10th Conference of the International Committee for Design History & Design Studies

Making Trans/National Contemporary Design History

Wendy Siuyi Wong / Yuko Kikuchi / Tingyi S Lin (eds.)
ABOUT ICDHS

The International Committee for Design History and Design Studies (ICDHS) is an international working group whose board members are internationally acknowledged design scholars. http://www.ub.edu/gracmon/icdhs

ICDHS conferences

The activity of the group began with a conference organized in Barcelona (Spain) in 1999. This was followed by a second meeting in La Havana (Cuba), in 2000. The Committee was inaugurated in the Istanbul (Turkey) conference, in 2002. The activity continued in the conferences held in Guadalajara (Mexico, 2004), Helsinki & Tallinn (Finland & Estonia, 2006), Osaka (Japan, 2008), Brussels (Belgium, 2010), São Paulo (Brazil, 2012) and Aveiro (Portugal, 2014). ICDHS conferences aim to assess the current state of affairs of design history and design studies. They are scientific conferences with a referee process to select presentations. Every conference has a theme, chosen by the board and the local organizers as an indication of the issues to be considered.

Previous conferences

1999  Barcelona (Spain) / Design History seen from Abroad: history and histories of design
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These conference proceedings for the 10th Conference of the International Committee for Design History & Design Studies (ICDHS) comprise a selection of papers presented at its bi-annual conference held between 26th to 28 October, 2016 in Taipei, Taiwan. The theme of the conference is “Making Trans/National Contemporary Design History” with the overarching aim to explore different possibilities of engagement that advance ‘global’, ‘world’ and ‘transnational’ design histories and studies. The Call for Papers announced eight strands for the conference: Inter-Asia and Design Historical Issues in Asia; Trans/national Design Theory and Identity; Science, Technology and Sustainability; Craft, Material Culture and Cultural Industry; Design Policies, Pedagogies and Creative Economy; Contemporary Design Practice; Activism, Democracy and Design Interventions; and an Open Strand.

The organizing committee received 230 abstract proposals for the three presentation formats: panel; individual paper; and poster presentation. All proposals were carefully reviewed by at least two members of a reviewing committee that was composed of 84 researchers from 62 institutions in 20 different countries, appointed by the strand chairs and conference co-convenors. In selecting papers, the reviewers aimed to balance quality of work and engagement with the groups of topics that emerged from the conference themes and strands. Following a second round of reviews, 67 individual full papers for individual paper and poster presentations, and 3 sets of panel theme paper presentations have been included in these proceedings. The selected papers have been divided into four sections.

The first section on Inter-Asia and design historical issues in Asia consists of 11 papers by researchers based in Japan, Singapore, Australia, Korea, UK, Taiwan, and the UAE. The papers cover specific topics on modern craft histories, craft-design activities in colonial Japan, women’s modern fashion, emerging design in Asia, and craft history.

The second section on the conference theme of the Trans/national design theory and identity encompasses 3 sets of panel theme papers and 19 papers that illuminate shared and translated modernities in global and colonial contexts.

The third section on the topic of the contemporary design practice and design interventions comprises 21 papers that focus on subjects ranging from science, technology and sustainability, to activism and the democracy of design.

The final section selected from the open strand consists of 16 papers that look into areas such as design policies, pedagogies, creative economy, and various topics from within contemporary design studies.

We would like to thank all authors, track chairs, members of the reviewing committee, the program committee and organizing committee, and all student helpers for making the ICDHS 2016 Taipei happen. In particular we acknowledge the dedication and expertise of all contributors from across the globe in coming together to deliver a very high quality of work that has ensured our conference will promote truly trans-national exchanges of academic, professional and research perspectives and views.

The Editors
Wendy Siuyi Wong, York University, Toronto, Canada
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Tingyi S Lin, National Taiwan University of Science and Technology, Taipei, Taiwan
ABOUT THE EDITORS

Wendy Siuyi Wong is an associate professor in the Department of Design at the York University, Toronto, Canada. She has established an international reputation as an expert in Chinese graphic design history and Chinese comic art history. She is the author of Hong Kong Comics: A History of Manhua (New York: Princeton Architectural Press, 2002), four books for Chinese readers, and numerous articles in academic and trade journals. Dr. Wong was a visiting scholar at Harvard University from 1999 to 2000 and the 2000 Lubalin Curatorial Fellow at the Cooper Union School of Art, New York, USA. In 2009 and 2010, she was a visiting research fellow at the Department of Design History, Royal College of Art, and she served as a scholar-in-residence at the Kyoto International Manga Museum. She is a contributor to the Bloomsbury Encyclopedia of Design, acts as a regional editor of the Greater China region for the Encyclopedia of Asian Design, and currently an editorial member of Journal of Design History.

Yuko Kikuchi is a Reader at TrAIN (Research Center for Transnational Art Identity and Nation) and CCW graduate school at University of the Arts London. She has also held visiting professor/fellow appointments at Academia Sinica in Taiwan, University of Tsukuba in Japan, National University of Singapore and Heidelberg University. Her key works include Mingei Theory and Japanese Modernisation: Cultural Nationalism and “Oriental Orientalism” (RoutlegeCurzon, 2004), Refracted Modernity: Visual Culture and Identity in Colonial Taiwan (Univ. of Hawai‘i Press, 2007), and two special issues: “Transnational Modern Design Histories in East Asia,” The Journal of Design History 27, no. 4 (2014) and “Negotiating Histories: Traditions in Modern and Contemporary Asia-Pacific Art,” World Art 5, no. 1 (2015). Awarded the Terra Foundation Senior Fellowship at the Smithsonian American Art Museum (2015-16) and the British Academy-ASEASUK ECAF fellowship at École française d’Extrême-Orient in Phnom Penh (2014), she has been writing a book about Russel Wright and the U.S. intervention in Asian design during the Cold War. After leading the joint international project ‘Oriental Modernity: Modern Design Development in East Asia, 1920-1990’ (AHRC funded 2012-14), she is also jointly editing a two volumes reader, East Asian Design History Reader to promote studies on transnational design histories and translation of primary materials from East Asia.

Tingyi S. Lin is an associate professor at Design Department, National Taiwan University of Science and Technology, Taiwan. Her current research focuses are on visual storytelling, strategic visual planning and visual information design. Dr. Lin serves as a board member in the Taiwan Society of Basic Design and Art and as World Regional Representative for the International Institute for Information Design. She has received awards and honors for her work in video production, graphic creation, and design research. Her creative art/design interests include graphic design, video arts, and computer/multimedia art, including Revolving Door (video), Lake Moon (video on stage), Echinacea Campaign logotype & application (visual identity system), Smart Vending Machine UI Project (UI/UX design) and Emergency and Safety Visual Identity Project for Taipei City (visual information design). She conducts design research in the field of fundamental design, strategic visual planning, user-centered design and information design for wayfinding/wayshowing, safety/emergency, and vitality/health system. Her visual language and information design focus on the art, design, and human learning fields. She publishes research papers, attends international conferences in different regions and also provides lectures and speeches overseas such as USA (UW-Milwaukee), Japan (Kyu Tech) and China (Tsinghua University). She is now establishing a co-teach course with KISD, Germany.
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Clément Vincent / American University of Sharjah / Sharjah / UAE

Abstract

Confucius advocated the practice of ancestor worship cults, and for some Chinese families the edition of traditional genealogies, tracing back to the 13th century, continues to be one of the responses to remembering and honoring ancestors. This article focuses on a specific printing technique that uses wooden movable-type for the editions of genealogies. It is a detailed description of the various steps involved in the printing process: type carving, layout / composition of pages, and printing as seen practiced in Dongyuancun, a village in Rui’an township in Zhejiang province, mainland China. Additionally, the examination of past genealogies kept at the Gushan and Zhejiang libraries in Hangzhou shed light on the artistic and typographic value of these editions. However, the making of a genealogy book, its format, paper, layout, and kind of characters used, cannot be fully understood without an appreciation of the cultural, social, historical, and religious traditions associated with it.

Keywords

Chinese, genealogy, lineage (家谱 jia pu), (族谱 zu pu), wooden movable-type

Introduction

The ancestor cult is important to many cultures around the world. In China, for some families, the edition of a printed genealogy responds to this duty to remember and honor ancestors. This is often expressed in the introductions of genealogies via statements such as “Our ancestors define our origin while the clan indicates a common origin for its members… When the genealogy exists, the will to search the origin exists, the act of filial piety exists. This is why the genealogy is created, to build benevolence and virtue within the family.” Labor, care, and the use of durable materials transform family origins into tangible and legible memorial objects. Genealogies are the records of a family or a clan lineage.

I did fieldwork in Dongyuancun 东源村 (lat. 27° 44’ 48” N long. 120° 22’ 48” E), and Dananxiang 大南乡 (lat. 27° 42’ 59.4” N long. 120° 23’ 55.2” E) in Zhejiang province in 2009 and 2012. I observed the making of genealogies, interviewed local artisan printers and clients involved in the edition of current genealogies. In Hangzhou, I consulted and documented genealogies kept at the Zhejiang Library Gujibu, (Gushan Library) and in the rare book department at the Zhejiang Library on Shuguang Road. In (木活字本 mu huo zi ben) editions I have consulted, ancient and more recent ones, successive generations are recorded and ordered from the most ancient to the more recent, and each is given a numeral order: first, second, and so on. Regularly updated in some cases, a set of twenty books can compose a genealogy containing 20,000 names or more. The names of male members, and their wives and sons, are recorded with dates of birth and death. Daughters are mentioned only if they marry, and then their husbands’ names and places of origin are also given. Professions of any prestigious members of the family may also be mentioned, including professors, high-ranking civil servants, or individuals who passed imperial exams. Such information is usually consigned in the introduction of the genealogy, and is written by the family member in charge of the edition.

In Dongyuancun 东源村 Rui’an township in Zhejiang province, Mr. Wang Chaohui (born 1955) and his family have produced genealogies for twenty-seven generations. The following parts of this article will describe the drawing and carving of characters, as well as the composition of the text, its layout, and the printing process for the editions of (木活字本 mu huo zi ben) genealogies. This process is ancient—the first publications...
Drawing and engraving of wooden movable-type

Wang Chaohui carves around fifty characters a day on average to maintain his collection of roughly thirty thousand characters needed for the composition and printing of genealogies. The material used to carve wooden movable-type is the wood from the birchleaf pear tree (*Genus Pyrus*), which is clean-cut in small smooth blocks (fig. 1A, 1B, 1C). Depending on the type-size needed for the publication, the size of these blocks can vary. I observed two different type-sizes on a printed page (fig. 6), and the two corresponding point-sizes on a typeset form (fig. 2B). For the largest point-size (fig. 1A), blocks of wood have the following dimensions before being engraved with a character: their typographic heights are between 10.5mm (2p6) and 11mm (2p7); their widths also vary between 10.5 to 11mm; and their point-size is 12mm (2p10). The difference in typographic height and width is likely due to the cutting process used to produce these blocks. The smallest point-size is cut from blocks that have the same typographic height (10.5mm to 11mm) but their widths vary between 5.5 and 6mm and their point-size is 7mm (1p8).

Starting with these little cubes of wood (fig. 1A), the process begins by drawing the character in reverse on a face of the cube (fig. 1B, 1C). In the past this operation was done with a brush, however I did not see any evidence of brushes being used during my visit. It seems that Wang Chaohui uses fine black-ink pens to draw the reversed forms of characters.

During the 19th century, in the west, images or letterforms cut in wood were usually carved on the transverse section (or the end) of a woodblock for resistance purposes during the impression of large runs. In our case (fig. 1B), some characters have been traced parallel to the fiber orientation of the woodblocks. Because runs of genealogies usually range from twenty to one hundred copies (Xiaoman, 2005, p. 341), and its printing technique does not cause heavy pressure on these wooden characters, they do not need to be designed to support tons of mechanical pressure. The typographic style of the characters traced on these blocks correspond to what is now known as the “Song script.” The Song script (Songti 宋体) is a styled writing system allegedly formed during the Song period (960-1279) when woodblock editions (banden) using this script’s style for carving characters played a significant role in disseminating texts in China (Wilkinson, 2000; MacDermott, 2005).

A specific trait of this script is its thin horizontal strokes and thick vertical strokes (fig. 1D). A second important characteristic that might have played a role in adopting it for publishing genealogies is the relative geometrical regularity of this script as all characters seem to fit in a square surface (fig. 1D). This quality is important because it facilitates the production of thousands of small, carved wooden characters necessary for typesetting genealogies. On the quantity of character usually needed, its style and point-size, Zhang Xiumin quoted by Xu Xiaoman wrote: “[Genealogy masters] would travel to towns in Shaoxing or the Ningbo area, carrying their wooden type on shoulder poles, to print genealogies. Their loads of wooden types (muzi), also called ‘wooden stamps’ (mujin), contained only twenty-thousand-odd types, all made from pear wood. These types came in two sizes, big and small, though all were carved in the “Song” style (Songti).” (Xiaoman, 2005, p. 337).

Due to the relative geometrical regularity of the type, character width and height are constants — they can all fit in a square of equal surface. This homogeneity is an asset for carving the characters. Multiple woodblock sizes are not needed within the same point-size. Constant widths and heights of wooden movable-type within a point-size also facilitate typesetting. For example, this allows for setting vertical columns of one character or horizontal lines without spacing or leading adjustments. Because the woodblocks’ width and height are equal, the layout unit is also the size of the character most commonly used throughout the publication.

The carving process of the characters follow a certain order. An interpretive panel in the Wang house hall in Dongyuancun 东源村 provides the following information: “Engrave all the horizontal strokes of the character, then all the vertical strokes of the character, and then all the right-falling stroke, and finally cut away all the empty margins and corners of the character. Now a character written in reverse form will be prominent on the wood mould.” This routine is not always strictly observed. The method used by Wang Chaohui (fig. 1B) suggests that up to nine characters are carved concurrently. In some instance the corners have been carved but the outside of the strokes have not. When carving not one but a series of characters together, it is possible to think that the carving process is altered and follows a different sequence. This sequence might even differ from one carver to another.

Carving curves or straight lines or a mix of both requires different gestures and strategies.

Specificities of certain characters — featuring more or less curves and straight lines — bring about different carving
strategies. Some production constraints, such as the requirement to maintain a sufficient stock of characters for typesetting relatively long text, might just as well impact rationalization of the carving process. “Group carving” several characters at once, instead of carving them separately, might save time. Moreover, carving a group of characters from a “type design view point” gives the carver a greater command of the consistency of the typeface as a whole. The carving tools Wang Chao used are rudimentary (fig. 1C), and no optical device, such as a magnifying glass, supplements his eyes. A glance at the many trays filled with hand-carved characters in his shop is a humbling experience.

Typesetting, layout
When manually typeset text in a Latin, Greek, Cyrillic, Arabic, or Hebrew alphabet with metal mobile characters, a typesetter has to pick characters one by one from a case to form a line of a given measure in a composing stick. When a line is complete, it is carefully placed from the composing stick onto a form. One by one lines are added until they compose an entire page. In the printing shops as seen in Dongyuan, pages are typeset differently. Mobile wooden characters are stored face up in vertical rows (fig. 2A) on a wooden tray in which thin bamboo strips separate the rows. In the Wang’s house, several trays with thousands of characters are kept horizontally on tables. After picking one character or several, their placement on a wooden form (fig. 2B, 2C), made out of Chinese fir, follows right away. The typesetting and layout are simultaneously complete when all the wooden mobile characters needed for a given spread are tightly in place.

The layout (organization of the content) is predetermined by wooden forms in which wooden movable-types are inserted (fig. 2B, C). The size of a wooden form varies with the format of the paper sheets used for the genealogy. In Dongyuan, forms used by Wang Chao were approximately 32.5 to 33 cm for the height and 50 to 50.5 cm for the width. Observations of several ancient genealogies from different time periods at the Gushan Library and the Zhejiang Library show that the layout of the text follows a similar structure. Only two kinds of forms are necessary for organizing the content on the pages. These two wooden-spread forms feature a central axis—dividing the spread into two equal surfaces—and a double outside frame on the periphery of the form. On some forms, four small incisions on the left and right side of the thick outside frame indicate horizontal divisions. On the horizontal parts of the frame no incisions are visible. Inside this frame are the two main fields reserved for typesetting.

Depending on the two main composition needs of a genealogy (introduction and generations), these fields are subdivided differently. Forms used for introductions feature columns on each side of the central axis (fig. 2B) while forms used for generations show a grid of vertical and horizontal divisions making an equal number of fields on each side of the central axis (fig. 2C).

I have yet to fully study all the details contained in the material documented at the Gushan and Zhejiang Library (both in Hangzhou), but my first observations indicate that the most important variable element in the layout of text across genealogies from different time period is the number of columns (fig. 3A-D) per page in the introductions. This variation is due to differences in format since narrower pages fit less columns than wider ones. A variety of size in paper sheets manufactured in different places at different times explain this variety of formats. However, what is interesting to notice is that the structure of the content across these genealogies follows the same organizational principles. This common organization is known as Su-style (蘇式 su-shi) and Ou-style (歐式 ou-shi)
and it originates from the work of Ouyang Xiu 歐陽修 (1007-1072) and Su Xun 蘇洵 (1009-1066) recognized as the “fathers” of a standard procedure of lineage building, (Li, 2014).

The content always reads from top to bottom and from right to left, and the pages featuring generation numbers, names, places, and dates are always divided into five horizontal divisions to accommodate for five generations (fig. 6).

**Inking**

Ink used for printing with wooden movable-type is soluble in water. It comes in dry solid blocks dissolved by friction. During the printing process, a brush is dipped in a bowl of water and then rubbed on the ink block to fill it with ink pigment. When the brush is filled with an adequate amount of ink, it is rubbed against the parts of the typeset form to be printed (fig. 4A). Depending on humidity and temperature, inking the form with the brush can be completed in either single or multiple applications. If the air is dry and hot, water contained in the ink evaporates quickly, resulting in a scant print. On the contrary, an overload of ink can clog the carved parts of the wooden movable-types, making non-legible imprints. The impact that atmospheric conditions have on optimal inking might also explain the sequence observed during the inking of the form. In all prints executed before me, the double outside frame of the form was always inkle first and the movable-types inside these frames last (fig. 4A).

**Printing**

For editions of genealogies, Wang Chaohui uses Xuan or Lianshi papers and the printing process does not require a press but a brush (fig. 4B). The format of the sheets of paper for these editions is approximately 60 cm by 40 cm, and it is larger than the format of the wooden spread forms. The paper is manually placed on top of a wooden form. Placing the paper on the form is a delicate operation. First, a fold, parallel to the bottom length of the sheet and 5 cm from the edge, is made (fig. 4C). This fold holds the sheet above the inked spread form, avoiding its natural tendency to collapse in the middle due to gravity. Then, the master printer holds the sheet horizontally by the bottom corners. When placement over the form is correct, the bottom corners of the sheet are placed in contact with bottom corners of the form. When the paper touches the inked bottom corners of the form’s outside frame, the sheet is released and falls into place, covering the entire form. Sometimes (as shown in figure 4D), the upper corners of the sheet fold back towards the inside — this phenomenon tells us that the fiber orientation of the paper and width of the form are parallel. Finally, when the paper falls in place adequately, the next step is to put it in contact with all inked parts of the form. In order to do this, the master printer uses a special brush (fig. 4B) to press the back of the paper against all inked parts. In line with the inking process, the printing sequence follows the same order. Outside frames are pressed with a brush first, and the inside of the frame is pressed last (fig. 4E, 4F).

**Other steps in the edition of genealogies**

Concerning the compilation of information needed for the publication, who, for example, is in charge of this task and how is the collection of information completed? One line read in the exhibition hall of the Wang’s house gives an answer: “There were women masters for compiling family or clan trees.” In “Preserving the Bonds of Kin,” Xu Xiaoman provides us with a...
In the temple, I was able to see the team organization and sense the atmosphere of the work. In this case, printers were not using wooden- but metal-movable type. While this did not change the entire process and the end result, some elements were different: the ink used was different; the way of inking the forms was different; and so was the way the paper was pressed onto the form.

Seeing the client interaction with the printers was something I had never read about because historical documentation is usually about the printers’ food and accommodation. While I knew that some of the family’s tasks included funding and collecting the content for the new edition, I had no idea how long it took. In this particular edition, the complete process including the manuscript preparation took two years. Two of the family members living in Dananxiang 大南乡 contacted members of other branches of the family disseminated all the world in order to carry on the compilation of names, but also to collect the funds necessary for the edition. In this case, family members were asked to contribute a sum of 300 CNY (Chinese Yuan Renminbi). However, donations vary greatly depending on the wealth of the family members with the wealthier supporting the inclusion of the less wealthy in the genealogy. The previous edition completed five years before had collected a sum of almost 1.3 million CNY but a large part of it had been used to renovate the family temple in Dananxiang 大南乡.

The final ceremony, when the edition is complete, is attended by family members and printers, and includes prayer and offerings to the ancestors. In the printed genealogies, the master printer links the different generations by tracing in red lines (fig. 6). This is the last step in the production process. The ceremony ends with the distribution of the edition to selected family members representing each branch. Some copies are also stored in the family temple. Careful observation of selected past genealogies, especially their introductions, can also bring additional questions and findings about this long-lasting regional book culture. However, one point is already apparent. The range of quality of printing and the different degrees of sophistication deployed in the making of these books is large. The two examples discussed below give an idea of the artistic and typographic value of these publications.

Some genealogies contain several styles of scripts. An example is 廖氏重修族譜 Liao shi chong xiu zu pu (1874 edition). Its pages feature a seal script, Zhuanshu (篆書), Lishu (隸書), Xingshu (行書), a cursive, and Songti (宋体) in three different sizes (fig. 7). While this diversity of script style is not uncommon in genealogies from the late Qing Dynasty, the Songti (宋体) is almost always used in the composition of introductions and generations regardless of the date of production of the genealogies.

Combining the Kaiti script (楷体) style with artistic imagery the 1850 edition of 廖氏重修族譜 Liao shi chong xiu zu pu contains in its first pages a spectacular series of six large characters. Four of these characters (墨家至寶) are decorated with a plant. The peach tree blossom decorating 修 (fig. 8A1, A2) represents the spring and matrimony (Koehn, 1952). The lotus flower visible in the character 家 (fig. 8 C1, C2) represents the summer. The Chrysanthemum in 至 (fig. B1, B2) represents the fall, and the Chimonanthus Praecox (wintersweet, 腊梅 lamei ) visible in 寶
(fig. 8D1, D2) represents winter. The meaning of all four characters 傳家至寶 (the most precious treasure transmitted in the family) refers to the genealogy itself, and is perfectly complemented by the passage of time, regeneration, and the fleeting beauty of the flowers visible in each combination between words and image makes this example a particularly meaningful and visually engaging one. Considering the limited extent of this study (only sixteen genealogies were examined), these examples also suggest that much more valuable elements probably exist.

Conclusion

Studying a tradition over 800 years old, but still very much alive, is a humbling experience. Wang’s family has been producing genealogies since the early years of the Yuan Dynasty (1206–1368). (Interview with Mr. Wang Chaohui, 2009). An Annotated Zhejiang Genealogy Bibliography published, by Zhejiang Library in 2005, shows an uninterrupted practice of the edition of wooden movable-type printed genealogies (Hong, 2006). Field observations and interviews conducted in 2009 and 2012 also show that editions of genealogies are still being produced. Mr. Chen of Dananxiang 大南鄉, born in 1970, was in charge of the 2012 edition of the Chen family genealogy but this edition used metal movable-types. In Dongyuancun Mr. Huang Laiping (黃良平), a client of Mrs Wang Xianzhu (王仙珠), was working with her on updating the list of names for the next edition of his family’s genealogy.

In an effort to keep the wooden movable-type in use, local government took actions. In 2010, it successfully applied to UNESCO and Wooden Movable-Type Printing of China was added to the list of intangible cultural heritage in need of urgent safeguarding (unesco.org, 2010). In 2012, Wang Falu (王法爐), responsible for the association of movable type printing in the city of Rui’an, commissioned an artisan in Dongyuancun 1900 copies of the Story of the Teachings of Master Yongjia (永嘉大師證道歌) Yong jia da shi zheng dao. This wooden-movable character edition of Xuanjue’s text (665–713) took a year of labor by two persons to be completed.

Such ancient knowledge and practices are usually visited through revivals, re-enactments, visits of preserved monuments, pieces of art, or readings of literary accounts and quotes in historical studies. It is less usual to be able to meet a man or a woman still alive and practicing “an ancient knowledge” as their livelihood. In this particular case, the method and process involved have not been altered significantly by the passage of time. Political and technological changes of the past eight centuries have not interrupted this practice either.

Genealogists like the Wang family practice a process, several techniques, and a body of knowledge that is unique. In addition to developing and preserving specific technologies and tools adapted to their publishing activity, they respond to the continuing demand for genealogies from their people. Currently, both wooden movable-type and metal movable-type are used for the edition of genealogies but the present research could not determine in which proportion. Data from the Annotated Zhejiang Genealogy Bibliography published, by Zhejiang Library in 2005 shows that for genealogies produced between 1979 and 2005 less than a third have been printed with wooden movable-type (Hong, 2006). In addition to my observations in Dananxian, another genealogy shop in Dongyuancun used metal movable-type. Carving manually wooden mobile characters and printing with them is a rare expertise supported by local government and mastered by a few individuals. Its viability as a commercial practice is uncertain.

In Dongyuancun, Wang Chaohui (王超輝 先生) works exclusively with wooden movable-type. Each year on average, he prints 3 copies of 5 different editions. With wooden movable-type or metal characters, the commission of such editions fulfills the ancestor worship cult and it can also be seen as a census method for increasingly disseminated clans. The process of the edition itself (collection of funds and names) is also the guarantee that in each generation, members from different branches of the clan communicate with one another and collectively preserve their cultural and familial heritage. Additionally, examples reported by Catherine Capdeville-Zeng (Capdeville-Zeng, 2009) show that lineage groups, as socially organized entities, can play an active role locally. They are able to challenge local authorities in social, cultural and political issues.

Economically speaking, the making of genealogies in villages is small and confidential, but its resilience and the continuous role it plays in the history of Chinese society is culturally and socially significant. Genealogy masters and editions of genealogies have emerged and benefitted from the interest and care Chinese
society has for ancestry. The production of genealogies responds to the duty of families to remember and honor their ancestors. Labor, care, and durable materials transform their sentiments into tangible and legible ritual objects. The content of these ritual objects is the record of constantly evolving lives and expanding families. As long as families and clans exist, genealogy masters should continue to record and produce the "private" memory and history of Chinese families.

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Biographical note
Clément Vincent is an Assistant Professor in the Visual Communication program at American University of Sharjah. In his work, Clément explores the integration of text in various contexts and situations, such as the urban environment, the page, and the image. Influenced by the ut pictura poesis doctrine of the Renaissance, his research investigates the principle of parallelism between the arts.
Birth of an Asian Design: Origins of the Chinese word ‘sheji’ and its relationship with the Japanese word ‘sekkei’

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Abstract
In the West, the term ‘design’ is used widely in English-speaking countries, and in many nations such as France. It is used even in the names of schools, for example, ‘école supérieure d’art et design.’ In East Asia, the Chinese word ‘sheji’ and the Japanese word ‘sekkei’ are common, both signifying ‘design’ using the same Chinese characters. ‘Sheji/sekkei’ could be even more widely used than the English ‘design’ itself. However, not much research has been done on the origins of these words despite their historical importance. This study shows that the modern Chinese ‘sheji’ lexicographically originated in the nineteenth century, and became to be used more widely in the twentieth century, partly affected by the Japanese ‘sekkei’ and ‘dezain’. This study also makes some other comparisons between ‘sheji’ and ‘sekkei’ to demonstrate the significant interrelationship between these two equivalents for the English ‘design’, used by over a billion Asian people.

Keywords

Introduction
Chinese ‘sheji’ and Japanese ‘sekkei’ mean the same and use the same two Chinese characters, corresponding to English ‘design’. In East Asia, the Japanese ‘dezain’ or Korean ‘dijain’ are also used, which were directly borrowed from English. In Japan and South Korea, the word ‘dezain/dijain’ is generally used for more artistic design, and another word ‘sekkei/seolgye’ is used for more technological design. In a wider East Asian perspective, however, the word ‘sheji/sekkei’ is also interesting and even more important because of its much longer history and larger area where it is used; mainland China, Taiwan, Japan, Korea, and Vietnam (tiếtnhiệt). We can find the ancient usage of ‘sheji’ in the Sanguozhi (Records of the Three Kingdoms) edited in the third century. Used for a campaign plan for a battle, it meant ‘plot’ or ‘conspiracy’. It was used in a strategic meaning rather than artistic or creative one in this historical text. Some studies suggest that modern Chinese ‘sheji’ as an equivalent for English ‘design’ was influenced by Japanese ‘sekkei’ in the early twentieth century. In fact, the Japanese ‘sekkei’ was first used for the titles of official documents and books in the late nineteenth century, whereas the Chinese ‘sheji’ seems to have been officially used since the 1920-1930s in this meaning. Although it is partly true, ‘sheji’ as an equivalent for English ‘design’ had gradually appeared in the nineteenth century in dictionaries edited and printed in East Asia. This study is based on the analyses of descriptions in various dictionaries of the Chinese, English, and Japanese languages, and the titles and contents of design-related books published in East Asian countries.

Dictionaries by Japan’s Dutch-interpreters
The first English dictionary compiled by Japan’s Dutch interpreters was the Angeria Gorin Taisei in Nagasaki in 1814. In this small dictionary, the English verb ‘to design’ was translated as ‘omonpakaru’ which meant ‘to consider’ or ‘to think with a specific purpose in mind.’ The English noun ‘project’ was translated as ‘mohan’, which meant ‘model’ or ‘example’ (Motoki et al, 1814). Another comparable English word ‘plan’ was not included in this dictionary. In 1830, Walter Henry Medhurst (1796–1857) published the English and Japanese and Japanese and English Vocabulary in Batavia. The English verb ‘to design’ was translated as ‘sitagaki (shitagaki)’ and ‘nozokf (nozoku)’. The English noun
‘design’ was translated as ‘omoi’. The English word ‘project’ was not included, and ‘plan’ was translated as ‘hetto (hatto)’, which meant ‘rule’ or ‘law.’

The second English dictionary compiled by a Japanese editor was a *Pocket Dictionary of the English and Japanese Language* published in 1862 in Edo (Tokyo). The editor Hori Tatsunosuke was also a Dutch interpreter of the Tokugawa government. He made this dictionary based on the Part I (English-Dutch) of a *New Dictionary of the English and Dutch Languages* by H. Picard, published in 1843 and revised in 1857 (Picard, 1843). Hori translated its Dutch texts in order to make his English dictionary. Related English words ‘design’, ‘plan’, and ‘project’ were all translated as ‘hinagata’ and ‘kuwadate.’ ‘Hinagata’ primarily means ‘pattern’, ‘model’ or ‘miniature’, while ‘kuwadate’ means ‘attempt’ or ‘scheme’ (Hori, 1862). Both of these words are more authentic Japanese rather than imported Chinese. The other Japanese translation of ‘design’ included in this dictionary was ‘mokuteki’, which means ‘aim’ or ‘purpose’ (Figure 1).

### Dictionaries by European missionaries in China

‘She ji’ appeared in the *Dictionary of the Chinese Language*, edited by an Anglo-Scottish missionary Robert Morrison (1782-1834), printed in Macao in 1822 (Figure 2). Although the English noun ‘design’ was not translated as ‘sheji’, the English verb ‘to design’ was translated as ‘she ji ce’, by using three Chinese characters which meant ‘to make a plan’ or ‘to make up a scheme’ as we can find in ancient Chinese literature since the days of Sanguozhi. ‘She ji’, the translation of the English verb ‘to design’ by using two Chinese characters, appeared in the *English and Chinese Dictionary*, edited by another missionary W. H. Medhurst, published in 1847–1848. He worked in Batavia and in 1842 moved to Shanghai where he founded the London Missionary Society Press.

In an *English and Chinese Dictionary* edited by a German missionary Wilhelm Lobscheid (1822-1893) and published in Hong Kong in 1866-69, the Chinese word ‘sheji’ was included as a translation of the English verb ‘to design’ (Figure 3). By analysing this difference in descriptions among the dictionaries produced in Macao, Batavia, Shanghai, and Hong Kong in the 1820s, 1840s, and 1860s, we can see that ‘sheji’ was chosen step by step as a translation of English verb ‘to design’ by British and German missionaries in collaboration with various Chinese advisors and assistants.

During those times, a traditional cultural sphere existed where Chinese characters were used still. In 1879, Lobscheid’s *English and Chinese Dictionary* was revised by Nakamura Keiu as the *Dictionary of the English, Chinese, and Japanese Languages with the Japanese Pronunciation* and published in Tokyo. ‘Sheji’ was included in Chinese characters, although Japanese pronunciation was not ‘sekkei’ but ‘hakaru’, ‘tsunoru’, and ‘kufusuru’ (Figure 4). In 1884, the same dictionary was revised and enlarged by Inoue Tetsujirō, also published in
Tokyo, as the *English and Chinese Dictionary*. It was republished in Shanghai in 1903. Inoue’s dictionaries were used in China, Taiwan, Japan, etc.

**Figure 3: Lobscheid, A Dictionary of the English and Chinese Languages, 1866–1869, Hong Kong**

**Figure 4: Lobscheid, revised by Nakamura, et al., A Dictionary of the English, Chinese, and Japanese Languages with Japanese Pronunciation, 1879, Tokyo**

**Japanese publications in the 1880–1890s**

It was at the end of the 1880s when the Japanese word ‘sekkei’ was included in a dictionary or lexicon. Although various English-Japanese dictionaries were published in the 1870s and 1880s, editors of these publications tried to include more authentic Japanese words as translations of English words such as ‘hinagata’ or ‘moyo’ for the English noun ‘design’, and ‘kuwaderu’ or ‘hakaru’ for the English verb ‘to design’. Also included were ‘zu’ (tu) or ‘zuan’ (tu’an) and ‘isho’ (yijiang) derived from a poem ‘Song of Painting’ by a Tang dynasty poet Du Fu.

The *Vocabulary of Mathematical Terms in English and Japanese*, edited by Fujisawa Rikitaro, where the Japanese ‘sekkei’ was first printed as the only translation of the English noun ‘design’, was published as a small lexicon in Tokyo in 1889 but rather symbolic, because from the 1890s, the term ‘sekkei’ started to be used in the titles of publications on architecture and civil engineering in Japan, and later in books on mechanical, electrical and chemical engineering. Fujisawa was a professor at the University of Tokyo where many of his colleagues played important roles as national leaders of various fields. The word ‘sekkei’ perhaps started to be used in various disciplines of engineering and natural sciences around this time.

In 1894, *Yokan Kenchiku Sekkei-sho Shoshiki* (*Drawings and Specifications of Western Architecture*) was published in Tokyo (Figure 5). In 1895, *Gakko Kenchiku-zu Setsumei oyobi Sekkei Taiyou* (*Outline of Specifications and Drawings for School Buildings*) was published by the Ministry of Education. The use of the word ‘sekkei’ also started for the titles of books of mechanical engineering at the end of the nineteenth century. *Kikai Sekkei Seizugaku Shoho* (*Rudiments of Machinery Design and Drawing*) was published in 1899 (Matsuo, 1899), followed by *Kikai Sekkei oyobi Seizu* (*Machinery Design and Drawing*, 1906), *Kikai Sekkei-ho* (*Machinery Design Method*, 1906), etc.

Before the 20th century, a comparison between the presses in Japan and China was difficult, because except for some Christian mission presses, there was scarcely any modern publishing company in China before 1897 when the Shangwu Yinshuguan (*The Commercial Press*) was established in Shanghai. The number of Chinese books with the titles including ‘sheji’ gradually increased in the 1950s, more in 1980–1990s, and widely in the 2000s. However, the word ‘sheji’ had actually appeared in the titles of Chinese books published in the 1920s, which were on ‘project’ rather than ‘design’, and in the field of children’s education rather than design education.
‘Sheji’ as project and ‘sheji’ as design


The ‘project method’ is a progressive and practical method of teaching used in the schools of architecture and engineering in Europe in the eighteenth century. In the early twentieth century, William Heard Kilpatrick (1871--1965) expanded the ‘project method’ into a philosophy of education, based on the pragmatism philosophy of his colleague John Dewey (1859--1952). Dewey visited Japan in February, China in April 1919, and stayed there until 1921, giving more than 200 lectures in various places. Kilpatrick visited Japan in May 1927, China in late May or June. His lectures were translated into Chinese and published in *Jiaoyu Zazhi (Educational Review, formerly Chinese Educational Review)* in June, September, and October 1927.

![Figure 5: Tatekawa, Yukan Kenchiku Sekkei-sho Shoshiki (Drawings and Specifications of Western Architecture), 1894, Tokyo: Kaikosha](image1)

Although similar Chinese characters, different words were occasionally used for the translation of some Western words in China and Japan. In 1903, Lobsheld’s *English and Chinese Dictionary*, revised and enlarged by Inoue and published in Tokyo in 1884, was republished in Shanghai. Although not included in its original version published in Hong Kong in 1866, ‘sheji’ was included as one of Chinese translations of the English ‘project’ also. However, it was not the first case. ‘Sheji’ had already been included as a Chinese translation of not only ‘design’ but also ‘project’ in a small *English and Chinese Dictionary* compiled by an American missionary, I. M. Condit and published by the American Tract Society in 1882.

While the Chinese ‘sheji’ was used for the English ‘project’, ‘koan’ was used in Japanese regarding the ‘project method’. Above all, the English ‘project’ was also written as ‘projekuto’ in the katakana syllabary mainly used for transcription of foreign language words into Japanese. Therefore, the Japanese ‘koan’ was not as important as the Chinese ‘sheji’ in this regard. In 1922, a Japanese book on the ‘project method’ was published by Matsunami Taigan who studied in the US when Kilpatrick’s important article ‘The Project Method’ was published in the *Teachers College Record* of Columbia University (Kilpatrick, 1918). Matsunami used neither ‘koan’ nor ‘sheji’ but a rather unique title for his book. He also used the katakana ‘purojekuto mesoddo’ as its subtitle. When translated into Chinese, the Chinese ‘sheji’ was used for its main title (Figure 6).

The Chinese translation of Matsunami’s book was published by the Commercial Press of Shanghai in 1923. The Commercial Press for which Wang Yunwu (1888--1979) served as the chief editor and translator since 1921 became a very important publisher in China. Wang held up two principles, the ‘extension of education’ and the ‘academic independence’. The Commercial Press has also published *Jiaoyu Zazhi* which carried
China’s first articles on the ‘project method’, besides more than ten ‘project method’ books in the 1920s. In the Model English-Chinese Dictionary published by the Commercial Press in 1930, ‘sheji’ was included as a translation of not ‘design’ but ‘project’, and the ‘project method’ was included as an example of the English word ‘project.’

Wang started the Wanyu Wenku (Complete Library) for the Commercial Press in 1929. It might have been modelled on the Banyu Bunko started in Tokyo in 1926, but grew much larger libraries consisting of more than 150,000 titles, covering from philosophy to technology. In 1930, one of the books on the ‘project method’ published under the Wanyu Wenku had the Chinese term ‘sheji’ in its title (Figure 7). In 1933, three engineering books were also published under Wanyu Wenku.

They were Jixie Sheji (Machine Design), Dianji Sheji (Electric Machine Design), and Gongchang Sheji (Factory Design). These are among China’s first engineering ‘sheji’ books (Figure 7), following the first educational ‘sheji’ books published by the Commercial Press in the 1920s. Wang supervised all of these early ‘sheji’ books in China, covering both education and engineering, using the same Chinese term ‘sheji’ for the translation of both ‘project’ and ‘design’.

Changing ‘sheji’ and shifting ‘sekkei’

The Japanese term ‘sekkei’ was used mainly for engineering ‘design’ from the 1890s. In China, the modern ‘sheji’ was first used for the ‘project method’ in primary education in the 1920s, but also for engineering design from the early 1930s. Although the number of Chinese books with the word ‘sheji’ in their titles was much smaller than Japanese books with ‘sekkei’ in their titles even in the 1940s and 1950s, we can find its usage in various fields, from education to engineering, and from architecture to economics. This is a characteristic of the usage of modern Chinese ‘sheji’, which was mainly started from the ‘project method’ used in progressive education.

Although we can find a few early Chinese examples of the word ‘sheji’ in the design of stage or exhibition in the 1950s, it was basically in the 1980s when it began to be used in the titles of books for artistic design as well as engineering design, that is, after the Great Cultural Revolution of China. During this age, it started in Taiwan or Hong Kong, and sometimes related to Japan.

One of the first Chinese books entitled Fuzhuang Sheji (Fashion Design) was published in 1969 by the Taiwan Shangwu Yinhuguan which was developed from the Taipei office of the Commercial Press opened in 1948. Wang Yunwu moved to Taiwan in 1951 and became a representative of the Taiwan Shangwu Yinhuguan in 1964. Therefore, Wang was related to all the beginning of the usage of the modern Chinese word ‘sheji’ in educational method (‘project’), engineering (‘design’), and more artistic design (‘fashion design’), although one of the first modern Chinese books on design, Zuixin Tu’an Fa, was also published by the Shanghai Commercial Press in 1926, by using the term ‘tu’an’ rather than ‘sheji’.

The origin of the title of the book Fuzhuang Sheji was ‘fukushoku dezain’ rather than ‘fukuso
sekkei’. Its author Sugino Yoshiko (1892–1978), one of the pioneers of fashion design in Japan, published one of the first Japanese books for which the katakana word ‘dezain’ was used in its title in 1947. The Japanese word ‘dezain’, which is closer to the English ‘design’, actually began to be used before the war. However, the use of this kind of English-origin words during the war was prohibited or at least avoided. One of the first publications with the katakana word ‘dezain’ in their titles was Dezain-shu (Design Collection) of Kawabe Gyoho published in Kyoto in 1913 (Figure 8). It was a publication of his pattern design. Among periodicals, a monthly journal Dezain was published in Osaka between 1927 and 1933. It was a journal for modern architecture, art, and design.

After the war, the katakana word ‘dezain’ began to be used in various design such as graphic or industrial design following fashion design. However, the number of books in which ‘sekkei’ was used in their titles was much more than that of ‘dezain’ books. It was around the year 2000 when the number of ‘dezain’ books approached that of ‘sekkei’ books. In the 2010s, the former is gradually overtaking the latter in Japan.

Conclusion
The modern Chinese word ‘sheji’ now used for almost all kinds of design from fashion to architecture in Greater China lexicographically originated in the nineteenth century. Although pronounced differently as ‘sekkei’ in Japan, ‘shit ke’ in Vietnam, and ‘solgye’ in Korea, ‘sheji’ is used by more than a billion East Asian people, which is as many as the total population of Western people who use the English ‘design’, French ‘dessin’, Italian ‘disegno’, Portuguese ‘desenho’, and Spanish ‘diseño’. In a sense, ‘sheji/sekkei’ is from the beginning a kind of international term of Asia originated in China and gradually applied to modern meanings by Chinese, Japanese, and East Asian people in neighbouring countries, as well as by Western people who lived in East Asia in the nineteenth century.

‘Sheji’ and ‘sekkei’ are still experiencing modifications in both countries. In Japan, the katakana word ‘dezain’ is gradually applied also to technological design for which ‘sekkei’ has been mostly used. This is a phenomenon in a country where both Chinese characters as ideograms and kana as phonetics are used in combination. In China where phonetics are not used in normal writing and all Western names and terms have to be translated by using Chinese characters, a different change is happening in recent years.

It is the new usage of ‘meishu sheji’ and ‘yishu sheji’, by adding ‘meishu’ (fine arts) or ‘yishu’ (art) in front of ‘sheji’ (design). ‘Meishu sheji’ (‘fine arts design’) appeared in Chinese book titles in the 1970s and more widely in the 1990s and 2000s. ‘Yishu sheji’ (‘art design’ or ‘art and design’) appeared in the 1990s and even more widely in the 2000s and 2010s. These changes probably coincide with the different stages of the development of design activities including education in Greater China. The appearance of ‘meishu sheji’ and ‘yishu sheji’ in China chronologically coincides with the growing usage of ‘dezain’ over ‘sekkei’ in Japan.

Although concentrated only on the words for design in East Asia, this study could have perhaps shown some significance of international comparative studies of the words for design which we have been doing mainly in Western languages in collaboration with colleagues across the world for almost 10 years. The exchange of information and historical data is not very active in East Asia despite the great population and still growing design activities, in view of the fact that different writing systems such as Chinese characters, Japanese kana, Korean Hangul, or Vietnamese alphabet are used. We expect further development of international collaboration in East Asia in this kind of research, which may stimulate some related studies on Western words for design again.

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**Biographical note**

Haruhiko Fujita, Professor of Aesthetics, Osaka University, is also General Editor of the *Encyclopedia of Asian Design* planned to be published in 2017. His major publications include *William Morris, Design Theory and History of Modern Japan*, *Iconology of the Universe*, *J. M. W. Turner*, and *William Morris-His Life, Work, and Landscape*. 
The textile industry and design strategies in the Meiji era Japan: The case of the Nishimura Sozaemon family

Tomoko Hata / The Museum of Kyoto / Kyoto / Japan

Abstract
At the time of the Meiji crisis, the Japanese textile industry had been utilising techniques derived from Western technology and promoting its export industry. Textile industry has played an important role in Japan's emergence onto the international stage as a major modern industrial power. Nishimura Sozaemon’s family has a long history as a Japanese textile wholesaler and even now operate under the name Chiso Co. Ltd. It has exhibited artistic embroidery and yuzen-dyeing textiles both domestically and internationally. Nishimura Sozaemon combined textile products with the traditional Japanese paintings of Kishi Chikudo, Imao Keinen, and others. He aspired not only to promote the textile industry but also to demonstrate the high standards of Japanese textile quality as an art and to display Japanese pride on the world stage.

Keywords
Textile industry, embroidery and yuzen-dyeing on velvet, pictorial design, world's exhibition, government policy

History before the Meiji era
The Nishimura Sozaemon family founded a family business in the middle of the 16th century. The family, in the Chikiriya clan, currently operates as a textile wholesaler under the name Chiso Co. Ltd., which is one of Japan’s oldest businesses. According to the surviving genealogical records of the Nishimura family, the Chikiriya clan was founded during the Koji period (1555-1558) when Nishimura Yozaemon opened a shop selling clerical garments in the Sanjo-Muromachi district of Kyoto. The clan’s shop flourished in the 17th century, operating in more than 100 housing units. However, the only remaining direct descendants of the Chikiriya clan are the Nishimura Sozaemon, Nishimura Jihei, and Nishimura Kichisaemon families.

At several points in the long history of the Nishimura Sozaemon family, the family’s future was in jeopardy. One such instance occurred towards the end of the Edo period in the early 19th century when financial difficulties, compounded by troubles surrounding the family’s inheritance, placed the family in a precarious situation. Nishimura Sozaemon IX sold the family estate in 1827 in order to pay back loans and went on to plan the family’s restoration together with his 17-year-old sales clerk Ohashi Jusuke and two of his maidservants. Nishimura Sozaemon IX died one year later, whereupon the family adopted a three-year-old child from the Chikiriya clan that they raised to become the tenth Nishimura Sozaemon. The young Ohashi Jusuke, a mere employee, raised his infant master and resuscitated the family business with the support of the clan. Despite Nishimura Sozaemon X dying at a young age, Ohashi Jusuke, now head clerk, managed to lead the business to success and bought back the family’s estate. In recognition of his achievements, he was named the 11th Nishimura Sozaemon.

In the year 1873 (Meiji 6), Mikuni Naoatsu of the Mikuni family was adopted into the Nishimura family and became the 12th Nishimura Sozaemon. The modernisation policies and Westernisation ideologies of the new Meiji government brought significant changes to the industrial structure in place at the time. Up until the Edo period, the textile industry in Kyoto had mainly produced vestments for use in temples and shrines and personal attire for the Daimyo and court nobles. Starting in the Meiji period, however, this market rapidly declined due to the removal of the Emperor and court nobles to Tokyo as well as the catastrophic damage to temples caused by the anti-Buddhist movement. The Nishimura Sozaemon family, who until the Edo period had mostly supplied the Higashi Honganji temple, started to seek new business overseas from the Meiji era onward.
Reconstruction of the textile industry in Kyoto

December 1870 (Meiji 3), the Meiji government set up an establishment for promoting industry called the Seimi-kyoku Bureau in the Nijo-Kawaramachi district of Kyoto. The name Seimi was coined by transcribing the German word chemie (chemistry) using Chinese characters. Foreign specialists were invited there as lecturers with the aim of furthering industrialisation, especially in the field of chemistry. Incoming Western knowledge of chemical dyes and their uses was taught at the establishment. Moreover, during the 1873 (Meiji 6) international exposition held in Vienna, three textile workers from Nishi-jin, Kyoto, toured Europe with government exposition officials, stopping in Lyon, France, to learn weaving techniques. They returned home with Jacquard and Battant looms, bringing about revolutionary progress to Kyoto’s textile technologies. After that, the government began dispatching Japanese workers to France and Germany to learn dyeing techniques. Foreign artisans and Japanese workers who studied abroad became lecturers and imparted their knowledge to many more workers, resulting in vast improvements in production quality as well as quantity.

On the other hand, Japanese arts and crafts such as ceramics, cloisonné ware, metalwork, and embroidery were highly regarded in the early days of the international exposition. This was because of the fact that Japan’s handicrafts were extraordinarily elaborate, as well as because of the influence of ‘Japonism’ (Japanese influence mainly by Ukiyo-e (woodcut prints and crafts)). The Japanese government ranked the country’s handicrafts as a major export product and implemented measures to improve design quality. Designs that would increase foreign interest in Japan came to be sought after.

Influence of Mikuni Yumin

Mikuni Naoatsu was adopted into the Nishimura family in the year 1873 (Meiji 6). The year was a turning point for Japan’s economy and industry, and it was from then on that the Meiji government actively pursued ways to increase production and promote industry and exports. Now the 12th Nishimura Sozaemon, Mikuni Naoatsu succeeded in incorporating Japanese styles of painting into embroidery and yuzen-dyeing. His connections with Japanese painters were made through his father, Mikuni Yumin. Mikuni Yumin was a sinologist and scholar of Kangaku, which is the study of the classical ideologies and literature of China. He was born in Fukui and immigrated to Kyoto in 1832 at the age of 23. His family were merchants who ran a marine transport business in Fukui’s Mikuni Harbour, which was an excellent environment for acquiring new information and knowledge from overseas. In Kyoto, Mikuni Yumin became the jukan (official Confucian teacher) of the Takatsukasa family (court nobles), and he came into contact with many scholars and artists. The study of Kangaku was essential not only for the court nobility and intellectual class but also for painters, since they were often required to produce paintings about Chinese legends. Early artists who interacted with Mikuni Yumin and were involved with the textile business of the Nishimura family include Kishi Chikudo and Imao Keinen. Kishi Chikudo, originally from Hikone in Shiga Prefecture, was heir to the Kishi School developed originally by Ganku. He specialized in shasei, a style of painting characterised by realistic depiction. He provided original drawings not only for the embroidery
and textiles of the Nishimura Sozaemon family but also for those of other textile manufacturers such as Tanaka Rishichi. However, we can infer that Chikudo’s ties to Mikuni Yumin and the Nishimura family were particularly strong from the fact that his last paintings are in the possession of the Nishimura family, as well as the fact that he worked on the sliding doors of the Higashi Honganji temple (a temple with which, until the Edo period, the Nishimura family held strong ties).

Imao Keinen began his artistic training as Suzuki Hyakunen’s apprentice, but, in his youth, he had also studied Kangaku under Mikuni Yumin. Keinen provided numerous sketches to the Nishimura family, and we can deduce that he and the family held strong ties from the fact that in the year 1891 (Meiji 24), he published a collection of Kacho-ga (paintings of flowers and birds) through the Nishimura Sozaemon establishment.

**Renovation by Nishimura XII**

The key characteristics of the revolutionary work of Nishimura Sozaemon XII in the Meiji period are as follows:

1. He integrated Japanese paintings into embroidery and yuzen-dyeing.
2. He disseminated the techniques for yuzen-dyeing on velvet.

That being said, these accomplishments were not Nishimura’s alone; in part, they were the result of the handiwork and design capabilities of the Kyoto textile industry’s workers. Nishimura held a role more akin to that of a producer, creating sublime works of art by employing talented textile workers.

Let us follow the works produced by Nishimura Sozaemon and the exhibitions in which they were displayed. At the international exposition that took place in the early years of the Meiji period, his displayed works comprised many items that, up until then, had been intended for domestic sale, such as fukusa (small cloth wrappers) and tablecloths. However, in the second domestic industrial exposition held in the year 1881 (Meiji 14), his piece *Kujaku* (peacock) was displayed. This is a 172 cm piece of embroidered shioze (Japanese silk) dyed with yuzen. The sketch of the peacock is based on a painting by Ganku, which is still in the possession of the Nishimura family. The piece is widely regarded for its fine embroidery, so diligently woven and exquisite that one could mistake the picture for the real thing. In the fourth domestic industrial exposition, the embroidered piece *Kannon* (a figure of the Deity of Mercy) was displayed and won first prize. The original picture was the work *Yonyu Kannon* (Kannon with a Willow Twig in a Vase), hanging in Daitokuji temple and copied by Kishi Chikudo for the design. These large-scale pieces of embroidery were framed or put on scroll mounts so as to be appreciated as works of art.

The phrase ‘yuzen-dyeing on velvet’ could be used to characterise the major elements of the second domestic industrial exposition of 1881 (Meiji 14). The first velvets woven in Japan in the 17th century were plain and unsuited to the dyeing of designs and patterns. The Nishimura family developed the technique of dyeing weft threads containing copper wires, thereby succeeding in reproducing fine Japanese paintings on velvet. They displayed these pieces at the 1900 Paris international exposition and the 1904 Saint Louis international exposition, where they received high praise.

These dyed and woven textiles—pieces of clothing and interior fixtures embellished with Japanese paintings using new techniques and refined sketches—are pieces of art of which Japan should be proud and which greatly contributed to its progress in the textile industry.
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Gracious:
Modern living in post-independence Singapore

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Abstract
In the 1960s, Singapore began a rapid period of urbanisation, altering city and domestic sphere. In 1969, the concept of ‘gracious living’ was introduced to capture the ideal qualities of modern Singapore, but it remained ill-defined. This paper explores the dissemination of gracious living in 1969–75 through Singapore’s popular press. It shows how gracious living was adopted as a counterpart to modernity, transformed, embraced advertising, and came to be derided as empty materialism. Gracious living shows us an important ideological device in Singapore’s programs of nation building and modernisation, and this study attempts to account for the core principles underpinning its uses.

Keywords
Singapore, policy, modernisation, governmentality, consumerism

Introduction
This essay is about rhetoric in Singapore in the 1970s. Specifically, it is about the concept of ‘gracious living’, which attempted to define the urban condition and national character of Singaporeans. Singapore became an independent republic in 1965, beginning a process of reform that included stabilising the economy and addressing urban squalor. Powell (1996, p.47) characterised the period as one of optimism and idealism. This period of remaking Singapore included efforts by the Housing and Development Board to reshape the city through low-cost public housing, and later, national campaigns to shape behaviours of language, family, and outlook. But gracious living was unlike these other policy developments in that it remained particularly undefined. It was not targeted towards any specific realisation, but still suggested the promise of complete reform. Rather than leading clearly to strategy and design, it took shape as rhetoric, being frequently discussed in newspapers. Gracious living was ultimately a lifestyle concept that made Singaporeans consider how they ought to live.

Art, nature...
Singapore’s Prime Minister, Lee Kuan Yew, introduced gracious living to the national consciousness in 1969. In his words, it described “a pleasant city, with parks and gardens, music and painting, drama and light entertainment: a rugged and courteous people” (Koh, 1974). It was at once a description of the ideal urban environment, the culture industries, and the public mentality. However, there was a problem with the definition in that people didn’t quite understand what it meant. Over the following years the term became a flexible catch-all for the desires of Singaporean society.

Lee’s description of gardens and the arts led to interpretations of tangible qualities. What he described was most recognisable as things that are pleasing, prompting a materialist reading where to live graciously was to surround oneself with beauty. Difficulties in understanding gracious living beyond its materialism may stem from the fact that it was not a novel term, in the west it had been used in books on social etiquette (Pratt, 1932; Cuming, 1965). It was attached to ideas of how grace and elegance translated into home decoration and hospitality. In the 1940s, for instance, the Singaporean department store Robinsons promised gracious living through its advertisements of imported upholstery fabrics and tablecloths. At the time, gracious living was the calm elegance of the domestic environment, a product of the home beautiful. Throughout the 1960s advertising continued to promise gracious living through appliances and imported foodstuffs, making it an aspiration to domestic luxury. When Lee...
adopted this language in 1969, he was expanding existing aspirations for home life to the scale of the state, constructing a framework for living that encompassed urban planning, architecture, the culture industries, and individual behaviour.

Gracious living can be seen as an early attempt at the governmentalist campaigns that were later released, an effort to shape Singaporean citizens, making them amenable to the economic and cultural plans of the new republic. However as Tunstall (2007) argues, for governmentality to operate it requires two levels of design, first the policy, then a clear communicative form so that the message may enter the national consciousness. Gracious living lacked this second step, remaining an unresolved proto-policy. It did, however, serve as testing ground for Singaporean values that would later appear in specific campaigns.

Not long after Lee introduced gracious living, it became a subject of public discussion. Two elements were clear in Lee’s outline: gracious living involved nature and the arts, and for many this served as a reliable guide. A.G. Alphonso, Director of Singapore’s Botanic Gardens, commented that conserving nature was essential to gracious living (Gardens and Parks, 1972). By 1972, it was described that simply sitting under the shade of a tree was gracious living (Not Just Grace of Place, 1972). This last appeal to gracious living promoted the annual Tree Planting Day, part of a general greening policy that intended to make the rapid urbanisation of the Housing and Development Board more pleasing. This is one example of how values established under gracious living became defined policies of their own.

Others focused on the arts, and many exhibitions launched in aid of gracious living. Parliamentary Secretary (Education) Mohammed Ghazali Ismail stated in opening one such exhibition that it was artists who would ensure gracious living by applying their skills to industry, thus beautifying the human environment (How Artists Can Ensure a Gracious Life, 1970). Interestingly, for Ghazali in particular, nature and art shared a logical connection. He saw nature as “the mainspring of inspiration for artists” (Call to Cultivate Interest in the Fine Arts, 1971). At this time, nature played an important role in the identity of Singaporean art, as represented in the romanticised landscapes of the leading Nanyang Painters.

Art and nature were explicitly mentioned in Lee’s 1969 introduction to gracious living, but it wasn’t long before others attached different values to the concept. In 1970, two months before Ghazali’s speech on art and industry, Parliamentary Secretary (Culture) Sha’ari Tadin proposed his own method for gracious living: family planning (Family Planning, 1970). As with Tree Planting Day, this was another idea that was later adopted formally in the 1974 Two is Enough campaign. Projecting future policy, Sha’ari positioned small families as economically stronger and providing better education. Small families would lead to greater knowledge, which is what Sha’ari understood as ‘gracious’.

... And consumption

Sha’ari’s approach to family planning and Ghazali’s idea of the arts gave value to knowledge and skill. However, both could also be interpreted materialistically: small families are financially stronger, and art will make better industrial commodities. Indeed, it was this materialistic interpretation, extending gracious living’s earlier meaning of conspicuous consumption, which took hold of the public imagination. The commercial mobilisation of gracious living received its first grand showcase at the 1971 industrial trade exhibition at New World Amusement Park (Trade Fair, 1971). Here, advertisers drew on the newfound popularity of the term and asserted its former meaning, using it to display the latest household goods. For many people, gracious living was consumption of the latest appliances and home decorations.

‘Art’ and ‘nature’ showed gracious living as a response to urbanisation, and in some ways so did its materialist reading. Singapore’s early public housing projects were based on utilitarian needs to provide shelter and support the economy; they were what Jacobs and Cairns (2008, 589) called “a modernism indifferent to display and ornament”. By the early 1970s, there were growing efforts among people to invest in luxury decoration inside their public housing flats, softening the functionalist rooms and creating a higher sense of material wealth. As Jacobs and Cairns (2008) describe, from 1972 the HDB published the magazine Our Home, which gave professional advice and DIY solutions for renovating flats. As the nation stabilised, the lure of gracious living was its promise of something more than shelter. It implied the material luxury of modernisation, where harsh public housing estates could be made glamorous through consumption. In this way, through advertisers’ prompting, gracious living became a popular concept of interior design. It was this impulse that the New Nation newspaper played into with their “Gracious Living” supplement in late 1971, a special section concentrating on modern interior decoration, which discussed high-rise living, designing bathrooms, using carpets and wallpapers, and incorporating antiques into the
home. Such efforts were framed around public housing, though some features show that desires lay elsewhere. For instance, a small logo, marking each article in the section, shows a modernist bungalow, a statement that the real image of gracious living was not the government flat, but the private house.

In the materialist interpretation, gracious living meant televisions and kitchen appliances. What was earlier attached to soft furnishings was now an expression of domestic technologies and modern conveniences, and this all cost money. One letter to the *Straits Times* described this gracious living: “a clean and beautiful garden city, an earth satellite station, a mosquito-free and pollution-free Singapore, easy-to-play Toto, hawkers’ centres, five-room housing board flats, colour TV (soon to come), wider roads, pan-expressways, fly-overs, over-head bridges, jumbo-jets, more hotels, more public telephones, and many other amenities” (Chew, 1971). The idea was projected as something everyone in Singapore should strive to attain, speaking of public flats and structural works to improve the whole city. While there is hope here for the broad population another reader was sceptical, saying, “only money makes gracious living possible” (An Observer, 1971). Associations were developing between ‘graciousness’ and affluence.

The consumerist view of gracious living grew so powerful that it easily absorbed the notion of art into its system. Gracious living meant the commodification of art, or, art as home decoration. Art was accepted, but as the poet Yeo Cheng Chuan (1971) commented, was not engaged with as substance: “…where an exhibition / of paintings is a social event first, where / many are sold on gracious living, but what / they really buy are houses, cassettes, cars…”

While this view painted gracious living as modern lifestyle, for some the fatigue of consumerism set in. To express this, gracious living was again employed, though this time it suggested a dignified removal from modernity. This quality is found earlier than Lee’s policy, in the language of advertising. In 1957, gracious living was taken out of the home, and used to market the Sea View Hotel. An older hotel from the 1900s, it is stated as having a gracious quality “not often found in the modern hotel” – this adds nuance, suggesting gracious living as a type of consumption involving a calm elegance, disconnected from the speed of the modern world. A later commentator, Amy Chua (1971), trying to make sense of gracious living, drew on this earlier notion to criticise the materialist interpretation. Chua maligned the fact that gracious living had come to mean “high-style living”. She questioned the fundamental connection between gracious living and art, writing that the fashion for batik painting in home furnishing reduced art to decor and commodity.

Chua suggested instead that gracious living should be “graceful”, the “relaxed living” of not being caught tirelessly in the business of modern life. It was modernisation that brought Singapore its materialistic focus on lifestyle, and gracious living needed to question this. The purpose of art in gracious living is not to surround oneself by beauty, but to cultivate aesthetics for refinement and “humane sensibility” – the capacity to observe art should translate to abilities to observe the suffering of others, rather than being blinded by wealth. Aesthetic sense, for Chua, was the core of gracious living, which was not really about design, but “inner truth”.

Despite such arguments, the materialist understanding persisted, as did associations with wealth. Even though it was promoted through efforts such as the Ideal Residential Block contest of 1978 (offering prizes for residents who made their government flats presentable and maintained a neighbourly community), gracious living became less associated with life in government housing. Some believed that the very environment of the private condominium was more conducive to gracious living ([Letter], 1972). Certain buildings were soon being advertised for their ability to provide gracious living, and in some cases, like the 1976 Ardmore Park apartments, gracious living directly informed the architects’ plans, providing tangible examples of built works that claimed gracious living as guiding philosophy (Every Facility for Gracious Living, 1976). For Ardmore Park, what this actually meant was very similar to a 1940s understanding of the term – it was about privacy, modern decor, and adjustable living spaces for entertaining guests, providing a social function of style and glamour. Gracious living ultimately meant modern conveniences like the central air-conditioning in the 1972 design of an exclusive estate at Victoria Park Close, expressly designed to give gracious living to “rich executives” (Bungalows Designed for Gracious Living, 1972).

But looking back to the comments of politicians, gracious living was not intended for the elites, nor did it set out to promote conspicuous consumption. The arguments against materialism continued. Sha’ari Tadin admitted that earlier attempts to construct gracious living had been misconstrued. In 1972, emphasising the value of art, he commented that the absence of aesthetic sensibility created a “spiritual vacuum in the Singaporean personality” (Getting the Wrong Idea About Living Gracefully, 1972), which provoked concern that “this slogan [is] restricted to money, nightclubs and fancy car numbers” (Bassapa, 1971). Taking up this concern, Edgar Koh (1974) tried to
champion gracious living, arguing that the materialist standpoint had missed its essential quality. The materialist urge resulted in what Sha’ari called “ugly Singaporeans”, and so Koh argued that it was actually “simple and frugal living” that better encapsulated the concept, because this would foster the spiritual and aesthetic components that he believed were intended. In this, Koh drew on the values of Amy Chua’s writing from 1971. It was about “individually, learning to appreciate simple pleasures and derive joys from simple sights, sounds and actions” (Koh 1974).

In 1975, New Nation included this exchange: “Ah Fook: I say, what has happened to the national fitness exercises that used to be such a big thing? Mei Lin: I suppose people have opted for gracious living instead, whatever it means” (Ah & Mei, 1975). It was clear by this point that gracious living had become a recognised topic for discussion, but that nobody really knew what it meant. Indeed, over the previous six years it had been many things to different people. It was an individual’s focus on the home interior and a communitarian concern with the city. It was luxury in private ownership and compassionate civic mindedness. It was fast-paced modern life and the reaction against it. It was interpreted both materialistically and aesthetically.

A proto-policy on modernity
Gracious living became a rhetorical vessel for the values of different people, allowing them to make of it what they would, installing and trialling their own ideas. Interestingly, many of these values were later officially turned into policy. ‘Two is Enough’, ‘National Courtesy’, and ‘Singapore Garden City’ all expressed values once contained in gracious living. Considering this, I would argue that gracious living was a proto-policy, and essential in shaping governmentality in the city-state. Lee’s introduction of gracious living constructed desire for an ambiguous modern lifestyle and modern city. It introduced the concept to popular rhetoric, calling out diverse interpretations about how to make this possible. This made the government’s later provision of answers, by extracting elements of gracious living, all the more welcome, as the desires had become internalised. Gracious living was, at its core, establishing beliefs as to what Singapore should be, how its people should behave, what they should value, and what their government ought to provide. By the 1980s, gracious living ceased to be a subject discussed in newspapers, though it continued occasionally in advertising. Today the phrase is sometimes still seen, as in the Gracious Living furnishing exposition. As a formless proto-policy, there was no clear ending to gracious living, but its significance gradually faded.

Gracious living responded to increasing modernisation and urbanisation in republican Singapore. It attempted to make sense of this new landscape, and more importantly, to move beyond utilitarian concerns, constructing a lifestyle that celebrated the luxuries of the modern world. While it remained unclear, and was never as prominent as Singapore’s later campaigns, gracious living shows a process through which Singaporeans tried to make sense of modernisation, attempting to move past the physical changes that modernity brought and construct the pleasures of modern life. It’s just that nobody quite agreed on what these pleasures were.

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**Biographical note**

Jesse O’Neill was previously Merewether Scholar at the State Library of New South Wales, and received his doctorate from the University of New South Wales, for research into colonial Australia’s early print and publishing cultures. Jesse is currently Lecturer in Design History at the Glasgow School of Art in Singapore.
Travelling by bicycle in Australia, from nationalism to multi-culturalism…:
Brand names, marketing and national identity

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Abstract
With the Australian-owned and Taiwanese-manufactured bicycle Malvern Star launching its premier model named Oppy after world champion racer Sir Hubert Opperman, it is harking back to the glory years of Australian bicycling sporting success. This paper explores the history of the bicycle industry in Australia and the role played by product branding. It also documents the change from this nation starting as a largely British ‘settler’ society, and becoming a modern multi-cultural one.

Keywords
Bicycle, industrial design, Australia, culture, industry

Introduction
A strict post-colonial ‘centre-periphery’ argument would suggest Australian culture (and bicycle design activity) was in every way deferential to major international design cultures. This was not the case. Even under British colonial rule, the first settlers from 1788 were beginning to form their own version of British culture in a distant land. There was increasing engagement with non-British cultures and companies; from the 1880s there were many attempts to develop a bicycle locally drawing parts and ideas from European countries and America, as well as the ‘mother country’, Britain.

This all suggests a situation of either multiple or shifting ‘centres’ of influence that the standard ‘centre-periphery’ argument does not take into account. Australia moved within this range of influences with some degree of freedom and to both its advantage and disadvantage. The international influences acting upon the local bicycle design industry that is explored throughout this paper suggests Australian industrial design culture has always been a response to world industrial design. Australian designers engaged with every major design trend, sometimes copying, sometimes manufacturing under license, sometimes adapting and sometimes even being at the forefront of experimenting with new international design ideas.

1880’s-1902. Australia’s ‘pioneering’ bicycle industry before the locally developed Malvern Star

The late 19th century saw great technological experimentation with bicycles as all countries with some industrial capability experimented with ideas for the new mode of transportation. 1886 is generally recognised as the date of the world’s first modern bicycle; the diamond-shaped frame of the English Rover Safety Bicycle. This made the ‘Ordinary’—popularly known as the ‘Penny Farthing’—style of bicycle suddenly redundant. There were 100s of Australian attempts to design and manufacture a local bicycle before the dominant local brand, Malvern Star, emerged in 1902. The least successful of the early Australian designs were of total local design and manufacture. More successful were those local bicycles that incorporated imported design knowledge or mechanical parts, especially complex items such as tube-joining lugs, derailleurs and gears, difficult for an emerging industrial country to produce. For example, Malvern Star often used expensive-to-cast BSA lugs, and adapted them by cutting out their own decorations (Rapley, 2012, p.68). Adaptations were also made to imported parts to make the Australian bicycle sturdier to cope with rougher Australian dirt and gravel roads linking small towns with the major cities. A visit to the Australian National Museum in Canberra reveals several bicycles celebrated for their role in the social and explora-
discovery of gold in the state of Victoria, Melbourne in the 1880s was
Australia as a colony, a satellite, a province, and on the periphery
The origins of Australia's dependence need to be explored.
The strongest influence on the early local attempts to produce an Australian bicycle was still indebted to international models. According to Rapley (2012, p.20), while other names were overtly patriotic; *Carbine* was named after the racehorse that won the first Melbourne Cup horse race. This was the first of many links to the Australian love of sport. Similar overtly patriotic names were given to other locally designed and manufactured goods, for example cars. In the early days of the Australian motor industry in the late 1800s, patriotic names were favoured for local cars – *Austral, Australia, Australis, Roo, Shearer* and *Southern Cross*. But in the 19th century, even the most nationalistically-named Australian bicycle was still indebted to international models. And the strongest influence on the early local attempts to produce an Australian bicycle was British. Following the discovery of gold in the state of Victoria, Melbourne in the 1880s was *per capita* the wealthiest city in the world, and

Australia as a colony, a satellite, a province, and on the periphery
Dieter Senghaas has suggested a ‘peripheral’ culture can be identified by the following characteristics: exports of primary commodities to one major trading partner, a large external debt, extensive foreign investment, a high level of technology imports and unfavourable terms of trade (1985, p.156). This surely described much of Australia’s history where increasing levels of foreign investment, imports of technology and the practice of simply copying international design objects or even ‘manufacturing under license’ (with consequent royalty payments) resulted in low levels of Australian scientific and technological research and development, and a ‘brain drain’ of talent overseas (Todd, 1995, pp. 6-7).

The origins of Australia's dependence need to be explored.
Britain and Europe industrialised during the 19th century; a time which saw the development of the international economy under which, for the first time, ‘peripheral’ parts of the world were united by trade–people, ideas, money and machines moved about from one country to the next. The European powers needed essential raw materials and then markets for selling manufactured goods. Thus began the 19th century scramble by most European countries to pillage less-developed countries. Britain colonised India; Holland, Indonesia; France, Indochina; Italy, parts of Northern Africa. Any number of historians could introduce the story of British colonial settlement in Australia. Of specific relevance to this paper about technology in Australia, however, is the work of Jan Todd. Todd claimed that from inception Australia was peripheral to Britain, and this unequal relationship has denied Australia the opportunity to build the necessary independence to become technologically mature. While the colony supplied the raw materials, Britain would undertake the design and manufacturing befitting its role as ‘workshop of the world’. From the beginning of the 19th century Australia became a useful dependant supplying Britain with wool for British textile mills. After the middle of the century, gold became Australia’s next important contribution to Empire. (Todd, 1995, pp.3-4) Put simply, the unequal relationship between the ‘centre’, Britain, and ‘peripheral’ (or ‘provincial’) Australia, forced the latter into the role of supplier of raw materials and importer of manufactured goods and technologies. This situation has led Paul Grant to declare Australia lacked ‘technological sovereignty’, the capability and the freedom to select, or create, the technology needed for industrial innovation (1983, p.239). The best outcome of importing technology is an assimilation of imported technology with local technology. However there have been many examples of the failure of technology transfer. This might involve a clash between imported and local technology leading to two separate technologies operating in competition with each other in the ‘peripheral’ country, or the failure of imported technology to aid local technology. There is also the case of inappropriate technology transfer where the ‘peripheral’ culture does not need the ‘centre’s’ technology (Todd, 1995, pp.11-13). As can be seen, imperialism (and its consequences) can have devastating effects on a country.

Australian bicycle design, manufacturing and branding
Consistent with the spirit of nationalism which left its mark on other areas of art and design in the early years after the Australian Federation of 1901, most early Australian bicycles had names which were intended to evoke a sense of ‘Australian-ness’. Some bicycle names drew on ‘rural’ themes, *Bullock* (Rapley, 2012, p.20), while other names were overtly patriotic; *Carbine* was named after the racehorse that won the first Melbourne Cup horse race. This was the first of many links to the Australian love of sport. Similar overtly patriotic names were given to other locally designed and manufactured goods, for example cars. In the early days of the Australian motor industry in the late 1800s, patriotic names were favoured for local cars – *Austral, Australia, Australis, Roo, Shearer* and *Southern Cross*. But in the 19th century, even the most nationalistically-named Australian bicycle was still indebted to international models. And the strongest influence on the early local attempts to produce an Australian bicycle was British. Following the discovery of gold in the state of Victoria, Melbourne in the 1880s was *per capita* the wealthiest city in the world, and

Travelling by bicycle in Australia I 025
A visit to the Farren Collection in Melbourne reveals many locally-made bicycles with a strong British influence, including both the Argo and the Australian Army Folding Bicycle, both of which contained BSA parts (Farren, 2013, p.240). So too the Bates, Diamond, Hillman, Hartley, Healing, Huffy, Martin, Neville, Olive, Parkside, Rossmore, Speedwell, Speedway, and Webster. The Moller was based on Humber parts (Farren, 2013, p.46).

But there were also many attempts to develop an Australian bicycle drawing parts and ideas from European countries and America, other than the ‘mother country’, Britain. This was sometimes reflected in their branding and model names. There were bicycles of American influence, often using the handlebars designed by the first black American super-star rider Major Taylor including the Mainie Star and Trooper. There were bicycles of French influence, for example French Nervex lugs were used by many Australian frame-builders including Ace, Toseland, Rob Special and Super Elliott. Other local designers used French Prugnat lugs Paino and Cecil Walker amongst them. There were bicycles of Italian influence including the Frejus-Hillman (Rapley, 2012, p.172), while in recent times, the great local designer Daryl Perkins learned from Faliero Masi (Rapley, 2012, p.218). Other bicycle names were plucked from Greek Mythology witnessed by Ixion and Orion.

Clearly Australia drew from a rich array of international sources to design, manufacture and brand its bikes. This worked to the nation’s advantage, as Australia has always been an early adopter of new technology and enjoyed these benefits. Within all this Australian experimentation and interaction with the rest of the world, most bicycles on Australian roads prior to the first substantially mass-produced Australian bicycle (the 1902 Malvern Star) were either fully-imported (largely from Britain) or, in larger numbers, Australian-built versions of what were basically a set of ‘world bicycles’.

There were some uniquely Australian design innovations. As early as 1896 patents protected ‘chainless variable gear mechanisms’ developed by two separate local companies Triad and Love. (Berto, 2009, p.47). Also innovative was the Barb Sprung Frame while Gem brakes of the 1930s predate current V-brakes by many decades (Farren, 2013, p.108). Australia has also been innovative in being an early adopter of new technology. For example Malvern Star embraced and popularised the Cyclo gear rear derailleur system in this country.

Australia also seems to have lent many of its unique words and names to international brands. For example, many foreign companies see a marketing advantage in using exotic Australian animal names. Many use the word and image of the Kangaroo. The earliest was The Premier Kangaroo Dwarf Safety of 1884 designed and manufactured by Hillman, Herbert, Cooper, of Coventry, England. (Farren, 2013, p.116). This continues today. Stumpjumper is an American bicycle model that surely owes its unfamiliar name to the Australian-designed Sunshine Harvester ‘stumpjumper’ agricultural plough. There are also Kona Utes (named after the Australian coupe-utility ‘ute’ light truck), Platypus water bags, and American company Soma have just released Oppy pedals (named after Australia’s greatest sports rider.)

Multiculturalism is the Australian national identity; Australian industrial design culture interacting with the world

A strict ‘centre-periphery’ argument would suggest the Australian bicycle design activity was in every way deferential to the major international design cultures. This was not the case. Even under British colonial rule, Australians were beginning to form their own version of British culture in a distant land. From the very first weeks of settlement, circumstances forced innovation in the manufacture of unique tools to cope with different physical conditions. These pioneers up until Federation, and in some cases beyond, were arguably the dynamic face of Empire abroad, and were as much British as they were Australian. Later within this relationship, there was freedom for local bicycle companies to also engage with non-British companies. French, American and Italian examples have already been cited. This all suggests a situation of either multiple or shifting ‘centres’ of influence which the standard ‘centre-periphery’ argument with its emphasis on Britain and its colonies does not take into account. Australia moved within this range of influences with some degree of freedom and to both its advantage and disadvantage. The Australian design community did defer to the ‘visiting expert’ from ‘centre’ design cultures. Australians did value the prestige of the imported product over the local product and so did engage in the practice of manufacturing under license. On the other hand, despite the strong influence and domination from various design ‘centres’, the Australian design community managed to negotiate its own ‘space’. Australia seems to have been able to choose larger, more industrialised partners from whom to import technology and research and development findings it could not otherwise afford. The
Australian bicycle industry occasionally even managed to shame the ‘centre’ culture by occasionally producing a better product through adapting ‘centre’ designs to suit local needs.

The international influences acting upon the local bicycle design industry explored throughout this paper suggest Australian industrial design culture has always been a response to world industrial design. Australian designers seem to have engaged with every major design trend, sometimes copying, sometimes manufacturing under license, sometimes adapting and sometimes even being at the forefront of experimenting with the new international design ideas. The evidence presented in this paper suggests that ‘multiculturalism’ is the true Australian national design identity.

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Biographical note

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The rise of consumerism and the localization of trademark design in colonial Korea: 
Focusing on the “cultural rule” period between 1920 and 1937

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Abstract
This study aims to capture aspects of localization in trademark design during the so called “cultural rule” period (1920-1937) in colonial Korea. While conducting case studies of corporate and merchandise trademarks, it also pays attention to political, social and economic conditions, as the shift of policy by the colonial government in 1920 led to the expansion of media, commerce and advertising, resulting in the rise of modern consumerism in Korea. In trademark design, a “Korean transformation” was observed. National icons were adopted to emphasize the origin of Korean products and companies, original forms of symbolization were sought as counterparts to the Japanese family crest style, and the use of hangeul (Korean characters) expanded. This article claims that although nationalist implications were imbedded in these changes, the fundamental driving force was the profit motive of enterprises, which sought optimized forms to attract the attention of consumers.

Keywords
Trademark design, visual identity, consumerism, Korean design history, colonial Korea

Introduction
As an institution that gathers capital, produces goods and creates profits on a large scale, the corporation is an entity that characterizes the modern economy. Moreover, if we accept the fact that the company is a modern organization, it could be said that the characteristics of the modernization of a certain society would be imbedded in the activities and appearances of the companies within it. Therefore, as visual representations of corporations and their products that are put out on the front line, it could also be assumed that contemporary social and cultural traits are reflected in trademarks.

This is especially true in the case of Korea between the late 1800s and early 1900s, as the concept and system of modern commerce, as well as mass advertising and the graphic symbolization of its components, were all introduced as part of an explicitly “modern” civilisation. The emergence and establishment of the trademark in Korea were largely lead by foreign companies operating in the Korean market after the opening of the ports in 1876. At the beginning of the twentieth century, among the foreign powers surrounding Korea, the Japanese gradually enhanced their political and economical influence, dominating the Korean consumer goods market. As a result, during the first twenty years or so in Korea, advertising as a whole, and trademark design in particular, tended to follow the Japanese convention with little modification. It was mainly from the 1920s that changes, which could be described as “reactions” to the initial foreign introduction of trademark design, became significant among Korean firms. In other words, a tendency to “localize” trademark design was apparent, and this was influenced by a shift in social atmosphere and the raised commercial awareness of the public.

The “cultural rule” and the rise of a modern consumerism
The March First Movement in 1919, a nationwide protest against the Japanese occupation, made the colonial government realize that excessive oppression of the Korean public would act against its interests, destabilizing colonial
rule. Consequently, the so called “cultural rule (munhwa jeongchi)” was proclaimed in 1920, which promised greater opportunities for Koreans and the Japanese respect for Korean culture (Peattie, 1988). Although the fundamental intention was to stabilize and extend their domination by conciliating the Koreans and creating class that supported the colonization (Kang, 1994), nevertheless, under this scheme, which continued until the initiation of “general mobilization” in 1938, public conditions were amended to a certain degree as the colonial government broadly alleviated social and economic regulations. Moreover, as Robinson (1998) has demonstrated in his study of radio broadcasting in Korea, the “cultural rule” provided a space for Koreans to develop the vernacular culture in constructing a modernity of their own, which acted to both sustain and subvert the assimilation policy.

With regards to trademark design, changes in economic and media policies are of particular significance, as they laid a foundation for the maturation of modern consumerism. In 1920, the colonial government abolished the legislation that suppressed the establishment of private companies (Hoesaryeong) (Jeon, 2012), and exempted Japan-made industrial goods from import duties (Seoulteukbyeolsisa-pyeonchan-wiwonhoe, 2003). These decisions drastically accelerated the inflow of Japanese capital and commodities, while partly facilitating the organization of business by Koreans as well. On the other hand, permission to publish newspapers was granted to the private sector, which resulted in the foundation of three Korean newspapers, growth of the overall volume of daily media, and the expansion of the reader class among Koreans (Kim, 2002).

With the support of the colonial government, investment in Korea by Japanese entrepreneurs was invigorated, which was also evident in the retail industry. From around the mid-1920s, Japanese retailers such as Chōjiya, Minakai and Mitsukoshi expanded their business in Seoul by increasing capital investment or constructing new buildings, and re-established themselves as “department stores” (baekhwajeon) (Oh, 2004). “Modern” commodities imported from Japan filled these newly established spaces for consumption, and consumer culture in Korea was formed around these products. According to Hwang (2006), by 1930, the formation of a mass-consumer society was evident in Korea with Seoul as the center. In other words, a “modern” consuming public had emerged, who dedicated a certain amount of time for shopping, and who had acquired the skills to express themselves through their consumption. Of course, it should be noted that the enjoyment of this material affluence was limited to the upper class urbanites, who were only a small part of the population. Nevertheless, a system of mass-consumption existed, where consumers, companies and products interacted, and advertising worked as a device that mediated this circulation.

Meanwhile, the expansion of print media naturally provided more space for advertising, which was taken up by “big brands” of Japanese origin, such as Ajinomoto, Kaô and Mitsuwa. Because the 1920s was a period when Japanese manufacturers strived for the improvement of advertising in their own market, together with the importation of these major Japanese products, the developments that had been made in Japanese print advertising design were introduced to Korea as well. In particular, a consistent and integrated representation of visual brand identities was significant.

The tendency to emphasize brand identities in advertisements, in turn, seems to have elevated the public awareness of trademarks in Korea. For example, a newspaper article from 1922 which depicted the daily routine of a “modern gentleman,” filled with major Japanese products and their logos, was representative of the widespread popularity of these branded commodities. In addition, a “Trademark Exhibition” was held in 1922, and a series of articles which presented and explained the trademark designs of twenty-nine companies in Seoul was featured in Maeilsinbo in 1927. These examples point to the fact that the brand had become more important to the Korean consumers, not only in its name, but also in its visual aspects. Along with the rise of modern consumerism in Korea, this increased public interest towards trademarks and their design led companies to devote more efforts to perfecting their visual identity. In the process of such elaboration, especially among Korean companies who had to survive competition with their counterparts from the empire, a tendency to “Koreanize” the designs was observed, which could be divided into three different aspects.

**The Mulsanjangryeo movement and symbols of "ours"**

While the society enjoyed a relative abundance of commodities after 1920, the
economic stability and independence of Koreans still remained an issue under the colonial capitalism. As a means to overcome this situation, the Mulsanjangryeo (Korean Products Support) Movement, an economic independence movement was initiated by nationalist-capitalists in 1923, and was aimed at the accumulation of Korean capital by promoting the consumption of locally produced goods (S. R. Lee, 2005). Under the influence of this movement, Korean merchants and manufacturers made advertisements that strongly provoked national sentiment, and trademarks were also designed according to the general slogan of the campaign, "our products." In order to represent products of Korean origin, familiar national icons were transformed into trademarks. For instance, the map of the Korean Peninsula was used as an emblem of national territory that ought to be protected, and the Geobukseon (Turtle Ship) appeared as a protest against the Japanese, imbued with the meaning of a patron that defended the nation from Japanese invasion several centuries ago.

The most explicit example of this patriotic representation strategy is seen in the case of Taegeukseong (ying-yang and stars) brand of cotton cloth. (Figure 2) The taegeuk, or the Korean ying-yang, used as the central motif in the Korean flag from the late 1800s onwards, has been perceived as a symbol of national identity ever since, during the Japanese occupation, and especially after the March First Movement, public exposure of the motif became difficult as it was censored by the colonial police. Therefore, using the taegeuk in the brand name and as a trademark, and displaying "this trademark, our cloth, our pride" in advertisements, made a bold statement that directly stimulated the patriotic spirit of Korean consumers. The campaign was successful, in that Taegeukseong cotton became widely perceived as "our product," leading to a rapid increase in sales. In similar cases, by displaying strong Korean motifs as trademarks, products and corporations could put on a patriotic image, and the fact that this strategy was effective also indicates that consumers keenly reacted to the message implied in the graphic symbol.

Regarding the actual achievements of the Mulsanjangryeo Movement, however, economic historians have pointed out that it failed to fulfill the missions it had proclaimed. In fact, despite ostensibly emphasizing economic independence and national identity, many of the major companies who led this movement were highly cooperative with the colonial government's control policies (Bang, 2010). Thus, it is worth noting that even while the nationalist values represented through the trademark were actually void, the trademark still was a valid trick of trade, and this seems to reflect the ironical situation of the colonial capitalism.

A search for an original form of symbolization

During the 1910s, the Japanese family crest style was established as a standard for corporate trademarks in Korea. Entering the 1920s, as the culture around trademark design matured, Korean companies started to differentiate their symbols by modifying them into a style that was more familiar to the local visual culture. Generally, the use of letters became prevalent as they replaced figurative elements, and these could be divided into two types.

The first type was represented by the frequent use of stylized Chinese characters, which means letters that are highly distorted to fit a geometrical frame, distinct from ordinary legible letterforms. A typical example is the corporate trademark of the Korean pharmaceutical company, Joseon-maeyak-hoesa. (Figure 3) The logo is a combination of two characters "hoe (図)" and "chun (setPosition:));" inside a diamond shape, transformed to the extent that both are barely decipherable. The result is a design that is perceived as a pattern rather than as letters. The origin of these distorted letterform designs can be found in the gilsangmunja, which are lucky Chinese characters stylized within typically round or rectangular figures, applied to everyday objects such as ceramics, clothing and furniture. The gilsangmunja, as one sort of the munjamun (letter patterns) tradition prevalent from the Joseon Dynasty, were forms of visual symbolization comprehensible to the Korean public. (Lim, 2004)

Another distinctive type of the letter trademark is the pattern constructed by the radial repetition of characters. (Figure 4) This design was commonly found in trademarks of enterprises with simple and symmetrical
Chinese characters in their names. Although this style seems to originate from Japanese corporate identity design, the fact that it is found in a much larger proportion of Korean firms is intriguing. Arguably, it can be seen as a compromise, following the tradition of munjamun on one hand, and selectively adopting a specific design technique from the Japanese family crest that suited the local visual culture on the other.

Although the Japanese family crest had been accepted as a typical form of corporate trademark in the 1910s, its visual grammar was unique to Japan, and contained symbols such as plants, animals or architectural elements, not something that could readily be comprehended by the Korean public. In the case of Korean firms these alien elements remained peripheral or merely decorative, making it difficult to imbue meanings or values, which in fact is the essential function of a trademark. Consequently, as the public became more aware of trademarks in the 1920s, these graphic components, which were invalid as a visual language, had been partly discarded from the logos of Korean companies. Instead, applying munjamun, a local tradition of styling, or combining it with a foreign technique, had become valid design methods. Therefore, it could be said that at this point, the search for original forms of symbolization had been extensively explored within the Korean trademark culture.

The expansion of hangeul trademarks

Hangeul trademarks were not completely new in the field of corporate identity, as they had been used within the Japanese family crest style as components, to substitute Chinese or Japanese characters during previous years. However, as the localization of trademarks proceeded throughout the 1920s and 1930s, the use of hangeul in the designs had become more frequent, not only among Korean but also Japanese companies, and within various contexts.

Since hangeul had long been considered as the essence of Korean culture and spirit, it was often used as a symbol of patriotism. The logos of Donga-buin-sanghoe and Dongyangjeo Fabric, brands that were closely related to the Mulsanjangryeo Movement mentioned above, were representative examples, featuring their names in hangeul within the trademarks. (Figure 5) The intention was similar to the case of Taegeukseong, used within advertisements to emphasize the nationality of the business.

Meanwhile, the increased use of hangeul trademarks within the Korean rubber industry around 1925 was also remarkable. As a rare case in this colonial situation, rubber production was a field where Korean firms were superior to their Japanese counterparts in both quality and quantity (S. R. Lee, 1990). Thus, in this case, although adopting national characters in the trademark was not directly an act of patriotism, it was a means of reaffirming and promoting the industrial superiority of Korean companies.

The most prominent property of the hangeul trademark, however, was its legibility. The case of Ryeongsinhwan, a leading Korean digestive medicine brand, best illustrates this utilitarian approach to using local characters in the logo design. In 1922, the brand announced the change of its famous trademark from a Chinese logotype to Korean, through newspaper advertisements. In the introduction of their brand renewal, it was clearly stated that a hangeul logotype had been chosen as it was "comprehensible," and would prevent consumers from confusing it with fake or similar brands. (Figure 6) Since most of its competitors were also Korean, it could be assumed that there was little intention to promote the product’s national identity by the use of Korean script.

The fact that hangeul was applied to trademarks mostly because it was legible, can also be inferred from its use by Japanese firms advertising in Korea. Hangeul logotypes for Japanese brands were mostly created as part of localized marketing campaigns. For example, advertisements featuring illustrations of Japanese women wearing kimonos, had been changed to women wearing hanbok (Korean dress), in which case the brand names and trademarks were also translated into Korean. (Figure 7) As in the case of Ryeongsinhwan, the translational conversion of logotypes...
was beneficial in terms of the likelihood of comprehension. Here, as noted by G. R. Lee (2001), the issue of national identity was deferred; instead, by trying to find a form of design that could be inscribed on the minds of a broader public, economic logic gained significance.

**Conclusion**

Trademark design in colonial Korea appeared as a complex and hybrid phenomenon, where the policies of the colonial government, traditions in Korean visual culture, the perception of the consumer and profit motives of both Korean and Japanese entrepreneurs acted upon each other. The "Korean transformation" in trademark design during the 1920s and 1930s was a course of visual elaboration, in order to influence Korean consumers who had now become more brand-sensitive. This holds significance, as the effort to apply local specificity to the imported "modern" commercial symbolization system was observed on an industrial scale for the first time. Within the political and economical conditions of the colony, experiments were conducted with graphic elements having a sense of locality, such as national icons, traditional patterns and local characters. However, behind all these experiments lay the fundamental principle of profit, trying to capture the interest of the potential customers to the maximum.

**References**


**Biographical note**

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Co-existence relationship of residential apartments and furniture in the republic of Korea

Hye-Sung Kang / Min-Soo Kim / Seoul National University / Seoul / Korea

Abstract
As of the year 2012, more than half the population of the Republic of Korea (ROK) reside in apartments. Because the majority of the residential properties are comprised of apartments the main target customers for the manufacturers and service providers would naturally be the apartment residents at the early stages of product development. The co-existence relationship between the apartment complexes that multiply themselves by virtue of multiple imitation systems and the products that again repeatedly get imitated to take advantage of this multiplication has to be an interesting topic to explore. This topic would have a close connection with examination of directions of development of the apartments and Korean furniture manufacturing industry to their present states, as well as with examination of the mutual relationship between them.

Keywords
Product standardization, furniture industry, South Korea, apartments

Introduction
In South Korea, apartments began to be built in the 1930s and they are still the most popular type of housing. This housing type presented in this article differs from those typical in Western Europe, such as the habitations à loyer modéré (HLM). Apartments often signify poverty in major European cities, whereas South Koreans, particularly the bourgeoisie, appreciate this form of collective living. Since the advent of new residential areas, apartments have been built with various architectural appearances featuring different structures, sizes, facilities, and equipment, among others.

In compliance with current building codes in South Korea, the forms of housing generally fall into two categories, namely, detached houses and apartment buildings. The number of the latter has increased constantly by 3% to 4% a year since 2000 (Ministry of Land, Infrastructure, and Transport, 2013). The vast majority live in apartments. Six out of ten people in metropolitan areas live in common housing based on 2012 data.

The popularity of this housing type has shifted the target of the furniture industry: toward potential apartment residents. Furniture companies focus on these consumers during the first stage of the development process and then develop products that suit them. The production of uniform apartment products has improved as well. This study focuses on the research problem of product standardization in South Korean apartment standards and market supply, with a specific examination of whether consumers are deprived of opportunities to experience variety in furniture choices in this context.

This article presents an examination of the symbiotic relationship between the replication system of large apartment complexes and reproductive products influenced by this type of housing environment in South Korea. The beginning of the standardization in housing and expansion of such housing phenomenon is observed through the aspects of this mutual relationship and co-evolution.

This symbiotic relationship between the two requires a discussion of the evolutionary process occurring within a sociocultural context. This study analyzes this mutual relationship to examine the effects of housing unification in the process of standardization on our lives, as well as the significance of these effects. This study focuses on the period between the late 1970s and the mid-1990s. In the 1970s, numerous studies on standardization were carried out in accordance with governmental policies following a large supply of apartments becoming available, which the public in turn became accustomed to as a typical housing type, until the mid-1990s...
when floor plans for apartments became inflexible. Analyses were performed through: reviewing governmental and corporate reports on housing standardization, apartment floor plans, and advertisements in newspapers and magazines, that were published in the selected time period.

**Apartments and standardization**

It is crucial to establish standards in industrialized countries, and standardization should be performed in advance of the process of urbanization. In the field of construction, standardization contributes to reduced loss and increased profits in mass production and streamlined use of materials, thereby facilitating the establishment of a reasonable production process. The Netherlands, Japan, and Singapore were among the countries that realized that they needed large-scale housing construction; thus leading to discussions around the standardization-related issues. Problem solving methods for standardization and uniform floor plans were also discussed in countries that have a long history of apartment housing availability.

Studies on housing standardization in South Korea were first carried out during the country's period of industrialization, when housing policies were established and large-scale construction of apartments was undertaken, as part of the initial Five-Year Economic Development Plan of the Korean government in 1962. Standardization of housing and materials was essential for large-scale housing construction. Apartments were the optimal product to provide a large number of houses at low cost in a short period of time (Ministry of Works, 1981). Studies on standardization in this period attempted to apply modules for furniture and material standardization to floor plans of detached houses, row houses, and apartments. These assessments found that only the floor plans of apartments were appropriate for contemporary housing-related policies. Follow-up studies focusing on standardization and apartments were continuously performed until the late 1980s.

The fixation on apartment plan types was also significantly linked to an obsession with economic logic and efficiency in Korean housing standardization. Whereas small apartments used to be irregularly supplied, since the late 1980s, political effects, such as tax benefits and priority decisions for allocating property, have shaped the establishment of the frame of constructing apartments that have areas of 60 m², 85 m², 102 m², and 135 m² as standardized space (Cho and Park, 1998). As a result, once consumers had chosen a certain floor space, they had no option but to accommodate themselves to a uniform floor plan, as the number of bedrooms and composition of public space were fixed according to the particular housing size. The method of dividing pre-set unit plans only leads to a limited number of floor plans. Additionally, one study indicated that while different apartment suppliers provide distinct plan types, there are common patterns found between these plan types (Kim and Park, 1992).

Studies on plan classification problematically promoted a uniformity process disguised as standardization. A research report published by the Korea National Housing Corporation in 1988 details a study on the application of system furniture to apartment houses for the effective use of residential space, and argues that a consistent size system should be developed, in terms of creating a relationship between the building frame and furniture to effectively use space by removing dead space in apartment houses.

Setting the module size of system furniture and establishing it as a national standard has the following advantages: First, the quantity of furniture that is carried while moving can be minimized. Second, resource waste can be reduced and economic loss can be minimized by partially replacing parts of the furniture that were damaged while being used, or easily enlarging furniture if necessary. Finally, an increase in the overall quality and durability of furniture could be promoted to enable standardized furniture use in buildings. Despite these benefits, the government's projects on the standardization of system furniture were only focused on apartments. Systematized furniture modules have not been implemented due to various circumstances, including a conflict of interest among furniture manufacturers.

**The birth of standardized furniture for apartment**

The capital city, Seoul, saw an unprecedented acceleration toward urbanization due to economic growth. The apartment blocks indicated a real urban development alongside government policies in the 1970s. [figure1] In parallel to the development of apartments, furniture was mass produced in the 1960s. At that time, apartments were popularly seen as a part of the picture of modern life.
Real estate developers featured detailed internal spaces that conformed to modern styles as people demanded for a variety of types of apartment structures. There was also a demand to fill these houses with furniture. In response to this demand, a Korean newspaper advertisement in 1991 targeted the apartment residents using the term “the apartment furniture” (APT Furniture). [figure 2] In this publicity, furniture items are mounted on an apartment akin to Lego blocks to encourage interested customers to purchase a plan designed to fill their houses with furniture via a simple phone call.

The emergence of the new term APT Furniture in this social environment is debatable (Nam Young-lak, 2001). The concept began to appear in reference to furniture designed specifically for the apartment plan. Since the 1980s, apartments have been considered as an investment rather than a place of residence. Many apartments located in the Gangnam district in Seoul showed an increase in prices close to 14 times than its price 10 years ago. People dreamed of climbing the social ladder through the acquisition of apartments. Their dreams became reality easily because to the expansion of apartment constructions. When the price of the apartment increases sufficiently after a few years of purchase, people upgrade their apartment in search for a higher profit.

As this purchasing behavior developed, people invested less in home interior products. People do not spend money for a place they consider leaving soon because they are already thinking of the new apartment’s decoration, which they have not moved into yet. They choose to abandon their existing furniture from their former apartment to ensure the harmonious interior of their new apartment. Further efforts to harmonize incongruous furniture products require money and time. Meanwhile, it is also necessary to consider the ease of mobility in the future. This new behavior is spreading among city dwellers rapidly as it is difficult and often unattractive to reorganize an apartment by combining new furniture with the old ones.

The culture of consumption referred to as the “Furniture Packages,” where built-in furniture match the wallpaper, began to emerge in the new apartments. [figure 3] The furniture manufacturing industry is threatened in South Korea, but furniture distribution companies remain successful. Those “Made in China,” synonymous with poor quality, were intended to be discarded after a period of use. Nonetheless, they fully meet society’s expectations. Indeed, under capitalism, furniture also joined the tragic fate of other products: that of being thrown into landfills after they are no longer deemed useful.

**Who are “non-standard customers”***?

The market size of the Korean domestic furnishing was about KRW 9 trillion in 2011 (Statistics Korea, 2011). Furniture imports represented nearly KRW 1.2 trillion or 12% of the total amount. The proportion of the Korean brand market was KRW 4.3 trillion or 52% of the total KRW 8.2 trillion. The figures show that the furniture consumption in South Korea responds to the domestic market demand. More than half of the Korean furniture purchases represented items manufactured by large national companies even while, in 2008, statistics showed that small and medium enterprises (SMEs) accounted for the majority of the market share of the furniture industry. This trend indicated the scale of influence of major brand companies in the Korean furniture market.

In this unfavorable environment, most SMEs tend to imitate the existing products of major brand companies rather than invest in product research. This inclination has led to problems of scarcity as regards diversity in models, design, or sizes in the furniture market. Thus, consumers’ choice has become considerably limited when buying furniture products in Korea.

In the 1970s, brand furniture items were produced to correspond to the demands for apartments. As apartments were recognized as modern Western-style houses, new wardrobe designs began to appear and were recommended by specialists in magazines as a way of embracing modernity (Housing, Vol.9 No.1, 1968). This period thus formed the desire for new furniture to blend in the newly built civilization that obliges living in an
apartment. [figure 4]

Before discussing the present day “non standard customer”, a review of the history of furniture is necessary; this review includes the history of wardrobe, which is the most important furniture in traditional culture and has undergone the most visible change in Korea. The introduction of the apartment as a housing type triggered the use of built-in wardrobes to maximize storage space and enable greater ease in moving. The built-in wardrobe was a valuable alternative that addressed the lack of storage space, which was the biggest problem in living in an apartment compared with traditional houses. In the 1960s, the South Korean furniture industry grew rapidly along with the increase in the necessity of organizing wardrobes containing Western clothes.

The new form of built-in wardrobe replaced the traditional one (janglong) as apartments grew in popularity. Janglong’s symbolic character in one’s marriage and as traditionally the most important piece of furniture in a couple’s life faded.

The universal diffusion of fixed furniture is relatively recent; fixed furniture represented only 2% of the total installations since 1998. Since the 2000s, the market for built-in furniture, particularly the wardrobe, expanded due to the increase in the reconstruction and renovation of apartments. Major brand companies, which had been sensitive to the needs of their customers, responded to the demands for apartment residents and then the SMEs reacted in turn. According to South Korea’s current codes of construction, the minimum ceiling height for a building is 2,400 mm. As the average height of the apartments built in the last years measured between 2,300 and 2,400 mm, the wardrobe furniture market had also grown to maximize its storage function according to the recommended standard. Consequently, it has been difficult to find built-in wardrobes below 2,200 mm in height among furniture brands in the domestic market.

During the 1980s, apartments with low ceiling became popular with the development of New Towns because lowering the ceiling maximizes the developers’ profits. The minimum ceiling height was only 1,800 mm until 1999, before reforms in the law were made. (Choi Seng-gil, 1999) The difference between the height of the furniture, especially the wardrobe, and ceiling ended in a discord among furniture manufacturers whether to standardize their mass production for new or old apartment residents or non-residents of apartments. In this study, these consumers are called non-standard customers.

The non-standard customers refer to the people who live in a type of housing in which a mass-produced fixed furniture could not be installed. They are residents of apartments and detached houses with a ceiling height under 2,300 mm and over 3,000 mm, respectively. As such, their only solution is to buy customized products that are more expensive. Their choice when purchasing furniture is also limited.

Many written accounts of these non-standard customers are presented in the Web and online interior design communities. However, these complaints are insignificant in a society where three quarters of more than 45 million people live in apartments. The core issue is not only about the cost or limited options of wardrobe furniture but the synthesis of these comments with regards to their effect on daily lives and society.

Fig. 3: A furniture advertisement "Wedding Packages" in a Korean magazine in 1995

Fig. 4: A furniture advertisement in a Korean magazine in 1984

Conclusion
This article attempts to elucidate the standardization of housing and furniture problem and the relationship that has transformed the Korean culture. Criteria for standardization are necessary in this age of mass production. The need to standardize required a production reference so that the apartment could become a typical housing type in South
Korea. The apartment preference could be attributed to the transformation of the societal preference and the rapid economic development, which greatly influenced the culture of consumption.

With this change, there is a societal fear and psychological pressure to not lag behind new treads and lead a similar life to avoid alienation. Decorating the apartment is often a deliberate attempt or an undue impulsive act to prove that one is as good as the others. The perspective of non-standard customers in this context demonstrates the disqualification of disunion in a system of a society. This marginalization leads them to follow the footsteps of those before them for integration into the mainstream.

The uniformity of the unit plan characteristics for the apartments propelled the loss of diversity in furniture. This lack of diversity in the furniture industry has made Koreans’ lives standardized. In addition, this problem of uniformity sheds light on the endemic problem of the domestic furniture industry. As the furniture industry has shifted its focus more on the distribution development than the investment in research and development and technical advancement of the furniture design, their inherent competitiveness has gradually weakened.

Rows of apartment complexes continue to thrive in Korea. A similar landscape unfolds across the country. Why do Korean cities look like an army on the march? The proliferation of mass-produced furniture for standardization evidently corresponds to the replication process of the apartment blocks. A scrutiny of the evolution of this mutual association is important for explaining the culture of consumption in Korea. The transformation for progress necessitates an insightful contemplation of the individual and the society.

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Abstract

The Design Society (TDS) was recently established in Singapore and runs 'The Design Society Journal' (TDSJ), a self-published design magazine documenting Singapore’s visual culture. As designer-editors, they aim to cultivate graphic design discourse in Singapore through critical journalism. This posits their practice as design authorship and TDSJ as ‘designer-authored’ history. This paper presents a brief study on the first eight issues of TDSJ (2009 to 2013) using an analytical framework mainly from the ideas of Michael Rock, Steven McCarthy and Teal Triggs. An investigation into three areas—editorial structure, textual content, and designed form—reveals that TDSJ is still a work-in-progress while unravelling the publisher’s ideology. It suggests the expansion and refinement of theories on design authorship by addressing the complications involved when discussed transnationally against other distinguished Euro-American examples. With the increasing interest in studying these graphic artefacts, this provisional reading presents another perspective to the current discourse on design authorship.

Keywords

Graphic design history, design authorship, designer-authored history, designer-authored magazine, critical journalism, graphic design criticism

Introduction

There are increasing interests in examining design magazines as graphic artefacts for a study of history (Fallan, 2012), through scholarship on self-published graphic design magazines mostly framed around the theories of graphic or design authorship. Discussion on design authorship occurred mainly during the mid-1990s (Triggs, 2009, p. 325) where a plethora of independently produced, designer-authored magazines were emerging outside of traditional commercial graphic design practice. These magazines “all contribute to the historical narrative, in designers’ voices, of how authorial practice has enlarged the discipline of graphic design” (McCarthy, 2011, p. 9). Triggs (2009) went further to propose that these magazines represent an ‘alternative’ practice-oriented history that is equally valid to that found in traditional historiographical practices.

To date, studies on design authorship were mainly focused on magazines from Euro-America that have achieved reputable standing, some of which are: Emigre (Rudy VanderLans, USA), Dot Dot Dot (Stuart Bailey and Peter Bilak, NLD) and Octavo (8vo, UK). This paper proposes to also consider examples of designer-authored magazines that might not have achieved such canonical standards, sharing John A. Walker’s (1989) view when he described that “the geography of a mountain range cannot be understood in terms of peaks alone” (p. 63). Other than learning about qualitative differences through comparison between contrasting examples (1989), taking less promising examples into discussion also help to examine areas that might otherwise be overlooked: Are there theoretical issues to address when discussing designer-authored works of various standards? How would the interrelationship between visual form and written content vary between these examples? How would these examples contribute to a complete historical account of design authorship in graphic design? Would examples outside Euro-America affect our understanding of self-publishing endeavours in design transnationally?

In response to these questions, this paper presents a brief study of a design magazine from Singapore, The Design Society Journal (TDSJ). It posits TDSJ as a designer-authored magazine after addressing the complexities found within such assumptions. With that, this study on the first self-published designer-authored work in Singapore provides an additional viewpoint to the current discourse on the relationship between designer-authored...
magazines and graphic design history. Through analysing TDSJ within the framework of existing scholarship on design authorship, this paper demonstrates how such an example might affect, alter, and expand existing studies of the discipline. The Design Society [TDS], founded in the year 2009, is a Singaporean non-profit organisation “dedicated to the goal of raising the general standard of design in Singapore” (TDS, 2014). The organisation launched TDSJ in that same year, a bi-annual magazine that aims to address the lack of design discourse in Singapore, through publicly accessible yet critical content. These intentions were voiced out by one of TDS founding members Hanson Ho in the editorial of the first issue and are ideas that demand closer examination alongside increasing interests in studying designer-authored magazines as graphic artefacts.

TDS was first managed by a group of founding members who are well-established local graphic designers and creative directors who maintained an independent commercial practice. In 2014, a new group of designers took over and published two issues (8 and 9) that distinctly differ from the first eight issues (0 to 7) in its editorial direction. For this reason, this paper analyses only the first eight issues (2009 – 2013), during which TDSJ was under constant editorial guidance of Hanson Ho, as its managing editor and creative director through his design studio H55, with a team of contributing editors, writers, and practitioners.

TDSJ tends to be seen as a late endeavour influenced by much earlier examples of self-authorship, especially in comparison to the early 20th century typographers’ attempts at advancing ideas through self-authored books (McCarthy, 2011). However, if we take a realistic perspective that considers TDSJ’s geographical origins and cultural conditions—the general lack of critical reflection on its own visual culture—TDSJ could, in contrast, be seen as a bold and contemporary effort evolving outside traditional graphic design commercial practice in Southeast Asia. The eight magazine issues could then be seen as important graphic artefacts situated within the late but significant shift from a commercially driven to a culturally driven graphic design practice.

**Regional and local design history**

Outside of Euro-America, there are growing interests to develop a regional graphic design history within an East Asian framework, tapping on their geographical relationships and interconnected cultural influences (Kikuchi & Lee, 2014). This excludes Singapore, which belongs to the Southeast Asian cluster. Mostly isolated, efforts in this region do not yet directly encourage or support situating local graphic design history against corresponding developments in surrounding nations. Along with Singapore’s short history, its culture mostly brought over by or appropriated from early immigrants from neighbouring Southeast Asian countries (Turnbill, 2009), there is not much of a distinct (cultural) identity for design historical studies. Instead, these limitations allow for some other possibilities: the merging, or parallel development of distinct cultures and their relationship to design; state of design in Singapore and its relationship to postcolonial studies; and how globalisation affects contemporary design practice in Singapore. This paper attempts the last suggestion above, investigating the effect of an international movement of self-authorship—seeing graphic design beyond its commercial value—on Singaporean graphic designers.

In Singapore, writings on graphic design history exist mostly in fragments. Some prominent ones are: Leong K. Chan’s (2011) studies on political printed matter in Singapore as ideological tools, or their relationship to Singapore’s design identity; a book titled *Independence: The History of Graphic Design in Singapore since the 1960s* that is also published by TDS and written by Justin Zhuang (2012), which was described as lacking in critical evaluation in a review by *Eye Magazine* (Rigley, 2013). Faced with a limited range of both designed artefacts for study and existing studies itself, the proposed object of study (TDSJ), an attempt at design authorship, proves to be a unique point of departure that contrasts local discourses on design history and studies. Nonetheless, its limited scope should eventually be woven into a wider history of the discipline in Singapore.
Designer-authored history and magazine

This section addresses complexities in identifying TDSJ as designer-authored by providing an overview of existing theories on design authorship. Acknowledging the difficulty of bringing into discussion a large number of voices on this topic, this paper uses an analytical framework based mainly on ideas from Rick Poynor, Michael Rock (on design authorship), Steven McCarthy, and Teal Triggs (on designer-authored magazines and histories).

The idea of ‘designer as author’, or design authorship, emerged as one of the key ideas in postmodern graphic design practice (Poynor, 2003, p.118) during the early to mid-1990s (McCarthy, 2011, p.7). It describes the shift from designers being just visual communicators (of external messages) to being also originators of messages (Rock, 2013), of which the most convincing examples are achieved in self-determined environments without constraints imposed by clients (Poynor, 2003, p.128). An example of this is the range of ideologically driven graphic design instruction books from key modernist designers (refer to Table 1). On the other hand, works not entirely self-directed and/or authored could also be considered works of “authorship” when designers assume roles that allow designing in “close engagement with [pre-developed] content” (Poynor, 2013, p.123), hence also having an influence in shaping content through its communication, as compared to developing it (Rock, 2013).

Although ideas of authorship encountered difficulty from criticisms of the author as authority figure (Barthes, 1967), McCarthy (2011) and Triggs (2009) further contributed to the discourse by elaborating on design authorship’s relationship with history as a subject, and the magazine as artefact. In their respective case studies, they discussed how “designer-authored history and magazines” significantly contributed to the history of graphic design, both in terms of authored content and designed form. Briefly listed in the beginning of this essay, these examples—its designer-authors unambiguously responsible for their production—added new discussions to design authorship. Although it increased the relevance of this (arguably out-dated) topic to contemporary design practice and studies, this paper aims to further evaluate these claims with an analysis of TDSJ, upon positioning it further as a designer-authored work in the following paragraphs.

From the ideas above, we see how there are varying factors to which we can pick and define a practice in “design authorship” (Rock, 1996); whether the designer-author engages equally in design and writing as compared to just having control over them, or whether authored content includes largely visual or textual works, or a combination of both. In all, McCarthy summarised that design authorship “opened” new avenues for collaboration, [built] stronger relationships between visual form and literal content, [expanded] space for personal expression, [created] greater level of social and political engagement, and [found] […] opportunities for entrepreneurial ventures” (2011).

This can be observed in the works of TDS, through their efforts from 2009 to 2013 in encouraging graphic design discourse through regular design conferences, publishing articles on visual culture in our social and political environments, and communicative explorations between form and content through self-publishing. Ho’s role as the editor and creative director of TDSJ allowed him control in shaping both visual and textual content, whether or not directly engaged in both. The objective is not to attribute the work to any individual, as it is problematic to assume that one designer is wholly responsible for a design artefact’s form and content (Walker, 1989, p. 48). In this case, it is also useful to look at the various levels of authorship (on a scale of one to four) in auteur theory as pointed out by Walker (1989) when referencing film theorist Richard Dyer. TDSJ straddles between one and two, one refers to a single person as sole originator and two refers to the cooperation of several people, but still containing distinguished individual ‘voices’. Hence, TDSJ can be determined as designer-authored as it is closer to the “total authorship” end of the spectrum.

TDSJ, like other designer-authored magazines are works of criticism also functioning as designed graphic artefacts (Triggs, 2009, p. 329); it is a work of visual critique, as well as a designed artefact subjected to criticism. Here, Rock’s (1996) broader ideas on graphic authorship—the re-emphasis on the significance of design in a designer’s aural role; the visual language employed is in itself the content—is especially useful for examining the visual form of TDSJ and identifying the designer-editor(s) mediation between form and content.

Although design authorship has a narrow scope compared to the entire range of graphic design practice, it proves to be the most relevant way to view TDS’s design and editorial practice. It helps “thinking about design beyond established definitions” (Poynor, 2003), discussing peripheral practices outside design’s core concern as a service-providing activity. Instead of seeking absolute agreement within voices in design authorship, the next part of this paper taps on its nuanced ideas (refer to Table 1) to briefly discuss three main aspects of TDSJ—editorial structure, textual content, and designed form—in closer detail. The analysis reveal insights into the actual authorial practice of its producer(s), and therefore their ideology and any transnational meaning derived from it, in comparison to the distinguished, canonical examples from Triggs and McCarthy.
TDSJ embodies. This is especially useful for studying a history of graphic design profession being only a service providing, problem solving one, although already practicing outside such models. Design authorship in this case—knowingly or unknowingly—seems to also be legitimising strategies of TDS or its designer-editor(s), on top of its outward focus on developing the discipline beyond capitalistic ventures.

**Textual content**

As a designer-authored magazine, the ideas and beliefs of the designer-editor(s) are literally contained within the texts TDSJ embodies. This is especially useful for studying a history of ideas, an approach suggested by Robin Kinross.

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**Table 1—Quick Reference on Design Authorship**

<table>
<thead>
<tr>
<th>Author</th>
<th>Key Idea</th>
<th>Examples</th>
<th>Relevance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teal Triggs</td>
<td>Designer-authored works represents a visual and text-based alternative history outside traditional academic practice in historiography (Triggs, 2009, p.325).</td>
<td>– Small press and self-published magazines, fanzine and pamphlets</td>
<td>Positive descriptions of designer-authored works, and their contribution to history could be evaluated against an analysis of content in TDSJ.</td>
</tr>
<tr>
<td>Steven McCarthy</td>
<td>Designer-authors advance ideas through self-authorship by creating own histories through writing, designing, and publishing (McCarthy, 2011, p.7).</td>
<td>– Eric Gill’s “Essay on Typography”&lt;br&gt;– Jan Tschichold’s “New Typography”&lt;br&gt;– DotZero (USA)&lt;br&gt;– Ocatvo (UK)&lt;br&gt;– Emigre (USA)&lt;br&gt;– ZED (USA)</td>
<td>Relevant to looking at the editorial structure of TDSJ, identifying possible ideological positions.</td>
</tr>
<tr>
<td>Michael Rock</td>
<td>Designer-authors are technically proficient, have a signature style, and have accumulated a body of (not necessarily written) work with consistent interior meaning (Rock, 1996).</td>
<td>– Joseph Müller-Brockmann&lt;br&gt;– Rudy VanderLans&lt;br&gt;– Paul Rand&lt;br&gt;– Erik Spiekermann&lt;br&gt;– Robin Kinross&lt;br&gt;– Ellen Lupton</td>
<td>Relevant to a discussion of TDSJ’s designed form, keeping in mind its relationship with content in communication.</td>
</tr>
</tbody>
</table>

**A closer look at TDSJ**

**Editorial structure**

This section takes into account the framework (editorial structure) of TDSJ; it looks at their approach by examining its parameters for content contributions. This precedes a discussion of its design and content.

Contained within each issue is a “Showcase” section showcasing local works. It is possible to see this section as TDSJ’s curated list of “good” designs in Singapore. This can also be seen as a platform to legitimise certain visual styles as many of the featured works were of a similar “look and feel”. The recurring names in both “Showcase” and other articles also reveal how this section was used as an insular, accompanying “gallery”. As with most portfolio feature platforms, they seldom communicate anything more than rituals of appreciation.

It is stated in the magazine’s front matter that the selection criteria for “Showcase” is that it should be “commissioned work”; the commissioning client is included in the accompanying captions. This hints at their intention to avoid “self-initiated” work submissions, and seems to imply that “real” work is what contributes to “good” work. It is paradoxical that TDSJ itself would fail the criteria in which it required from other works, as the magazine is one without a commissioning client, a “self-initiated” publication.

This conflict can also be observed from evaluating this selection criteria against ideas from an essay contribution by authors Randy Yeo and Lim Jin Li (2013). They highlighted the need to look at a representation of the role of design beyond traditional problem solving, and failure to do so would discount the possibility of any new avenues of discussion, thought and critique (2013). One can see how this contradicts the approach of TDSJ in enforcing the selection criteria that discounts non-commissioned works. If ruling out self-initiated work was not their intention, it reflects their uncritical approach in drawing parameters for its content.

This awkward positioning is further identified in the mission statement from their website. It states that their role is to provide a “platform for the betterment of Applied Graphic Design in Singapore” (TDS, 2014) (Author’s emphasis). If “Graphic Design” already describes a form of applied art, the additional word “applied” seems to imply a deliberate attempt to distance itself away from any ambiguous ideas of what graphic design have become. The implication that TDSJ is steering away from independent work, but still existing as such is problematic.

These examples show how the designer-editor(s) are still unable to breakaway from ideas of graphic design profession being only a service providing, problem solving one, although already practicing outside such models. Design authorship in this case—knowingly or unknowingly—seems to also be legitimising strategies of TDS or its designer-editor(s), on top of its outward focus on developing the discipline beyond capitalistic ventures.

**Looking at The Design Society Journal | 041**
(2004, p.18). He identified the need to critically assess the relation between ideas and products, as verbal utterances of human endeavours are often arbitrary and naïve (2004). For this reason, this segment evaluates the designer-editor(s)’ intentions against TDSJ, using their communicated aims as checkpoints for further analysis.

In the editorial of the first issue, Ho introduced Shirley Surya’s essay—an inquiry on design writing in general—as one that “examines the production of graphic design discourse that the magazine itself is attempting to formulate and cultivate” (Surya, 2009, p.32). Within it contains an underpinning message that aims to contextualise their practice—to “archive, speak of the times, be more critical, and encourage discussion” (Ho, 2009, p.3) in graphic design “beyond shallow trend-following and empty form-pushing”, with a “historically- and contextually-informed critical point of view” (Surya, 2009). The designer-editor(s) also aspire for TDSJ to be something in between documentary and critical, or “critical journalism”, a term Poyner uses to describe Eye magazine.

There are noticeable discrepancies between these ideas and some key essays found in TDSJ. Justin Zhuang’s article “Where to Next?” shows how external issues affect design implementations of Singapore’s transport system, presenting historical changes throughout the years in its socio-political contexts (Zhuang, 2009, p.61). Although detailed, the opinions were not analysed and communicated with supporting visual examples. There were instances where the essay referenced remarks made by organisations: to improve the transport information system through design, but did not discuss how, or evaluate whether these design “improvements” contributed to a “world-class land transport system”. Zhuang concluded that the design identity is seen as a collection of separate voices even after its revamp. These otherwise important issues—that would contribute to a critical evaluation of Singapore’s visual culture—were left undiscussed due to the absence of supporting examples and visual-driven analysis.

The same is seen in another article on the visual transformation of Singapore’s longest surviving newspaper, The Straits Times. This article ended with a reflective thought: although the newspaper has rarely won design accolades, it however, works in a country where “design is rooted in trends and driven by commercial imperatives” (Zhuang, 2009), and that “what we find designed […] is but a reflection of the values of the community it serves” (2009). This comment is a pressing message to the local government and design community, but because it lacked an argument, it did not do much to convince and leave an impact on its readers.

We can see that the content found in TDSJ might not match what the designer-editor(s) described in the beginning. Mostly documentary, they shy away from constructing a critical perspective on the subject, and differ from Poyner’s description of critical journalism—to “take up a position and argue a case” (Rock, 2013, p. 229). Other than the lack of healthy scepticism, these articles seem to avoid complications found in graphic design practice and does not yet fit Triggs’ (2009) description of how designer-authored magazines contain “some of the most interesting criticism”.

![Fig. 2: Page spread of The Design Society Journal no. 0, ‘A Design of its Time’, 2009 (Author’s scan)](image1)

![Fig. 3: Page spread of The Design Society Journal no. 4, ‘A Tourist in a Visual World’, 2011 (Author’s scan)](image2)

![Fig. 4: Page spread of The Design Society Journal no. 4, ‘Got Singapore Design?’, 2011 (Author’s scan)](image3)

**Designed form**

The magazine experienced a major change in its format and design within the first eight issues, occurring after the fifth issue. The first one was highly visual, with many spreads filled with full colour illustrations. Its typography—setting article titles in large point sizes with manipulated letterforms—also contributes to its visual-driven presentation. To analyse TDSJ’s visual form with equal importance as its content and structure, this segment borrow ideas from Rock (2013, p. 93). He wrote that design in itself communicates ideas as how content would, and the designed result is a form of text as “complex and referential as any traditional understanding of content”. This re-emphasises the unique perspective of studying designer-authored works as designed artefacts, when designers are finding ways to speak through graphic treatment to “build a body of work that emerges a singular message” (Rock, 2013, p. 95).
“Conceptualised by H55, the inside pages is influenced by the idea of newspaper clippings and photocopied archival material. [It] is made up of a juxtaposition of orderly newsprint grid design, […] and the occasional random ‘cutting-and-pasting’ of text and images” (Ho, 2016).

The quote above is H55’s description of TDSJ’s design. It describes the use of a visual rhetoric device, a “makeshift” aesthetic (Fig. 2 and 3) to communicate that the magazine is still a work in progress; a visual reminder of it still being in a process of archival. This is observed through repeated graphic treatments from issue 0 to 5, through collageing, overlapping of images and texts, the use of photocopied image reproductions, and seemingly random “cut-and-paste” layouts. In one specific example, body texts from later spreads were repeated in earlier spreads, interacting with overlapping images to create a visual “cut-and-paste” effect (Fig. 3). This act of transforming textual content into decorative or visual elements might confuse new readers instead of enticing them to find about the “partially hidden” content revealed in the following pages.

Although the varieties of treatments all come together to communicate a consistent message—an authored chaos or designed mess—these sometimes-superfluous treatments might be distracting to the reader.

An example of an elaborate use of repeated elements can also be found on the title page of the article, “Got Singapore Design?”. The article title, along with its description, was repeated over two facing pages; the national mascot of Singapore (Merlion symbol) was also introduced as a patterned image throughout the entire spread (Fig. 4). It is not difficult to then interpret this designed spread as a form of visual commentary—deliberate or not—on the essay’s subject, local design. It describes the heterogeneous culture of this nation, a careless and messy mix of whatever “ingredients” available, achieved in the visual expression through the treatment of its text, images, and graphic symbols.

After the fifth issue, TDSJ experienced major changes in its design and format, moving away from its visual-driven focus. With a reference made to Eye magazine, this is probably an attempt to move towards the “bookishness” of an academic journal. Its size was also reduced to a smaller format for “easier reading” (Zhuang, personal communication, December 18, 2014). The big headline titles and “chaotic” arrangements were suddenly replaced with a neat and strict use of three- and four-column grids, with a single typeface used throughout the entire journal (Fig. 5). Looking at this change, it is deducible that TDSJ is still searching for an identity and voice, similar to the state of graphic design writing in Singapore. This is an abrupt change that leaves little room to further interpret the visual messages communicated in the previous issues.

**Conclusion**

This quick analysis reveals TDSJ’s shortcomings against other commonly discussed designer-authored works; it is still a work-in-progress. It shows how transnational diffusion of ideas in design authorship yielded results that are not quite fittingly framed by existing studies or claims about the subject. This essay proposes to shift the focus of discussion on design authorship—that which pertains to graphic design writing and criticism—from its current idealistic point of view to one that also considers the effects of such ideas travelling transnationally.

To take a broader perspective, this case study echoes a common phenomenon of how ideas that originated from the west have been rapidly influencing or developing in Asia, but occurring within an intellectual or cultural void (Koolhaas, 2010). A sympathetic view on this will aid in studying other contemporary design practices in Singapore, of which many were (or will be) influenced by ideas from the west. As how TDSJ differs significantly from the earlier designer-authored magazines, other design artefacts or practices that were results of transnational influences in design authorship will also have their own historical narratives. This eventually works to expand our understanding of the subject beyond Euro-America.

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**Biographical note**

Kong Wen Da, Gideon is a Singaporean designer and independent researcher, currently working as a graphic designer while involved in writing and research.
Visualization of technological utopianism by corporate advertising campaigns in the 1980s: South Korea LG’s ‘technopia’ and Samsung’s ‘humantech’

Su-Ji Lee / Seoul National University / Seoul / Korea

Abstract
This study focuses on technological utopianism which was created by major corporations through their advertisement campaign designs in mid to late 1980s in South Korea. In this study, we analyse the contents in printed advertisements and TV commercials of LG’s ‘Technopia’ in 1985 and Samsung’s ‘Humantech’ in 1986. In the mid to late 1980s, South Korea was full of hope because the domestic economy improved rapidly, and the social environment was filled with expectations of globalization. LG and Samsung both focused on development of technology and wanted to visualize some kind of ‘utopia’, which was created by them through their ads. As the two rival companies had similar campaign purposes, the designs of their campaigns looked very much alike. The campaigns emphasized a meeting between technology and humans, wanted to be a hero who helps weaker and smaller humans, and expressed unrealistic depiction with computer graphics.

Keywords
Technological utopianism, corporate advertising campaign design, Korean corporation, technology visualization

Introduction
The economy of South Korea (hereafter, Korea) has grown rapidly over the decades. When the Korean War ended in the 1950s, Korea was one of the poorest and most undeveloped countries in the world. However, Korea maintained high levels of economic growth during the mid to later part of the 20th Century. Presently, Korea is considered by many as one of the more developed countries. During the economic growth, technological development played an important role. Major companies such as LG, Samsung, and Hyundai invested heavily in the progress of technology.

This study focuses on technological utopianism, which was created by those major corporations through long period advertisement campaign designs in mid to late 1980s. In 1980, Korea was full of hope due to enormous economic growth, and globalization through hosting the 1986 Asian game and the 1988 Summer Olympics in Seoul. These sociocultural backgrounds provided foundation of a corporation’s dream to create a ‘utopia’ through their own technologies.

Two large Korean corporations visualized their images of utopia through large-scale corporate advertisement campaigns. LG, named Goldstar in the 1980s, was established in 1959 and produced the first Korean radio, which was the beginning point of the electronics industry in Korea. Samsung Electronics was established in 1969 and rapidly developed. After the 1970s, competition between LG and Samsung started in earnest to lead Korean electronics industry, which became the core industry in Korea in the 1980s and captured the biggest part of the exporting industries. Electronics industry was a high-tech and growing industry in the 1980s after light and heavy chemical industries. Presently, LG and Samsung are famous Korean companies in the world.

This study deals with corporate advertisement campaigns, ‘Technopia’ and ‘Humantech’, which were created by LG and Samsung, respectively. ‘Technopia’ is the compound word technology and utopia, and ‘Humantech’ is comprised of two words, human and technology. The two ad campaigns shared many similarities. They both started advertisement campaigns around the same time, and showed similar images and designs. The period lasted about ten years as corporate ad campaigns, which dealt with technology as core ad themes, sharing similar purposes for the ad campaigns. The campaigns received a great amount of attention for their new style and
they won many advertisement awards for that time. Ads were inserted in a paper and many kinds of magazines. At first, ads were shown at least once a week in the daily newspapers as an effective frequency for exposure.

This study focuses on the mid to late 1980s and analyzes ad designs into three themes. These ad campaigns lasted pretty long. Thus, there were substantial changes in the designs and the concepts of ads. By focusing on the mid to late 1980s, the ad campaigns showed a relationship between the corporations, technological utopianism and sociocultural background at the time through their ad designs.

**Economic growth in the 1980s and technological utopianism**

As I mentioned in the introduction section, Korea is well known for its rapid economic growth in a short period of time. However, Korea maintained high levels of economic growth during the mid to later part of the 20th Century. Even there is the term ‘Four Asian Tigers (or Dragons)’ that refers to the high-growth economies of Hong Kong, Singapore, Taiwan and Korea between the early 1960s and 1990s.

Many studies have shown that technological advancement plays core role of economic growth for both developing and developed countries. Many countries, including Korea, created special economic zones, export processing zones and science parks in 20th Century. Thanks to the good response of these specialized institutions, Korea became one of the centers for the new electronics industries in the 1980s. Korea’s main industry varied with the period. The core industry in the 1970s was heavy chemicals, and was electronics in the 1980s. The mid to late 1980s economic boom produced a first time trade surplus (1986), which exceeded a $10 billion (US) gross domestic product (GDP) in 1987 and recorded unprecedented macroeconomic indicators. Korea’s technological advancement was critical for economic growth over the past sixty years, and established an economic structure that provided diverse advantages to major companies and conglomerates (also called ‘chaebols’).

It is the economic background of the appearance of an ideology called technological utopianism in Korea. Technological utopianism (hereafter, techno-utopianism) is a kind of ideology of theory based on the premise that advances in science and technology will take a critical role to create a promising future and a utopia. The specific meaning of this term has changed through time, but the core idea is still the same as emphasizing science and technology’s important role. Korea in the 1980s could be a stage of techno-utopianism, because it was full of hope that was shared by many in the country. Korea not only experienced astonishing economic growth, but hosted many international events such as the 1986 Asian Games in 1986 and the 1988 Summer Olympics in Seoul that opened the age of globalization.

This study captures the subjects, the major companies or conglomerates, which visually drew techno-utopianism. Many major companies such as LG and Samsung who are even still an important axis of the Korean economy rapidly grew in the late 20th Century. The two corporations were rivals and both wanted to dominate the leadership of Korea’s electronic industry by showing their own techno-utopianism ad images through broad-scale ad campaigns. Consequentially LG and Samsung harbored a desire to create their own technological utopia through by designing ad campaigns at the same time.

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![Fig. 1: ‘Humantech’, 1986](image1)

![Fig. 2: ‘Technopia’, 1989](image2)

![Fig. 3: ‘Technopia’, 1990](image3)
Design analysis of corporate advertising campaigns

There are two approaches in most printed advertisement analysis. The first approach focuses on figurative features in the ad and the second approach concentrates on content elements. Images such as Illustrations and photos, typography, symbol marks, and border lines belong to figurative features. The headline, body copy, slogan and caption belong to content elements. This study analyzes corporate advertisements by both approaches in order to cover the ad design components thoroughly.

Images commonly cover a large proportion of printed ‘Techno’ advertising campaigns for both ‘Technopia’ and ‘Humantech’, which approximately covers over 70% of the whole surface area. In other words, full images which are designed by photos and illustrations play an important role to create a lingering impression in advertising design rather than blank space or lettering. Basically, meanings and messages exposed in images are the main criteria in dividing this chapter into three sections: ‘Humanism’, ‘Heroism’, and ‘Unreality’. These three sections are not covering all the features and can be overlapping to some extent. Instead, they can reveal the key features of the techno-utopianism well in the ads.

Humanism

First, I will focus on the relational aspects of the human and technology shown in both ‘Technopia’ and ‘Humantech’ in the name of humanism. From the Samsung campaign ‘Humantech’, we can sense Samsung’s intention to emphasize that their technologies are humanistic. ‘Humantech’s main slogan is “Technology which keeps in tune with the people is – Humantech”. Similarly, ‘Technopia’s main slogan also shows a relationship between technology and human: “Meeting of the technology and the human-Technopia.” In some of the ad campaigns, technology mostly visualized with robots meeting and shaking hands with humans (Fig. 1), and helping people (Figs. 2-4). Technology usually would become a robot incarnate if it is visualized as humanlike. Various ads are closer to humanoid (Figs 1, 2, and 7), some ads are like cartoon characters (Fig. 3), and other ads are little short of industrial robots (Figs. 4, and 8).

Then, why do the corporations want to connect their technology to human? Why do the corporations personify technology visually and have robots meet people? First, as always, because technology was commonly seemed to be something cold and hard to the general public. Thus, the corporations wanted to overcome the cold images stuck in technology. To archive this goal, they illustrated humanlike technology with various types of robots in ad campaigns that help people (Figs. 2, 3, and 4), which seems so familiar and warm. The body copies in the right side of Fig. 1 are written as “To make people more convenient, to make people healthier, to make people safer”. They created an image of efficient helpers having warm humane technology. This finding leads to next section that discusses enlightenment and heroism in ad campaigns.

![Fig. 4: 'Humantech', 1987](image1)
![Fig. 5: 'Technopia', 1986](image2)
![Fig. 6: 'Technopia', 1986](image3)

Heroism

In the previous section, we analyzed both ad campaigns with a humanistic point of view. We found that both ad campaigns are very close to humanism, which takes us to other research questions. Then, what were the goals that LG and Samsung wanted to archive through the ad campaigns? What were the roles of LG and Samsung in the ad campaigns? In most ads, corporations explain their technologies and possibilities on the side portions with small photos and body copy writings. This may reflect the intention to inform the public their corporate values and importance. The goal to educate the public on the ignorant of technology is comprised in design explicitly and implicitly, which is called ‘enlightenment’. The dictionary definition of enlightenment means to cause someone to understand something by explaining it or by bringing new information or facts. Likewise, through the ad campaign designs, the
corporations wanted the public to understand what they had through visual descriptions. Then, who are the subjects of the enlightening people? That is the corporations. By taking the position of enlightenment and leading people, LG and Samsung put themselves in the position of the hero status. The corporations’ implicit intention to place themselves in a heroic position is expressed in two ways in the ad design. First, we focus on how humans would appear in ads. In most of ads, there are children rather than adults as the representations of humans (Figs. 2, 4–8). These ad campaigns were not a product advertisement, but a corporate one. Thus, LG and Samsung might have selected models fit with the future-oriented and future-responsible image they wanted to achieve. The children appearing in the ads were under age 5 to teenagers, which may suggest this age group can be the future partners of the corporations. More importantly, that age group is in need of someone’s help. At this moment, the technology would help the children. In Figs 2, 4, and 8, technology represented by robots bestows a semiconductor, candle light, and torchlight on the children. The children take it gratefully and delightfully. Some of the ads such as Fig 2, 4, and 8 remind us of the Greek myth of Prometheus who gave fire to mankind.

Second, representations of technology such as Saturn, a satellite, a gold humanoid robot, and an industrial robot are mostly larger than those of the human. Fig 5’s head line is “What does it look like in the 21st Century?” In this ad, technology appears as Saturn with rich color and big size in the middle, which uses more than half of the whole ad. In comparison, children are relatively small, dark and are in a corner. In Fig 6, we can find similar theme and expression.

The model of human represents children rather than adults, and technology is portrayed relatively larger than humans. From these facts we can assure the corporations’ implicit intention of being the hero and playing the leading role of progress towards the future and enlightenment of people. Thus, in the ad campaign designs of the future, the hero is the corporation rather than the human.

Unreality
The last and remarkable feature of ad campaigns is unreality. Almost all ads in the ad campaigns show a little bit of unrealistic and exaggerated depiction. The technology is quite abstract and conceptual rather than concrete and practical. Humanoid robots in the ads are basically far from real ones existed at that time. If LG and Samsung wanted to introduce their technologies in a realistic and practical way, they should have described how computers, optical communications and semiconductors are used in people’s home and offices. However, LG and Samsung did not describe that. LG and Samsung just wanted to make unrealistic, nonexistent images for visualizing a utopia.

In the ad campaigns, there were TV commercials and printed advertisement since the beginning. Therefore, in this section, I analyze unrealistic designs and images that stood out from TV commercials. TV commercials are quite distinct from print ads as they generate the unrealistic world not only visually, but also techni-

ical with new computer technique, computer graphics (CG). The ad campaigns’ TV commercials were the first CG created in Korea. Thus, they were the first chance for people to experience new video images by the new CG technique. CG represented three dimensional images, transforming freely with the ability to describe reality similarly.

Through CG, impossible expressions become possible, and the ad campaigns’ TV commercials could make full use of its effects. Korean people experienced CG effects for the first time in the 1980s and, of course, were quite shocked. One example of TV commercials, ‘Humantech’ in 1986, shows a typical flow of early
CG commercial (Fig. 9). In Fig. 9, there are only switching over florid images instead of any story line or clear theme. The commercial’s graphic is unrealistic and even closer to surrealism. This kind of video could be developed only from an advanced technique, which at that time was new CG. This kind of video causes people to forget reality temporarily and daze people with unrealistic visual fantasies.

**Conclusion**

This study focused on technological utopianism, which was created by Korean major corporations through the long period ad campaign designs in the mid to late 1980s. To visualize techno-utopianism, LG and Samsung used ad campaigns. There were three main features (i.e., humanism, heroism, and unreality) that are expressed in the campaigns name, images, slogan, body copies, and tools.

This study mostly concentrated on the common grounds of two ad campaigns. However, there were also differences, which were less important for the main topics. Because the ad campaigns lasted about one decade, there were many changes. This study focuses on the first five years of the ad campaigns, which reflected the initial intention of production and wide attention. After the 1980s, the social environment changed, and thus, the ads campaigns changed their contents away from techno-utopianism. Instead of utopia and heroism, LG and Samsung depict themselves as useful and practical corporations in real life. This change is related to labor, social problem, and interests in democratization.

Techno-utopianism created by major corporations in the 1980s may be the precursor of initiative transition from government to companies along with neo-liberalism. Actually, the relationship between the government and the corporations changed in the 1980s. Until the 1970s, the government supported the corporations politically and financially through tax benefits. However, since the 1980s, the government started to regulate the corporations, breaking off the reciprocal relationships. These historical examples, two ad campaigns, show how sociocultural backgrounds and design are closely related, and how design reveals various implicit intentions and purposes in ads.

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**Biographical note**

Su-Ji Lee is a master’s student of Design History and Culture in the faculty of Design at the Seoul National University. She majored in Visual Culture Studies and Biological Science at the same university. Her main area of interests is technology, media, human nature from a design viewpoint.
A study of the agricultural design in the U.S. aid period (1951–1965)

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Abstract

This paper aims to discuss the propaganda for the general people in the early agricultural society in the U.S. Aid period (1951-1965). The text adopted was the agriculture publications by Joint Commission on Rural Reconstruction (JCRR), Harvest Farm Magazine and Four-H Association, etc., which were funded by U.S. Aid. The era between 1950-1960 saw the stable growth of agricultural economy. The peasants’ levels of education during this time were improved along with the improvement of economy. From the investigation of Taiwan’s early agricultural society from the publications concerning agricultural education, the project would discover that, while the government strengthened its promotion of the knowledge of how to farm and raise, propaganda became the common graphic medium for promoting and spreading agricultural education through cartoon and illustration.

Keywords
Taiwan, U.S. Aid period, agriculture design, visual culture

Introduction

The fifties and sixties were a period of land reform and agricultural economic development in Taiwan. While Taiwan has witnessed certain accomplishments in the area of political economic research on the period of U.S. aid, few studies have examined this period from the perspective of art and design (Lai, Y. Z., 1993). In particular, there has been little monographic research concerning the theme of agricultural imagery during the period of U.S. aid. Taiwan still had critical implications for the global military situation even after the end of World War II. Externally, Taiwan was protected by the promise of U.S. military cooperation, while internally it was receiving funding in the form of U.S. economic aid. In addition, the Kuomintang (KMT) government undertook land reform (1949~1953) and economic development (1953~1965) (Yuan, Y. S., 1998). At the end of the period of U.S. aid Taiwan had gradually transformed itself from a poor country with inadequate food resources to one with a stable foreign currency exchange (Tsai, S. S., 2015). During this period, its people were exposed to the culture and popular trends of the world’s powerful countries, as well as major international events.

This study undertakes a literary and historical discussion of design during this period, with the sociology of art as its methodology, and takes the three criterion of “representativeness,” “importance,” and “preciousness” in selecting materials to verify the inseparable relationship between art and society during this period, in addition to performing an analysis of the imagery and visual styles of artistic design, and building a visual culture for Taiwanese rural society during the period of U.S. aid. It is hoped that this study will foster a deep sense of nostalgia for the design content of this period.

Literature review

Post-Colonial Land Renewal

The Taiwanese provincial government clearly stipulated authority and responsibility in the relationship between landlord and sharecropper through the reduction of rents for farmlands in all cities and counties to 37.5% of production in May, 1949, which ensured the rights of sharecroppers and improved their livelihood. In January, 1953 the government implemented its land-to-the-tiller program, which expropriated the excess land of landlords in order to foster self-sufficiency in land-owning farmers. From 1949 to 1953 the KMT government reconstructed the production
and distribution structure of the post-World War II economic order through the 37.5% measure, the releasing of public land, and the land-to-the-tiller policy (Taiwan Provincial Government, 1971). It was able to implement these policies based Sun Yat-sen’s three people’s principles, and those of the livelihood of the people and equal distribution of land in particular, within short period of several years. As a result of more equitable land distribution resulting from reforms, the traditional relationship between landlord and sharecropper gradually disappeared. The new land-owning farm households, economically independent individuals with social equality, arose as a result (Huang, C. J., 1991; Han, S. H., 2006).

Sino-American Cooperation in the Period of U.S. Aid

U.S. aid consisted of military and general economic assistance. After World War II the world situation was rapidly transformed, and two camps emerged, the free world led by the United States and the communist bloc. The United States aided to the KMT government in the second half of 1951. This officially commenced the beginning of the period of U.S. aid, which lasted until June 30, 1965 when the United States announced its discontinuation. The United States and the ROC signed military aid agreements on February 10, 1951, the “Common Defense Agreement,” and another on December 3, 1954 entitled the “Sino-American Mutual Defense Treaty.” The economic and military agreements signed with the United States assured Taiwan’s economic security internally and military stability externally. As such, it had an inseparable relationship with respect to the solidification of defense capabilities, a nation’s top priority, as well as economic development during the period of U.S. aid from 1951 to 1965, which had a deep and long-lasting impact (Liu, Z. W., 2012).

Agricultural public announcements and graphic design

The period of U.S. aid was one in which the people followed the example of their leaders. The JCRR shouldered the responsibility for the publicity and promotion of agricultural policy, and promoters were often seen in rural villages carrying canvas work bags on their back to visit many households and deliver illustrated magazines. The propaganda posters the JCRR hung, with content as enriching as a small school booklet, were printed by the JCRR and, because the cost of printing was born by U.S. aid, the “Sino-US Cooperation” logo was printed in the lower right-hand corner. Publicity themes in these posters included informational illustrations on animal husbandry, as in Figure 1: “Will a lack of potash lead to lower rice production?” The poster heading was reminiscent of a course title, and the course content, “getting the fertilizer, fertilizing, harvesting,” utilizes four-framed color cartoons with illustrations which were exquisite and provided great detail: an American steamboat has traveled from afar with the imprinted “Sino-US Cooperation” logo carrying fertilizer to Taiwan; farmers accept the fertilizer from the JCRR, and open the bag of potash with an imprinted “Sino-US Cooperation” logo to mix with soil; the self-tilling farmer who had used the fertilizer is then shown smiling after a bountiful harvest. The simple four-frame illustrations could more easily tell the story with greater details, and this was the irreplaceable language of images. In addition, posters were also used as “diagrams for the land reform the government decreed and advocated in order to convey difficult to understand and complicated proclamations, such as when the government encouraged “everyone to eat sweet potatoes” during difficult times in the agricultural period (Figure 2). Promotions became effective through the use of explanatory illustrations. During this period magazine supplements often provided common knowledge and information, and used images to convey ubiquitous common sense learning topics. Examples included household subjects, such as how to knead dough.
addition, recipes were illustrated via graphic method. Other issues that were addressed included how to plant a home garden to beautify your life, how to utilize a tiller, the order for dealing with insect stings, rabid dog bites, food poisoning, electrical fires, and others. There was practically no topic these illustrations did not deal with. What is more, the cover in Figure 3 presents the internal structure of a pig through medical anatomical method in order to explain how to prevent Ascariosis. The relationship between pests and plants is illustrated in a scientific diagram to educate farmers on the cover of Figure 4.

**Conclusion**
Taiwanese society sought development under Sino-U.S. economic and military cooperation during the period of U.S. aid. During this period, the people became accustomed to relying on flipcharts as an educational method (looking at images to gain knowledge). These posters were loaded with information and used for agricultural advocacy and classroom learning as a result of the driving force of vigorous agricultural promotion. Promotion through educational posters primarily took the form of single color cartoon strips, as well as exquisite and beautiful illustrations. In addition, the influence of American trends could be seen in the American-style advertising for popular agricultural products, as Taiwanese agricultural advertisements used anthropomorphized cartoon images.

**References**

**Biographical note**
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Embroidery patterns of the Qing Dynasty robes

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Abstract

In the Qing Dynasty robes pattern on a sample cut from the visual design point of view, through field surveys, comparative Induce Act, comparison, analysis of the structure and pattern shape characteristics. The results found that, in the Qing Dynasty robes and line pattern is formed with a very close association. Having a form of class 3, the dotted line, cross, curve, by way of permutations and combinations, and evolved into the broken line side by side, mesh, ring. Dashed lines the most common pattern consisting of relatively simple, the use of a larger number. Patterns constitute a cross shape is more complex, a fixed usage patterns. Arc, constitute a more flexible pattern often used on a wide range of image composition. Line is an extension application constitutes the basis of the design of the study, the traditional design thinking, utilizing modern design practice.

Keywords

Pattern, shape, line configuration, the Qing Dynasty robes

Research Purpose

The late Qing feudal nation, as the demand of the ruling class, as well as harassment in the form of clothing, apparel developed rapidly. Through apparel production process, access to a variety of semantic patterns containing as cultural symbols, giving a deeper symbolic meaning. Among them, the figurative form the main element unit again form constituted, composed of diverse complex shape features. In the Qing Dynasty robes as samples from a visual design perspective, the analysis of the structure of clothing pattern shape, providing an image as a study of the Qing Dynasty culture foundation. National Museum of History is a collection of many in Taiwan in the Qing Dynasty robes cultural relics units, taking into consideration the objectivity of the study sample, therefore, to the museum’s collection items as research subjects. Museum of History and storage application, conduct field surveys Qing Dynasty costumes. Robes survey sample 17 for analysis at this stage in the Qing Dynasty embroidery pattern biography.

Research Sample

Using a field survey of the way by the real ancient relics image capture, view it through with the National Palace Museum collection of data, and image form books mentioned. The 17 encodes the Qing Dynasty robes, and performed sample analysis. Analysis of samples, use the inductive method for image comparison compare the sample pattern, conducted sampling pattern is depicted. Due to complex forms, interleaved, and therefore among the parts of the pattern to capture as artwork depicting, for analysis purposes. And supplemented Museum collection image data, and image books, understood as a pattern, comparative information. From the stage of the research process, only constitute a pattern shape analysis, visual angle from the plane to explore the structure and pattern of cell morphology. Study samples 17, 25 pen pattern. After sampling the image to compare the research method mutual comparison, according to the basic pattern shape manner, divided into A, B, C three kinds (Figure 1).

A class pattern to form a broken line as a unit composed patterns, each dotted line are parallel. On a Class B pattern, weft way interaction into a cross-shaped cell morphology. Class C
main pattern in an arc, line to arc pathway, wrap, stick together, so that the line gradually aligned surface. Cell structure pattern three were dashed line, cross, arcs, and then a combination of the broken line side by side, mesh, ring-shaped image. According to three Patterns, samples were classified.

**Type A: Dashes**

Fig. 2: No. 2 (Drawn by the researcher)

Fig. 3: No. 3 (Drawn by the researcher)

Fig. 4: No. 5 (Drawn by the researcher)

Fig. 5: No. 7 (Drawn by the researcher)

Fig. 6: No. 9 (Drawn by the researcher)

Fig. 7: No. 14 (Drawn by the researcher)

Fig. 8: No. 6a, b (Drawn by the researcher)

Fig. 9: No. 10a, b (Drawn by the researcher)

Fig. 10: No. 11a, b (Drawn by the researcher)

Fig. 11: No. 4 (Drew by the researcher)

**Type B – Cross**

There are four strokes (12-14), it can be divided into two modes. The first one kind of coarse weft, warp smaller, less obvious cross-shaped cell morphology. The second type, the cross section shape of the more obvious, and aggregated into a mesh.

Fig. 12: No. 1a, b (Drawn by the researcher)

Fig. 13: No. 8 (Drawn by the researcher)

Fig. 14: No. 13 (Drawn by the researcher)
Type C – Arc

4 data (Figure 15-18), contain Class A pattern combined with each other. Line path parallel to the main arc, snapping, rewind, constitute a ring. Minimal gap between line and line, line and line in flush manner, so that wound into the surface region. More particularly, for the construction of a wider region to form a surface image.

Research Conclusion

The traditional patterns of the Qing Dynasty costumes to basic design principles shape cut from three basic elements form the pattern, A Class dashed Cross Class B, Class C arc for the initial constitution of the Qing Dynasty Costume Designs, approximate the results demonstrate the basic discussion. Graphic design from the perspective of the Qing Dynasty robes pattern shape, though are in line as the basis for the composition, but also contains the basic principles constitute the dotted line, crosshairs, arcs and other images. By way of permutation and combination, side by side to form a mesh, ring and other composite image. Patterns of the Qing Dynasty costumes, it can be said that the practical application of the principles of modern basic shape. Through a preliminary analysis of this study to examine the context of the evolution of the traditional pattern, hoping to crystalize the ancients thought of the past, cultural background into the design thinking of them, provide the basis for the application holds many lessons for graphic design.

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The journey from self-exploration to self-identity: The evolution of contemporary Taiwanese graphic design

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Abstract

To understand contemporary Taiwanese history of graphic design, one may want to learn the development of Taiwan politics first. This article will demonstrate how Taiwanese graphic design is influenced by political trends. However, when politics intervenes in graphic design, the creating process would be restrained since designers will need more thoughts before applying texts and images. The evolution of Taiwanese graphic design is the best testimony of the argument, by crossing the post-colonial period, the crisis of national- and ethnics-identity in 1971, and the social conflict after the end of Martial Law in 1987. Graphic design works with Taiwanese consciousness may have less commercial sense, but describe the subjectivity value of the society with more accuracy. The works contain the essential elements that make graphic design step from localization to internalization which are the main streams in the history of Taiwanese contemporary design.

Keywords

Graphic design, subjectivity, martial law, Tai-Ke culture

Introduction

In 1949, after the defeat in the Chinese civil war, the government of the Republic of China, led by Chiang Kai-Shek and the Kuomintang (Chinese Nationalist Party) came to Taiwan. Henceforth, the practice of “Martial law” (1949-1987) followed. Meanwhile, due to the outbreak of Korean War in 1950, the Republic of China in Taiwan (R.O.C.) received financial support from the United States over the period 1951-1965. In 1954, the Sino-American Mutual Defense Treaty was agreed by the U.S. and R.O.C. government. Based on this interactive relationship, the States provided strong support for Taiwan in military, national defense and economy sectors. Consequently, influences from American culture and contemporary graphic design flowed in; one example being through pop music and album cover. Both American culture and the postcolonial culture after Japanese colonization offered Taiwanese graphic designers inspiration in the early phase. In 1971; the Senkaku Islands dispute, also known as the Diaoyu Islands dispute, compelled many Taiwanese to reflect upon their national- and, ethnic- identity. Thus, the trend of thinking was highlighted by this period’s graphic design. It was not until the termination of Martial law that Taiwanese graphic designers had more freedom in their creations.

The Aftermath effects of Post-colonialism (1945-1961)

Taiwan was a Japanese colony from 1895 until the end of World War II. Although Taiwan no longer belonged to Japan, the connection remained. For example, the development of culture and art showed the huge impact of the culture assets and economic construction during the period under Japanese rule. These became the phenomena of the aftermath theory of Post-colonialism. The album cover design in this period exhibit influences from Japanese ruling and imported records (United Kingdom, United States, and China) as well. The style of Taiwanese design transformed from De Stijl, Art Nouveau, Victorian to Art Deco. In this period, the essence of culture is unclear; the subjectivity of Taiwan is absent. Also, most of the works present the same style as during the period as a Japanese colony, which demonstrates the argument that the relationship between “post-colonialism” and “colonialism” are connected instead of separated.

From 1961 to 1971, the economic growth had been focused on the export processing zone and trade surplus industries. The evolution of graphic design has entered the initial stage, due to the gradual stabilizing in political and economic sectors, leading to the rising need for living necessities. However, due to the lack of internation-
During the late period of U. S. assistance to the time of exploring self-identity (1970-1987)

The Senkaku Islands Dispute in 1971 triggered Taiwanese people’s national and ethnic identity. The incident led to local literature movement and development in art subjectivity. Graphic designers started to think about subjective consciousness in their works. Whether Taiwan is an extension of orthodox China or the nation China with subjectivity of Taiwan (R. O. C. in Taiwan) became a critical issue. 1971 was also the year the R.O. C. withdrew from the United Nations. After that, Taiwan faced the cruel reality of diplomacy difficulty. Moreover, the Senkaku Islands Dispute caused many Taiwanese to ponder over their nation’s international position and ethnic-identity. These social incidents and ideological trend reflected on the poster design at that time. The graphic designers used various forms and elements to narrate different attitudes on subjectivity, such as traditional Chinese symbols versus local Taiwanese elements.

Under the atmosphere of the 1973 Oil Crisis, the Taiwanese government still pushed ahead with the Ten Major Construction Projects. The emphasis on economic construction demonstrated that the government confronted the reality that “Retake Mainland China” was not applicable at the moment. The Taiwanese government had expended most of the budget in national defense. In the 70s, the government reduced the budget for the military, and invested more money in economics, education, culture, and art construction. Even through the two oil crisis during the 70s, the shifting of the nation’s financial allocation contributed to its economic growth and led to the rise of culture and art. Graphic design had gained its visibility, and became an efficient tool of product marketing, for instance, in poster design, Logo design (corporate identity system, visual identity), package design, advertising design, commercial photography, and public service advertising. Also, illustrations and design painting made huge progress in this era. Newspaper promoted the design combing illustration and layouts. Overall, in this period, graphic design’s main purpose was commercial.

In 1971, the Taiwan Amoeba Design Association (TADA) was established. The intention of choosing the word “Amoeba” was for the pursuit of innocence, originality, the most fundamental principles of visual design, and designers with innovative ideas constantly brought up-to-date conception to art and society. (Lin, 2003)

In 1972, Taiwan’s first advertising magazine “Advertising Ages” was founded by Cheng-Feng Guo, which had immense influence on graphic design. With design magazine and exhibitions, graphic design was encouraged to present practicality and generality in society. In 1973, the first Taiwanese modern dance company “Cloud Gate” was founded. On December 10, 1979, the International Human Rights Day, one of the largest demonstrations throughout the Martial Law period occurred in Kaohsiung City, the “Formosa Incident.” This incident changed the neglected attitude of the U. S. toward the practice of Martial Law in Taiwan. In addition, the Formosa Incident emphasized Taiwanese sovereignty and the value of democracy in people’s minds. Near the end of the 70s, people became aware of the issue of national and ethnic identity.


The calm before the storm

A remarkable economic growth could be seen in Taiwan after the promotion of the Ten Major Construction Projects. Due to the prospective scene, graphic design was getting more and more attention, and the need from the market was greater than ever. Before 1987, when Martial Law was still in practice, the intention of graphic design was for practicality, illustrative and narrative purposes. Designers had to be careful in their use of texts and images. Messages that have critical or objectifying connotation intentionally or not were strictly forbidden. To meet the government’s requirement thoroughly is a must for the creators at the time. In advertising, video, and communication industries, there were specific regulations which forbid violation of the national principle policy and only good manners and customs were allowed. Mass meetings, demonstrations, and the dissemination of unfavorable ideas about the government were forbidden as well. Rules which applied to society also applied to graphic design. Serving as a device for business
marketing, there was not much freedom in design work. For example, the colour red was taboo, since it was the colour symbolizing communism, except for Chinese New Year and wedding occasions. In 1983, shortly after the opening of the Taipei Fine Arts Museum, the sculpture in front of the building—Tsai-Chien Lee’s Finite to Infinite—faced the “red” issue. The art piece was a hefty geometric red sculpture, constructed by bending triangular columns to a similar symbol of “infinity.” However, in 1985, because someone argued that the sculpture resembled a red star—a Communist symbol—the art work had to change the colour to silver. This kind of political intervention in art and design under the ideology of white terror had its origin in 1950, when the beginning of the Korean War prompted the ruling party in Taiwan to consolidate its regime. Due to the reason of corporates within the United States being against Communism, a series of white terror and anti-spy measures were implemented by the Taiwanese ruling party since 1950. Literature, movies, music, to fine art were all affected. It was not hard to imagine that the artists and designers had to comply with the Martial Law, set themselves in restricted creating environment, so that they could stay away from prison.

**Vintage nostalgia and the post-modern period in Taiwan (1990-1993)**

After the end of the Chinese Civil War in 1949, about 1.2 million soldiers and civilians left their homes in China for Taiwan. In 1987, the Taiwanese Kuomintang government lifted the ban on visiting relatives in Mainland China. The veterans in Taiwan had lost contact with their hometown for 38 years since 1949. With the ban lifted, they could finally go back and reunite with their long-lost families. In this occasion, the sharp contrast of the two sides of the strait was exposed to the people. On the cover of Taiwanese singer and songwriter Da-yu Lo’s album Hometown (1991) (Fig. 2), which was designed by Akibo Lee (1961-), one can see the confused and lost expression of the veteran after visiting his hometown in Mainland China. This album cover design is more like a stamp design, yet there is no postmark, date, nation, nor currency value on it. With exchange between China, Taiwan, and Hong Kong, bans such as visiting relatives in mainland China were lifted, and the mail and phone calls between China and Taiwan became possible if transferring via an intermediary such as Hong Kong. Although the long-lost connection was reconnecting, the inner world of the people were disconnected separately by opposite sides (the two sides in the stamp). It is also a representation of the tragedy: innocent youth were deprived of the warmth of family life, due to conflicts and inappropriate conscriptions. They were forced to leave their home, parents, wives or beloved ones, even children. After so many years, they became alone, old and with sadness.

The design of the Hometown album cover wisely describes the complex and ambiguous feelings of Taiwan’s new residents (the first generation of mainlanders) after their visit to their hometown. Time flies, and people change. The man in this cover wears a pair of white glasses. The oval shapes of the white glasses resemble “eggs”, which in Chinese pronunciation has the homonym of “birth.” This probably narrates the thoughts of those “mainlanders” who retreated from mainland China to Taiwan: Where is the hometown? In the early 1990s, following the trend of internationalized business patterns, Taiwanese industries gradually shifted their investment to China to form globalized marketing operations. The trend of globalizing impacted considerably in the field of graphic design. In addition, the waves of “Taiwanese consciousness” and “local identity” were rising at the time. Local Taiwanese culture, dialect, art, and traditional opera have been degraded, due to a government who implemented policies since 1972, such as the designation of Mandarin as the official language and carrying out the civil Mandarin movement (traditional Chinese). It was until the 1990s that the government and people started to consider the importance of “Taiwanese consciousness.” Thus, localized themes and materials begun to show up in graphic design.

On the album cover of Afternoon Theater (Fig. 3) by Taiwanese-dialect singer-songwriter Ming-Chang Chen, the designer used classified ads in newspapers as the background of the cover, and smartly put the crew list into various ads. The classified ads were the epitome of economic development and the livelihood of Taiwanese society. After lifting the press ban in 1987, freedom of speech was no longer a political taboo or burden. Newspapers can even serve as the advertising device for propaganda and anti-propaganda purposes. In this piece of graphic design work, newspaper classified ads are used as the source material, which compared the once degraded local culture, dialect, and traditional opera, to the recruitment, lost-and-found, legal statement, etc. in the
newspaper, things that belong to daily life. Graphic design is a visual culture that combines people’s needs and the significance of time.


In 1995 and 1997, China undertook two military exercises targeting Taiwan. The actions were attempts to intimidate and affect the first Taiwanese presidential election in 1996. Nevertheless, similar to the Senkaku Islands Dispute in 1971, the threat ran counter to China’s desire. Taiwanese people started to reflect on the subjectivity of Taiwanese politics according to their political- and national-identity. Graphic designers actively responded to the calling. Their works presenting labor movements, the environmental topic, and the gay issue.

In 1999, the Labor Exchange Band published their debut album *Let Us Sing Mountain Songs* (Fig. 4). In the album title, the band used the traditional Taiwanese Hakka dialects word, "us" (wo-deng, 我等) instead of the Chinese "us" (wo-men, 我們). On the album cover, the designer utilized the hand-drawing illustration as the main expression. The illustration narrates the Mei-Nong Hakka people’s lives, how they settled down on this very land, and how they built their home and established their career. The image presented a peaceful scene: the local people’s unsophisticated faces, beautiful mountains and river, men and animals living together in harmony. The people and the land are united dependably in a simple style. On the right of the cover, the Hakka people blew the suona horn, a traditional instrument for gathering everyone. The insects and birds in the woods, as well as the fish in the river, together with human beings all summon up to sing the hometown’s mountain songs. The mountain songs of the hometown were a kind of mother-tongue call, which is calling them from deep inside their hearts. The deeper meaning in this rustic and simple Mei-Nong Hakka village is the feeble cry from the local people calling for the public and government’s attention. They look at the sky helplessly. They hope that humans could reflect on their indifference and brutality, and stop thinking and treating the land and other beings only from the point of view of economic benefit.

*Tou*ch (Fig. 5), is the first gay and lesbian record in the Chinese world. It is also the starting point of the combination between graphic design and the gay issue. "Touch" is an erotic characteristic of physical intimacy. It is also a private behavior of comforting. Sexual passion and pleasant sensations could be conveyed to others via touching. In this album cover, the overall impression is a sketch by charcoal pencil, presenting a spiritual body which is oppressed, unhappy and in unspeakable pain. The unmodified hidden lines express an unpleasant experience. The closed eyes and mouth, as well as the bended facial muscles, are like the inner world of gay people: they are unable to vent their feelings but remain in silence. The Chinese title "Touch" is composed by Mandarin Phonetic Symbols, which makes one associate the word with the incoherent speech of babies. It discloses the immature environment for discussing gay issue in Taiwan at the moment. There was still a long way to learn and grow, to realize a deeper understanding about gay people. On the side label, the designer highlighted the by inserting in word “gay”. It implied the marginalization of gay people in the mainstream society. They were not very likely to be accepted by the majority. Moreover, there was no singer’s name on the album cover, just like the "he" or "she" who was restrained and oppressed still not willing to “come out.”

**Taiwanese subjectivity and local consciousness on the international stage (2000–)**

“Tai-Ke Culture” (or Tike culture) is a discriminated derogatory noun. “Tai-ke” was originally used by Taiwanese mainlanders to call Taiwanese local people with negative connotation. Nevertheless, in the end of 1990s, “Tai-Ke Culture” moved from the border to the core, became a popular trend in graphic design. Since 1990s, design exhibitions have been hold frequently among Taiwan, Hong Kong, and China. “Taiwan Image” became the source material for evolving from Taiwan consciousness and localization to the internationalization. After 2000, “Tai-Ke Style” is the highlight in graphic design, such as works by Akibo Lee, Qing-Yang Xiao (1966- ), Tzi-Chin Huang, and Jung-Yu Liao. These graphic designers share the common ground that they have designed both album cover and book binding. Another trend, the “Taiwan Image,” is presented by fusing Taiwanese with Oriental elements in a postmodern way with simplicity. The design style develops from Chinese characters, idioms, and Taiwanese slang, such as works by Apex Pang-Soong Lin, Ming-Long Yo, and Hung-Tze Lin.
In 2005, the album cover of Monte Wang’s *The Wandering Accordion*, designed by Qing-Yang Xiao, was nominated for Best Recording Package of the 47th Grammy Awards. In 2008, Xiao got another nomination by the 50th Grammy Awards with the album *Riding the White Horse*. The design style is the fusing of classic and modern. Xiao combines Taiwanese traditional opera (歌仔戲, kua-a-hi, a kind of song drama) with stone rubbing art. In the cover, an ancient general is riding a white horse (Fig. 6). The subjectivity of the white horse is highlighted by the ink color of stone rubbing. The graceful and aesthetic lines coordinate with the characters by ancient calligraphy and seal cutting, presenting a noble and elegant oriental flavor. This piece of work is a conceptual design containing both local taste and innovative fashion sense.

In March 18, 2014, thousands of students were surrounding and occupying Taiwan Legislative Yuan because the legislators were attempted to expedite a service pack with China. Graphic designer Aaron Nieh (1977- ) designed a whole page ad, *Democracy at 4am*, for New York Times. Nieh used a picture of blackness at 4 am to describe the incident that Taiwanese ruling party ordered police to suppress and evacuate the sit-in protest students. Another designer, Tzi-Chin Huang, made a series of “Tai-Ke Style” graphic design with Dada irony, photomontage collage, and Soviet Constructivism techniques to support the student movement. Compare to previous graphic design, which aimed to serve for economics and commercial, the design after 1987 became the praxis of social movement. It not only deepens the essence of graphic design also expands the application of the subject matters.

**Conclusion**

In *Detachment and Unification: A Chinese Graphic Design History in Greater China Since 1979* (Wong, 2001), the author argued that it was after the end of Martial Law period that Taiwanese graphic design started has the autonomous to create, and the mature development can happen. In this article, the development of Taiwanese contemporary design is reviewed in three phases. The interactive creation between graphic design and social context could be possible only when political freedom is completed. Works with originality, subjectivity or deeper meaning will not exit, if a nation has excellent economy foundation but lack of freedom of thought and speech. The evolution of Taiwanese graphic design is the best testimony of the argument, by crossing the post-colonial period, the crisis of national- and ethnic-identity in 1971, and the social conflict after the end of Martial Law in 1987. Graphic design works with Taiwanese consciousness may have less commercial sense, but describe the subjectivity value of the society with more accuracy. The works contain the essential elements that make graphic design step from localization to internalization which are the main streams in the history of Taiwanese contemporary design.

**References**


**Biographical note**

Li-Min Chen completed his PhD in Design Studies at National Yunlin University of Science and Technology, Taiwan and has been teaching there since 1992. From 2004, he is in the Department of Visual Design at National Kaohsiung Normal University (NKNU) and is currently the Professor and Chairman of Department of Visual Design, NKNU.
Uncharted territories of transnational design history with particular reference to Turkey

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Abstract

This paper unfolds an interesting characteristic of transnational design based on observations in Turkey. This may be titled as “A Non-Reflective Transnational Dissemination of Impacts,” which denotes one directional process where design ideas run from centre to periphery but not vice versa in particular areas. For instance, Baroque and Rococo architecture were introduced to the Ottomans in the 19th Century and the Balian Family designed many ostentatious buildings in Istanbul; what impact have they made on Italian or French Architecture? None? Bruno Taut who is famous with his Glass House designed in 1914 Deutsche Werkbund Exhibition, moved to Turkey in 1936, built several important buildings including a "pagoda house", died in 1938 and buried in Istanbul. How many of his architectural work in Turkey were acknowledged in Global Western design history? None? These cases constitute a ground to explore and develop the concept of "A Non-Reflective Transnational Dissemination of Impacts".

Keywords

Transnational history, design, Bruno Taut, Balian family, Turkey

Introduction

This paper aims at revealing and discussing the particular characteristics of transnational design history that we have encountered in Turkey. In order to study the subject with a coherent approach, the understanding of transnational history and its interpretation for the field of design will be briefly revealed. This will help define a conceptual territory within which an undefined area will be looked into with an example from Design History in Turkey.

Transnational history

The expression of transnational is not new. It goes back to 1862 when German philologist Georg Curtius discussed 'transnational' languages in Leipzig (Macdonald, 2013). It took six years for its first English appearance, in an article published in Princeton Review (Macdonald, 2013). Nevertheless, the term gained widespread use and enriched substance since 1990, which has opened avenues for serious discourse as well as offering new ways for history researches (Kikuchi, 2014; Friberg, 2007; Macdonald, 2013). The rise of globalisation debates and the issues of migration are amongst the leading factors bringing the term transnationalism on the agenda. Simon Macdonald gives a good account of the evolution of the term and concludes: “Akira Iriye’s influential call in 1989 for new research ‘to search for historical themes and conceptions that are meaningful across national boundaries’ accelerated the emergence of transnational histories” (2013, p. 4).

The relationship, meaning and position of transnational histories with respect to comparative studies, global and world histories were much discussed (Bayly, 2006). It would not be right to draw a straightforward conclusion and give precise definitions of each one but a few sentences formulating the framework of this paper would be useful for the arguments presented later.

Comparative studies have their own aims and objectives and are restricted to nations and states. The critical writers underline that comparative studies could be strengthening the national version of history, may treat “its cases as autonomous and ignores the link between them”. In defence of comparative studies, Frieberg, Hilson and Vall argue that “comparative methods, practiced as a heuristic search for similarities and differences
across space, may transcend national borders without reinforcing dominant national paradigms” (2007, p.735). Referring to Miller’s article, many commentators would agree that comparative and transnational histories are not mutually exclusive, but they are complementary although the scope of transnational studies is much wider and inclusive. (Szélpál, 2009).

The differences between world and global histories are vague as differences between transnational histories and comparative histories. Bayly has stated “that the distinctions between world, global, and transnational history have never adequately been explained” (2006, p. 1442). His explanation is to highlight the minor distinctions: “I get the sense that ‘transnational history’ stands in the same relationship to ‘international history’ as ‘global history’ does to ‘world history’: that it is much the same thing, except that the term ‘transnational’ gives a sense of movement and interpenetration” (Bayly, 2006). Ian Tryvell’s observations are in the same direction: “The new transnational history was related to, but not the same as globalization, world history, and comparative history” (2007, p. 1).

Kikuchi gave a good account of these debates and analysis of the concepts with special emphasis on their reflection in design history (2014). To focus on the subject of this paper, her description of transnational history will be utilised for it is pragmatic and instrumental: “The transnational approach identifies the porosity of national borders and allows us to see different flows of human activities, including interactions of people, objects, ideas and art and design movements; otherwise the perspectives are delimited by national borders” (2014, p. 325). Actually, this is a definition accepted by many scholars, as Thelen writes “We wanted to explore how people and ideas and institutions and cultures moved above, below, through and around as well as within the nation-state” (1999, p. 967).

Two cases from Turkey: Bruno Taut and Balian

Taking these sentences as starting points, two hypotheses will be formulated based on specific cases concerning design history in Turkey. The purpose of these suppositions is to raise questions, touch upon uncharted territories and perhaps generate new perspectives for the further development of transnational design history.

The first situation is Non-Reflective Transnational Dissemination of Impacts, which denotes one directional process where design ideas mostly run from centre to periphery but not vice versa in particular areas. An excellent example is Bruno Taut who was born in Konigsberg in 1880, studied architecture in Stuttgart, designed the legendary Glass Pavilion for 1914 Deutsche Werkbund Exhibition, built many housing compounds in Berlin, moved to Japan in 1933 and finally relocated in Turkey in 1936, where he died and was buried in Istanbul, just after he designed the catafalque for Mustafa Kemal Ataturk.

Taut was appointed as the first Head of Architecture Department at the Fine Art Academy in Istanbul. Although his life in Turkey was short and limited to his last two years, the amount of work he created and his influence in the constitution of modern Turkish architecture is considerable (Aslanoglu, 1976). Taut had worked as a practicing architect for the Turkish State as much as he operated as a head of department. Among the many buildings he designed, the Faculty of Languages, History and Geography of Ankara University is particularly important for its scale, appearance, materials selected and details which has made it a manifest for Modern architecture in late 1930’s of Turkey. Amongst his other works, he made another fascinating move: As a cultural agent and a restless soul, after his experience in Japan, Bruno Taut designed and built a ‘Pagoda House’ for himself in Istanbul (see figure 1).

When Taut’s life, experiences and successes in various countries are taken into account, his irrefutable role and undeniable value for international architecture becomes apparent. In this respect, we can assume and expect that his work is the subject of intensive research, leading to vast quantities of publications. Unfortunately, this is not the case. As an exception to this general trend, we may include the works of Manfred Speidel – a Bruno Taut

Figure 1: Pagoda House by Bruno Taut, Istanbul. (Photo: Courtesy of Piramit Haber)
expert, an early text by Aslanoglu (Aslanoglu, 1976), a book section by Bozdogan (1997), an article by Erdim (2007) and the seminal book of Esra Akcan published in 2012. Most of the researchers on Bruno Taut have often focused on his worldwide known ‘Glass House’ or his achievements in national scopes, for instance his housing schemes in Berlin, his buildings and pedagogical role in Turkey or his endeavours in Japan.

Three issues surface here: A) he is underrated and ignored by many historians in the West. B) his works in countries far from the West, namely in Turkey and Japan, remain distant from current design discourses and have been missed out c) National histories and comparative studies have failed to uncover his transnational significance.

Reyner Banham’s remark on Taut supports these observations. Referring to his 1914 Glass House, Banham writes: “Quite apart from the possibility of its having been influenced by Paul Scheerbart’s book, Glasarchitektur which came out in the same year, its rare qualities suggest that it was produced in a moment of genius that Taut was unable to repeat” (1989, p. 81). Is “…unable to repeat” not a judgemental statement proposed without evaluating Taut’s later work in Japan and Turkey?

Inci Aslanoglu encounters another kind of reserved approach to Taut (Aslanoglu, 1976, p. 35). Aslanoglu, referring to Walter Segal’s article (1972) notes that post war architectural historians had focused sufficiently on Bauhaus and many German émigré architects but they avoided Taut and his work for this is a very difficult subject matter that they did not know how to handle or classify. Thanks to a transnational approach, Esra Akcan’s has worked to overcome these difficulties 40 years after those sentences were written (2012). Akcan prefers the word ‘translation’ instead of ‘transnational’ in her book. However, her definition of the former is not dissimilar to the definitions of the ‘transnational’ that we use in here. “… (A) term I particularly find accessible since it is a common experience, whether one has translated between two languages, mediums or places. … a cultural flow from one place to another.” (2012. p. 4)

Nevertheless, even Akcan’s work serves to prevent further enquiries: Taut’s house in Istanbul known as Japanese House, due to its pagoda like appearance, offers a wonderful view of the Bosporus due to its architectural configurations. But, why ‘pagoda’, a form used for temples in Japan, should be employed in Istanbul for a dwelling is not very clear. Akcan considers it as “critical and innovative gesture” while Taut, in a letter to Walter Segal, stresses that his designs are samples of his architectural understanding (2012). Bozdogan underlines that this house “stands out from the rest of his built work in Turkey as the symbol of his preoccupation with the lessons of vernacular in Japan and Turkey” (1997, p. 185-6). If we take the Turkish design concepts used in this building into account, one may conclude that Taut has created an amalgamation of transcultural design appropriate to geography and climate with innovative features reflecting a contemporary taste of his own.

What effect has this house and Taut’s other works in Turkey has made in architectural practice and education in Japan or in the West has not surfaced in this initial survey. Probably none. Is it because Istanbul and Taut were not part of cutting edge design discourse in the West? Could we assume that this may be a Non-Reflective Transnational Dissemination of Impacts, a one directional process where design ideas amongst others, flow from centre to periphery but not vice versa? Could the centre (or some countries of the centre) are more introvert and self-oriented and thus, closed to the periphery at certain time periods?

This brings the second example to the fore for examination: The Balian Family (Balyan in Turkish). Three generations of Balian Family, members such as Kirkor (1764-1831), his son Karabet (1800-1866), and his sons Nikogos (1826-1858), Sarkis (1835-1899) and Agop Balyan (1830-1875) were the key figures of 19 Century Ottoman architecture (Goodwin, 1992). They were working for Ottoman Sultans and had erected the most important buildings, comprising of Dolmabahce, Ciragan and Beylerbeyi Palaces, Ortakoy and Valide Sultan Mosques, Beyazıt and Dolmabahce Clock Towers, and houses at Akaretler in Istanbul to name but a few. Nikogos, Sarkis and Agop had studied at Sainte-Barbe College at Paris where Alexandre Labrouste, brother of renowned French Architect Henri Labrouste was the head. Goodwin has written years ago about their attendance to Sainte-Barbe College and underlines how Henri Labrouste was influential on Nikogos (Goodwin, 1992, p. 419).

What concerns us within the scope of this paper is how Balian’s works are treated by national and transnational histories. The situation from the viewpoint of former is not something that one can be proud of. Deliberating the great numbers of building they have built more than a century ago, we discern that studies on their works are limited, publications are inadequate and is mostly comprised of articles, except for a few books on the subject. The main reason for the shortage of knowledge may derive from the “little information concerning Balians themselves in the documentation of the Ottoman archives” (Wharton, 2010, p. 93). The list published in the book “Armenian Architects of Istanbul” portrays well the scenery and inevitably leads to the following critical observations:
First. Although in recent years the variety of commentators has increased, and has been mostly and understandably researchers of Armenian origin, who study architecture of the Balian family. Benefiting form Armenian sources is obviously an advantage to get further information at least for cross checking.

Second. Up until a few decades ago, some historians kept a distance from Balian’s designs and mentioned them in nothing more than a few superfluous sentences. When mentioned, Balian’s architecture is neither praised nor acknowledged properly. A respected architectural historian, Abdullah Kuran, successfully describes several 19th Century Balian buildings without mentioning originators’ names in the text but in the footnotes only (Kuran, 2012). For an art Historian, Aslanapa, Ciragan Palace is a hybrid example of a stupefaction period in which foreign constructions were destroying the portrait of the city where Italian architects were prevailing (Diez & Aslanapa, 1955). Arseven writes that Ottoman architecture was in total collapse in 1861 and adds, "respected Rum and Italian architects of that time, used to make sort of weird buildings totally alien to Turkish Art” (Arseven, 1984, p. 180). (Rums are people who lived in East Roman Empire. As a Turkish expression, in common parlance, it refers to people of Greek origin who live in Ottoman territory as her citizen).

Third. The role of Armenian architects in Turkey is a minefield and an ideological battleground. For example, Aygul Agir’s assertion is that there is lack of evidence to support that Balian brothers officially studied in France (Agir, 2005). Alyson Wharton thinks the opposite and tries to prove it (Wharton, 2016). In a conference paper Serafettin Deniz claims that Nikogos Balian could not have built Ortakoy Mosque (Deniz, 2006). Selman Can takes the proclaims further: for him Balians are not architects but constructors. Having said that he then gives a list of architects as the designers of many buildings ascribed to Balians (Elmas, 2016.) While nationalist history discourse attempts to ignore or discredit Balians or try to diminish their role in the design and construction of notable premises certified to them, their church designs are not even mentioned or not considered as part of Ottoman Architecture (Kuban, 2007).

Irvin Cemil Schick has very recently taken part in the writing of an edited book entitled “Turk Mimarisinde Iz Birakanlar” (Those Leaving Traces in Turkish Architecture). The Ministry of Environment and Urban Planning has initiated an edited book project on Turkish architecture. Schick has been invited to be become a member of editorial board. He realises that there is almost no foreign or non-Muslim architect in the list prepared. He insists that the list needs alterations and succeeds in getting some names included. His experience with the authorities and his narration of the publication process of the book illustrates clearly and ironically the current state of a prevailing nationalist attitude (Schick, 2016).

National histories do not grasp entirely the realities of fundamentally homogenous but at the same time multi-ethnic structure of Ottoman urban culture (Cerisi, 1988). Edhem Eldem articulates the situation eloquently: “Nation-sates are often incapable of understanding empires” (2010, p. 13).

To this end, it becomes evident that transnational history finds another fecund soil within which to grow justification of its presence and effectiveness. Exactly here, the aforementioned question surfaces again: What impact has Balians’ Baroque and Empire style architecture made on the global or world history? Affie Batur and many other scholars accentuate that their work is not a copy of Western architecture but an original approach adopting and taking it further, which definitely, requires a substantial investigation.

What can be said regarding Taut could also be reiterated in this point: Non-Reflective Transnational Dissemination of Impacts could also be valid for Balians. In other words, one would always like to know the influence and contribution of their architecture beyond the borders of Ottoman Empire if there is any. Where does this stand in relation to conventional Baroque and Empire style and within the dominant discourse? How could transnational history draw a perspective within these niches of uncharted territories?

**Conclusion**

These questions are intended to indicate the necessity of new approaches as well as new directions needed in the design history of Turkey. However, the current nationalist streams also present gap, voids and domains to be scrutinized. A nation state born out of the ashes of a huge and cosmopolitan empire is substantially different than a nation state based on one or two ethnics groups. In a sense, Turkey is to suffer from non-comprehension and non-embodyment of these diversities, which render the materialization of various fractions, societies, and communities, religious and political factions possible. This fragmentation causes and forces each group to search for and built its own identity. Historiography as well as design appears to be the victim of these affords, for they are being used and abused from time to time (Balcıoğlu, 2012; Balcıoğlu & Emgin, 2014). Therefore, ‘Trans-community Design Trends’ drives from this multi-layered, and perhaps, in a positive remark, colourful mosaic but at the same time
chaotic situation.

As a corollary, this paper draws the attention of design historians focusing on Turkey on two methodological concerns: Non-Reflective Transnational Dissemination of Impacts and Trans-community Design Trends. These two unexplored area of transnational historiography, which definitely demands further study, may not be Turkish specific peculiarity, and might be applicable in and for other countries as well. Therefore, historians have to be prepared to construct bridges over troubled waters.

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Biographical note
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Sailing upwind or a fresh and salt watered history of design

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Abstract

It is interesting to see how history has neglected the waters which in reality cover more than 70% of the earth. The civilizations which have not established land settlements have been considered as extinct (like Polynesians and Phoenicians) if not named as some obscure phrases like “sea people”, and the languages developed in the seas have been considered as a combination of land languages combined with a necessity to define technical aspects of boat building and/or seafaring. Starting with the multi-centered origins and multiple evolution of vessels and their components designed for fresh water and sea travel, and limiting itself with the historical design aspects of sail, this paper is a moderate attempt to argue whether a nautical design history can change our cognition of history in general.

Keywords

Historical rhetoric, design history, maritime design, boat building, lateen sail design

Introduction

“There is no document of civilization which is not at the same time a document of barbarism. And just as such a document is not free of barbarism, barbarism taints also the manner in which it was transmitted from one owner to another. A historical materialist therefore dissociates himself from it as far as possible. He regards it as his task to brush history against the grain” writes Walter Benjamin (1940) in his classical essay Thesis on the Philosophy of History essay. Though the claims in this article seem over ambitious, it is rather a moderate effort to provide not an anti-historical view, but an extended model to review the early past with a considerable amount of data regarding seas and oceans, excluding the majority of the established historical paradigms regarding Mediterranean and European originated discourse related to design history. It can also be viewed as an attempt to provide some early foundational links between world history, maritime history and design history where these three domains have lost connections mainly because, i) all three areas have developed to be well defined and clear specialization areas, and ii) marine issues and affairs have always been a unique area from the beginning with its special language, tools, and affairs. The most ambitious argument behind this article can be defined as an attempt to start a discourse on “Maritime Design History” if it does or can exist. Besides and beyond the definitions of history as an account of chronological record of events which have taken place in an unchanging past from ancient Aristotle to “a kind of research or enquiry” into “actions that have been done in the past”, conducted “by the interpretation of evidence”-evidence being further defined as documents by more contemporary R.G. Collingwood (1946), history is also a convention about the past reflecting the values which belong to the collective consciousness of the present and eliminating the ones which do not belong to it.

This article mainly deals with early maritime issues until lateen sail was invented with a specific focus on Southeast Asia and Indian Ocean for this area seems to have provided some of the the influential basics of maritime design to be credited to Mediterranean and Eurasia in the periods to come.

Dealing with maritime design history arises the question whether there exists a structurally and even chronically different history of civilization than the history we have accumulated regarding events on land which is a kind of terrestrial history. Though they are inevitably interrelated the general structure of the history we know mainly focuses on the series or repetitive events on types of land from continents to islands. From the rise and fall of civilizations to the structural categories created in the course of history, land plays the major role. From the discovery
of the earliest humanoid bones found in Africa to early settlements and agricultural developments in Mesopotamia, and from the domestication of horse to fall (or conquer for some others) of Constantinople or the discovery (or conquest for some others) of Americas, history has been established and structured by the events bound to land.

**Histories of land and sea**

"But the influence of the sea on man’s daily life and on his future well-being is so great and still so poorly comprehended that the sea must be explored, studied, and understood so that it can be taken into account more intelligently whenever man is faced with any problem relating to his physical environment" says H.B. Stewart in his In Deep Challenge (1966). The oceans and the seas are more important to life on earth than the rainforests by not only dictating the global weather but also by providing the world's water supply. On the other hand reckless destruction of the resources combined with severe acidification and pollution, the destruction of sea habitat is immense and to some researchers even irreversible. The rate of the extinction or decrease of sea species are at an unsustainable rate and some of the living organisms from fishes to weeds are going extinct before they are being discovered.

According to Unesco (2016) there are close to 500 dead zones covering more than 245,000km² globally, equivalent to the surface of the United Kingdom. Paradoxically we have more knowledge and data about UK more than entire oceans and seas. One of the causes of this destruction lies in humans' questionable attitude towards sea not excluding in terms of a historical subject. Probably people watch more space ships than actual ships on movie or television screens. Yet, like human body, almost ¾ of the surface of the earth is covered with either fresh or salt water. To be more accurate water makes up about 71% of the Earth's surface, and 96.5% of all the Earth's water is contained within the oceans, while the remaining 3.5% is freshwater lakes and frozen water locked up in glaciers and the polar ice caps (Williams, 2014). And very much like Hollywood dealing more with fictional space ships than the oceans and sea related plots, history has done a very similar attitude towards land, underestimating sea or treating it as if seas and oceans have not been an integral part of the chronological sets of events on land. It is not, or maybe it is, surprising to see maritime history, oceanography, or maritime archeology follow a different pattern different than the world history rhetoric.

The emphasis on the silk road, or kings' road, or the Alexander's or Crusaders' road, or the railroads after the locomotives were developed by industrial revolution have been comparatively less when compared with the trade networks of the Indian Ocean and Arabian Sea. Evidences show that people were to trade between Mesopotamia and Indus river four thousand years ago, world history doesn't seem to recognize much and still cling unto the generic rhetoric of history following the paths of land culture mainly based on transition from hunter-gatherers to agricultural settlements. Migration of first settlers from Southeast Asia to Australia on rafts almost in 50.000 B.C. or the Polynesians' epic ocean voyages in the Pacific Ocean from 1000 BC to 1500 AD with their possible trips to the east coasts of America remain as underrated marginal stories historical rhetoric. While the world history traditionally focus on political, religious, or cultural issues, issues like maritime trade, explorations, sea migrations, or naval subjects remain as a distinctive domain within maritime history (Paine, 2014). Design history, on another domain, while following the rhetoric of world history through a chronological order prefers not to touch upon maritime issues in a similar way. Like maritime language remains alien to land language, maritime history remains alien to world history and design history. In addition to this alienated historical approach Eurocentric attitude towards not only world history but Maritime issues create another set of complexities. Not only the generic world map, but also the world history and historical maritime developments have always been viewed as a European followed by American phenomenon.

The emphasis on Columbus' first voyage to the Americas in 1492, followed by Vasco Da Gama's to India and Magellan's circumnavigation of the earth in late 15th and 16th centuries, or Lewis Cook's half colonial half scientific expedition in the Pacific Ocean have always been more than the maritime achievements of the Arabs', Polynesians', Southeast Asians', Vikings' or Chinese and Japanese maritime achievements of the times before them, not to mention a continent totally ignored. Africa. Maritime design history provides evidence that people especially alongside the East coast of Africa and alongside the North African shores by the Mediterranean from Tunis to Alexandria and Antioch have played major roles developing a civilization based on maritime affairs from trade to fishing, from boat building to sail design. On the contrary seas and oceans other than Mediterranean seems to have played the major roles until the Mediterranean and the continents around Mediterranean have defined world history from first settlements in and around Mesopotamia to the invention of Sumerian writing, from the Bronze Age in Asia Minor to Mediterranean empires from Egyptians to Romans, Byzantines and Ottomans.
human kind should have survived through two ice ages and the intervals between them in the last almost three millions of years (Fuller, 1982, p.11). An ice age lowers the ocean level and reveals connections between land masses. These ice ages must have made some migrations of humans and animals possible and easier from one continent to another as in the case of Asia to America through Bering from Siberia to Alaska, or from Southeast Asia to the islands all the way to Australia. First expanding and then melting of ice masses, filling the solid oceans with water and latter developments through millions of years should have separated these people from once they’ve originated from and let them develop their own cultures socially and even biologically independently, forming the ethnical and anthropological origins of today. Through these prehistoric courses of developments people should have developed first boats making transportation possible on fresh waters running from the heights of high Himalayas.

The diversity and population of not only people of Far East and South East Asia but also of cultures, beliefs, religions, languages can overcome every continent even today. More than half of the world population is still living in India, China and Southeast Asia today where a little more than 30% is in Europe and almost 15% is in Americas. The separation of continents and islands by seas could have been the reason two different sets of cultures emerged in latter periods, one settled in big continents of Eurasia, Africa and Americas while the others formed islanded sea people of Southeast Asia Islands, Polynesians, or people of Marshall Islands who developed totally a different design paradigm of Pacific Ocean map from bamboo sticks for example. The melting of the ice from top of the mountains and hills of Southeast Asia and the need for fresh water on islands and sea shore lands of the continents should also have started the design and production of first sea, river and canal transportation boats in the same continent which could have become the riverine trade vessels for thousands of years followed by much capable designs equipped with oars and sails to go further towards west from Philippine Sea to Red Sea and East Africa along the Indian Ocean.

Chang Ziang, Xi Ziang, Mekong, Salween, Irrawaddy, Brahmaputra, Ganges and Indus rivers from East to West form a similar pattern of fresh water ways from Himalaya tops towards different ashore centers thus also forming design cradles for the foundations of maritime design both for fresh water currents, and, wind and sea navigation. And Columbus’ interest to reach India could also be shared by Alexander the Great for the very same reason that “Ex Oriente Lux” not because there were Silk Road and King’s Highway, but also a very well established sea routes running between Mediterranean and Indian Ocean. The wealth running up and down the river Nile was the reason to build the city of Alexandria which then turned out to be one of the boatbuilding and trade centers of the Mediterranean for distribution. The voyages up and down the river Nile, Red Sea and Persian Gulf accompanied with the trade roads along North-South axis could have made a design interaction as well in terms of boat building which
made both ends benefiting from the designs of the other end. This hypothesis require one essential maritime design to be developed, a ship which is capable of going not with but also toward the wind, equipped with a set of strong hull and power to go upwind, which is impossible with oar or rudder like designs being used in rivers.

Dhows and lateen sails

The earliest depiction of square sailed boats can be found on Egyptian pottery going back to 3100 BC (Lavery, 2004, p.21). The Nile with winds blowing from north to south and the currents flowing from south to North have made Egyptian boats sail upstream, hoisting a large rectangular sail, and then are rowed back down the river. The wealth of Egyptians followed by Babylonians, Phoenicians and Nabateans/Arabs depend on their North-South water and land ways from the river Nile towards east including Red Sea, Arabian Peninsula and Persian Sea, not to mention Mediterranean. It is no surprise that the first fictional account of a ship in history, Noah’s Ark, also belongs to the narratives of this region from The Book of Genesis in the Bible to Islamic Quran. The natural and social diversity of the Indian Ocean ecology from the East Coasts of Africa to Southeast Asia has also has also brought diverse cultures and technologies into close contact and interdependence including maritime design as in the case of dhows. Tropical forests in east Africa and India could have provided the raw material of shipbuilding, and shipyards and India’s cotton for sails, iron nails, and coir ropes were essential materials. The Arabian Peninsula and the Gulf, lacking these resources could have supplied men, traders and laborers, who spent much of their time abroad and at sea. Eventually shipbuilding also could have taken off on the African and Arabian coasts.

Seems like while the November-February monsoon winds have made sailing westward possible, the April-September monsoons have made it eastward back and dangerous as well, between India and Egypt until Roman times and latter. The earliest capable designs which were to sail open seas seems to have derived from West Indian Arab accredited dhows combined with lateen sails. James Taylor suspects that the word dhow is of Indian/Portuguese from the times of Portuguese hegemony sounding like another Indian word padao being used for Indian sailing ships (Taylor, 2002). Though no evidence has been left regarding dhow type of sailing boats were inventions of whether Arabic West or Fareast Indian Ocean, they dominated the early sea trade routes between Red Sea and South East Asia from 600 BC onwards and their most distinctive features were their stitched planks and triangular sails. They were mainly trade and fishing vessels of different scale from huge baghlah, ganjah, or sambuk types of big offshore long distance voyagers to small barija and smallest zaruq types used for pearl fishing. Because all these words have either Arabic or Persian origins, these vessels seemed to have designed and developed in the Arabian Sea from Red Sea to Persian Gulf.

If dhows were the first ancestors of long distance voyages in terms of hull type, lateen sail was one of the most significant inventions making the ships sail upwind. Lateen sail is the triangular type of sail which allows boats sail at an angle towards the wind because of the pressure differential between sides offering less drag and versatile maneuverability compared to square type of sails which was the type of sailing downwind with the push of the wind from aft. Another type of a tilted square and upside down type of triangular V-shaped sail has been developed, designed and used by Polynesians in Western Pacific since around 2000 BC. Romans to Vikings all sailor sea civilizations from Mediterranean and Black Sea to West Atlantic and Northern Europe, used square sails if not accompanied with oars. The transition from square sails to lateen or the invention of lateen can well be explained by tilting the square sail until its axis becomes perpendicular to the wind (Campbell, 1995 p.2).

I.C. Campbell (1995), who has published one of the most valuable contributions to the development of lateen sail concludes that lateen sails were not as revolutionary as they were thought, and ii) they were neither Arab, nor Southeast Asian inventions, but were developed in Mediterranean, Southeast Asia, and West Indian Ocean independently well before Arabs and Muslims dominated the region. Accepting both arguments do not diminish i) the value of lateen sail in maritime design history, ii) the inter-trade between Mediterranean and Southeast Asia could have made invention of lateen sail not independently, but through interaction. Contrary to the boats and ships designed and used for fishing, trade, or ceremonial reasons as in the case of Egyptians until Phoenicians, Greeks’ and Romans’ warship designs like galleys and triremes which maybe not put an end to the thousands of years old trading cultures of the region from Mediterranean to Southeast Asia, but definitely transformed the region from a trade based geography into a land based military fight and conquer based one. Warships of the latter periods like galleys and triremes with their variants depend on oarsmen made up of the slaves of military Roman, Byzantine and Ottoman empires.

Narrow, long ships, powered by banks of oarsmen, circling each other attempting to ram the enemy and grapple the ship so that attackers can board have remained as the basic naval warfare tactic until the
Sailing upwind or a fresh and salt battle of Lepanto in 1571. This war between the Ottoman Empire and the coalition of Catholic maritime states has ended the domination of rowing type ships and ships equipped with sail started to gain dominance afterwards. The Europeans’ Exploration Age followed by the establishment of new trade routes and seas of naval warfare between continents not only brought back sailing ships but brought them back with glamourous designs of carracks, galleons, and galleys.

Very much alike in their life on land, humans have designed diverse set of sea and water related forms, yet concepts fixed for particular purposes from better floating hulls to wind operated sails. Over time, these forms should have become refined or been transformed into new possibilities through new technological, social and cultural developments and interactions. Many concepts of sea related designs from the overall shape of boats to the specific elements of rigging probably derived from accumulated experience in practical work, before being codified and, in turn, fed back into other applications. Regarding not only the maritime or design issues, but also other historical issues as well there can be more to be found or more to be investigated regarding the role of Southeast Asia and East African Coast all the way North to Mediterranean either on land or on water remaining not only undercovered but also disappearing because of the contemporary destructive situation in the region.

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Representations of British women at the British Empire Exhibition, 1924–1925

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Abstract
This paper will explore how the representations of British women in the British Empire Exhibition (1924–1925) were used to distinguish Britain as the mother country of the British Empire. In 1921, the territories of the British Empire were at their largest; however, the empire was facing economic decline and fear of disintegration by 1924. The exhibition was organized based on those fears. Dominions and colonies were asked to cooperate to show the “unity” of the empire. Half the people of the British Empire were women. How, then, did the British Empire Exhibition try to incorporate women into the new vision of the British Empire? Looking at the representations of British women in the exhibition, it is possible to understand how Britain tried to propagate the image of British women to show its civilized superiority within the British Empire.

Keywords
British Empire Exhibition, representations, gender, modernity

Introduction
The British Empire Exhibition, which opened in April 1924, attracted almost 27 million visitors. It was a large event in which most of the dominions, colonies, protectorates, and mandated territories were asked to cooperate for the “unity” of the Empire. Within the 216-acre site at Wembley stood the Palace of Engineering, Industry, and Arts, pavilions of dominions and colonies, kiosks, gardens, five restaurants and 28 cafes, small churches and religious meeting houses, and an amusement park. The purpose of the exhibition was to show imperial solidarity and stimulate trade within the British Empire. The Prince of Wales’ message on the opening day was that the exhibition was “presenting this picture of our Commonwealth of Nations” and giving “a living picture of the history of the Empire and of its present structure” (Knight & Sabey, 1984, p. 12). In other words, Britain was trying to forge a new transnational image of the British Empire.

Various recent studies on the British Empire Exhibition have focused on how dominions or colonies were represented in the exhibition and how appropriate a place it was to educate people on imperial propaganda. However, it was also a place where people encountered the notions of class, race, and gender. Gendering the Fair stated that “world’s fairs have tended to annunciate racial, class, and national identity in highly gender-specific ways” (Boisseau & Markwyn, 2010, p. 3).

In Ephemeral Vistas, Greenhalgh addressed the relationship between women and international exhibitions, stating, “International exhibitions were one of the first and most effective cultural arenas in which women expressed their misgivings with established patriarchy” (Greenhalgh, 1988, p. 174). When women were depicted in the exhibition, they were seen as evidence of women’s advancement into society. Clendinning dealt with the involvement of the International Council of Women (ICW) in the British Empire Exhibition. ICW proposed the establishment of the Women’s Section, inspired by the Women’s Board of the Panama-Pacific Exposition in 1915. The Women’s Section also had the task of organizing Women’s Week at the British Empire Exhibition (Clendinning, 2010, p. 116). Clendinning (2010) explained the efforts of ICW at Wembley and praised the fact that the ICW “put women on the map at the 1924 British Empire Exhibition by creating political spaces for women in the physical and the intellectual sense” (p. 126).

When looking at the displays and how women participated in the exhibition, women’s active participation is obvious. Women held conferences during Women’s Week on topics such as women’s health, educa-
tion, and home life. Another important conference was held from May 5 to May 8 by the ICW on the subject of the prevention of causes of war. As Clendinning claimed, at the Empire Exhibition, women were depicted as political citizens. However, at the same time, Englishwomen’s traditional roles were emphasized at the British Empire Exhibition. Therefore, this paper focuses on how women’s gendered role was consolidated and displayed at the British Empire Exhibition and how this gendered role was used to distinguish Britain as the mother country of the Empire. To analyze women’s representations at the Empire Exhibition, this paper will focus mainly on a few particular displays that were noted in journals and newspapers.

**Women’s section and hospitality**

How were women involved in the British Empire Exhibition? The Women’s Section was established through the efforts of Lady Aberdeen, the first president of the ICW. It was given the task of offering hospitality to foreign visitors of the exhibitions and organizing Women’s Week from July 21 to 26.

The Women’s Section was established with Queen Mary as the patron and the Duchess of York as the president. At the second meeting of the general committee of the Women’s Section, the content of their hospitality was discussed. Aristocratic ladies, such as the Duchesses of Devonshire, Atholl, Wellington, and Norfolk, offered to entertain foreign visitors with parties, and various organizations were asked to arrange sightseeing facilities and weekly expeditions. In June 1924, parties were held throughout London every week. Queen Mary held a Royal Garden Party, inviting 5,000 guests, and the government gave a garden party at Hampton Court with 2,000 guests.

These hospitalities were not planned solely for the distinguished guests. Hospitality for common visitors was also arranged. Lady Galway suggested the Empire Fellowship scheme so that British citizens could offer their houses or tours to visitors from overseas. The Manchester Guardian stated that foreign visitors were expected to go home with “pleasanthest memories of England” (“England ‘At Home,’” 1924), and “a little insight into the significance of England (“Women’s Week at Wembley,” 1924a). British women were allotted the role of hostess to entertain guests visiting the country.

**Women as housewives and objects of display**

Another role that women were allotted was that of housewife. It has often been claimed that goods and products displayed at the international exhibitions labeled women as consumers (Clendinning, 2010, p. 117). Indeed, various newspapers printed articles for women readers suggesting the exhibits they should visit. The Daily Mail advertised that “a housewife who spends a day or days at the British Empire Exhibition may come away with a hundred inspirations for her home (“The Housewife at Wembley,” 1924).

Even the colonial exhibits were suggested as places where English housewives could get hints for maintaining their homes. Native arts and crafts would decorate their homes, and the food produced there would enrich their menus. At the Palace of Industry, there were demonstrations on “how to cook Empire foods.” Mrs. C. S. Peel (1925), a journalist, wrote that, by cooking Empire food, women were “keeping the money in the family,” and women could do the great work of securing “the Imperial Economic Independence of the nation.”

Using the products of the Empire meant being patriotic. The Times introduced the Empire Shopping Week, held from May 19 to 24, and explained that women were considered “principal shoppers and they could create a demand for Empire goods” (“Empire shopping week,” 1924). Queen Mary even stated, “It is the home which makes the nation and which builds the Empire” (“Queen & Importance of the Home,” 1924). Women’s roles as housewives and consumers were considered vital in maintaining the Empire. Therefore, for British women, being a housewife was a credential for being a citizen at that time.

Various exhibits in the exhibition especially appealed to housewives. However, at some exhibits mentioned in newspaper articles as exhibits for women, women’s bodies were used for display. One popular exhibit was the gas exhibition in the Palace of Industry. A tableau of the Seven Ages of Women was shown. It revealed how gas was used in the infancy, childhood, school days, business life, middle age, and old age of women’s lives, displaying “hitherto unknown methods of heating and illuminating the home” (“Women at Wembley,” 1924).

Another exhibit that was frequently recommended for women was that of the Nottingham lace displayed at the Place of Industry. According to a woman correspondent from The Times, visitors from the dominions seemed to seek this exhibition as their first place to visit (“Through a Woman’s Eyes,” 1924).

The Nottingham lace industry was competing against European industry at that time. The Queen, a women’s magazine, advertised, “Here were to be seen specimens of the immensely improved products of
the characteristic English manufactory” (“Dress at Wembley,” 1924). According to a guidebook, “Many feminine visitors, indeed, will probably vote this corner the most interesting part of the Exhibition” (A Pictorial and Descriptive Guide to London and the British Empire Exhibition, 1924, 1924). The reason that women found this part of the exhibition interesting was the use of live mannequins. When the mannequins and dresses were displayed at a ball before the Duchess of Portland, the Duchess of Newcastle, and other ladies the previous year, it “evoked much praise” (“Beautiful Lace Dresses,” 1923). “[B]eautiful (British) mannequins” displayed the gowns designed by M. Reville of Hanover Square (“Dress at Wembley,” 1924). Similarly, the Bradford Chamber of Commerce displayed their wools with a parade of “pretty English mannequins.” It was planned to show “what English makers can do, helped by English dress designers showing their work on English mannequins” (“English Textiles and Laces,” 1924). Each of them was “a type of English beauty” (“English Fashions at the Exhibition,” 1924) (see Figure 1).

English beauties were also displayed inside a glass case at Pear’s Palace of Beauty, which was located inside the amusement park. Beauties were chosen from among famous women in history or literature such as Helen of Troy, Cleopatra, Dante’s Beatrice, Mary Queen of Scots, Nell Gwynne, Scheherazade, Madame de Pompadour, Mrs. Siddons, and Miss 1924. These characters were not just beautiful but also clever women who achieved something in their lives. They were not all Englishwomen, but the women playing the roles were English or British. A picture of these women costumed as the characters appeared on the front page of The Queen (Figure 2). More than 750,000 people visited the venue (Knight, 1984, p. 74). Pear’s was a soap manufacturer, so the message from the Palace of Beauty was straightforward: by using Pear’s soap, women would be beautiful.

Exhibiting colonial people had been the tradition of the international exhibitions since the 19th century, but at Wembley, English or British women also became part of the “human exhibition.” In addition, British people were used to looking at women on display, as there were entertainments such as tableaux vivant in the 19th century. At the Empire Exhibition, their physical beauty was linked to the good quality of British products.

One article in the Daily Mail concerned “England’s pretty girls” who flocked to London because of the exhibition. The article tried to determine which town or village produced the prettiest girl in England, and in the end, it concluded, “in no country of the world is the standard of looks higher than it is in Great Britain” (“England’s Pretty Girls,” 1924). Even the English visitors were objects of display.

**Modernity and British women**

As we have seen, British women’s beauty was displayed in connection to the good quality of British products. It also meant that women were viewed as the receivers of the fruit of progress in British industry. Labor-saving devices for the home, such as a new type of steamer that claimed to save fuel, time, and cooking space, sewing machines, and stoves, stimulated women’s desire to buy. While native West African housewives were shown using primitive kitchen tools (“West African Housewifery,” 1924), British woman used the latest kitchen tools at the gas exhibit.

Civilization and primitiveness were in contrast at the exhibition. While the British represented modernity, progress, or civilization, the non-British represented tradition, wildness, or primitiveness. Likewise, the Palace of Industry, Engineering, and Government pavilions were constructed in concrete, the newest building material, while the pavilions of colonies such as Bermuda, Burma, and Ceylon were made of wood. Even though the purpose of the exhibition was to consolidate imperial unity, Britain tried to differentiate itself from the others by presenting itself as the industrial country, while other parts of the Empire provided abundant raw materials.
One way of differentiating Britain from the colonial parts of the Empire was to show women’s participation and women’s progress in society. During Women’s Week, various conferences were held, and the National Council of Women established a two-room pavilion near the Government Pavilion to allow various women’s organizations to hold conferences. The conferences were opportunities to learn about the other parts of the Empire, but they were also opportunities to show the visitors all aspects of women’s progress after the Great War. Women’s active participation in the exhibition and their social and political progress were “visible signs of modernity” (Clendinning, 2010, p. 114).

Conclusion
Wembley was a place where people could get an overview of the Empire. Even the people who had not visited dominions or colonies were able to gain firsthand knowledge of the Empire just by visiting the exhibition. However, it was also a place where British learned about their own country (“Belated Reflections on Wembley,” 1924), and it was a place for foreign visitors from the Empire to learn about their mother country.

What permeated the exhibition was the intention to educate people about the history of the Empire and Britain’s position as the mother country of the Empire. In the Weekly Bulletin of Empire Study, a pamphlet containing educational material, William Wordsworth’s poem “The Motherland” was posted along with information about the Empire’s climate, trade, history, and other educational texts (Weekly Bulletin of Empire Study, 1924, p. 5). It was stated that “[t]he links of sentiment and affection are stronger than laws and constitution” and that “a common loyalty unites” the Empire (Weekly Bulletin of Empire Study, 1924, p. 124).

During the Great War, dominions and colonies aided Britain in fighting the war. Their contribution could not be ignored. Meanwhile, the British Empire was in danger of disintegration. Dominions were becoming independent, and nationalism was stirring in Ireland, India, and Egypt. Britain was no longer able to hold the Empire by its economic power or by its army and navy. Therefore, other means to hold the British Empire were sought, sparking the idea of the British Empire Exhibition.

As we have seen, representations of British women at the exhibition aimed to differentiate Britain from other parts of the Empire. The women’s civilized hospitality, physical beauty, and visible participation in society were signs of civilization and modernity that distinguished Britain as the mother country. At the same time, women’s roles as housewives were emphasized in the context of civilization and modernity. The British Empire Exhibition incorporated British women as citizens who upheld the British Empire along with men, as Queen Mary stated: “[T]hough women’s first responsibilities centre in the house, in these days of enlarged opportunity they do not end here” (“Women’s Week at Wembley,” 1924b).

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**Biographical note**

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The difficulty of bridging between art education and design education for children: A reception of Marion Richardson in Japan after WW2

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Abstract
Since the defeat in WW2, the Japanese education system has undergone significant reform under the influence of the American army of occupation GHQ. Particularly, the new education philosophy derived from John Dewey's theory initiated this reform. The provisional plan for curriculum guidelines established in 1947 according to this trend has set a new subject of arts and handicrafts, which focused a practical design education, rather than a creative art expression. Meanwhile, Japanese educators introduced western drawing education, conducted by educators including Marion Richardson in the early 20th century. As an example of the reaction to this, Japanese design educator Haru Madokoro recognized that Richardson's methodology showed what was considered as lack of arts and handicrafts in Japanese education from her perspective. This paper will clarify some issues of Japanese art/design education for children, investigating the introduction of English drawing education into Japan and its response after WW2.

Keywords
Pattern, form, drawing, art/design education for children, Japan, England

Introduction
Since the mid 18c, children have been considered inherently creative, so that arts and crafts classes in Japanese primary schools are also based on this notion. Actually, children are less creative than we think. Looking at the works of children in lower grades of primary school, it can be seen that children are easily able to reproduce stereotypical drawings from manga or TV anime, rather than to patiently seek their own expressions of their experiences. Art teachers often spent their time trying to dispel the influence of adults from infants in accordance with an opening remark of Jean-Jacques Rousseau's Emile (Rousseau, 1957, p.5). They manage to prevent their students from copying existing stereotypes, by giving hard-to-use materials such as torn colour paper or self-made pens instead of store-brought colour pencils. Childlike scribbles are often idealized in early primary school art classes.

When students go to the upper grades or junior high schools, teachers discouraged them from making such scribbles as though their time for development was over, and required them to make a poster on traffic safety or drawing letters with a serif typeface on section papers, introducing elements of design education. However, if it is accepted that a child is essentially creative, it must wondered as to why are they not left just as they are. Design education connects with some issues of occupational training for children, teaching them how to make a livelihood, for example. Without the element of occupational training, art class must be disregarded by both teachers and students because it is not required as examination subjects for university. In 1951, Taizo Inamura, a painter as well as a professor of art education in Ibaraki University, remarked that child art education in Japan was freed from "German romantic and unpractical idea", and went toward “American practical science” (Inamura, 1951, p.137). He also predicted art education would be increasingly disregarded in this tendency. Thus, there is less continuity in art education than our expectation between an art class for lower grades and that for upper grades in primary school, because these are based on different causes: how to develop a child's creativity or their imagination and how to make a livelihood. There is no coherent methodology that bridges the gap between child’s scribbles and design. In 1958, Japanese design educator Haru Madokoro pointed that the Japanese education of arts and handicrafts lacked “the mind and methodology of composing and designing” (Madokoro, 1958, p.64). As an important clue to cover this failure, she introduced activities by English art educator Marion Richardson in Japan after WW2.
Marion Richardson. However, her concern shifted from Richardson a few years later. In this paper, we will firstly highlight an advantage of Richardson’s methodology of education in the above noted perspective. Secondly, we will examine why it did not enter the mainstream in Japan, considering the trend of art education in the country.

Richardson’s drawing education for children

Roger Fry and Herbert Read, who had an enormous influence on art/design in the English-speaking world, both looked at Richardson’s education. Fry is well-known as an art critic who introduced French post-impressionists in London in 1910. In 1910s, he managed the design workshop “Omega Workshops” and became a member of the Board of Trade and appointed a Committee on Art and Industry in 1931. Read had worked in the ceramics department at the Victoria and Albert Museum (1922-31), published his book Art and Industry in 1934, shortly after “Gorell Report (1932)” issued in the 1931 committee as mentioned above.

When Fry organized the exhibition of children’s drawings at Omega Workshops, Richardson searched for a new post in London. After unsuccessful interviews, she visited him through his sister Margery’s introduction at an exhibition venue in 1917 (Richardson, 1954, p.30-1). He had discovered the “primitive” as a common trait among Modern art and children’s drawings (Fry, 1917, p.226). Richardson felt sympathy with his idea and showed her students’ drawing to him. Fry added these drawings to the exhibition.

Read referred to Richardson’s education in the above-mentioned book and maintained correspondence with her. There is, however, a difference between Read and Richardson according to their attitudes toward “pattern”, which she emphasized in art education for children. Read had served as the president of the Society for Education in Art (SEA) for over 20 years (1946-1968), and on her death in 1948 he edited her memorial issue of Athene. Nonetheless, Read had misjudged that Richardson’s methodology could be adapted for exclusively art education for younger children. Richardson disapproved of his comment and wrote to him on June 13th, 1935: “The babies of four make pictures as well as pattern, and even the most intelligent of the seniors continue to make patterns up to the school leaving age of seventeen or so” (Richardson, 1935).

When Richardson showed Fry her students’ drawings, he understood her innovative methodology. Breaking with mainstream methodology of observation-based drawing of that time, she focused on children’s own expression of their mental images. One reason for this emphasis was the influence of Shut-Eye Drawing and Visualisation classes given by Robert Catterson-Smith, a lecturer and designer associated with the Arts and Crafts Movement at the Birmingham College of Art and Design (MacDonald, 1970, p.327). Prior to this, as an example of an alternative to the South Kensington Approach, Thomas Ablett developed a drawing education and systematized its method at the Royal Drawing Society. Even though Ablett encouraged free drawings inspired by children’s memories or imagination, his approach was inclined to moral conditioning and shifted towards the imitation of nature through observation-centered training in art (Richardson, 1925, pp.9-11). Eventually, Richardson did not adopt his method for her practices. She even raised doubts over John Ruskin’s doctrine ‘go to nature,’ to which Ablett responded, “Are we, therefore, to conclude that art is natural?” (Richardson, 1947, p.3). In view of Drawing Syllabus of Dudley Girls’ High School 1915 to 1916, it includes pattern making as the sixth of seven items. Here she warns children not to depend on outside images. In the process of making patterns, “the girls are urged to wait until their mental picture is vivid before attempting to draw. They must in every case make a drawing with their eyes shut, before the ordinary work is begun” (Richardson, 1917-18). She also states that “we must be careful that in the name of visualising and free
expression our teaching does not become rigid and uncreative again” (Richardson, 1919, p.2). The drawing education that Richardson aimed for did not leave children to scribble in the name of “free expression” and was different from the vocational training and academic art education. Richardson argued that the appropriate help of the teacher was necessary for students, as distinct from repressive instruction or sheer abandonment of instructors. The teacher should train the child to be faithful when recording the child’s mental imagery (Richardson, 1947, p.4).

The idea of “pattern” is characteristic of Richardson’s educational methodology in rejecting both the imitation of outside nature and letting inner nature of children free. As indicated earlier, for her “pattern” is inseparable from “picture” and children could make both patterns and pictures in parallel independently from their growing stage. Because pattern is a basic element for both art and design in her view (Richardson, 1934, p.1), there was no reason to distinguish between education for the lower grades and for the upper grades of primary school. Pattern is the center of her education for children. It can develop children’s spontaneous “scribbles” into both “picture” and “design”. In 1935 she published Writing and Writing Patterns as a guidebook for transforming scribbles into unified works. It aimed at not only being a drill for handwriting, but also of developing the child’s sense of form [figs. 1, 2, 3]. She claimed that “by scribbling, they were teaching themselves both to write and to draw,” and “in scribble the same patterns occurred over and over again,” (Richardson, 1954, p.55). Thus the “pattern” has a formal coherence or unity beyond the categories of mere decorative elements.

**Fry’s “concept-symbol” and Richardson’s “pattern”**

Richardson’s educational methodology seems to be very similar to Roger Fry’s theory of modern art, which refused the imitation of nature as well as absolute abstraction. Both theories laid stress on grasping forms based on individual experiences and its process of patternization. Fry’s idea that we should not see subject or motifs, but look at the composition of formal elements such as colours and lines in a picture coincides with Richardson’s “pattern”. The pattern can be drawn even with one’s eyes shut and even adapted to commercial design. This supports Madokoro’s view that finding a clue to cover the lack of Japanese design education in Richardson’s methodology emphasizing “pattern”.

As we mentioned earlier, children tend to repeat existing stereotypes as an end goal. Japanese art educator Mitsuru Fujie calls this stereotype gainen-ga (concept picture) [fig. 4]. It is often just a copy of popular anime characters, so that children draw human figures with almost the same shape and expression. Meanwhile, Fujie distinguish a relation between forms transforming and being improved according to experience as zu-shiki (scheme) [fig. 5]. This idea reminds us of concept-symbol proposed by Roger Fry. He dismissed classical imitations of nature and modern impressionist realism as just a copy. He advocated post-impressionists finding the same attitude as some artists in early renaissance. They are equally “primitive” and their attitude is to be “intensely moved by events and objects, and primitive art is the direct expression of his [artist’s] wonder and delight” (Fry, 1917, p. 267).

Not only are outside motifs or inner emotions important, but also the relationship between both, which makes empirical components. Fry called this attitude of trying to visualize their experience immediately as “primitive” and the process of this visualisation as “concept-symbol” (Fry, 1910, p.334). If we can identify this Fry’s concept-symbol with Fujie’s “scheme”, we may also consider it as an equivalent to Richardson’s “pattern”. In making pattern, children have to stop renewing their experience through looking at outside objects in order just to refine their copy and have to focus only on visualizing their experience with their eyes shut. For Fry and Richardson, a starting point of design was not abstract but based on individual experience which was an interaction between outside object and inner emotion.

While Fry thought that the “patterns” made by the child were not art, he believed they had the potential to be translated into beautiful textiles with minor modifications (Fry, 1996, p.409). This reminds us of his experiments with the Omega Workshops in the 1910s, where young artists adapted the formal patterns in their artworks into the design of everyday goods such as furniture and furnishing [figs. 6, 7]. Richardson also taught her students to translate some of their “patterns” into household materials; potatoes, carrots and rubber erasers, which were found in children’s everyday life, were used to make prints. For example, linen curtains were printed by hand from lino cuts and hung in the staff room (Richardson, 1946, p.55) [fig. 8]. At a children’s art and design exhibition in the Whitworth Gallery in Manchester in 1928, many people from the textile industry had an interest in some of her students’ potato block-printed patterns (Richardson, 1946, p.55).
How and why did Richardson’s educational methodology of design not go mainstream in Japan?

As we have seen, Richardson and Fry did not think that “pattern” was limited to child design education. However, even in Education through Art published in 1943, Read misunderstood her methodology as limited to basic design education for younger children. In his book, he put art education in center of general education in the manner of Friedrich Schiller and proposed stages of several art education according to types and development of children using personality psychology and style theory which was popular at that time. He shared the underlying view of identifying a mental development of children to the history of human race. A pioneer in the study of child art, English psychologist James Sully had already analysed children’s drawings, comparing the drawings of “savages” or prehistoric men in his Study of Childhood (1895).

There is the same view among those who introduced Richardson’s practices in Japan. Japanese design critic Shinji Koike, who introduced her memorial issue of Athene in a Japanese journal on art education, also understood a development of child’s creativity by comparing it to the history of expressions of the primitive race (Koike, 1949, p.10-2). Both Koike and Read coincidentally cited Richardson’s words: “Art is not an effort of will but a gift of grace — to the child at least, the simplest and most natural thing in the world” (Richardson, 1938). However, they neglected a question from Richardson, “Are we, therefore, to conclude that… man is born with the innate power to produce and to understand art, and that he loses it by living in a world where values are false and materialistic?” (Richardson, 1947, pp.3-4)

The first book-length translation of Richardson in Japanese was of her Art and the Child (1946) and published in 1958 by Inamura. He was not only involved in art education, but also editing the textbook titled Arts and Crafts of Children [Jidō no Zuga-Kōsaku] in 1952. In the mid 1950s, Inamura went to participate in the 9th International Congress of Art Education in London and witnessed pattern-focused art education proposed by Richardson. On this particular year, Madokoro reviewed this translation and found in it “the mind and methodology of composing and designing” as above-mentioned. However, in 1958, school education system faced a great turning point in Japan. In this year, the Teaching Guide for the Japanese Course of Study (draft proposal) of 1947 was revised without the letters “draft proposal” in its title and turned into more strong supervision. In new guideline, educational goals were set in every 2 grades of primary school according to the growing stages of children. Comparing 1947 version to that of 1951, the former had been regardful of the variety of child’s development, the latter ordered to execute the school education absolutizing growth stages. This order is obviously incompatible with Richardson’s view. In just a few short years, Inamura’s focus moved from Richardson to Austrian art educator Viktor Lowenfeld who put emphasis on expressing child’s inner experience freely, illustrating some traits of children’s expression in each stage of growth.

In 1980, the second version of the translation of Art and the Child was published after being out of print for long time. The translator’s preface shows that the book, originally published as Richardson’s autobiography and without any detailed presentation of her practice, is recognized as an opponent of utilitarian design education that GHQ pushed ahead in Japan, or as one of traditional romantic and expressionistic propositions of art education. It is probable that the second translation was accepted along with a similar reaction to the first version. For example, Japanese schoolteachers have commented about her practices as “sweet romanticism” or “feminine and over-sweetness”. Until the end of the 20th
century, we failed to find articles or books about Richardson in Japan. Japanese scholars seem unaware of her educational methodology, or her words: “The new ways sometimes only pretend to be free, pretend to encourage the child’s own expression of his own vision” (Richardson, MR3049, p.2).

Conclusion

Today in Japan, theory of design education for children often adopts a basic part of Bauhaus method such as Johaness Itten’s colour theory, though it is not for children in itself. Several activities in Art Education Centre founded by Japanese art critic Masaru Katsumi in 1955 had a great impact on these tendencies. A similar movement appeared as Basic Design through the 1960s in England, but they still overlook the gap between primary art education and senior design education, as mentioned earlier. However basic it may seem, the Bauhaus method does not attract younger children, because it does not always stress children’s own expression. Although several movements for children’s art education emerged at a private level in 1950s Japan against a policy of government, Marion Richardson had been left out of the mainstream. But using her method, we could have bridged the gap between education for children and for adolescent. Even when they grow up, we can keep their interest in drawings or paintings, as far as they are encouraged to keep renewing their own “pattern” not to keep reproducing the “stereotypes” of childhood.

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Zentner house in Zurich: A villa by Carlo Scarpa abroad and its furniture

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Abstract
Zentner house (1964–1968) is the only work ever built abroad by Italian architect and designer Carlo Scarpa. For nearly 50 years the house was neither accessible nor publicly documented. The house is currently being studied by a group of Swiss researchers as an example of “trans-national” design, with the complete documentation (photography, drawing, three-dimensional models) of a surprisingly high number of details, materials, and designs for a building in Switzerland, also influenced by the style of Frank Lloyd Wright, who had a close relationship with the clients. The furniture of the house has a pivotal role in the further development of the work of Scarpa as a product designer. The whole house hosts a profusion of made-to-measure furniture and fixture designed by Scarpa. As well as the undocumented designs the current study highlights the impact of an Italian project on Swiss and international scenes.

Keywords
Made in Italy, Swiss design, Carlo Scarpa, Dino Gavina, Zentner house

Introduction and methodology
This paper reports on the research project “Casa Zentner in Zurich: an Italian Villa in Switzerland”, financed by the Swiss National Science Foundation, and developed by an interdisciplinary team, integrating the methods and views of the architectural historian, the conservation architect and the industrial design scholar. The team is composed of prof. Giacinta Jean, dr. Roberta Martinis and dr. Davide Fornari.

The project considers the architectural design history of the house with a holistic approach encompassing the transformation of the pre-existing house, the design of outer and inner space including the furniture and fixtures production (Jean, Martinis, Fornari 2014). The methodology includes retrieval and analysis of all the documentation of the building: drawings, bills, letters, prototypes, photographs are currently scattered among private and public archives in Italy, Switzerland, Austria, and the United States.

Oral history is a main concern as most of the people involved with the building have passed away, such as the main architect Carlo Scarpa, the commission givers, and some of the professionals involved. Theo Senn, the local architect in Zurich, is still alive and a source of fundamental insights. On the Italian side, Dino Gavina – who produced some of the furniture of Zentner house in his catalogue – died in 2007, while Sandro Bagnoli and Raffaello Repossi, who worked for Gavina, offered many details about the transformation of a unique piece into a successful serial product. Many of the scheduled interviews remain to be conducted, especially with the assistants of Carlo Scarpa.

Finally, the analysis of the house and of everything it contains is a main source of understanding of its value to architecture and design history.

Research framework and history of the house
Zentner house by Carlo Scarpa was built in Zurich between 1964 and 1968. It is the only work built abroad by the Venetian architect. The house was designed to the very last detail, including furniture, and it has always been inhabited by the original clients, who have never made any significant changes.

Set on the Doldertal’s slope, in a panoramic position, Zentner house is characterized by monumental and shifting spaces: large interconnected rooms, with double height or very long perspectives, where the
views continuously change. The precious materials and their design contribute to this “domestic” monumentality, and so do the translucent marmorino plasters and the floors of different-colored wood. All is purpose-made for special clients, who lived in it with their art collection.

The house represents a cultural and material testimony of the highest value. Due to its location in Switzerland, the privacy of the owners and the inaccessibility of the Scarpas archives until few years ago, the house has never been the subject of a monographic study.

The state of research concerning Zentner house is minimal: the house is depicted in a number of magazines with the same few drawings and photographs, along with short texts with basic information (Vercelloni 1973; Joly 1974; Yokoyama 1976; Scarpas 1977; Scarpas 1985; Scarpas 1988). The same happens when the house is included in general publications on Carlo Scarpas, such as monographs or exhibition catalogues (Fenaroli 1984; Marcianò 1984; Fonatti 1984; Guller 1986; Albertini-Bagnoli 1988; Los 1995; Furuya 1997; Noever 2003; Beltramini-Zannier 2004 and 2006; Bruschi-Scaramuzza 2005). In both cases, magazines or monographs on Scarpas, the presentation of the work exploits only a minimal percentage of the existing graphic documentation. Due to the inaccessibility of the documentation, Italian researchers have partially avoided this subject: Zentner house is nearly absent from the endless bibliography produced in Italy on Scarpas, although foreign publications have featured it, especially within international reviews on the issue of villas devoted to masterpieces of the 20th century, such as GA Houses (Yokoyama 1976).

In 1964 Savina Masieri Zentner commissioned Carlo Scarpas to restore a villa built in 1914 on Aurorastrasse in Zurich. The result of the design process, whose main feature is the incorporation of the existing building (to the point that it completely disappeared) in a brand new volume, is a suburban, magnificent, refined house. In the words of Savina’s son: a “villa […] gorgeous yet anachronistic for its time and place” (Edoardo Zentner, in discussion with Roberta Martinis). Savina Masieri was the widow of the architect Angelo Masieri, a disciple, then assistant of Scarpas, who in 1951 commissioned Frank Lloyd Wright to renovate his palazzo on the Grand Canal in Venice (Moneo 2004), which encountered a series of obstacles and changes that led to the establishment of the Masieri Foundation in the same building, refurbished by Carlo Scarpas and entrusted to University Iuav of Venice (Martinis 2008).

In Zentner house, Scarpas’s intellectual wanderings seem to happily collide: Viennese architecture, as seen by Hoffmann, Otto Wagner and Loos (in the façade on the street), Wright (in the façade on the garden) (fig. 1); remembrances of Klee (e.g. in the motif of the wooden floor), as well as his then recent interest in Mark Rothko (Tafuri 1984, pp. 86-89). Once mounted together, autobiographical and architectural elements, as well as suggestions, build a sort of gigantic fragment, which, as Tafuri noted “if taken on its own, tells about an irreparably lost whole” (Tafuri 1984, p. 77). Furthermore, Kurt Forster suggested that the city of Zurich in the 1960s was for Scarpas a “real cultural vent”: through Savina Zentner he got to meet a variety of personalities from the Zurich cultural scene, and in particular Max Bill, a member of the Zürcher Konkrete Kunst group (Forster 2004, pp. 15-16), previously involved in the experience of De Stijl. An evidence of such an encounter of similar personalities despite their different cultural remits is the large sculpture by Max Bill in the garden of Zentner house, entitled Homage to Carlo Scarpas (Edoardo Zentner, in discussion with Roberta Martinis, Zurich, March 12, 2014). At Zentner house Scarpas met other artists whose works were collected by the Zentner couple: Hans Arp and especially Gottfried Honegger, author of tableaux relief with geometric shapes set according to stochastic sequences (Forster 1972; Forster 2004a, pp. 21-22). Scarpas was constantly reasoning on such topics.

The project for Zentner house included also most of the furniture. It was here that Scarpas started his experience in the field of industrial design: the table “Doge”, produced in 1968 by Dino Gavina, is the first of a series of further variations (tables “Sarpi” and “Florian”, produced by Simon in 1975).

The same lack of in-depth historical and critical literature concerns the furniture of the house. Authors have highlighted the exceptional genesis of the table “Doge” (Pollifrone 1984, p. 186; Bagnoli 2000; Sonega 2009, p. 8; Bagnoli, Di Lieto 2014), yet they have not thoroughly investigated the ensemble of furniture designed for these clients in the framework of a general project of living.

The artist Lucio Fontana introduced Dino Gavina (1922–2007) to industrial design. In 1953 Gavina opened a shop in Bologna selling furniture and fittings, then in 1960 he founded the company Gavina SpA. He was the chief executive officer, while Carlo Scarpas, whom Lucio Fontana introduced to Gavina at the Milan Triennale in 1953, was appointed president. The first designers working with the company were Pier Giacomo Castiglioni, Vico Magistretti, Kazuhide Takahama and Tobia Scarpas, Carlo’s son. Gavina was the first company to produce reissues of historical pieces of design, such as the tubular steel furniture designed by Marcel Breuer in the
1920s, including several tables. Breuer gave Gavina as a present a table with two plinths for his house in Bologna: after observing its structure, Carlo Scarpa proposed a new modified version, which was marketed as the “Delfi” table.

Following this reissue, Carlo Scarpa became more interested and actively involved in the production of industrial design projects (Sonego 2009). The first piece produced by Simon – the new company founded by Dino Gavina and Maria Simoncini – was made in 1968: a new version of the table designed by Carlo Scarpa for Zentner house, marketed as “Doge”, with some significant variations. The original top was in wood (ebony) with a marquetry of marbles, while the “Doge” table has a transparent crystal top, in order to reveal the supporting structure, as Gavina suggested.

This table is not only the first piece of furniture produced serially following a design by Carlo Scarpa, but also the first in a series entitled “Ultrarazionale”, a project which aimed to overcome the issues of Modern architecture, in search of a “poetical richness”, that Carlo Scarpa perfectly represented in Italy. The whole series, including tables, sofas and containers by Carlo Scarpa and Hirozi Fukuoh, was developed between 1968 and 1983, but only partially reissued by the company Estel who acquired the rights of Simon-Gavina.

The “Doge” table represents the first experience of Carlo Scarpa in the production of serial furniture – a field in which his son Tobia was already successful, designing furniture for Gavina SpA and lamps for Flos, another company founded by Gavina. The comparison with the original table designed for Zentner house is important, both for evaluating the criteria for the translation from “unique piece” to serial production, and for documenting its real manufacturing and the relationships with other authors, as well as for assessing its state of conservation.

Intermediate results and conclusions

The research project is in its second year of three. The analysis of documentation is completed and the on site survey for a complete two- and three-dimensional analysis of furniture and fixture is scheduled. A comparative analysis of furniture and architectural details is to be completed, yet it has already highlighted a strong connection between Venice and Zurich: most if not all the raw materials, elements, details, fixtures and furniture were imported from the Veneto region.

A morphological genealogy of details can be established between Zentner house and other Scarpa projects in Italy. As an example, the Olivetti showroom (Venice, 1956–1957) and Zentner house show unexpected connections, such as the same corner treatment cut at 45 degrees employed for the window frames. The dining table designed for the house features a steel base and a top made of ebony with marble inlay (fig. 2). Through archival research, a prototype of the top was tracked down in the collection of the Vienna MAK Museum, who acquired it from the Anfodillo family, Scarpa’s carpenters, together with several drawings and sketches.

While the Italian design entrepreneur Dino Gavina had the chance to admire it and decided to produce it as part of the catalogue of Simon Gavina, under the name of “Doge”, significative modifications in size and materials were made. Through an interview with the designer Raffaello Repossi (in discussion with Davide Fornari, Mantua, January 10, 2016) who was working with Dino Gavina in the late 1960s, it was finally possible to define the story of the table’s production. Scarpa provided Gavina with a technical drawing with measurements on a paper napkin. Repossi and other Gavina assistants produced a first prototype in the wood and metal workshop in San Lazzaro di Savena, near Bologna, under the supervision of Japanese designer Kazuhide Takahama. The finished
prototype astonished the staff at Gavina for it did not require many adjustments in terms of size. Gavina decided to complete it with a crystal top in order to let the metal structure show. Few modifications were requested by Scarpa, such as a joint in form of an intersection of gilded cylinders (Scarpa’s signature shape in many projects) between structure and top, were agreed in words and partially rejected in production. Since 2013, the table is in the catalogue of the Italian company Cassina, specialized in authorized re-editions by masters of design.

The analysis of the architectural object led to the definition of a catalogue of a number of unpublished fixtures, mainly lamps integrated into the architectural elements (ceiling lamps, wall lamps). A three-dimensional description of all these discoveries will form part of the final results of this research project, as they will neither be available for direct view nor be shown in museums or produced for mass market in the future.

A direct visual survey of the house in its complexity led to the discovery of an unpublished archigraphy by Carlo Scarpa, who often embedded typography into architecture (“archigrafia” is the Italian word for describing such practice), generating a series of typefaces specific to co-crete façades, ivory tiles and the likes. The typefaces designed by Carlo Scarpa have been the subject of two different surveys, one by a then graphic design MA student (Palladini 2007) and one by an architecture historian (Abbondandolo 2011). Neither had access to Zentner house, yet even scholars of Carlo Scarpa found unlikely the idea of an archigraphy by Scarpa at Zentner house. Surprisingly enough, hidden by plants in the garden next to the access to the living room, a low relief acronym set in concrete was found. According to Edoardo Zentner, Carlo Scarpa designed it in order to brand the prefabricated concrete tiles that covered the terraces and external floors of the house, which were also produced in Italy and imported to Zurich by a company belonging to the extended family of Savina Zentner. Archigraphies are perhaps the missing link between the work of Carlo Scarpa and Max Bill: if we compare Scarpa’s recurrent figure of the intersecting circles to the typeface designed by Max Bill for the furniture shop Wohnbedarf in 1930s (redesigned by Cornel Windlin and Gilles Gavillet as Supermax typeface for Lineto foundry in 1999) we notice unexpected similarities between such different personalities and scenes as Scarpa and Bill, Venice and Zurich.

References

Carlo Scarpa (1985), A+U, no. 10.

Biographical note
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Swiss Style beyond the border: 
Swiss graphic designers in Italy

Davide Fornari / Giovanni Profeta / SUPSI University of Applied Sciences and Arts of Southern Switzerland / Lugano / Switzerland

Abstract
This poster reports on the relationship between Swiss and Italian graphic design during the 20th century, by visualizing and analyzing the community of Swiss graphic designers active in Italy. Two exhibitions held in 2012 at Museum für Gestaltung Zürich and Triennale di Milano focused on the two national scenes, with meaningful overlapping in terms of authors and artifacts. Many Swiss graphic designers are and have been active in Italy, and they represent the most influential community of foreign designers in Italy. This poster visually presents the results of a research project conducted through literature review, archival research, and oral interviews.

Keywords
Graphic design history, visual communication, Swiss Style, Italian design, information design

Introduction and framework
The relationships between Swiss and Italian graphic design have already been explored (Richter 2007; 2014), even though a number of figures and archives have only been partially investigated. The exhibitions held in 2012 at Triennale di Milano (TDM: grafica italiana) and at Museum für Gestaltung in Zurich (100 Jahre Schweizer Grafik) represent two milestones in the history of 20th-century Italian and Swiss graphic design. In some cases the exhibitions echoed each other: same designers and, in several cases, identical projects. The Milan exhibition welcomed visitors with citations from two Swiss designers: Jan Tschichold and Lora Lamm. The Zurich exhibition featured some iconic works made for Italian brands but considered as Swiss graphic design, such as the illustrations by Lora Lamm for Pirelli.

Since the 1930s Italian and Swiss graphic design have established intense relationships, hand in hand with the cultural relations between the two countries. But while historical and critical attention for Swiss graphic design has grown over time, partly due to the very high level of quality achieved by the Swiss Style or ‘International Typographic Style’, “an in-depth history of [Italian] graphic design has yet to be written” (Anceschi 1981, p. 6). We can also ascribe Swiss designers active in Italy to this unbalanced historiographical landscape. While they have gained increasing critical and institutional attention through time, there are a large number of designers active in Italy who deserve further study.

Concerning the relationship between Italy and the international context, the most common critical opinion is that the ‘Milanese School’ or ‘Italian school’ was born thanks to hybridization between the Italian and Swiss graphic scenes. “The arrival of Swiss designers in Italy, on the Zurich–Milan axis, has often been seen in terms of a successful marriage between a kind of functional and calculated Swiss prose and an Italian impromptu poetic vein”, writes the Italian design historian Carlo Vinti, “seen variously as resting on the balance, tension or interweaving of Nordic austerity and Mediterranean exuberance, between the mathematical order of the Swiss and the typically Italian liking for experimenting freely” (Vinti 2013: 28). As Vinti rightly puts it, “the picture becomes far more complex and nuanced” (ibidem), while the current opinion seems to be the result of two simplifications or prejudices that put Swiss and Italian graphic traditions on opposite ends of a virtual field of graphic design.
This poster and its dataset form part of a larger research project on the history of Swiss graphic design: “Swiss Graphic Design and Typography Revisited”, financed by the Swiss National Science Foundation in the framework of their Sinergia program for the years 2016–2019.

The dataset was collected through the review of existing literature, the analysis of curricula vitae, archival research on digital and analogic databases, and mainly oral interviews with the people concerned or their heirs and former co-workers, typically other Swiss or Italian graphic designers.

This visualization has two goals: a. to describe life and activity of each graphic designer; b. to group the places where they lived in order to map the connections between Switzerland and Italy.

The dataset is composed of 28 records encompassing chronological and geographical data. The timeline and the alluvial diagram were generated through coding with the javascript library D3.js. The timeline is chronologically ordered according to designer birthdate. The alluvial diagram links names, cantons of birth, places of education and work in Italy. The height of the vertical bands shows the number of graphic designers who lived in the same city.

**Analysis of results and conclusions**

While this poster presents intermediate results, as more Swiss designers active in Italy remain to be interviewed, some relevant information can already be gained. First of all, the presence of Swiss graphic designers in Italy has had a Gaussian pattern, whose peak is in the past and current level is similar to the 1930s (fig. 1). The peak of the bell corresponds to the years from 1950 and 1970, a period that saw the Italian economy booming and Italian companies forging an alliance with graphic designers. These years were characterized – as in a definition by Carlo Vinti (2007) – by an ‘industrial style’, where Italian agencies and companies collaborated in producing successful corporate identities.

Data collected also demonstrate that Swiss graphic designers active in Italy do not solely move across the axis Zurich–Milan as their places of birth or origin are more varied and include all Swiss linguistic communities. Some of the best Swiss professionals were active on the axis Turin–Milan in crucial years. A further analysis of their works (not shown in this poster) arises doubt about the connection of Swiss graphic designers in Italy to Swiss
style. Their works are more complex and cannot be described as Swiss style: formal and chromatic reduction, sans-serif typography, privileged use of photography. In Italy, one can find Swiss graphic designers using mainly illustration (Lamm, Osterwalder), designers using serif typefaces (Huber, Monguzzi, Humm), and designers characterized by chromatic exuberance (Schawinsky, Huber, Ballmer, Jost).

Thus, it is perhaps difficult to confirm the idea that “In Italy it was difficult to separate what was Italian from what was imported from neighbouring Switzerland” (Hollis 2006, p. 255). Swiss graphic designers active in Italy represent a significant intersection of the two scenes, yet the importation of the Swiss style to Italy should be imputed to graphic designers in Italy who were mainly interested in what was happening on the Basle–Zurich axis, such as Vignelli, Waibl, Cittato, Noorda and many more. They used Helvetica, reduced the chromatic range of their posters, and used geometric shapes or photography. Indeed this transnational issue is far more complex than it has been described thus far.

**References**


**Biographical note**

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The orient and the occident through cinema and film posters: 
A Portuguese case study

Igor Ramos / Helena Barbosa / University of Aveiro / Aveiro / Portugal

Abstract

"Filmmaking is a chance to live many lives". Robert Altman (1925-2006), film director

This paper aims to provide a case study for how cinema and film posters can be the vehicle for a transnational cultural exchange between Occidental and the Oriental audiences, through the eyes and cameras of Portuguese filmmakers João Pedro Rodrigues (b.1966) and João Rui Guerra da Mata (b.1966). Their "Asian films", which have been selected for some of the most prestigious film festivals in the world, were the starting point for a broader discussion about the possibilities of cinema, visual culture and even social/diplomatic relationships, during a face-to-face interview where Guerra da Mata was joined by designer Luís Alegre (b.1969), with whom they've been working for the past years on the posters and promotional material. The paper analyses the films' content, its relation with posters and other aspects that translated into visual and socio-cultural fluxes, while trying to understand the directors' work method and creative process.

Keywords

Graphic design, design history, film poster, transnational cinema, Portugal and Asia

Introduction

Following an investigation that started in 2012 at the University of Aveiro, this paper represents a new contribute to the history of Portuguese film posters, this time focused not only in the graphic aspect, but, most importantly, in the films themselves and how their content is relevant for this specific strand of the conference.

In the summer of 2015 Portuguese filmmakers João Pedro Rodrigues and Guerra da Mata were present at the Taipei Film Festival to introduce their films to audiences as part of the “city in focus” section of the festival’s program, which was dedicated to the Portuguese capital, Lisbon. Over the last eight years they’ve directed one feature film, The Last Time I Saw Macao (2013), and four short films, China, China (2009), Red Dawn (2011), Mahjong (2013), and Iec Long (2015), that tackle on a subject matter that is very unusual in the history of Portuguese cinema: the country’s relationship with the Orient.

China, China and Mahjong take place in the two epicenters of the Chinese community living in Portugal: one in the heart of Lisbon (Martim Moniz) and the other in the countryside (a warehouse zone in the distant suburbs of Oporto), respectively. The Last Time I Saw Macao, Red Dawn and Iec Long are result of a (re)discovery of the Portuguese ex-colony by the duo that during three trips, spread over the course of several months, gathered more than 150 hours of footage to document how they saw Macao nowadays. The films are presented in chronological order, according to release year, with their respective posters.

Article

“China, China! Can you give me a lollipop?”

The first short-film, China, China was born from a couple of loose ideas from Guerra da Mata who wanted to film something set in Martim Moniz, which he considers to be “the most cosmopolitan area of Lisbon” (interviewees Guerra da Mata and Luís Alegre, January 22, 2016 – all quotes in this paper refer to the interviewed authors). It’s the city’s very own melting-pot of stores and restaurants owned by people from different cultural backgrounds, a zone that suffered many years of a bad reputation (Guerra da Mata admits that it was an “ugly area” and that part of the challenge was trying to make it interesting), but it’s now becoming a trendier spot in the capital. The directors wanted
to shed a light on the Chinese community working there while telling a story with a colourful, ‘pop’ and visually dynamic approach.

![Fig. 1: China in her bedroom with a wallpaper of New York](image1)
![Fig. 2: China, China's poster](image2)

It follows a young Chinese woman, named China. She’s married, has a small son and, like many Chinese people living in Portugal, works all year round in a supermarket. However China’s dreams are bigger: she’s fascinated with New York (fig.1) and hopes to move there one day. Unlike her strict husband (who only speaks mandarin), she’s fearless and unafraid of smoking or jumping on top of a bed while listening to Pop Dell’Art (a Portuguese pop/rock band). The messy kitchen also reflects China’s carefree attitude, not something that’s expected from a Chinese housewife.

In the summer of 2009 the Lisbon City Hall held a public screening of the film on the main square of Martim Moniz. The directors were present to introduce the film to the audience. They recall how everyone seemed impressed with the accuracy of the sets, but, as the film progressed and China began to increasingly act more rebellious, some discomfort began to be noticeable amongst the audience… eventually leading to the tragic final scene where China’s little son accidentally kills her with a loaded gun. “When it ended, the entire audience looked back at us, they didn’t seem happy. I thought we would never be able to come back to Martim Moniz again!” the directors said. After this experience, while doing the festivals’ circuit, they felt the need to clarify that, even though the story takes place inside the Chinese community living in Portugal, it was never intended to work as a documentary or a realist portrait of these people. It’s a fictional work, done in an outsider’s perspective, but with realistic scenarios, consequence of the directors’ knowledge of Oriental visual culture.

The poster (fig.2) features China with the red color of her lips and lollipop standing out against the pitch-black background. The mandarin characters have a striking presence (the Portuguese translation only appears in a second layer of information) that both designer and directors appreciate since it emphasises the trans-national aspect of the film and helps to contextualize it without giving away specific details about the plot. They tried the characters in red but opted for white, because it wouldn’t interfere with the lips and lollipop. The sombre tone contrasts with the colourful film, foreshadowing the tragic final scene.

“We’re a little cynical in the Occident, we’ve lost our relationship with food”

Red Dawn is the second Asian short-film and the first to be taken out of the material collected during the trips to the Orient. Realizing that only brief seconds of the Almirante Lacerda Market (known as ‘Red Market’) would make the final cut of The Last Time I Saw Macao, Guerra da Mata suggested to Rodrigues to make a short film. Built in 1936, using western red bricks, it’s one of the few remaining places were everything’s fresh: from fruits and vegetables, to fish, seafood and meat. Not merely a documentary but rather an ode to the everyday life on this market, Red Dawn depicts, besides the act of killing per se, the costumers, the workers’ skills and movements, and the presence of red: not only in meat and blood, but also in aprons, rubber gloves, bowls, lamps and several other objects that go unnoticed.

Still in 2011, Red Dawn was adapted to a video installation, part of the exhibition “Where is China?”, held at the World Art Museum of Beijing, which featured works of Portuguese and Chinese artists, commissioned by designer Luis Alegre. One hour before the arrival of the Portuguese President for the exhibition’s inauguration, the video projection of the film was replaced with a single still frame (fig.3) without any warnings or explanations.
(another work of art was censured and the exhibition’s catalogues were removed) much to the surprise of everyone involved since the works had passed in a previous censorship test (and Red Dawn, in particular, had authorization and support from Macao’s Cultural Institute). At the time this situation was not actively reported to the media because of diplomatic reasons (the project was financed by Portuguese and Chinese institutions and still had to be exhibited in Portugal), but in the following weeks word got out and people became aware that the film had been banned because the organization felt that it didn’t portray China on a positive way to possible tourists and visitors, considering it “too violent for occidental eyes”. The title Red Dawn also sparked controversy for possibly conveying some sort of critical reflection/attack to the Chinese communist regime. The genesis of the conflict was essentially the Chinese thinking of how they would be perceived by occidental audiences.

“This is Macao, an ex-Portuguese colony that never really was”
The Last Time I Saw Macao was initially intended to be a documentary about the former Portuguese colony that in 1999 transitioned to Chinese administration. Guerra da Mata, who lived there as a child, had been telling Rodrigues stories about that period of his life for more than 20 years. After the project was greenlighted they were able to travel there with a small crew. The goal was to “rediscover” Macao: one after being there many years ago, and the other going there for the first time, but already knowing plenty about the region from the stories he was told and the knowledge that he acquired from watching films and other media. Soon enough they realized that they had no interest in conceiving a strict documentary, so they mixed-in a storyline and turned the project into a docu-fiction where fiction and reality are intertwined. The absent protagonist/narrator has Guerra da Mata’s name and voice and, like him, he’s going back to Macao 30 years later, but looking after Candy, an old friend who contacted him, feeling fearful for her life after getting involved with the wrong men. The plot unfolds as a noir cat-and-mouse game, with the protagonist sometimes getting lost in the search for Candy due to the fact that so many things and places had changed over the last decades and nobody seemed able to help him - “400 years under Portuguese dominance and no one here speaks Portuguese” he complains. “The Las Vegas of the Orient”, as it’s referred to nowadays, is an ever-changing entity, “the most densely populated city in the world but also the one where you can feel most alone”. Throughout the film we see (real) pictures from Guerra da Mata as the protagonist revisits places of his childhood.

The directors admit that they deliberately “sabotaged” the film by introducing footage from Lisbon, China and others places outside Macao because, for them, “Macao was more of an emotional place than a
geographic one” and Guerra da Mata, in particular, always looked for (and found) Macao in other cities and places throughout his life. In relation to the poster, it has different iterations in some of the countries were it has been released, however they all have in common the use of an image featuring Candy’s silhouette with a tiger in the background, taken from the opening scene. The dark image announces the noir aspect of the film and the mystery surrounding the plot. In terms of typography used for the title, variations occur: in the Portuguese poster “The Last Time I Saw” is in a white, sans-serif font (Garage Gothic Bold) and “Macao” in a customized red typography, designed to give the word an undoubtedly Asian look (the only poster to do so); the French poster solely uses the same sans-serif font of the Portuguese poster, but in red; the American poster goes in a different direction, giving the title a greater presence, in the top of the poster, and using a serif font (Amati AR Regular) which Guerra da Mata and Alegre think gave the film a retro vibe that, by their accounts, induced some audiences into expecting something different than what it delivered (fig.5).

“The Chinese this, The Chinese that… Chinese always appear as the bad guys”

Mahjong, commissioned by Curtas (“shorts”) Vila do Conde - International Film Festival, marks a return to Portugal, to the Industrial Zone of Varziela, known as the “Portuguese Chinatown” and located in the north of Portugal, near Vila do Conde. Mahjong follows a man as he searches for the woman he wants to get married with, but since she’s part of the Chinese community than runs Varziela this union is doomed. Besides this fictional story, the film aims to provide an inside look into this hermetic environment: the directors had to ask permission to the leader of the community to shoot there. They were captivated by the mystery, and even secrecy, surrounding the shops and warehouses that constitute this gigantic wholesale market.

They recall how, prior to the time of the shooting, a burned down warehouse and other similar incidents were making headlines and triggering unwanted attentions. In the beginning of the film the protagonist is reading these articles on his laptop and later visits the wrecksages of this warehouse. They also shot some scenes at a florist, and when they went back there, months later, to invite the owner to the premiere of the film, the new owner swore that there was never a florist there. The leader of the community had also gone away. In a few months Varziela had changed, but the directors also address the Portuguese and their fear of the unknown when the protagonist says that Chinese always appear as the bad guys.

The poster features the mysterious woman, whose face is obscured by the dragged nightlights, maintaining the anonymity she has in the film. The mandarin characters for “Mahjong” have a strong presence, in red, in the bottom half of the poster. Without them this would be a conventional western film poster (fig.6).

“To whom dreams of them, they are still people”

The most recent work, Iec Long, is dedicated to another intriguing place in Macao, the Old Factory of Firecrackers “Iec Long” in the island of Taipa. Photographic evidence proved that in this factory, like in many others in Macao and across the world, there was child labour. Iec Long is a tribute, a memorial even, to the men, women and children who worked in this place where explosions and other work-related incidents were often fatal. Before the downfall of traditional Macanese factories in the 60s and 70s, making firecrackers (or as they’re called in Macao: “panchões”
which means “Chinese rocket” or “Chinese cracker”), was one of the three main traditional industries, the others being making joss sticks and matches. In the short film, between opening and closing scenes of firecrackers exploding, an old worker recounts the life he spent working in the factory, alternating between black and white segments, filmed with and super 8 camera, where we see several children (presumably ghosts) wandering through the ruins of the factory which is now being restored by orders of the Macanese Ministry of Culture.

The poster features a grainy, black and white picture of one of these children. The colorful circles are symbolic of the fireworks’ explosions and, visually, the poster draws inspiration from the works of Japanese plastic artist Yayoi Kusama. In terms of typography, it was decided not to go with the Chinese characters because it would make the title too long, using only “Iec Long” in the font Garage Gothic Bold. Despite the typical western layout, the Orient is still very present through the boy’s face and the word “Long” (fig.7).

Conclusion
Because they are the result of a creative and personal process, films are subjected to interpretation of the beholder, however the directors state that they don’t do them with any political or social agenda. They don’t mean to criticize anyone or anything, the result is merely a reflection of how they see the reality and play with it.

They recognize that the film posters have a very important role in terms of promoting a film and inviting audiences, and therefore have developed a long-lasting professional relationship with graphic designer Luís Alegre, since both parts have aesthetic affinities. In on way or another, all posters carry some sort of visual reference associated with the Orient.

After being present in film festivals and retrospectives in countries such as Macao, China, Japan, Taiwan and South Korea, the directors agree that Asian audiences are very enthusiastic about occidental films because they offer a window into the western world and lifestyle. “They have much more insight into our culture than we do into theirs, because they are curious and constantly seeking new information.” This translates into sold-out sessions, high demand for promotional material of the films (such as posters, postcards, DVDs and other merchandise and memorabilia) and long lines for autographs. When asked if they feel that Portuguese audiences share the same desire to discover the Orient through its films, they answer: “Do we even want to know about our own films?”.

References

Biographical note
Igor Ramos holds a Master’s Degree in Design by the University of Aveiro and is pursuing a PhD at the same university, after an internship at Providência Design in Porto. Developing a pioneer research about the history of Portuguese film posters, he also takes in interest in design history, visual culture, graphic design, cinema and pop culture.

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The construction of Estonian national style under Soviet rule
Triin Jerlei / University of Brighton / Brighton / UK

Abstract
When observing the commodities produced in the Soviet Union, one notices frequent references to pre-Soviet national culture. Estonia was no exception, demonstrating the emergence of a national style that existed in full accordance with the official Communist power. This style was created mostly through the use of visual references to pre-Soviet Estonian culture. Besides imagery, in some cases national references also included partial adopting of certain material practices. This paper focuses on the creation of Estonian national style under the Soviet power to determine its ideological roots and the strategies of imposing and materializing this construct.

Keywords
Soviet Union, national identity, Estonia, industrial design, socialism

Introduction
This research aims to research the references to pre-Soviet culture in Soviet Estonian design and how during the 1960s these references were employed to construct a national style, in order to determine the ideological roots and strategies of imposing and materializing this construct. To better understand the different motivations behind this construction, this study focuses on three different groups individually: The Communist Party, designers and other agents in production process and the consumers. While these construction processes differed throughout Soviet Union according to historical, cultural and political conditions, this research offers an insight into one specific design system. Through this case study, this article both arrives to a better understanding of national propaganda in the multinational Soviet context and proposes a methodological viewpoint for analyzing national style in industrial design.

As mentioned above, the key groups whose interests shaped the construction process of Estonian national style in the discipline of industrial design, are identified as Communist Party, production agents and consumers. This systematization is naturally a simplification: Communist Party includes both the influences of doctrines and texts as the decisions made by party officials in Estonia and in Moscow. Production agents are identified as industrial designers, but also other factory officials and, to some extent, also factory workers insomuch they happened to steer the production process at any stage. Finally, consumers are not only members of the general public, but also design critics, historians and curators. It is necessary to emphasize that naturally these groups should not be seen as completely opposing and homogeneous. Many individuals simultaneously belonged to several categories and, as members of each group varied according to age, gender, education and other factors, their views on national style and its position in Soviet Estonian design differed as well. Nonetheless, this paper still aims to analyze the broad tendencies in view of each category.

Time period in question, 1960s, was crucial in local context as by this period Soviet Estonian economy had reached the capacity to produce and distribute a larger variety of commodities for the general consumer. Having been independent since the fall of Russian Empire in 1918, Estonia and other Baltic States were occupied by the Soviet Union in 1940, unlike the other states that had been under the Soviet rule since 1922. In the post-war period, factories had not yet reached their prewar capacity in quality or quantity and thus the variety and quality of consumer products were not yet sufficient to draw any conclusions concerning style. In 1962, VNIITE, the All-Union Scientific Research Institute for Technical Aesthetics, was founded – a research institute that aimed to propagate contemporary design ideas and to improve the aesthetic quality of Soviet industrial design (Azrikan 1999: 48-50). The establishing of VNIITE is often seen as the beginning of an official industrial design discourse in Soviet context.
Manifestations

The national symbols used in design mainly referred to pre-Soviet peasant culture, thus establishing a type of a canon. While 1960s were the height of popularity in establishing the national style in Soviet Estonian design, this use of peasant culture was not a novel concept. In fact, already at the beginning of 20th century peasant culture had been adopted in architecture and interior design, although the scope was not comparable to the industrial design of 1960s. Estonian art nouveau architecture in particular had focused on use of national romanticism, much like the contemporaneous style in Finland. (Kodres 2001: 187)

Therefore, national symbolism in industrial design actually referred to two separate époques simultaneously: the mythical peasant culture of the previous centuries and the more accessible brief pre-Soviet independence. This fact can be seen as pivotal in the preference of national symbols.

While Western Communism was, in its nature, against nation-states and nationalism, Soviet Union was actively employing nationalism in the interest of Socialist propaganda. National references were actively used in Soviet propaganda already since the very beginning of the regime. Lenin had already emphasized every nation’s right to self-determination (Lenin 1914: 227). Later, during Stalin’s reign, nationalism became a weapon for constructing both local and all-Union narratives in the interest of propaganda. As pointed out by Victor Margolin in his study on the Stalinist propaganda magazine USSR in Construction, one of the main reasons behind adopting national references in Soviet propaganda was a wish to convey an image of a future embracing all diverse ethnic and national groups (Margolin 1997: 167). The same traditions were prevalent not only in Estonia, but elsewhere in USSR as well. Greg Castillo has written on the subject of Soviet Orientalism that while the calculated use of regional traditions ended with Stalinism, national references emerged since the 1960s in new ways, bordering on kitsch (Castillo 1997: 33).

In her research of Soviet fashion, Djurdja Bartlett has argued that propagation of national symbols in Soviet design acted as an ideological barrier against Western trends. (Bartlett 2009: 230). This idea can also be seen as a pivotal factor in Soviet Estonian industrial design. As already mentioned, the discipline was still new during the period in question, the 1960s. Thus, for local public national style was supposed to reduce the power of international trends and to stop Western design from becoming a leading example. However, this objective was doomed from the very beginning. Especially in European areas of Soviet Union, West soon became the “framework of universal categories”, as phrased by Piotr Piotrowski (Piotrowski 2009: 28). Even certain Soviet design institutions, most notably VNIITE, started propagating Western values and standards in design (Azrikan 1999: 64). A small number of designers, for example a renowned design professor Bruno Tomberg, introduced national references to mass production during the 1960s, but as the style became popular amongst the general public, it was soon disregarded as kitsch and avoided by designers. Thus, national style never became the prevalent style in the realm of Soviet Estonian consumer goods; however, it persisted in small details and certain products, causing art critics headache for years to come.

One of the key symbols was the national dress, the patterns of which were used not only in textiles, but also on other types of products. Katrin Kivimaa has studied the manifestations of national identity in the visual arts. She notes in her study of feminine identity that folk costume played the same symbolic role in national identity during the national movement of the 19th and early 20th centuries. (Kivimaa 2009: 137) She states further: “Thus, folk costumes had already become a conventional and formal sign of ethnos, which the Socialist Realist model adopted.” (Kivimaa 2009: 135) Mostly, symbols referred to various parts of the female costume. One of the most popular uses of national costume was a small wooden doll in national costume, produced by Salvo. The appearance of different dolls varied greatly, but they were always in production throughout the entire Soviet period. Use of national...
dress in Soviet propaganda was not specific to only Estonia, but rather a common method for referencing pre-Soviet traditions and culture. Evidence suggests that this type of doll in a national costume was fairly common throughout the Socialist Bloc as means for demonstrating an idea of a national identity: for example, Vladimir Kulic the Yugoslav pavilion of EXPO '58 as being filled with "forty-five dolls dressed in traditional folk attire from all parts of Yugoslavia, surrounded by the images of the country’s most beautiful natural landscapes." (Kulic 2012: 161). Besides national dress, other peasant images were used as well, although to a lesser extent. One curious example is a souvenir spinning wheel produced by Salvo in 1965. In itself, it was an interesting example of emphasising the image of traditional culture, while neglecting the actual content. Initially, a spinning wheel had been a tool, not a decorative object. In 1965, very few households would have used a spinning wheel for its original purpose, especially as the Soviet power insisted collectivisation. As such, while this object was based on traditional ways of life, it was also an active attempt to reduce rural culture to decoration. While at first glance it could have been seen as an apologetic revival of the past, the souvenir spinning wheel was rather a final blow to peasant life, suggesting that its rightful state was a novelty item. This object only features in one product catalogue in 1965, and was therefore probably produced only in small quantities. However, it was definitely not a sole example of revivalism of traditional ways of life. Even in the 1980s, Tartu Plastics Factory was producing a small weaving loom, usable for making doll carpets.

Another popular symbol of national revivalism in design, especially on souvenirs, was medieval architecture in Tallinn. While the Baltic-German roots of Estonian culture were otherwise denied or devalued, using the Old Town as a symbol was a good example of how some aspects of it were appropriated. As Tallinn was one of the few cities with an old town built according to Western traditions, either the town silhouette or images of single medieval buildings were used because of their distinguishability. One interesting example of using the Old Town as a source of inspiration for a product was the lamp "Old Thomas", designed by Bruno Vesterberg in late 1960s and produced until the early 1980s. It was shaped like an old-fashioned lantern and decorated with a figure of Old Thomas, famous from the weathervane of the Tallinn Town Hall. The lamp was produced in large quantities and became popular both in Estonia and amongst tourists. During this period of establishing the national design tendencies in the 1960s, stylistic strategies were not the only tool for conveying the romanticism of national ideas in mass production. Besides purely visual references, souvenir industry also employed different production methods for ideological aims. In 1966, Uku was founded - an association that employed non-professional craftspeople (Uuemõis 1975: 2). It was a peculiar example of using nationalist material practices for official ideology. Employees were able to work from home and make national souvenirs according to designs by professional artists. Traditional national handicraft in Uku’s example was used as an ideological symbol of national traditions in general. Different technologies, from metal- and woodwork to embroidery were used in production. However, while in traditional handicraft one person would make an entire object from scratch, in Uku the work was divided into stages, all of which were carried out by different people. While on paper Uku’s aim was ‘keeping traditional handicrafts alive’, it was still rather a step towards mass production, except that the factory system existed only as a work arrangement, not as an actual physical building. Therefore, while Uku used national connotations to create an illusion of maintaining traditional ways of life, it was a compromise between the factory setting and a traditional work environment.

These examples raise a question: how exactly did these national references emerge? Returning to the three focus groups, how exactly did each of them function in the development of this style? The use of peasant culture in crafts and industrial design in post-Stalinist era has been documented in other Socialist countries as well, for example by David Crowley in Poland (Crowley 1994: 195). However, the manifestations of national imagery differ in countries due to variations in political structures and local industrial design. Analyzing the illustrating examples, most of them are found in the realm of mass production, which was fairly typical to national elements. There were some highly respected designers who employed references to traditional peasant culture in exhibition
objects, but only during a brief period at the beginning of the period in question. Soon, as national imagery was gaining popularity with the general public, many art and design critics stood against it as a sign of the decline in aesthetic taste, as this article will demonstrate below.

In an article published as early as 1969, renowned Estonian art historian Leo Gens wrote: “The dissociation in material environment has become a discerning feature of contemporary culture. Man really needs romance, needs a so-called carnival situation, it is not a coincidence that we have so many replica windmills, almost genuine country taverns with pseudo-national food and pseudo-national interiors. […] If the attic is empty, these needs are satisfied with wooden candlesticks by ‘Uku’, baskets, small tankards or national dolls by ‘Salvo’. (Gens 1969: 2)

In Gens’s view, mass-produced national objects were a poor substitute to genuine folk artefacts that were used to escape from reality. As the contemporaneous Soviet interiors and objects were usually deliberately simple and lacked decoration, people tended towards the opposite. Folk objects or their contemporaneous mass-produced counterparts were familiar, easily recognizable and sentimental. This type of critique from renowned critics, combined with the evolution of contemporaneous design ideologies and an expanding knowledge of global design theories, was arguably an important factor for the decrease in interest towards national tendencies amongst more renowned industrial designers. Later, Western influences became more prevalent in the works of more informed designers.

Meanwhile, Gens’s critique illustrates another viewpoint. When it comes to consumers, it should be stressed that, comparing the design structures present in Soviet Estonia and Soviet Union in general to those functioning in Western Europe and the United States at the same time, consumers had significantly less power in determining the style and typology of products. In a state economy there was little competition between different factories and without financial profits factories and designers had no incentive to take the views of consumers into consideration. Additionally, it is extremely problematic to study the opinions of consumers due to censorship in Soviet media. The only testimonies that remain from Soviet consumers in regards to the contemporary views towards national style are reader’s letters from newspapers. These are not necessarily authentic, as newspapers were controlled by the Communist party. Therefore, this critique also acts as evidence to the popularity of neotraditionalist design. Although consumers might not have played a significant role in encouraging national references, they definitely welcomed the new style.

Therefore, having analyzed the small role played by consumers and the reluctance of designers and other design specialists, this paper reaches the conclusion that the main initiator of neotraditionalist symbolics was the Soviet power. The prevalence of this style in mass-produced design which is submitted to government control to a greater degree than craft, applied arts or exhibition objects demonstrates the involvement of Communist power. As the final proof, it is important to stress the openness of discussing political intentions behind the propagation of national style. To no extent should the role held by the state in establishing a certain style in industrial design be seen as a secret intervention happening behind the scene, but rather as a deliberate and open strategy to demonstrate the willingness to improve and alter the existing Soviet reality. In an article published in 1966, the Minister of Local Industry declared the aim of Uku to be the demonstration of scope and perspectives of Estonian national culture to the entire world, disproving claims by some emigrant groups that everything national was doomed in Soviet Estonia. (Uuemõis 1975: 2) Therefore, the scope of national style within industrial design was beneficial in terms of Soviet propaganda, to create an illusion of a national artistic autonomy and of self-determination enjoyed by Estonians in USSR.

Conclusion

Manifestations of national culture in Soviet Estonian design mostly focused on pre-Soviet peasant culture, although there were also examples of using other recognizable symbols and landmarks. While the establishing of national style in Soviet Estonian industrial design was a joint effort between the state power and the designers, Communist Party played an important part in this process. Although amongst designers and design critics national references soon became a sign of poor taste, these references had several functions within Soviet ideology: to show the Soviet system favorably to the outside world and to reduce the effect of Western design on local production. As at least the second objective was not reached, national references still remained present in certain areas of mass production.
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Biographical note
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Consuming the image of “Japan” in British Art Deco fashion

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Abstract
Art Deco is a decorative arts style that originated in the mid-1910s, developed over the 1920s and 1930s, and is particularly closely related with 1920s France. Some of the inspirational sources for Art Deco were the visual cultures of various exotic regions, such as East Asia. In particular, Chinese and Japanese styles were two of the most important influences on the eclectic mix of styles and spirit of Art Deco. In this paper, we discuss how Japanese styles were established and consumed in British Art Deco fashion. Although Japonisme goods were already popular in the nineteenth century, their decorative and picturesque motifs became practical fashion items during the Art Deco period.

Keywords
Art Deco fashion, British consumer culture, Japonisme, Oriental design, silk

Introduction
Art Deco design was eclectic; it reflected exotic inspirations and became a modern and unique transnational design style. Traditional methods and techniques from East Asia were a significant influence on Art Deco’s new exotic style. Design historian Gillian Naylor (2003) noted that British industrial art was conservative and indifferent to foreign art movements. In the early 1920s, British design critics ‘had inherited the Arts and Crafts conscience – the moralities of practical use and fitness for purpose that had made their predecessors’. In addition, textile design was important in the British Art Deco context, and their ‘vibrant colours, emphatic repeats, florals and abstracts signalled the passing of William Morris’s influence’ (Naylor, 2003, p. 232).

This study analyses 1920s British consumer culture, which was a significant period for Oriental influences on design, especially Japanese design. The 1920s were also an important period for the silk trade between Japan and Britain. This study researched 1920s fashion magazines, such as Vogue and The Queen, and business magazines such as Drapers Record, and discusses how and why some Japanese goods—e.g., kimonos and umbrellas—appeared frequently in the British fashion media. Although Japonisme goods were already popular in the late nineteenth century, their decorative and picturesque motifs became practical fashion items during the Art Deco period. By ‘practical’, I mean that these goods were widely used daily by not only artists, but also by ordinary people. Kimono design was partially introduced into Western garment designs and Japanese umbrellas were used as sunshades.

Arguably, the key to this change was the material used. Japanese silk fabrics or silk embroideries were often displayed in 1920s British magazines and advertisements. Silk prices were considerably reduced in the twentieth century because of massive silk production in Japan, which made silk comparatively more accessible after being treated as a luxury for a long time. This availability encouraged Japonisme fashions among British women, especially upper-middle class women, as shown by the readership of the magazines researched for this study. This transnational phenomenon was most clearly illustrated by the British adoption of kimono style and Japanese umbrellas.

Japanese Silk in Britain
Since the sixteenth century, England depended on raw silk imports from France and Italy because the British climate was unsuitable for sericulture. However, the British silk industry continued to develop, especially in the early nine-
teenth century. Britain was one of the four largest Western markets for silk and the world consumption of raw silk increased 5.5 times from 1875–1877 to 1927–1929 (Federico, 2009, p. 43). The British silk industry differed from all other European silk industries because it was not an export industry and it could not even satisfy the large domestic market demand, which continued even after the First World War. Within 10 years after the First World War, when raw silk processing business was at its zenith from 1924 to 1928, Britain had imported one million pounds of raw silk (Flugge, 1943, p. 95).

Many Japonisme fashion goods were made from silk. Silk originated in China and were exported to Europe around the twelfth century. In 1873, China boasted about being the main raw silk exporter, but Japanese raw silk exports had overtaken Chinese silk exports by 1905. In 1930, Japanese silk comprised 80% of the global silk trade (Li, 1982, pp. 192–198). The massive volume of Japanese silk produced was mainly exported to Europe and America. By the 1920s, silk had become the main material representing Japanese culture.

Great attention was paid to Japanese silk during two international occasions. In 1910, the Japan–British Exhibition was held at White City in London, which celebrated and reinforced the Anglo–Japanese Alliance of 1902. The Exhibition was strongly supported by the Japanese Foreign Minister Jutaro Komura. Silk products were introduced as ‘one of the most important products of Japan’ (Matsumura, 2011, p. 213). A large variety of silks and silk fabrics were exhibited in the textile industry department of the Exhibition, which were reported as follows:

In other classes of silk fabrics, such as crêpe for umbrellas… A large number of kimonos adapted to Western requirements took the fancy of many people, so much so that their influence became noticeable on ladies’ costumes in this country (Matsumura, 2011, p. 213).

Kimonos and umbrellas using Japanese silk fabrics were exhibited and generated great demand for these products in Britain. Not only Japanese silk products, but also sericulture methods and the history of silk in Japan were introduced in the textile section of the Exhibition. Thus, this exhibition laid the foundation for the popularity of Japanese silk in the twentieth century, which continued into the Art Deco period of the 1920s. The second international occasion was the Exposition Internationale des Arts Décoratifs et Industriels Modernes held in Paris in 1925. Japan made another great impact by focusing on exhibiting kimonos and Japanese umbrellas, such as the Yuzen kimono by Takashimaya Gofukuten (kimono shop), the Hikida ‘so-sibon’ (overall tie-dyeing), and nagajuban (a long undergarment) made by Urata Seizo. Other kimonos won the gold, silver, and bronze prizes. Furthermore, many Japanese umbrellas and parasols made of paper and silk were exhibited. The parasol made by Teshigawara Limited Partnership Company won the only grand prize among the Japanese exhibits in the exposition (Shokoshomukyoku, 1927, p. 114). Japan considered the Western market when planning its exhibitions.

**Ornamentalism in fashion**

**Kimonos**
The use of kimonos in the nineteenth century can be classified roughly into two categories. Initially, kimonos were used as picturesque motifs and often appeared in works by European painters like Dante Gabriel Rossetti and James McNeill Whistler from the middle of the 1860s. Kimonos were then worn as a dressing gown.

In the twentieth century, European fashion shifted in its use of kimonos. In Art Deco fashion, especially in the 1920s, kimonos were popular and continued to be worn informally as dressing gowns, as they were in the nineteenth century. However, there were obvious differences between the kimono fashions in the nineteenth and twentieth centuries.

Western garment designs directly adopted the kimono shape appeared in the early twentieth century and some representative examples were ‘kimono coat’, ‘kimono sleeve’ and ‘obi belt’ designs. Especially in British women’s magazines in the early 1920s, clothes using ‘kimono sleeve’ and ‘kimono shoulder line’ designs were frequently observed. In 1928, British Vogue introduced an evening wrap that was sold as a Vogue pattern with the caption, ‘The sleeves are kimono in front’ (Vogue, Oct 3, p. 96) (Figure 1). The straight kimono lines coincided with the Vogue of Art Deco fashion. Western design also adopted the shape of a kimono in the ‘kimono coat’ often seen in the early twentieth century, which was first produced in the early 1900s by the French couturier, Paul Poiret. British fashion houses, such as Burberry and Redfern, also sold kimono coats in the 1920s.
European fashion design inspired by kimono elements followed not only the shape of sleeves, but also the use of ribbons. In 1923, a feature article ‘Spring Movements in the Paris Fashion Market’ published in Drapers Record stated that ‘Indian and Persian designs in novel effects and colour combinations on silk crêpe and very wide ribbons (the latter for hats or the new “Obi” bows on evening frocks) are expected to be much demand later on’ (Drapers Record, 13 January 1923, p. 79). Some designs from Eastern countries were confused and lumped together. However, a kimono element, ‘obi’, was seen as a remarkable new design and was used as a ribbon decoration on frocks. A similar description of obi ribbons was also published in a Drapers Record article, ‘Fashion Notes from Paris’, from the same year, which described a trend in evening dresses as ‘even when draped, the bows are placed on the hips, Japanese fashion’ (Drapers Record, 17 February 1923, p. 431).

Japonisme clothing frequently incorporated Japan-inspired motifs in prints and patterns. Western designers produced several clothing items with Japan-inspired motifs and designs. In addition, motifs were designed by a Japanese designer, Léonard Foujita, who was active as a painter and printmaker in 1920s Paris. A Western-style dress printed with a Japanese pattern was published in Drapers Record with the caption ‘Maid’s Gown Printed Artificial Silk Ninon, pretty Japanese effect’ (Drapers Record, 20 April 1929, supplement ii) (Figure 2). Flowers and temple architecture can be seen in the pattern, and the woman modelling the gown is also holding a Japanese parasol.

Animal and floral motifs from Japonisme designs have been adopted in artworks, arts and crafts, and interior products since the Art Nouveau period in the nineteenth century. Similarly, these Japanese motifs were also incorporated into Art Deco fashion. The preferred motifs appear to have been taken from nature.

The use of kimono as informal wear, such as dressing or tea gowns, did not fade away and it continued to be popular in Britain from the late nineteenth century to the early twentieth century. Accordingly, kimono designs in Art Deco fashion were used not only for informal wear since the nineteenth century, but also in Western garments, such as kimono sleeves and coats, and dresses embroidered with Japan-inspired motifs.

Why did Art Deco fashion incorporate kimono elements? David Cannadine (2002, p. xix) noted that the British Empire was ‘concerned with what has recently been called the “construction of affinities” on the presumption that society on the periphery was the same as, or even occasions superior to, society in the metropolis’. This observation was demonstrated by the consumer culture for kimonos in Britain. British designers combined kimono and Western garment designs, which were worn by British consumers, especially women who wore kimono-based designs in Western clothing, such as coats. British consumers also similarly utilized Japanese umbrellas.

Japanese Umbrellas

Another Japan-inspired object represented prominently in Art Deco fashion is the Japanese umbrella. In the nineteenth century, Japanese umbrellas were also known as picturesque motifs. The practice of walking under an umbrella in the rain did not begin to take hold in Britain until about the late eighteenth century. Professional middle-class citizens, such as doctors, began to use umbrellas for practical reasons related to their occupation. In the mid-nineteenth century, light and slim umbrellas appeared; gentlemen then began to substitute an umbrella for a walking stick.

In contrast to an umbrella representing the carriage-owning class, the parasol was a status symbol for the upper and upper-middle classes who frequently rode in a carriage. Accordingly, a large-sized parasol with a long handle came to be popular after the 1860s. In almost the same period when these parasols were in fashion, Japanese arts and crafts were increasingly attracting British attention, including at the London International Exhibition on Industry and Art held in South Kensington in 1862. From the late 1870s to the 1880s, and in the 1920s, Japanese parasols became popular in Europe and were mostly used at the beach (Ito, 1996, p. 253).

Japanese umbrellas appeared in British magazines in the mid-1910s. In 1915, Colour Magazine included a fashion plate of a woman holding a Japanese umbrella on the seaside (Colour Magazine, June 1915, p. 189). In the twentieth century, Japanese umbrellas were used as a practical and fashionable tool for keeping dry or
blocking the sun, which is quite different from the way they were used in the nineteenth century. Photographs of British celebrities published in The Queen frequently showed Japanese umbrellas being used as sunshades in places for social interaction.

In addition to the change in use between the end of the nineteenth century and the twentieth century was the diversification of materials used to make Japanese umbrellas. Before the 1920s, Japanese umbrellas were mainly made from oil-paper or silk with embroidery. The latter style was frequently seen in 1920s magazines.

As shown in British women’s magazines published in the 1920s, all Japanese umbrellas made of paper, silk, or cotton were used as a sunshade to protect people from the sun: ‘This year one sees a great many Japanese parasols. A number have really come from Japan, and are made of oiled paper, transparent round the edge; others are of silk, either plain or decorated with Japanese embroidery’ (The Queen, 7 August 1920 p. 161). The Queen went on to explain that ‘Japanese sunshades are the great fantasy of the summer, and are varied and elegant; the one seen here is of shot black and silver, the transparent border being of black crêpe georgette; it is simply mounted on bamboo’ (The Queen, 7 August 1920, p. 161). Crêpe georgette is a thin silk cloth; therefore, traditional Japanese umbrellas made from oil-paper, and those made from silk, had become fashionable in Britain during the 1920s.

However, some umbrellas with different designs to Japanese umbrellas were introduced to British consumers as being Japanese umbrellas. For example, The Queen (13 March 1920, p. 378) published a description of parasols as ‘Japanese in shape, [they] are of brocaded silk in the same colour and material as the robe they accompany, the handles are in the same style’, which differs significantly from original Japanese umbrellas, especially in their shape and use of ribbons. This magazine also described an umbrella as a ‘Japanese sunshade of cream voile de soie edged with a fringe and trimmed with blue and grey goffered ribbons’ (The Queen, 29 May 1929, p. 695). However, these umbrellas do not look like traditional Japanese umbrellas because they never included a ribbon trim or decorated fringes. These examples may be British-made Japanese parasol designs. Round-shaped umbrellas were probably recognized as being Western designs, and flat-shaped umbrellas were known as Japanese designs.

Some magazine advertisements included information on Japanese parasols. Faudels sold Japanese parasols made of cotton with silk embroidery through its advertisement in Drapers Record (10 March 1923, supplement I). In 1924, Drapers Record published an advertisement for Priest, Marians & Co., Ltd., which was a photograph of two Japanese parasols and a room divider (12 April 1924, p. 65) (Figure 3). This company was a supplier of Japanese umbrellas; however, the patterns on the umbrellas shown in Figure 3 are gaudy, thus, these umbrellas appear to have been made in Japan with the intention to export them overseas. Japanese parasols for international sale were usually exported to Britain using similar trading companies.

In the British history of umbrellas, the handle was important because it showed status and fashionableness. Umbrellas with similar handles to Japanese handles appeared in the early twentieth century. Liberty introduced umbrellas with ‘Japanese Aryma’ glass handles (Liberty’s Catalogues, 1985, microfilm 1923). In 1920, The Queen published an article about an umbrella with a Japanese ivory handle (The Queen, 7 August 1920, p. 161). In the 1920s, the vogue among upper-middle class women in Britain for Japanese umbrellas, especially those made of silk, had a similar relationship to the use of an umbrella as a status symbol in British history. As for kimonos, Japanese umbrellas were also accepted as being linked with class status in British culture.

Cannadine (2002, p. 122) noted that ‘the British created their imperial society, bound it together, comprehended it and imagined it from the middle of the nineteenth century to the middle of the twentieth century in an essentially ornamental mode. For ornamentalism was hierarchy made visible, immanent and actual.’ Umbrellas and parasols were historically upper and upper-middle class status symbols in Britain. Therefore, in the 1920s, Japanese silk umbrellas were consumed as a status object reflecting the owner’s place in the class hierarchy.

**Conclusion**

Kimonos and Japanese umbrellas were linked with the British upper-middle class in the British cultural and historical context because they were made from silk and they were consumed accordingly, especially in British Art Deco fashion. Drapers used Japanese silk ornamentally for the upper-middle classes to represent symbolically their status.
in British hierarchical society.

British Art Deco fashion incorporated Japanese influences into the pre-existing Western clothing designs, such as dressing gowns and coats. Kimonos were used as an ornamental construct. This situation was similar to the formation of the British imperial society constructing affinities.

The development of the Japanese silk industry led to the popularization of silk, which supported the spread of Japonisme goods in British consumer culture. The use of Japanese kimono and umbrella designs were deeply intertwined with the British fashion of the 1920s, and their influence continues to the present day. These Japonisme goods were given meaning in the fashion and class hierarchy of the 1920s by British drapers and consumers because they incorporated silk and were consumed mainly among the upper-middle class.

What happened after the 1920s? In the 1930s, Japanese silk goods were boycotted. Therefore, the popularity of Japonisme goods is assumed to have declined gradually in the 1930s because consuming silk products became a political act, which reduced the demand for Japonisme products in British fashion.

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Japanese concept of Kogei in the period between the First World War and the Second World War

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Abstract
In Japan in the period between the First World War and the Second World War, Rokuzo Yasuda defined Kogei in general as applied art industry, while there were three major movements of Kogei: Bijutsu Kogei, Sangyo Kogei, and Mingei. Sangyo Kogei and Mingei were considered to be counter-movements to Bijutsu Kogei. Sangyo Kogei and Bijutsu Kogei, however, were translated by using the same English expression, ‘industrial art’, and the English expression ‘folk craft’ was applied to Mingei. In this paper, focusing on the arguments about Kogei at the time, I suggest that the Japanese concept of Kogei meant not only crafts but also industrial design, and its fundamental aim was to beautify our daily life by unifying beauty and utility. Yasuda’s definition and others’ arguments about Japanese Kogei provided important foundations for the development of the modern design movement, especially industrial design, in postwar Japan.

Keywords
Japanese Kogei, crafts, industrial art, industrial design

Introduction
The Japanese word Kogei, as well as the Japanese word Bijutsu, has rich layers of meaning. It is very difficult to translate the Japanese word Kogei and to interpret its old meaning using modern language. Some experts define Kogei as ‘crafts’ or ‘arts and crafts’, some as ‘applied art’, while others as ‘industrial art’ or ‘industrial design’.

In his paper presented in 1937, Rokuzo Yasuda (1874-1942), president of the Tokyo Koto Kogei Gakko (Tokyo Higher School of Arts and Technology), explained that the Japanese word Kogei stood for ‘artistic industry’, or ‘applied art’, and at the same time he used the expression ‘applied art industry’ to mean Kogei. Today, Yasuda’s definition of Kogei as ‘artistic industry’ or ‘applied art industry’ sounds somewhat strange. His definition of Kogei in general, however, is one of various hefty arguments about the Japanese concept of Kogei.

According to Shinji Koike (1901-1981), a representative Japanese design critic and educator in the Showa era, there were three major movements of Kogei, i.e., Bijutsu Kogei, Sangyo Kogei, and Mingei, in the period between the First World War and the Second World War.

This paper considers arguments regarding Kogei including its education, and I propose that the Japanese concept of Kogei at the time meant not only craft but also industrial design, and that its basic purpose was to embellish our everyday lives by unifying beauty and utility. Yasuda’s definition and other discussions of Japanese Kogei have contributed significantly to the development of the modern design movement, particularly industrial design, in postwar Japan.

Yasuda’s definition of Kogei as applied art industry
In Tokyo in August 1937, an international conference entitled the Seventh Biennial Conference of the World Federation of Education Association was held. In a section of the conference entitled ‘Educational Crafts Section’, Rokuzo Yasuda, president of the Tokyo Koto Kogei Gakko, read an English paper entitled ‘Applied Art Industry in Japan’ to give an outline of Japanese Kogei to foreigners. Yasuda’s paper shows us the general meaning of Japanese Kogei at the time.

The Japanese term Kogei, Yasuda says, may be rendered in English as ‘artistic industry’, and
stands for the term ‘applied art’ commonly used in the West. After having stated that the interpretation of ‘artistic industry’, or *Kogei*, necessarily differs from person to person and that perfect agreement as to its definition may be impossible, Yasuda presents his definition of ‘artistic industry’ based on common sense. ‘Artistic industry’, Yasuda explains, is concerned with products for daily life which should serve the varied necessities of mankind and the desire for beauty. Today, the English expression ‘applied art industry’, which consists of the two terms ‘applied art’ and ‘artistic industry’ to mean *Kogei*, feels a little peculiar. The expression, however, reflects the historical and educational condition of *Kogei* in the Japan of the 1930s.

According to Yasuda, after the Meiji Restoration (1868), Japan learned many things from the West, especially in scientific industry, which had been non-existent in Japan, and about mechanical and scientific methods as applicable to artistic industry. Japanese people, Yasuda says, believe that it is the mission of their nation to harmonize the inherent culture of the East with the modern culture of Europe and America, and thus produce a new culture. To realize this mission, Japan established applied art education from primary to higher grades. The fundamental training for applied art in primary school is drawing and manual work. The courses of study at middle-school grade in art and craft schools (*Kogei Bakko*) or industrial schools (*Kogyo Bakko*) consist of metal work (*Kinko*), ceramics (*Yogyo*), lacquer work (*Shikko*), weaving and dyeing (*Senshoku*), architecture (*Kenchiku*), design or decoration (*Zuan*), and so on. Many graduates of these schools, Yasuda points out, go out into the world to earn their living, and a few of them enter institutions of higher grade, such as the Tokyo Koto Kogei Bakko (Tokyo Higher School of Arts and Technology) founded in 1921 and the Kyoto Koto Kogei Bakko (Kyoto Higher Technical School) founded in 1902. The courses of study in these higher institutions at the time were technological design (*Kogei Zuan*), technological sculpture (*Kogei Chokoku*), minute machinery (*Seimitsu Kikai*), metal technology (*Kinzoku Kogei*), wood technology (*Mokuzai Kogei*), technical printing (*Insatsu Kogei*), photography (*Shashin*), technological weaving (*Shikisen*), technological ceramics (*Yogyo*), and architecture (*Kenchiku*).

*Kogei* defined by Yasuda as applied art industry could have broadened meanings from handicrafts to industrial machine-made products. In this meaning, Yasuda points out that the Japanese government should promote and encourage applied art industry in terms of foreign and domestic trade as social and industrial policy. Yasuda explains that the reason that this should be the case is that, in this industry, hand-made articles are much more highly appreciated than machine-made items. In addition, Yasuda stresses that there is hardly any commodity which does not require some manual work though the greater part may be machine-made.

On the other hand, in the same section of the conference, Toyochika Takamura (1890-1972), a professor of the Tokyo Bijutsu Gakko (Imperial Academy of Fine Arts, Tokyo), gave a definition of *Bijutsu Kogei* as industrial art with specific meanings.

**Takamura’s definition of **Bijutsu Kogei as industrial art**

Takamura begins his English paper entitled ‘Basic Education of Industrial Art’ with the following sentence.

First of all, it must be understood that in this article the word ‘industrial art’ is used to include only such manual work as may be regarded as of high artistic merit.

The Japanese proceedings of the conference show us that Takamura adopted the English expression ‘industrial art’ for the Japanese expression *Bijutsu Kogei*. Thus, the above sentence is a plain definition of *Bijutsu Kogei*. In his paper, Takamura solely treats the basic education in *Bijutsu Kogei* provided by the Tokyo Bijutsu Gakko because the academy founded in 1890 was considered to be representative of the educational facilities for industrial art in Japan at the time.

According to Takamura, a professor of metal work at the Tokyo Bijutsu Gakko, the student is given a preliminary education in the general idea of *Bijutsu Kogei* through lectures and training in the preparatory course of one year. Thus, the basic education, which the academy adopted in 1933, gives no practical training whatever in technical skill in any one branch of industrial art but is devoted to training in modelling (*Sozo*), charcoal drawing (*Mokutan-ga*), designing (*Zuan*), and Japanese painting (*Nihon-ga*).

Modelling and charcoal drawing, Takamura notes, are considered ideal arts for grasping the fundamentals of the three dimensions, and designing is concerned only with so-called abstract designing (*Junsui-Zuan*), but not with its applied art. Training in Japanese painting is essential in education in industrial art. Takamura emphasizes that without sufficient dexterity in brush work it is very difficult to master the peculiar handicrafts of Japan such as metal carving and lacquer work. According to Takamura, in the course of Japanese painting, the student is to develop the faculty of grasping the true form of an object by delineating natural objects from life, and is encouraged to cultivate facility in manipulation of the brush (*Unpitsu*) by copying (*Rinmo*) old outline drawings (*Hakubyo-ga*)
Lectures, Takamura says, supplement the training in order to give the student a general idea of what industrial art is. The subjects are the history of Oriental art, the history of Occidental art, principles of designing, and Oriental literature. Oriental literature is offered for the following five reasons: first, to exalt the national spirit; second, to explain the content and history of Japanese culture and how it came to be what it is; third, to show how closely industrial art is related to human life; fourth, to demonstrate the process through which Japanese culture has encouraged the development of peculiarly Japanese industrial art; and fifth, to promote, through studying the culture of our forefathers, understanding of present conditions and to outline the future course of our own culture.

Takamura’s explanations of training and lectures in the basic education of the Tokyo Bijutsu Gakko show us that the peculiarity and artistic merits of Japanese *Bijutsu Kogei*, mainly metal work and lacquer work, are characterized principally by manipulation of the brush, which is cultivated by copying traditional outline drawings, and the content and history of Japanese culture, which Oriental literature reveal. Takamura, however, scarcely refers to the practical merits or utility of *Bijutsu Kogei* as industrial art in his paper. The Japan of the 1930s, focusing on the importance of manual work, *Sangyo Kogei*, and *Mingei*, which nobody mentioned in the conference, struggled to realize Kogei as a unity of beauty and utility in daily life.

**Sangyo Kogei and Mingei as counter-movements to Bijutsu Kogei**

According to Eiichi Izuhara (1929-2008), a representative Japanese design historian, *Sangyo Kogei* and *Mingei*, starting in the early Showa era are considered to be counter-movements to *Bijutsu Kogei*, especially its academism. The Japanese term *Sangyo Kogei*, however, was applied to the English term ‘industrial art’, which was used to mean *Bijutsu Kogei* at the time. The expression ‘industrial art’ did not indicate the difference between *Sangyo Kogei* and *Bijutsu Kogei*.

In 1928, the Ministry of Commerce and Industry (Sho Ko Sho) established the Kogei Shidosho (Industrial Arts Research Institute) for the purpose of reviewing the traditional techniques of indigenous local handicrafts. Its aim was not only to promote export but also to utilize the surplus labor of the greatly depressed farm villages in the northeastern areas of Japan by industrializing traditional and local handicrafts, which were called *Sangyo Kogei*, in a scientific way. In his articles published in 1932, Kitaro Kunii (1883-1867), first president of the Kogei Shidosho, defined *Sangyo Kogei* as indigenous industrial products including both hand- and machine-made objects for daily use, which are beautified by unifying art and science, in other words, by harmonizing utility and beauty.

In Tokyo in 1936, Soetsu (Muneyoshi) Yanagi (1889-1961) established the Nihon Mingei-kan (Japan Folk Crafts Museum) to give a permanent home to works of indigenous local handicrafts, which Yanagi named *Mingei*. According to Yanagi, *Mingei* (folk craft or folk arts), an abbreviation of *Minshuteki Kogei* (folk handicraft), means various objects made by hand for everyday life. In contrast to *Bijutsu Kogei*, its main purpose is usability (Yo). ‘Usability equals beauty’ *(Yo-soku-Bi)* in *Mingei* philosophy, in which Yanagi played a leading part from 1926 when he and his friends announced the prospectus of the foundation of a museum for folk craft.

In a statement published in 1932, Kuni evaluated the activities of the *Mingei* movement encouraging local production to realize reliable utility and natural beauty in their products for daily use, and asserted that *Mingei* and *Sangyo Kogei* faced the same direction toward new popular industrial art based on utility. In addition, Kuni considered that products led by the *Mingei* movement could be suited for export, and he advised leaders of the *Mingei* movement to introduce modern science carefully into the production process of handicrafts. But leading persons of the *Mingei* movement, Izuhara points out, criticized *Sangyo Kogei* for industrializing and mechanizing indigenous local handicrafts. For example, in his memoirs published in 1962, Kageo Muraoka (1901-?), Yanagi’s colleague, emphasized the idea that industrialization and mechanization led by the Kogei Shidosho were harmful to the wholesome development of local handicrafts, because the *Mingei* movement wanted not only to preserve indigenous local handicrafts but also to protect them from excessive industrialization and mechanization contaminated by capitalistic commercialism. Kuni’s idea of *Sangyo Kogei* to promote the production process of Japanese handicrafts by applying scientific technology and to beautify industrial machine-made products by applying Japanese indigenous handicrafts may have been inappropriate for *Mingei*, even for *Kikai Kogei* which Yanagi had excluded from *Mingei*.

In his book entitled *Kogei no Michi* published in 1928, Yanagi considers both hand-made products called *Kyodanteki Kogei* (guild crafts), such as the best works being done under the Medieval guild system, and machine-made products called *Kikai Kogei* (industrial crafts), such as aluminum saucepans, as *Mingei* (folk crafts), because their main purpose is usability in everyday life. Yanagi, however, emphasizes the importance of handicrafts
because of the poverty of material and beauty in most industrial machine-made goods (Kikai Kogei). Thus, in his book entitled *Kogei Bunka* published in 1937, Yanagi clearly excludes *Kikai Kogei* from *Mingei*, and points out that machine-made products should be beautified not by applying and imitating skilled handicrafts, but by designing a simple and straightforward form based on its own function. Machines, Yanagi says, should be elevated to be able to produce beautiful things for our everyday life, and a designer, whose intuition can perceive the proper beauty in a machine, is required for industrial machine-made products.

At that time, from an educational point of view, Yasuda, as well as Yanagi, stated that it was necessary not only to study the aesthetic problem of machines and machine-made products systematically, but also to train appropriate designers for machines and industrial machine-made products from battleships to commodities, such as gramophones, radio sets, cameras, clocks and wrist watches, gas fittings, electric heaters, electric fans, printers, film projectors, automobiles, electric trains, and so on. In order to meet these needs, *Kogei* in general should transit from traditional crafts to modern industrial and mechanical techniques. The transition, however, was nipped in the bud by the wartime governance established in 1943.

**Conclusion: From crafts to industrial design**

In 1949, when Japan, as one of the defeated Axis nations, was occupied under the Allied Forces, Shinji Koike published an article entitled ‘Kogei kara Kogyo Sekkei he’ (From crafts to industrial design). In this article, Koike criticizes *Sangyo Kogei* and *Bijutsu Kogei* for keeping feudal crafts unchanged, persisting in a traditional lifestyle, and forcing pre-modern tastes upon others, and he asserts that, in Japan after the Second World War, there was no serious relationship between the people’s modern everyday life and *Kogei* as special protected crafts. *Kogei* in prewar Japan, Koike says, could not be considered as an integral element of various living facilities for our material environments. Thus, in postwar Japan, old concepts of *Kogei*, such as *Bijutsu Kogei* and *Sangyo Kogei*, should be wiped away, and new concepts of *Kogei* in general should be called *Kogyo Sekkei* (industrial design) or *Indasutoriaru Dezain*, which is an adoption of the English word ‘industrial design’ in syllabic translation, in order to humanize industrial technology on a large scale through cooperative relationships between designers and engineers.

By 1950, interest in industrial design prevailed in Japan, and many industrial products made in Japan, such as automobiles, auto-bikes, electronic fans, and cameras, appeared in the market and for export. This trend stimulated Japanese designers to establish the Nihon Indasutoriaru-Dezaina Kyokai (JIDA, Japan Industrial Designer Association) in 1952. It was in the postwar period that *Kogei* transited from crafts to industrial design, for which arguments about the Japanese concept of *Kogei* in the period between the First World War and the Second World War provided the basics.

**References**


Folk Craft.

**Biographical note**

AMAGAI Yoshinori, PhD (University of Tsukuba), is Professor in Art and Design History at Akita University of Art, Japan. He has published his article on pioneers of Japanese design education in the Meiji era in the *Journal of the Asian Conference of Design History and Theory.*
THEME

Le Style n’existe pas: How migration shaped the “graphic design nation”

Panel Chair

Davide Fornari / SUPSI University of Applied Sciences and Arts of Southern Switzerland / Lugano / Switzerland

Robert Lzicar / Bern University of the Arts / Bern / Switzerland

Panel abstract

Theories developed in Switzerland throughout the 20th century have shaped international practice in graphic design and visual communication down to the present today. At the same time, the development and dissemination of these theories can be traced back to the migration of objects, people and ideas, as well as to corresponding economic and political decisions. This topic most recently gained prominence with the acceptance of the Swiss immigration referendum in February 2014. This panel discusses different forms, meanings and consequences of both internal and external migration in the context of Swiss graphic design by focussing on the following case studies:

1. Exporting Swissness: Swiss Traditions and Visual Stereotypes in Contemporary Graphic Design
3. Walter Ballmer: Designing Networks Between Switzerland and Italy
4. The Diffusion of the Swiss Style in America: Jacqueline Casey and the MIT

Based on these case studies, this panel argues that migration contributed to the development of “Swiss graphic design” from a style into an asset that is part of national heritage – a fact that was confirmed in 2014 when it was one of eight Swiss candidates proposed to UNESCO as Intangible Cultural Heritage. This makes mandatory a critical discussion of the branding of Switzerland as a “graphic design nation”.

Keywords

Graphic design history, national identity, migration, Swiss Style, geographic dispersion

PAPER #1

Exporting Swissness:
Swiss traditions and visual stereotypes in contemporary graphic design

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Abstract

“Swissness” is a label established in the 1990s to brand products and services made in Switzerland. Until today it is associated with values such as quality, accuracy, reliability and heritage. It has since expanded to encompass political and cultural issues. According to that development, visual references to “Swissness” can not only be found in product or tourist advertisements, but also in recently designed posters in the field of culture. In contrast to the market-oriented patriotism promoted by traditional definitions of Swissness, these artefacts contribute to alternative
images of Swiss national identity and disseminate them through graphic design exhibitions all over the world. This becomes particularly relevant as Swiss graphic design and typography has recently been announced as candidate for the UNESCO list of Intangible Cultural Heritage, suggesting graphic design culture in Switzerland itself is associated with Swissness. This paper analyses three posters from the exhibition Stealing Swiss (Samwon Paper Gallery, Seoul, 10.20.–12.6.2014) and discusses how they question national stereotypes promoted by Swissness and support alternative approaches to it.

**Keywords**
Graphic design, visual culture, visual stereotypes, national identity, Swissness

**Introduction**
The exhibition Stealing Swiss took place at the Samwon Paper Gallery, Seoul, from October 10, to December 6, 2014. It presented an overview of contemporary graphic design from Switzerland including different media such as posters, books, brochures, leporellos and flyers, and offered a wide range of design approaches (Lzicar & Zeller 2015) (see Figure 1). A significant number of posters in the exhibition visually referred to Swiss customs. The present paper examines these posters as representatives of Swissness, considering the traditions and stereotypes on which the design of these posters focuses, and how these are interpreted in a “designerly” way. Besides these aspects, the exhibition itself could be said to have been representative of Swissness by using the nationality as a quality label, as its title suggests. It thereby contributed to the construction of alternative images of Swiss national identity. But what are these images, and how do they change their meaning when they are presented in a different cultural context such as in Korea?

The branding of products as “made in Switzerland” became popular during the interwar period. But already as early as the late 1910s the Swiss flag was used to label goods from Switzerland, and this was later followed by a stylized crossbow (Horber, 2008, p. 34). One possible reason for the introduction of this label is that Switzerland is a small country without many natural resources. To be competitive in a growing international marketplace, Swiss companies and authorities created campaigns and marketing strategies to construct and promote the reputation of Swiss-made goods. That Switzerland was able to establish itself as a “chocolate nation,” even though chocolate mainly consists of resources imported from abroad, can serve as proof of the success of those efforts (Huguenin, 2013, p. 150). “Präsenz Schweiz” (“Presence Switzerland”), an organizational unit of the Swiss Federal Department of Foreign Affairs that deals with questions of public diplomacy and nation branding, conducted a study in 2006 that showed how Switzerland’s image abroad is strongly influenced by stereotypes: So Switzerland is still associated mainly with watches, chocolate and cheese (Buchser, 2009), while stereotypes in tourism advertisements might also support this perception (Tissot, 2012). The Swiss usually claiming not to be especially patriotic can even be considered as “fundamentally hypernationalistic” when it comes to tourism posters. The repeated use of symbols is regularly explained by strengthening the unity of Switzerland as a nation lacking a shared language as unquestioned smallest denominator (Signer, 2010, p. 29).
Driven by the success of national branding in the tourist industry, symbols like the national flag expanded their use to labeling products from Switzerland on the global market. As a result, Switzerland has been associated with a high standard of quality for a long period, but today the established image leaves an impression of being somewhat dreary and out of date. The term Swissness emerged in the late 1990s to position Switzerland as a trendy lifestyle brand at home and abroad (Tanner, 2007). Most recently, the Swissness legislation to protect and promote high-quality “Swiss products and services” was passed by the government and will come into force in January 2017 (“The new ‘Swissness’ legislation,” 2015).

In summary, Swissness has been created as a marketing term to add Swiss made products and services a symbolic value and developed to brand Switzerland as a nation with distinctive characteristics, but also has supported nationalism. It can be reasonably assumed that visual culture has played a significant role in these processes until today. However, a significant number of contemporary Swiss graphic designers take a critical view of Swiss national identity. By appropriating graphic products, symbols and cultural traditions, their posters reveal stereotypes and create individual images of Switzerland.

This paper examines three posters from the exhibition Stealing Swiss with regard to their interpretation of Swissness. We selected the posters, because some elements obviously refer to Swiss visual culture. First, we will describe the design of the poster, focusing on those elements. Secondly, we will analyze the posters within their historical context by comparing them to other visual products or with reference to why they where originally designed. To gather more information on the design processes, we consulted the designers via email. Thirdly, we will interpret the poster from a perspective of the construction of national identity. The paper will conclude with a discussion of how the exhibition in Seoul disseminated alternative images of Swissness beyond common national stereotypes.

From dairy to design
The poster Käseunion Neue, designed by Reto Moser, Tobias Rechsteiner, and Simon Renfer, presents an “under-cover-still-life scenery” including two jugs, a coffee mug with a spoon, butter on its butter dish and a large cheese. The table has been set, and is completely covered by a red-and-white, checkered tablecloth. In the lower right corner, the attentive viewer finds a stylized crossbow with a waving flag on top, spelling “BANG!” (see Figure 2).

Only a few experts would recognize the design as a reinterpretation of a poster by Victor Rutz from 1938, commissioned by the Schweizerische Käseunion (Swiss Cheese Union), a cartel regulating the price and distribution of cheese in Switzerland (Ryser, 2015). The original poster shows the same scene, but uncovered: a checkered green tablecloth in front of two cropped characteristic polka-dotted jugs and a similar coffee mug containing coffee with a large dash of milk. Two other typical Swiss food products play a major role in the design: a slab of butter and an Emmental cheese (see Figure 3). The focus on Swiss dairy products is not coincidental. The poster aims to promote these as staple foodstuffs for the home market during a period of economic uncertainty, just before World War 2. Rutz created an iconic still-life illustration of the Swiss custom called Café complet – a cold meal including coffee, milk, butter, bread, jam, cheese and sausage that was typically served for dinner on workdays in the
French and German-speaking parts of Switzerland. The original version of the poster also has a crossbow in the lower right corner, a typographical logo using the words “Schweizerische Käseunion”, thereby indicating the country of origin of the products displayed.

The three designers were commissioned to promote an exhibition of reinterpretations of historical Swiss posters organized by the Swiss Cultural Fund in Britain entitled Switzerland: Design for Life (A Foundation, London, 2011). Käseunion Neue refers to different Swiss products and customs in various ways. By choosing the historical poster of Victor Rutz as their basis, the designers are not only referring to a historical Swiss graphic product, but also to a time when dairy production was an important industry in Switzerland – though in this context, it is substituted by design culture. The iconic red-and-white, checkered tablecloth is still used on the tables of restaurants and in tourism advertisements down to the present day, and can thus be considered a successful Swiss design product. The stylized crossbow refers to the Swiss national hero Wilhelm Tell, who only became widely known in the 19th century, thanks to the play of that name by Friedrich Schiller. But the designers have changed its meaning: The crossbow still labels the poster as “Swiss made,” but the “BANG!” at the same time offers a comic-style contrast to this, referring to the crossbow’s original function as a weapon. As the exhibition in question showcased young designers and design studios from Switzerland, the poster contrasted typical visual elements of Swissness with elements of a global pop culture to create a cosmopolitan image of a contemporary Swiss design culture.

**Anachronistic sausages**

Dafi Kühne’s poster Heute Metzgete arranges blotchy red words in the shape of a large sausage. The words “Heute Metzgete” stand at the upper end of sausage, and “in der Krone” at the lower end. This, along with the fact that the poster is printed in meat-like shades of red (see Figure 4), reveals that the poster is advertising a Metzgete in a local restaurant – a Swiss culinary tradition in which one eats freshly slaughtered pork in various forms ranging from blood sausage to liver sausage and bacon, accompanied by sauerkraut and potatoes. This becomes even clearer, as the type-sausage is set from the key components of a traditional Metzgete-plate.

Switzerland has a rich tradition of sausage-making (Heller, 2007). The tradition of the Metzgete goes back to a time when pigs were kept at home and only slaughtered in late autumn so as to conserve their meat during the winter. Even today, a Metzgete makes use of almost every part of the pig and is still served from late September until January in both rural and urban areas of Switzerland (Imhof, 2012, pp. 22–23).

Besides its subject, the poster also refers to this Swiss custom on the level of its production: Being printed as a linocut using the designer’s own letterpress (see Figure 5), the production of the poster appears as anachronistic as the event being advertised. Strikingly, the poster was not designed to announce a real Metzgete, but was commissioned to be sold as an art print in a limited edition in an online design shop (Kühne, 2011). The meaning of the poster thus shifts to conveying a notion of Swissness in the kitchens of a design-savvy audience, or to exporting it internationally as part of this exhibition.

**Local, not national**

Erich Brechbühl’s poster Anne Bäbi im Säli appropriates the form of a chalkboard which can typically be found in front of a Beiz to advertise its daily specials – Beiz being the Swiss-German name for a semi-public premises that is something between a pub and a restaurant. In the present instance, the poster announces a play by the Theatergesellschaft Sempach, the local theater company in a small Swiss village. As the upper part of the poster suggests, it is common for these boards to be sponsored by brands from Switzerland and abroad served in the Beiz. In this case, the logotype of the popular Swiss soft drink Rivella is substituted by the name of the theater group. The name of the play in sans-serif letters, Anne Bäbi im Säli, adopts the irregular spacings of carelessly applied leterset type. All other information is handwritten in sloppy letters, as if the writer had been in a rush to write a menu just before lunch was due to be served (see Figure 6).

Rivella, a soft drink based on milk serum, was developed in the 1950s in a small village near Zurich. The product became very popular, began to be sold in other European countries, and found itself promoted to the status of a national beverage in Switzerland. As a Swiss alternative to other, mostly international, soft drink brands, Rivella represents Swissness as a lifestyle (Imhof 2012, p. 45), for instance by using Swiss-German dialect for its advertising campaigns (see Figure 7).

Brechbühl developed a playful concept to promote the theatrical performances by linking the rural aesthetic of the chalkboard with the local focus of the event and the venue (“Buureschopf Wirtschaft Zur
Towards a Glocal exchange

The analysis of these three posters reveals how conscious contemporary Swiss graphic designers engage with the country’s visual culture. The images used for their posters – a dining table, a sausage and a chalkboard – evoke collective memories and create identity. On closer inspection, the posters question this identity by overlaying traditions with egalitarianism, by highlighting their archaic dimension, or by pointing out the impact of national economies. The posters thus preserve the heritage of visual culture from Switzerland, but at the same time critically assess Swiss traditions and create new images of Switzerland in a “designerly” way.

Concerning its content and intention, the posters don’t advertise for Swiss goods or services, but utilize Swiss cultural characteristics to promote Swiss design abroad, an online design shop or a play by a local theater company. This exemplifies, on the one hand, how Swissness expands its meaning beyond common national stereotypes and market-oriented patriotism. On the other hand, the study indicates a trend towards *glocalization* – meaning the blurring boundaries between the local and the global – in contemporary Swiss graphic design. As argued by Fallan and Lees-Maffei (2016), design has for centuries been simultaneously local, regional, global and national. Globalization and national identity should therefore not be perceived as binary terms, but rather as inseparably intertwined processes. Coming back to the exhibition *Stealing Swiss* at which the three selected posters were presented, the combination of a national scope and global exchange is central to the concept developed by the curators and graphic designers Erich Brechbühl and Noel Leu. Located in Seoul and designed as a traveling exhibition, *Stealing Swiss* supports the dissemination of alternative images of Swiss national identity abroad.

Bearing in mind that national stereotypes are a well-known phenomenon in Swiss politics – particularly on posters and flyers of the right-wing populist political party “Schweizerische Volkspartei” (Swiss People’s Party), where myths are strategically turned into stereotypes for use in both foreign and internal affairs (Tanner 1998, p. 27) (see Figure 8) – exhibitions like *Stealing Swiss* indicate a growing relevance for future research in terms of Swiss foreign policy.

References


Leslie Katherine Kennedy  
Dispersing  
Basel School of Design 1968

The international Weiterbildungsklasse für Grafik,  
which was conceived to expand their endeavors to accept students from outside Switzerland.

Thus, the modernist pedagogic syllabi implemented within the Basel School of Design’s Graphikfachklasse (vocational graphic design program) was extended to include a postgraduate program; the Weiterbildungsklasse, which was conceived to attract international students.

From its inception, the reputation of the Weiterbildungsklasse spread rapidly, making Basel a mecca for young multinational designers and design educators (from e.g., Asia, North and
South America), who would then, geographically disperse Swiss design methodology and tenets – through both practice and teaching – around the world.

Albeit, much of the Weiterbildungsklasse’s syllabi leaned heavily on the school’s traditional design syllabi, the innovations of Emil Ruder, Armin Hofmann, Wolfgang Weingart, et al, still underpins the school’s renown.

While the Basel approach to modern typography has been extensively documented, the flip-side of the school’s curriculum, those exercises used to create images by training exacting brush and drawing skills, has long deserved the same degree of attention. These acquired techniques would become an embodied resource for form-based outcomes (e.g. symbols, logos, pictograms).

This presentation’s perspective will be to contribute findings from recent research – e.g. transcribed interviews, collected syllabi and curriculum – to contemporary discourses considering how the Basel Weiterbildungsklasse would influence the geographic dispersion of the concept "Swiss Style".

Keywords
Basel School of Design, Weiterbildungsklasse für Grafik, Syllabi, Methodology, Geographic dispersion

Biographical note
Leslie Kennedy, a former student of the Weiterbildungsklasse at Basel School of Design, followed by years as an Art Director, joined the Master’s program at the FHNW in Basel, where she was granted a MA for her thesis concerning the didactic and methodological approaches of the Basel School of Design.

PAPER #3

Walter Ballmer:
Designing networks between Switzerland and Italy

Davide Fornari / SUPSI University of Applied Sciences and Arts of Southern Switzerland / Lugano / Switzerland

Abstract
Walter Ballmer was one of the most prolific Swiss graphic designers active in Milan, where he lived and worked for almost his entire career after being trained in Basle. Until now Ballmer’s work has been neglected although it should be considered as a pivotal connection between Swiss and Italian graphic design for its capacity to build on transnational networks with fellow colleagues and clients at studio Boggeri (where he started his career) and Olivetti, magazines, and professional associations.

Ballmer, an AGI member and recipient of Compasso d’Oro award, was the designer behind many internationally acclaimed brands (e.g. Roche, Valentino, Olivetti), and was able to develop an entrepreneurial ‘studio’ approach, which was a successful strategy in such a difficult market as post-boom Italy.

Oral interviews and archival research made available unpublished materials that enlighten the role and specificity of Ballmer in the Italian context.

Keywords
Walter Ballmer, Italian design, Graphic design history, Olivetti, AGI

Introduction and methodology
This paper reports on a case study from a larger research project on the history of Swiss graphic design: “Swiss Graphic Design and Typography Revisited”, financed by the Swiss National Science Foundation in the framework of
The research project is in the beginning of its first of three years. While the Ballmer archives are not available due to a family decision, working materials have been found in clients’ archives and his assistants’ archives. The Studio Walter Ballmer's career constitutes a case study whose aim is to examine the visual artefacts produced by Ballmer during his stay in Italy as an employee of Studio Boggeri (1947–1955), art director at Olivetti (1956–1970) and principal designer of Unidesign (1971–1990s), using a historical approach mixed with ethnomethodology (deep immersion, informed interviews) as opposed to ethnographic methods (Pollner, Emerson 2001). The research has begun with the collection of archival material in Italy and Switzerland. The following step is to conduct a series of around 15 semi-structured interviews with contemporary witnesses (Ballmer’s family and assistants, Giorgio Lucini, Bruno Monguzzi, Felice Nava, Urs Glaser, Anna Monika Jost and Fulvio Ronchi). The resultant data will be brought together and analyzed according to a framework defined in the current literature on the history of graphic design in Italy and Switzerland. Unidesign archives are currently not available to the public. Materials originating from Unidesign can be found with clients' archives such as Archivio Storico Olivetti (Ivrea), Valentino (Rome) and others. The collection and close reading of these materials aims at reconstructing the archive as an atlas where the 'memory of the projects' and their networks are the focal point of research (Gunetti 2009). The focus is not Walter Ballmer or Unidesign per se, but rather the microcosm of a graphic design studio established by a Swiss graphic designer abroad and the networks and relationships that it was able to create.

**Historical context**

Walter Ballmer was one of the most prolific Swiss graphic designers working in Italy, where he lived for almost his entire career after being trained in Basle. “The arrival of Swiss designers in Italy, on the Zurich-Milan axis, has often been seen in terms of a successful marriage between a kind of functional and calculated Swiss prose and an Italian *improviso* poetic vein” (Vinti 2013, p. 28). Yet, according to Richard Hollis, “in Italy it was difficult to separate what was Italian from what was imported from neighbouring Switzerland” (Hollis 2006, p. 255). The osmosis between Swiss and Italian designers worked so well that “today […] it would scarcely come into anyone’s head to call personalities like Max Huber or Walter Ballmer Swiss designers” (Höger 2007, p. 42). But as Vinti puts it: “the picture becomes far more complex and nuanced” (Vinti 2013, p. 28), while the current opinion seems to be the result of simplifications or prejudices regarding the Swiss and Italian graphic traditions (Fioravanti, Passarelli, Sfigliotti 1997; Baroni, Vitta 2003; Georgi, Minetti 2011; Camuffo, Piazza, Vinti 2012; Lees-Maffe, Fallan 2014).

Walter Ballmer (Liestal 1923 – Milan 2011), after studying in Basle at the Kunstmuseum Basle (“School of arts and crafts”) (1940–1944), moved to Milan to work for Studio Boggeri in 1946, where he refined his technical and cultural skills (Monguzzi 1981, pp. 57, 60, 62-67, 70; Waibl 1988, pp. 134-135; Odermatt 1998, p. 14). In 1956 Adriano Olivetti hired him with an exclusive contract for the advertising office. Ballmer redesigned the Olivetti logo (1970), in the framework of a cultural and corporate policy that Vinti called ‘industrial style’; a corporate identity built within the company instead of being outsourced to other professionals (Vinti 2007). One can perceive the Swiss roots of Ballmer’s advertising campaigns for Olivetti, based on the sole use of typography, yet they are just early examples of a ‘manner’ that was spreading, not necessarily only through Swiss graphic designers in Italy (Piazza 2012, p. 22). In 1971, Ballmer founded his own office in Milan, Unidesign: the clients were some of the most significant Italian brands, such as Nava or Valentino Garavani, whose logos Ballmer designed (Ballmer 2003). In 1971, he became a member of AGI (Bos, Bos 2008), after winning the Compasso d’Oro award in 1954 and best Swiss poster award in 1961.

The work of Walter Ballmer has been mostly neglected thus far, while his work as art director at Olivetti and as a founding member of Unidesign was pivotal in connecting the Swiss and Italian graphic design scenes (Ballmer 1981; Monguzzi 1981, pp. 57, 60, 62-67, 70; Waibl 1988, pp. 134-135; Odermatt 1998, p. 14; Ballmer 2003; Piazza 2012, p. 22; Lzicar, Fornari 2016). Ballmer was the designer behind many internationally acclaimed brands (e.g. Roche, Valentino, Olivetti) and was able to develop an entrepreneurial “studio” approach, that is, being recognized for technical skills or a specific task – in his case, logo design – which was a successful strategy in such a difficult market as post-boom Italy (Vinti 2007). His oeuvre is of particular interest because of his connections to fellow designers (through his participation as a member to AGI and ADI – Associazione per il Disegno Industriale).

**Intermediate results**

The research project is in the beginning of its first of three years. While the Ballmer archives are not available due to a family decision, working materials have been found in clients’ archives and his assistants’ archives. The Studio
Boggeri archives have not yet been investigated. A number of institutions and people remain to be interviewed, yet an already consistent amount of unpublished material has emerged, shedding light on Ballmer’s practice.

The Archivio Storico Olivetti in Ivrea contains most of the material belonging to the Olivetti Company from 1908 to the end of the 20th century. While neatly organized, it is often difficult to track graphic design artifacts as they were seldom credited to the designers due to a company policy which did not allow in-house designers to sign their works. Nevertheless, a large number of works by Ballmer has highlighted his intensive practice as one of the four art directors active at the same time at Olivetti during the years 1956–1970. The analysis of Graphis annuals from that period have confirmed the fact that all printed material from Olivetti was signed and published as ‘Olivetti Ufficio Pubblicità’ (“Advertising Office”).

In 1970 Ballmer started his own office, and kept working for Olivetti as a consultant, devoting nearly two years to the redesign of the Olivetti logotype. This task was crucial in his career and influenced his future commission-givers. The Olivetti logotype changed many times since 1908, with different version designed by Xanti Schawinsky, Marcello Nizzoli, and Giovanni Pintori. Ballmer’s contribution coincided with the peak of the company’s global expansion, and the need for a corporate identity for world markets. But prior to this task, Ballmer was responsible for developing commercial campaigns for typing machines, calculators, and especially the line of Olivetti office furniture called Synthesis. The catalogues and leaflets for Synthesis show proof of the self-promotion and networking capacity of Ballmer: in many of the interiors showcasing the furniture he included abstract paintings and silk-screenings from his artistic practice. Like many other Swiss and Italian designers, Ballmer paired his design career with less known research in visual arts, typically in the so called Konkrete Kunst (“Concrete art”), thus connecting with the likes of Franco Grignani, Tomás Maldonado, Bruno Munari, and especially Max Huber, Richard Paul Lohse, and Carlo Vivarelli.

Investigation at the Olivetti archives also proved the strong connections between Olivetti and Wertheim, a department store in Spain which had a close relationship with the Italian company through members of the board of advisors and joint marketing activities since the 1930s. Ballmer designed an entire corporate identity system for them.

Archival research at maison Valentino in Rome was only partially successful: the company has been sold four times since its establishment, and while the archives are perfectly organized and digitized, it was only possible to highlight the precise year of the activity of Ballmer and infer its reasons. According to the public relations manager at Valentino, until the 1970s maison Valentino changed logotype and brand every other season. The name was more recognizable than the brand itself. The market had been thus far limited to Italy, while from the beginning of the 1970s onwards Valentino’s international fame boomed. Thus, Giancarlo Giammetti, manager of maison Valentino, found in Ballmer a ‘technician’ able to build a brand: a capital ‘v’ set in Bodoni encapsulated in an elliptical shape, which was registered as a trademark and still used nowadays with few corrections. Even though the logotype...
has changed over the years, Ballmer’s brand for Valentino has been kept and used on labels, advertising campaigns, and branded fabrics.

The interviews with former assistants of Ballmer have been extremely interesting, as they have conveyed a fresher insight into the life and practice of a graphic designer mostly unknown beyond the usual biographical profiles compiled for catalogues and annuals. Anna Monika Jost (Klosters-Serneus 1944) and Fulvio Ronchi (Milan 1950) were two of Ballmer’s assistants at Olivetti in different periods. They never met or knew of each other, yet they reported very similar experiences while working at Olivetti under Ballmer as art director.

Anna Monika Jost arrived fresh from the foundation course at Zurich School of Arts and Crafts to Milan and started working as a freelance for Ballmer at the Olivetti offices. Her job position was never official, and for this reason oral history is a key in this case study: the Olivetti archives do not show proof of her work for the company as she was paid by the hour as a consultant in the years 1966–1967. Fulvio Ronchi was employed to help Ballmer in the redesign of the Olivetti logotype in 1969–1970. He defined the practice of Ballmer as extremely calculated, based on geometrical and mathematical rules, and as a whole very slow: Ballmer needed to motivate every single choice taken in the design of a poster or a page structure. The design of a poster could take up to two years. Ronchi also reported on the wide use of photographers, model makers, printers, and fine printers in Northern Italy, which points to the considerable financial means available at the time for Olivetti art directors.

Magazines were crucial in the spreading of visual works by Ballmer and Unidesign: Rassegna, Neue Grafik and Pagina hosted projects by Ballmer (Anceschi 1981; Müller 2014). While the reasons and impact for these publications are to be clarified, the connections between Ballmer, Vivarelli and Huber date back to their work at Studio Boggeri in the 1940s, which forged an alliance that remains to be investigated, together with Ballmer’s admission to the Alliance Graphique Internationale in 1971.

The draft of a book also emerged from archives: the dummy of a catalogue of Ballmer’s work, designed by himself in the manner of many other monographic catalogues devoted to Swiss graphic designers and concrete artists, typically published by ABC Verlag in Zurich or similar publishers in multilingual editions. The book collects images from the works Ballmer considered most representative of his œuvre. It has a double cover and layout: graphic design on one side, visual arts on the other. In the colophon, next to placeholder texts are the coats of arms of the two cantons of Basle (Basel-Stadt and Basel-Land), which testify to Ballmer’s wish for public acclaim, as the use of coats of arms would suggest financial backing or at least an endorsement from cantonal authorities. Such a book was never published, yet it witnesses his constant desire to connect two different worlds: Switzerland, where he was born and educated according to the principles of what was later known as Basel School of Design, and Italy, where his career prospered and he spent all his life.

Conclusions

A pattern emerges from the analysis of material belonging to several Ballmer’s clients: from the initial work on advertising campaigns, Ballmer and Unidesign slowly switched across the years to a focus on corporate identities for then-emerging global markets. Olivetti, Wertheim, Valentino, and many more were at the time expanding their operations and needed highly visible and recognizable brands and corporate visual strategies.

Thus, Walter Ballmer was able to become a sort of technician of graphic design, focusing his expertise on logo design and acquiring clients by word of mouth: he was hired from Studio Boggeri to Olivetti; the work at Olivetti helped him connect with Wertheim and Valentino; a similar brief was the base for his work for Colmar.

His double practice as graphic designer and visual artist was also a way to remain connected to his Swiss roots: concrete art was a common practice for both Swiss and Italian artist (Munari 1974), and Ballmer was constantly aiming at this double exposure, be it through visual arts or through his affiliation to professional associations, such as ADI and AGI.

References

PAPER #4

The diffusion of the Swiss Style in America:
Jacqueline Casey and the MIT

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Abstract

The typographic style that developed in Switzerland post-World War II quickly gained recognition and became known as the International Typographic Style. In America, this style was embraced in corporate and institutional graphics during the late 1950s and throughout the 60s, and has remained a significant inspiration and aspect in the design field. The Massachusetts Insti-
Institute of Technology (MIT) was one of the early institutions that demonstrated influences of the movement in the work produced by its graphic design office. Spearheading its involvement was American graphic designer Jacqueline Casey (1927–1992). In the mid-1950s, Casey recognized the exceptional expertise and accomplishment of Swiss graphic designers and established a connection with Therese Moll, who introduced Swiss typography, grids, and modular systems to the MIT office.

**Keywords**
Swiss Style, Diffusion, America, MIT, 1950s

**Introduction and context**
US-based graphic designer Jacqueline Casey (1927–92) is celebrated for her poster design work at MIT, in a career that spanned 30 years. She represents a generation of US designers who embraced the influential European and Swiss graphic movements of the 1950s and 60s, which we now recognize as International Typographic Style. Her work gracefully combines these influences with an innovative and distinctive approach. Casey is one of the few women practitioners from this period whose work received recognition in the official archives of graphic design history.

After the Second World War, a new leading design style was developed and perfected in Switzerland, more specifically in Zurich and Basel. The Swiss Style emphasizes objectivity, clarity, order, and is characterized by the use of systematic grids, sans serif typefaces, and asymmetric layouts. It soon outgrew its native boundaries and spread in America through different streams: publications, exhibitions, professional associations, teaching, and migration of designers. Moving to the United States in 1935, the Swiss designer Herbert Matter can be seen as a forerunner in this campaign. Around the 1950’s and 1960’s, we can observe many links and channels of dissemination for Swiss Style in America. Here are a few examples: Joseph Müller-Brockmann got notable attention by having his work published in American magazines and by organizing a touring exhibition. Armin Hoffmann became a visiting lecturer at Yale University, a bastion for modernism. Paul Rand cultivated friendships with Swiss designers through the Alliance Graphique Internationale group. Karl Gerstner published Die Neue Graphik and exhibited the work of his agency Gestner+Kutter in New York. Swiss expatriate designers working at Geigy in New York continued to work in the same manner.

Considering the American design context where many styles and attitudes evolved simultaneously, Swiss Style came to be embraced especially by corporate and institutional graphics. In fact, the development of American corporate design in the mid-60s is closely connected to the emergence of the International Typographic Style. With it, we saw the rise of design groups such as Chermayeff & Geismar or Unimark specializing in the creation of identities and annual reports for multinational companies. In this male dominated arena, it is quite interesting to observe the influence of Swiss Style in the work produced by a woman, Jacqueline Casey, at the Massachusetts Institute of Technology (MIT).

**Foundation of MIT office of publication**
Shortly after taking a new position at MIT, John Mattill, journalism graduate, founded the MIT Office of Publications. He had realized that MIT publications – anything from promotions, student recruitment, fundraising, catalogues, and posters – would be printed without consistency in their look and voice. Sensitive to language from his journalism studies he also understood the value of design as he had taken a course at the University of Iowa with the owner of private press Prairie Press, Carroll Coleman, who published elegant little books. Mattill thus came to appreciate the quality of typography and how graphic art works. Looking to hire a designer, he followed the recommendation of a teacher in the department of architecture who also taught at Massachusetts College of Art and Design, and hired Muriel Cooper in 1952, who was one of the first designers ever hired by the university. In 1955, Cooper recruited graphic designer and fellow MassArt alumna Jacqueline Casey. Ralph Coburn, an MIT architecture student, and Dietmar Winkler, a recent German immigrant, soon followed. They too would be influential in bringing the modern look to MIT.

In its early years, there was no obligation to use the MIT Office of Publications if one wanted to print something, but it was an available service. At first the office was only involved in the design of summer session materials, but soon the high quality of its work was acknowledged by the different faculties and offices. Without ever
having a style book, the MIT Office of Publications created a modern and consistent identity devoted to excellence. Its look was restrained, functional, elegant, and intelligent – qualities shared by an important movement at the time, the International Typographic Style.

Acknowledgement of Swiss Style

The development of MIT’s graphic identity was undoubtedly shaped by a practice of inviting visiting European designers to work on special programs for a few months every year. This exercise began in 1958, just as Cooper left the Office for a Fulbright Scholarship in Milan. As Mattill recalled: “I think it is probably Jackie more than anyone else who recognized that Swiss designers were the people with an exceptional expertise and accomplishment in graphic design and typography. Looking at Swiss publications, they were all beautifully designed, very restrained, very elegant, and very technically correct. Their typography reflected an intelligence and an understanding of formal principles. I can’t remember the details of how it worked out but we got the name of a Swiss designer; Karl Gerstner” (John Mattill, in discussion with the author, April 2, 2015). For her part, Casey has acknowledged that “the people who had the most influence on me were Karl Gerstner and Kurt Wirth” (Casey & Winkler, 1992, p. 1). Swiss designers were clearly held in high regard, and a contact was made with Karl Gerstner who recommended Therese Moll as a visiting designer. With a training in modular systems, Moll’s utilization of proportions in design were soon the core of MIT’s image. She also introduced the office to European typography and laid out the groundwork that is still being followed today (Casey & Winkler, 1992, p. 17).

Therese Moll had studied at the Basel School of Design in Switzerland, then worked in the best studios of her day: Studio Boggeri in Milan, followed by Karl Gerstner and Geigy (Hollis, 2006, p. 163). She was a talented designer whose knowledge was gained through the best teachers and designers of her time. Unfortunately, her untimely death may have left her fade into oblivion. She undoubtedly deserves more recognition, as she was not only an outstanding designer who merits being considered equal to the Swiss masters of her time, but also had a direct hand in the dissemination of Swiss typography and design across the US.

Casey’s design approach

As Casey had received a Certificate in Fashion and Illustration and a Bachelor of Fine Arts degree from the Massachusetts College of Arts, her education in graphic design really took place at MIT, working with Cooper and with visiting designers. And since she had no formal graphic design education, she developed her own way of working. Contrary to how most designers work, which involves making many variations and compositions for one assignment and then selecting the best one, she would only work on one artwork: “If you would have seen Jackie’s desk, you would have wondered where she did her work. There was nothing on the desk, maybe some posters or exhibition catalogs; basically a white desk. She would hang her design up. She would get up, do something and come back and sit down and stare. She would work on the same artwork until she was satisfied with it. It was an optical process. It was very clever as this process made her always conscious of the environment in which the poster would be displayed” (Dietmar Winkler, in discussion with the author, March 31, 2015). Furthermore, Casey always had two things in mind when designing a poster: the audience and the artist or subject concerned. Her posters engage the intellect.
of the audience with a striking or puzzling image. She gracefully created relationships between words, images, and colors in a clever and minimalist manner. Black backgrounds were often favored as they provide a greater impact from the environment in which the posters would be displayed. Research was central to Casey’s designs: “The most constant part of my approach to design has always been the search for information. It starts out with gathering material: an interview with the client, taking notes and establishing the client’s objectives, a library visit, a search through the library stacks; determining the purpose of the communication, the audience, looking for any hint of special significance to make a more accurate and vital statement. Anything to represent the intelligence and quality which drives MIT” (Casey & Winkler, 1992, p. 1). What is more, she was resourceful – able to deliver high-quality artwork despite often working with limited budgets, and using office supplies such as sticky dots in compositions. She also used the IBM Selectric Composer, which used typewriter balls, with each ball providing a different typeface. This would reduce costs by avoiding outsourcing the work to a professional typesetter. When budgets allowed, Helvetica proved to be one of the typefaces she favored, asking, “Was there ever a more satisfying typeface?” (Casey & Winkler, 1992, p. 27)

A woman practitioner

When discussing Jacqueline Casey, it is difficult to disregard certain feminist matter. Her work was featured in 1988 in Women in Design: A Contemporary View, and the introduction asserts: “Many women in the design field want to be acknowledged for the ideas and work they produce, as opposed to being singled out for the fact that they happen to be women” (McQuiston, 1988, p. 6). This was Casey’s stance. However, the general context of graphic design in the US, in which she evolved, made her one of the few women in the field to earn an international reputation. She participated in competitions and gained good visibility in magazines, books and exhibitions. The MIT Office of Publications could have counted more women than men at some point – Muriel Cooper, Jacqueline Casey, Therese Moll, Elisabeth Ferry, Nancy Cahners – an unusual situation in those days. Some fellow workers recalled an office full of humor and liveliness where Casey’s clear laugh would fill the room. Cooper may have acted as a leader in creating this particular environment: “She was single. She was very gutsy. She had so much energy. Where Muriel was, things moved. She made everybody respond to her energy. She was a woman who understood power at a time where most were less outspoken” (Dietmar Winkler, in discussion with the author, March 31, 2015). Casey may not have been as straightforward as Cooper; she was aware of the institution’s limitations. Despite the progressive attitude at MIT, the lack of women in higher positions was evident, given that most were secretaries. She attended regular women’s meetings at MIT in which discussions included the position of women at the institution. Feminism therefore seems to have been a concern for Casey, as well as a number of social and progressive causes. She collected anti-Vietnam War posters, which were later donated to Monserrat College of Art.

Some have suggested that the significant positions gained by Casey and her fellow female designer colleagues was due to the little money the jobs offered. Men went to higher paid graphic occupations, for example, annual reports were the new way to make big money. A new situation emerging at the time was noted by Henry Kay Henrion. According to him, the 1950s saw the poster as the most desirable medium, and thus most designers were poster designers. Henrion states: “It was the most glamorous, most seen and discussed medium in the wide spectrum of graphic design. Since then the poster has declined and many other facets of visual communica-
tion […] have become equally and often more important” (Henrion, 1983, p. 8). Did a change in the profession and type of project create opportunities for women? Perhaps, but it would require larger and further discussion than this text allows.

Legacy

A long struggle with cancer affected the course of Casey’s career, and in 1989 she became a visiting design scholar at the MIT Media Laboratory, until her death in 1992 (“Designer Jacqueline Casey Dies at 65,” 1992). Few institutions achieved the excellence of MIT’s identity and graphic materials. Casey should be remembered as one of its most devoted innovators and artisans. Furthermore, her work stands as a noteworthy example in the development of the International Typographic Style in America.
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Biographical note
Louise Paradis is an art director based in Los Angeles. She received a BA in graphic design from UQAM, Canada, and an MA in Art Direction from ECAL, Switzerland. Paradis is lead researcher and co-author of 30 Years of Swiss Typographic Discourse in the Typografische Monatsblätter published by Lars Müller.
The inflow and adaptation of Russian Constructivism on the Korean typographic culture in the 1920s–1930s

Sun-A Jeong / Min-Soo Kim / Seoul National University / Seoul / Korea

Abstract
The aim of this study is researching the interaction between Russian constructivist graphic image and the East Asian typography, particularly Korean typography which has different features, compared to Western letters. For this purpose, graphic design that appeared in media such as newspapers, magazines and books during the 1920-30s in Korea is investigated. In conclusion, Russian constructivist images in Korea were composed with traditional calligraphy and created distinctive visual culture because of the political and economic colonial condition at that time, while constructivist images in Russia and Europe were used mainly with sanserif typography that considered to have international characteristic.

Keywords
Constructivism, Korean typography, Korean design history, sanserif typography, modernity

Introduction
Russian Constructivism was active around the time of the 1917 Bolshevist Revolution. Constructivism represented the "new age" brought about by the Bolshevist revolution. This style’s character was revolutionary, radical, and connected to other avant-garde European artistic movements that sought experimentation and innovation, including Dadaism, Futurism, and De Stijl. Meanwhile, the world was undergoing the reorganization of political structures after WW1. “Modernization” was also pursued in Korea, a colony of the Japanese Empire, as it had the will needed by weaker countries to survive independently among world powers. Consequently, different ideologies clashed over the nation’s direction. In this environment, the “Western” and “Modem” style of Constructivism entered to the colonized Korea and other parts of East Asia through magazines, posters, and book covers where the socialist ideas were depicted.

This study examines how the socialist ideology and style responded and adapted to Korean typography, which is distinctly different from the Western typography. Through this process, I expect to reveal a specific cultural amalgamation process of how a certain type of image can be adapted to the typographic characteristics and societal conditions of a different culture.

Russian Constructivism and typography
The stylistic characteristics of Constructivist graphic work by designers such as El Lissitzky and Rodchenko can be summarized as dynamism through asymmetry. Dynamism was revealed in plane graphics, and was the trait most valued by Tatlin, the de-facto leader of Productivism, when constructing the Monument to the Third International in 1919 as the head of the artistic college of the IZO(section of visual arts) of the Narkompros(People's Commissariat for Education). Led by IZO, Constructivism excluded decoration and showed asymmetrical dynamism, and came to be accepted as the visual style embodying the ideology of Russia's revolutionary government, carrying out the political propaganda and demagogy of government agencies. Constructivism faithfully signified socialism.

The sanserif typestyle first appeared in English type specimens in the 19th century. It represented a font that was optimized for the printing machine, and ended the tradition of the black letter type, representing the influence of writing tools. Robin Kinross, in his Modern typography: an essay in critical history, describes the acceptance of the sanserif typestyle in the early 20th century, saying, "The preference for sanserif is directly related to the typestyle befitting the modern age of machines." Therefore, in Constructivist typography, the meaning behind
utilizing the sanserif typestyle goes beyond delivering messages: it can be used as an image representing the new production methods and its efficacies of the that age – the age of machines – that internalized the revolutionary spirit emphasizing everyday life and production, while declaring a severance from the past.

Constructivist characteristics of asymmetrical composition, geometric elements, strong color contrasts, and color layers made for a mutually responsive relationship with the sanserif typeface, because the sanserif typeface excluded the decorative effects of serif, and in the space of a layer, the strokes functioned as geometric shapes. Moreover, the neatly organized outlines of the sanserif typeface, when organized with other geometric elements in the Constructivist layer, are similar in form and therefore mutually interact within one space rather than separating into texts or images, making it easier to display new effects.

Figure 1 is an advertising poster of the Leningrad State Press designed by Rodchenko. The text differently arranged, it did not fit in square box as general typography used to do. Letters were not simply for reading nor fixed in form within a square box; they were “images” just like other formative elements such as lines and layers, enabling their playful manipulation. Moreover, the fact that the reading direction of letters is free in many Constructivist images supports the notion that texts were utilized as images.

The introduction of Constructivism in Korea in the 1920s and 1930s

It is difficult to ascertain the exact routes through which Constructivism was introduced in Korea. Some possibilities include the 1921 visit to Japan by Constructivist artist Bubnova, leading to the reception of Russian Constructivism and its influence on an international student in Japan during this period. And Koreans in Russia, having immigrated to the Maritime Province in the 19th century, visited Korea in the 1920s for the purpose of cultural exchange. Based on such evidence, it seems natural that Constructivism was introduced to the Korean Peninsula. Yong-chul Kim (2010), who studied Japan’s modern graphic design and acceptance of the Russian avant-garde phenomenon in Japan and Korea, noted the influence of Japanese Constructivism on Korean magazine covers and title designs of the 1920s and 30s such as Joseon Munye (1925) and Sacho (1927), deeming them an “effect of the acceptance of Russian avant-garde art in Japan.” Moreover, researcher Min-soo Kim, through his work Yi Sang Pyeongjeon (2012), compared the morphology of the covers of Joseongwa Geonchuk designed by Lee Sang (generally known as a literary figure) and ‘Beat the Whites with the Red Wedge!’ (1919) designed by Russian Constructivist designer El Lisstzky, and discussed the influence exchanged between these. (Figure 2)

Among the covers of the magazines published in the 1920s, it can be seen that a new visual style was introduced in Korea and to the public, from their resemblance with the <MAVO> – a journal of a Japanese constructivist organization. In the 1930s, avant-garde activities in Japan had been oppressed, however in Korea, prints in constructivist style became more common compared to 1920s(Figure 3). It is because the colonial rule changed to “Cultural Governance”, press agencies rapidly increased. In other words, increasing of daily information led increasing contacts with the styles of information-constructivist style.

In Korea and Japan, Russian Constructivism images carried out the functions of revolutionizing and inspiring the public by urging the revolution of the proletariat class and criticism of capitalism. Like the Bolshevik Revolution, it carried the avant-garde spirit of moving forward into a new age by destroying the old. Image was aligned with production, such as labor, industry, and machinery; with classes such as the bourgeoisie and the proletariat; and with innovation in terms of colonies such as independence and autonomous survival. Magazines expressing such spirit and serving such purposes revealed themselves to the public through the visual styles of
The inflow and adaptation

Constructivism, characterized by asymmetric composition, photomontages of humans, and the placement of geometric shapes.

Fig. 3: Magazines in Korea in the 1930s
Fig. 4: 1927, Japanese magazine Munye Jeonseon; 1933, Korean magazine Daejung

The characteristics of Constructivist images adapted in Korea

In the beginning of the 20th century, the sanserif typeface prompted discussions on both sanserif typeface’s reading effectiveness and its being “national/international” in its inevitability in containing regional cultures. Serif displays the individuality of text. This is because text reflects the influence of the writer’s physique (overall posture, pressure from the hand, among other factors), and the influence of the writing tool utilized in a particular culture. Jan Tschichold, who considered the “new typography” to be under the influence of Russian avant-garde art, especially that of El Lissitzky, explained “elemental typography” in Typografische mitteilungen, a German typography journal, asserting that the “purpose of the new typography lies in communication,” and defining typography as a method of communicating what is to be shown (the effectiveness of reading).

Moreover, “the typeface with strong ethnicity is not a typeface that is elementally designed, (which the new typography aims for) and that limits the potential for international communication.” – it means the sanserif typeface excludes the potential for the influence of a certain stereotype from ethnic character, facilitating and achieving international and effective communication. As seen above, the Constructionist visual style was recognized in the West through the need of the times for visual unity and international communication; however, in the non-alphabetic culture of Korea, the problem of “image and typography” was recognized differently than in the West.

While the Constructivist style book covers and posters for advertising and incitement purposes in Russia chose sanserif typeface that excluded the influence of the writing tool, in Korea, were preferred the typeface that appeared to be heavily influenced by brushstrokes and emotions. Even if the typography was geometrically refined on paper for unity with images, the swooping-up marks of Asian characters, which are regarded anatomically as the serif of the alphabet, display their presence undeniably as reading elements, rather than being excluded.

Two magazine covers in Figure 4 clearly display the differences in the typographies of western Constructivists and cultures that utilize Chinese characters. Both covers utilize traditional Constructivist visual styles, including strong colour contrasts, colourful layers, photomontages, overprinting effects, and dynamic perspective compositions. Compared to such visually organized images, the typography of the titles strongly displays the characteristics of brush writing cultures. Traits such as brush-up marks resulting from brush pressure and dots resembling water droplets are characteristics of Asian calligraphy, and unobservable in the western alphabet. The brush-up marks and horizontal strokes in the title of Daejung seem rather linearly refined; however, they are clearly different from the sanserif alphabet, which is extremely geometric in form. In Russia, the outline of the text was organized and typography carried out through diagonal ordering, or through controlling the widths and lengths of strokes; however, in Korea, as seen on the cover of Daejung, each of the characters is uplifted at the top-right corner, displaying dynamicty internally in the text. This displays the influence of vertical writing in Asian calligraphy. In summary, while the Constructivist elements and typography were dealt with as one image on one layer in Russia, the Korean example displays clear distinctions as image and text. Moreover, while the western alphabet (Cyrillic script in this paper) is unified stylistically with Constructivist elements, in the Asian brush writing cultures of China and Korea, letters are displayed ethnicity; even if they are refined in tandem with geometric elements, they are decoratively organized regardless of the natural structure of the text, and tend to be less standardized compared to the unified sensation of the sanserif alphabet. Figure 5 shows the difference between the mainland Russian Constructivist image and Korean
As such, the stylistic divide of elemental images and typography apparent in the Korean Constructivist designs is due to 1) the difference between text systems from an expressive standpoint, and 2) the age-specific background of modernization and nationalism. Chinese and Korean characters are ideograms, and to express one letter, many strokes are needed in one rectangular frame. This text system is entirely different from the grapheme alphabet, which is organized in a straight line in one direction. In the case of the alphabet, the organizing of graphemes for the communication is done only from left to right; however, in Chinese characters, the notion of top and bottom exists within one character. From the perspective of reading the text, character recognition may be performed instantaneously, without observing the sides and corners, with sufficient familiarity with the text; however, from the perspective of making and aligning the text forms, the number of strokes, and their gaps and overlaps act as complicated restrictions for readability. Compared to the alphabet, which has a relatively simple form of graphemes to distinguish sound, Chinese characters are ideograms, and elements such as dots and strokes, distinguishing sound and meaning, are more detailed.

Typographically, brush-up marks and dots, akin to the serif of the alphabet, cannot be overlooked in the geometric refining of the strokes, as they are directly related to the meaning and sound of the text. From the perspective of familiarity with the western alphabet, while the form of brush-ups and brushstrokes are functional in nature, they could be seen as decorative and expressive; therefore, by embracing such small reading elements, it is difficult to attain the “elemental typography (as opposed to typeface with strong ethnicity)” asserted by Jan Tschichold, which would be the geometric product of eliminating such elements.

When various avant-garde movements including Constructivism were active, unlike the West’s focus on this “utopian” ideological internationalization, East Asia faced the dual challenge of counter to western imperialism and dealing with the issue of self-identity. In East Asian nations under the rule of colonial powers, socialist art movements strived for modern ideals through resisting the colonial powers and endeavoring for national independence. The “meaning” of nationalism, striving for the internal unity of the people and the nation, was much more important than the effectiveness of typography or “technical” unity in the layer on paper. The subjects of persuasion were the “Korean compatriots,” and the style that allowed for the visualization of the oneness of the Koren race enabled more effective communication, as opposed to the sanserif typeface, which purposely excluded ethnicity.

**Conclusion**

This paper examined how Russian Constructivism, carrying the spirit of the age, interacted with the typography of Chinese character cultures such as that of Korea. The Constructivist graphic style is characterized by the imbalanced dynamism, along with the asymmetrical composition, the geometric elements, the colourful layers, the photomontages, and the overprinting. Based on the above criteria, this paper examined the Korean graphic design that seemed to have been significantly influenced by the Constructivism as a socialist visual style. The typography utilized along with Constructivist images in the East Asian nations such as Korea and Japan showed a strong ethnic color, and was perceived as very different emotion compared to the sanserif-focused typography of mainland Russia, which excluded such elements.

In propaganda design, the Korean Constructivist style and typography displayed the separation of text and image while the interaction of typography and Constructivist style on one layer in Russia. Such separation comes from the strong reflection of the brush as writing utensil, a fundamental difference in typography between the two nations, and from its visual difference with the geometric style of Constructivism. There are two main reasons for the strong ethnic color in Korean typography while using the Constructivist style. First, it is difficult for the reading elements of Chinese, which are both phonetic and ideographic in nature and composed of brush-up marks and dots, to be geometrically refined, as they are functional; as such, it is difficult to achieve the “elemental typography” (the new typography) characterized by the sanserif typeface. Secondly, in the western-focused modernization process,
the West chose the sanserif typeface in order to exclude ethnicity and improve international communication; however, Korea, which used Chinese characters, had to counter to the West, and considered the uplifting of self-identity through ethnicity as well as independence. It therefore needed to confirm homogeneity through displaying ethnic color, which led to internal unity.

The Constructivist style disseminated across mainland Russia was led by the state, and was depicted in images by artists belonging to a state-sponsored organization. At a point when other ideologies were forbidden and oppressed by the state, the continued indoctrination of the ideology was demanded, and Russian Constructivism in the 1920s offered a response to this demand. However, communism existed as one of the ideologies of modernization in Korea and Japan; in the process of persuading the public to select it as the “ideal” ideology, Constructivist images were utilized to offer a visualization of the ideology. To enable effective communication of ideological messages, Constructivism in the two nations had to express not only the socialist ideology based on the theory of class, but also patriotism. In other words, the result of the clash between the radical new image presented by the Constructivist visual style and the background sketched in this paper was the merging of the geometrically refined Constructivist formats of Russia and the ethnic typography based on calligraphy.

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Min-Soo Kim, Professor and Director of Design History and Cultural Studies, graduate course of Seoul National University(www.snu-dhc.com); Received Ph.D from New York University in USA.; Former chief editor of The Journal of Design Culture and Criticism (JDCC, 1999–2002), the first journal of cultural history, theory and criticism on design in Korea.
**THEME**

**Modernisms’ locations I:**
“Forging a bridge of understanding”?
The emergence of national and transnational design organisations, 1930–1970

Leah Armstrong / University of Applied Arts / Vienna / Austria
Tania Messell / University of Brighton / Brighton / UK
Harriet Atkinson / University of Brighton / Brighton / UK

**Panel abstract**

This panel forms part of a series of three panels that coalesce around the theme of ‘Modernisms’ Locations’, and specifically considers the International Council of Societies of Industrial Design (ICSID), the relationship between national and transnational design cultures, and the evolution of models and codes of professional practice during the mid-twentieth century. Dr. Leah Armstrong’s paper locates the British Society of Industrial Artists in an international context and shows how the professionalization of design in Britain was shaped through a complex negotiation between the national and the transnational. Tania Messell’s paper examines the tensions that surrounded ICSID’s establishment, and reveals how cultural internationalism was inextricably linked with Cold War politics and national representation. Finally, Dr. Harriet Atkinson’s paper explores Black’s role in internationalizing British design cultures by examining the incentives that drove his contribution to ICSID and other design organisations, and its impact on these transnational sites.

**Keywords**

Internationalization, design organizations, professionalization, ICSID

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**PAPER #1**

**Looking inwards and facing outwards:**
The society of industrial artists 1930–1967

Leah Armstrong / University of Applied Arts / Vienna / Austria

**Abstract**

The professionalization of design in the twentieth century was an international phenomenon that has often been studied as a series of discrete national histories. This paper explores alternative approaches to accounting for professionalization through a detailed examination of the British design profession in its formative years, cultivated through the establishment of the Society of Industrial Artists (SIA), the first professional body for design in Britain (1930–). Drawing on previously unseen archive material, it locates the SIA’s position as a British institution within an international context. The paper argues that the SIA’s Code of Professional Conduct rested upon an interpretation of ‘Britishness’ borrowed and appropriated from the traditional professions of law and architecture and represented in the figure of the ‘gentleman-professional’. Indeed, many of the Society’s
founding members including Milner Gray, Misha Black and FHK Henrion, self-consciously adopted this persona. Importantly however, a significant number of these members, including Black and Henrion, were also Émigrés from Europe. For these designers, the act of ‘being seen’ to be British was fundamental to performance of professionalism. Black and Henrion also played an active role in establishing international platforms for the SIA, through the establishment of ICSID and ICOGRADA, on which they could project the image of the gentleman designer and export SIA codes of professionalism. Bringing these inward looking and outward facing dynamics into tension, the paper suggests that the professionalization of design in Britain was profoundly shaped through a complex negotiation between the national and transnational.

**Keywords**

Britain, Émigré, ICSID, ICOGRADA, Professionalization, Society of Industrial Artists (SIA)

**Biographical Note**

Dr Leah Armstrong is Senior Lecturer in the department of Design History and Theory at the University of Applied Arts Vienna. She has previously held research and teaching positions at the University of Brighton, Victoria and Albert Museum in London and the Glasgow School of Art.

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**PAPER #2**

**Design across borders:**

The establishment of the International Council of Societies of Industrial Design (ICSID), 1953–1960

_Tania Messell / University of Brighton / Brighton / UK_

**Abstract**

The International Council of Societies of Industrial Design (ICSID) was founded by designers from Europe and the United States in 1957 to raise the professional status of designers and establish international standards for the profession, in a period that witnessed the rapid growth of design institutions and professional organisations (Lees-Maffei 2008). However, while a rhetoric of cultural internationalism surrounded its establishment, and its members described its aims as forging a ‘bridge of understanding’ across borders (Misha Black 1961), frictions surrounded the drafting of its aims and functioning, which resulted from Cold War politics, local agenda, and conflicting design ideologies.

**Keywords**

The International Council of Societies of Industrial Design (ICSID), internationalism, design organisations, professionalization

**Introduction**

The International Council of Societies of Industrial Design (ICSID) was established by a circle of designers from Europe and the United States in 1957 to raise the status of designers, facilitate communication amongst its members, and raise design standards internationally (1959 Constitution). While the rhetoric of cross-border cooperation surrounded its formation, competing political and cultural agenda met within its ranks, which stifled the organisation’s international aims and inner-workings. The first part of the paper will examine how diverging incentives shaped mid-twentieth century international expert networks, followed by a biographical overview of ICSID’s cosmopolitan founders, which will highlight their growing involvement in national undertaking in the 1950s. Approaching the organisation through a transnational perspective, which acknowledges that international organisations are ‘complexly intermesh-
ing circulatory regimes’, shaped by the movements of ideas and individuals between different national and local settings (Kott, 2011, p.446), the examination of the debates that surrounded ICSID’s establishment and the drafting of the council’s aims and functioning will reveal how ICSID became a central arena for its founders to disseminate ideological influence on the world stage, gain prestige and economic returns in a context shaped by Cold War tensions, the opening of the markets, and competing design ideologies.

**NGOs and the ‘one world’ rhetoric**

The creation of this international design community in 1957, aimed at forging a ‘bridge of understanding’ across borders (Black, 1961), took place when the Enlightenment concept of “World Citizenship” permeated political and cultural post-war discourses, and international cooperation was regarded as ‘the best alternative to the perils of racism, nationalism and nuclear annihilation’ (Sluga, 2011, p.223). Cultural exchange was particularly believed to ease international relations and to favour peace preservation during that period, and governmental and non-governmental international organisations multiplied on the shared assumption that cultural questions knew no boundaries (Iriye, 2002). However, scholarship on international expert networks reveals how these sites often witnessed professional rivalries, political propaganda, and attempts to claim recognition both at home and abroad (Rodogno et al., 2014, p.6), whilst their members were often bound to local resources and networks (Kott, 2011). ICSID was similarly devised on idea that cultural exchange could offer an alternative for world politics (Pulos, 1988, p.209), and for its second President, the designer Misha Black, professional bodies are able to engender ‘co-operation which eludes politicians, [a task which] those who have held office in ICSID have been aware of from its beginning’ (Black, 1969, p.6), whilst ICSID’s instigator, Jacques Viénot, stated that design itself was capable of ‘favouring international relations’ (Viénot, 1953, p.86). However, whilst the rhetoric of international understanding surrounded ICSID’s establishment, competing agenda manifested themselves within its ranks, and alliances were rapidly formed, as the council’s founding members had diverging ideas of design and how the discipline was to organise itself internationally. This overlap of internationalist discourse and individual imperatives can be examined through the concept of ‘rooted cosmopolitanism’ which by stressing the fluid character of cosmopolitanism, recognises that whilst individuals can have multiple allegiances and stand in different social circles, they remain ‘linked to place’ and to the professional and personal experience they experience in these spaces (Tarrow, p.6). Thus in line with the transnational perspective, which reveals the diversity of ideas and individuals that composed international organisations, this concept brings the study of international organisations beyond the primacy of national attachment, whilst highlighting how local attachment and cultural internationalism co-existed, and mutually reinforced each-other.

**The origins of ICSID**

For the American designer Arthur Pulos, who joined ICSID in 1961, ‘the group that made ICSID happen originally were all very elitist, a very international-minded, very tight little group of about a dozen’ (Pulos, 1980). ICSID was mainly instigated by the French entrepreneur and leading design figure Jacques Viénot, the American designer Peter Muller-Munk and the British designer Misha Black, whose aptitude to evolve in cross-cultural settings can be traced back to their upbringings. All three originated from families that evolved in enlightened circles of the middle and the upper-middle class, and while Black had emigrated from Azerbaijan to Britain with his family in 1910, Muller-Munk left Germany in 1926 for the United States on the lookout for work opportunities. Their upbringings in educated circles participated in expanding their horizon, as these included the study of foreign languages, the introduction to foreign culture, and frequent holidays abroad in the case of Viénot (Boniface, 1997, p.12).

Assisted by their diplomatic know-how and multi-lingual skills, ICSID’s founders later actively participated to international undertakings in the fields of art and design between the Interwar and 1957, where their paths often intersected. As such, Viénot attended the British Council of Industrial Design’s International congress in 1951, where Black presented a paper, and both men spoke at the Aspen conferences in 1956. Müller-Munk on the other hand represented the Society of Industrial Designers (SID) at an international congress held by Viénot in Paris in 1953, and acted as a jury member for the Signe d’Or award of the Benelux countries since 1957, where he crossed Black’s path in 1959 (Martinez, 2010, p.130). From the late 1940s however, ICSID’s founders became increasingly involved in national design organisations, as Viénot founded the Institut d’Esthétique Industrielle in 1950, Muller-Munk presided the SID between 1954 and 1955, and Black acted as the President of the SIA (Society of Industrial Artists) between 1954 and 1956. Thus by the time they established ICSID, they had become key figures in national and international design circles, where, as seen next, they promoted conflicting visions of design and of its
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(Pulos, 1988, p.241). Muller
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Viénot subsequently invited societies to a constitutive meeting in Paris in April 1956, during which an 'International Liaison Committee' was to be established. Reunited were Muller-Munk, Black and Viénot alongside delegates from the French association Formes Utiles (Useful Shapes), the French Chambre Syndicale des Stylistes Industriels (Trade Association of Industrial Stylists), the West German Rat für Formgebung (Design Council), the
Italian Associazione Disegno Industrial (Industrial Design Association), and the Society of Swedish Industrial Designers, whilst the Indian Institute of Art in Industry and the Japan Industrial Designers' Association were represented by proxies (Viénot, 1956, p.33). The organisation was officially registered on the 28th June 1957, and ICSID's first formal meeting held in London the following day. Described by Muller-Munk as a 'fine display of transatlantic community of interest and of unselfish professional cooperation' (Muller-Munk, 1957, p.5), the meeting witnessed his appointment as President and Black as Vice-President, which led the association to be fully oriented towards professional matters. The association's title was indeed changed from the 'International Council of Societies of Industrial Design' to the 'International Council of Societies of Industrial Designers', and the voting system was devised to allot six votes per country, which were to be divided amongst a maximum of three societies. Two categories of membership were furthermore introduced: 'Full Members', which were composed of more than fifty per cent of designers, and 'Associate members', which included mostly state-funded organisations, and whose members were not accorded voting rights (Muller-Munk, 1957).

Preserving the control of ICSID by Full Members was paramount for Muller-Munk, whose country was the only one represented solely by Full Members, the IDI and the American Society of Industrial Designers (ASID) (ICSID membership index, 1959). While the former relented to join ICSID as they considered the expertise level of its members to be too low, Muller-Munk regarded ICSID as a key platform to further the American International Cooperation Administration's (ICA) technical assistance programme, to which he contributed between 1955 and 1960 as part of the country's Cold War containment strategy (Delphia & Stern, 2015, p.121). The American government indeed employed a large amount of American designers for trade fairs and for the ICA's undertakings during the 1950s (Er et al., 2003, p.33), when designers were given 'a new kind of responsibility for […] formulating America's approach to other nations' as Industrial Design's editor Jane Fiske Mitarashi wrote in 1957 (Mitarachi, 1957, p.39). In this context, Muller-Munk embraced his role as political agent, and his commitment transpires in the address he held at the House Foreign Affairs Committee in 1957, in which the designer warned the audience that 'weaker [...] needy nations [have] only two places to look for [technical help] - to the Soviets and to us' (Delphia & Stern, 2015, p.125). In this context, the designer rapidly exploited ICSID's internationalist purposes to gain the support of foreign design circles by inviting the Indian Institute of Art in Industry and the Japan Industrial Designers' Association to join the organisation in 1956 (Black 1956), whose countries at the time witnessed ICA interventions (Pulos, 1988, p.241). Muller-Munk also presented ICSID's establishment as essential, as it would hasten 'the maturity of this young profession' (Muller-Munk, 1957), while he regularly stated that American design expertise represented the ultimate stage of development (Muller-Munk, 1953, p.73). This rhetoric of assistance was furthermore coupled

The professional turn
As reflected in ICSID's first letterhead, on which three design conceptions were displayed: Industrial design, Esthétique Industrielle (industrial aesthetics) and Formgebung (the act of shaping), the council rapidly saw the manifestation of different visions of design and of ICSID's line of conduct. For Viénot, who presented the idea of establishing an international design association in 1953 (Esthétique Industrielle, 1953, p.4), the creation of such an organisation would assist him in revealing that French designers could contribute 'to the international edifice' of industrial aesthetics (Esthétique Industrielle, 1953, p.4), while allowing him to promote the discipline of esthétique industrielle (industrial aesthetics) (Le Boeuf, 2006). Viénot had developed the latter in the 1940s by drawing from early twentieth century theories of 'useful beauty', through which he argued for the 'synthesis' of industry and of the arts to construct a modern society (Le Boeuf, 2006, p.50). The organisation Viénot envisioned thus conveyed his broad cultural stance, as for him, such an international alliance was to be of great value 'not only from a business, but also from an artistic, philosophical and social point of view' (Viénot, 1956, p.9), and a few months before ICSID's establishment invited French, Belgian, and Italian societies to push for an organisation interested in the intellectual, philosophical and educational aspects of design (Vago, 1957, p.8). After having received the support of Black and Muller-Munk, Viénot subsequently invited societies to a constitutive meeting in Paris in April 1956, during which an 'International Liaison Committee' was to be established. Reunited were Muller-Munk, Black and Viénot alongside delegates from the French association Formes Utiles (Useful Shapes), the French Chambre Syndicale des Stylistes Industriels (Trade Association of Industrial Stylists), the West German Rat für Formgebung (Design Council), the
with Muller-Munk’s promotion of design as inextricably linked to ideas of planning and efficient modernity, through which the designer advocated the benefits of cooperation amongst ‘democratic countries’ (Muller-Munk, 1959, p.2), and by hailing the economic benefits of a unified trade zone, furthered the ICA’s ambitions. The designer as such pushed for the creation of an international directory of professionals, of travelling exhibitions, and of documents facilitating international collaborations since 1954 (Viénot, 1954, p.33), initiatives which further reflect the designer’s corporate vision of ICSID.

Black, who acted as ICSID’s President between 1959 and 1961, similarly expressed the need to keep a professional emphasis within ICSID during the organisation’s first official meeting (ICSID Meeting Minutes, 1957, p.11), a position which reflected his repetitive attempts to establish designers as fully-fledged professionals at international design congresses in the 1950s (Blake, 1984, p.9), and his close involvement with the SIA. The latter was established in 1930 to protect the interests of designers and to assist British trade at home and abroad, and after the Second World War, tightened its membership requirements by reserving the association to industrial designers whose products were to be mass-produced (Maguire & Woodham, 1997, p.125). The association mainly envisioned industrial design in line with a British understanding of professionalism, which as the design historian Leah Armstrong writes, was grounded in ‘gentlemanly behaviour and self-improvement’ in an attempt to place design alongside established professions such as architecture and engineering (Armstrong, 2015, p.15). Thus for Black, designers ‘must organise their affairs as competently as architects, engineers, barristers [and] doctors, similarly build their organisations’ (Armstrong, 2015, p.15), and by modelling ICSID’s first Constitution on that of the SIA’s (Blake, 1984, p.7), the designer aimed at propagating his association’s vision of professionalization. However, Black’s local allegiances were multiple, as the designer was member of the British Council of Industrial Design’s Information Committee during his presidency of ICSID, when the latter acted as the patron of the Council’s exhibition at the department store Le Bon Marché in Brussels in 1959 (Esthétique Industrielle, 1959, p.42). Thus Black actively used ICSID to export the SIA’s code of professionalism, while fulfilling British economic interests through the organisation’s international outreach, incentives which spurred his pragmatic vision of ICSID.

A battlefield of ideologies

Whilst both Muller-Munk and Black envisioned ICSID as an association dedicated to practical means, eleven societies out of twenty-four had been designated as Associate Members by 1959, and the Anglo-Saxon vision of the organisation was met with the growing opposition of ICSID’s remaining members (Black, 1957). As the Italian, Finnish, and French delegates expressed during ICSID’s first official meeting, eliminating the voting rights of Associate Member would affect designers within these societies, whose opinions on professional issues would not be taken into account (ICSID Meeting Minutes 1957, p.5). Associate membership furthermore constituted a threat for national representation, as after the Finnish Society of Crafts and Design had been designated as Associate Member, its President Herman Olof Gummerus devised the creation of a second International Council of Design to represent ‘propaganda societies’ and craft associations. Gummerus’ project reflected the society’s international ambitions but also its aspiration to represent the country within ICSID, as the President apprehended the fact that the smaller Finnish society Ornamo, voted as Full Member, would have more influence than his society within ICSID (Black, 1960). The Italian Associazione per il Disegno Industriale, on the other hand castigated the Anglo-Saxon approach, as it similarly to Viénot’s Institut d’Esthétique Industrielle promulgated a practice that answered economic, but also cultural and social ends, in a period in which the commercial approach of American designers was often condemned in Italian design circles (Fallan, 2013, p.265). This view reflected the main issue for ICSID’s delegates, who expressed a growing concern towards ICSID’s commercial turn during the meeting (ICSID Meeting Minutes 1957, p.5), and which as seen next, was the more forcefully condemned by Viénot.

While Viénot had been deeply impressed by the status held by designers in the US in the late 1940s, and the French association Formes Utiles regularly condemned his approach as driven by American-inspired aesthetic functionalism (Rouelle, 1998, p.308), the American dominance within ICSID threatened his status and that of industrial aesthetics on the world stage as the design historian Jocelyne Le Boeuf writes (Le Boeuf, 2006, p.56). As such, when the Institut d’Esthétique Industrielle was designated as Associate member in 1959, Viénot immediately retracted its membership and intensified his anti-American discourse alongside an attempt to establish a ‘European union of designers’ a few months after ICSID’s establishment. Presenting his countrymen as the torchbearers of industrial aesthetics, through which they were to ‘preserve the prestige of the mind’ (Viénot, 1955, p.41), Viénot planned to unite French and European designers ‘to bring spiritual values to a disoriented world’ and to arrest the expansion of the American design model, which had increasingly become ‘the servant of capitalist machinery’
(Viénot, 1957). By brandishing European culture against commerce, Viénot as such re-enacted a discourse that swept over French intellectual circles in the late 1950s, when repeated attempts to restore the ‘French grandeur’ on the world stage took place, (Kuisel, 1993, p.108), and in so doing attempted once again to place himself at the forefront of international design initiatives, by shifting his discourse to European collaboration.

However, Viénot’s project came to an abrupt halt following his death in 1959, and ICSID’s membership categories remained throughout the 1960s, while the term ‘industrial design’ was ratified during ICSID’s first General Assembly in 1959, as such asserting the Anglo-Saxon dominance within the organisation. Following ICSID’s feud with the Finnish society and the CoID’s refusal to join the council due to its Associate Member status, Black however admitted some voting rights to Associate Members during his presidency (Constitution, 1959, p.5), and after Gummerus asked for UNESCO’s assistance to create a second design organisation, the international agency decided to support ICSID on the condition that it promoted the social and cultural benefits of design to wider audiences. The council was furthermore to recover its title ‘Industrial Council of Societies of Industrial Design’ as for UNESCO it represented a more inclusive understanding of design, a change, which after it was ratified at ICSID’s second General Assembly in 1961, led Formes Utiles to re-join the organisation, as for its President, René Herbst, the shift ‘put the accent on the defence of ideas rather than professional interests’ (Herbst, 1963). Thus while ICSID mainly concerned itself with professional matters, such as the drafting of international standards and the definition of industrial design until 1961, the council expanded the range of its concerns throughout the 1960s, a shift also spurred by the rapid entry of societies from developing and Socialist economies, which alongside a more sporadic American involvement in ICSID, diversified the organisation’s activities.

Conclusion
As this paper has revealed, the rhetoric of cross-border cooperation surrounded ICSID’s early years, which reflected a wider belief in the pacifying qualities of cultural cooperation and exchange in the post-war period. However, while this internationalist discourse accompanied ICSID’s establishment, ICSID’s founders rapidly attempted to gain the control over the council’s functioning, which became a central platform for the furtherance of national agenda, financial returns, and prestige, in a context in which Cold War imperatives and the opening of the market positioned designers as diplomatic agents in international spheres. The examination of ICSID’s founders’ incentives through the concept of ‘rooted cosmopolitanism’ has finally revealed that whilst ICSID’s founders primarily acted in accord with local interests, their incentives at times went beyond national allegiance, whilst frictions existed between members representing the same nation, as such highlighting the need to examine ICSID beyond the national framework, in order to shed light on the internationalisation of design in the post-war period.

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PAPER #3

The 'stateless' designer: Misha Black (1910–77) and the internationalisation of design practice

Harriet Atkinson / University of Brighton / Brighton / UK

Abstract

The career of designer Misha Black (1910-1977) was characterised by his role in internationalising design practice. This was manifest in his design work, as well as through teaching, writing, lectures and in his leadership of design organisations. A Russian émigré to Britain in 1912 - who declared himself ‘stateless’ on official forms - Black’s work was consistently focused towards making a contribution beyond Britain, including official exhibition sections for Seville (1928), New York (1939) and Ceylon (1952); as advisor on industrial design to the governments of Argentina, Brazil and Israel; presenting lectures round the world and writing books which put design in transnational perspective. He set up and led a number of key international groups: as co-founder in 1933 of leftist artists’ organisation Artists’ International Association and as president (1959-61) of emerging transnational design group ICSID, for example. Alongside leading international design organisations, Black evolved international networks for the practice he co-founded in 1942, Design Research Unit (DRU), while at the same time designing through DRU some of what might be considered the most quintessentially British corporate identities; for British Rail and London Transport, for example. This paper will explore Black’s role in internationalising British design cultures, asking to what extent he was motivated by philanthropic concerns and how much by business sense, exploring the sorts of alliances he sought, and analysing the impact of his interventions.

Keywords

Design organisation, design practice, internationalisation, professionalization

Biographical note

Dr Harriet Atkinson is a design historian whose research interests centre on designers’ work within ‘official’ contexts. Author of The Festival of Britain: a land and its people (I.B. Tauris, 2012), she completed her PhD at London’s Royal College of Art and teaches history of art and design at the University of Brighton.
THEME

Modernisms’ locations II: Transnational exchange through design

Zeina Maasri / University of Brighton / Brighton / UK
Tom Wilson / Design Museum / London / UK
Elli Michaela Young / University of Brighton / Brighton / UK

Panel abstract
This panel examines the entanglements of design with political processes of decolonization and nation-building post-1945. It presents three historical case studies that cut across different fields of design and compares disparate postcolonial contexts. The three papers critically analyse the role of design discourses, practices, artefacts and institutions in postcolonial identity formations. The first looks at graphic design in the context of 1960s Beirut and, by extension, the Arab East at a tumultuous global moment to probe design’s role in articulating transnational political subjectivities and aesthetic sensibilities. The second investigates the architectural discourse of the Commonwealth Institute in London and associated exhibition displays, where ideas about modernity, national identity and transnational relationships were formed and communicated during Britain’s turn from Empire. The third considers the ways in which fashion and textiles were utilised in the construction of a modern Jamaican national identity, negotiating notions of race, class and gender to come to terms with a colonial history. Through these three papers, the panel aims to contribute to current debates in design history about the circulation of design beyond Euro-American geographies of modernism and frameworks of knowledge.

Keywords
Transnational circulation, identity, decolonisation, design modernism

PAPER #1

Double trouble: Decentering the West, dislocating the nation

Zeina Maasri / University of Brighton / Brighton / UK

Abstract
Design histories from long-silent margins have begun to fill the numerous gaps in a world map that stretches beyond the Euro-American canon. This paper contributes to emerging debates in global design history by proposing an alternative approach particular to ‘non-Western’ geographies. I argue for a double decentring in design history: the first, through a postcolonial lens, displaces the West in understanding global modernity; and the second, through a transnational framework, attends to the dislocation of the nation from a privileged site of particularity. I exemplify this conceptual approach by presenting as a case study my research on graphic design in 1960s Beirut–Lebanon.

Keywords
Beirut 1960s, Arab world, decolonization, design modernism, transnational cultures
Introduction

This paper draws from research I have been conducting on the history of graphic design in Beirut-Lebanon’s long 1960s, extending roughly from the late 1950s to the mid-1970s. It is generally concerned with the nexus of political and aesthetic fields in everyday visual and material culture. It probes the particularity of this intersection in the context of the Arab world at a tumultuous moment that conjugated local political struggles and regional decolonization processes with an emerging global Cold War order.

The question of how to write a history of design from the ‘non-Western’ margins, without uncritically valorising national or cultural difference, remains, however, a complicated one. This paper focuses on this question and its complications, to propose a transnational perspective to graphic design history that is grounded in postcolonial critique.

Decentring the nation from global design history

My study ventures ‘beyond the pale’, to borrow Judy Attfield’s words (1999), in terms of the geographical territory that has produced the modern design canon and claimed its universal validity. I situate my work among emerging scholarly efforts to write the histories of modern design from the margins, outside a traditionally Euro-American history. A number of prominent scholars in the field have been pressing for the necessity of a globally inclusive design historiography (eg. Adamson et al. 2011; Fry 1980; Margolin 2005; Woodham 2005 and most recently Huppatz 2015).

The question of how to write this history, as Victor Margolin (2005) pointed out a little more than a decade ago, involves points of divergence. His approach takes on an exhaustive world history perspective that opens the definitions of design to wider terrains covering ‘the conception and planning of visual and material culture’ that would not exclude the non-industrialized parts of the world (ibid: 239).

Likewise, Anna Calvera proposes a multi-sited global design history map, which works itself outwards starting with the local as the initial site of research (Calvera 2005). She advocates the latter as an approach to peripheral geographies that have been invisible on the world map of design history. ‘To get a place in history and enter inside its boundaries’ she argues, ‘it is necessary to have a history, and to have a history, it is necessary to build up local and national histories and begin to tell them’ (Calvera 2005: 375). I do recognize the importance of a history written from the purview of the site of locality and expanding outwards. This is what I set out to do in my project. However, Caldera does not clarify what she means by the local. How does this site of particularity not fall into a binary relation to the global, denying from the outset of any research project the complex dynamics in which the global and the local interact and contend with one another? If anything, her text confounds the local with the national, a problem that I think is shared across a number of e.

The internationalization of cultural studies in the last decade of the twentieth century faced a similar problem. In efforts to prioritize the particular over the universal, the nation-state was privileged as the site of particularity (Stratton and Ang 1996). The resulting form of a globalized cultural studies was criticized as an unproductive intellectual endeavour likened by Frederic Jameson to ‘a kind of United Nations plenary session’ in which each group was given respectful (and “politically correct”) hearing (cited in Stratton and Ang: 365). Jon Stratton and Ian Ang have argued that this risks concretizing differences into fixed mutually exclusive categories. They suggest that rather than valorise uncritically any asserted particularity, ‘cultural studies needs to reflect on the concrete processes of particularization itself, and to interrogate its politics’. A postcolonial framework, they suggest, offers one such critical strategy (ibid: 367).

The same critique and suggestion could be extended to globalizing design history, which takes the national for granted as a site of cultural locality and difference. Evidently, some studies have been more successful than others in unpacking the constructed nature of a given national identity and ensuing design style. David Crowley’s study of design in Poland is undoubtedly a pioneering effort in that regard (Crowley 1992). Nevertheless, such a nationally bound lens is not adequate to cases like Lebanon (and others I presume) where the national is a contested terrain, fraught with political incongruity.

In contradistinction to an overarching narrative of world history and a nationally circumscribed one, Glen Adamson, Giorgio Riello and Sarah Teasly propose a global design history approach which ‘recognizes
the multiplicities and fragmented condition in which we experience and enact design, as part of being in the world' (2011: 2–3) and which ‘demands that all design be understood as implicated in a network of mutually relevant, geographically expansive connections’ (ibid: 6). Their conceptualization for a globally sensitive and decentred logic of design history, along with their proposed models, intersect and resonate most with the aims I have set out in my project. Rather than ask what is Lebanese, or what constitutes Arab design, I am interested in understanding how graphic design in the context of 1960s Beirut articulated identities and negotiated them between the global and the local.

Studying the history of design from a global perspective requires critically attending to the transnational dimension of politics. The hegemonic formations and ensuing subjectivities involve struggles not only of different domestic registers — cultural, sectarian, national, and economic. But also of different geopolitical scales of power relations and antagonisms that are not circumscribed by the contours of the nation.

Focusing on the city, rather than the nation, as my site I adopt a non-essentialist definition of place that takes into account, as Doreen Massey urges, a ‘global sense of the local’. A place, she describes, formed by networks of social relations, ‘meeting and weaving together at a particular space and time where a large portion of those social relations, experiences and understandings are constructed on a far larger scale than what we happen to define for that moment as the space itself, whether that be a street, or a region or even a continent’ (Massey 1991: 28–29).

I deploy a postcolonial perspective to critically study the interface of the global with the local in design history. As I shall be discussing, postcolonial critique deters binary conceptions of this cultural interface, which is essential to unpick the global enterprise of modernity and to study its everyday material cultures.

**Decentring the West from global modernity**

Edward Said’s study of Orientalism, as a discourse of European scholarship on the Orient, has been crucial to our understanding of the process by which the East was set against the West and constituted as its inferior other. The study of the nexus of power and knowledge that animated an Orientalist discourse, along with associated institutions and colonial practices, Said contends, is requisite to ‘understand the enormously systematic discipline by which European culture was able to manage—and even produce—the Orient politically, sociologically, militarily, ideologically, scientifically, and imaginatively during the post-Enlightenment period.’ (Said 1979: 3)

Power in this form — embedded in discourse as a system of knowledge and through dividing practices between self and other — Michel Foucault has argued objectifies and transforms individuals into subjects (Foucault 1984). It ties people to an identity imposed on them, which they must recognize and which subjects them to others in this way. Said’s study, in drawing on Foucault, is thus a critical genealogy of a discourse through which the oriental subject was historically constituted.

What remnants of this discursive binary and ensuing oriental subjectivity can be seen in postcolonial Beirut? Postcolonial time, as a historical conjuncture, refers to a shift in global power relations marking the transition from the age of Empires—direct colonial rule, to the post-independence or post-decolonization moment (Hall 1996). Undoubtedly, the Middle East has lived different politics of colonization and temporalities of decolonization that would imply in turn different postcolonial subjectivities ranging in particularity from Algeria, through Egypt and all the way to the Levant’s Lebanon and Syria, the complexity of the Palestinian case notwithstanding.

Postcolonial theory, building on from Said’s Orientalism, has helped decentre the West in understanding the global enterprise of modernity, displacing now tired notions of ‘influence’ and ‘imitation’ of a Western origin (Bhabha 1994; Mitchell 2000). Its different scholars, despite their varied theoretical reasoning, have criticized the cultural binaries claimed by imperialism — colonizer and colonized, the West and the non-West, the modern and the traditional — and reconceived their relation as forms of transculturation, cultural translation, appropriation and transfiguration. Homi Bhabha has argued that the non-West is not a location of pure cultural difference to the West. He urges us to think beyond narratives of originary subjectivities and primordial antagonisms and focus instead on the emergence of ‘the interstices – the overlap and displacement of domains of difference’ in the articulatory processes of colonial and postcolonial cultural hybridity (1994: 2). Timothy Mitchell (1991; 2000) contends that ‘the production of modernity involves the staging of differences’ (2000: 27); it is not a product of the West but of its interaction with the non-West. He elaborates that the modern is staged as representation, in open-ended differential relations to an original that only exists as an authoritative yet elusive promise. This process lends modernity the immense capacity for replication and expansion, and at the same time makes it vulnerable to disruption, open to displacement and rearticulation. Accordingly, Mitchell sharply concludes that the universal claim of modernity is never complete.
In similar vein, reflecting on the intensification of globalization processes in recent history, Arjun Appadurai invites us to rethink the centrality of the West as a purveyor of cultural flows and forms and to examine how a multiplicity of forces, not only economic ones, determine the complex entanglements of global modernity. He argues that ‘the new global cultural economy has to be seen as a complex, overlapping, disjunctive order that cannot any longer be understood in terms of existing centre-periphery models’ (1996: 32). The transnational framework he outlines, helps me to consider the context of Beirut in the 1960s — in its multi-directional (East-East and West-East) flows of incoming designers, political discourses, cultural practices and forms (including images and aesthetics), operating as he contends within overlapping, disjunctive landscapes whose centres shift according to the different kinds of cultural affirmations and networks of political solidarities taking shape regionally and globally.

In sum, I am proposing here a double decentring in global design history: the first, through a postcolonial lens, displaces the West in understanding global modernity and the second, through a transnational framework, attends to the dislocation of the nation from a privileged site of particularity.

I will now exemplify this conceptual approach by presenting, as a case study, my research on graphic design in 1960s Beirut–Lebanon.

**Case study: The three Beirut(s)**

In studying graphic design in 1960s Beirut, I examine the archive of artefacts in question, as well as their associated moments of design and circulation, along three competing discursive moments and geographies, in Appadurai’s terms three overlapping and disjunctive landscapes, that conjugated the global with the local in laying claim over the city’s cosmopolitan identity:

‘Beirut: the Paris of the East’: a site of cosmopolitan leisure and tourism on the Mediterranean

‘Beirut: the Arab capital of culture’: a pan-Arab cultural and publishing node

‘Beirut: the Arab-Hanoi’: a revolutionary node in the Third-World


I begin with the first moment by asking how is a statement such as ‘Beirut: the Paris of the East’ both an affirmation of a deep-seated East–West division yet simultaneously an act of displacement of this binary relation? If Beirut is both Western and Eastern, as the statement claims, then it is not exactly Eastern, nor exactly Western either; the hybridity disrupts the binary relation and undoes the essentialism inherent in any quest for cultural authenticity. We could think of the statement in that sense as performing a discursive disarticulation between East and West in imagining and living Beirut as a city. It is telling of Beirut as the space of ‘transculturated’ where the hard cultural poles of East and West get contested. I am interested in the material form of this articulation — its aesthetics, meanings and practices — and the way it is carried through the design of everyday visual and material culture. The first section of my project looks into the different modalities through which ‘Beirut: the Paris of the East’ historically emerged and took visual and material form. I examine the promotion of Lebanon as a Mediterranean site of modern tourism and leisure within an emerging global economy of travel and consumer desires. I analyse how Mediterranean seascapes and associated leisure tropes get appropriated and rearticulated discursively along a particular political discourse of nationhood and its cultural materialisation (Maasri 2016).

One important point this statement brings forth still requires elaboration. Beirut is likened with nothing but the French metropolis that had ruled over it. It is undoubtedly telling of the lasting cultural hegemony that characterized the colonizing experience. But acquiescing to this simple explanation undermines a critical analysis of the politics claiming Beirut as a cultural hybrid between East and West. If the frontiers between East and West are displaced in this statement, what other/new frontiers does it discursively articulate? In other words what new relations to the East, notions of locality particular to the Arab East does such a statement refer to or determinedly muffle?

The cultural hegemony of the colonizing experience did not go by uncontested in the wider Arab East; as a matter of fact its effects gave rise to anti-colonial political mobilization, which was coupled with a quest to recover indigenous cultural forms ‘uncontaminated’ by the colonial encounter. Political movements emerging in the 1950s in Egypt, Syria and Iraq, which were pan-Arab in scope, articulated a discourse of Arab identity in antagonistic relation to European colonial power. A discourse summoning an Arab identity as such, constructs a relation of equivalence between elements of difference with the western colonizer such as language, cultural heritage and aesthetics, giving thus material form to the antagonism. This found resonance in postcolonial forms of modern Arabic...
literature and artistic practices. Beirut was not impermeable to this discourse and ensuing cultural practices (Kassir 2003). The city in fact took a leading role in the publishing and transnational distribution of Arabic literature, playing host to the first Arabic book fair and to new adventures in the Arabic press (Mermier 2005). I am concerned here with the publication design and visual culture of this emerging literature, paying equal attention to the flow of ‘pan-Arabist’ discourses and its transnational subjects—Lebanese, Egyptian, Iraqi, and Palestinian publishers, authors and designers that weave through the city, in and out of its flourishing publishing industry.

The third discursive moment revolves around the re-articulation of the ‘pan-Arabist’ Beirut into the revolutionary ‘Arab Hanoi’ (Traboulsi 2001), in the late 1960s and through the 70s. This third discursive framework situates Beirut within Third Wordlist political geography and connects it, through the Palestinian Resistance, to a transnational discourse of anti-imperialism and revolutionary struggle. This last framework is attentive to the visual and aesthetic discourses of the ‘Arab Hanoi’ as designed and circulated in printed media. I am interested here in tracing the signs, symbols and aesthetics that are carried through such media, in the way these travelled across transnational networks of solidarity from Cuba to Africa and all the way to Vietnam, in and through political discourses and imaginations, constituting in their trajectory revolutionary subjects who espoused violence as a legitimate means of struggle.

In all three discursive formations— the determinedly cosmopolitan Westward looking Beirut; the authenticating ‘pan-Arabist’ Beirut; and the revolutionary Arab Hanoi— the question of cultural modernity in its relation to the West is lurking. Outside the struggle over this question as claimed within the different discourses of the moment, I am wary of an analysis that represents cultural artefacts of either of these formations as a simple binary between, on one hand, a passive absorption of a ‘Western’ modernity and, on the other, an active resistance to its cultural hegemony. While these different discourses may politically contend with one another over this very issue, the cultural and aesthetic articulations of these politics are not reducible to a simple dichotomy between East and West nor are they impermeable to one another, let alone mutually exclusive monolithic fixed categories. To configure it otherwise undercuts the complexity in which modernity is sought, enacted and wrestled with in and through the everyday material culture of Beirut and across the differences that make up its postcolonial subjects.

Conclusion
In sum, my project is committed to a double decentring, of the West and the nation, in design history, which I have outlined in this paper. I am cautious that the decentring strategy proposed, far from constituting a de-politicized form of pluralism, indeed accounts for the transnational dimension of power relations in the everyday, in which design is one important site of struggle.

References


Biographical Note
Zeina Maasri is a lecturer and PhD candidate in the School of Humanities at the University of Brighton, UK. She is the author of the book Off the Wall: Political Posters of the Lebanese Civil War (London: IB Tauris, 2009), curator of related travelling exhibitions and online open archival resource (www.signsofconflict.com).

PAPER #2

Displaying the Commonwealth:
Modernism, nationalism and decolonisation at the Commonwealth Institute, London, 1958–73

Tom Wilson / Design Museum / London / UK

Abstract
The opening of the Commonwealth Institute in London in 1962 was a striking expression of faith in the emergence of an united and diverse Commonwealth. For its director Kenneth Bradley, the modernism of the Institute’s hyperbolic paraboloid roof and its displays inside were positive representations of the political and social ideals, which marked the emergence of the new Commonwealth. But despite the building’s forward-looking ethos, it was also a legacy of Britain’s imperial past; many of the exhibits inside came from the Commonwealth Institute’s predecessor, the Imperial Institute, where they supplied material for the domestic imagination of the British Empire.

This paper locates the Commonwealth Institute as a significant and complex space through which ideas about modernity, national identity and transnational relationships were formed and communicated during Britain’s turn from Empire. It begins with a study of the Institute’s architecture, and shows how the building itself was rhetorically evoked as an example of the Commonwealth in action. The discourse around materials, in particular, was used to suggest a mutually beneficial economic relationship between Britain and the Commonwealth, and had the effect of occluding the economic relationships that made the actual exchange of materials possible. This paper then addresses the complexity of decolonization by showing how newly independent countries sought to take control of their own representations, paying close attention to the case study of ‘Instant Malaysia’, a new display by Archigram Architects in 1973. As representations of both Empire and Commonwealth, the Institute’s exhibition galleries were decidedly unsteady projects of British influence.

Keywords
Archigram, Commonwealth, Empire, British modernity, Exhibitions
Biographical note
Tom Wilson is a graduate of the Royal College of Art and Bath Spa University. He is currently working on an AHRC-funded Collaborative Doctoral Award between the University of Brighton and the Design Museum. His research interests relate mainly to twentieth-century design history. In addition to undertaking research, he works closely with the Design Museum in managing and developing its permanent collection.

PAPER #3

Fashioning Jamaica from colony to nation:
Textile production, dress and the fashionability of African diaspora between 1950–1975

Elli Michaela Young / University of Brighton / Brighton / UK

Abstract
Design has played an important role in the remaking of the Caribbean, particularly in the fashion and textiles industry. This research project considers the ways in which fashion and textiles, produced in Jamaica between 1950 and 1975, were employed to navigate shifting subjectivities in a nation undergoing transition. In particular, it studies how national identities were constructed in a period of decolonisation and how fashion and textiles were utilised in this process. Considering the complex relationship between colony and metropole and subsequent narratives, I examine the acts of resistance to Empire that formed part of the struggle for independence, in addition to considering the role played by design in resisting and/or accommodating a globalized British and European aesthetic.

Using the Jamaican Fashion Guild as a case study, this paper aims to show how Jamaicans sought to control their own representations, engaging with design practices to construct a ‘modern’ Jamaica. It considers the ways in which Jamaicans negotiated notions of race, class and gender to come to terms with their colonial history. It argues that an examination of postcolonial design practices can help us rethink and reconceptualise fashion and textiles histories.

Keywords
Caribbean, fashion and textiles, Identity, Jamaican Fashion Guild, Post-colonialism

Biographical note
Elli Michaela Young has a BA in Design from The Cass, London Metropolitan University, an MA in Post-colonial Cultures & Global Policy from Goldsmiths College, University of London. She is currently a DESIGN STAR AHRC’ Research Student at University of Brighton. Her research considers the way in which fashion and textiles were utilized in the construction of identities in Jamaica.
**Intertwining histories of design: Portraying the map of present European design history through 10 ICDHS Conferences (1999–2014)**

**Anna Calvera** / University of Barcelona / Barcelona / Spain  
**Helena Barbosa** / University of Aveiro / Aveiro / Portugal

**Abstract**

After the tenth anniversary of the ICDHS Conferences, this paper recalls and expands upon the European Province workshop held two years ago to address a transnational approach to reviewing the many histories of design that have emerged at these conferences. We have restricted the focus to Europe. This represents a first step in a wider research project aiming to rewrite the European history of design, comparing and intertwining all these peripheral histories that have emerged and, thus, establish the wider history. The project also assumes a previous task: to clarify what we actually mean nowadays by Europe. The aim is to draw the boundaries of a cultural, technical and aesthetic territory, a map of Europe based on what we have learned from the ICDHS conferences, and to think about it. This is the central argument of this paper.

**Keywords**

European Province, transnational history, Braudel, histories of design, ICDHS

**Stage 1: History provides a way to present Europe**

When a research project starts in the Humanities and Social Sciences fields, it is convenient to carry out an early task of clarifying concepts and defining the basic notions needed to achieve a comparison between different historical realities, whether local, national or regional. It is also convenient to provide ideas for understanding what might be shared within a large or multidisciplinary team. This is the process when a transnational approach is adopted to reviewing different histories of design already developed locally by national researchers that deserve to be compared to establish the wider history. We realised that while setting up a project of a compared study on European histories of design, we were applying a transnational approach to European history. As such, it is an ambitious and large project. In the planning, a series of connected issues reared up regarding the current map Europe and the conceptual boundaries outlining the Continent: what is Europe nowadays? How large is the European territory at present? How many different cultures, languages and ways of living comprise the current idea of Europe? In short, what are we talking about when we say “Europe” right now?

A related issue soon arose while researching the answer to the current economic and political reality as reflected by newspapers, general surveys and political press: are the administrative borders established politically by the 28 European Union (EU) useful enough for historical research? Do the existing borders outline Europe and its mental image? This is an old question: Fernand Braudel, for instance, in 1955, while writing in Brazil for a Brazilian audience, introduced many different worldwide regions calling them “Europes” (“car il y as dans le monde cinq ou six Europe”, Braudel 2001: 133). He mentioned zones culturally born and influenced by old Europe through colonization, but warning “La vieille Europe don’t les limites à l’est sont à fixer” (The old Europe whose boundaries east are still to be fixed [2001: 133]). More than fifty years later, as far as our research proposal progressed, east boundaries were blurring even more — Braudel was not strengthening the usual Eurocentric approach, but rather he encouraged these other areas to feel free, adopting a similar view to studying their own countries as this one adopted by European historians when they talk about themselves and their own history.

Assuming that a helpful frame to work upon may be sought in historical thought, last year we looked at a map of Europe embedded in exemplary works by Braudel and the idea of Europe bequeathed by him when he studied the world through the early modern centuries. In fact, this was just one hypothesis giving rise to the
research project mentioned above, “Intertwining European Histories of Design”. It might be the map that described Europe when the preliminary industrial revolution was already going on and, so, when modernity as a historical era started. This map should help us to avoid key questions, like the inclusion in the map of neighbouring territories such as Turkey, Russia and Israel, for instance, to mention only the most controversial countries, when considering the more restricted European area of influence. According to Braudel’s sense, current Europe can be defined as a world region because it can be identified as an area whose unity depends on the network of exchanges and relationships of all kinds, which gave her its constitution regardless of state sovereignty (Chartier 2001: 119-20).

Being very prudent, the main goal of this paper is actually to draw a first portrait of a map that may suit a transnational vision of the global region and its twentieth century history of design. Related aims are to understand how ICDHS international conferences profiled this map and are advancing a new vision of the history of design in Europe, checking the idea of a European Design as well. The former intention of the paper was to compare the two maps, the former that gave way to modernity, and the latter providing a way out.

Map 1: European presence around the world, 1775

Braudelian chart representing the pepper trade routes, made to visualize the growing potential of London and also traffic developed from the Netherlands, France, Spain and Portugal. For Baltic and Mediterranean seas, it conveys the more frequent itineraries (Braudel 1979 Vol. III, p. 19).

Map 2: The way in: Europe’s shape inherited from history

Imitations of Versailles: another Braudelian map exemplifying the spread of cultural movements across Europe, 18th century. Note the buildings in San Petersburg and Moscow, and the void of the area still under the Ottoman Empire. Thus it is easy to define a European territory not dependant on current political borders (Braudel 1979, Vol. III, p. 53).

Map 3: The shape of europe by its inhabitants: The east is clearly blurred

Map from Orteliu’s Theatrum Orbis Terrarum. Orteliu’s Europe was modelled after an earlier wall-map made by Mercator. It should provide a useful depiction of the Continent for merchants and statesmen of the time. Published in London, 1606.

Table 1. The way out: Who actually forms present Europe?

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Table created at the turn of 20th Century. It is a development made after the original table included in Jonathan M. Vlackham’s paper at The European Province Workshop (Aven, July 2014, p. 715). Apart from membership to the UE, we considered their participation at ICDHS events. LEGEND: Written in grey. Countries of Europe (50), written in black. Member Countries of the EU in 2012, written in italics. European countries that presented papers at one or more ICDHS Conferences. Smaller size: countries by the authors on these countries.
Intertwining in the horizon

Ten years of regular meetings around the world amounts to a solid and significant background for a project on transnational history such as that which we decided to plan. Of these ten conferences, nine of them established in their motto, title or theme a call to propose aspects that would establish links and points of comparison, even collaboration, between the many local and regional histories appearing as the conferences continued, and more people would join them (see Fig. 1): Guadalajara ‘04 and Helsinki ‘06 stated it clearly. Other mottoes drew attention to all these other histories being added to the map of the discipline and its related scientific community. They gave way to issues previously forgotten or set aside in the old general history of design. Keywords used frequently to include: the plural for history and the emerging of the others; the geography of design history and the need to observe the evolution of technical terms applied to design, recalling traditional words still active and relating to material cultures (Osaka ‘08 Beyond Westernisation, Brussels ‘10 Rescuing the Western Vision). All of them demonstrate a strong commitment to what is often called the ICDHS’s inclusive spirit, evident since the first edition. It became consolidated because ICDHS’s main aim in this first phase was to discover and meet new colleagues coming from all around the world. From that point of view, ICDHS performs the role of “loudspeaker” for design history developed around the world, using a metaphor proposed by Braudel a long time ago and referring to research done in peripheral areas (2001: 244)

Another interesting precedent for a transnational approach to Europe worth mentioning here is The European Province Workshop held two years ago at the 9th ICDHS. Planned to introduce the issue of reviewing the role of Europe in the usual version of the general history of design, the call invited thinking about two main topics, one labelled as domestic affairs, the second as foreign affairs. This was to consider, firstly, both the challenges and opportunities of writing the specific histories of European marginal areas; then, secondly, the role of current Europe in the globalised world of design and its culture. Some issues were then identified as unresolved. Considering a possible common history, the variety of very local languages appeared soon as a major obstacle both to researchers that wished to inquire abroad (this is the case of languages spoken across Mitteleuropa — to use an old-fashioned word — and the Baltic and Mediterranean neighbourhoods), and to local historians trying to disseminate their research outcomes abroad, and enrich the very well established mainstream ways of working. It is a path back and forth and, thus, a flux to inquire about while observing how a scientific and specialized community of experts is being built up whether across Europe or the whole world. Later, several self-accepted provinces reviewed the advantages and strategies used having taken this condition on. While Spain and Turkey reinforced the need for a comparative approach between local issues and a wider common history — a danger for regional historians is a lack of consensus on crucial issues, claimed Tefik Balcioglu — Denmark and Finland noted different ways of acting as a peripheral culture while building up their specific identity within the European map at the same time. Anders V. Much displayed three options to managing the peripheral character: to perform as an autonomous centre; as a voluntary chosen periphery or, rather, as a pure and sound province the result of self-exoticization — an interesting approach. From Finland, Pekka Korvenmaa raised the issue of provinces being culturally creative, innovative and original. He reminded us of the spread of Art Nouveau across many provinces of Europe, a hypothesis already proposed by Mireia Freixa too. Clearly it is also worth noting the spread of modernist ideals after WW2, having won the war against visual classicisms manifested in European fascisms. But we were also reminded of another phenomenon that is socially and culturally very interesting, and peculiar to post-modern times: the originality of young cultures emerging in urban suburbs, far away from the high cultured and well-established town centres. This happened when the first punks and their cultural output reached the cultural panorama all over Europe.

Mapping design in Europe through ICDHS

To carry out this task, we used ICDHS Proceedings and Abstracts books as a key source of information about the sort of European history of design that has taken shape in this specific scientific context. Here again, this is a first
step in a research process concerning ICDHS’s legacy. It permitted us to gather enough data to draw several maps on the current situation of DH & DS. The study of ICDHS’s concerns, participants, themes and contributions offers a lot of significant information regarding the evolution of the discipline of design history, but to comment all of them would go beyond the scope and purpose of this article. Here we focus just on papers related to European issues.

Table 2: Total participants at ICDHS venues (1999-2014)

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<tr>
<td>Total participants</td>
<td>87</td>
<td>90</td>
<td>104</td>
<td>117</td>
<td>104</td>
<td>129</td>
<td>117</td>
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Built after every venue. See www.ub.edu/gracmon/icdhs. We consulted that table and amended some data in preparing this paper.

Viewing the data rendered by ICDHS, it was important to realize which countries participated regularly and their representativeness. Being a conference that seeks to embrace global participation, and counting on the presence of 49 countries through to 2014, in this first phase of research we considered Europe as a starting point. But remember: what should be Europe at present? It includes the territory defined by physical geography as a continent: from the Atlantic to the Urals, from the Arctic Circle to the Mediterranean and the Caucasus. It comprises 48 states and many more nations but excludes the Anatolian area of Turkey. However, looking at ICDHS’s most frequent attendants, the territorial boundaries proposed by this study integrate some countries not belonging to the EEC: Iceland, Norway, Russia, Switzerland and Turkey. In the latter case, because of the frequent and continued presence of scholars coming from Ankara and Izmir, Turkey has been included in its entirety.

We know there are a lot of constraints in drawing a map that may undermine the credibility of information gathered just from the attendance data of a conference where peer evaluation of quality is active and powerful. There are other factors too that impede a real perception of what is happening at the European level just from these conferences. Economic policies of universities often prevent people from attending conferences held far away. It is known that there is widespread interest among many participants from different countries that were unable to attend due to lack of funding. On the other hand, accepting English as the only language of the conference raises another barrier; to attend depends on idiomatic skills while speaking fluently in a foreign language. It is easy to check this factor by the assiduous presence of countries accustomed to speak English daily. These situations have a tremendous impact on the results presented. From participation at ICDHS events, we only gather information those scholars who, being able to express themselves in English, are often experts on Western issues. This means that the display of content offered by these maps always represents a fragmented vision of what has actually happened, whether in the past or the present, in so many places even in Europe. Nevertheless, the information collected is important to configuring a schema of what has been going on nationally in the field of Design History across the Continent since 1999. In fact, a similar approach to the information could be prepared locally, addressing the most
active towns and researching their relationships.

For a better understanding of this data it has been necessary to draw several different maps and illustrate specific situations. These maps indicate the epicentres of participation and production in terms of papers per conference and also by the total number of conferences. Let’s consider some of them. Firstly, in two distinct maps and using concentric circles, we can see the face-to-face dimension of the presence per country at each conference (Fig. 2), and in the second map we can see the total number of participants at a specific conference (Fig. 3). We reproduce the maps for the Aveiro 2004 conference as an example. Similar maps have been produced for every venue. Secondly, the same procedure applies to the creation of two other maps, which show the number of papers presented per country (Fig. 4), identified by the number of circles, which is less than the number of participants compared with the previous figure, and the total number of papers presented at all conferences (Fig. 5).

This data gives us an idea of the actual representativeness of every country in terms of the number of papers presented, and allows us to identify who is in the map, at least during the period of existence of ICDHS (Fig. 6).

To visualize and compare the weighting of every community of scholars, we draughted a new map using the size proportion of every country, taking into account the number of participants. For example, the size of Spain grows 125% given its participation of 125 delegates. Similar percentages were applied to all countries based on the number of participants per conference (Fig. 7).

**Fig. 2: Countries participating at the 1st ICDHS, Barcelona 1999**

**Fig 3: Attendants at ICDHS Aveiro 2014 / countries**

The international impact of the first event in Barcelona was high. Information about what happened was requested from many places overseas.

**Fig. 4: Papers presented at ICDHS Aveiro 2014**

**Fig: 5. Total number of papers presented at ICDHS (1999-2014)**

Same legend

Reading the maps

Through this distort map, it is easy to appreciate that the countries highly present at the forum were Portugal, Spain and Turkey, all located in southern Europe. In addition, the UK and the Scandinavian countries clearly stand out. The
central part of Europe features a reduced expressivity but it is not totally non-existent. Some Croatian, one Hungarian and a couple of Polish scholars joined several conferences (3,1 and 2 respectively). Italy and Switzerland were also there although occasionally. Hence, according to the statistical data and as seen from a national point of view, the portrait of current European DH & DS emerging through ICDHS’s activities is unbalanced. Provinces around the perimeter look very active and have been quite regular, while there is some significant variation throughout the years. The resulting picture might be assessed observing towns, or rather strong universities, higher education schools or bodies supporting delegates. While it may be a coincidence — just a hypothesis— perhaps the implementation of the Bologna process in higher education might have led to increased interest in history and theory.

![Fig. 6: Countries participating at ICDHS (1999-2014)](image)

![Fig. 7: Weighting according to ICDHS delegates](image)

Highly significant is the powerful, constant and regular presence of the UK — remember the DHS collaborated with ICDHS many times. This case is unique, as the British DHS has a long history, together with a large critical mass of active teachers involved. This also explains why Anglo-Saxon ways of acting and standards of rigour increased progressively and subtly in that forum too.

Then, we must remark on the low presence of big Western countries with historically considerable national design industries. Both Germany and France hold a firm place in the European history of design. They have a critical tradition too. Does this imply that Design History is not a cultivated discipline there? The foundation of a Society of Design History in Germany (GfDG 2007c) was recent. It could be that GfDG have a narrow scope focused mostly on domestic issues. Concerning France, there is a very active community in both Design Management and Design Research fields. A few years ago the Ateliers de la recherche started up with a sturdy Francophone interest. Despite French emblematic museums — such as the Georges Pompidou — and the existence of collections closely related to design, and plenty of design high schools all across the country, design history seems still to be a marginal consideration.

So, to conclude, both the maps of design history and of the history of design varied significantly over these years. Recall the 1985 Boiler House Project: “National Characteristics in Design”. Countries considered were Britain, France, America (this is USA), USSR, Italy, Sweden and Germany. For the rest, to draw maps from the data of the ICDHS and propose a configuration of Europe through the eyes of these events, it is necessary to understand the already existing fluxes between countries. One further task to do is to survey and map the themes papers most often dealt with, in order to observe the convergence of interests and common issues. It would help to demonstrate the interesting hypothesis launched in Aveiro: the existence of very creative and innovative peripheries.

**References**


ICDHS’ Proceeding and abstracts books: http://www.ub.edu/gracmon/icdhs/

Biographical note
Anna Calvera teaches Aesthetics and History of Design at the Design Department, University of Barcelona, at BA, MA and PhD Studies. Researching within GRACMON Research Unit, she is author of several books and articles on issues regarding the culture of design. Member of the ICDHS, EAD’s boards & Scientific Committee of the Museum of Design Triennale di Milano; she also cooperated with the Design Museum of Barcelona.

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A search for Brazilian craft identity

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Abstract

The basis of this article is a question posed to Aloísio Magalhães, Secretary of Culture in 1975. It was about a possible recognition of a Brazilian product. The proposal was to find the cultural references that form the national handicraft. The aim was also to understand how the objects presented this country material and immaterial wealth. It was important to understand the process for producing symbols, information, and culture. We presented some local objects with native and mimetic characteristics. They illustrate that the ‘Brazilianess’ of our craft is not pure, but multicultural. Because of that, it was necessary to define today’s culture concepts to understand the identity construction. The research took a theoretical and an existential-phenomenological approach. It defined territorial identity, cultural changes, trans-culturalism, globalization, and hybridity. The challenge was that Brazil has an extensive cultural diversity. That is due its colonization process and intense migrations.

Keywords

Brazilian handiwork, cultural identity, trans-culturalism, multicultural

Introduction

In 1975, Severo Gomes, Minister of Industry and Trade, asked Aloísio Magalhães, Secretary of Culture, the reason why it was not possible to recognize a Brazilian product. After forty years, this is the question that this article seeks to answer. At that time, Aloísio also said that to understand a culture, it was necessary to know its reality in its various moments (Magalhães, 1997:115). He suggested mapping and documentation to comprehend Brazilian material and immaterial wealth. This paper’s initial purpose was to follow the Secretary’s proposal. The idea was to find the cultural references of a Brazilian craft. It was important to understand the process of symbols, information, and culture production. We illustrate that the ‘Brazilianess’ craft is not pure, but multicultural by presenting some local objects with native and mimetic characteristics.

The research took a theoretical and an existential-phenomenological approach. We defined territorial identity, cultural changes, trans-culturalism, globalization, and hybridity. The challenge was that Brazil has an extensive cultural diversity. Because of this approach, it was necessary to define today’s culture concepts to understand the identity construction. We discussed cultural identities and their strengthening and weakening. We evaluated the Brazilian product by its socio-cultural bias and we also confronted its relationship with its extensive territorial dimension. Before the theoretical foundation is laid out, it is important to thank the CNPq – National Council for Scientific and Technological Development, a well respected scientific institution in the Brazilian academic milieu, for their financial support to our participation in the ICDHS Congress. It is also relevant to say that this research is part of Ms. Paoliello’s postdoctoral studies in Faculty of Fine Arts at Lisbon University, Portugal and Ms. Machado’s Master’s Degree in Integrated Planning Management at Vale do Rio Doce University, Brazil.

Theoretical foundation

Culture is a set of meanings and interconnections that shapes one’s identity. Through symbols and representations, it introduces what is internal and singular. Claval (2013:95) established three conceptions of culture. The first places culture as a set of practices, knowledge, and individual values. The second sets the principles that determine an individual's choice. The third concept presents the attitudes and customs that give the social group its unity. Accord-
ing to this author, culture comprises many variations. In this paper, the latter has an important role in the collective identity construction. That is the one that should be analysed to understand the Brazilian identity elements capable of producing a sense of nation.

National identity “provides a series of stories, images, and landscapes. It also builds sceneries, historical events, national symbols, and rituals. All those represent the shared experiences. They are the losses, triumphs, and the disasters that give meaning to a nation” (Hall, 2003:52). It collaborates towards building the feeling of belonging. To identify is to demarcate borders, to make distinctions on who belongs and who does not. It divides what is proper and what is foreign, same and different.

Local culture and social relations reflect that this feeling is linked to territoriality. Topophilia (Tuan, 2012) reflects this sense of place belonging. It’s an engagement loop that connects people with a given part of a space. It’s about affection. This word comes from the verb to affect that means to touch, to cause a certain sensation. It is also to appropriate and to choose what is important in each individual perception.

The being and space relationship is a mutual constitution, an inseparable web. Territorial identity is perceived, interpreted and imagined, especially when it anchors in landscape qualities. It is a reflection of a sense of place. According to Heidegger (2001), “we are not in space. We are being spatial.” Marandola and Dal Gallo present the being-place term, whose relationship presupposes a mutual and simultaneous construction. The subject constructs the place at the same time as he is being built by it (…) The places where the person lived or lives are responsible for their way of being. Through perception, sensation, cognition, representation, and imagination, the being-place is constituted. (Marandola and Dal Gallo, 2010:411)
To become a collective experience, the nation must represent each individual. People should recognize in space the symbolic elements related to their territory and history.

Territorialising is the process of territorial reconstruction. It is the place and community relationship rediscovery. Some authors have explained this process. They divide the process into three possibilities. The first is to denominate. It is the creation and the assurance for cultural practices. The second stage is the space control. Geo-symbols are used to understand and organise it socially and spatially. It is a reification phase. After that, the territorial system should be structured. This last stage reinforces the identity establishing spatial and identity links. It gives up ground to the identity and places value on the territory.

New territorial processes promote new meanings. Therefore, they provide the appearance of other identities. There could be a national identity, a regional and local one that could happen at the same time. Territorial simultaneity could also happen and it that causes the appearance of dual or multiple identities.

Bauman named this process of post-modern society as liquid. According to this author: “Fluids neither fix space nor bind time. They are constantly ready to change it. It is the flow of time that counts, more than the space in which they happen. After all, they occupy that space only for a moment” (Bauman, 2001:9).
So, how to recognize a Brazilian product? That is this article’s central question. We must consider that “things are symbolic ornaments of identities” (Bauman, 2001:100). In a world of instability and continuously transformed identities, objects also become unstable.

It is important to understand a little more the signification of the being-place. For that, we present three approaches on migration by Marandola and Dal Gallo (2010). They talk about transnationalism, multi-territoriality, and in-between territoriality. These concepts will help us in understanding the unfinished contemporary identity and the Brazilian craft symbols.

The transnationalism considers the space as a fluid. The person is no longer limited to the origin nor to the arrival place of settlement. The multi-territoriality is about the loosening of the national borders that become gradually more permeable. It is about a transit in the various spaces. The in-between territoriality is when people live between regions and between cultures. They are between being and not being a citizen. They are divided between the demands from the origin place and the ones from the destination place.

Another type of structural change is also transforming the present society. It is the globalisation process. Tarouco and Reyes state that “Globalization is the end of Geography or the annulment of space. It can be expressed by the ‘dispossession’ of human activities. It is the ‘depersonalization’ of the place that is not uniqueness anymore” (Tarouco and Reyes, 2011:2).

The locality refers to a historical construct between society and the nearby territory. It is not only contrary to a global position. According to Hall (2003), globalisation would be responsible for some collective identities formation movements. One is the disintegration of national identities; another is the strengthening of these
national and local identities by a globalisation resistance. It is a local reaction.

Haesbaert and Limonad (2007:41) discuss the socio-cultural homogenising image resulted from the globalization. Their texts explain the dissolution of local identities that could culminate in a depersonalised global space. This fragmentation as another face of globalisation manifests itself in the form of exclusion. Canclini introduced the term hybridisation in various ways.

At this point it must be said that the concept of hybridisation is useful in some research to cover conjointly forms of cross-cultural contact that usually carry different names: radical or ethnic fusions called mestizaje, syncretism of beliefs, and also other modern mixes between the artisanal and the industrial, the refined and the popular, written and visual forms in mass media messages. (Canclini, 1997:19)

It is about simultaneous actions, in which everything is interchangeable. It is a process of intersection and inter-culturalism. The result appears in cultural changes and in conflicts between tradition/modernity, local/global, old/new. With hybridisation, dispossession and reposition reappears, and also territorial relocations and new symbolic productions. In Brazil, that happened since the beginning of its colonization process and intense migrations.

The decline of national identities gives away to new hybrid identities and globalisation encourages the appearance of various territorialities and hence to identities diversity. That argument alone could stop us from mapping the national cultural values embedded in Brazilian handicrafts. There is no longer a political nation-state able to make a homogeneous culture. “National identities are strongly generic” (Hall, 2003:61). Therefore we can state that the Brazilian national product does not exist in its uniqueness.

**Object-place**

The craft objects are narratives. They are the symbol of a situation and a defined place, so they show us an identity. They become a speech and then translate our culture. We can also name them as ‘reflexive products’ because they can emerge from and also interpret some human's experience.

In this way, we present five objects examples that have Brazilian cultural signs. They are impregnated with the place where they were produced. It is a specific time-space production. They are cultural narratives that represent a small part of this country handicraft.

We will begin by showing the first Brazilian handicraft revitalisation project result. It is the result from a meeting between designers (Heloisa Crocco, Marcelo Drummond, and Porfírio Valladares) and craftsmen from Ouro Preto, Minas Gerais.

The project discussed the cultural significance loss in products developed with soapstone. The local architecture, the Baroque monuments and Aleijadinho works formed the new objects basis, as in figure 1.

This object-place reflects the culture of this place. A functional contemporary demand, ‘soap dish’, symbolizes people's identity. It chronicles various references. First, the soapstone – a low-value material - exploration history is explicit. The baroque architectural reference is the second one. Their contra curves reveal a symbolic identification. The technique used is the last narrative because it is an interpretation from one from the 18th century to the 21st century. It is a time rereading of several constructed narratives that forms this object-place.

The next object-place is made from *cuijera’s* fruit. It was dyed in black and decorated with ornamental incisions. It is important to say that the gourds are used as tools in Santarém region since the 17th century. Local indigenous communities have developed this artisanal practice and IPHAN registered them as a cultural heritage. They are still used today throughout the Pará state to serve its typical dishes.

In this historical object, some images found in Belém's museum collections were inserted. Some archaeological images found in tapajônicas' ceramics were also used as cultural symbols. Figure 2 shows the object developed by the Santarém's Women Association.

The designs and patterns used are similar to those used in the Indian body painting. That results in a material culture. When these patterns are reused, this people reconstruction history happens. This object-
place provides the narrative of two epochs, their habits, and their culture. From the southeast toward the south of our country, we present the third object-place. It was developed by Tina Moura and Lui Lo Pumo in partnership with the Ladrilã artisans. They are from Pelotas, Jaguaraó, and Pedras Altas, cities in Rio Grande do Sul. This region is famous for its carpets and pure wool blankets. However, the collection developed different objects from this traditional material. One example was the Anemone lamp (Figure 3). It awarded the 25th edition Design Award of Brazilian House Museum.

This object narrative began with a way of thinking beyond the traditional material application. Its seasonal application changed for new uses with new colours. The light that exceeds the existing material is a novelty. This temporal-spatial displacement provides new symbolizations. The narrating identity and historical references prints a new contemporary identity. It is a re-look to what is typical but it also reinforces the importance and the history of the existing material.

The next example presents the work from Handcraftsmanship Association from Monte Castelo. They are from Maranhão state. Their objects are made from the Buriti, a majestic palm tree, abundant in the region. Its fruit is a chestnut color and is covered with shiny scales. The basket (figure 4) was woven from its large leaves and also used its oval nut.

This artisanal practice is linked to cultural traditions, in which we could also notice indigenous influences. It brings strong values. It is a product that reflects the artisan itself and that also expresses a cultural identity. It uses local raw materials, traditional skills, and a cultural heritage that results in a unique craft product. The last object-place to be displayed is made of clay. The piece - almost an ex-voto - carries all the expressiveness of the artisan. It features the faces of the people that lives around its house and also from those imagined by the artisan. Figure 5 shows the craft object made by Irinéia Silva from Muquém, Alagoas. It is an object-place that embodies an individual identity. It goes beyond the historical culture narrative. It is an artist look on the local material, on the people nearby, using a particular technique.

We noticed that craftsmanship could be seen as an interpretation, as a personal symbolism. It can also be the result of a single person and her/his local territorial identity. We could exemplify it not only as identification of a collective narrative but as a personal and a symbolic narrative of a place.

It is worth mentioning that the objects-place presented here are just a small selection to show the diverse craft developed in Brazil. They are local identities that increase the sense of belonging to the responsible artisans. So, is there a genuine Brazilian handicraft product? We can answer no, as we stated earlier. But we can also say yes. “Communication between man and nature is mediated by objects. They are signs of happiness, satisfaction, power, wealth, science, technique, etc.” (Henrique, 2008: 204). The identity generates products that represent someone or somewhere. They appear as a mirror of certain local place and time.

Our difficulty in finding Brazilian’s product identity is the result of this country great cultural diversity, its colonization process and the intense migrations that occurred here. Hall (2003:59) stated “most nations consist of separated cultures. There was a suppression of the existing one. Culture was unified with a long process of violent conquest”. Brazilians were composed of Indians, Portuguese, Italians, Japanese, Germans, Africans, etc. This ethnic diversity is the foundation of this country culture. As in many other nations, it reflects the “difference as unity” (Hall, 2003:62). Those are the reasons why the Brazilian nation doesn’t exist and therefore the impossibility to visualise its cultural and craft characteristics.
**Final considerations**

The objects-place craft deals with the production of objects, materials, techniques, symbols, people, and place. It is a local and personal narrative interpretation. The objects are a reflection. They represent identities and histories. A simple object reflects a cultural territoriality. The Brazilian handicrafts should not be read as 'frozen' products. They should not be seen as 'pastiches'. Otherwise, they should be the result of its culture accumulation. They should take possession of this country’s history and be the result of all the cultural contamination process to this date. To recognize a Brazilian handmade product we should use a space-time reference. This will describe the country’s identities, culture, materials, symbols, and techniques. We should also concern that Brazilian craft is multicultural in essence.

**References**


**Biographical note**

Carla Paoliello is an Architect, an Artisan, and a Researcher. Her master's and doctoral degrees were in Structural Engineering in 2001 and 2008. Nowadays, she is a post-doctoral student in the Faculty of Fine Arts Center, at Lisbon University. She is interested in discussing craft, culture, design, and the territory.

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The perfect dress and its making: A comparative study of the sartorial habits of Amsterdam women (1950s–2010s)

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Abstract
The shift from home and custom-made clothing to mass-produced ready-mades in 20th-century Europe has been the subject of studies from multiple disciplines and across various locations. Contributing to this field of studies, and extending the analysis until the present day, a group of female consumers living in Amsterdam in the 1950s and 2010s were interviewed about their sartorial habits. The study identifies a discrepancy between common manufacturing processes and values related to identity as a central cause of this shift. Furthermore, it explores how such a discrepancy can be found again today, arguing that this divergence is leading to the re-emergence of customized production.

Keywords
Dressmaking, mass production, customization, craftsmanship, identity

Introduction
The rise of the apparel industry has been studied from a variety of disciplines including Economics, Business, Jewish and Labour History (see Godley, 1997 for a brief review). Some of the factors considered essential for its development and popularization in Europe and North America are the development of sizing systems, sewing machines, and, importantly, the growing prominence of fashion trends (Godley, 1997, 1999). The decline of previously popular ways of dressmaking, however, has received less attention. Most scholars see this as a gradual process of substitution of home and custom-made clothing by mass-produced ready-mades. They argue that, although this process took place at different times in different regions and concerned different categories of clothing, the development was overall similar (Kaipainen, 2009). For instance, Zakim (2009) reveals how the ready-made substituted the homespun in representing national values for American consumers during mid 19th century, Ugolini (2003) uncovers the tensions involved in the choice between tailor-made and ready-to-wear for early 20th-century British men, and Kaipainen (2009) points out that late availability of ready-to-wear in Finland extended this process until mid 20th century. Other authors, however, argue that the industrialization around the turn of the 20th century resulted not only in an increase in the production and consumption in the ready-made industry, but in an increase in the production and consumption of home and custom-made clothing as well (Burman, 1999; Fernandez, 1994). According to this rationale, the popularization of the domestic sewing machine and paper patterns enabled more people to pursue dressmaking activities for themselves, their family members and clients. However, if the consequences of industrialization for personalized clothing during the early 20th century are up for discussion, it seems beyond dispute that personalized dressmaking declined around mid 20th century. “It is only since the Second World War that mass-produced, ready-to-wear clothing has become the standard wear for everyone” argues Elizabeth Wilson in her influential “Adorned in Dreams: Fashion and Modernity” (2003, p. 89). In this article we stress the significance of consumer values in this process, taking the city of Amsterdam as an example and contributing to the transnational debate. Home and custom dressmaking were the most common ways of making clothing in Amsterdam during the first half of the 20th century. However, as we will argue, these practices were not optimal in terms of what consumers wanted to communicate through dress, resulting...
in a radical decrease in personalized clothing by mid 20th century. In the first part of this article we highlight the importance of fashion trends to 1950s Amsterdam consumers and how ready-mades were the most desirable way to look “modern”. Subsequently, we continue this perspective into the present in order to explain the current emergence of Product-Service Systems (PSS) offering personalized clothes on demand. Unlike in the 1950s, the consumers of today see adherence to fashion trends as something inevitable rather than attractive; individuality and personal style, however, are considered central. We argue that the divergence of these values with those of mainstream mass production is offering a fertile ground for emerging customization initiatives such as NikeID or MiAdidas and transforming, once again, the way we design and make our clothes.

In order to investigate the issues introduced above, two groups of women were interviewed about their sartorial practices. The first group was asked about their experiences during the 1950s, when they were in their twenties and thirties. This first series of interviews was carried out in 2011 with eleven women. The eleven women in the second group were between 25 and 35 years old in 2015 and were asked to reflect on their present or recent practices. All names have been changed for privacy reasons.

“If you are in fashion you matter”

Drawing on the interviews with the first group, the 1950s can be seen as a transition period in the Netherlands, going from making clothes and visiting a dressmaker, to buying ready-mades in a store. This is more or less in line with the rest of the industrialized western world (Wilson, 2003). Most of the women in this group regularly made clothes for themselves and their family members, until ready-to-wear became more popular. Several interviewees stressed that professional dressmaking was a possibility only for higher classes and therefore not within reach for them. One of the respondents could only afford to buy second-hand clothing. However, three of the women happened to be professional dressmakers and defined their clientele as varied.

Not only the practice of dressmaking was popular among these women, they also transformed and remade garments, adapting them to changing body shapes and fashion trends. When Jacoba was 18 (in 1935) she bought her first ball gown. “[Black] always looked good on me so I bought a black dress. First it was a long dress and later I transformed it into a short dress, and then it lasted longer […] You could change the whole look; for example [by altering] the sleeve of a blouse”. Ria, born in 1925, recalls transforming ready-mades regularly. “I bought this skirt and top, and made them into a dress. The skirt was pleated, but I changed it. Then I got a different effect.” Hendrika, a seamstress born in 1925, also used her skills to alter clothes: “By adding a small thing it would become a little different. It would become fashionable.”

Although widespread sewing skills at the time allowed for a complex and continuous process of design and manufacture resulting in the making and remaking of unique pieces, the stylistic ideals of these women were far from unique. When asked about the design process for dressmaking, both the amateurs and professionals stressed the role of ready-mades as a source of inspiration. Jacoba, who regularly made her own clothes at home, said she “looked for what was fashionable in magazines and in shop windows” to base her choices on. “Fashion was in the window displays,” Hendrika confirmed. Jantien, a professional dressmaker born in 1924, was aware that her services were second choice for consumers who had an expensive taste: “[People] came to me because it was cheaper than buying something”. They often told her what they had seen in the shop and she would base her designs on those ready-mades. “To see what was fashionable, I would sometimes go look at the shop windows. I was good at drawing, so I mimicked what I saw”.

From the responses of these interviewees we can conclude that following given fashion ideals, to be modern and ‘fit’ into society, was considered essential. It was the responsibility of the consumer to keep up with the newest developments in order to be “well-dressed”. Clasina, born in 1925 and regularly sewing at home for herself and her children, would “try to join fashion as much as possible”. Similarly, Marianne (1925) recalls that “there was fashion and then I would try to follow it, of course”. The main reason to (still) do that according to Jachienke (1935) is that “it’s important to look good, and that was the case also then.” For Hendrika, the social significance of fashion transcends simple personal appearance; “if you are in fashion you matter”, she stresses.

The role of ready-mades as signifiers of fashion trends shows how they were highly desirable before becoming actually convenient, explaining the decrease in the popularity of personal dressmaking practices as soon as ready-mades became affordable to more consumers. Ready-mades were much more in line with the dress values of the time. The garments might not have been as durable and well-fitted as good quality custom and self-made clothing, but they were designed by professionals aware of the latest trends (Godley, 1997; Kaipainen, 2010; Marcketti, 2005). Although this article highlights the influence of consumer preferences in technological change, we
do not deny the role of mass production in spreading and consolidating those values. In our view, it was this mutual influence that made industrial clothing the best way to “be modern”.

“This is just…me”
The sartorial practices of the second group, young women working in Amsterdam today, differ in several aspects from the ones of the first group. To begin with, the great majority of these women have never made clothes for themselves or others. Only one of the respondents occasionally practices amateur dressmaking. They incorporate new clothes in their wardrobe in several ways. Buying ready-made clothing from physical shops and from online shops is the most popular way. Some of the respondents also exchange clothes or buy clothes second-hand. When asked about the criteria for choosing their clothes, they stress the importance of new items to match or complement the other clothes in their wardrobe. In many cases, it is this analysis that actually leads to a new purchase. Their wardrobe represents the spectrum of clothing that defines their dressing style.

Most of the women see adherence to fashion trends as something inevitable rather than important or appealing. “I don’t look to what’s in (…) but implicitly you take it into account because that is what is there [in the shops]. I buy what’s there, so automatically I’m following [trends], but maybe with a lag of a year or so”, says Susanne (31). Klara (33) is “not interested enough in fashion to pay attention to trends”. Sometimes, they explicitly resist falling in line: Ingrid (28) and Annemarie (34), for example, decided to avoid a trendy style of backpack that “everyone has today” when buying one for themselves. Lotte (28), conscious of the seasonality of the colours offered in shops, takes her chance to purchase a lot of garments when one of her favourite colours is trendy, so that she can also use them when they are out of style.

Overall, the inspiration of these women’s shopping decisions comes from their personal background, memories or character, and their direct surroundings. Sara (27) recognizes the influence that living in South Africa and attending swing and jazz dance lessons has had on her style, which she describes as “contemporary” but also incorporating “African-like” prints and a certain remembrance of the 1920s. Lotte (28) has “a very rigid colour scheme” consisting of “a lot of green, turquoise, brown and earth colours”, which goes well with the tones of her skin, hair and eyes, and Rosana (34) acknowledges the influence that living in South Africa has upon her style, “informal, with bright colours and accessories like rings or earrings”, which has been prevalent for many years and regardless of the season.

The significance of personal style for this generation can perhaps best be illustrated through the experience of Lotte. For Lotte, identifying her personal style with the help of a stylist friend was “an eye opener” and she recommends this experience to others; “at some point you discover your style, it is something that is not related to fashion, it is not related to your peers, this is just…me. And somehow it sticks and it crystalizes, and you say: Oh… this has been me for a long time, I will stick to this (…) OK, then all the other stuff I have just needs to go, because this is just… better.”

So if the personal and different are central values for this generation, does that mean that imitation and trends play no role at all? We think not. Based on the writings of sociologist Gabriel Tarde we argue that it is not that we no longer imitate, it is just that the way in which we imitate and follow trends has changed, resulting in an increasing intervention of the individual:

What is contrary to personal pre-eminence is the imitation of a single man whom people copy in everything. But when, instead of patterning one’s self after one person or after a few, we borrow from a hundred, a thousand, or ten thousand persons, each of whom is considered under a particular aspect, the elements of thought or action which we subsequently combine, the very nature and choice of these elementary copies, as well as their combination, expresses and accentuates our original personality (Tarde, 1903, p. xxiv).

In conclusion, the approach of the second group of women to dressing style varies heavily from that of the first group. While the first group identifies adhering to fashion trends as a key factor to dressing well, for the second group fashion trends are one element of style, an element with which they can play by incorporating, resisting and/or transforming it based on their own set of aesthetic values. These values are based highly on personal experience and are perceived as resulting from the individual.

Personalized production: An industry in the making
What the two generations of women have in common is that the prevailing manufacturing methods of their times do not correspond with the values they find important in dress. Whereas in the 1950s the women aspired to be in fash-
ion and follow a generic style, the most common manufacturing method was custom dressmaking. In the current day, now that dress values are inclined towards the personal or the particular, the material resources to realize them are highly generic. Women’s relationships with clothes today is linear, consisting of buying, using and disposing, and rarely involves creating or modifying garments in order to create unique items. The lack of skills to do this is a major reason. Janneke (28), like most of these women, has never had a custom or self-made garment except from a scarf, she thinks “that would be too expensive or take too much time because I need to learn how to do it (…) now I really have to put effort to get them (…) I don’t really see me doing something for myself”.

Arguing that it was the divergence between the prevalent manufacturing processes and the values associated with dress that in the 20th century lead to the decay of home and custom dressmaking, it is not unfeasible that today’s disparity between processes of making and dress values will lead to the proliferation of industrial practices that speak more to what consumers find important. For, while individuality and originality are major concerns for today’s women, most of the clothing industry works on the basis of repetition.

The renewed interest in personalized clothing at a global level challenges the dynamics of traditional companies. Customized clothing requires reversing the whole production chain by starting from consumer demand and transforming production lines into service-based flexible systems (see e.g. Duray, Ward, Milligan, & Berry, 2000; Pine, 1999). Examples of such initiatives already in the market include that of big companies such as Nike or Adidas, who offer online platforms where customers can create their personalized sportswear based on combinations of pre-defined parameters, and small start-ups such as Knyttan, a shop were customers can walk in and use an interactive platform to create their sweaters to be knitted by the on-site cutting-edge manufacturing machine. The extent to which these emerging Product-Service Systems may substitute mass production in the future is not yet clear. In fact, these practices are still limited to a small group of early adopters. What is clear is that their popularization will depend, among other factors, on the values the consumer of the future associates with dress. Will individual style and exclusivity of dress become significant enough for consumers as to make mass production of clothing obsolete?

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In search of an imagery of domestic objects in Chile (1860—1930) through *Lira Popular* broadsheets as a graphic and identity reference

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**Abstract**

One of the most important examples of identity graphics in Chile is the *Lira Popular*, a set of broadsheets printed in Chile (1860-1930) by popular poets who would report sensationalist news in décimas [ten-line stanzas], generally illustrated with an engraving; a largely urban phenomenon due to rural-urban migration and the resulting population growth in cities. Beyond the content of the broadsheets the image takes on relevance: the engravings reinforce a visual imagery where domestic objects, associated with the popular class, and consistent with the identity of these broadsheets, are represented and recognized as of part of a local identity. The following paper will approach material culture in Chile through a focus on objects of everyday use as seen in the *Lira Popular*, in order to elucidate from them a collective imagery and identity.

**Keywords**

Domestic imagery, household objects, material culture, visual culture, Chilean identity, broadsheets

**Introduction**

The following paper will delve into the images of household objects, present in the *Lira Popular* broadsheets, as a reference to a system of everyday objects that could form a collective imagery and identity. The *Lira Popular* will be used as a cultural object with a strong local identity in order to approach the material culture of the nineteenth and early twentieth centuries, in search of an imagery of objects in Chile.

In this regard, the following investigation seeks to contribute to the current lack of knowledge on the subject in Chile, with the *Lira Popular* as a gateway given its importance as a graphic and visual reference and signifier of local identity. To this end, the broadsheets will be analysed by contrasting with historical documentation: photographs, prints, travel accounts and studies of the time.

First, the *Lira Popular* will be presented according to its context and local identity; the broadsheets will then be analysed and the objects within presented; finally, this information will be compared with historical documents to clarify and verify a system of everyday objects.

**The *Lira Popular*: Context and identity value**

The *Lira Popular* is a loose set of broadsheets printed in Chile from approximately 1860 to 1930, within which sensationalist news events were generally reported, illustrating the most striking event with engravings. Written in décimas, the broadsheets were aimed at a mostly illiterate audience and made by rural popular poets, who brought a culture of oral tradition from the countryside to the city, based on popular chanted poetry.

The period of the *Lira Popular* is one of profound modernization and social change in Chile, a time of mass migration from rural areas to cities undergoing urbanization. After 1865, a migrant population arose which initially favoured the new mining region and great cities; by 1885 the migratory movement accelerated because of the crisis in the mining sector, the shutdown of the hacienda system, and the growing need for labour due to major modernization of the cities, which caused an increase in the urban population (Salazar, 2000). Due to rapid de-ruralisation, this population was relegated to second rate work, and thus stuck between its rural origins and its ‘proletarian-industrial’ destiny, stripped of its rural roots and yet not entirely at home in the developing city — a
consistent with the audience to which it was addressed — as bearer of an oral tradition associated with a sense of ‘origin’, and a reporter of the events close to the reality where the audience saw itself portrayed — encouraged identification with the message it delivered as an active subject in the construction of a national identity. The topics reported form the image and collective unconscious of a social body in action, a mirror of Chilean idiosyncrasy: the manner of thinking about certain subjects and the feeling and life of the people. The broadsheets thus enable the construction of a social and collective imagery, forging allegiance for, and with, an audience of limited economic and cultural means, enabling access to a particular form of expression that allows it to participate of the city through varied recognizable codes: on the one hand, the décima, linked to oral culture; on the other hand, print, associated with the city itself.

In addition to the above, the upper class rejected any association with rural origins; coupled with a strong aspiration by the oligarchy to a European model, another identity bond is forged from the contrast between a ruling caste with a taste for the foreign (with a preference for French modes) and traditional or local customs. Thus, the *Lira Popular* represents this due to its origin, theme and imagery, and consequently would be a repository of an identity that comes from a tradition without further external influences, thus becoming an object considered to be “Chilean”. Concerning this, besides the fact that *Lira Popular* is actually considered as a “Chilean object”, in Latin America (specially in México and Brazil) exists similar examples of broadsheets, printed at the same period of time, that are also considered as a local graphic referents in its countries: a phenomenon that denotes a common identity, an imaginary associated to the entire region, “holder of an expression related to the popular sectors in each country, where the sense of ‘popular’ would be linked with a sense of origin and identity” (Malacchini, 2012).

Regarding the image found in the *Lira Popular*, it occupied a significant portion of the space of the broadsheet. Considering the high levels of illiteracy in Chile — by 1865 illiteracy was estimated at 83% (Labarca, 1939) — the use of the image gains even greater relevance. Its primary function was likely to facilitate the understanding of the texts to an illiterate audience, but above this to draw attention to the broadsheet by making it more attractive. The image, which was usually a woodcut representing the most scandalous events, was used to portray scenes that were familiar both to the popular poet and to the audience to which it was directed. In this sense, the image identified its reader with a common and collective imagery representing everyday scenes, such as toasting, popular characters, canteens, and violent scenes, among others. The above is reinforced by the importance taken on by the use of woodcuts in the history of Chile, a widely-used means of reproduction especially in the beginning by a marginal sector, where the *Lira Popular* in particular enjoys a foundational status in the wood engraving tradition.

The identity value of the *Lira Popular* broadsheets, its décimas, but especially its engravings, has resulted in its use as a graphic reference where the identity value of the image becomes more relevant. The broadsheets became a platform for identity, where identity lies with the content of popular origin in association with the local, thus constituting a graphic identity based in popular culture (Malacchini, 2015).

**Household objects and their presence in the Lira Popular**

The presence of different objects, for the most part of household use, can be observed in the scenes illustrated in the *Lira Popular* broadsheets. Although the woodcuts are in rough strokes — far removed from the woodcuts seen in European broadsheets — the objects remain recognizable; the strokes confer the image an identifiable style that will...
be associated with an image of ‘popular’ origin (as opposed to ‘finer’-lined clichés). In the broadsheet, in order to visualize a scene that must be recognizable to a largely illiterate audience, representation becomes crucial, an synthesis exercise of context that must relate to its public: the popular poet, or the engraver (who were not always the same person), must decide which objects should make up the scene to communicate, from the image, an identifiable action. In this way, through an economy of resources will be possible to discriminate the objects to make up the engraving, illustrating the essential and recognizable to build an image. This is reinforced by the vision of philosopher and psychologist William James (contemporary of the period studied): “Millions of items in the outward order are present to my senses which never properly enter into my experience. Why? Because they have no interest for me. My experience is what I agree to attend to. Only those items which I notice shape my mind...” (Csikszentmihalyi & Rochberg-Halton, 1981; James, 1890, p. 402). In the present case, care is given to selection of the main objects that could serve to build an imagery familiar to the audience. The objects on display are the objects of their immediate surrounding, which accompany them daily and to which attention is given, both through repetition and by virtue of being, for the most part, the few objects in their possession.

Thus, in the images we see a representation of chairs, stools, benches, low tables, beds, knives, braziers, teapots, musical instruments (the llanera harp, vihuela guitar and Chilean guitarrón), demijohns and, above all, different glass vessels. The latter is unsurprising given that at the time there was talk of alcoholism in farmhands and labourers, a problem signalled not only by the gentry, but also by the popular poets in their verses. The toast, which involved wine, beer or hard liquor, was part of a national tradition.

As regards the furniture, with the exception of beds (a metal bed is observed) the representation is wooden furniture denominated “rustic”, where chairs and stools evidenced a seat of woven vegetable fibre (straw, wicker or cattail). The musical instruments, on the other hand, are precisely those in use today to play Chilean folkloric music (cueca or zarzuela at the time). The brazier, of simple form and made of iron or other metals, was a central object in the room: as well as serving to heat the room, it was where the water was boiled in the teapot for breakfast, as well as other meals, always within the confines of the ‘bedroom’. Thus, all of these objects may well constitute a set of objects of everyday use associated with a local imagery.

Many of the scenes depicted in the broadsheets occur outside, as in the case of galleries or courtyards, which were usually a space adjoining the bedroom. For this segment of the population, most of whom were crowded in one room per family in conventillos [tenements] or urban ranches (De Ramón & Gross, 1985), the gallery or the courtyard was the natural continuation of the room, the space where social life took place. This is where lunch was ‘cooked’ and shared with other residents, as well as being the stage of impromptu parties accompanied by the chilean guitarrón and the harp.

This is why, when speaking of ‘domestic’ objects, these are contextualized in a space that is not exactly confined to a house as such: they are household objects subject to open and common areas, both outside and inside the room, which are in turn of ‘hybrid’ use. The chairs that are used in
interiors are the same as those taken out to the courtyard to share a meal; the brazier allows for the heating of water from the teapot, both inside and outside the room. The domestic space is expanded, allowing a collective construction of identity associated directly to the identity value inherent to these objects, an idea reinforced by one of the many subjects discussed in Csikszentmihalyi & Rochberg-Halton (1981, p.17): “…the home contains the most special objects: those (…) that create permanence in the intimate like of a person and therefore that are most involved in making up his or her identity. (…) … household objects constitute an ecology of signs that reflects as well shapes the pattern of the owner’s self”. These household objects convey a common language emphasizing the construction of collective identity, in which the ecology of signs is further highlighted by focusing on a limited number of objects.

Everyday objects: Identity imagery of a working class in information

The objects defined above were compared with photographs and documents of the period in question, which coincided with the largest modernization of cities and main migratory movement in Chile. While it is impossible to find pictures of the inside of the houses, given that at the time photographs were normally reserved for the wealthy, whose home interiors were rarely photographed (much less those of common people), some photographs were found that portray life in tenements and some urban ranches, but only their courtyards and galleries. Here, the space is a centre of reunion: due to overcrowding, the domestic space had little choice but to expand to the collective space. We see in these common spaces the presence of largely the same objects portrayed in the broadsheets of the Lira Popular. The only object that is absent is the metal bed, which is usually limited to the private sphere. Many objects, especially furniture, resemble or are identical to the typology of those used in rural ranches. In this regard, some objects that are considered “could have derived from a peasant background, belying the rural origin of their owners. These are objects that relate to memory and nostalgia, a role linked to ‘antique’ objects as defined by Baudrillard: “(…) “Such is the role of antique objects, which always take on the meaning, in the context of the human environment, of an embryo or mother-cell.” (Baudrillard, 1996, p. 84). Transitional objects that would serve as a bridge, in many respects, for labourers settled in the city to their rural origins, while staying within the urban context; contributing, as in the case of the Lira Popular, to making the transition from peasantry to a developing working class more bearable.
A 1903 social study of a working class family (Eyzaguirre & Errázuriz, 1903) reveals more details of life inside the rooms: nine family members lived in one space, several of whom would sleep in the same bed while the mother ironed clothes, leaving the brazier on until it would extinguish on its own. Breakfast and the evening meal were made in the same room, with space for a hen house in the corner. The room lacked ventilation and natural lighting. The goods that the family possessed are also listed in the study, many of which coincide with those observed in the broadsheets, drawing attention to the objects that appear under the category of furniture (tables, iron beds, chairs, benches, nightstand, mirror, wool and straw mattresses, bedding, cages, among others) and utensils (brazier, a portable furnace, clay pots, buckets, large and small teapots, plates, cups, bowls, spoons, forks, knives and a large glass). The above-mentioned objects are defined as a few articles of “first necessity, very poor and in disrepair” (Eyzaguirre & Errázuriz, 1903), corresponding to objects of everyday use that, given their scarcity – being limited and quantifiable – take on importance, thus reinforcing the imagery they create.

In contrast to the above, the system of objects of the ruling class aspired to objects governed by European fashion: Louis XV furniture, large dining tables and halls of mirrors. The Chilean upper class had identified itself with the foreign, with the desire to belong to a great Paris or London. In an almost opposite place, the system of objects associated with an imagery of the urban popular class from the country, it would connect with a sense of oral/rural origin. Here, the objects become signifiers of identity, taking on a leading role in a historic moment in Chilean society undergoing transformation.

**Conclusion**

Analysis of the *Lira Popular* as a cultural object and bearer of local identity is, in itself, a gateway to the study of material culture at the end of the nineteenth century and early twentieth century in Chile. In this manner, beginning with the observation of the set of household objects represented in the broadsheets, it questions their possible identity value and how they could contribute to a collective imagery and identity.

The studied objects are as transitional and ‘hybrid’ as the context in which they are located: the labourer, who is neither a peasant nor city dweller, sees both the *Lira Popular* and the objects it represents as a bridge between modernization of the city and the rural nature of the country.

In this way, these objects propose a collective imagery tied to a common language of objects, allowing, in turn, the construction of an imagery recognizable by an audience that, while illiterate, is assumed to be object-literate. Thus, the audience is illiterate people who read, beyond the text, the image on the broadsheet: the represented objects communicate from a common language of images to a social group that shares the same origins. This language, which articulates and strengthens itself from community experience, conveys an imagery that determines a recognizable common identity.

This identity is built upon the community experience that is reflected in the domestic space, which expands to the common area of the dwelling. It is in this place where the “reading” of objects becomes important: these are experiences that are shared by a large part of the population, thus allowing a direct identification, both to the context and the objects that are found and used within it.

Finally, the question of the origin of these objects remains: many from the colonial era, such as the brazier, while others could have incorporated later modifications at a national or regional Latin American level; others may have been imported. Similar questions arise regarding the confrontation of locally manufactured and imported objects where both could be recognizable as part of an imagery identity.
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Biographical note
Simoné Malacchini is a teacher in the Department of Design, Facultad de Arquitectura y Urbanismo, University of Chile. Author of the book “Lira Popular, identidad gráfica de un medio impreso chileno” (2015). Has also curated the collections of contemporary art “Ojo Andino Chile” (2015) and “Ojo Andino Perú” (2016) part of the Imago Mundi collection; among other works and books. Interested in visual and material culture.
Character design and regional identity in Korea since the 1990’s

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Abstract
The aim of this study is to research the local government-led identity design by analyzing the official characters of the municipalities. After the autonomous local government system launched in 1990’s, each region started to establish a CI (Community Identity) including regional character in order to promote themselves. The competition between governments was so overheated that in about 7 short years, a majority of the municipalities established CIs. The regional characters look very similar to each other in several aspects. And it is apparent that there is a stereotype. Many of them were designed by KIDP (Korea Institute of Design Promotion) and some design companies that are registered with the Institute. The CIs were created and established hastily in a competitive manner without enough deliberation, and discussion by only a handful of companies. As a result, the characters could not successfully embody the true identity of its representative area.

Keywords
CI (Community Identity), identity design, character design, regional character design

Introduction
Korea has many regional characters. A lot of attention was given to building regional identities since the mid-1990’s. The integrated identity design was especially prevalent, such as logo and emblem design, which also gave birth to many characters. During the following decade, such phenomenon has established itself as a popular trend. Currently, many establishments that are associated with the Korean government including provinces and government agencies have their own characters. The characters created for the different regions of Korea were explored in more depth.

Regional characters are visually similar. Sometimes it is hard to distinguish one from the other. In other words, it can even be criticized to the extent that they do not successfully embody the true identities of their representative entity. What could be the reasons behind such tendencies?

The cultural, social and political background on how the regional character design projects first started was traced. Furthermore, the development process of these designs is also presented. I took an in-depth look at the 161 characters, of how they were created and conducted visual analysis of the final products. And then, this paper cast a critical eye on government-lead designs.

In this paper, the term, Community Identity (CI) is used. Many different terms such as GI (Government Identity) or CI (City Identity) and TI (Town Identity) are in use; however Community Identity is chosen as it includes both City and Town.

When a character is used to represent a certain region, it is sometimes referred to as the mascot. However in this research, they are standardized into: character design, and regional character design.

Background on regional character design boom
The 1990’s in Korea has been evaluated as the era of explosive growth in the culture industry. Fine arts, and pop culture were in full bloom and a wide array of cultural goods was produced and consumed. Also, Personal computers started to proliferate, hand in hand with the internet.

In the computer software world, people started to use software that is used to create vector im-
Character design and regional identity

Thus the medium for cartoons made a transition from paper to computer, and characters also underwent a change from being ‘analog’ to ‘digital’. In a nutshell, the development of technology made character design possible.

Character Boom

The mascot for the 88 Seoul Olympics, Hodori, is an anthropomorphized tiger wearing a necklace with the Olympics logo. Through the international mega-event, Korea intended to express its national identity on the international scene in a profound and grand manner. This character being used to represent the Koreans’ identity is highly significant. It is clear that a tiger wearing a traditional ribboned dancing hat called the Sang-mo was beloved. This was the moment when the Koreans realized that a character can be used as a ‘symbol’.

The creation of this character marked the start of a boom in the cultural industry market. Many took notice that the character industry had become a major part of the cultural industry market, and this field garnered much attention. The government also supported the character design industry. Furthermore, many of the character production and licensing companies were established after the mid 90’s. Keeping up with the trend, such started to produce characters for the regions and municipalities.

Launch of autonomous local government system

Starting from June, 1995, the government shifted from a centralized government into a local self-governing system. Each local government made effort to create a sense of community among its residents, and looked for the ways to promote their region to everyone else. They each had to find unique identities that were markedly different from their neighboring counterparts.

Each region then tried to establish their own identities by utilizing the methods for creating Corporate Identities or CIs, which was prevalent among many of the companies during this era. During this period, competition between regions was becoming ever more heated. It was paramount for each region to establish unique identities based on each of their characteristics and attributes.

In South Korea, there are a total of 17 major regional governments also known as the Metropolitan Councils: the capital city of Seoul, 7 Metropolitan Cities, and 9 Provinces. They are made up of 232 Primary local governments. These regional governments became independent both in administrative and economic aspects from the central government in 1995.

History of regional character design

The rise of the regional character design

The regional character design trend emerged with great speed, and peaked at the end of the late 1990 to 2000, and either became completely obscure just as fast as it rose to popularity, or continued an ambiguous existence.

Bucheon was the first city to make effort to create a city image. Starting from the year 1991, they established their official mark, character and color scheme, and used them in road signs, and street furniture. The other regions followed suit but not until the mid-90’s.

In the case of Seoul, the capital of Korea, the first character was designed in 1994. Busan, and Daejeon’s were in the following year, 1995. In the late 90’s even the minor regional governments that are a part of the provinces each raced on to create their own town symbols, and this movement, all of a sudden, became a nationwide trend. This trend spread from around the capital to the regions further away, and from larger cities, to smaller towns and villages.

Starting from 1996, articles related to CI started to make their way onto the pages of newspapers. At first, the articles started off by mainly covering the City image, what symbols are, and introducing cases from other countries. Later, they covered stories on how many regional governments which were racing to develop their own characters, around 1999.

The character boom that started in 1995, peaked in 2000. According to a research conducted in...
2002, 148 out of 248 governments established individual regional characters. In a short 7 years, more than half of the municipalities jumped into CI projects, and this is a clear indication that regional character development was taking place at an incredible speed.

The fall and continuity of the design
After the mid 2000’s, the highly accelerated character design output started to decline. While renewing the home-page, some characters were withdrawn from the “symbol of our city” page. It also seems that many people thought that they did not successfully play the role of a meaningful symbol.

However other regional governments continued to create and renew their characters. Normally the smaller cities and regions that are more reliant on the tourism industry and have specialty regional products have tended to do that. These regions created more characters that could be used at the local festivals, and merchandise. Some of the regions even hold design contests.

Catching up with these contests, educational programs instructing the way to design suitable character appeared. Some video lectures frankly focused making the winner of contests. These lectures provided stereotyped manual in detail from sketching to coloring. Furthermore, they showed how to design many applied poses as well as basic front view.

<table>
<thead>
<tr>
<th>Total</th>
<th>213</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:2</td>
<td>197</td>
<td>About 92.5%</td>
</tr>
<tr>
<td>1:3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Big and rounded eyes</td>
<td>152</td>
<td>About 70.4%</td>
</tr>
<tr>
<td>Child-like body shape</td>
<td>150</td>
<td>About 70.4%</td>
</tr>
<tr>
<td>Couple</td>
<td>62</td>
<td>About 29.1%</td>
</tr>
</tbody>
</table>

Table 1: Figurative characteristics
Analysis on regional character design

Analysis was conducted based on 213 characters. These are about 87% out of a total number of 245 regional governments. It was focused on figurative characteristics and subject matter.

Figurative characteristics of regional character

Out of the 213 characters, almost of them have big face and small body. The ratio of the head to total height is 1:2 or 1:3. Also, many of them had big and rounded eyes, and many of them were representations of young children. They are not easily distinguishable, but some were introduced on the homepages as young, or others are clearly child-like in appearance. The characters were a couple in 62 cases, about 29.1%.

Overall, the color schemes are monotonous. In the past the characters were created in 2D images with black outlines, but those that are created more recently are 3-dimensional, with gradations rather than solid color segments. The expressive style has changed due to the development of technology. However the basic format stayed more or less the same such as the child-like body shape, short arms and legs, large, rounded eyes. Indeed, the characters were quite similar in appearance.

Subject matter of regional character

According to a study conducted in 2007, many characters were based on the symbols, or specialty products and historical figures. However, a problem arises that certain symbols can overlap over a number of regions. Indeed, there were quite a few cases of disputes. In the cases of regions with the same symbols, creating characters based on those symbols can undermine the uniqueness of their message.

When the characters are based on historical figures, the different regions may argue over who will take over whom. In the case of Nongae and Hong-Gildong, each of them were created by different regions. These are just a few examples and there are many more similar cases.

<table>
<thead>
<tr>
<th>Nongae</th>
<th>Hong-Gildong</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jinju-city</td>
<td>Jangsung-gun</td>
</tr>
<tr>
<td>Jangsu-gun</td>
<td>Gangneung-city</td>
</tr>
</tbody>
</table>

Table 2 – Same figures manufactured from different regions

There are some reasons why these cases happened. First of all, if the historical figure is famous and high-profile, promoting a region using a character based on him or her would be much more effective. Also, the region can reap profit from the character related merchandise. However, the more important reason is that the predicament arose mainly because of how the government chose to proceed during the process of selecting a motif for “identity” and conveying it in a visual manner.

In fact, the deliberation over the issue of identity and symbol has started much earlier. Korea in the 70’s was a time of rapid industrial growth and the nation-wide goal was to advance the field of design for exporting. Because of this, Koreans became strongly focused on showing the world the “color of their identity” However, after the prolonged colonization and war, the traditions were severed, and was extremely difficult to re-acquire the sense of identity as a people. Numerous attempts were made to rebuild our identity while searching for the answers to the questions of who we are, and how we should be represented.

Similarly, the Local Independent governments also faced similar issues when they became independent from the central government in the 90’s. I have come to believe that on top of the difficult task of looking for their identities, they also had to think about what their identities should be built upon.
The process of design production

Many local independent governments commission the KIDP (Korea Institute of Design Promotion) joint CI production projects which include character design. The KIDP then subcontracts the project to a design company that is registered with the Institute. In other cases, the local governments are also known to directly award contracts to famous well-established local design companies. These companies created characters for many different governments simultaneously and continuously during the ‘boom.’ How much thought the companies put into the identities and individualities of the characters is unknown.

Also, factoring in the fact that character production spread from large cities to smaller ones, it is quite likely that the latter analyzed the formers’ characters and created their own in near-imitation.

Conclusion

The main role or purpose of the regional character is to act as the ‘symbol’ of a region based on the regional characteristics. Based on what we have reviewed so far, however, the characters shared comparable subjective matter as well as similar formative characteristics. It can also be deduced that such canon almost stayed the same for 30 years. These issues are may be the limitations that character design has. However the following is gathered as the reasons behind such traits.

1. Insufficient discussion on the issue of identity.
2. How competition riddled, fast paced, CI design led to character design without copious amounts of discussions and deliberation.
3. How the characters were repeatedly created through the same institution, and a few select companies.

There have been much self-criticism on the regional character design, and it is true that this pushed the field of design forward. However there are many who are voicing that regional characters are useless, and keeping a critical eye on the government design administration is very important.

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Biographical note

Sun-Young Lim, Master of Fine Arts Candidate in Design History and Cultural Studies at Seoul National University. Bachelor of Fine Arts in Painting and Design at Seoul National University.

Min-Soo Kim, Professor and Director of Design History and Cultural Studies, graduate course of Seoul National University(www.snu-dhc.com); Received Ph.D from New York University in USA.; Former chief editor of The Journal of Design Culture and Criticism (JDCC, 1999~2002), the first journal of cultural history, theory and criticism on design in Korea.

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Sources of inspiration in Turkish modern furniture design

Hande Atmaca / Universita Degli Studi Di Firenze / Florence / Italy
Seren Borvali / Izmir / Turkey
Deniz Hasirci / Izmir University of Economics / Izmir / Turkey
Zeynep Tuna Ultav / Yasar University / Izmir / Turkey

Abstract
An analysis of the sources of inspiration for the design of a new product can reveal how knowledge is reflected from one product to another, and conveys the elements shaping a specific era. This paper examines sources of material, information and inspiration of designers in the Modern period in Turkey between 1930 and 1980, within the context of furniture design. To achieve this, an inquiry was conducted on the sources of inspiration considered to have enlightened design philosophy in order to reveal the relationship between national and international styles. Interviews were conducted with designers of the time, within the context of the "DATUMM: Documenting and Archiving Turkish Modern Furniture" scientific research project. These interviews shed light on sources of inspiration during this significant period, materials used, applied methods, reflections of habits, and cultural effects.

Keywords
Turkish modernist furniture, design inspiration, oral history, furniture, DATUMM: Documenting and Archiving Turkish Modern Furniture

Introduction
This study examines the inspiration, adaptation and transformation of ideas to understand the factors affecting Modernist furniture design in the development of a new, Modern Turkey between 1930 and 1980. Inspiration from the Western world shows a desire to become more civilized and modernized. As cultural products, architecture and furniture design reflects changing economic, political and cultural values within the society (Sözen, 1996). The aim of the paper is to understand through oral history how design understanding in Turkey was shaped in the context of a developing country with limited resources. Since a significant number of designers from this era are still producing, it was possible to access a national and trans/national living design history in terms of their Western sources of inspiration. This study also aims to understand the aesthetic preferences of users as well as designers during this specific period, within the context of the "DATUMM: Documenting and Archiving Turkish Modern Furniture" scientific research project, A1308001/BAP-A024-K, supported by Izmir University of Economics (IUE) (Tuna Ultav, Hasırcı, Borvalı, Atmaca, 2015a).

Until the 18th century, the Ottoman Empire was self-sufficient in technical and architectural fields. There was no desire to import ideas from abroad because all human resources were supplied from within the empire along with the necessary education to work in these fields, particularly the Hassa Architects belonging to the palace. However, a different approach began in the 18th century with interest in Western science and technology, starting first in the military forces (Kuruyazıcı, 2002; Sözen, 1996). Similarly, the West was studied during the early years of the Turkish Republic, with the globally influential Modern movement being adopted in an effort to create a new national identity. A pure, rational, economic design concept took hold, being first applied by German and Austrian architects commissioned to help construct a new architectural language for the nation. Shortly after this, Turkish interior architects, such as Hayati Görkey and Sadun Ersin, were sent abroad to bring back new experiences to share with students and staff at the Istanbul National Academy of Fine Arts – today's Mimar Sinan Fine Arts University. Görkey educated his students in an exceptional contemporary approach in tune with Western developments, while...
Ersin, a student of Görkey, followed by many others, became akin to a Renaissance man, designing interiors, furniture and technological equipment, as well as painting, experimenting with new materials, and even making his own musical instruments. Designer Önder Küçükerman took a similar approach, experimenting with materials such as plywood, and designing equipment such as record players and lighting fixtures. These products were all in keeping with contemporary international trends (Küçükerman, 1974).

Moderni, founded in Istanbul in 1953 by architect Fazıl Aysu and interior architect Baki Aktar, was a milestone furniture store in terms of the Modernization process, as well as for the design and production of furniture in a period of limited production. The firm provided a workspace for significant artists and designers, including İlhan Koman, Şadi Çalık and Sadi Özış, enabling the production of creative furniture (Karakuş, 2011). Inspired by the products of this company, designers Turhan Uncuoğlu and Yıldırım Kocacıklıoğlu created a showroom named Interno in the mid-1960s, which housed designs of Modernist greats like Le Corbusier. This showroom also served as a gallery to educate designers in contemporary design issues, and allow them to follow leaders such as Hayati Görkey, Sadun Ersin and Utarit Izgi on the Modernism path. Interno in Istanbul, and Butik A (today called MPD, Mobilya, Planlama, Dekorasyon / Furniture, Planning, Decoration) in Ankara, established by Bediz and Azmi Koz, which are still open today, were among the first established showrooms. Their aim was to create awareness about Modernist approaches learned from abroad, and provide a combination of furniture and services (Tuna Ültav, Hasırcı, Borvali, Atmaca, 2015b). These were pioneers of the period, producing high quality interiors and furniture, which became a benchmark for Turkish Modernist design. Given the importance of this era, the interviews reported in this study make a major contribution to contemporary design history by increasing our understanding of cross-cultural communication during the Modernist period. This first-hand access to information from the designers themselves or those close to them, enables the identification of sources of inspiration in the history of Modern Turkish furniture (DATUMM, 2013-14).

Types of Inspiration

Inspiration, here, is grouped under five headings: Western Inspiration, Western Materials, Local Interpretations, Western Habits and Formal Resemblances to Contemporaries.

Western inspirations

Bediz Koz from MPD, explained the European influence in the 1960s:

“We were influenced by the Western approach. In those years, there was no chance to go abroad very often... At first, when we started our business, there was only Domus magazine. Later, we subscribed to this magazine and followed the current trends. Gio Ponti, Mangiorotti, and his use of marble... Then Scandinavian and Danish design became very popular in Europe. There was a shop in Paris selling Danish products called Maison de l'art Nouveau. We visited those places when we had the chance.”

According to Karakuş, in the early years, this newly developing aesthetic was in the process of development, bridging the gap between the designers' work and their own cultural environment (Tuna Ültav, Hasırcı, Borvali, Atmaca, 2015b). Moreover, the influence of American and North European design can be seen during the 1960s. Regarding American influences, Önder Küçükerman highlighted the importance of American PX stores (military post stores) and magazines:

“PX stores were huge chain markets which were established in military zones of friendly territories. Nowadays, young generations do not even know they existed... The catalogues of PX stores became guidelines for us. These catalogues had every type of information, even on which shelf to keep size 43 feathered hats.”

Küçükerman also noted the importance of the Fine Arts Academy’s library, stacked with books from around the world, brought back by Osman Hamdi in the early years. In the 1960s, the library had a similar function to today’s internet, making resources available from around the world. However, Küçükerman also emphasized the crucial influence of the Western world, which he described as an "illusion" created with images and beautiful details, which had no equivalence in his home country at the time.

“In 1965, the London based group Archigram had a lot of popularity. I used to travel to their trade fairs for the company I worked for. I still recall visiting Archigram’s office. When I entered, what I encountered was an illusion. Within a small room, all the images we had seen so far were illustrations on A3 paper. The projects that we considered real and grand were all, in fact,
Küçükerman thus shows the importance of studied reflection rather than blind application with no context. By bringing context into practice, ERSA was one company that prioritized function over aesthetics when it was commissioned to design furniture for Turkey’s State Supply Office (SSO). The requirement to create functional, compact furniture that could be easily transported anywhere in Turkey necessitated certain purifications in design, which was followed by more aesthetic concerns. After completing the SSO contract, ESRA transferred to the private sector. They started by imitating and being influenced by other company’s products, but later evolved their own style.

As a part of the European influence, the effect of Italian design can be seen during the 1970s. After education in Italy with Babür Kerim İncedayı, Yavuz Irmak opened his own furniture atelier, strongly influenced by Achille Castiglioni:

“In those years, the Modern movement spread to Turkey with architecture, interior architecture and furniture design all together. First, education was influenced by the trends that came from Germany and Northern Europe. Afterwards, I was influenced by Italian design. Some of the furniture of Marcel Breuer, Le Corbusier, Mies van der Rohe were produced by some ateliers here. We were obliged to follow that path... Above all, Modernism was a free space and you were free to do whatever you wanted. I was influenced by the Memphis group, but we never designed something so extreme... Furniture had to fit a certain style or character.”

Irmak also mentioned the scarcity of journals, except for “Schöner Wohnen”, and recalls asking overseas travelers to obtain these for him. Traveling was a matter of economy so the Milan fair was the best choice. As İncedayı pointed out, it was crucial to see where and how things were produced:

“You needed to do something new, to use new material. It was important to create what was needed. Styling was just a part of it; it had to be functional. Otherwise, it would be a work of art. In Italy, I learned to use materials and technology, to produce in an efficient way, save material, like how to reduce the amount of mould, to build a bridge between design and technology.”

Sadık Aktar recalled his father, Baki Aktar’s visits to international fairs:

“He frequently went abroad, and sent postcards to my mother asking how I was. They were sent from Milan, Paris, Barcelona, etc. Most probably the things he saw in fairs influenced him because it was the time after the Second World War, and the whole world was hungry for new things.”

Western materials
With increased communication and new materials, new production techniques were introduced to Turkish designers. Synthetic materials were much appreciated, such as American Venetian blinds and shades, artificial leather brand Vinylex and Formica. American officers stationed in Turkey decorated their houses with these materials, which were later bought by locals when they moved. These products were in high demand because they were considered Modern (Gürel, 2009).
Local interpretations

The designs of the late Fikret Tan can be traced to his inspiration by a combination of Turkish and other cultures. According to his son, Yalın Tan:

“My father had an extreme interest in vernacular architecture... He was keen on being adventurous, looking at his heritage, traveling around the villages. The effects of this wandering are visible in his work. These trips, and especially the journeys that he made to Paris, influenced him a lot. But his great appreciation of Turkish culture and Turkish art is visible in every detail.”

For Bediz Koz, regarding the material used in new Modernist furniture, Turkish wood, especially good quality oak, was key. Due to a lack of conventional materials for furniture production, Designers creatively adopted other local materials, such as water pipes, hazelnut sieves and fishing nets. As Neptün Özış recalled:

“Designers wanted to use perforated metal sheets, for example, but it was not possible to find these. They looked at what they had... found hazelnut sieves, for example, and they used these... They looked at fishing nets, and inquired into how they could use these in furniture. They stretched the fishing net in metal frames to form chairs.”

Other examples of local interpretation during the 1960s include the wooden coffee tables by SIM Furniture Factory, and the ceramic-topped tables designed by the Füreya Koral Atelier, designed for the main building of The Grand National Assembly of Turkey (GNAT) by Sadun Ersin.

Western habits

Some of the furniture produced reflected Western rather than Turkish cultural habits. Some examples are the day bed, music box and wicker armchair (which can be seen at the Florya Atatürk Marine Mansion), the wine trolley designed by Sadi Özış, and the wine rack designed by Danyal Çiper.

Formal resemblances to contemporaries

Learning from foreign contemporaries, Danyal Çiper, adopted Frank Lloyd Wright's organic architecture. He followed Louis Sullivan's principle that “form follows function”. Çiper's great attention to the living environment, and his organic architectural style can be seen in all his designs, which free the room from the box. In both his furniture and living spaces, his user-focused approach meant that the furniture naturally led to the space and the space to the building. Çiper is known in Turkish architectural history for the amount and quality of detail in his spaces. One well-known Turkish architect, Şevki Vanlı, described Çiper as Wright's post-1945 architectural representative in Ankara, and a romantic Modernist (Cengizkan, 2013; Gür, 2013).

The formal resemblances to contemporaries can be seen in much work of this period. For example, the sofa designed for relaxation areas by Sadun Ersin, following the Interior Design Contest launched for GNAT in 1959, resembles DeStijl’s work with its Cartesian joints.

The formal resemblances to contemporaries can be seen in much work of this period. For example, the sofa designed for relaxation areas by Sadun Ersin, following the Interior Design Contest launched for
Sources of inspiration

GNAT in 1959, resembles DeStijl’s work with its Cartesian joints. Ersin’s 1939 design for a biomorphic and sculptural coffee table for the GNAT resembles the Japanese-American artist and industrial designer, Isamu Noguchi. Ersin’s coffee table below shows reflections of biomorphism due to the surface designed by the Füreya Koral Atelier.

Sadi Özış and his company, Kare Metal, frequently worked with materials like fishing nets and welded steel, while chairs designed in 1959 by Sadi Özış and İlhan Koman resemble Harry Bertoia’s welded chair manufactured by Knoll in 1952. According to Uzunarslan, Özış had been experimenting with welded steel and chicken wire since the early 1950s, and they were the first to use chicken wire in furniture. Since Kare Metal and Bertoia were in contact, it is possible that the designs may have evolved through sharing visuals (Tuna Ultav, Hasirci, Borvali, Atmaca, 2015b). Interestingly, in 2015, Knoll allowed Kare Metal’s related furniture designs to appear in its production catalogue. Ersin’s fiberglass chair design of the 1970s also shares common features with the Eames lounge chair.

Mustafa Plevne, founder of Metal Mobilya, described how his company studied Modern furniture, and learned by making replicas from photographs, improving the joints and details, and changing the material and form. Known for its sleek, stylized furniture that could be taken to pieces for delivery, SIM Furniture Company was notable among its contemporaries. SIM came close to the approach taken by IKEA in Sweden, and similar concepts during this period.

Conclusion

Through interviews, this study analyzed the sources of inspiration of Turkish Modernist designers’ production of Modernist furniture. It found that these designers gained inspiration from international, mostly Western sources, which they obtained from design magazines, books and occasional visits to design fairs abroad, mainly in Europe.

In the process of the evolution of Modern furniture design, designs were studied, lessons were learned from abstractions before being combined with local materials, details and techniques. Apart from these inspirations, it was also observed that similar approaches emerged around the same time, despite the lack of any information from abroad. Further stages of this study will require more detailed interviews with designers, individual studies of prominent designers of the time, and analysis of furniture in specific types of buildings, including educational institutions and railway stations. At this point, the significant amount of data already obtained from interviews and visuals provides a clear view of how knowledge was transferred throughout the Modernist period. However, much more work remains to be done in this key period in Turkish design history before other data is lost forever.

Acknowledgements

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References


Biographical note

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Strange encounters: A series of posters investigating the hybrid embodiment of Indo-Canadian identity

Krishna Balakrishnan / York University / Toronto / Canada

Abstract
Postmodernism has been important in acknowledging many forms of “otherness” that emerge from differences in subjectivity, gender, race, class, temporal, spatial geographic location and dislocation. This has become a topic of interest among graphic designers as they explore design’s relationship with culture. This project, a series of creatures called The Avatars explore the use of graphic design to produce visual artifacts that discuss hybrid embodiment of Indo-Canadian identity. Using hybridity, Homi Bhabha’s concept of a “third space” identifies a metaphor for the space in which cultures meet. Where communication, negotiation, and translation bridge societies, a new space emerges.

Keywords
Graphic design, cultural hybridity, Culture, identity, third space

Introduction
Articulating and enunciating concepts of cultural hybridity in graphic design not only helps to comprehend the evolving cultural identities of multiculturalism and migrant experience, but also promotes alternative ways of representing in-between cultural spaces. The posters series, The Avatars, created by Krishna Balakrishnan are a digital montage of Hindu gods and goddesses, comic-book superheroes and Disney princesses. They are metaphorical representations analogous to the embodiment of Indian-Canadian (Indo-Canadian) identity. The designer attempts to discuss complex ideas of migrant identity, difficulties in translating vernaculars—images and symbols across cultures, and negotiate the representation of a meeting space between strangers. All of these questions highlight postmodernism’s concern for difference, difficulties in communication, and complexities and nuances of interests, cultures, and place.

The Avatars (Fig. 1–4) are a series of hybrid creatures, mutations, or a combination of strangers, which depict negotiation of their prescribed representation. On one hand, The Avatars make use of comic-book vernacular and children’s cartoon characters from Western popular culture while on the other hand, The Avatars depict Indian Hindu gods and goddesses. These juxtaposing vernaculars from distinct cultural contexts meet in their hybrid embodiment. In this embodiment, the boundaries that contain static identities are dissolved. Attempting to visually read The Avatars forces one to negotiate these juxtaposed identities. The Avatars’ construction asks questions of their configuration: Why are they in this mutated form? What is their relationship to one another? Cultural identities are represented as negotiating against one another, and as a result the hybrids are recognized as either contesting or harmonious in their embodiment.

To understand The Avatars, one needs to forgo traditional representations of being an Indian and a Canadian. The Avatars’ bodies are never complete; they are in the process of “becoming” their new embodiment, and “destructing” their former selves. Sacred images in Hinduism are temporal, incomplete, and inadequate as a full expression (Preston, 1985). The sacred images of Hindu gods are constructed according to systematic rules, and then are infused with sacrality and kept “alive” by highly controlled behaviours intended to retain the “spirit in matter” (Preston, 1985). Hinduism is an imaginative, “image-making” religious tradition in which the sacred is seen as present in the visible world—in multiple images and deities, in sacred places, in people, in every locus of Indian life (Eck, 1998). The behaviours Indians exhibit towards sacred images is brought to their immigrant land and changes accordingly upon interactions with new experiences.

The superheroes are representations of godlike presence in American “material” popular culture.
Their images are produced in similar quantity as those of the Hindu gods—in product packaging, films, posters and whatever corporations can exploit in their trademark. Though the superheroes of *The Avatars* can be perceived as American, they have roots in every country, where, around the turn of the twentieth century, the comic industry expanded from publication newspaper and strips to circulation in collections and serials. Canadian culture, so close in proximity to the United States, is heavily influenced by American superheroes. Today, comic studies have been integrated into many university programs of world literature, and represent a form of storytelling art rooted in transcultural imaginations.

The medium of collage is also used to represent hybridity. *The Avatars'* incorporate image reproduction of characters that are familiar and different. The gods and superheroes are products of mass printing. One does not need to travel far to encounter Indian gods. Their adoption by global culture has seen Krishna and Kali appear on CD covers, diaries, websites, clothing, and fashion accessories. The superheroes and princesses are part of the Hollywood popular material cultures and their images are mass reproduced. In this way, the Hindu gods can be seen as popular images that represent India or Indian-ness. The mass consumption and presence of superheroes gives them the power to be seen as gods of Hollywood material culture. Through juxtaposing one element to another, the images make us rethink the significance of all familiar images. *The Avatars* appear estranged, otherworldly, in-between the possible and the impossible or unlikely, and in a space between real and simulated. By its nature, the collage becomes an interpretation—an expression of opinion. Collages' interpretative qualities make them "uniquely suited to the job of bringing the world and its cultural efflorescence into close proximity, with no burden to mimic reality or impart truths" (Hoptman, 2007, p. 11). *The Avatars*, in expressing the duality of Indian and Indian-Canadian identity, become a form of strategy, a resistance to the world they inhabit. Difference and similarities of images asks us to imagine them in an alternative way.

While one recognizes the positive contribution of multiculturalism in producing cultural diversity, theorists and writers such as Stuart Hall, Homi Bhabha, Salman Rushdie, bell hooks, and Sara Ahmed emphasize the importance of cultural differences for notions of hybridity. Multiculturalism is an attempt to both respond to and control the dynamic process of articulating cultural difference, demanding a consensus based on a norm that cultivates cultural diversity ("The Third Space: Interview with Homi Bhabha," 1990 ). For Bhabha (1990), the liberal relativist perspective of cultural diversity is inadequate, and does not recognize the universality and normative stance from which it constructs cultural and political judgments. Ahmed (2000) describes multiculturalism as the proximity of strangers. The strangers are not simply those already recognized as out of place; rather, in a multicultural nation, strangers have a place. Ahmed (2000) argues further that multiculturalism can involve a double and contradictory process of incorporation and expulsion: it may seek to differentiate between strangers whose appearance of difference can be claimed by the nation, and those whose differences may be dangerous to the well-being of even heterogeneous nations. The proximity of strangers requires constant adjustment and transformation (Ahmed, 2000). With the notion of cultural difference, Bhabha (1990) positions himself within liminality—the in-between, productive space in the construction of culture as difference or otherness. However rational one is, it is very difficult, and even counter productive to try and fit together different forms of culture, and to pretend they can easily coexist.

The *Avatars* are not about seeing the Western-ness or Indian-ness, but rather seeing a unique in-between space of negotiation—a Third Space. Bhabha (2006) notes that this Third Space intervention makes the
structure of meaning and reference an ambivalent process; it destroys mirrored representation, and reveals cultural knowledge as continuous, integrated, open, and expanding code. Such intervention challenges our sense of “the historical identity of culture as a homogenizing, unifying force, authenticated by the original Past, and kept alive in the national tradition of the People” (Bhabha, 2006, p. 156). *The Avatars*’ enunciation displaces the narrative of Western’s perception, which Bhabha (2006) describes as being written in homogeneous, linear time. *The Avatar* as a metaphor of Indo-Canadian identity asks one to re-examine their own perception of the migrant stranger.

Psychologist and cognitive scientist Lawrence Barsalou points out that we process concepts not as abstract, detached combinations of features, but rather as “agent-dependent instruction manuals” to run an embodied simulation (Kukkonen, 2013). These embodied simulations are tied to the context of particular situations, which include the objects and agents involved, actions and bodily states, motivations, emotions, cognitive operations and often settings. The embodied situations evoked by *The Avatars* places the images in the situation of the Indo-Canadian self, whereby the migrant experience is understood as a perception. Migrant individuals perceive notions of “difference” in the new environment, but are those “differences” analogous to the Canadian experience? Seeing and reading images in the migrant’s perspective, one can experience a sense of double embodiment. Reading the images of *The Avatars* in terms of a situated conceptualization brings the formerly individual (gods and pop characters) together in analysis; embodiment and composition contribute to creating an embodied simulation of the migrant experience. Indo-Canadian identity is continuously changing and *The Avatars*, as a metaphor of migrant experience, represent such change.

References


Biographical note

Krishna Balakrishnan is a Toronto based graphic designer and emerging mixed-media artist. His artwork takes a critical view of social, political and cultural issues. Images and text intertwine to narrate a collection of diverse cultural references, oscillating between different systems of representation to evoke non-linear perception of migration, belonging, temporality and displacement. His work can be viewed at bkrishna.com.
Towards a new paradigm: Applying industrial design processes to the craft bamboo industry

Hung-Wei Lee / Gianni Renda / Carolyn Barnes / Swinburne University of Technology / Melbourne / Australia

Abstract
The craft bamboo industry in Taiwan has been in steady decline since 1985. In recent years, the government has attempted to stimulate this industry by promoting this craft as a distinct form of national culture and identity; however there is a disconnect between the desires of national policy objectives and the effort required to raise the state of play in Taiwan’s bamboo crafts and product sectors to compete on a global scale and attain a desirable level of demand. The research aims to demonstrate that an industrial design-led approach is required within the craft bamboo industry to revitalise the sector.

Keywords
Craft, cultural Industry, cross-functional cooperation, bamboo, industrial design

Introduction
The development of bamboo crafts in Taiwan can be traced to the practices of Taiwan’s indigenous peoples and later to Han Chinese immigrants; both groups using local materials to address daily needs (Cheng, 2010). Traditional bamboo craft workers were both designers and producers, producing individual designs using a range of techniques and offering a distinct product to modern process-driven designs. Production met basic standards of practicality and design, with the majority of artefacts being easy to produce and low-cost. Since the early twentieth century, there has been some tension between preserving traditional craft techniques and developing new, industrial-scalable products from bamboo.

Craft based approaches
Craft is both a title for a field of cultural practice and a term that relates to how skilfully one creates an artefact in fields ranging across art, craft and design. In early agricultural societies—such as Taiwan—craft was the practice used to manually produce items ranging from tools to utensils and garments, including those that were used for ceremonial purposes, being elaborately produced to mark their ritual use (Huang, 2001). In discussing the value of craft, Karppinen (2008) cites the German philosopher Hannah Arendt’s (1958/2000) identification of three fundamental human activities; labour, work and action. Arendt links work with skill and technique, craft products and cultural heritage, the expression of skilfulness and knowledge in the activity of hand production making human life meaningful. Kikuchi (2015) and Huang (2001) contend that craft is a broadly defined set of human activities inherently related to human nature and vital for human fulfilment and enlightenment.

Bamboo industries and related design education
From the early Qing dynasty (1644-1911), Taiwan exported indigenously designed and made products to Mainland China (The Nantou County Department of Cultural Affairs, 2015). These early products can be divided into three categories: carpentry, carving and weaving. They included large-scale products such as bamboo furniture and bamboo cages for keeping livestock. From 1936, Japanese craftsmen introduced techniques such as weaving and fretwork to Taiwan, initiating the production of sophisticated and technically advanced goods such as cases and baskets (Cheng and Won, 2010). However, since the early twentieth century there has also been a tension between preserving traditional craft techniques and developing new industrial products from bamboo; for example using high-
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temperature pressure machines to make laminated bamboo flooring. The period from 1975 to 1985 was the golden age for bamboo products in Taiwan. The local government in Zhushan Town, Nantou County, encouraged the growth by establishing a specialized bamboo craft education program at National Zhushan High School. This school was focused on traditional techniques, rather than the design and manufacturing techniques for contemporary consumer products. Many of the bamboo craft workers trained at National Zhushan High School continue to produce work in a craft-based, studio fashion; this being increasingly out of step with changing market conditions and expectations.

Unfortunately in 2010, these bamboo craft classes ended (National Zhushan Senior High School, 2016). In other schools, there had been no design tutoring related to bamboo until 2008; the passing of the ‘Cultural and Creative Industry Development Law’ saw the government seeking to raise the level of community cultural engagement and to promote ‘Brand Taiwan’ internationally. Furthermore, some universities began to offer design classes related to bamboo craft. There are now five universities which offer bamboo craft training within design education in 2015 (Ministry of Education, 2016).

Policies and preserving the master’s tradition in the face of decline

Two published case studies (Lin, 2012, Gao, 2012) report Taiwanese government initiatives for the bamboo crafts sector. The 2007 ‘The new interdisciplinary process for authoring application’, jointly managed by the Taiwan Design Centre and Taiwan Craft Research Development Centre invited designers and crafts people from fields including bamboo, lacquer and glass to collaborate. Lin (2012) argues that the rebranding of Taiwanese crafts in 2008 under the auspices of the project under the brand name ‘Yii’ for the international market, sought to project a contemporary outlook for Taiwanese craft, while the focus on current design trends and production factors sought to drive successful development of new products. The second initiative, ‘Slow living mixed media product development’ had bamboo as a theme and linked craftspeople with design consultancies and teams for the same end.

The finest bamboo craftworks require the performance of high-level techniques and abilities, so in 2009, Taiwan’s government instituted a campaign to promote the living crafts movement across the country, where craftsmen may be elected to the ‘Taiwan Craft Family’ honours roll. Once elected, the value of their past and future work increases significantly. Because of the lack of formal training in bamboo crafts in Taiwan, few craft workers have the skills to achieve such a standard. Faced with craft industries in decline, in 2013 Taiwan’s Council of Labour Affairs launched a plan, the title of which can be loosely translated as ‘Using Famous Masters to Teach Good Apprentices’ (Taiwan Workforce Development Agency Ministry of Labor, 2015). The program provides training in professional skills for various heritage crafts through an apprenticeship system. The program offers training in 25 traditional skills categories, including bamboo products. Graduates of the program receive an award from the Ministry of Labour the Workforce Development Agency Skills Certification Centre. After training, effort is made to help the trainee make a smooth integration into employment (Taiwan Workforce Development Agency Ministry of Labor, 2015).

The value to local industry

For Wang et al. (2011), bamboo crafts perpetuate Taiwan’s cultural heritage, with bamboo weavers and crafts people reporting their work to secure knowledge of traditional bamboo weaving techniques and to digitize Taiwan’s bamboo arts and crafts. They provide a strong argument for the value of bamboo as a craft material that is readily accessible for the creation of a range of contemporary products. Kettley (2012) discusses contemporary business trends and the values of ‘craftivism’ and the Slow Movement for emerging crafts peoples and makers. Globalisation has been contested by a number of movements. The Slow Movement, originating in Italy, has promoted the value of local produce and skills as against an industrialised consumerism that have erased meaningful differences between time and place (Petrini, 2005). The reaction against consumerism has recently taken a more political expression through emergence of ethical consumerism (Auger et al., 2007), the Fair Trade movement seeking to connect consumers with the lives of producers, including in the area of craft products (Lyon, 2006).

Can Taiwan learn from Europe?

Across Europe, there was a push for the industrialization of traditional craft production, design being understood as the new industrial art, not an extension of craft. An outgrowth of the Deutsche Werkbund, the Bauhaus (1919-1933) built a design curriculum based on a synthesis of art, science, and technology to educate future designers by making
a primary distinction between Formlehre and Werklehre; the study of form versus crafting (Delle Monache and Rocchesso, 2014). The curriculum of the Basic Course, the first year of study at the Bauhaus, focused on research rather than creation, comprising exercises and problems to be solved within the framework of specific constraints such as economy of time or reduction of means and parameters (Stefano Delle Monache, 2014).

Bauhaus design philosophy and design processes were not systematically taught or used in Taiwan until around 1970 when Taiwan’s economy began to truly grow and modernize (Huang, 2001). Of particular interest here is the principle of ‘pragmatic academics’ found in the Taiwanese curriculum for handicrafts. Lessons covering basic drafting, woodworking, weaving and ceramics—as well as modeling—emphasised both the essence of Bauhaus notions of handiwork manipulation and the industrial application of design as in Bauhaus design education (Yao et al., 2013).

Engaging with industrial design processes
As previously established, Taiwan’s bamboo manufacturing industry uses traditional management practices to run production processes, lacking expertise in design management. Shah (2000) argues, however, that ‘There is empirical evidence that innovations can be developed by those holding any of a number of functional relationships to them, such as manufacturers, users, or materials suppliers. Roberto (2008) contends that design-driven innovation is urged along by a company’s vision about possible future product languages and meanings. The process these companies follow suggest the major modes of innovation: 1) design-driven innovation, where innovation starts from a company’s understanding of the nuanced, tacit undercurrents within socio-cultural groups and can harness these to create new languages and meanings; 2) market-pull innovation, where innovation begins with the analysis of consumer needs and preferences and then searches for the technical means and aesthetic and symbolic languages to fulfill them; 3) technology-push innovation that leverages the dynamics of technological research. Both Shah (2000) and Roberto (2008) recommend design-driven innovation as the way to push a company’s vision the furthest, but all three modes of innovation would aid NPD for Taiwan’s bamboo products manufacturers. Taiwan already engages heavily with industrial design; companies such as Giant Bicycles, Acer and HTC are known for their high quality products with strong aesthetic sensibilities; a future may be envisioned where craft manufacturers appropriate the design techniques of the aforementioned firms to produce world-leading products with a strong customer focus.

Conclusion
An identification of industrial design approaches and driven innovation might stem the decline of Taiwan’s bamboo crafts and manufactured products industries by developing products that consumers actually want. In recent decades, the viability of Taiwan’s bamboo crafts and manufactured products sectors has suffered from competition large-scale industrial copying and from cheap plastic versions of goods formerly made in bamboo.

The above literature suggests a range of factors as contributing barriers here including poor grasp of the nature and differences between art, craft and design; a lack of suitably trained workers; a lack of focus on bamboo as a material in design innovation, a lack of industrial design-led approach knowledge at companies, individual companies preferring to struggle on alone, and strong external competition from global, low-cost manufacturers. The one bright spot is the Taiwanese government’s interest in and support for heritage cultural industries despite the need for more effectively targeted initiatives. The usage of industrial design processes, appropriated from the high tech industry may help develop and engage further with the craftsmen and elevate the products to an international audience. The processes of methods are design-driven innovation, market-pull innovation and technology-push innovation. Three modes of innovation would aid NPD for Taiwan’s bamboo products manufacturers.

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Biographical note

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Associate Professor Carolyn Barnes (PhD Melb 2004) is Academic Director of Research Training in the Swinburne School of Design where she teaches research methods for academic and practice applications. Her research investigates how to harness the knowledge and power of individuals and groups to address their primary needs and interests.
Reviving Taiwan’s craft bamboo industry: Evaluating recent strategies to transform a heritage craft sector into a contemporary cultural industry

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Abstract

Policy-makers increasingly see cultural industries as important economic contributors with the added scope to sustain local identity. Since 1991, Taiwan’s Ministries of Culture and Education have sought to revive Taiwan’s bamboo crafts, including for their cultural heritage value, in the face of damaging competition from cheap imports. Various policies and programs have sought to give new strength and vitality to Taiwanese cultural production. Despite some noteworthy individual projects, such efforts typically neglect the root causes for the decline of Taiwan’s bamboo industries. Research suggests that successful cultural industries need a critical mass of creative innovators, entrepreneurs and skilled workers and advanced manufacturing capability. The paper discusses industry development strategies to date, arguing that the main hurdle to the revitalization of Taiwan’s bamboo industries is a lack of an innovation culture in manufacturing companies to drive new product development compounded by design graduates’ limited exposure to bamboo as a material.

Keywords

Bamboo products, cultural industries, design policy and innovation, design curriculum

Introduction

Taiwan’s bamboo products encompass works of craft and manufactured goods. The main bamboo crafts are weaving, carving and bolt-chisel bamboo furniture. Manufactured products include blinds, birdcages, chopsticks, lampshades and lighting, swords, tea trays and toothpicks. A separate field of production is bamboo flooring through high temperature compression and laminating techniques.

Taiwan’s 1987 policy of economic liberalization contributed to a climate that has seen the decline and restructuring of Taiwan’s bamboo industry. Many bamboo manufacturers have relocated to China, creating less demand for Taiwanese bamboo and prompting Taiwan’s farmers to replace their bamboo plantings with other crops. The centre of bamboo craft and timber production in Taiwan is Zhushan Town, Nantou County. Industry decline has contributed to the closure of the specialist bamboo craft education program at National Zhushan Senior High School in 2010, further jeopardizing the future of Taiwan’s bamboo products sectors. This paper considers the potential to revive Taiwan’s bamboo industries through design-led innovation, transforming them into a contemporary cultural industry.

Creative industries

Since the early 2000s, a consensus among academics and policy-makers identifies cultural industries as new drivers of economic growth (Scott, 2006, Currid and Connolly, 2008, Pratt and Jeffcutt, 2009, Reimer et al., 2008, Florida, 2002). Kong (2014), however, argues that as governments internationally rush to implement creative industries policies, caution should be exercised due to a lack of conceptual clarity around the nature and operation of creative industries, with more research being needed about what is happening on the ground. Taiwan’s Department for Culture, Media and Sport’s (DCMS) Creative Industries Taskforce (1998) defines creative industries as having their origin in individual creativity, skill and talent, their scope for wealth creation being linked to the generation of intellectual property. DCMS was an early adopter of the term ‘creative industries’, coined in 1997 by the UK government as a classifier for a new, emerging areas of industry linked to the melding of commerce and human creative capacity.
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The chair received international acclaim at the 2009 Maison & Objet Expo, Paris, but its design points to major hurdles to the renewal of Taiwan's bamboo products sectors. Collaborating designers had little understanding of the material characteristics of bamboo and no Taiwanese manufacturing company had the equipment or technical staff to mass produce Grcic's complex design (Lin, 2012). Significant time and effort was

Taiwan's creative industry initiatives

International models for the development of creative industries have strongly influenced the Taiwan government's effort to revive heritage arts and crafts as a source of economic and social benefit on different fronts. Taiwan's 2010 'Cultural and Creative Industry Development Act' merges aspects of the UK's 1998 'Creative Industries Policy', the UK's 2001 'Creative Industries Mapping Document' and the United Nations' 2008 'Creative Economy Report'. These reports draw on significant research into creative activity and its economic value in economies at different stages of development, often stressing the benefits of combining traditional culture and new technologies to stimulate culturally meaningful economic activity. The 2008 'Cultural and Creative Industry Development Law' saw the Taiwan government seek to both promote Taiwan's cultural brand internationally and raise the level of community cultural engagement. The policy included a national plan for cultural workers, academics and government to collaborate on cultural and industry development. Later, the General Provisions of Taiwan's 2010 'Cultural and Creative Industry Development Act' set out an ambitious agenda for the development of Taiwan's cultural and creative industries through the use of 'new technology and innovative research and development' combined with sound 'training of cultural and creative industry professionals' (Taiwan Culture Ministry, 2010). Taiwan's bamboo crafts and products sector was included as a field for funding within Taiwan and internationally to address more than three decades of decline.

There had now been a series of government efforts to support traditional arts and crafts. In 1991, for example, the government instituted the 'Local Industry Promotion' program, using case studies from Japan to show how Taiwan's artists and craftspeople might actively preserve, develop and promote their work. In 1995, the Ministry of Education and Ministry of Culture founded a National Arts Award, a Heritage Award and the National Technology Achievement Award to promote the nation's traditional arts, crafts and industries. Efforts to foster active cooperation between manufacturers, crafts people and academia was also funded through the Taiwan Design Centre and the National Taiwan Craft Research and Development Institute. A 2007 program matched leading designers with bamboo product manufacturers to jointly develop more innovative, desirable products.

After several funding rounds, some products have achieved international recognition, for example, the 'Bamboo 43' chair designed by German industrial designer Konstantin Grcic and fabricated by the Taiwanese bamboo master Chen Gaoming. The chair received international acclaim at the 2009 Maison & Objet Expo, Paris, but its design points to major hurdles to the renewal of Taiwan's bamboo products sectors. Collaborating designers had little understanding of the material characteristics of bamboo and no Taiwanese manufacturing company had the equipment or technical staff to mass produce Grcic's complex design (Lin, 2012). Significant time and effort was
invested in adjustments to enable production, with only single showroom display models being produced. Recent work with state-of-the-art rapid prototyping technology has still not resulted in the mass production of any bamboo consumer products from the initiative (Taiwan Design Center, 2015).

The skills and knowledge deficit
Traditionally, bamboo goods in Taiwan were folk crafts, seeing skills and knowledge handed down from generation to generation. The Japanese established formal training in bamboo crafts during their colonization of Taiwan (1895-1945). In 1938, the Japanese established the Zhushan Town Bamboo Craft Heritage Learning School, to teach boys who had graduated from elementary school bamboo-weaving techniques, with the government paying for their tuition and lodging. The School pioneered the development of local craft industry based on studio craft techniques. From 1952, the Nantou County Government promoted bamboo crafts through workshops (Wong et al., 1998) and by establishing the Nantou County Crafts Research School in 1954 (Yang 2015), building a base for the growth of Taiwanese bamboo crafts industry up to the early 1980s.

Many of the bamboo craft workers trained at National Zhushan High School continue to be involved in studio craft production, but this is an approach increasingly out of step with contemporary market conditions. In emphasising making skills, craft workers’ training lacked exposure to design principles, affording little capacity to critically assess products against broad market expectations and developments. National Zhushan High School phased out its bamboo craft course in 2010, leaving a gap in technical education for bamboo products. Some training in bamboo crafts is available through intermittent, government-funded courses in heritage skills. Some universities offer single units in bamboo craft techniques and design, but the skills and competencies required to work with bamboo as a material are no longer available in Taiwan to the level required to sustain an industry, much less modernise one.

Design innovation and industry-scale renewal
The present should be a favourable time to market craft products and bamboo goods from Taiwan. The West’s ongoing interest in Asian culture continues (Zeng 2004). Murray (2010) discusses consumers’ admiration for craftsmanship and enjoyment of the tactile qualities of hand-crafted items in contrast to the character of mass produced goods. Many consumers welcome products that use sustainable materials like plantation bamboo. However, a craft model of industry organization is increasingly difficult to sustain in the face the turbulent business environmental created by globalisation, which for seen cheap imported alternatives erode the local market for products like Taiwan’s bamboo goods, making many traditional craft industries unviable (Murray 2010). Hareven (2003) argues for a stress on the symbolic value of authentic products rather than practical function to differentiate them from imitators, but de Waal (2002) sees a risk in developing products purely to appeal to consumer sentiment, which can quickly change.

Taiwan’s bamboo craft studios and manufacturing companies are small-to-medium sized businesses, most being family-owned and traditional in outlook, being poorly placed to navigate the web of challenges and opportunities described above. Most lack marketing capability, especially the market information to withstand the impacts of globalization, which Chandasekharan (2005) argues requires sophisticated understanding of diverse factors such as product development and pricing, marketing approaches and practices, market channels and potential institutional support. Cunningham (2006) likewise describes the related challenges of contemporary product planning, which depends strongly on effective product research, promotion and distribution to meet the needs and interests of consumers to ensure adequate earnings.

Most research into innovation in new product development (NPD) focuses on large firms, Chrisman and Patel (2012) arguing for more research into research and development activity in family owned SMEs. Their research identifies a consistent negative relationship between family ownership, R&D intensity, and product and company performance. Bolton (2009) reports that family firms typically invest less in R&D than non-family-owned firms. Family-run firms also typically lack expertise in design management, which Roberto (2008) argues helps companies to get closer to consumers, their needs and preferences. Design-driven innovation is practiced at its most advanced level by successful Italian manufacturers such as Alessi, Artemide and Kartell, international leaders in their industry despite being relatively small-sized companies (Roberto 2008).

Shah (2000) argues that successful product innovation derives from two main sources; information transfer between lead users and manufacturers and relative perceptions of the benefit of innovation between users and manufacturers. Roberto (2008) contends that design-driven innovation in companies occurs in two major
dimensions: 1) market-pull innovation that begins with the analysis of consumer needs and preferences, leveraging the nuanced, tacit undercurrents within socio-cultural groups to search for the technical means and aesthetic and symbolic languages to fulfil them and 2) technology-push innovation that harnesses the dynamics of technological research. Both Shah (2000) and Roberto (2008) recommend design-driven innovation as the way to push a company’s vision around new products. Jan (2003) favours an activity-based division of the NPD process across the stages of idea generation, idea screening, commercial evaluation, technical development, testing and commercialization, but notes that in large companies innovation is equally a distributed process that needs strong coordination across the R&D, design, engineering, production and marketing departments of a company. More pertinent to small, craft-based firms is Shah’s (2000) argument that companies can benefit from personal use of their products to understand their level of innovation.

Arguably, all of these strategies would aid Taiwan’s bamboo products manufacturers to develop new products. We are currently analysing a body of qualitative interview research into NPD in Taiwanese bamboo manufacturing businesses to address a lack of knowledge about what is happening here, with the raw data suggesting a raft of deficits including a lack of design and design management expertise. Sciascia et.al. (2015) argue that for the long term, small family businesses—this being the pattern for Taiwan’s bamboo manufacturing companies—business goals are typically shifting and varied. Where family wealth and company equity closely overlap, R&D levels are adversely affected because of owners’ overriding motivation to protect family wealth and status. Tang et al. (2014) argue that as the intersection between family wealth and firm equity reduces, this fosters raised R&D activity due to long-term aim of increasing family prosperity balances the risk of low investment in R&D.

Sciascia et.al. (2015) make two recommendations for SME owners and managers aiming to raise R&D intensity. Firstly, where the overlap between family wealth and firm equity is low, family owners should invest more in the R&D to raise the benefits of family ownership. Secondly, where the overlap between family wealth and firm equity is high, family owners should open to offering equity to other owners such as angel investors or private equity to reduce the risks to family wealth while raising the level of R&D activity. The low profile and sector-wide decline of Taiwanese bamboo craft studios and product manufacturing companies makes such investment unlikely. Other authors highlight the challenges for companies that wish to secure financial profits from their innovations through intellectual property protection and licensing agreements, which has been a problem for Taiwan’s bamboo manufacturing companies, who have seen their products copied by low-cost manufacturers, including in substitute materials such as plastic. Companies need to keep ahead of the innovation curve to capture profits during the time when they still have an advantage over companies that come along to mimic their innovations.

Fundamental to all models of design-driven innovation in NPD is the manufacturer’s role to identify market needs, then use design and technology innovations to fulfil these (Magnus and Siri, 2015). Other writers describe product innovation within individual firms as substantially as case of locally-driven behaviour, where business owners and staff need to have both an intuition for and knowledge of what they are doing (Dorst, 1997, Valkenburg, 2000). The shift in Taiwan’s economic base, combined with neoliberal policy reforms has polarized the country’s manufacturing sector, with companies in high-tech industries succeeding in appreciating this and old-style manufacturing sectors such as in bamboo products falling into a malaise that blocks any such recognition. Djelic and Antti Ainamo (1999, p. 622) highlight the way that companies in the luxury fashion industry in different national contexts have worked together to whether turbulence in the international economic environment by reorganizing around different network forms, ‘the “umbrella holding” company in France, the “flexible embedded network” in Italy and and the “virtual organization” in the United States.’ Currently, the constraints and opportunities for Taiwan’s bamboo manufacturing companies are being addressed at the level of government.

**Conclusion**

For the Taiwan government, both the revitalisation of heritage crafts to refocus attention on Taiwan’s cultural origins and the need for economic and social development through creative industries are a concern. Policy and revitalization programs are constrained in the case of Taiwanese bamboo studio crafts and manufactured products because responsible government agencies have insufficient information to frame their approaches (Cheng and Won, 2010, Karppinen, 2008, Yao et al., 2013, Taiwan Labour Ministry, 2014). Much of the existing data is poorly analysed and offers a limited guide to policy development and industry support initiatives. With limited and outdated data, there is presently little scope to predict the ongoing feasibility of Taiwan’s bamboo crafts and manufactured products sectors. Moreover, our paper suggests that bamboo studio crafts and bamboo manufactured products are distinct fields with
individual challenges, each needing their own remedies.

The revitalisation of Taiwan’s manufactured bamboo products sector requires the urgent injection of enhanced capability in design, design management, manufacturing systems and marketing on an industry-wide scale to withstand the impact of sharp, multilateral global competition and increasing customer expectations. Broad industry development in a sector dominated by small to medium-sized, family-owned firms will need to overcome significant historical legacies, but it is undoubtedly that the industry will need to come together to achieve the required innovation in manufacturing processes and new product development. Currently, the only positive for the Taiwanese bamboo manufactured products sector is the interest of relevant government departments in jointly negotiated industry development through financial aid and guidance. Modernised industry and company practices and government support, however, need to be accompanied by efforts to address an additional barrier, the lack of designer graduates with a knowledge of and interest in bamboo as a material for product design.

References


Biographical note
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Abstract
The depiction of the world by means of world maps makes design perspective an issue of cartography. In design issues, world maps have different purposes, such as in the field of information graphics. The geographical centres of conventional world maps are usually defined by the Equator that forms the horizontal axis, rather than by the thematically relevant geographical area of the map’s topic. Conventional world maps are commonly used without much thought to the relationship between the map’s theme and its geographical centre. These prevailing conventions are responsible for the specific worldview that emerges from a unique perspective and a unique ideological point of view. This raises the question: what if world maps could be designed with different perspectives? “Mapping World Maps” answers this question by proposing a principle for generating unconventional world maps. Special-purpose software has now been developed (www.worldmapgenerator.com) to generate wholly new varieties of world maps.

Keywords
Visual communication, cartography, generative graphics, world maps, viewpoints

Introduction: Maps, a matter of visual communication
In visual communication, maps are an important means of depicting information. Maps are visual depictions that are not merely a matter for cartographers. However, it is rare for world maps to be applied in visual communication in a manner that takes their possible variations into account. For world maps are subject to conventions by which they are usually depicted from the same ideological and constructive perspective. These conventions are responsible for how we depict our world. Above and beyond this, the boundaries between the disciplines of cartography and visual communication are vague, which can be explained by a glance into their history (Papay, 2012). The artificial division of the concept of the “map” from that of the “image” only began to make itself felt at the close of the 16th century, according to which cartographic depictions were assigned to the field of “cartography”. Today, maps are of great significance in visual communication, not least in connection with “visual sign systems”. One important representative of an interdisciplinary approach is Jacques Bertin, who presented his “Sémiologie graphique” both in specialist cartographic journals and in the field of visual communication (Bertin, 2001). One of the things that Bertin demonstrated was how “variables of the second dimension” create a basis for cartographic diagrams – and this also offers a basis for cartographic infographics (Bertin, 1967). This graphic/cartographic idea played an important role in the visual communication discourse (Daru, 2001) and was taken up by Edward Tufte, whose fundamental works on visual communication refer to infographics (Tufte, 1990).

The project described below is based on a critical inventory of the design and construction of cartographic fundamentals for visual depictions, and it places its focus on world maps. It is not the depiction of data (infographics) or narratives (storytelling) that is foregrounded here; world maps are instead regarded as “basic maps”, thus as a basis for a visual depiction. The following research goals were pursued. 1. Comprehending the construction and design of world maps, and adopting a broad variety of possible world maps. 2. Applying world maps to different contexts of usage; this will be demonstrated by means of the applications (Da Vinci, Tourist, Journalist) of the software that has been developed for the purpose, namely worldmapgenerator.com; and 3. Elaborating the socio-cultural dimension of multiple perspectives of world maps, and reviewing assumptions of their neutrality. Finally, methodological deficits will be identified within the framework of the project and alternative solutions presented. World maps are determined by standardisations whereby the constructive aspect of a world map is substantially determined by its “projection”; 1 this projection is responsible for the mathematical derivation of the map’s flat surface from the Earth’s

1 For simplicity’s sake, we ignore here the precise difference between the concepts of “projection” and “Kartennetzentwurf” (literally...
spherical surface, and is responsible for the image proportions of the world map. It also defines the region that is depicted in the centre of the image. However, there are hardly any maps in use that have shifted an alternative geographical centre to the middle of the image. The possibilities for depicting the region in the centre of the image are by no means exhausted and are in fact currently highly restricted.

Methodological concepts for constructing world maps and alternative possibilities

Turning the surface of the globe into a two-dimensional map involves an abstract mathematical transformation from a sphere into a two-dimensional plane. An algorithm is needed for this transformation, which is called a “projection” in the cartographic process. This projection always subjects the world map to distortion, because a distortion-free depiction of the surface of the globe is an impossibility in a world map. Just think of a conventional world map in which North is at the top and whose top and bottom margins are determined by the North and South Poles respectively. We immediately see that certain regions have been distorted. Thus, for example, the Antarctic appears as a long strip at the bottom of the image, while Greenland abandons all notion of fidelity to its real form and surface area. World maps possess their own characteristics that are determined by their projection and their degree of distortion. There is currently a broad variety of projections that can be subdivided into tangential, planar, equidistant or mediating projections. These different types of projection also differ in their form. Some world maps are square, others are round, curved or even star-shaped.\(^2\) The choice of projection and the choice of the geographical centre for the middle of the image are responsible for the form of the Earth’s surface.

In order to achieve a broad variety of different world maps, we here introduce a new principle for generating them. When constructing unconventional world maps, the mathematical transformation of the surface of the globe onto a two-dimensional plane remains the same. The unconventional aspect of this principle is oriented on the extant algorithms for projections, and merely rethink the region to be depicted in the middle of the image. This is carried out by a flexible positioning of the great circle.\(^3\) In other words, whereas in conventional world maps the great circle of the Equator usually lies in the horizontal centre of the image, unconventional world maps can place the great circle in any desired position (see Fig. 1). These unconventional world maps are still subject to the same degree of distortion.

Besides unconventional constructions of world maps, different possibilities for depicting the world also allow for a broad variety of world maps. Conventional attributes can be rethought, such as the colours given to geophysical elements. Thus the mass of water need no longer be depicted as blue.

In order to achieve a broad variety of possible world maps, a new software program has been developed (www.worldmapgenerator.com). It allows for unconventional world maps to be generated in which the

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\(^1\) "map net draft"). To be precise, a projection is the strictly mathematical transformation of the three-dimensional globe onto a two-dimensional plane. A “Kartennetzentwurf” on the other hand can signify a modified transformation of this procedure in which the conversion can be influenced by other parameters that have been determined elsewhere. These concepts are often used imprecisely in the field of cartography. The “Robinson projection”, for example, is not really a “projection” but a mediating “Kartennetzentwurf”. The present article uses the term “projection” throughout. (Bollmann, 2001) pp. 440 – 443.

\(^2\) Compare, for example, square: Miller or Mercator projections; round: azimuthal projections; curved: Eckert or Robinson projections; star-shaped: Waterman projection. These and other projections can be chosen freely at www.worldmapgenerator.com.

\(^3\) A great circle is the largest possible circle on the surface of a sphere. The Equator and the Meridians are great circles. Theoretically, an infinite number of great circles could be placed around the globe.
geographical centre of a world map can now be determined independently of the chosen projection (Fig. 2). The result is unconventional world maps whose image proportions offer alternatives to hitherto world maps. This Worldmapgenerator is freely available online and enables an interested public to create just such unconventional world maps. Every user can generate his or her own individual world map in which the geographical centre and the projection can be chosen freely.

Potential contexts for applying unconventional world maps, with concrete examples

Maps are employed in visual communication as “representations of geospatial data” or as “geo-data carriers” that form the basis of a graphic visualisation. Maps serve as a medium for conveying information, creating a frame of reference that can be employed in different ways as a “ground plan”, a “basic board” or an “image plane”. The scope of allocation of cartographic visualisations is correspondingly varied – we just have to think of information visualisations of storytelling. Maps give a location to data in infographics, they visualise statistics, accompany literary works (such as “The Land of Oz”, “The Hobbit” etc.), they embody imaginary worlds in films and computer games, are used for propaganda purposes, and illustrate travel guides for cities, etc. (Caquard, 2015). Different types of maps are envisaged for all these different uses and they can be accordingly employed for graphic applications, as in the case of city maps, weather maps, top-view maps, metro maps etc. They utilise different design means in different ways – such as typography, map layout, symbols, colours etc.⁴

Unconventional world maps call certain aspects of the conventional perspective of the world into question. World maps are not an objective, faithful depiction of the surface of the globe. It is obvious that world maps do not just depict geophysics in the best possible, abstract form, but also always convey a subjective world outlook (Harley, 1989, 2001). This socio-cultural dimension in world maps and the worldviews associated with it are placed in a theoretical framework and illustrated below by means of examples using the three applications developed in the course of the current project, namely “Da Vinci”, “Journalist” and “Tourist” (Stirnemann, 2014).

When opening Worldmapgenerators.com, three applications appear on the start page that can be employed to meet different graphic needs (Fig. 3).

The “Da Vinci” application offers access to individually generated world maps that question conventions of map depiction and the worldviews associated with them. This application enables one to construct and design unconventional world maps. In an initial step, an interactive “globe world map model” allows one to define the geometrical depiction of the world map (Fig. 4). This interactive model enables the user to follow the transformation of the globe’s surface into the two-dimensional world map in real time. The geographical region placed in the

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⁴ In the fields of design and art, more and more publications are appearing with cartographic content. This variety of publications makes it evident that cartographic content has long been appropriated by graphic design. See (Akerman, 2007) – (Barber, Harper, & British Library (London), 2010) – (Barber, 2005) – (Antoniou, 2013) etc.
centre of the image can be shifted by means of the ball and the map, with the contact point of the image\(^5\) being displayed synchronously. The second step enables the user to design the unconventional world map. Colours, patterns and line thickness can be adjusted for assorted geo-features such as land and water masses, country boundaries, the map grid and individual countries etc. The free choice of design parameters means that the design of the world maps can turn out to be very unconventional indeed.

Fig. 3: Start page, worldmapgenerator.com with the three applications: Da Vinci, Journalist, Tourist

Fig. 4: Interactive globe map model using the “Da Vinci” application.

The frame of reference of any graphic depiction is never unbiased. “Da Vinci” demonstrates that even world maps are not neutral, two-dimensional depictions. They present the surface of the globe but are not visualisations of reality. Instead they represent a strongly abstract space at a specific point in time. Current world maps comprise a synthesis of different signs that results in the map picture. This map picture is subject to specific conventions that are in turn determined by their cultural context and the motives of the person creating the map. The reception of a map is also dependent on the conditioning of the observer. Interpreting visual codes depends both on the conventions for a map’s depiction that have evolved through history and on the observer’s socio-cultural particularities. Consequently, it is impossible to achieve a universally valid, unique interpretation of a map. It remains individual and dependent on the observer’s world view.

The “Journalist” application places the unconventional world maps in a communication context, namely in the context of news headlines. Two modes are available for this. The news can either be read or written; thus the user either reads the news that is generated by the RSS feed, or designs his own headline. The construction and design of the world map is carried out by a generative process by means of which variables of construction and design are combined with one another to produce the corresponding world map. World maps suitable as images for newspaper articles are generated in both modes. From a constructional point of view, the centre of the world map is adjusted to the place featured in the news headline. So, for example, if the headline runs:

\(^5\) By “contact point of the image”, we mean the foot of the perpendicular of the centre of the projection, here of the world map.
"With new climate draft, a deal creeps closer in Paris",\(^6\) then the world map is subjected to an automatic process that focuses it on Paris. From a design perspective, the world map is created from a combination of a predefined number of design variables. A variety of different combinations of variables can lead to many different world map designs.

Graphic representations using world maps are often determined by a specific underlying intention: they are a visualisation of power and politics. For visual communication, depictions of so-called “suggestive” maps are of particular relevance. These have an emotional impact and subliminally convey a specific conviction. Arnold Hillen Ziegenfeld (1935) created the expression “cartographic” for just such a map type that emerged in analogy to the then emerging field of commercial graphic art. The unconventional world maps that appear in the “Tourist” application in connection with the daily headlines compel us to adopt a new, content-related perspective to political events.

The “Tourist” application enables the user to depict and measure distances around the globe. Here, routes are drawn between different destinations. The application then shows the degree to which the route drawn is subjected to the distortion of the world map. By adjusting the centre and the projection of the world map, a shift occurs in the length of the routes that are drawn, though their effective distance remains unchanged. In other words, if one were to travel from Taipei to Zurich, from Zurich to Montreal, from Montreal to Buenos Aires and then from Buenos Aires to Taipei, the distance of the route would measure 43,528 km in total. In Fig. 5, this route is depicted from the perspective of Taipei, and then from the perspective of Zurich. These visualisations demonstrate clearly that the distance of the route remains effectively the same, but its form can appear very different according to the centre point chosen.

The manifestations of basic graphic depictions are always influenced by a specific subjective standpoint that results from a subjective perspective, and thus also represents a subjective worldview. Creating and using cartographic depictions is always determined by a subjective reference point. So it is all the more important to ask questions about the standpoint of the individual. In the “Tourist” application this is documented by shifting the map’s centre point.

**Discussion**

Cartographic depictions are widely used in the field of visual communication. As “data carriers” they often create a frame of reference for visualisations of information. This graphic basis is employed for different graphic products, such as for info-graphics or storytelling. But these are not value-free. On the contrary, they are determined by conventions of depiction that have emerged over time and have correspondingly conditioned our ability to interpret them. This is where the software worldmapgenerator.com comes into the equation: this software questions conventions of design and construction in world maps by enabling users to generate subjective maps. They can choose any geo-

\(^6\) Reuters headline on Wednesday, 9 December 2015.
graphical centre for the map and modify the world map by means of different design options. Using the three applications (Da Vinci, Journalist and Tourist) demonstrates that the unconventional world maps all refer to a communication context. Ultimately, the sociocultural dimension of world maps is made evident and discussed with regard to the worldview that they represent. We can conclude from this that cartographic depictions can be applied in different fields in visual communication. This is why questioning their ideological and constructional perspective is of great importance. Worldmapgenerator.com offers a suggestion as to how multiple visual perspectives can be applied to world maps.

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Biographical note
Julia Mia is a graphic designer, an artistic researcher and a freethinker. She challenges viewpoints and likes to contemplate the world upside-down. For that she developed the software www.worldmapgenerator.com. Julia Mia is in the process of completing a PhD. She has several years of work experience as a graphic designer and today runs her own design studio (www.juliamia.ch).
Design of an entrepreneurial model in product development and strategy for marketing of handicraft products in the northeast of India: Shken.in – craft community collectives

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Ravi Mokashi Punekar / Avinash Shende / Indian Institute of Technology Guwahati / Guwahati / India

Abstract
The north east states in India is home to diverse ethnic communities who excel in bamboo and cane crafts. Often located in remote villages these communities lack access to commercial urban markets. Economic growth suffers and the community fails to translate its crafts into a successful enterprise. This paper will present design led interventions that were initiated by a design team amongst such remotely located craft communities in the north eastern hill state of Meghalaya, India. ‘Restrained Technology Intervention’ (RTI) model was adopted that enhanced productivity and quality standards, but retained the skill sets of the artisan community. A comprehensive community development plan was outlined that included skill assessment, craft training programs in productivity enhancement methods following the RTI approach. A branding and online marketing plan was developed which considered employment opportunities for the educated unemployed youth of the state. Market testing was undertaken with sample production of the newly designed products to verify their acceptance amongst two leading retail-marketing agencies in the country. A unique initiative in compiling a database of the craft community resulted in celebrating identity of individual craftsman in that collective. It was envisaged that this intervention would result in bringing a sustainable business enterprise that gave direct access to every member of the craft community collectives across the state. The paper suggests that this entrepreneurial model in product development and marketing of Handicraft products can be adopted as a policy initiative for growth of the handicraft and the handloom sector. In the Indian government's new thrust on 'Make in India', such an inclusive approach has the potential to generate economic growth opportunities for the vast pool of highly skilled craft communities spread across the country.

Keywords
(RTI) Restrained Technology Intervention, handicrafts of northeast, branding for craft-products, Make in India

Introduction
Indian handicrafts embody a heritage of aesthetics, creativity and craftsmanship in their rich diversity – a living tradition that has sustained generations of people in India. The Working Group Report on Handicrafts put together by the Ministry of Textiles, Government of India (GoI) for the plan period (2012-2017) highlighted some key insights that hamper the growth of the handicraft sector in India. It estimated that we have a workforce of nearly 7 million craft-persons spread across this unorganized sector. The handicraft sector contributes to exports of handicraft from India worth nearly Indian Rupees 10000 Crores (215 million USD) per annum. The report outlined the recommendation for intervention focused on 5 key aspects:

1. The need for brand building, marketing, craft promotion, advocacy and entrepreneurship
2. Development of craft clusters infrastructure and technology
3. Schemes for Artisan welfare
4. Research, education, training, design and compliance issues
5. Plan for Inputs, credit, raw material
The Government of India through the Ministry of Textiles, has introduced a number of centrally funded schemes for the upliftment of Handicraft and Handloom sector in the country. Agencies like the Khadi and Village Industries Commission (KVIC) and the Directorate of Handlooms and Handicrafts through the Office of the Development Commissioner (Handicrafts), extend intervention programs including craft training, marketing fairs, social welfare schemes etc. Small financial loans are extended to Self Help Groups (SHGs) to organize craft communities of 20-30 members and infrastructure support provided through Common Facility Centres (CFCs) for groups of SHG’s. The periodic training and skill upgradation workshops organized during the year get small teams of craftsmen to attend these workshops against a daily sustenance allowance. Designers empaneled with the DC(H) office are invited to conduct these training programs in new product and tool development. These schemes are more often subject to pressure of meeting the deadline of fund utilization for the financial year. However, in this process a holistic development of the sector is missed out. This paper presents an alternative integrated and holistic design led entrepreneurship model undertaken for the state of Meghalaya with a focus on bamboo crafts as a case.

### About handicrafts in the north eastern states

The north-eastern states, often referred to as the seven sisters, comprise the hill states of Meghalaya, Nagaland, Manipur, Arunachal Pradesh, Tripura, Mizoram and the Assam Valley. They form a diverse multi-ethnic community of Indians and are home to more than 100 ethnic tribes who are skilled in craftsmanship and handloom traditions very distinct in their aesthetic sensibilities. These communities are spread across the different states, of which some are located in remote mountainous locations amongst the foothills of the Himalayas. Living with nature is integral to their lifestyle. The social structure is well defined with the village headman playing a distinct role in management of affairs of the village. The states have a long international border and there is a cross-cultural influence from neighbouring countries including Myanmar, China, Bangladesh and Bhutan. The entire region has an extraordinary diversity of tribal people. Arunachal Pradesh has 26 major tribes; Nagaland has 16 tribes and the state of Meghalaya, Assam, Manipur, Mizoram and Tripura has nearly 12 tribes each. Relatively cut away from the other regions of India, each state is industrially less developed but has a rich wealth of natural resources including forests, mines and biodiversity.

The 23rd CII initiative to improve the handloom and handicraft products of North East, CII Delhi (2001), status report prepared by Northeast Development and Finance Corporation (NEDFi) on the Handloom and Handicraft sector in north-east India, presents the following interesting facts highlighting the importance of development of handicrafts for the economic growth of the region.

- Every 14th person in the north-eastern region is dependent on handloom and handicraft products for a livelihood.
- Nearly 80% of income for the artisan comes from the handloom and handicraft sector.
- More than 90% livelihood to nearly 60% of the artisan community comes from handloom and handicraft sector.
- Share of raw material in the value of a product is nearly 30% (ranging from 42% high to 5% low).
- The extent of value addition as percentage of prices earned by the artisan is around 32%. (Only one-third is the artisan earning, nearly two-thirds is the sum total of expenses and overheads distributed between middlemen, transport, marketing, display and promotion, etc.).
- The difference between average price earned by the artisan and that at which the product is being sold in the local market is more than 35%.

The second most important economic activity in these hill states after agriculture is handloom and handicrafts. Secondary data highlight the distribution of the handicraft clusters comprising of 250-300 members each, in the North eastern states (Table 1) and Handicraft projects extended to artisans amongst the different north east states in India (Table 2).
Table 1: List of Handicrafts cluster in North Eastern states in India

<table>
<thead>
<tr>
<th>State</th>
<th>Total Districts</th>
<th>District where cluster exists</th>
<th>Cluster Covered</th>
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<tbody>
<tr>
<td>Meghalaya</td>
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<td>Arunachal Pradesh</td>
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Table 2: List of Handicrafts Project sanctioned and artisan coverage in North Eastern states in India

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In addition Resource Centre has been set up by the Government at Imphal, Manipur and Guwahati, Assam. Source: Working Group Report on Handicrafts for 12th Five Year Plan, Ministry of Textiles, Govt. of India, 2012

Fig. 2: The products that craftsmen brought were decorative and display products, as well as products what they make traditionally.

Design led interventions in the bamboo crafts of Meghalaya: A case example

The Office of the Directorate of Commerce and Industries (DCIC), Government of Meghalaya, is a state level entity under the Ministry of Industry and Commerce. It is responsible for handicraft promotion and craft cluster development in the state of Meghalaya. DCIC approached the Department of Design, IIT Guwahati to undertake a workshop in training the craftsmen in new product development. The IIT design team comprising of three faculty, three artisans and 12 senior design students, took this opportunity to study and understand the current state of bamboo craft practices amongst identified craft clusters in the four districts of Meghalaya. They organized a brainstorming workshop in the Office of the DCIC, Shillong and invited the concerned stakeholders. Participants included 80 artisans, 14 DCIC officials and field managers, entrepreneurs and professional designers working with crafts community. Information was gathered through Interviews and discussions. Photo documentation was undertaken of the existing range of products made at the craft clusters. Contact addresses of the participants were gathered to enable subsequent interactions.

The information gathered from the brainstorming session helped to understand issues and problems in bulk production at the grassroots level. Craftsmen have different skills and make only what they are good at and in small numbers using traditional tools. These products were mostly decorative and suitable for local use. They sold the products at the local weekly market as they could get money upfront. Unaware of the needs of the urban markets, these skilled craftsmen did not realise the potentials and design intervention in products could fetch better value and price. One entrepreneur attempted to engage in this attempt withdrew complaining that the craftsmen failed to meet his business commitment for bulk orders received from a retailer in a city. “I got an order for 10,000 baskets, but as the number increased the quality of the baskets made were of poor quality and were rejected.”

The design team identified scalability and quality check as the challenge faced in this intervention.
It required modelling an intervention that considered the entire product life cycle and integrated them in a holistic manner. Considering the insights from the brainstorming session, a quick field study was also made with two leading retail outlets in Mumbai to gather the scope of sales for utilitarian products. It was found that there was a very high potential for “hand Made” craft products for contemporary lifestyle amongst urban markets.

A new trend in online marketing of handicraft products was rapidly emerging in the Indian market. Urban-markets showed a high demand for functional handicraft products of everyday use. Middle income urban consumer particularly preferred functional and utilitarian items like fruit baskets, roti (bread) baskets, paper waste bins, laundry baskets, trays, photo frames, lamp shades, etc. These were presently being sourced in bulk from China and Malaysia. These could be developed as a replacement for these items.

A disruptive transformation could be achieved through new product development and brand building. This would address issues of design development of a new range of bamboo products that will aim to meet aspirations and demands of an urban market. The following products were shortlisted for design and development:

- Roti / Bread basket
- Paper basket
- Laundry basket
- Lighting shades
- Fruit basket
- Gift hampers

**Methodology**

The above study resulted in outlining the approach and nine stage methodology the design team conceived it would follow during the rest of the development process. With these inputs the design team conceptualized the first set of utilitarian products that included (bread basket, laundry basket and paper baskets). Following this the design team planned its first on-site craft workshop on February 18-21, 2015 at village Mawkapahan in the Mawsynram block. During the first field based design workshop at Mawsynram, the design team wanted to ensure that the crafts cluster would be able to deliver both quality and quantity of production in a limited timeframe. To ensure this it encouraged the cluster by placing a batch order for them to deliver in a time period of two weeks. The aim was to give them confidence in entrepreneurship. Payment for their efforts was committed by giving them an advance payments towards purchase of raw material and indicating the price of purchase for each item. This experiment proved very successful when the design team received the first delivery after the stipulated two weeks and the craftsmen were paid for their efforts immediately. It also helped to build mutual trust between the design team and the craft community.

It was evident that a holistic approach in new product development, marketing and design intervention leading to new range of products need to be developed. These could be introduced through a branding and marketing plan. However an intervention had to make inclusive an approach that had continuity with the existing skills of the craft community. Such design interventions must make this a strength for its acceptance to the local craft community.

**Development of productivity enhancing tools following Restricted Technology Intervention (RTI) model of intervention:**

To ensure consistency in quality and standardization in size of the products the IIT design team decided to introduce productivity enhancing means through the introductions of easy to make molds, jigs and fixtures.

1. Development of molds and workstation was undertaken keeping the following factors in mind:
   - Ease of fabrication of the molds that are long lasting and can be fabricated at the village level using locally available materials and processes.
2. Introduce easy to understand assembly methods.
3. Human factors consideration in terms of safety and human comfort during use.
4. Processes for steam bending of bamboo strips must be developed using standard components that are readily available in the market.
The first set of four molds was designed one each for the roti basket, the laundry basket, lamp shade and the paper basket. This formed a very crucial exercise in achieving the desired shapes and form for the new product range developed. It also ensured the desired volumes of production at a competitive price range to meet expectations of a large urban market. All the products that were developed had a unique identity of the region and the craft cluster. They incorporated design features that drew upon the skill sets the different artisan community presently processed. During the training program they found ready acceptance by the craftsmen. The ‘easy to make’ molds, jigs and fixtures helped to enhance quality and quantity of production keeping locally available fabrication skill sets and processes. It introduced a method of intervention in the handicraft sector that can enhance the market potential of these high value hand-made products. The design team coined the term ‘Restricted Technological Intervention (RTI) Method for this novel approach.

Further to achieving effective communication the design team planned the design of visual aids and instructional videos that could help craftsmen to overcome language barrier and encourage peer self learning during the making process.

The plans for the next set of ten field-based Training program were finalized, one each at the district towns of Mawphlang, Pynsurla, Shillong, Mawkyrwat, Mairang, Nongpoh, Jowai, Nongstoin, Tura, and Williamnagar. The design team outlined the work plan in the field at each craft cluster and the training inputs to be given to them. Village craft clusters were grouped and invited to participate and trained for the first time to the new range of products and productivity enhancing methods using the newly designed molds, jigs and fixtures. During these workshop they were also introduced to:

1. Techniques in treatment of bamboo to overcome problems of post production fungal attacks on the raw material.
2. To achieve consistency in quality, the use of simple hand tools and mechanically operated sizing machines like width sizer; simple jigs and fixtures etc. must be introduced.
3. To bring diversity and choice for the customer in the new product range techniques in coloring bamboo slivers must be introduced.

Based on the success of the series of ten field-based experiments, the design team planned two Production workshops at IIT Guwahati. A spirit of the strength of a craft collective could be shared and experienced for the first time when all the participants attending the field based training workshop from the different clusters met together for the first time during the two workshops. All were producing the same products using the same set of productivity enhancing molds, jigs and fixtures. The design team could talk with them together to help them to realise the value and potential their products could fetch if they worked as a collective. Talks were arranged in support schemes that could help them to organize themselves at their village clusters. The novelty of the holistic approach where the focus on ‘people first’ was very evident. It had the reassurance that it could be scaled up for volumes of production should these teams reorganize themselves into a collective group. It logically laid the road map for the branding of this new initiative.

Planning for the front end – Marketing and branding strategy for new range of handicraft products of Meghalaya

As a part of Pre-launch testing, range of products that were produced were taken to the leading retail outlets in Mum-
bai, we got a positive response for our products and they were keen on placing an order. Development of the Branding and Online marketing plan was developed based on the new product development and production plan following the RTI approach outlined earlier.

**Branding**

An effective communication strategy that was in tune with the emerging trend of online marketing seemed very logical to pursue. Product differentiation could be effectively achieved by strategically capturing the ethos of ‘people first’ as the face of this novel craft collective initiative. The factors that formed the guiding ethos in building the brand included:

1. The brand name needed to have a regional feel to give it an identity of the state of Meghalaya.
2. The logo and style to be developed had to be contemporary, unique and appealing. Embossing, etching on Bamboo should be possible therefore a bold font was chosen for the identity.
3. The brand needed to have a contemporary and ‘Glocal’ sound to it. The tagline (CRAFT. COMMUNITY. COLLECTIVE) reflected the ethos of the holistic concept viz.- to celebrate the craft, get the communities together and forming a collective. The web URL was chosen as SHKEN.IN and not .COM to align with objectives of MAKE IN INDIA campaign by the government.
4. The color scheme has to celebrate the feeling of being ‘natural and handmade therefore we chose green for the logotype.
5. Social media promotion - where craftsmen were positioned as heroes by coining the term Shken Heroes. Facebook page was created and a glimpse of the project was shared with the online community.
6. After the conclusion of each workshop, one copy of the documented newsletter were posted to the village head of the respective cluster to showcase a sense of pride amongst the artisans.

**Project Implementation – Planning Entrepreneurial Intervention Model for Phase 2**

The project at this stage has followed the project methodology and realised in a planned manner the first 8 stages of Phase 1 as outlined in figure 04. These phases included:

- Need Identification
- Skill Assessment
- Product Planning
- Design Development
- Production intervention following RTI
- 10 Field based Training programs
- 2 production workshops
- Building a strategy and Branding for effective communication and promotion and doing a pre-launch Market test

The pre-launch market test showing positive results has helped build a firm foundation for planning the implementation.
of the Entrepreneurial intervention model for Phase 2 of the project. During this stage the modalities of supply chain management, aspects of transportation and formation of the Craft Collectives (in alignment with the policies of the government) has been outlined as shown in figure 9 below.

The proposal has received a very positive response from the Government of Meghalaya.

**Conclusions**

Engaging with the craftsmen at their place of work during the ten field based workshops has been an experience. It has enriched this design led initiative in the domain of crafts to be grounded and realistic in its approach. The focus on ‘people first’ perspective has brought realization that going into the field, engaging with the community, learning the challenges they would actually experience has resulted in bringing credibility and acceptance with the people involved. Modelling of an approach including production workshops has helped the craftsmen to experience the issues related to production and what care has to be taken while making objects in large quantities. The design got insights on design and development of molds. Appropriate refinements and improvisations to production processes were made to appropriately introduce variations in the product design features. Knock down features had to be thought of in the molds to facilitate ease of transportation to the village centre.

Concepts in managing the production and delivery mechanism needed deviations from established approaches. Establishing trust and acceptance by the artisanal community was primary to the success of this model. Ensuring that there is a cycle of production by placing orders with the craftsmen and facilitating direct and immediate payment to the craftsmen was crucial in such an intervention. These outcomes were far more productive compared to the earlier scenario where there was no follow up after the conventional design workshops conducted earlier. The design team has learnt the challenges of planning and design for the Indian handicrafts of the north-east.

This activity being the second most important economic activity of this region, the importance of introducing a novel RTI approach in production of crafts for the NE cannot be over emphasized. Furthermore, the introduction of online marketing for high value handicrafts of Meghalaya has potential to bring the handicraft community in such remote locations to the attention of national and international audience. Celebrating the artisan community of the region by branding cannot be over emphasized.

The Government of India, recognizing the need for a rapid transformation of the manufacturing sector for the economic growth of the nation, has recently introduced schemes such as ‘Make in India’ and ‘Digital India’. The design team is convinced that the approach outlined as a model (outlined in figure 9) for the bamboo artisan community of Meghalaya has the potential to be scaled up for successful implementation. The proposal has convinced the Government of Meghalaya to go into the second phase of implementation of this project. It can result in the disruptive intervention that this unorganized but important sector urgently needs for its revival.
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Visual rhetoric of the Islamic State (IS):
Persuasion in the field of terror

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Abstract
Terror organizations deliberately utilize the power of the image. Through examples, the present analysis employs an iconological-iconographical approach to examine the pictorial world and design of the Islamic State (IS), revealing that the IS uses classic, sometimes commercial motifs. These serve primarily to manifest power through mechanisms of fright, superiority and brutality. Each instance of staged choreography and planimetry functions like a classical battlefield victory image. The IS folds many symbolic messages into these motifs (crucifixions, destruction of cultural objects) through traditional iconoclastic methods. In social media, other more recent visual worlds predominate, covering topics of freedom, health care and family. In Western commercial style, they depict “normal” social life within IS-controlled territory while downplaying the regime’s violent acts.

Keywords
Terror organization, Islamic State, iconography, iconoclasm, propaganda

Introduction
“Every military or political organization – outlawed or not – in the world has maintained a ‘brand identity’ over time” (Beifuss/Bellini, 2013, 7). Consequently, the IS’s visual online communication appears strategically planned and stage-managed to produce emotional effects. “Inside the images of its actions against minorities and unbelievers, we see campaigns of genocide, crucifixions, stonings and open massacres as specific symbols ... the IS also targets cultural icons and religious centers with an aim to eradicate entire societies” (Jasper/Moreland, 2014, 5). Images are increasingly important in 21st Century communication, even terrorist propaganda, since images are quickly and ubiquitously spread through social media (Lobinger, 2012, 23).

The IS – also known as ISIS or ISIL - utilizes photographs and informational graphics. In annual reports published since 2012, graphics are employed to present macabre accomplishments (Watson, 2014). The proportion of IS’s communications devoted to visual communication is significant. The present article examines these visual communications from perspectives of media creation, pictorial manipulation and communications design.

Statement of the problem
American communications theorist Harold Lasswell defined propaganda as “management of collective attitudes” and “control over opinions” through “manipulation of significant symbols” (Lasswell 1927/1971). The IS’s pictorial worlds raise questions of how such techniques facilitate the group’s appeal notwithstanding its chilling methods and practices and how it can attract new members even from Western countries. IS foreign combatants have increased from around 300 to over 20,000 (Kirk, 2015). This increase is strongly attributed to the IS’s use of multimedia (Hofstetter/Montoya, 2014). Which visual elements – primarily images – does it circulate? How does it use pictorial language to control followers and attract new members? How are images categorized and what are the dimensions of their meaning? The aim is to discover the extent to which strategies, methods and elements of visual presentation and media design support propagandistic intentions.

Current state of research
Analysis of terror groups’ visual language has only recently become a subject of communications science research.
Tulloch and Blood (2012) examined key images of terrorist attacks or wars. Beifuss and Bellini (2013) analyzed logos and iconography of many terror organizations worldwide. Brezeale, Pleggenkuhle and Scott (2015) researched the identity-building factor associated with terror groups. Few studies of the IS pictorial world have emerged. Nissen (2014) described the images distributed by the IS via social media as a struggle for ‘hearts and minds’. Gambhir (2014) deals with content, motifs and symbolic meaning in the IS propaganda magazine “Dabiq”. In “The ISIS Twitter Census”, Berger and Morgan (2015, 2) extensively examined approximately 20,000 Twitter accounts associated with the IS and its supporters. Jasper and Moreland’s (2014, 5) study explains why cultural icons and religious centers are targeted within entire societies. The rare scientific research focused on IS pictorial language is often fragmentary. Our qualitative examination of IS visual communication aims to close this knowledge gap and help explain the organization’s appeal.

Methods
Several online images were identified that were probably distributed by the IS itself and accessed by Western media. Many such motifs appeared in Western online and print media. Based on Panofsky’s (2006) approach to the description and interpretation of images and inspired by Müller’s (2003, 40 ff.) index categories, the visual material was classified into subjects/genres, qualitatively and iconographically analyzed, and interpreted iconologically. Our methodology was guided by Panofsky’s visual analysis, substantially broadening the analysis of “production-related aspects” described by Bohnsack (2011). Regarding the analysis of the strategic production context – that is, which messages should be derived from the images – iconological context analysis (Bock/Isermann/Knieper 2011, 56 ff.) fundamentally influenced the research. Thus conclusions may be drawn regarding strategic aspects of the pictorial world. A limitation, however, is that the producers’ image creation process and individual disposition could not always be reconstructed.

Results
Abu Bakr Al-Baghdadi

Pre-iconographical level
Image foreground
In the foreground, viewed from below, a powerfully built man, around 50 years old, is standing upright behind a microphone, facing the camera, his head turned 45 degrees left and tilted back. He gazes emotionlessly, almost staring, past the camera’s right side. His nose is wide, eyebrows thick, beard abundant; his mouth is closed, its corners turned slightly down. Wearing a black kaftan and turban, he raises his right arm and lifts his index finger. A shiny object adorns his wrist.

Image middleground
In the middleground are gold-colored handrails at each side of the individual, who is presumably standing elevated on a staircase or pulpit. At the right middleground is a stone balustrade of similar materiality to the marbled walls and columns in the background.

Image background
In the background are two stone columns with filigree, floral and geometrical ornamentation (Bänderwerk/Mäander). At the left, behind a column, is an electric fan. In the background, to the individual’s right, two tulip-shaped wall sconces emit a green-glowing light. At the upper left, the ISIS flag is superimposed.

Iconographical level
The photo is captioned, “A year after ISIS declared a cross-border caliphate and rebranded itself, the elusive so-called leader Abu Bakr al-Baghdadi has still only been seen once.” The photographer is not credited.

Iconological level
Perspective projection
The individual is vertically positioned somewhat left of center, his torso and legs unseen. The microphone stand draws the viewer’s attention, giving the individual a tilted appearance.
Choreographical staging
The photo portrays IS leader Abu Bakr al-Baghdadi, also called “Caliph Ibrahim”. The image was likely created in July 2014 in Mosul’s Great Mosque. A video with similar images exists, suggesting that this picture was taken at the same time. Besides the video and photos, there are few pictures of al-Baghdadi, who normally appears masked, earning the sobriquet “invisible sheikh” (BBC News, 2015). The photo appears unstaged and, from its lighting, was probably taken in the evening. The upward-angled shot suggests a taller person, creating an impression of power, self-confidence and superiority. The head’s backward tilt and the raised chin reinforce this impression. The IS logo identifies the image’s processor/distributor.

Planimetrical holistic structure
It is a two- or three-point perspective. The vanishing point is clearly at the right side, formed by sharply sloping lines in the background (building) and foreground (wall). The second vanishing point proceeds leftward into the interior, passing between the columns. Accentuated by his bodily shape and particularly by the dark, monotone clothing, Baghdadi’s appearance forms an ascending triangle at the image’s center. Additional image-guiding lines emerge from the raised index finger pointing at the sky; as an extension, the edges of the columns in the background; and the microphone stand. The lowered gaze parallels the triangle’s right side. This impression is reinforced by the head which, together with the beard and turban, forms an inverted triangle. The point at this triangle’s base, when extended, also parallels the other triangle’s right side. Although Baghdadi is perceived as an important and central element of the image, closer examination reveals the lines formed by his stance to be conflicted and divergent. The photograph’s medium shot guides our attention to one person.

Iconological-iconical interpretation / summary
The extended, upwardly pointed index finger is generally perceived in Western cultures as threatening gesture (raised or moral index finger). Historically, examples exist where discussions or worldviews by eminent philosophers or scholars were symbolized by the raised index finger:

St. Athanasius in a painting by Raphael

John the Baptist is often depicted with raised index finger and referenced in Islam and Christianity.
In today’s media, the symbol of the raised index finger associated with Muslims is frequently interpreted as “sympathizing with the IS”, appearing in IS photos as that organization’s symbol. Explanations of this image in IS motifs often cite the example of “Abu Bakr al-Baghdadi with raised index finger in the Mosul Mosque.” “More specifically, it refers to a fundamentalist interpretation of the tawhid, which rejects any other view, including other Islamic interpretations, as idolatry. Zelinsky writes that when ISIS uses the gesture, it affirms an ideology that demands the destruction of the West, as well as any form of pluralism. For potential recruits around the globe, it also shows their belief that they will dominate the world.” (Skoler, 2014)

The original Islamic meaning of the raised index finger is that “…when ISIS militants hold up a single index finger on their right hands, they are alluding to the tawhid, the belief in the oneness of God and a key component of the Muslim religion. The tawhid comprises the first half of the shahada, which is an affirmation of faith, one of the five pillars of Islam, and a component of daily prayers: “There is no god but Allah; Muhammad is the messenger of Allah.” (Zelinsky, 2014) “In prayer, the finger is slightly raised to attest to Allah’s oneness and the prophecy of Muhammad” (Bärliner, 2015). In summary, the raised index finger should be interpreted both historically and today as expressing defense of power, assertion of a position, and claim to rule.

Palmyra
Pre-iconographical level
Image foreground
In the foreground is a regularly shaped, sand-colored portico similar to a beveled edge/rugged cliff or bordure. The IS flag is superimposed at the upper left.

Image middleground
In the middleground, 25 men in olive-colored overalls kneel near the edge of a platform, their hands behind them. Some lean forward, hanging their heads; others slump back; still others look toward the observer. In front of them, centered and standing erect with legs apart, a black-clad (baggy trousers, loose top) individual poses, his head covered. Behind stand 25 additional individuals wearing beige (kaftans) with head coverings (presumably turbans) in earth colors. A large flag (approximately 7m square) hangs vertically in the image's center; it features white Arabic characters along the upper edge and black Arabic characters in the circle below.

Image background
The portico is flanked left and right by a monumental, temple-like ruin with approximately ten columns. The flag is suspended from the roof by two cables. The sky is a monochrome sandy color.

Iconographical level
Like a theatrical ensemble, the men stand arrayed in a row across the stage, the oversize IS flag serving as backdrop, its size guiding the eye. The writing at the top lies specifically along the observer’s horizon. It comprises the Arabic words “La ‘ilaha ‘illa-llah” (There is no god but God [Allah] – the first part of the shahada) (Beifuss, Bellini, 2013, 51). The white circle below contains three lines in Arabic: “Muhammadun rasülu ‘llah” (Muhammad is His messenger – second part of the shahada). “The words are written in reverse order, reading from top to bottom ‘Allah’, ‘Messenger’, ‘Muhammad’ (Beifuss, Bellini, 2013, 61). The flag is an element of the Muslim profession of faith “…the solid flag was the Prophet Mohammed’s war banner” (Prusher, 2014).

Iconological level
Perspective projection
The photo was taken in the Theater of Palmyra in Syria from a slight elevation. The shadow of the man at the center indicates time of the photo as late afternoon or early evening. The lineup of individuals fills the second-lowest sixth of the image. Taken together, they occupy only a small share of the motif’s vertical space.

Choreographical staging
The black-clad man in front of the group issues “the orders”. He postures himself like a commander, facing away from them. The image was shot during the seizure of Palmyra, one of the ancient world’s most important cultural centers. The photographic object is the execution of Syrian soldiers before an audience that was said to include children, among
others (Spiegel Online, 2015). The executioners stand menacingly and imposingly behind the kneeling soldiers.

The ancient city of Palmyra, under IS control since May (Stern, 2015)

Planimetric holistic structure
This shot was taken from a single-point perspective. The photo's vanishing point is the “Seal of the Prophets” at the flag's center. The image is defined by two rectangles: the square flag and the rectangle above it, framed by the columns. The niche within the upper rectangle is empty, creating the impression that the figure that would have been there has been visually replaced by the black IS banner. The wide shot setting deliberately introduces the site (Palmyra) and the action (seizure).

Iconological-iconical interpretation / summary
The photo, in central perspective, creates a heroic effect recalling images of Hitler’s processions at the Nazi Party rally grounds in Nuremberg, staged to create a monumental demonstration of unending power along Roman patterns (Hengst, 2015). The Palmyra representation follows the age-old iconoclastic tradition (Besançon, 2009) in its demonstration of supremacy (after wartime victories or revolutions) through destruction of the vanquished group's cultural objects. The victors’ power narratives include images celebrating them as conquerors through the destruction of symbolic figures like sculptures (Lenin statues in Eastern Europe), monumental structures (Palmyra in Syria) or shrines (Bamiyan in Afghanistan). Destruction of cultural objects is clearly a deliberate symbolic act of assuming power, since the loss of symbols inflicts pain similar to that caused by the loss of human life. Iconoclasm has been scientifically documented since the early Middle Ages, especially during the Byzantine iconographic conflict (Brubaker, 2012).

Family and children – Daily life
Pre-iconographical level
Image foreground
Two dark-haired children (approximately 10 years old) play on a wave-shaped climbing apparatus. Another child wearing pink shoes, probably female, is seen behind the apparatus at the image’s far right. The apparatus sits on a lawn with bare and grassy patches. Open-mouthed, the child facing the observer to the apparatus’s right smiles and appears pensive. He glances right and below, past the camera. He wears a bright, heavy pullover similar to a sweatshirt with a blue/orange pattern on the front, jeans, and sneakers. With his left foot on the next rung of the apparatus’s ladder, he appears about to climb higher. Each hand grips one of the vertical bars. The second child on the apparatus, facing away from the observer, is stepping forward in the opposite direction. His arms are raised as if to balance himself on the rungs. He wears a diamond-pattern pullover with blue and white stripes around the sleeves and a solid blue back, dark jeans and sneakers. The IS logo is superimposed at the upper right.

Image middleground
All that is visible in the middleground is the lawn, alternately illuminated by late afternoon sun and darkened by long shadows. Scattered along the ground are light-colored objects, possibly paper or debris.
**Image background**
In the background is the blurred image of a van, tailgate open, and a group of four to six individuals surrounding it. Two of them, standing alongside the car and possibly leaning against it, appear to be observing the children at play. The leftmost of this pair wears a light-colored head covering.

**Iconographical level**
According to media reports, this scene is taken from an IS propaganda video (dailymail.co.uk, 2015). The same source reports that “…these children live under the control of ISIS”. Both the video and the image display the IS logo, indicating IS production.

**Iconological level**
**Perspective projection**
The shadows suggest the likely time of the photograph as late afternoon. The backlit children dress warmly in pullovers and long pants, possibly indicating an IS directive to cover the body appropriately. The long shadows on the lawn suggest tall trees or buildings outside the picture’s frame. The photo is shot at the children’s eye level. The parents remain farther away, blurred in the background, producing a sense of detached normality; the sun’s rays accentuate the sentimental mood, creating a “friendly, sunny” impression.

**Choreographical staging**
The children are not playing together. Each of them is moving in a different direction. The observer’s focus is drawn to the right half of the image to the child facing the observer. Normality and routine create an effect contrary to the violent IS images published to this point.

**Planimetrical holistic structure**
The apparatus’s wave-like appearance defines the image’s lines. The horizon is in the upper third of the image at the children’s eye level.

**Iconological-iconical interpretation / summary**
Portrayal of everyday situations, cheerfulness, childhood, normality and “happiness” is a departure in the IS pictorial world from the gruesome, chilling and frightening motifs circulated to date. It offers the pretense that life under the IS is normal and routine.

**Summary**
Based on analyses of the individual images, one concludes that IS uses classic and often commercial motifs to portray its power and traditional values. Using mechanisms of fright, superiority and brutality, these representations proclaim IS power. Individually, each instance of staged choreography and planimetry functions similarly to many classical images of battlefield victory. The IS builds symbolic messages into these motifs (crucifixions, destruction of cultural objects, displays of power) that were traditionally employed in iconoclasm, thus utilizing techniques already evidenced in 8th-9th Century Byzantine iconoclasm.

The IS consistently converts classic Western motifs into propagandistic visual language. These images are inspired by pictorial compositions that have contributed to Western visual understanding for centuries in the case of European painting - but also, in particular, for decades in documentary and journalistic contexts.
Classic, culturally compatible visual motifs are routinely used to convey messages. Thus the IS deliberately exploits its potential recipients’ existing knowledge in order to enhance the effect of its own images. Notably, the IS rejects Western values in principle yet employs Western visual motifs. The historic power and competence of its pictorial compositions nurture its claim to power and truth as the final, incontrovertible assertion of the Islamic State. This occurs mainly with destructive visual tools of power (notably images of the destruction of Palmyra), but sometimes with constructive visual representations (the IS as welfare state). In such cases, the compositional strategies are similar to those employed by Western media that represent conflicting positions and values.

In social media, still other more recent visual worlds predominate, covering topics like freedom, health care and family. In Western commercial style, these images depict “normal” social life within IS territory while minimizing the regime’s many violent acts. The camera positioned at individuals’ eye level underscores the statement. These photographs depart from the hard and brutal characterizations of the IS, promoting on a social level the “values” and “advantages” of life in the Islamic State. Their hoped-for effect is that many young people will enlist in the “IS adventure”. Thus a new IS image is eclectically created wherein visual content is contrary to martial images, producing great ambivalence in the observer.

**Limitations and suggestions**

The present study has several limitations. First, it is based on a reduced image set. These photos were specifically selected to address certain messages regularly conveyed by the IS to the public and accessed by Western media. Given the impossibility of determining actual authorship, we relied heavily on images published in Western media that featured a clear reference to the IS as author. This leads to a second limitation: these images largely represent a preselection by Western media and may possibly be less representative of IS’s overall published images. Notwithstanding these limitations, the study represents a starting point in the analysis of IS pictorial worlds. Future research could perform quantitative analyses of larger visual samples. Individual IS media forms and in particular its published video clips have thus far gone largely unexamined (Christoph, 2015). Since 2014/2015, the organization has published short online videos resembling video ads concerning life in IS territory (mujatweets episodes). Regarding these videos, theoretical approaches drawn from marketing effectiveness research could become a fruitful line of inquiry.

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Exploring phase change materials in gloves to regulate body temperature

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Abstract
There are two types of Phase Change Materials (PCMs) which have been developed and adopted in textiles: heat (energy released) and cool (energy absorbed). This paper discusses current PCM applications in gloves and explores future usage. Laboratory research design was used to explore the application of PCM in the design of protective gloves to determine if there was improved thermal regulation. Prototype gloves were developed using a 35% cotton/65% polyester blend interlock material which comprised of a top and bottom layer. The middle layer was a coated PCM fabric. A final layer using PANEX, a weave carbon fabric, surrounded the other layers and formed the outer shell of the glove. Preliminary tests indicate that absorbency or release of heat (energy) while changing states within this glove structure will provide a benefit for the wearer. Future research will test these gloves in working conditions.

Keywords
Personal Protective Equipment (PPE), gloves, Phase Change Materials (PCM), hand function

Introduction
Phase Change Materials (PCMs) have been suggested as latent energy storage materials because as they change phase from solid to liquid, liquid to gas and vice versa, energy in the form of heat is absorbed or released. This theory derives from the use of chemical bonds to store and release heat. The thermal energy transfer occurs when a material changes from a solid to a liquid, or from a liquid to a solid (Bendkowska, Tysiak, Grabowski, & Blejzyk, 2005). This is called a change in state, or "phase." PCM, proven to possess thermal-regulating characteristics, is proposed for applications in clothing materials in conditions that require workers to face extreme temperatures. PCM also is believed to conserve energy and maintain certain temperatures, so PCMs have been chosen for latent energy storage materials.

The goal of PCM textiles is to create reusable energy to maintain body temperature, as well as to optimize the performance of protective wear such as gloves. When the wearer’s body temperature increases or decreases, the PCMs applied to the fabric will change state helping to regulate the wearer’s body temperature by providing warmth or cooling. Maintaining a stable hand temperature can improve working conditions and comfort. Hand function is compromised when hands become too cold, as dexterity and ability to manipulate materials is decreased.

In some work environments, jobs require the use of heavy garments or specially designed clothing with specific functions to protect the wearer from injury, heat stress, or contamination. These special-function garments could prevent transfer of hazardous materials onto the skin, as well as prevent the transfer of heat and moisture out of the garment. To accomplish this, researchers have developed a way to encapsulate PCMs into clothing fibers to reduce heat loss or prevent overheating in protective clothing (Mondal, 2008). PCMs react instantly to temperature changes. Because of the energy they release and absorb during these changes, PCMs can be used for thermal storage and thermal control.

Theoretically, PCM's ability to preserve energy is relatively simple. When a PCM's temperature increases above its melting point, the PCM absorbs and stores heat as thermal energy as it melts. When the PCM's temperature increases beyond the specified temperature range, the PCM is powered off and the PCM cools to below
the melting point, releasing its stored energy and returning back to a solid state. As PCM absorbs heat, it provides thermal regulation to wearers, as well as enhances comfort by reducing perspiration. In this way, heat stress is prevented.

Another characteristic of PCM is that it acts as a mediator between the body and the environment’s temperatures. PCM products will help people who need to protect their body during outdoor activities in severe conditions like extreme hot or cold (Flouris & Cheung, 2006). In agriculture, industry, and recreation, many subjects may encounter severe sun exposure, which poses a risk to their health without proper protection against ultra-violet light. Taking such cases into consideration, another purpose of this project is to explore and enhance PCM product effectiveness relative to consumer needs.

The goal of PCM textiles is to create reusable energy to maintain body temperature, as well as to optimize the performance of protective wear such as gloves. Maintaining a stable hand temperature can improve working conditions and comfort. Hand function is compromised when they hand becomes too cold, as dexterity and ability to manipulate materials is decreased. The back of the hand also has blood vessels close to the surface and as blood runs through the veins the gloves will allow cooling to take place and help regulate temperature throughout the body. This project is intended to explore issues for the product development of PCMs to create gloves with improved thermal regulation properties. The study has practical applications for the inner linings of protective clothing in conditions of high heat or extreme temperature (Kovacs, Splittstoesser, Maronitis, & Marras; 2002; Mondal, 2008).

Laboratory research design was used in this study to explore the application of PCM in design protective gloves.

Method

Procedure 1: Preparing the PCM

The first step involved dissolving 3g of three-isocyanate in 6g of ethyl acetate in the homogenizer. Then 3g of n-eicosane was added and the solution was stirred until the n-eicosane was completely dissolved. Next, 10g of PVA aqueous solution (5% weight) was added to the solution. Once all chemicals were added, the solution was mixed in the homogenizer for ten minutes at a temperature of 40°C to create a completely homogeneous solution. Stirring was continued until polymerization occurred and the ethyl acetate was completely volatile.

In this study, a field emission scanning electron microscope was used to explore the high-tenacity polyester fabric after the irradiation of argon and oxygen plasma treatment. Images were used to determine change in fiber surface according to the different variables: gas treatment, plasma power, and irradiation time. The operating current was 12 mA and the voltage was 10kV.

Microencapsulated phase change materials (PCMs) were successfully prepared by three different process: emulsion non-solvent addition method, in-situ polymerization and interfacial polycondensation. The process parameters- such as polymerization temperature, additive, rotational speed and mass ration of phase change materials to monomer etc. – which control the size, shell/core ration and yield the microcapsule were studied. Chemical composition and microstructure of the microcapsules were characterized by FTIR and microscopy, and thermal characteristics were tested by differential scanning calorimetry. The results reveal that good microencapsulation can be achieved.

Procedure 2: Designing gloves

The following is the design and experiments design and analysis along with results. Two PCMs gloves were designed on different labs and tested.

The concern is that traditional leather gloves lose tactile sensation. It is easy to be tired and reduce productivity to expose this gap between the sleeve and the glove to a heat environment without any protection. Two prototypes were created and tested on male subjects to evaluate fit, mobiles, hand movements, and protective functions. This project is proposal to adopt PCMs to create fire fight’s gloves to lower heat sensation, allow fire fighter’s hands to be tactile sensitive, provide protection and make it easier for fire fighter’s to use hands properly (grasp items, etc.). The design of the gloves can be slimmer due to the advance nature of the materials used which enhances mobility for the wearer. This usability testing is important to ensure that the fire fighters can use the gloves effectively.

The application of PCM in the design of protective gloves for firefighters was explored through laboratory research to determine if there was improved thermal regulation. An interlock material made of a 35% cotton/65% polyester blend was identified and used to develop prototype gloves. The interlock material had two
layers and between these layers was a coated PCM fabric. All the layers were surrounded by PANEX, a woven carbon fabric, which formed an outer shell. This combination of layers would provide protection and cooling to the inter-lining section that covered hand back area exposed to surface.

Preliminary tests indicate that absorbency or release of heat (energy) while changing states within this gloves structure will provide a benefit for the firefighters. PCMs have been found to be one of the most efficient ways of storing thermal energy and it is expected that the use of this material in gloves will provide a new use for this developing material technology. Future research will test these gloves in working conditions.

Qualitative research design was used in this study. A self-developed questionnaire was used to interview subjects after they tried out the cooling gloves containing PCM. The questionnaire was revised after the pilot study. The questionnaire covered information about demographics with six questions, and explored the needs of PCM users in seven closed and two open-ended questions. The seven closed questions reflect consumer values, the effectiveness of PCM, and its availability in the market, while the open questions collect deeper insight into fire fighters’ interests and the need for future product development.

Discussion and Conclusion
The results of this study suggest that consumers are interested in adopting PCM products because not only do PCMs contain an energy sustaining property, but they also provide adequate temperature control for the body. Suggestions for improvement were provided by each group of subjects. Among these subjects, color distinctions were suggested so the firefighter, rank and company could be better recognized in the field. Common concerns that were raised by each group included the lack of specific properties. Subjects agreed that the firefighter traditional leather gloves provide great heat protection but loss in tactile properties reduce some capability and the gloves were not attached to their jacket creating coverage issues. Most subjects indicated that effectiveness of the leather gloves was limited by thickness of coverage on the hand and duration of use.

Many target consumers appreciated the immediate temperature changes of PCMs in other commercial products. Their absorbency or release of heat (energy) while changing states within a certain temperature range was considered beneficial by consumers. Products that include PCMs, such as gloves, have a high likelihood of being adopted by fire fighters. That apparel coated with PCM can either reduce heat loss or prevent overheating has already been accepted by some targeted consumer groups. Therefore, target consumers have embraced PCM as a thermal balance between heat generated by the body and heat released into the environment. PCMs have been found to be one of the most efficient ways of storing thermal energy.

This study looked at the use of PCM textiles to regulate the temperature of the wearer, in this case fire fighter gloves. PCMs have been found to be one of the most efficient ways of storing thermal energy and it is expected that the use of this material in gloves will provide a new use for this developing material technology. In this study the new material was found to be a technical success and offers the additional benefit of less bulkiness leading to better mobility and tactile senses for the wearer. Future research will evaluate the gloves in working conditions.

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Biographical note
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British design pedagogies in Japanese design handbooks: Focus on color education of the government school of design in Britain

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Abstract
The British influence on design education had been present in Japan since the 1870’s. Modern Japanese art and design promoters introduced and translated a great deal of Western design theories into Japanese, including British treatises. Since then, important design handbooks about methodology were published. This trend reflected a growing concern about incorporating design as a part of compulsory education. Tracing the source back to its origin, the Government School of Design reformed design education in the early 1850s. The School of Design constructed the widespread practice of teaching industrial drawing as well as color education. Its compulsory art education was disseminated to other countries. Design methodologies including the teaching of color theory were also adopted by contemporary Japan. As a consequence, the Japanese government adopted the recommendation from the International Congress of Dessin Education held in 1900 in Paris that was based on the educational system of the Government School of Design.

Keywords
Color theory, 19th Century Britain, Cole Circle, compulsory art education

Introduction
The Government School of Design (renamed later as National Art Training School, now known as Royal College of Art) was founded in 1837 with the objective to improve the art of design. Here, the use of the word design was complex and meant “dessin” or “desegno”. This beginning of a state-funded school had underlying in economic reasons. It aimed to refine the artistic quality of leading products in Britain. Along with this, it aimed to uplift public tastes in design through education. On the other hand, the school was planned to be differed from the Royal Academy of Arts. Since then, the school’s branches gradually increased in local regions, but their results turned out to be ineffective to design reformers such as Henry Cole (1808–1882) and his group of companies. They endeavored to establish a more consistent educational system under the management of the Department of Practical Art, which was widely implemented throughout Britain as the “South Kensington system”.

Previous studies have indicated the overseas influence of the Government School of Design in America, Australia, Canada, New Zealand, Brazil and India, but little comprehensive research has been made about their relationship with Japan. Moreover, they have contextualized the educational conflicts between art and design in their studies. What seems to be lacking is a consideration that the school’s art system had developed to compulsory education. In addition, only a few studies show British influence on design methods which was called “benka” (conventional treatment) in Japanese education. However, it focused on ‘drawing’ only, and did not consider about ‘color’. In fact, British design theorists and educators, Richard Redgrave (1804-88), Owen Jones (1809-74) and Christopher Dresser (1834-1904) wrote elaborate design treatises, and they had put importance on color theories in their books. Their teachings should have been reflected in the educational methods of the Government School of Design.

This study aims to show the relationships between British and Japanese design education by focusing on the formation of the modern educational system, and analyzing key design handbooks which were written by Japanese design educators. First, I will identify prominent theories of design practice in British design education. Secondly, I will describe how received British design theory was during the Meiji era. Finally, I list varied
descriptions of design education, then examine teaching materials on color in the late nineteenth and early twentieth century Japan.

The educational features of the government school of design

After the establishment of the School of Design, the Council appointed the artist and scientist William Dyce (1806-1864) as a director. During his term from 1838 to 1843, he introduced a practical teaching method of drawing and authored "The Drawing Book" that used geometrical outlines as a basis. Although the Schools of Design were criticized as "mere drawing schools", the textbook was highly influential in the following decade. Taking this opportunity for reform, Henry Cole, a British civil servant (who was the succeeding director) together with his circle endeavoured in reorganizing the Schools of Design using a centralized management system. The Art Superintendent Richard Redgrave took charge of forming the National Course of Instruction which consisted of four courses specifically drawing, painting, modelling and design, which had a total of twenty-three stages. He emphasized the importance of botany during the twenty-second stage of the curriculum, elementary design, gave the theme 'natural objects ornamentally treated and usually botanical' to students. The syllabus also included elementary drawing for public day schools which were implemented during the early stages that made children acquire skills in copying accurately in mechanical and imitative ways. Thus, the focus had always been the standards for industrial design, and it later transformed to public art education.

Furthermore, new methods of color instruction characterized its education. The application of color theory in Victorian Britain expanded from fine art to design, helping build the autonomy of design as a new genre. Also, color laws were useful in decoration and manufactures. The Cole circle fully realized the necessity of color education through the planning of the Great Exhibition of 1851. They adapted treatises on color harmony and contrast from the British chemist George Field (1777–1854) and the French chemist Michel Eugène Chevreul (1786–1889). In particular, Field’s chief book Chromatography, published in 1835, helped establish the value of the three primary colors and of the harmonious color combinations in complementary contrast. His ideas were developed by Owen Jones and Richard Redgrave. According to them, harmonious color must contain 'equivalent amounts of the complements' (that is, 'chromatic equivalents'). Jones employed Field’s theory as a basis for the color scheme of the Great Exhibition, which was set according to Field’s prescribed proportions of eight parts blue, five red, and three yellow. With another reference to Jone’s color theory, An Attempt to Define the Principles which Should Regulate the Employment of Colour in the Decorative Arts, Redgrave prepared a diagram to illustrate the harmonious relation of color for the schools and workshops of manufacturers and remarked about the laws of color.

To explain this I have prepared a diagram to show you that colours must be arranged together in specific and absolute quantities to be agreeable to the eye; it is founded on the experiments of Field, who laid down, from able researches and experiments, what these relative quantities must be. Thus, in arrangements of the primaries, a surface quantity of three yellow requires, to be agreeable to the eye, a surface of five red and eight blue; or three yellow harmonises with its secondary purple as three to thirteen in surface quantity. (Redgrave, Addresses of the Superintendents of the Department of Practical Art, Chapman and Hall, pp.78 – 79,1853.)

Then he wrote a textbook called, The Catechism of Colour in 1853, and illustrated Field’s proportions of harmonious color and Chevreul’s simultaneous contrast using a ‘color cube’ that he himself had developed. The designs of Kate Greenaway exemplified the reception of Redgrave’s teachings when she made them during stage twenty-two “elementary design” in the national course. This manual seems to be the first color textbook which was used in British public education. In this way, the educators incorporated the two main color theories into a new curriculum.

The reception of British design education in the Meiji Era

The Japanese government established a uniform national educational system called Gakusei system in 1872. The Ministry of Education modelled this system after those in Western countries, including textbooks and curricula. A subject of art (gagaku or zuga) started to be taught in elementary and secondary education, which introduced traditional Western methods of drawing. However, it did not include color in the early stage. Separate from the subject of art education, the topic of the iro no zu (color chart) was introduced to primary school curricula around 1873, by providing questions and answers. This material was a direct copy of a contemporary American primary textbook by Marcius Willson (Ogata, 1987). The iro-zu consisted of two charts with accompanying color illustrations. Color chart no. 1 showed the seven spectral colors, their combinations, and their kindred colors. Interestingly, color chart no. 2
clearly showed George Field’s chromatic scale but did not discuss harmony among the colors in detail. The inclusion of color as a curriculum topic lasted only five or six years, not until 1904 was color education at the primary school level reintroduced in Japan.

Corresponding to the needs of higher art education, the Ministry of Education started up a board of inquiry of art education in 1885. As a result, the Governmental Art School (Tokyo School of Art) was founded in 1887. This school fulfilled the two functions: a general course (painting, sculpture and artistic crafts) as a part of professional training and a teacher’s training course for secondary schools. The education policy followed a conservative approach for the Japanese traditional art representation. In accordance with the development of Japanese industry, the government required setting up technical colleges, and then established successively three governmental colleges which were equipped with the design course from 1897.

What needs to be noticed is the tendency of Japanese art educator to form design methodology which emerged just after the Paris Exposition of 1900. The government took part in it to raise national prestige through art. However, the exhibits were unpopular, because Japonism was becoming out of fashion among Western countries, whereas art-nouveau as a new style of art gained popularity. Therefore, the exposition gave an explicit watershed in Japanese design reform movement. Beyond that, the exposition also held the International Congress of “Dessin” Education, which proposed inclusion of design to compulsory art education. Furthermore, the congress emphasized the importance of color study to students. The Ministry of Education published this report and the sixth item on the agenda indicated the following:

Decorative design should include the following:
1. Geometrical study by means of linear application and division of surface
2. Sketching, especially plants from nature
3. The primary law of design and knowledge on the law of decoration
4. Inquiry about an undulation of objects in modelling and its decoration

As we have confirmed, all recommendations were common with the precedential teachings of the Government School of Design. A government official Naohiko Masaki (in later, a director of Tokyo School of Art) joined this congress, and then set a board of inquiry of general art education. The said agenda made a great impact for officials to include design in primary and secondary education, since the Ministry of Education actually introduced ‘surface decoration’ as design (kôanga) in curriculum. In 1904, an official gazette, the 6,338 issue, announced to teach design to students from geometrical approach to sketching under the law of nature.

The announcement dealt with color education as significant learning, still the curriculum did not list it independently. Rather, it suggested teaching the names, the arrangement and the properties of color before practices with colored pencils (Kanpo, 8/15/1904). Through these processes, the board members focused on four educational issues; the training of art teachers, the objectives and curriculum of general art education and the equipment of class room including teaching aids. Significantly, the members had great interest that the British government added art into compulsory education in 1860, specifically after the Great Exhibition of 1851. They considered that Japan should learn lessons from Britain’s educational system with the failure of the Paris Exposition of 1900 as the turning point. Thus, the Schools of Design was regarded as an ideal model in order to improve technical education as art.

The introduction of color theory in design handbooks
The Ministry of Education and other Metropolitan authorities successively held lectures to teach design to art teachers handling general courses. Consequently, this circumstance guided the lecturers in publishing the following design handbooks: Shinzo Komuro’s Lectures of Design Method (Zuanhô Kogi) in 1907 and General Design Methods (Ippan Zuanhô) in 1909, Shimada Yoshinari’s Lectures on Industrial Design Method (Koagei Zuanhô Kogi) in 1909, Kou Morita’s The Method of Decorative Design (Soshoku Zuanhô) in 1910, and Kannosuke Hara’s A New Edition of Design Method (Shinpen Zuanhô) in 1911. These handbooks played important roles not only for art teachers but for specialists to invent new decorations from motifs according to the procedures described by these authors. They also had common contents about composition, form, color of decorative design and their application in design.

The pioneer design specialist and educator was Shinzo Komuro (1870-1922). He was an associate professor of industrial design in Tokyo Technical School (now known as Tokyo Institute of Technology) which was founded by the government. Columbine (odamaki) illustrated his introduction of the Government School of
Design’s conventional treatment. A precedent for similar example was Miyamoto Sanpei’s *Drawing book for Elementary School* (*Shôgaku Hutsu Gagakubon*), which had been published by Ministry of Education in 1878. Unlike Miyamoto, Komuro explained how pictorial sketch from natural observation transformed into new design. More importantly, his methodology came from Christopher Dresser according to *General Design Methods* (Komuro, p.160.). Moreover, Kyoto Higher Technical School (now known as Kyoto Institute of Technology) also adopted this method in the curriculum. Consequently, Benka had considerable influence on the new comprehensive national art textbook for elementary grades entitled *New Textbooks of Drawing* (*Shintei gachô*) published in 1910.

Furthermore, Komuro introduced the methods of color arrangement for design for the first time in *Lectures of Design Method*. He explained about primary, secondary, tertiary colors, the psychological effects of colors, contrast, harmony and the color wheel. This became the firm basis for color instruction in the subsequent handbooks on design. Since then, Shimada introduced Field’s theory of chromatic equivalents and Chevreul’s simultaneous contrast in his book *Lectures on Industrial Design Method* through illustrations. Instead, Morita only dealt with contrast, harmony, complementary colors, pigments and coloring techniques in *The Method of Decorative Design*. Hara also gave the same description for the most part, but provided a thorough list of references on British design theory in *A New Edition of Design Method. New Textbooks of Drawing* organized the content systematically such as drawing, painting, composition, colour theory, decoration and design, and inserted color wheel of twelve hues that was derived from three primary colors.

In the same way, most contemporary educators omitted the scientific and philosophical ideas in which the original sources had been rooted. We have confirmed that these attitudes were identical with those of Victorian design reformers. Color theories had been taught depending on form or drawing. In their perspective, the procedure of making design meant that the form comes first, and then the color follows a subordinate position. Thus color education was restricted to use the basic color properties and its arrangement for practical applications.

**Conclusion**

The Government School of Design provided the comprehensive curriculum in art and design with the National Course of Instruction. An important point to emphasize is the Cole Circle incorporated color studies into the curriculum as opposed to the Academies of Art which put emphasis on drawing in the early years. A synthesis of form and color should be essential for their education.

In particular, the British design educators paid great attention to George Field’s color theory of primaries, as well as French chemist Chevreul’s color theory. Redgrave made the color diagram for visual aids and published the textbook, *An Elementary Manual of Colour*, in 1853. In short, the educators mainly introduced the two theories into the curriculum. This textbook dealt with color properties, harmony and contrast that were integral parts of producing decorative design. It became one of the earlier exemplars for instruction on color.

Under the waves of modernization, the Japanese educators consulted the British design theories, and used them comparatively in their books. Through the Japanese design reform since 1900, the inclusion of design to compulsory art education started. Meanwhile, benka became the influential design method, while color theories in design handbooks became the partial introduction of Western color theories. Their descriptions did not cover how to complement color application for students. It might be difficult to measure the whole impact of British design and color theories in the early art educational stages in Japan. Still, color that is, in Field’s colour theory had been adopted once at first, and form or design methodology was accepted later. This showed a unique relationship between Britain and Japan in the field of art and design education.

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Biographical note

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Anomy in Design:
Sir Nikolaus Pevsner’s admonition to “democratic” society
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Abstract
In the eyes of Nikolaus Pevsner, twentieth-century design appeared to be in a state which could be described as “anomy in design,” where any act of design could be justified as long as it followed the taste of the majority. Thus he had come to admonish the world of design and the public, on various occasions, of the potential dangers of liberty that they were enjoying in post-World War II “democratic” society. For Pevsner, who believed art and design had roles to play in reforming post-World War II society, what could not be ignored was the fact that artists, designers and architects were pandering to a majority who so often accepted uncritically the taste of a powerful few who sought to control public opinion rather than cultivate and refine the aesthetic faculties of common people.

Keywords
Nikolaus Pevsner, democracy, design history, designer, liberty

Pevsner’s concerns about majority rule
This biographical study of Sir Nikolaus Pevsner (1902-1983), a giant in the field of the history of art and design, intends specifically to draw attention to his role as a social reformer in the post-World War II “democratic” west.

Just before and during World War II, Pevsner had seen the democratically-elected government of his homeland, Germany, erect trite, seemingly immutable buildings solely to impress the masses, who were yearning for monuments which fulfilled their longing for national pride. The terrifyingly inhumane, anti-democratic, fascist regime of National Socialism realized that art and design could be used as propaganda to induce the largely naive population into taking inordinate pride in their nation, race, and national achievement, and thus manipulate them for their own ends.

The overthrow of the fascist regimes and the end of World War II did not end Pevsner’s concern that, even under Western “democracy,” most people still did not seem to realize the dangers of design and architecture which sought to appease those in power and gain mass appeal, but lacked integrity and neglected moral responsibility.

Whether under a repressive dictatorship or a democratically elected leadership, majority rule is still necessary for the control of the masses, and a democratically elected government which seeks to achieve its ends through unscrupulous appeals to public opinion is no better than a totalitarian regime which wishes to control the public through immoral propaganda.

In July 1947, just a few years after the end of World War II, Pevsner discussed artistic manifestations of democracy in “The architecture of Washington” (Pevsner, 2003, pp. 11-16), a talk on the radio which raised the question of whether the most stunning, seemingly immutable public buildings in Washington D.C. actually embodied the aspirations and industry of a society glorying in its democracy.

The magnificence of these government buildings in the capital city of the most powerful country in the Western world is markedly different from that of architectural monuments executed by an authoritarian regime, for it was not intended to incite chauvinism or ethnic pride. Yet Pevsner had his doubts about the ways in which the ideal of democracy was expressed through these monuments with their towering columns, for these designs were in fact meant to instill patriotism and win over public opinion, and could therefore potentially lead to negative effects such as those prompted by the meretricious monuments of totalitarian society.

Appealing to majority taste is not necessarily detrimental in an enlightened and morally respon-
sible society in which individuality is encouraged and respected. If this is not the case, however, the danger of "simply following the taste of the majority" or "satisfying the preference of the majority" can lead artists and designers to wholly accommodate themselves to popular taste which has become an end in itself. Having witnessed and experienced the tragic end of populism in the very last years of the Weimar Republic, which led to the rise of the National Socialist government, Pevsner was well aware that majority rule is not necessarily right, and indeed can be utterly wrong, and that artistic creativity can become a tool employed for insidious purposes.

The notion of the architect, the artist, the designer, as a person whose role is merely to satisfy the will of the majority of people, both artistically and functionally, becomes stronger than ever when the architect, the artist, the designer is forced to vie with her or his peers for popularity and mass appeal. The architect, the artist, the designer then comes to believe that, as long as her or his work is popular, anything is permissible; and this ultimately leads to the germination of the state of artistic creativity which can be termed "anomy in design," viz., lacking any ethical standards and driven by worldly desire for fame and wealth.

The absolute reliance of society on majority rule in turn drove the world of design into an anomie state. The designer was blind to the danger of seeing popularity as the ultimate standard by which to judge a work of art/design, regardless of ethics or functional validity, in a society dominated by majority rule at the expense of morality. People were not awake to the danger of believing that the architect and designer are supposed to dedicate their work to the proper authorities and that one shows social responsibility by following what the majority wants. Thus the key to resolving anomy in the world of design was to free those in art/design professions and their public from the dangers of majority rule. Pevsner felt that not enough educational opportunities were provided, not only to artists and designers, but also to the masses, for refining their aesthetic faculty and their moral judgment. His admonition of the danger of "anomy in design" was, therefore, intended both for artists/designers and the general public, which also needed to improve and refine its aesthetic faculties and its moral judgment, not accepting works of art uncritically merely because their leaders or trendsetters promoted or promulgated those works.

Pevsner on a “democratic” society’s social responsibility to help people develop their aesthetic faculties

Having witnessed in his homeland the rise of an ultra-nationalistic authoritarian regime through the accepted “democratic” system of elections decided by majority vote, Pevsner came to have reservations about the wisdom and effectiveness of majority rule. The essence of democracy, for Pevsner, lies not just in the “majority rule-based process” of decision-making, but also in the personal development of mental, spiritual and aesthetic faculties needed to participate in the democratic process.

Pevsner defines “democracy” as the “public duty of helping people on [sic] to develop their fac-
ulities — mental and spiritual and also aesthetic” (Pevsner, 2003, p. 16), and, as an art historian, emphasizes the personal duty, and social responsibility, of artists and designers to guide the public in artistic values.

Pevsner, who started to engage academically with the modern movement of design in the early 1930s, discusses how this duty and social responsibility could be carried out on a number of occasions throughout his life. For example, in Visual Pleasures from Everyday Things: An Attempt to Establish Criteria by which the Aesthetic Qualities of Design can be Judged (Figure 1), published by the Council of Visual Education in 1946, Pevsner asserts the importance of visual education “for the sake of a fuller life” in “an age in which visual beauty has grown so rare”:

For the sake of a fuller life it should be asked, in an age in which visual beauty has grown so rare — with nature miles removed from the place of most people’s daily work, with architectural beauty confined to odd scattered fragments amidst tens of thousands of ugly, ill-designed and ostentatious shops, and with beauty driven right out of ninety-eight per cent. of the furnishings which surround us and the tools which we use. (Pevsner, 1946, p. 5)

Taking into account the twentieth-century reality of the lives of ordinary people in industrial society, Pevsner’s promotion of visual education for working people was eminently practical. In this essay, he introduces the fact that collections of various works of art in public institutions are all available for visual education of the labouring class; and, if no original works are available to be studied, Pevsner suggests that photographs and lantern slides of these works and printed publications with “sufficient illustrations” be substituted for the original works. Pevsner’s bracingly practical stance is well expressed in the following words:

The Victoria and Albert Museum has a Circulation Department containing some 70,000 works of art (not only of design), many thousand photographs and about 75,000 lantern slides. These can be borrowed by local museums, art schools, training centres and secondary schools.... Photographs may also be obtained by communicating with such organizations as the Design and Industries Association and The Housing Centre...
The Council for Visual Education, which advocates the teaching of the appreciation of design in all Schools, is arranging a special series of small exhibitions of good illustrations of architecture, town planning and design for circulation in schools and use at conferences, etc., which should also be valuable, as little of this material is available at present in suitable form.... Of publications with sufficient illustrations to take the place of photographic exhibitions, there are unfortunately very few. By far the best was the Christmas 1935 number of The Architectural Review with 371 pictures.... The Architectural Review is at present including a monthly feature called Design Review. (Pevsner, 1946, pp. 6-9)

Pevsner’s interest in developing the aesthetic faculties of the public is also revealed in his contributions to and/or his editorial policy for The Architectural Review, of which he was the chief editor from 1943 to 1945 and a member of the editorial board until 1970: for, either under his name or his editorial leadership, The Architectural Review continued to actively run various articles taking up and examining all sorts of works of art and theories of art, from, for example, the eighteenth-century theory of the Picturesque and examples of Picturesque gardens all the way to twentieth-century large-scaled council estates, public housing complexes, designed works related to public transportation, and the ideas behind these contemporary designs.

Prior to his appointment as the acting editor of The Architectural Review, Pevsner wrote an article in 1942 for the magazine on Frank Pick (1878-1941), a personal friend of his, who had worked as a Traffic Development Officer of Underground Electric railways and later as the first Chief Executive of the London Passenger Transport Board (LPTB) (Pevsner, 1942, pp. 31-48). This article shows clearly how seriously Pevsner was concerned about the education of the labouring class and the development of its aesthetic faculties, even in wartime.

Pick knew the significant roles that art and design should play in the daily lives of working people; and Pevsner knew well the significance of the role Pick actually played in nurturing the aesthetic education of the general public in twentieth-century Britain. As part of his effort, Pick commissioned leading or rising graphic designers to design posters for the London Underground, thus presenting to the public aesthetic achievements that enabled people who rarely went to museums a chance to develop their aesthetic faculties. For Pevsner, Pick’s astute leadership of the LPTB was “the most efficacious centre of visual education in England” (Pevsner, 1982, p. 191), and he wrote of the posters designed in the 1930s for the Board that “it can safely be said” that “no exhibition of modern painting, no lecturing, no school teaching can have had anything like so wide an effect on the educable masses as the unceasing production and display of L.P.T.B. posters over the years 1930–1940” (Pevsner, 1982, p. 193).
Come to think of it, Pevsner, a man with a great variety of academic interests and diverse research achievements, remained from first to last an educator of the general public. His Englishness of English Art (1956) provoked a wide interest in the national character of a nation’s art. Pioneers of Modern Movement (1936) and Pioneers of Modern Design (1949) broadened the definition of art by valuing for the first time the art-historical merits of mass-produced works of modern design. His forty-six volume series of Buildings of England (1951-1974) and his radio talks, covering wide-ranging and complex topics, contributed enormously to the visual education of post-World War II generations. All of this work was the fruit of many years’ endeavour by Pevsner to develop the aesthetic faculties of the public.

For Pevsner, the development of the aesthetic faculties of the “educatable masses” was indispensable in combating “anomy in design” in “democratic” society based on majority rule. In supporting this development, Pevsner endeavoured to raise educational standards of art colleges in Britain. When the National Council for Diplomas in Art and Design (NCDAD) was instituted in 1961 with the aim of “scrutini[zing] all the applications from art colleges wishing to offer the new diploma [in art and design]” (Harries, 2011, p. 617) and to ensure that the substance of the new courses satisfied the standards, Pevsner accepted an offer to chair one of five panels set up by the Council, the “Art History and Liberal Studies” panel. It has been said that Pevsner was offered the chairmanship because of his publication of Academies of Art in 1940. This may well be true, but, more importantly, Pevsner was obviously the most suitable candidate for the chairmanship due to his well-known advocacy of the extension of visual education in Britain.

The collection of the NCDAD-related papers, produced between 1960 and 1966 and now held in the National Archives in Kew, includes a table with a list of various names of art historians and artists (Figure 2) which was apparently prepared at one point in the autumn of 1960 by civil servants responsible at that time for the selection of members of the National Council (National Council for Diplomas in Art and Design [NCDAD], 1960-1966). The column of comment on Pevsner in this table makes clear that Pevsner was eager to accept any appointment by which he could participate in the task of furthering the extension of art and design education, since it is stated that he was “willing to serve on new executive body if invited” (NCDAD, 1960-1966).

**Pevsner as social reformer**

In 1952, Pevsner gave a radio talk, “Reflections on not teaching art history” (Pevsner, 2003, pp. 155-162), which drew his listeners’ attention to the fact that “[e]verywhere the History of Art is established as an academic subject; only in Britain it isn’t” (p. 156). In this radio talk, Pevsner claimed that there seemed to be some feeling, at that time, that the teaching and research of the history of art as an academic subject was “sufficiently well looked after” by two institutions in London: the Courtauld and the Warburg. He then went on to admit that he agreed with this viewpoint.

There seems to be some feeling that that [academic teaching and research of “the history of art in its own right”] is sufficiently well looked after by the Courtauld and Warburg Institutes in London. Whether these two are enough and whether they provide for all needs [although Pevsner says, in this talk, it is not for him to discuss these issues] — I am inclined myself to think they do.... (Pevsner, 2003, p. 162)

Rather than firmly establishing the history of art as an academic subject in British higher education, Pevsner found it more significant, more crucial, to concentrate on developing the aesthetic faculties of the general public. This aim, for him, was of primary importance, and necessarily entailed that artists, academics, and the public should all be alerted to how important this aim was and is, and why it is essential for the sustaining of a truly “democratic” society. This vision of education of Pevsner’s reminds one of the leading Christian Socialist of Victorian Britain, Frederick Denison Maurice (1805-1872), whose conception of the Working Men’s College saw improvement of the aesthetic faculties of the labouring class as an indispensable element of social reformation.

As we think of Pevsner’s life as a social reformer and advocate of the necessity for the public to develop its aesthetic faculties, we should see him not only as the “Herr-Professor-Doktor” (Crossley, 2004, p. 21; Harries, 2011, p. 768; Mowl, 2000, p. 6), a high-profile “academic” art historian, who once yearned to hold a personal chair at Edinburgh and later enjoyed the Slade Professorship of Fine Art at both Cambridge and Oxford, but also be aware of another side of Pevsner, the side that has not been sufficiently looked into as his design-architectural historiography has faced merciless criticism in the latter half of the 20th century (e.g., Watkin, 1977). Pevsner was a believer in the power of the Modern Movement in design to reform the anomic state of artistic creativity in post-World War II, majority rule-based “democratic” society. He was a man who loved modern poster design for being instrumental in developing the aesthetic faculties of the public, keen to expand opportunities for ordinary people to be able to appreciate and study art and design on a daily basis. After all, where he had taught for over twenty-five years and
Anomy in design

held a personal chair in the history of art was not at one of the ancient universities, but at Birkbeck College, London, an institute well-known for having been, and being, instrumental in contributing to the higher education of working people in Britain.

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Exploring ways of interactive diagrams on Chinese traditional craft: Take Nanjing Ronghua craft as an example

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Abstract

With the aging of handicraft inheritors and the pinch of young apprentices, Chinese traditional craft inheritance is in an urgent and critical situation. This research aims to explore ways of interactive diagrams to display the knowledge system of Chinese traditional craft on mobile phone platform so as to answer what should be inherited and how to achieve it. By dividing Chinese traditional craft into physical form and intangible form, this research has clarified the structure of Chinese traditional craft, which contains four parts—materials, craft process, tools and typical craft forms. Based on cognitive load theory and situated cognition theory, two ways have been found to design interactive diagrams. In the part of testing the effect of interactive diagrams, the research has built up a prototype, designed the test, analysed the data. It shows that the present interactive diagrams have an obvious improvement for novices in their recognition and awareness of materials, tools and typical craft forms and, at the same time, it is difficult for novices to attain skillful craft by using such interactive diagrams.

Keywords

Chinese Traditional Craft, Interactive, Diagrams, Craft
解決方案——中國傳統手工藝的互動式圖解法

中國的知識體系分為“以文字為媒介的知識體系”[1]和以“行為或其他非文字”[2]形式為媒介的知識體系。傳統手工藝屬於後者，涉及“手工藝產品製作過程中的材料、工藝和形態等方面的專門知識與器物的選擇、使用、維護、保存等的社會生活常識，以及與之有關的品質、風格、配置和傳說故事等方面的內容”[3]，“歷史上各種手工藝的實踐證明，在傳統手工藝的實施過程中，對材料、工藝、形態等體系化的專門知識的了解和把握至關重要”[4]，這也是現代手工藝學習者和從業者區別於傳統手藝人只知道如何製作，不知道為什麼這麼做的重要區別之一。因此，在本研究中，傳統手工藝的當代傳承必須立足中國傳統手工藝知識體系，尋找解決方案。

智慧手機在現代社會的普及不僅改變了大眾的學習方式，也給傳統手工藝的傳承帶來新的途徑。研究聚焦的中國傳統手工藝互動式圖解法滿足了人們微型的、互動式的學習習慣，以移動應用為載體，學習者通過與圖形化的傳統手工藝的技藝、製作材料、形態結構等元素之間的互動，達到學習技藝的目的。文中提出的互動式圖解法包含了“互動式”和“圖解”兩個關鍵字，其中，“互動式”是一種資訊交換的方式，它注重使用者的行為和使用過程中用戶與“圖”的互動；“圖解”，顧名思義是用一系列符號化的圖形解釋中國傳統手工藝知識體系。互助式圖解法即是一種以“圖”為載體，通過視覺、聽覺等多種通道，以及用戶與“圖”的互動，體驗傳統手工技藝的方法。

本文將技藝的圖形化解析內容分為兩類，“一類是以固定的物質形態出現的，如工具、材料、最終的工藝製作成品等，這類主要以形態和樣式的形式出現。另一類則是非物質的，如工藝製作流程、工藝分解步驟、工具使用方法、材料選擇方法、工藝規範等”[5]，這兩類主要與製作技藝相關。

中國傳統手工藝的互動式圖解內容研究完成後，進行圖解法的框架研究。由於中國傳統手工藝本身複雜度高，學習過程中需要對原始的材料進行序化組織，使工藝易於理解和學習。依據認識負荷理論，從資源的分配角度解決這一問題。

先對工藝進行步驟劃分，再從“材料、工藝過程、工具、形態四個部分”[6]對各工藝步驟進行分析。在對話模式上以使用者為中心，針對中國傳統手工藝作為學習內容的複雜性特徵，在內容組織和呈現上避免多餘資訊干擾使用者的資訊獲取途徑和效率，利用中國傳統手工學習特有的“工藝步驟學習”與“典型工藝品製作”結合的方法，組織結構形化解析框架。

情境認知理論的引入，主要是研究如何讓中國傳統手工藝在智慧手機平臺上營造真實的技藝學習活動，它旨在促進學習遷移和良好學習效果的獲得，具體的方法包括提供複雜、結構不良的和真實的任務，培養學生具有超越淺層的以記憶、理解為主的學習方式，轉向更高的思維技能的深層學習。而這些都需要學習者以學習主體的身份參與社會實踐，通過互動與合作學習，獲得知識。本研究為學習者提供了資源情境和任務情境，資源情境即為了完成學習任務而需要的資訊資源，任務情境即問題解決情境，它是為用戶提供手工技藝學習中的工作任務，這些任務通常是經過分解，並按照工藝掌握的要求有序組織。

由於“圖”在認識中國傳統手工藝的製作材料、工具以及最終的工藝品的面貌上的便捷和有效，本研究提出了兩種方法——相似和歸納，對中國傳統手工藝進行靜態圖形的符號化解析，例如將工具、材料、典型工藝品以圖片的形式展現。（圖1）

另一種是對手工藝製作技藝的圖解，主要解決如何在多媒體平臺上展現技藝，並且確保用戶能夠理解，這也是整個研究的難點。在這，綜合動作學習、技藝的虛擬類比、多媒體學習研究成果，以及手工技藝的特徵總結了四種圖形化解析的方法，即動作分解圖（圖2）、免錯提示（圖3）、有效回饋（圖4）、虛擬模擬（圖5）、內置測試（圖6）。其中，動作分解是常見的技藝學習方法，主要通過圖片、動畫、互動的方式，將技藝的全貌展現出來。免錯提示因該圖解法互動的特徵而被設計出來，用於操作前、操作中，可以降低用戶的認知負擔。有效回饋用以確保操作與用戶行為在時間和類型上的準確對應，促進學習效果的優化。技藝的虛擬模擬是本圖解法的一項新的嘗試，
通過三維虛擬技術為用戶提供傳統手工技藝的製作體驗，如南京絨花技藝中的圖案花傳花步驟。但是必須指出的是，對技藝的虛擬體驗需要篩選，由於對話模式的限制，一些與材料、工具密切相關的精細技藝，不適合在移動平臺上模擬。另一種用於技藝解譯的方法便內置測試，這是一項旨在提高使用者對技藝的理解認識程度的方法，主要通過對錯判斷的方法實現。

此外，本研究所完成互動式圖解法的內容與框架、設計原則的研究，並基於此進行基於移動終端的 App 原型設計和效果測試。

原型開發與效果測試

中國傳統手工藝互動式圖解法原型的設計包含了典型用戶設定、原型框架設計、功能設計與實現、用戶使用效果測試四個部分。通過手工藝學習問卷分析，本研究獲得了典型使用者的模型，即女性、25 歲、手工藝愛好者、通過自學方式學習手工藝、每週學習時間小於 1 小時。主要需求包括，想知道工藝製作步驟，認為視頻學習最有效。目前用戶的學習痛點是，缺少學習的資料，不知道從何處開始。基於此，本研究設計了手工藝學習 App 的使用情景，即學習者根據自身的需要自主選擇是否瞭解工藝背景、工具、材料、典型工藝品，並據此提煉出手工藝互動式圖解法的 App 原型。

根據研究工作開展的便利原則，本研究以南京絨花手工技藝互動式圖解法作為研究個案，南京絨花技藝 2007 年被列入中國江蘇省省級非物質文化遺產名錄，與南京源遠流長的絲織文化有著深厚的關係。在 App 原型設計中，基本內容包括，“文化介紹”部分介紹南京絨花背景資訊的動畫；“作品欣賞”部分包含典型工藝品的圖片欣賞和文字介紹；“工藝學習”部分包含工具、材料、工藝、圖案花四個子項，其中前兩個部分都按照工藝的三個步驟“勾條”、“打尖”、“傳花”用圖形化的方法解析工藝，解析方式包括步
驟圖、演示視頻、示例圖形、虛擬模擬四種方法。“圖案花”部分的設計是為學習者提供一個入門級的典型製作案例，圖解的形式包含兩種，即照片和文字的介紹以及虛擬模擬。（圖 7）

完成原型設計後，對原型在傳統手工藝的技藝學習展開實驗研究。實驗設計了實驗組和對照組各一組，分別選擇的技藝學習媒介是 App 原型和傳統媒介的集合，包括視頻、照片、文字等。實驗組和對照組為同校、同年級、同專業的在校大學生，並按照自然班級分組。實驗設計自主學習週期為一周，學習完成後，被測將完成相同的學習效果問卷，並基於此對比各項指標的學習效果。學習效果問卷聚焦四個方面的問題，其一是對工具、材料、典型工藝品的識別，其二是對工藝步驟中所用工具、材料的再認，其三是對工藝步驟的識別，第四是對工藝實際操作能力的判斷。從結果看，在對工具、材料、工藝品再認的測試中，實驗組，即使用 APP 的學習者正確率分別是 51.6%、61.3% 和 45.2%；在對工藝步驟中所用工具、材料的再認的測試中，對照組學習者的正確率分別為 51.6%、35.5% 和 48.4%；在對工藝步驟的識別上，實驗組的學習者正確率為 35.5%；在對工藝實際操作能力的測試中，對照組的學習者正確率為 32.3%。從結果看，使用 APP 原型的學習者在對工具、材料、典型工藝品的識別，和工藝步驟中所用工具、材料的再認，工藝步驟的識別三個環節中，使用 App 原型的實驗組正確率普遍高於使用圖片、文字、視頻學習的對照組。但在對工藝實際操作能力的測試中，對照組的學習者正確率為 33.2%；在對工藝實際操作能力的測試中，對照組的學習者正確率為 9.7%。從結果看，在對工具、材料、典型工藝品的識別，和工藝步驟中所用工具、材料的再認，工藝步驟的識別三個環節中，使用 App 原型的實驗組正確率普遍高於使用圖片、文字、視頻學習的對照組。但在對工藝實際操作能力的測試中，對照組的學習者正確率為 33.2%；在對工藝實際操作能力的測試中，對照組的學習者正確率為 9.7%。從結果看，在對工具、材料、典型工藝品的識別，和工藝步驟中所用工具、材料的再認，工藝步驟的識別三個環節中，使用 App 原型的實驗組正確率普遍高於使用圖片、文字、視頻學習的對照組。但在對工藝實際操作能力的測試中，對照組的學習者正確率為 33.2%；在對工藝實際操作能力的測試中，對照組的學習者正確率為 9.7%。在對工具、材料、典型工藝品的識別，和工藝步驟中所用工具、材料的再認，工藝步驟的識別三個環節中，使用 App 原型的實驗組正確率普遍高於使用圖片、文字、視頻學習的對照組。但在對工藝實際操作能力的測試中，對照組的學習者正確率為 33.2%；在對工藝實際操作能力的測試中，對照組的學習者正確率為 9.7%。在對工具、材料、典型工藝品的識別，和工藝步驟中所用工具、材料的再認，工藝步驟的識別三個環節中，使用 App 原型的實驗組正確率普遍高於使用圖片、文字、視頻學習的對照組。但在對工藝實際操作能力的測試中，對照組的學習者正確率為 33.2%；在對工藝實際操作能力的測試中，對照組的學習者正確率為 9.7%。在對工具、材料、典型工藝品的識別，和工藝步驟中所用工具、材料的再認，工藝步驟的識別三個環節中，使用 App 原型的實驗組正確率普遍高於使用圖片、文字、視頻學習的對照組。但在對工藝實際操作能力的測試中，對照組的學習者正確率為 33.2%；在對工藝實際操作能力的測試中，對照組的學習者正確率為 9.7%。在對工具、材料、典型工藝品的識別，和工藝步驟中所用工具、材料的再認，工藝步驟的識別三個環節中，使用 App 原型的實驗組正確率普遍高於使用圖片、文字、視頻學習的對照組。但在對工藝實際操作能力的測試中，對照組的學習者正確率為 33.2%；在對工藝實際操作能力的測試中，對照組的學習者正確率為 9.7%。

結論

中國傳統手工藝的數位化傳承一直近年來的研究熱點，本研究從中國傳統手工藝知識體系出發，以移動應用平臺為載體，設計了移動應用原型的內容及組織架構方式，提煉出互動式圖解法的設計原則。在此基礎上，選擇南京絨花技藝作為個案，開發出互動式圖解法用於技藝學習的 App 原型，並驗證了中國傳統手工藝知識體系在移動應用程式原型開發的可能性。通過 App 使用效果的實驗及結果分析，指出在中國傳統手工藝工具、材料、典型工藝品、技藝組成
的知識體系中，前三者利用移動應用程式原型的自學效果優於利用傳統學習資源學習的效果，而在技藝的自學效果方面，無論是利用現有 App 原型或傳統學習資源，都效果甚微。

討論
在探尋中國技藝類非物質文化遺產的承傳的有效方式上，本研究根據中國傳統手工藝知識體系，開發了適合移動應用終端的手工藝學習應用程式原型。通過實驗，發現基於移動應用平臺的互動式圖解法無法使傳統手工藝知識體系中的技藝自學獲得好的學習效果。這一結論，對後續開展技藝類非物質文化遺產的數位化承傳研究和探索具有實踐指導價值。在下一步的研究工作中，將從互聯網技術、服務設計、社區手工藝活動策劃等方面，圍繞文化創意產品開發，探索技藝類非遺的承傳方式，創造一個集傳藝、交流、創造為一體的可持續發展環境。

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History and creativity:
Art, design and media history increase the potential of creative methods in design and management

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Abstract
Creative methods have become integral parts in product development, advertising, the design of communication and services, as well as in internal and external communications within organizations. The desired innovation as the objective of such planning and processes lies always in the future. But since we cannot make any safe statements regarding future situations, all that remains for us to do is to regard past situations as former futures in order to be able to assess historical occurrences with a view to upcoming demands. This approach, namely to associate historicity and creativity in a methodological context, means to incorporate historical patterns in methods of creative practice (workshops, facilitation, design thinking, etc.). Strategies of visual communication from fashion, culture and media history can provide insights and inspire methods in equivalent contemporary issues.

Keywords
Design thinking, creative methods, art history, iconology, design strategy

Introduction

Deduction and problem
A possible guiding paradigm for the classification of knowledge can be found in the differentiation of thinking and acting in the field of design, in contrast to the realities of nature and the sciences based on researching it. One speaks generally of the natural and artificial. Whereas the natural sciences relate to the reality of the world, the actual state of affairs and relationships with people, then design and the related science of the artificial can always be distinguished by its focus on situations in the future. The core of design, whether object or action-based, is principally directed towards future situations. It is meant to optimize existing situations (Simon, 1996). Since the future is, in principle, and empirically indescribable, design problems need to be articulated with deductions, models, and processes that differ from what would be required by the deterministic approach of logic and rational thought and knowledge in the natural sciences.

The problem of the conception of creative methods will be described and analyzed in the following with the action-based research-setting method. The central question is the extent to which historical images, cultural principles, and media history communication formats can contribute as role models for questions and tasks in innovation processes.

Wicked problems and visual science in the context of the problem
To what do we align our learning when we start from context-based and ambiguous problems and solutions constructs? Logical rationality is contrasted with practical experience that implements knowledge in the form of methods of experimentation and testing. On the basis of tasks for teams in design and innovation processes, historical models, such as image descriptions and the associated narratives become valuable sources of knowledge. Problems where the approach determines the nature of the solution are not a logical problem. Scientific questions often have a unique solution to a unique problem. In contrast, design and practical design problems are user-centered, in other words, focused on people. The center of these problems never constitute an object, but always a person acting within
their environment. In this context, Horst Rittel and Melvin Webber formulated in 1973 (Protzen, 2010, pp147-165) the term wicked problems to illustrate that unlike unique specific problems, design issues can never be answered with true or false. They have neither a universal context, nor a clear list of operational solution steps. Each solution is a partial solution; every approach depends on the definition of the beholder. Findings are not usually formulated based on understandable linguistic or textual presumptions, but require the visual interpretation of statements, such as characters, images or image sequences. Orientation on the basis of images defies deterministic operation of knowledge. Images are selective, ambiguous, refer to different reference systems and depend on context for interpretation.

Nevertheless, the question arises: What does art and cultural history tell us beyond their professional internal discourse? Design in contemporary life contexts, whether in combination with self, foreign, corporate or media management, can roll out a potential in combination with historic images and stories, that expands the perspective of communicative action. The work, educational, and entertainment worlds are not only more user-based and responsive, they are also further removed from standardization and specifications as regards localities, processes, and rules. Anticipation of future events is already presupposed as a prerequisite for strategic planning, innovation, and creation of new products, brands, and services.

Practical relevance: Method design thinking
In today’s methodology of designing and planning, strategies of practical learning have long been self-evident. If you integrate design in management practices, then one often speaks of design thinking methods (Cross, 2011; Kelley, 2013). Different types of implicit knowledge are inspired and recorded with different approaches. The methods are varied, but they have their simple and rather few basic rules. Common to all is that one never knows the solution in advance.

The reception of words and images lead to different memory capacity. Pictures have a much higher potential than spoken or read words. For decades, creative techniques have also been used in management education and practice, which make use of the higher memory potential of images, experiences and insights of practical designing, and team-based work. Especially in terms of strategic direction and planning of innovation, design thinking is now regarded as an indispensable tool. There are countless methods of team-based operations, which defy a clear and standardized definition. The following basic rules apply to all examples: Don't theorize, do! Let mistakes occur! Expand on the ideas of others! Think visually and human-centered!

Cultural and art history lend itself well in creating a vocabulary which can be based on actual fundamentals for these creative techniques that are usually visually, narratively, emotionally, and practically expressed.

Theory reference: Historical patterns as templates for creative work
In contact with design practice, theory does not have an end in itself. Rather, it provides the backbone to support practice. If you do not support the practice, then the success of design projects would be pure coincidence. Due to the inability to look into the future, a glimpse into the past makes for the creative space, which enables us to modify and improve existing events under current conditions.

The strategy of looking back, although you are on the road to innovation, opens a grandiose visual spectrum to establish images as models for intentions. On the way back-to-front, historical perspectives always open up the view of the footprints of others who wanted to manifest references and truths with images.

If we look at the past as a former future, we can use the experience of past differentiations and significances for our present actions. If you don’t use the method of applying history as a tool to assess your environment and its dynamics, then you can only act on the basis of personal preferences or fashion trends. Bazon Brock (Brock, 1990, p.211) formulated this method as the Pompeian view, in other words, freezing a historic event as an instantaneous recording, like the community of Pompeii which was preserved by its volcanic eruption.

Beat Wyss (Wyss, 2013) clearly demonstrated how the renewal of cultural practices is repeatedly nurtured and inspired by the adaptation of historical events using the Renaissance as an example (which he called cultural technique). From these so-called renaissances it became evident that the repetition of cultural intentions and understandings are an effective means of formulation of competence and power calculations in times of uncertainty and reorientation.
Hypothesis and question
The question above leads to the following hypothesis: Wherever we work today in the realm of strategic innovation, knowledge of the historical concepts of social and cultural constitutions may assist in utilizing exemplary solutions for orientation and information in design tasks. The advantage of historical strategies against arbitrary storytelling lies in the provable fact of historical artifacts or events. This statement serves as a source for the design of creative workshops for strategic innovation projects of all kinds.

From it the question arises, to what extent effective methods for workshop concepts that deal with strategic innovation, can be derived from historical patterns?

Method and procedure
Action based research
For the evaluation of actions in design processes, action based research is particularly suitable. This method is essentially a collaboration between researchers and practitioners (Dresch, 2014). The creative work of the workshop participants will be used to contribute to the improvement of knowledge about the assumed hypothesis. In addition to observing the work of the team, a survey after the workshop will serve that purpose. It refers to the following image example, which links a historical figure with a creative way of working.

Workshop
Using case studies from history, workshop participants who were given the task to deal with innovative strategies in the development or management of corporate goals, will be confronted with images and events from the artistic culture and media history. Historical images and their contexts were used as illustrative examples. Such pictures were always presented along with their production and reception contexts in addition to their immediate visual effect. It may be art-historical, emblematic or symbolic, everyday images such as photographs, images from advertising or mass media that were interpreted in a historical context (up to about 30 years ago) from an art, culture or media scientific perspective. Interpretations, descriptions, and anecdotes of the reception of images, eras, styles, media techniques, characters or narratives serve as the basis for the methodology.

Diverse facets of strategic planning for businesses, brands, services, start-ups or organizations serve as a starting point for applying this method. Tasks and objectives to provoke a renewal for the purposes of consolidation, change or innovation were conceived here methodically in workshops. The selection of methods was based on qualitative analyzes of historical images and their descriptions which are being used as a starting point for the workshop. The handling of image analyzes in the workshop was again analyzed using action-based research by documenting and analyzing the findings of the results and the manner in which the team reached these.

Iconology and qualitative image analysis
Based on the image description and interpretation approach of Panowsky (Panowsky, 2006) and modeled on the index categories of Müller (Müller, 2011), the image material was categorized into subjects and genres and qualitatively iconographically analyzed and interpreted.

The question concerning the subject of an image called formulated interpretation on the pre-iconographic level (here F1) and the iconographic level (here F2) called reflective interpretation (Bohnsack, 2011, pp 56-57). The reflective interpretation (here R3) were combined with the historical contexts (H4).

Formulating and reflective interpretation
F1: What can be seen (content, form, dimension)?
F2: What story is the image based on and which story came from it? (Purpose, meaning)
R3: Formal composition of the image (perspective, scenic choreography, planimetry)

Historic environment
H4: At what point in time was the image created, and what contexts (economic, social, political, media) prevailed at the time?

While the workshop was being laid out, appropriate images and visuals were defined in advance. During the workshop, these images were presented and implemented into the tasks.
Selection and implementation
SI 5: Using the descriptions, an image status was defined in terms of how the historical representation caused or favored a later situation. This change was described, deducted and formulated as a workshop task.
SI 6: Appropriate elements were defined from a pool of creative methods which played through the situations and the state to be reached within the meaning of the task in teams.

Image example: Storytelling on the basis of a historical image for the implementation in creative workshops for service improvement
The force of the narrative provides a strong bond to the memory of the recipient. Images and events that are involved in a story can be accessed more quickly. You can remember it better. If you were to place the same images and events without narrative elements simply side by side, they would be harder to remember or even impossible. Talking pictures avoid complicated words and texts. The challenge to leave familiar places and actions and to embark on a journey with unknown outcome is difficult or even impossible to implement with conventional workshop methods and techniques. Here, the process of a story is supported as evidence of the functionality of the intentions. For management workshops with the objective: How can we improve our service in the future? the participants were confronted with the following historical emblem and its history.

**Plus Ultra** is the emblem (Figure 1) that is to this day, an element of the national flag of Spain. According to the Greek poet Pindar, Heracles marked the strait of Gibraltar with two columns and the inscription *non plus ultra*. This was to warn about the end of the world that begins with the Gibraltar Ocean. The Renaissance in Spain turned the prohibition into *plus ultra* and this statement was to emphasize the success of the Spanish naval power. This new inscription was presented as a banner between the Pillars of Hercules, and still reminds us today of the fact that innovation is only possible when you cross borders. To accomplish this border crossing, the border must first be known and accepted as a cultural necessity.

**R1:** A pair of pillars standing side by side with the banner *Plus Ultra*. The representation of the water indicates a location near a coast. Furthermore, a coat of arms and a crown is depicted.

**R2:** Pindar describes in his third Olympic song that Heracles misses the ancient world, by marking the limits in Gibraltar with two columns. This marking denotes going past these limits as dangerous and unreasonable: *Non plus ultra*.

**R3:** Graphic representation of an emblem with embedded coat of arms. This image may exist in many versions. It shows no perspective, scenic or planimetric forms.

**R4:** The image was created in the Renaissance under Charles V. The imperial power calculation was based in part on the idea of overcoming the limits of the known world and to conquer new territories. The image is still depicted on the Spanish national flag today.

**SI 5.** The symbolic surpassing of limitations by the inquisitive humanism in the 16th century was achieved by the conversion of a ban into an invitation. This shows the potential of the new and unknown, which is fundamental to any innovation.

**SI 6:** A storytelling method is combined with a role-playing game.

Survey
A total of 20 participants of various workshops were surveyed in November and December 2015 respectively. The 12 male and 8 female participants between 20 and 60 years old all came from the professional fields of Marketing, IT development, project management, and corporate communications. The workshops were conducted for different purposes in the fields of management and strategic innovation. The case study task *plus ultra* and the creative method derived from it was part of all workshops. The historical image analysis was carried out in advance of the workshop. The workshop supervisors derived from it the appropriate method (see Table 1).

The quite experienced workshop participants (almost all have done workshops before) find creative workshops useful to implement corporate objectives. 12 of 20 participants estimated that the efficiency of creative work in teams was higher after the workshop with the case study. How can we improve our service in the future? 13 of 20 people found the derivation of the methodological approach from historical motifs very helpful, 6
answered the question with, “That’s what it sometimes comes down to.”

<table>
<thead>
<tr>
<th>HISTORICAL IMAGE ANALYSIS</th>
<th>WORKSHOP METHOD</th>
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<tr>
<td>Plus Ultra – historic emblem</td>
<td>Combination of storytelling and role-play</td>
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<tr>
<td>Innovation in history: Communication of the self-evident fact and the power of a seafaring nation, derived from ancient texts.</td>
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Table 1 – Analogy of historical storytelling through pictures and the design of a strategic management problem

**Conclusion and outlook**

The approach of integrating historical motives for workshop methods in the strategic design of entrepreneurial objectives has been interpreted by practitioners in the present test to be profitable. The method was evaluated as more or less suitable in different problem contexts. The analyzed case study plus ultra has been designed to fit the problem and was quite suitable. To achieve this potential, a sufficient potential of historical images and stories must be available. The fact that historical photos and events actually occurred in the sense of truthfulness and in relationship to the real word, helps to convey the credibility and effectiveness of the method. Some workshop participants criticized, in part, the relevance of the historical input in terms of current practice. How accurately the selection of pictures and stories fit the workshop methods turned out to be crucial for the efficiency of the method. In the future, historical images and events would have to be tested and evaluated in an elaborate process in regard to their efficiency for creative workshops.

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**Biographical note**

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Poetic dimensions: 
Jewellery conversations about design process

Zoe Veness / Bic Tieu / University of New South Wales / Sydney / Australia

Abstract
The decision by the authors, two Australian contemporary designers, to collaborate in a joint exhibition initiates a process of retrospective reflection as a preliminary strategy to identify common interests and to establish conceptual and theoretical frameworks. Underpinning their project is a mutual understanding and passion for contemporary jewellery forged by many years of academic study and teaching experience in the area of jewellery design at the University of New South Wales (UNSW) in Sydney. This paper signals the first collaborative venture between the two designers who have witnessed the gradual evolution of each other’s distinctive design language over many years. As a means to extrapolate potential frameworks for the exhibition and to highlight the impact of transnational influences in the context of contemporary design practice, two case studies are presented that include personal accounts by the authors of key research experiences in the Netherlands and Japan. Through these design conversations the authors hope new and serendipitous avenues unfold.

Keywords
Contemporary jewellery, reflective practice, design process, Onno Boekhoudt, CODA Museum, Kitamura Koubou, Japanese lacquer

Introduction
The discussions in this paper on methods of jewellery making are contextualised in the artistic and reflexive practice of the emerging field of Contemporary Art Jewellery. A reflexive approach to jewellery practice considers jewellery as a phenomenon that is analysed and researched with outcomes that are jewellery-related but not necessarily wearable (Den Besten in Reinders, 2010, p. 15). Liesbeth den Besten in her critical text On Jewellery (2011) affirms this broad definition when she writes, “Contemporary jewellery not only involves the baubles, bangles and beads but also photography, installation, performance, video and so on” (Den Besten, 2011, p. 15).

Both authors of this paper are research-practitioners and therefore employ practice-based methodologies in their work. This includes examinations of case studies through museum archives and exhibitions; investigations and tests of materials, forms, processes and techniques in the design studio; and studio visits and cultural studies experienced through international artist residencies.

Forming the backdrop for this paper is the decision by the authors to develop new work for a joint exhibition. This partnership is viewed as an opportunity to reflect on past work and to explore a variety of design forms including jewellery pieces, models, box-forms and containers, photographs and graphic design. The initial stage of the project’s development, and the main focus of this paper, is a review of key research experiences in the form of two case studies, one selected by each author. The comparative process that takes place with the ‘retrospective reflection’ (Gray et al., 2004, p. 22) of two influential case studies is a means to uncover similar interests.

Revisiting past ideas and experiences in order to develop new paths via the metaphor of conversation forms an initial scaffold. Here the authors are interested in ‘conversation’ as a design strategy that is open to the exchange of ideas and to improvisation that relies on “feeling, response and adjustment” (Gray et. al., 2004, p. 22). This initial approach values flexibility similar to Herbert Simon’s concept of ‘goal-less designing’ that is “open to the possibility of being led elsewhere” (Go, 2012, p. 518). It echoes Donald Schön’s analysis of design in The Reflective Practitioner (1983) as a “reflective conversation with the situation” that describes the “gradual give and take of problem formulation, experiment, and reformulation” (Buchanan in Meijers, 2009, p. 451). And it considers the
analysis of design methodology by John Chris Jones in *Design Methods* (1992). “The language of conversation,” writes Jones “must bridge the logical gap between past and future, but in doing so it should not limit the variety of possible futures that are discussed nor should it force the choice of a future that is unfree” (Jones, 1992, p. 73).

This paper analyses two contrasting approaches to design practice through an international lens. The conference theme of ‘transnational’ is interpreted as a synthesis of European and Asian sensibilities in the context of Australian contemporary design practice. The first case study focuses on the “process-oriented working methods” (Den Besten in Reinders, 2010, p.107) of the Dutch jeweller Onno Boekhoudt through a personal account by the first author of her research of Boekhoudt’s work in the Netherlands in 2012. The second case study shifts the focus from the Netherlands to Japan and the lacquer studio of Tatsuo Kitamura referred to as the Kitamura Koubou. Selected by the second author, this case study includes a personal account of her research of Japanese lacquer in Japan from 2009-2011.

**Case study #1: Onno Boekhoudt**

I like the fact that there’s mistakes (?) maybe they are not mistakes, experiments, risks, I like the fact that they are left, he hasn’t thrown them out, he hasn’t seemed to worry… (First author, written notes, October 1, 2012, Apeldoorn, the Netherlands).

Onno Boekhoudt (1944-2002) was an influential jewellery-practitioner and lecturer. He followed a process-oriented approach in which test pieces, found objects and finished wearable items were valued equally and presented accordingly in the same exhibition context (see Larsen, 1984, p.91). An examination of his work reveals a perpetual search for form shaped by the principle of honesty. Liesbeth den Besten remarks that, “it is testimony to his courage that, as an artist who enjoyed international respect and as a lecturer at the Rietveld Academy, he continued consistently to reveal his doubts, try-outs, investigations and failures to the outside world” (Den Besten in Reinders, 2010, p. 103).

Boekhoudt had requested that his “artistic legacy, both work and experiments, to be kept together” (Schrijver in Reinders, 2010, p. 116). So after his untimely death in a car accident in 2002 the CODA Museum in Apeldoorn, the Netherlands purchased Boekhoudt’s complete studio contents. This significant decision to honour Boekhoudt’s request enables members from the public including practitioner-researchers to access his collection and gain further insight into his working methods.

**The CODA Museum Collection: A personal account**

In 2012 the first author travels to the Netherlands to study a selection of Onno Boekhoudt’s work as well as other examples of Dutch jewellery design from the CODA Museum archives. Intrigue and surprise accompany the experience as the museum staff leave the stack of archival boxes unpacked (Figure 1).

The contents of each box is systematically examined by the first author with photographs and notes taken throughout the study session (see Figure 4):

Box no. 1: Lots of riveted elements, very fragile, scared to touch [. . .] Repousse rings and brooches with no thicker that 1 mm sheet silver. Left to tarnish, the finish isn’t perfect [. . .]
sliced strips of silver reassembled and then soldered I assume. Extra frame on back to prevent soldered/raised elements catching on clothes.

Box no. 5 (Figure 3): Beautiful object, lead, soft – too soft to take out of box without potentially damaging it or at least altering the shape. Looks like its been folded down the middle then opened back out, then folded vertically. Lead has a beautiful lustre, like soft grey, matte, can be pushed back into place really easily, very sensuous, seductive material . . .

Box no. 6: Four bangles/bracelets or objects that could be bracelets. Aluminium with repousse sections that have split, some thinking maybe with one by gluing three sections of black card to repousse area. I like the fact that there’s mistakes (?) maybe they are not mistakes, experiments, risks, I like the fact that they are left, he hasn’t thrown them out, he hasn’t seemed to worry (?) about the possibility of others seeing these mistakes but were/are they actually meant to be seen, are these private?

(First author, written notes, October 1, 2012, Apeldoorn, the Netherlands). Each piece appears to be inconclusive confirming Boekhoudt’s preoccupation with the ‘unfinished’. “Making - breaking”, he wrote in one of his many sketchbooks (Den Besten in Reinders, 2010, p. 99), what psychoanalyst Adam Phillips describes as a “mock-Punch-and-Judy dialogue” (Phillips, 1988, 131) to convey the process of destroying something in order to reveal mistakes and failures, of pulling apart and destroying previously made work is new terrain for the authors. How much vulnerability should one reveal through their work? Are jewellery secrets meant to be sacred? (Schrijver in Reinders, 2010, p.116).

While the experience of handling Boekhoudt’s work indeed clarifies many questions regarding how the pieces are made, the magic, or more precisely the poetry of his oeuvre remains ‘intact’. Ward Schrijver writes similarly,

When preparing for the exhibition in CODA I came across large numbers of these form-studies in the depot, and although I have been able to hold them in my hand one by one, they have meanwhile become more inaccessible than ever. (Schrijver in Reinders, 2010, p.118). A poetic dimension is discovered through the first author’s authentic encounter with Onno Boekhoudt’s work as well as a richer understanding of the reality of contemporary practice as an expression of the human condition. Compared to the objects made by Tatsuo Kitamura in the following case study, Boekhoudt’s poetic objects appear of this world. Boekhoudt ‘cultivated the unfinished’ while Kitamura searches for perfection.

**Case study #2- Tatsuo Kitamura**

Every studio has their secrets and so does the Kitamura Koubou.

(Second author, recorded conversation, 4 February 2016).

Tatsuo Kitamura (born 1952) also working under the studio title ‘Unryūan’ is one of Japan’s leading contemporary lacquer artists. An insight into his work reveals a commitment to upholding this traditional craft in the contemporary context. “He is not about imitation or fakery” writes Daniel McOwen in Unryūan: master of traditional Japanese lacquer: selected works (2002), “but is respecting what has gone before and re-expressing it in today’s terms, albeit with that reverential sense of the past that is such a rich characteristic of Japanese art.”

The world of Japanese lacquer art reflects a revered history associated with technique, narratives and materiality. Japanese lacquer’s application is broad and encapsulates painting, prints, objects and boxes. Examples of utilitarian objects of containment include ‘natsume’ (traditional tea caddy), writing boxes, and ‘inros’ (case with small compartments).

Two considerations are essential to the lacquer design process. The first consideration is the execution of technique via experimentation with materials and application methods. The second is the surface design, the narrative behind the graphic and how it envelopes and embeds the three-dimensional space. In this synthesis of narrative, technique and materiality is the search for a unified form. The lacquerware produced in the Kitamura Koubou appear to have arrived in this world fully formed so unlike Boekhoudt who turns the garment of jewellery inside out to reveal the seams and loose ends of thread, Tatsuo Kitamura illustrates an approach to making that covers any tracks like a hunter in snow.

Yagihashi Shin, director of the Lacquer Art Museum in Wajima, provides a poetic description about the objects from the Kitamura Koubou in Unryūan: master of traditional Japanese lacquer: selected works. Shin writes,

In eastern philosophy, not only in Japan, but also in China and Korea, there exists the idea that
the complete universe is contained in small objects. For example, the whole world is encapsulated in a vase and at any given moment may be set free. Kitamura’s detailed maki-e works are not defined by only detailed design and technique, they condense the whole universe. To go further, this condensed world makes us conscious of the unifier, the master, of the presence of gold (Kehoe, 2002).

**Kitamura Koubou: A personal account**

In 2009 the second author travels to Wajima, the lacquer centre of Japan, for a two-year residency to study traditional Japanese lacquer techniques. The residency is lead by tōryō (lacquer master) Tatsuo Kitamura of the Kitamura Koubou where through the making of objects she records the design processes of a particular technique called maki-e. Her training over this two-year period involves a series of projects that incrementally increase in skill requirements. Her first lacquer project is a painting of irises completed in silver powder on a small panel. The feedback to this initial study is simply that the lines captured are ‘not beautiful’. The next three months focus on line drawings with a brush through repetitive exercises for six days a week in the studio until the brush strokes reveal a sense of exuberance, elegance and definition (see Figure 5).

After gaining fluency and confidence with the brush she moves to the next project, a painting on a small two-dimensional panel that introduces her to basic traditional maki-e techniques and the use of gold. On completion of this painting she progresses to a three-dimensional object, a tea caddy or ‘natsume’. The following sequences of photographs visually document the design process for the natsume.

Following the natsume project the second author works on a small box. Each project is designed to gradually increase the level of skill and understanding of lacquer. Under the guidance of the studio master and supervision from the other studio members the second author achieves five lacquer maki-e objects. Her final work created at the Kitamura Koubou is a jewellery piece, a contemporary ring, which merges the traditions of Japanese lacquer with new computer aided design, an appropriate way to symbolise the completion of her lacquer training by fusing old and new methods.
Conclusion

Everything is a study. I’m still studying, I’m searching for forms.


The decision by the two authors to collaborate towards a joint exhibition instigated a period of reflection about their individual practice as a means to identify similar interests and potential conceptual frameworks. Both authors are design graduates from the same university however each designer has since explored distinctly different paths in their jewellery practice. In this paper the subsequent cross-fertilisation of their research interests and experiences highlighted two opposing methods in the studio practices of Onno Boekhoudt, a Dutch jeweller and Tatsuo Kitamura, a Japanese lacquer master. The first author reflected on her experience of viewing some of Boekhoudt’s objects at the CODA Museum in the Netherlands. This was followed by a personal account by the second author of the incremental design processes encountered at the Kitamura Koubou during her two-year study period in Wajima, Japan. Through these comparative encounters differing sensibilities were revealed.

The ‘process-oriented’ design practice of Onno Boekhoudt represents a mentality of making objects that is “open to the possibility of being led elsewhere” (Go, 2012, p. 518). Indeed as Ward Schrijver has stated Boekhoudt “was a man keen on exploration, an artist who considered the journey to an unknown objective more important than a glittering final result” (Schrijver in Reinders 2010, p. 118). In this paper Boekhoudt’s open approach was contrasted by the ‘traditionally bound’ and “reverential” (Kehoe 2002) practice of the Kitamura Koubou reflected in the personal account by the second author of her lacquer training with the Kitamura studio.

In the initial stages of the authors’ design dialogues these two approaches to object-making form an interesting dichotomy. Boekhoudt’s object-making inspires the authors to reveal some of the ‘doubts and try-outs’ of the design process as a means to think more poetically. And the Japanese sensibility of the objects of the Kitamura Koubou influences their search for the ‘unifier’, for an ideal balance between surface detail and form, and between notions of old and new.

References


Biographical note

Dr. Zoe Veness is a contemporary jeweller and Lecturer of Object Design at the Tasmanian College of the Arts, University of Tasmania in Hobart, Australia. Her work is held in private and public collections including the National Gallery of Australia and the Art Gallery of South Australia.

Ms. Bic Tieu is a contemporary maker of jewellery and objects. She is also a sessional academic and teaches into Design, Jewellery and Object at the University of New South Wales. Alongside this, she has the Bic Tieu Studio practice which often extends to projects, exhibitions and publications.
Abstract

19th century broadsides have been discussed in the history of design as examples of a typographic shift, brought about by the emergence of display styles such as "fat faces", and associated with new technologies such as the iron press. These characteristics can be seen mainly on broadsides that functioned as advertisement. Other kinds of 19th century broadsides were intended for popular reading, telling news and tales. These commonly combined poetry and prose, unlike earlier broadsides, typically written in either one of these text genres. This essay asks whether this combination was specific to broadsides and if it was limited to a specific country. Broadsides of John Lewis Printing Collection of the University of Reading Special Collections were analysed and compared to those of the Library of Congress, and similar examples were found in different countries. This indicates that the combination of poetry and prose in those broadsides goes beyond the framework of national borders.

Keywords
Broadside, design, poetry, prose, national identity, newspaper, typography

Broadsides in design history

Broadsides are generally defined as one-page publications printed only on one side, unfolded and with no specific standardized format. They were among the first works issued from Gutenberg's press and became popular throughout the following centuries, perhaps due to their relative cheapness and versatility. Displayed on public walls or read privately, distributed for free or sold, broadsides conveyed texts as diverse as government proclamations, ghost stories, timetables and songs, and were eventually collected, assembled as books or discarded. Still, some general tendencies and shifts in broadside readership can be inferred from indicators such as sales figures and average circulation.

Throughout the 16th and 17th centuries, broadside ballads – which speak about fictional and non-fictional stories, in verses meant to be sung or read – had more circulation than any other publishing genre in Britain (Nebeker 2007). In the 19th century they were less sought-after, while broadsides with news written in prose, or combining prose and poetry, were selling over 500,000 copies (Hepburn 2000, p.74). Despite the ubiquity of broadsides, their inclusion in design history may seem anachronistic.

As Walker (1989, p.29) remarks, design historians tend to define design as a "specialist activity associated with the industrial revolution" and mass production. But broadsides predate the industrial revolution, were frequently printed on old wood presses, and their large print run derived more from intensive human labour than from new technologies of mass production. Also, if in the industrial process of production, design gradually became "a process of conceiving rather than realizing the form" (Dilnot 1984, p.19), this separation between designing and making was not generally established in the production of broadsides, even in the 19th century. The editions issued by broadside maker James state "Printed by J. Catnach", although he was perhaps a combination of storyteller, businessman, printer and mass communicator. Anyway, Catnach's credit means that he did not consider himself a designer.

On the other hand, 19th century broadsides that function as advertisements have been identified with the rise of industrialization. Hence the references to advertising broadsides in design history, which distinctly exhibit display letterforms, such as woodtype letters or Thorne's typefaces – and the relative omission of other
broadsides that were everyday popular reading. Yet by prioritizing published and printed material that seem to represent industrialization (or the taste of an elite), design history can unwittingly distance itself from the actualities of reading. In this historical narrative, the selection of what was published can become detached from the creation and reception of what was read, which ultimately disconnects production from use.

As design historians shift towards analyses less centred on the industrial revolution and industrialized regions, the inclusion of broadsides other than advertisements becomes less anachronistic. An example of this shift is World history of design (Margolin 2015), which discusses the broadside production of the printing establishment of José Vanegas Arroyo in Mexico. Broadsides of different centuries and purposes are also thoroughly included in ephemera studies, dedicated to the everyday printed material.

The popularity of some 19th century broadsides suggests that their graphic presentation resonated with the reading culture of the time. Was this culture geographically widespread? To what extent was it also manifest in popular publications other than broadsides, such as newspapers and magazines? Published artefacts and readership are reciprocally dependent. Still, this interdependence tends to be overlooked by historical narratives about the graphic presentation of publications – with the exception of studies focused on the uses and receptions correlated with design, which observe "not only what design does to people, but what people do with design" (Walker 1989, p.183).

The broadsides of the John Lewis printing collection

This study is focused on a branch of the ephemera collection of British designer and historian John Lewis (1912-1996). Dilnot (1984, p.9) thinks Lewis is among those for which history is in the service of a practical purpose and, indeed, Lewis (1962, p.9) referred to his own collection as a "designer’s scrapbook". As an author of books about ephemera, typography and design, he also used his archive as research material for his texts. The approximately 20,800 pieces of graphic communication that he collected were transferred to the University of Reading Special Collections after his death.

Printed ephemera comprises the majority of Lewis’ archive. From the group of broadsides, 14 were issued in the 19th century and the oldest item is dated 1650. Eight of the 19th century broadsides, all printed in London, combine poetry and prose. This might reflect Lewis’ preferences, or the availability of these articles for collectors. Broadsides of the John Lewis Collection issued before the 19th century did not mix poetry with prose, whereas this combination can be found in other 19th century publications, such as chapbooks and religious tracts. Therefore, this arrangement was probably typical of the 19th century, irrespective of Lewis’ specific interests. Since broadsides circulated among different social classes (Hepburn, 2000, p.59-75), reading prose alongside verse was a relatively frequent practice at the time.

Example of combination of poetry and prose

The presence of poetry alongside prose in broadsides resulted in simultaneous narratives, which the reader could identify and understand. Apparently the writer, who could equally describe one story or make verses about it, often chose both options. News was accompanied by songs. A fiction story could be told twice, one version being a narrative prose and another version being a poem. Type, columns, ornaments and strokes would help the reader browse through these different stories on the page.

Also, one topic could be considered from various angles. This is exemplified in the broadside Jane Wade, a young lady of pleasure and fashion, published by James Catnach and one of the items of the John Lewis Collection [figure 1]. The story is broken into four pieces of individual texts, each one telling one aspect of Wade’s life. The first one, written in first person and verses, is her own version of her life; the second one is Wade’s
life written in impersonal narration; the third one is her letter to her parents and the fourth one is a poem that Wade prepared for the public to read at her funeral. On the top of the page, two sentences summarize Wade’s life.

The division of the content is stressed by the layout. Bold titles and capital letters signal the beginning of each text. Different column widths and alignments – justified or left-aligned – distinguish the songs and verses from the rest. Hence one story is fragmented as a set of points of view and text genres. Rather than making written transitions between the points of view in continuous texts, the edition maintains them as non-continuous and autonomous units.

The different texts are separated by white areas, ornaments and images. In addition, the relatively descriptive content of the impersonal narrative and the letter is visually grouped in larger justified columns of the same width. The subjective feelings arising from the story and expressed in verses are set in short and left-aligned columns. The reader is thus able to scan the page and select any one of the different texts, which can be read individually.

19th century broadsides and reading strategies

Broadsides makers created a multitude of arrangements in pages with poetry and prose [fig. 2–5]. The proportion of each one of the text forms varied, as well as their position on the page. The broadside theme could be more or less subdivided in different texts, thereby leading to different degrees of fragmentation. What these broadsides have in common is the non-continuous reading that they generate.

The presence of verses and prose on the same page almost inevitably results in dissimilar text-columns, and justified and left-aligned columns tended to be used for prose and poetry respectively. Additionally, different column widths often emphasized and made clear the difference of text genre, being used especially in the more fragmented broadsides. The contrasting text-columns conveyed different meanings, guiding a non-continuous reading and stressing the divisions of the page that the mix of text genres already tends to cause.

The inclusion of poetry among news and political texts that occurred in 19th century broadsides gradually disappeared [figure 6]. And if some 19th century newspapers had space for verses among news (and perhaps sometimes as news), they ultimately removed this text genre, except in specific contexts such as literary supplements. Even so, the non-linear edition associated with that inclusion of poetry in broadsides continued to exist. While the verses themselves were removed, the contrasting text-columns that they produced were preserved.

Pages with non-continuous texts certainly predate the 19th century and existed in publishing genres other than the broadside – the footnote that goes parallel to a main text is one example. What characterizes these broadsides, apparently distinguishing them from these other examples, is the intentional breaking of one subject into small texts units that can be read individually but also form a whole on a page, and which can be perceived through the column structure.
Comparison of broadsides and periodicals

The fragmentation of the Jane Wade broadside previously mentioned contrasts with the edition of the 19th century periodical The penny magazine [figure 7-8]. Written in continuous prose text, and set in the same typeface and size as the title, The penny magazine looks homogeneous compared to Jane Wade. This uniformity is visually emphasized by two symmetrical justified columns. The content of The penny magazine is divided in parts that apparently try to resemble chapters of a book rather than a fragmented broadside.

Other periodicals occasionally published verses, often on the front page [figure 9]. However, newspapers were chiefly filled with information written in prose, organized as separate articles that discuss different and sometimes unrelated topics [figure 9]. A page of a 19th century newspaper has a significantly larger amount of text than a broadside, and gives the impression of requiring more focus and time from the reader. Yet the presence of verses in this kind of page indicates that they were part of the daily reading material at the time.

Even though 19th century broadsides were a versatile medium which could potentially include any content, it seems that the broadsides that combined poetry and prose tended to present some specific topics. Celebrations, tragedies and crimes, deaths and executions were often chronicled in these broadsides [figure 2-5]. Fiction and non-fiction could sometimes be mixed, contrasting with the more ostensibly objective aspect of 19th century newspapers and The penny magazine. This means that broadsides differed from the periodicals of the time not only in graphic presentation, but also in content.

Fig. 6: Broadside about the presidential election. n.p. 1864. Size: 30 x 32 cm. Source: Library of Congress

Fig. 7: The penny magazine (cover of a monthly supplement). Published by the Society for the Diffusion of Useful Knowledge.1833. Size: 18.7 x 283 cm. Source: University of Minnesota

Fig 8: The penny magazine (inside page of a monthly supplement). Published by the Society for the Diffusion of Useful Knowledge.1833. Size: 18.7 x 28.3 cm. Source: University of Minnesota

Fig. 9: The Jeffersonian. 1853. Source: Library of Congress

Broadsides of the library of congress

It is unclear if John Lewis intentionally collected only 19th century broadsides that were printed in London. Perhaps he selected what looked interesting or what was available, regardless of the issuing location. The large print run of some broadsides issued in the Seven Dials area of London, where the printing workshops of James Catnach, John Pitts and Birt were established, probably increased the chances of finding a remaining copy of them in the 20th century. The significant presence of broadsides issued by Catnach, Pitts and Birt's in the Lewis' collection may result from this large circulation.

An examination of the material in Lewis' archive may indicate that the combination of poetry and prose in 19th century broadsides was specific to London, and perhaps especially Seven Dials. In order to test this hypothesis, the material of the John Lewis Collection was compared to the 19th century broadsides of the Library of Congress. 32 broadsides with poetry and prose were found, 1 being from Mexico and the rest from the United States, and broadsheets from both countries also provided similar examples. Therefore, combining poetry and prose was not a practice limited to London or British broadside printers [figure 10-11].

Clearly, the collection of broadsides in the Library of Congress was based on criteria other than those of the John Lewis collection. The predominance of broadsides that document historical and social facts indicates that they were selected more due to their written content, than for their visual or physical qualities. Some of the common topics are elections, the civil war and the abolition of slavery, as well as stories linked to the local life and
culture – for example, the burning of a nearby theatre, or a crime. Topics representative of the national interests surface in these publications, such as the emancipation proclamation of Lincoln in an American broadside [figure 10-11]. However, the texts could also inform the local reader about distant places. This is indicated by a French broadside, from the library of the University of San Diego, that tells of the abundance of gold in California. Interestingly, the last verses say that on est heureux aussi en sa patrie (one is happy also in one’s own homeland) [figure 12] and California is referred to as a pays (country) – which reminds us that the present-day national borders and prevalent definition of country may differ from those of the 19th century.

The percentage of broadsides with poetry and prose in the Library of Congress is minimal compared to those at the John Lewis Collection. They consist of nearly 0.5% of the total 19th century broadsides of the online database, whereas they represent roughly 57% of the Lewis’ collection. This can either reflect the criteria of each collection for selecting material, or reflect the abundant production of this kind of broadside in London, or perhaps it is a combination of both factors. In any case, the combination of text genres was practiced by 19th century broadside makers of different places and languages.

Poetry and prose in broadsides of different languages and places

It is possible that the graphic presentation of a 19th century broadside is identified with the images, techniques, type, colors, papers and the overall culture of the place where it was issued. What is more, in some cases they became source of inspiration for publishers and artists of later generations, thereby contributing to the formation of a national tradition. This is the case of Mexican broadsides issued by Antonio Vanegas Arroyo in the late 19th century, whose illustrators Manuel Manilla [fig. 13] and Jose Guadalupe Posada [fig. 10] influenced 20th century publications such as the newspaper El Machete, edited by artists Diego Rivera and David Siqueros, and the book production of designer Díaz de León (Margolin 2015, V.1, p. 490; V. 2 p. 484). Still, the specific presence of poetry and prose in 19th century broadsides transcended national borders.

It seems unlikely that this practice started in one place and then influenced printers from abroad. This would imply that the broadsides from one region were printed before the other ones. Instead, both American and British broadsides date from the 1810s onwards. At Seven Dials, their production seems to have hit its peak in the 1820-1830s, and at the Library of Congress the date of the broadsides tends to coincide with significant events of American history. This suggests that the combination of text genres did not have one specific origin or cause, but was instead connected with factors pertaining to different Western countries, cultures and languages.
ballads commonly reproduced lyrics that were sung by the broadside seller, and this combination of musical performance, accompanied by its printed version, also existed in places other than Britain. The printed form of religious speeches was another possible influence, as the speeches often interlaid prose discourse and orations [figure 14-15]. Also, literary stories that were themselves mixing text genres perhaps impacted on the broadsides. Exchanges between the form of the newspaper and the broadside were facilitated by the concurrent printing of broadsides and newspapers in printing workshops, such as that of Antonio Vanegas Arroyo in Mexico. In other words, this mix can be linked to traditions and practices whose presence within various cultures helps explain why poetry appears alongside prose in broadsides of different languages and places.

19th century broadsides in the framework of national histories
Broadside with poetry and prose coincided with the rise of the news industry and possibly merged new and old forms of narrative. This does not mean, however, that they exclusively represent a transition. Some of these broadsides break one theme in smaller texts whose different column widths help the reader distinguish the content. This structure is clearer in a newspaper of the 21st century than of the early 20th century [Figure 16-17]. This is a sign that the visual and typographic organization of the page does not necessarily evolve in a linear historical way.

The extent to which the graphic presentation of a page is subject to national causalities is uncertain. Although the language determines how a page will be read, the variety of languages does not coincide with the national borders. Ernest Gellner stresses the discrepancies between national and cultural frontiers, which ultimately undermine the ideal of a uniform nation. Moreover, assuming that nations and nationalism were defined chiefly within the 19th century (Hobsbawm, 1990), the search for clear national origins in the use of poetry and prose in 19th century broadsides becomes fruitless, for national identities were being constructed.

Indeed, Anderson (1991[1983]) emphasizes the influence of the printing industry and the newspaper in the emergence of a national consciousness, which means that 19th century broadsides were among the causes, rather than effects, of national identities. Hence the paradox of considering them from a present-day national standpoint. Grounded in Anderson and Gellner's premises, Walker (1989, p. 119-121) states that although national standpoints do influence the present-day design production and are "mobilized for use as a marketing strategy", and although national identity is now a construct that design can help shape and promote, "most countries have a mixture of races, regions, languages and cultures". In other words, the idea that a nation has a homogeneous essence is untenable.

Conclusion
This study asked how the graphic presentation of 19th broadsides related to their texts and contrasted with publications from different countries and of different genres. It was observed that broadsides with poetry and prose were produced in several western countries throughout the 19th century. The origin of this combination is unclear and may be linked to a shift in the print communication of this period. Broadsides perhaps expressed this shift (and contributed to it) by juxtaposing current forms of news texts and old popular and religious traditions. These broadsides were issued in the same period in different places and languages, thus their combination of text genres does not seem to derive from national causes.

Problems of classifying these broadsides as design artefacts arose, given that they...
were neither incorporated in industrial processes, nor involved professionals that perceived themselves as designers. But as design history defines, criticizes and redefines its own scope and methods, its industry-oriented premises (as well as other assumptions such as elitists biases) are also questioned. One of the implications of a design history centred chiefly in industry or in the designer is that it can become oblivious to forms of using and creating, writing and reading, that can re-emerge in new objects and processes. The non-continuous reading associated with 19th century broadsides, and which constitute a significant part of the present-day print and digital communication, is an example of practices that, once invented, became effective in other contexts.

Approaching the history of design as a history of things that were produced by specific professionals in specific ways is intrinsically problematic in a society whose products and professions are in constant transformation. In addition, objects of graphic communication can be conditioned by other changing factors such as the reading culture. Conversely, these objects help transform this culture, and the new elements that they introduce can be reassessed by designers and design processes.

References

Biographical note
Mila Waldeck is a doctoral student at Typography and Graphic Communication, University of Reading. Her research interests include artists’ books, typography and popular news media. She is also former art director of the fashion magazine Vogue (Brazilian edition). Her work can be viewed at www.milawaldeck.com
Understanding the complexity of statement: A document design approach

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Abstract

Though documents have helped people complete various tasks in daily life, there is still no unified standard in document design field; some designers even design documents just depending on their own experience. In this study, based on standards proposed by International Organization for Standardization (ISO), a human-centred document design mode was put forward. Credit cards have brought lots of conveniences to our daily life, but the complex credit card bills have also attracted many complaints. Cardholders may even suffer personal credit losses due to bill misreading. Thus in this paper, the new design mode was used in the upgrade design of credit card bills and the evaluation results showed that, the usability and satisfaction of new credit card bills were significantly improved compared with the original ones (P<.05). Besides demonstrating the validity of the new design mode, a good document design checklist was also provided as a reference for academic research in this field.

Keywords

Document design, credit card statement, information design, usability test

1＞前言

用於特定研究背景，缺乏跨學科、跨領域使用的條件，以及（2）未被充分論證，其信度和效度仍有待研究。


1. 以 ISO 9241-210:2010 為藍本，提出以人為本的文件設計模式
2. 制定優良文件設計檢核表

2. 文獻探討

研究將探討三種常見的設計模式，分析其各自特質及適用情境，作為制定文件設計模式之理論來源，此外，還列舉 ISO 推薦的使用性方法，以配合文件設計模式的實施。

2.1 常用設計模式比較與分析

1. 瀑布模式

Hackos（1994）提出的瀑布模式（Waterfall Model）共包含 5 個階段（圖 1）：（1）資訊規劃（information planning）；（2）內容規範（content specification）；（3）執行（implementation）；（4）製作成品（production）；（5）評估（evaluation）。瀑布模式的優勢，在於設計團隊能有效控制整個項目流程，每一階段的任務開始前，必須先完成上一階段的任務，其侷限在於，整個流程花費時間過長，若在最初規劃階段發生錯誤，將會影響接下來的每個階段。

！[圖1: 瀑布模式 (Hackos, 1994)](image1)

2. 迭代模式

相較於不可逆的、線性的瀑布模式，Martin（1991）提出了漸進的、可循環的迭代模式（Iterative Model）（圖 2）。在迭代模式中，設計團隊快速分析項目後，設計出原型（prototype），讓潛在使用者參與原型測試。設計團隊分析測試數據並將使用者的反饋意見用於改善下個原型設計，雖然最初的原型可能不夠完善，但在經過數次更新後將趨於完善。迭代最大的問題是每次原型測試的反饋意見都可能會更預期目標，加之原型設計往往並未建立在充分研究的基礎上，可能導致設計團隊對整個設計過程失去控制（Kimball & Hawkins, 2008, p. 315）。

！[圖2: 迭代模式 (Martin, 1991)](image2)

3. 綜合模式

綜合模式並非特指某一種模式，而是對融合瀑布模式與迭代模式的設計模式之統稱，ISO 9241-210:2010 所提出的
2.2 使用性研究方法

表1：支持以人為本設計模式之使用性方法（來源：ISO 16982. 2002. p. 19）

| 項目特徵 | 時間緊迫 | 資金有限 | 追求高品質之產品 | 需早期的訊息/反饋意見/診斷 | 需較大幅度提升原有產品標準 | 自動化程度
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3> 研究設計
通過文獻探討，研究認為以ISO 9241-210:2010所代表的綜合設計模式最符合文件設計的需求，並以此為藍本，提出以人為本的文件設計模式（圖4），共包括4個步驟：（1）了解文件的使用情境；（2）明確使用者需求；（3）制定設計方案（迭代次數依評估結果而定）；（4）評估設計方案是否滿足使用者需求。

研究為證實該模式之有效性，將其應用於信用卡帳單更新設計：首先，通過文獻分析，歸納台灣信用卡使用群體的主要特征及其對設計的影響。其次，先經放聲思考，請5名有信用卡使用經驗者搜尋帳單資訊的同時記下自己遇到的困難，後經訪談，詳細了解個中緣由，以此深掘使用者需求。再次，邀請業內專家、設計師與使用者組成設計團隊，制定新版帳單設計方案。最後，請有信用卡使用經驗者為實驗組與控制組，每組30人，評估新舊帳單之使用績效與滿意度。
以下為一張圖片的文本內容，可能為日本語言。為了確保理解，我們將其轉換為中文。

以年輕人為主，21-40歲占77.8%，此類人擁有代表快餐和靈活性的設計風格（Snelders，Mugge，& Huijnek，2014）；（3）信用卡持有者多い具有大學學歷（68.7%），受過高等教育的人更注重設計的視覺感觀，偏愛個性化和多樣化的設計（Holt，1998）；（4）年收入40-60萬的中高收入群體，構成信用卡的主要客戶群（38.7%）。

小結：
當使用訪談者在用心理論價值時向顧客發送的滿意度（楊眾玲，鄭佩珊，2007），帳單設計若能跳出出顧客對於信用卡帳單不易理解的規定，具備優良的資訊架構與版面設計，可有效提升顧客滿意度。

4.2 清楚使用者需求

上海商業儲蓄銀行在其網站上公佈了信用卡帳單所列印的各項資訊共11處（圖6），經回憶思考及訪談的逐字稿文本分析，信用卡帳單的使用者需求從低到高分別為4個層次：（1）資訊完整性：訪談者表示，自己的消費資訊均可在原版帳單中找到，未有資訊遺漏之狀況；（2）資訊易讀性：在資訊表述及文字易讀性方面，訪談者認為原版帳單存在日期標註方式不當、部份訊息表述過於簡短，字體過小等問題；（3）資訊架構合理性：原版帳單的資訊分類不夠精確，存在把不相關的資訊歸為一類的情況，此外，資訊的優先級亦未符合用戶需求；（4）版面美觀性：原版帳單設計缺乏吸引力，美感欠缺。

小結：
使用者需求分析結果表明，原版帳單除了資訊完整性外，在資訊易讀性、架構和理性與版面美感性面向均未完全符合使用者需求，顯示帳單需根據設計的必要性，此外，未被滿足的使用者需求，也將作為新版帳單所需解決之重點問題。

4.3 帳單設計方案制定

研究邀請2名大學設計系教師、2名平面設計師與3名潛在使用者組成設計團隊，共同制定帳單的更新設計方案。

4.3.1 資訊易讀性更新設計

原版帳單部份資訊字體過小而標題和內文缺少對比感，新版帳單在滿足內文可讀性基礎上，減小內文字體並增大標題字體，突出資訊間的主次關係。原版帳單推廣訊息的標題過於簡短，新版帳單改用簡短語言描述，如「XX 超市聯名

以資料分析與討論

4.1 瞭解信用卡帳單使用情境

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卡卡友獨享，每週二都是卡友折扣優惠日」調整為「刷 XX 超市聯名卡，每週二都是折扣日」。在字體選取上，帳單內文採用小號明體字，滿足消費者詳細閱讀的需求（圖 7），在重要訊息及標題處，採用大號黑體字（圖 8），滿足消費者快速檢視的需求。

圖 7: Adobe 明體字樣本
圖 8: Adobe 黑體字樣本

### 4.3.2 資訊架構更新設計

受訪者認為資訊架構的問題主要集中在：

1. 資訊僅先級不符合顧客預期，以及（2）資訊分類不精確。

原版帳單資訊架構如圖 7 所示，訪談中，受訪者最關心的是還款金額，其次，是填寫繳款單並選擇還款方式（銀行/便利店），只有當還款金額顯然超出正常範圍，才會檢視消費明細。不開心的則是最新訊息（活動推廣/通知）。新版帳單資訊架構如圖 10 所示，讀者的讀解順序調整為：還款金額→輔助資訊→繳款單→消費明細→最新訊息，此外，新版帳單

還將各還款方式分開並按資訊類型重新劃分版面空間。

圖 9: 原版帳單資訊架構（本研究繪製）
圖 10: 新版帳單資訊架構（本研究繪製）

4.3.3 版面美觀度更新設計

帳單美觀度的提升，主要從元素的空間分配與色彩搭配兩方面著手。Boulton（2005）設計的網格系統，用黃金分割（Golden Section）規畫版面空間，使版面具有嚴格的比例性與和諧性（圖 11），新版帳單使用網格系統劃分圖文區塊、欄間距、邊

圖 11: 建立網格系統之方法（本研究繪製，引用自：Boulton, 2005）
綠色視覺元素的空間，起到規範頁面內容的作用。原版帳單為白色文字，視覺區分度不高，新版帳單以色差分割各功能區域，深紅色統一為標題欄配色，突出功能區域之重點，各欄內文底色為淺橙色，將內文與標題相區隔。

圖 12 與圖 13 分別為原版信用卡帳單與新版信用卡帳單，新版帳單共經過 4 次迭代更新，每輪更新設計完成後，請專家依據自身經驗對設計原型進行評估，若未達到預期目標，則提出建議，並再進行下一輪迭代更新。

![原版信用卡帳單](image1)
![新版信用卡帳單](image2)

小結：
設計團隊圍繞原版帳單的易讀性、資訊架構與美觀度三個面向進行更新設計。設計方案依據使用者的反饋意見，選取了更易讀的字體字級，滿足消費者在不同場景下的閱讀需求；各資訊空格按照消費者的關心程度重新排序，降低搜尋資訊時耗；採用網頁體系優化版面空間，添加底色以劃分各功能區域。

4.4 > 設計方案評估
研究採用抽樣，徵集 60 名受測者，男性 39 人，女性 21 人，年齡涵蓋 20 至 50 歲，均具備信用卡使用經驗，受測者被隨機分配到實驗組（使用新版帳單測試）與控制組（使用原版帳單測試），每組 30 人。

4.4.1 > 使用性能評估
實驗分別統計受測者搜尋新版帳單與原版帳單中 11 處資訊（圖 6）所花費的時間，作為帳單使用性能之評估依據。表 2 為新版帳單與原版帳單的使用性能測試結果，經成對樣本 T 檢定，新版帳單的搜尋時間略低於原版帳單（P=0.00<0.05），其中，原版帳單搜尋時間平均數為 87.98 秒，新版帳單搜尋時間平均數為 66.43 秒。
表 2: 帳單使用性能 T 檢定（單位：秒）

<table>
<thead>
<tr>
<th>變異數</th>
<th>新版帳單性能測試 (N=30)</th>
<th>原版帳單性能測試 (N=30)</th>
<th>T 值</th>
<th>顯著性（雙尾）</th>
</tr>
</thead>
<tbody>
<tr>
<td>搜尋時間 (秒)</td>
<td>66.43</td>
<td>19.518</td>
<td>87.98</td>
<td>20.765</td>
</tr>
</tbody>
</table>

*P<0.05, **P<0.01, ***P<0.001

4.4.2 滿意度評估

受測者在完成搜尋任務後填寫滿意度問卷，問卷採 Likert Scale 5 階評量尺度進行，分數越高代表滿意度越高，經成對樣本 T 檢定，帳單滿意度評估結果如表 3，新版帳單整體感受滿意度平均數（4.43）高於原版帳單（3.73），改良成效顯著（P=0.002<0.05）。在字體大小、文字表述、資訊排序、資訊分類、視覺美感等 5 個細分項目中，新版帳單均較原版帳單有顯著提升（P<0.05）。

表 3: 帳單滿意度 T 檢定

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<thead>
<tr>
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<th>顯著性（雙尾）</th>
</tr>
</thead>
<tbody>
<tr>
<td>字號大小</td>
<td>4.20</td>
<td>.714</td>
<td>3.77</td>
<td>.728</td>
</tr>
<tr>
<td>文字表述</td>
<td>4.17</td>
<td>.699</td>
<td>3.73</td>
<td>.785</td>
</tr>
<tr>
<td>資訊排序</td>
<td>4.03</td>
<td>.414</td>
<td>3.67</td>
<td>.661</td>
</tr>
<tr>
<td>資訊分類</td>
<td>4.20</td>
<td>.714</td>
<td>3.83</td>
<td>.648</td>
</tr>
<tr>
<td>視覺美感</td>
<td>4.10</td>
<td>.759</td>
<td>3.60</td>
<td>.814</td>
</tr>
<tr>
<td>整體感受</td>
<td>4.43</td>
<td>.504</td>
<td>3.73</td>
<td>.944</td>
</tr>
</tbody>
</table>

*P<0.05, **P<0.01, ***P<0.001

小結:

新版帳單的使用性能與滿意度評估均較原版帳單有顯著改善 (P<0.05)，依本研究制定之設計模式，新版帳單不僅明顯減少消費者的閱讀時間，還可帶給消費者良好的視覺觀感，提升原版信用卡帳單的閱讀體驗。

5> 結論與建議

研究以 ISO 9241-210:2010 標準為藍本，提出以人為本的文件設計模式（圖 4），該模式強調設計的前期研究、設計過程的迭代及設計完成後的評估，並將使用者意見融入設計的各個環節，經檢驗，新版帳單的使用性能與滿意度評估均較原版帳單有顯著提升，顯示此模式之於文件設計是切實有效的。此外，研究還發展出優良文件設計檢核表（表 4），從資訊完整性、資訊易讀性、架構和理性、版面美觀性四個面向綜合評估文件品質，降低專家個人經驗對評估結果的影響。希望研究提供的設計模式與檢核表，能協助設計師站在使用者的角度上完成文件的設計與評定。

表 4: 優良文件設計檢核表

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<thead>
<tr>
<th>檢核項目</th>
<th>說明</th>
<th>檢核結論</th>
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<tbody>
<tr>
<td>資訊完整性</td>
<td>1. 遵守相關法令</td>
<td>符合法規的強制性警告/提示資訊</td>
</tr>
<tr>
<td>2. 符合行業規範</td>
<td>滿足行業協會要求標註的必要資訊</td>
<td></td>
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<tr>
<td>3. 滿足消費者的資訊需求</td>
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<td>4. 文字表述簡潔明確</td>
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<tr>
<td>5. 數據清晰明瞭</td>
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<td>6. 建立視覺引導</td>
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<td>符合法規的強制性警告/提示資訊</td>
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<td>2. 符合行業規範</td>
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<tr>
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<td>引導使用者按照既定順序閱讀文件</td>
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表 4: 優良文件設計檢核表

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参考文献


Biographical note

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Dr. Tingyi S. Lin, Associate Professor at National Taiwan University of Science and Technology, Director of Taiwan Tech Center for Humanities and Arts. Board member of the International Committee on Design History and Studies, the Taiwan Society of Basic Design and Art, and the World Regional Representative for the International Institute for Information Design.
Salinas-Flores, Oscar; "Design Transformation: The effect of global change and the reconceptualization of design in Mexico and Latin America since the 1980’s

Oscar Salinas-Flores / National Autonomous University of Mexico / Mexico City / Mexico

Abstract
What is it that defines design in a country facing the phenomena that led to significant world-wide changes in the 21st century? This document analyses the impact of cultural, social and technological transformations from the 1980’s in the design discipline and the consequences generated in the profession’s development in the first years of the 21st century. In an increasingly changing and complex world, design has reconceptualised, creating new profiles in the professional practice of design and generating change in disciplinary training. As a response to these changes, the design profession has set new limits in its relationship with society, and is faced by the ambivalence of whether attending social priorities and emergencies, or responding to the countless production of goods that are flooding the world through globalized markets.

How has this situation affected Mexico and Latin America, and how has this region responded to the transformations being faced in the 21st century? If we were to see design as a system that interacts with the socio-economical, political and cultural environments, its response shows us three different general situations. These identify this discipline in the region and its impact in society within and beyond its borders.

This text shows the change in design from the historiographical and phenomenological perspective, and explores a prospective analysis on the future of the discipline from the study of the transformations that are building the new paradigm of design in this century.

Keywords
Design transformation, new paradigms, historiography, phenomenology, Mexico and Latin America

Introduction
During the course of its history, design has never been as restless and vibrant as today. The relationship between human beings and objects or services is increasingly closer and the expansion of the conception, production and marketing of products involving a design process is becoming profounder and more widespread in the developed world. In the second half of the 20th century, a phenomenon of change that was linked to social, technological and scientific transformations came to happen. It significantly changed the geopolitical and cultural development of most nations in the international environment, and this in turn had an impact on the training and the professional practice of designers. During the 1980’s, a significant number of contributions occurred in the social, technological and scientific domains, all of which would eventually give rise to what some philosophers of contemporary life, such as Gilles Lipovetsky have called hipermodernism: a development with increasing consumption and new lifestyles in "an open-minded society, characterized by movement, fluidity, flexibility and detachment from the great underpinning principles of modernity", typical of the years lived so far during this century (Lipovetsky, 2006)

The drivers of change
Interestingly, in the 1980’s, a series of events which seemed to be loosely connected came about. They were the breeding ground for new multifaceted designs that would later meet the requirements of a changing world and never before manifested.

How did this process of change start?
After World War II, the victorious nations lead to a global realignment that generates two main blocs: the Soviet
socialism and the capitalist countries of the West, a situation that, one way or another, has an influence on the
development of almost every country in the world and gives way to the cold war, during which the leaders of the two
sides try to gain central control of the international environment.

In the Western world, globalization processes are stimulated. Consequently, a growing inter-
connection is triggered, both on communication and interdependence, but most importantly, new markets are pro-
duced and mimicked around the world, imposing an increasing number of brands of items and services, which have
been a means of disseminating and achieving a culture of control that has had an impact on almost all urban socie-
ties in the world, thus, changing lifestyles, likes, aspirations or identities, and leaving behind the values that once
prevailed during twentieth-century modernity.

Today, it is possible to identify the facts that had the most relevant impact on design in the
1980's. For example, in 1981, IBM, one of the most innovative companies worldwide at that moment, introduces
the first PC (personal computer), which would transform the modes of communication and intellectual output in our world.

Likewise, in the United States, from the 1960's onwards, the first works in
order to develop a human communication network through computer devices, the Internet, are initiated, but it is not until the 1980's that
this new form of global communication is consolidated, a time in which the protocols and languages, used to date,
are finally incorporated. In 1986, the method and devices to produce an object by printing successive layers of a
plastic material, stereolithography, are introduced. Actually, this technology has continued to evolve into what is now
commonly called three-dimensional printing. From the moment the Macintosh computer is launched, the production
of digital images and typography prompts the planning work of designers, who could use this technology for domestic
purposes for the first time.

In 1989, based on their observations of the earth, NASA space research informs about global
warming, and this also brings about various actions to combat its impact on humanity. As a result, designers had this
situation in mind when planning their future career goals.

Furthermore, towards the end of 1989, as a symbol of the fall of communism, the Berlin Wall is
smashed to pieces, and the dismantling of the Soviet Union also takes place, a country that, throughout that decade,
had suffered from a breakdown in structure, a serious economic stagnation and the collapse of the ideological values
that once had held that system. This situation gives way to a new world order, so new markets for designers emerge.

Like never before, the use and quick progress of the Internet helps designers work by means of
the new access to information, and instantaneous connection to a world vaguely known opens new career prospects
for designers.

Design transformation

21st-century design has rapidly been changing areas of expertise, and today it is palpable how professionals have
addressed new areas of work. By 1990, Richard Buchanan, one of the most renowned authors of design philosophy,
had already thought about the new career fields that designers had begun to get involved in, he called them ‘special-
ized research fields’ (Buchanan, 1995). From the early 20th century, the first two areas that had traditionally been
addressed were design integrated to symbolic and visual communications, historically associated with graphic
design; and secondly, design of material objects, mainly related to the profession of industrial design.

However, towards the end of the 20th century, the fields of design linked to organized services,
complex systems and new living environments were increasingly present.

These new ways of dealing with design are a reflection of the changes occurring. They created
a segmentation of the profession which gave way to new profiles for designers, who have gotten over the circum-
stances imposed by both, new technologies and social change.

These are some professional subdivisions worth mentioning:
  • Universal Design
  • Interaction Design / interface design
  • Experiential Design
  • Emotional Design
  • Participatory Design
  • Design for Sustainability
  • Service Design
  • Co-Creation / Co-Design

These changes have reconceptualised design. In fact, they have had such an impact that academic institutions and
professionals have been made to reassess their relationship with society.

**What have been the ways and modes of operation of designers?**

Concerns about climate change, overexploitation and deterioration of the ecological environment and the marginalization of a large number of inhabitants of the planet has motivated some designers to act in order to participate in the solution of these problems, and, metaphorically speaking, a door has been opened to facilitate their work. Today, a growing number of designers around the world have the chance to interact and work together — every day — with others via the Internet. Independent designers have learned to work with NGOs, sponsors, international political organizations or active social groups to get resources and other kind of support so as to carry out their projects without having to act only with the help from productive industries, as happened in the 1980’s; promoting what today is recognized as participatory design or co-design, and giving additional meaning to their professional work.

The inclusion of new technologies in designers’ work has significantly changed their work and it has revolutionized and transformed the design process; from concept to production and even marketing. Digitizing projective information, using numerical control machines and equipment such as three-dimensional printers have all allowed the development of customized product design.

Undoubtedly, design has expanded dramatically and it has thus changed the boundaries of the profession. Today, it is no longer enough for many designers to conceive a new item for an average consumer — a marketing term which they increasingly prefer to use less —, so they focus on those groups of citizens who suffer from a certain problem or need, and conceive experiences emphasizing emotions, and, as a result, they achieve the desired consumer satisfaction.

The 21st century displays increasingly complex projects, made possible by a techno-science that has reached unpredicted limits, such as nanotechnology, presented today at the cutting edge of tomorrow’s world and supported by a new material culture that might change the standards of life for humankind.

Likewise, a growing number of designers are participating in the projection of complex systems that are created for new life forms. They may range from James Dyson’s sophisticated appliances to communication products like those by Apple-Macintosh, or to increasingly complex devices, such as wearables, which are aimed at improving the quality of human life.

All this has led to a change in the preparation of designers. Hence, academic institutions have sought to adapt or modify their curricula, their didactic resources, their academic tasks, and even the name of their majors. They have been in need of linking or merging the knowledge and experience coming from students, integrating specialties or areas of knowledge in a single institution, thus achieving a better response to the changing needs of society.

**Impact on Latin America**

In Latin America, this phenomenon of change impacted professional design significantly. Before the introduction of these new technologies, the design of the region was out dated, compared to that of many developed countries, mainly in Europe and North America. Two issues essentially caused the difference: lack of access to inside information and lack of proper skills in advanced technology. However, globalization came to facilitate access to both. In fact, using the Internet decreased the isolation of developing countries by promoting synchronous international communication and thus generating a dynamic exchange of information that had an influence on the training and professional development of designers. This same process enabled access to new technologies, since the globalization of trade and the international advertising of materials as well as equipment for production and specialized software all helped reduce the gap between the less and the more developed regions.

Considering the aforementioned situation is key to understand why, Latin American designers have increased their contributions and more awards have been won in recent years, once deficiencies from the past were dealt with.

During the early 1960’s, design as an area of knowledge started almost simultaneously in Mexico, Brazil and Argentina, when the first university courses in design were created. In Mexico, graphic design started from a long tradition of graphic arts, which gathered an extensive collection of artistic expressions. On the other hand, industrial design came without an established industrial base or a culture of innovation that rendered this new discipline necessary. Eagerness from Mexican architects was core for the founding of this new profession and so was the presence of a generation of pioneers of furniture design, mostly emigrants from other countries, who, be-
between 1930 and 1960, developed high quality furniture using local materials and learned how to interpret a traditional culture with extensive experience dating back several centuries.

The first generations of industrial designers, of which I was part, developed their practice by focusing on meeting the needs of producers of goods and their markets, rather than on the needs from citizens that were used to purchasing whatever a protectionist governmental tariffs policy had made available since the 1950’s; a strategy allegedly beneficial to maintaining and fostering development of domestic industries. The result was contradictory. In the absence of competition, innovation was subdued and a policy of copying and reproduction of already marketed products in more developed countries was stimulated. Additionally, the designer faced a local technological lag, where design information was accessible only through obsolete print media, thus, such technology was inadequate to design new proposals. As a consequence, so as to meet the needs of local markets, the talent of designers then focused on developing projects that were based on the use of intermediate technology and local raw materials and, at its best, it was geared towards developing import-substituting products, or occasionally, an improved patent.

This situation began to change from the 1990’s, when the phenomenon of transformation that this analysis is addressing finally started.

What were the key factors that triggered this transformation?

An important factor is the opening of vast new markets for products designed. Social changes such as the collapse of the Soviet bloc and the redefinition of political and cultural objectives in China and rising commodity prices in developing countries, such as Latin America and the Middle East, generated classes with greater procurement capacity, better quality of life and an aspiration to live in a new culture of global consumption, influenced by new media interconnected via satellite and fiber optics.

The second factor is the unlimited use of communications. The broad global communications and international agreements between geopolitical regions has meant that designers in Latin America internationalize, thus they have become quite proficient in English and other languages; with academic or research stays in other countries, and postgraduate studies that rank them practically on par with designers in developed countries.

The third factor is access to new technologies. New technologies, new forms of communication and new information management have increased the number of designers who act as entrepreneurs, who are associated with independent interdisciplinary and international groups and are working on projects abroad. An important component has been the steady decline in the prices of production equipment, such as three-dimensional printers, and new materials, which allow its use with little investment.

The fourth factor is political and government support. Also, the new development policies of government systems have generated actions such as expanding academic offerings and evaluation and rewarding good university programs. This has meant that countries such as Mexico and Brazil have significantly increased the number of schools for the training of designers and the number of graduate courses (90% of doctors throughout Latin America are educated in these two countries). Similarly, higher research resources have accelerated the development of design disciplines. Furthermore, designers from this region have recently understood how to participate in integrative concepts like “creative economy” or “cultural economy”, both of which having included design as a factor for their progress.
The 2008 and 2010 reports on creative economy, and the 2013 UNCTAD Special Report, among others, show sustained growth in the sector since 2003, and it has been more resistant to the impact of the global economic crisis than traditional manufacturing industries.

The report indicates that Mexico has a share of 1.3% in the global creative market. In 2008, the country reported an annual growth in exports of creative products of 9.1% over 2003, and ranks eighteenth in the world, the first in Latin America and the fifth among developing countries.

Today Mexico is expected to consolidate its dominance as the main exporter in Latin America and the Caribbean and might increase its share in total exports of the region from 34.3% in 2013 to 41.1% in 2015, according to the CEPAL (Economic Commission for Latin America and the Caribbean). It may be added that the participation of Mexico may increase, even though its exports recorded an inter-annual fall of 4% in 2015, since the region as a whole showed a decline of 14% in foreign sales.

The sum of all these factors have led to a new outlook for some countries in Latin America, where Brazil — a country exceeding 200 million inhabitants — despite recent downsides, ranks as the best positioned due to production and marketing of products designed inside and outside their borders and the production of professional designers.

Mexico — a country with 122 million inhabitants — has a high number of design schools — nearly 90 of them focus on industrial design, and at least 120 are related to graphic design — with a large domestic consumer market, but still scarce in regards to exports of manufactured goods created by its designers, despite the positive export figures I have previously mentioned.

Designers have diversified their work extending the scope of the discipline in Latin America. Along with Brazil and Mexico, after leaving periods of political uncertainty, founding members of the discipline in the region such as Argentina and Chile have begun to consolidate their development and have staked out a development based on innovation and markets for social benefit. Behind them, Colombia, Ecuador, Uruguay, Peru, and Cuba make design an increasingly respected discipline by participating in transcendent projects, leaving behind its image of undervalued technical occupation with artistic pretensions, and subjected to other professions such as architecture or engineering.

Conclusion

From what I have discussed, I could well say that this process of change and evolution emerged during the 1980’s, and today, about 35 years later, in a world characterized by change and the rate of change, as never before, Latin America has benefited from circumstances that gradually and under pressure — from the affected countries, in a globalized world —, have left behind colonization and dependency, as we knew them in late modernity, to make way for a new economic and cultural relationship, where design has much to say.

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Biographical note
Oscar Salinas-Flores is the researcher and professor at the National Autonomous University of Mexico, with 40 years of experience. He combines professional practice, research and teaching. One of he’s main lines of research is the history of design, he is author of multiple publications in books and magazines focused on design disciplines.
Beyond emotional design:
Evaluation methods and the emotional continuum

Julián Covarrubias Valdivia / Gloria Adriana Mendoza Fanco /
National Autonomous University of Mexico / Mexico City / Mexico

Abstract

Emotional design and neurodesign are current trends in which designers and firms try to understand not only the user, but also his/her feelings, desires and expectations, to which end methods for evaluating emotions, rooted in different disciplines, have been proposed and used. However, the understanding of emotions is still in its infancy, as is their use in the design-decision-making process. In this paper, we present a list of emotional-evaluation methods and analyze the latter in order to propose a model aimed at clarifying the relationships between the different methods and the emotional continuum.

Keywords

Emotional design, neurodesign, emotional evaluation, Kansei engineering, neurosciences

Introduction

The creation of meaningful experience is one of the 21st century’s principal design objectives. Large companies increasingly interested in their clients, and, as more and more technological tools become available for use in the different branches of design, the said companies employ increasingly sophisticated methods so as to make a profit in their everyday operations, with the ultimate purpose of finding out what people are thinking and what they wish to achieve in their everyday lives, for which purpose various emotional-evaluation methods have been proposed, piloted and used during the design process.

It is very difficult to evaluate emotions due their complex, subjective nature. Though some of the existing methods are simple and rapid, requiring only pencil and paper, the results they achieve are superficial, while, in contrast, neuroscience is supplying more precise answers to many questions about needs and desires that are hard to express either verbally or non-verbally, though neuroscientific research is complex and expensive.

After reviewing the aforesaid emotional methods in this paper, with a view to understanding them, identifying their potential, and ascertaining their usefulness and relevance, we go on to present a taxonomy of them, analyzing each one, in order to propose a model that can help us to choose the most appropriate tool for each design process.

The emotions and the cognitive process

Psychologists have been studying the concept of emotion for decades. This endeavour to understand the relationship between emotion and behaviour is reflected in the different historical definitions of emotion. For example, Young (1976, p. 90) defined emotion as “a strongly visceralized, affective disturbance, originating within the psychological situation, and revealing itself in bodily changes, in behaviour, and in conscious experience”. Around the same time, Strongman (1973) determined that “emotion is feeling, it is bodily state evolving various physical structures, it is gross or fine-grained behaviour, and it occurs in particular situations”. Both Young and Strongman state that, while emotion is a complex phenomenon that involves different structures, nevertheless those structures and their interactions remain indeterminate.

The psychologist, Izard, proposes a revolutionary definition, arguing that emotion has substantial and measurable effects on cognition and action, so that emotion, cognition, action and consciousness are all interrelated. He states: “Emotion feelings are a phase of neurobiological activity and the key psychologi-
cal/motivational aspect of emotion. They constitute the primary motivational systems for human behaviour (Izard, 2009). Not only is this statement remarkable in its assertion that emotion feelings, along with other processes such as cognition and perception, are a part of neurobiological activity, but also, if it is true, then the influence of emotions on action is clear and definitive, given the latter’s motivational aspect. We designers are particularly interested in the role played by users’ emotions when they choose or utilize a product.

On the one hand, Donald Norman (2004) explains that the action of choosing a product is primarily emotional, and can be visceral, behavioural or reflective, while the research carried out by Izard confirms that the decision-making process is driven by emotion feelings, as Norman predicted, and, on the other hand, the trend in emotional design is towards emotional usability – i.e. towards creating products that evoke a specific emotional state in the user and fulfill their function better (Dormann, 2003). This is why we need to study and understand emotion in order to better comprehend the target user of the product we are designing, since the final aim of the study of emotions is to make design decisions by predicting the user’s emotional response.

Types of emotion
Emotions can be classified according to their intensity, using Ekman’s universal emotions classification or based on their relationship to cognitive processes. Poels and Dewitt (2006) propose an Emotional Continuum (See Figure 1) – i.e. a scale that grades the complexity of emotions depending on their interaction with the cognitive processes. The lower-order emotions, which are immediate and correspond to the visceral emotions described by Norman, occupy the left end of the continuum, while the higher-order – or most complex – emotions, which affect the cognitive processes and are the most difficult to comprehend, are grouped at its right end, which corresponds to the reflective emotional state posited by Norman. The basic emotional states – including Ekman’s universal emotions and the behavioural emotional state proposed by Norman – are grouped in the centre of the continuum.

Evaluating the emotional response
Designers are showing growing interest in emotions not only because they want to increase sales, but also because they wish to produce personalized objects and assess the emotional effect they produce when users interact with them (Caicedo & van Beuzekom, 2006). In response to this interest, several assessment methods have been proposed and used, being classifiable, depending on the type of information source, as self-reporting methods, autonomic methods and the Kansei Engineering method, which are reviewed below:

Self-reporting methods
Self-reporting methods use one or other of the following means to measure the subject’s emotional feelings as expressed by himself:

Visual measures, whereby subjects report their emotional state by choosing an image that best expresses it. As with verbal measures, different emotional models can be used. For example, the Self Assessment Manikin (SAM) (Bradley & Lang, 1994) uses the same model as PAD, the Emocards measure (Desmet, Overbeeke, & Tax, 2001), the PrEmo measure (Desmet, 2005), and Russell’s circumflex model of affection. The biggest advantage of these kinds of measure is that they can be used to assess diffuse, vaguely defined emotions, since they place no limitations on the language that can be used. These methods are designed to assess low-order emotions, with the number of dimensions used by the model determining the complexity of the emotions that can be measured.

Moment-to-moment, whereby the emotional state is monitored continuously, with the subject moving a pencil (warmth monitor) or a cursor (feelings monitor) in response to a stimulus. Though these methods are the simplest and easiest ones to use, since they are one-dimensional, they can only evaluate low-order emotions.

Fig. 1: The Emotional Continuum (Poels & Dewitte, 2006)
Autonomic methods
Methods that infer the subject’s emotional state using different indicators are called autonomic. These methods are the most scientific ones because they are based on anthropological or neuroscientific theories. The indicators they use are:

**Facial Expressions.** Based on his research, Ekman concludes that there are universal emotional expressions (Ekman, 1992), so that it is possible to recognize a person’s emotional state by reading certain visible facial codes (FACS). Although this method’s reliability has always been questioned, it is widely used to assess basic emotions.

**Biometrics.** Emotion feelings are physiological phenomena that can be measured via skin conductance (SC), electromyography (EMG), heart rate measurement (EKG) or eye-tracking, among other things, using what is called biofeedback equipment. All these methods are quantitative and their variables always need to be cross-checked. Though their design is still not definitive, they are useful for tracking more complex emotions - even high-order ones.

**The neurosciences.** In recent years, technology has evolved that is more capable of helping us to understand the brain and neural activity, and hence the neurosciences have become a very effective tool for evaluating the emotions. Given their great complexity, more information about these methods is provided below.

The neurosciences and neurodesign
The approach to design via the neurosciences that is called neuromarketing arose from marketing, and, with the help of neuroscience, has developed a set of tools and procedures that helps firms and other organizations to get a better understanding of their markets. Neuroscience is a fusion of various disciplines, including molecular biology, electrophysiology, neurophysiology, behavioral biology, neurology, cognitive neuropsychology and the cognitive sciences.

Several experiments have confirmed some of the conjectures that have been made to date about users’ needs and desires, placing even greater emphasis on studies that have led to new insights into the relatively irrational behavior exhibited by people when they make purchase decisions and consume products.

For example, in an experiment in which Electroencephalography (EEG) and Event-Related Brain- Potential (ERP) measurement were used on the subjects, Wang, X., et al. (2012) found that there is a measurable affective response to aesthetic experience. The aforesaid tools can differentiate between objective aesthetic value and subjective aesthetic evaluation, and the researchers concluded that emotional arousal seems to occur at the early stage of aesthetic processing.

Professor Leon Zurawiki emphasizes the implications of using neuro-imaging tools for marketing analysis, since the said tools are becoming mainstream instruments in different areas of marketing and product development (Zurawiki 2010). However, it should be stressed that ethical concerns continue to exist about the use of neuroscientific methods for commercial purposes.

The success of neuromarketing and neurodesign mainly resides in their ability to capture the whole emotional spectrum, while traditional surveys and other methods work only for a given order of emotions. Moreover, though a subject can try to outwit a traditional method by expressing feelings and thoughts that are different from those s/he really has, his/her physiological responses are unmistakeable – i.e. neurobiological methods are always accurate.

"With the use of brain imaging technology, researchers are better equipped to test the attractiveness of the products (separately and relative to each other), compare the appeal of alternative communications, choose the most appropriate media, study the propensity to conform to fashion or the intriguing phenomenon of loyalty". Even if many of the brain functions are still not known, many scientists –among them, Damasio and Craig (2009) – are looking for ways to more accurately locate the parts of the brain where emotions arise.

Kansei Engineering
The Kansei Engineering (KE) methodology was developed by Professor Mitsuo Nagamachi, Professor Tatsuo Nishino, and their colleagues at the University of Hiroshima for the purpose of making design decisions aimed at fulfilling emotional needs. The main objective was to understand sentimental, emotional and affective needs from Voice of Customer (VOC) and translate them into new objects, services and experiences – i.e. to design a satisfactory product or service that serves its purpose and/or generates pleasure.

Defined by Nagamachi as “needs, wants, affects, emotions and everything that is related to
them”, the word “Kansei” refers to feelings generated through sight, hearing, smell and taste. KE technology has been developed since 1975 and KE, which is seen as comprising over six main generations, is considered one of the few methods currently available for constructing models that links affective elements to a new product-development process (Shutte, 2005) and is capable of designing for the whole emotional continuum. The six KE generations are: KE type 1, KECC (KE Category Classification) KES (KE System), VIVA (Virtual KE System), RSKM (Rough-sets Kansei Model) and KEM (Kansei Ergonomic Model).

As part of the evolution of KE, computers have been included in the system in order to speed up analysis and deal with the complexity of processing “rough-set” data, and these changes have made the design-process response time shorter.

The three aims of Okamoto’s research (Hirata, 2009) are: (i) to find more effective means of developing a product or service by translating affective and emotional needs into design characteristics; (ii) to close the gap between VOC, the definition of design parameters, and product-development specifications; and (iii) to show that the satisfaction of emotional, affective and sensorial needs plays a crucial role in determining an organization’s success by differentiating it from its competitors.

In order to develop further (Schmorrow, 2007; Hirata, 2009), KE needs to obtain more neuroscientific and biometric tools so as to better understand the user and the emotional impact of design (arousal) and its interaction with needs and the achievement of Kansei goals.

How to choose a method?
As stated above, all the methods reviewed in this paper have different scopes and evaluate different segments of the emotional continuum, added to which there are other differences that should be taken in account when choosing a method for a specific project, along with other factors such as the resources needed, the disciplines involved, and the nature of the data analyzed and the information obtained. While not including all the available methods, Table 1 below provides a comparative overview of the characteristics of the methods that are most common or most frequently used.

The Emotional-Method spectrum shown in Figure 2 below is also proposed as a comparative tool for use when choosing an emotional-evaluation method. The horizontal axis on the Cartesian plane depicts the emotional continuum, since the type of emotions to be evaluated play a key role in the choice of a method. The vertical axis shows how complicated the different methods are, in terms of resources – time and the need for specialized staff, while the color coding indicates how invasive (i.e. uncomfortable) each method is. It is recommended that neuroscientific methods, which use radiation and invasive medical equipment, not be used frequently.

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<th>Method</th>
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<th>qualitative (QLY) / quantitative (QNT)</th>
<th>Type of information</th>
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Table 1 – Characteristics of Emotional-Evaluation Methods
We are aware that other methods may need to be included in the said “Spectrum” in the future, and consider both this analysis, and the table and figure contained in it, to be works in progress that can embrace other methods and tools in the future.

Conclusions
Emotional design and neurodesign set out to satisfy the user’s sentimental and emotional needs, to which end different disciplines have proposed emotional-assessment methods that differ in their complexity and scope. In this paper, we have analyzed and compared some of the said methods in order to show their potential and usefulness as emotional-evaluation tools. Given that the most complex and sophisticated methods tend not to be the most efficient ones, we need to determine the purpose of any evaluation that we plan to carry out, and ascertain its requirements, in order to identify and use the best method for a given design process. While there are many design problems that we are still unable to solve, nevertheless it is clear that design is evolving into a new multi-, inter- and trans-discipline capable of creating a better future and environment for human beings.

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Biographical note

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Service design as the service and social innovation for Shanghai urban mobility: An experimental project of “Smart Mobility”

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Mingjie Zhu / Tongji University / Shanghai / China

Abstract
Fast urbanization brings many challenges to the everyday life in Shanghai. There is a need of design for public service to improve the quality of urban life and providing ecological urbanism. After 20 years’ development in China, service design has been recognized at the beginning to the public service and social innovation applications nowadays. This paper presents a jointed service design research and education project “Smart Mobility”, which among three Asia design colleges. This paper is discussing around the application and practice of integrating service design thinking into enhancing the experience of urban mobility. After using the service design tools, the topic has been defined as how to make the auto-bus waiting time more interesting, and how to upgrade the experience of Shanghai Ferry. “HUXI” and “Art Stop” have been selected as the case study to explain the project approach and outcomes.

Keywords
Public service design, smart mobility, social innovation, service design education

Introduction
The research background
The imbalance of population distribution and the severe population aging have already brought pressure to city’s resource supply and public service, such as public mobility service capabilities. In 2015, China’s “Internet+” strategy, which will integrate mobile internet, cloud computing, big data and modern manufacturing (Shan,2015). ICT Government will guide enterprises with proper subsidies and use the market mechanism to operate to promote the information technology projects to better benefit the residents. The new generation of telecommunications, computers and wireless devices again open up many possibilities. All these new technologies work as service enablers.

Public transport services in Shanghai
Shanghai is the largest Chinese city and the 10th largest city by population in the world, with population of more than 24 million as of 2013 (data source: shanghai government, statistics bureau). And in which there are 8.9 million migrant workers accounted 39% of all (data source: the sixth national census). Shanghai has extensive public transportation system, with developed MTR network containing buses, trolley buses, taxis, and a rapidly expanding metro system. According to the Shanghai Quality Association (2012), the Investigation is about what is important to improve satisfaction of Shanghai’s public transportation. We can learn that 42.4% people think it is the reduction of public travel costs. 38.5% people think that it should accelerate the construction of flexible combined transport, and 36.1% people think it should improve good experience in service.

China’s popular O2O On-Demand Transportation Startups – Did Taxi, which makes it virtually impossible to flag down a taxi on the streets now. It has met the entry requirements to service the vast customer pool but the service is still one-dimensional so they must create a comprehensive service platform to connect the social innovation and business innovation as well. Service design has unveiled its inclusive features of cross-discipline, integration and humanity, as Parker and Heapy (2006) stated “the common challenge of service [is] in thinking about how to transform public services”. Service design has been recognized from the business case applications at the beginning to the public service and social innovation applications in China.
The "smart mobility" project, we discussed in this paper, was in connection with public transport services operated in Shanghai everyday. The project was aiming to formulate a localized approach in ICT (Information and Communication Technologies) based service. ICT-based service design can help expand the public transportation service areas, and in turn, build closer relationship between local citizens and new migrants, from technology but culture perspectives and social considerations. Meanwhile, the project is trying to explore service design education method in Chinese context.

Research approach

Traditional service provision is undergoing major transformations due to the infusion of technology into service encounters (Bitner et al., 2000). Services are usually developed in close interaction with the customers. Services are usually innovated in networks rather than labs (Abramovici and Laurence, 2004). ICT-based service innovation, which combined with the general liberalization of services in the 1990s, has transformed several industries, such as financial services, telecom and IT, and media (Bygstad and Lanestedt, 2009). ICT-based service including a set of information and digital technology tools. Technology is improving the ways in which impersonal services can complement or replace the human element in the process of service creation (Bitner et al., 2000). It could include application to the following aspects of services: user interfaces, tangible artefacts integrated with services, service processes, usability, definition of desired customer experiences, processes for communicating with customers, community building and marketing materials. Following with the increasing importance of services and the importance of technological innovation, ICT-based service could contribute to the introduce innovation factors in public services, and explore various collaborative possibilities.

ICT-based service introduces factors in public service innovation

Service innovation can be defined as “a new or considerably changed service concept, client interaction channel, service delivery system or technological concept that individually, but most likely in combination, leads to one or more (re)new(ed) service functions that are new to the firm and do change the service/good offered on the market and do require structurally new technological, human or organizational capabilities of the service organization.” (Johne and Storey, 1967) Most research on innovation still is in the high-tech products field (Tidd and Hull, 2003). There is that too little is known about ICT-based service innovation in public service.

The concept of service innovation will go beyond the physical geographic domain, and as an enabler, ICT-based service introduces commercial and social innovation factors to the public services. Didi on-demand transportation, Uber’s Chinese version, is a typical commercial innovation example. The Internet is main driving force to transform many industries to focus on individual demands, thus ICT-based service has tremendous potential to bring value to these kind of start-up internet application platforms to conduct customer analysis and precise marketing, in order to help the senior people or visitors to get taxi services easily.

It is not that public services need to be more like commercial service providers. It is that all service organizations need to find new ways of connecting intimately with their users and customers, of listening and responding in ways that reassure us all that we are being understood (Parker and Heapy, 2006). ICT based service innovation presents another challenge; it usually redefines the roles of the service provider and the users. (Bendik et al., 2009) Not only just adopting traditional services design methodologies, but ICT based service will further apply interactive network applications to include as many stakeholders as possible and co-create the design models in every layer or activity. The intangible, quick-moving or fleeting service touch points needs to be tangibly, concretely and visibly displayed in front of the stakeholders. ICT-based service usually applies visualization technology to extend collaboration experience during the services, deepen collaboration acknowledgment after the services, and enhance collaboration relationship among stakeholders along the whole process. The way that all the stakeholders are not simply grouped as providers or receivers, but participants or players to collaboratively co-create, co-develop and co-design will make more significant sense particularly in public service sectors than others.

Tiramisu, as a good example of ICT-based service introduces factors in public services innovation. This app use of field trials to evaluate crowd-sourcing prototypes and on how crowd sourcing can generate coproduction between citizens and public services. Tiramisu’s design integrates theories from service design on coproduction and co-design, with the intention of getting commuters to engage more deeply with the transit service and begin to feel they can influence its service offerings (Johne et al., 2011).
ICT-based service introduces in social innovation

When public services take a more user-centered design approach, they often learn that their customers’ main desires are for different services, not for automated services (Bradwell and Marr, 2008). In terms of ICT-based introduces in social innovation, socio-technological developments are changing our ways of communication and living and show possibilities that technologies can be used an enabling solution to promote social innovation and further build up a more interactive-friendly platform to help proactively share working experience and manufacturing process.

With the development of online instant messaging tools, such as WeChat and Facebook, it provides infinitive possibilities to connect people at random if desired (if these are open to it) and integrate with social networking services. The production of a service and a social network is mutually beneficial and creates a virtuous cycle. The production of the two elements can be amplified by ICT. ICT-based service could change the role of citizens in society from only describing the needs, desires and expectations to acting as collaborative members in the design, production and provision of public services (Botero et al., 2012). Through adopting social networking software and official or unofficial meetings, organisations could facilitate the progress of the prototype implementation more effectively. (Wu and Sung 2014). There is a good practice project named “HealthConnect” in U.K. It is a service development proposal designed to improve access to health and social care services in Buckinghamshire. “HealthConnect” improving service of the transport to health and social care, for both urban and rural residents in the 50+ age range.

Therefore, ICT-based service design research of this paper selected the topic of “Smart Mobility” as the experimental to put focus on the public transportation services in Shanghai, indicated how ICT-based service design can improve public service and drive social innovation.

Project approach and outcomes

“Smart Mobility” as the ICT-based service design research project was carried out jointly by Tongji University from Shanghai, The Polytechnic University Hong Kong and Sungkyunkwan University from Seoul. The project planned four design works to cover the most critical issues and touch-points that people might encounter when taking public transportation. Service design provides tools for user engagement in public services (Parker and Heapy, 2006) Students exploring service demands that stem from people’s ever-lasting pursuit of personalized mobility in Shanghai, and formulating customer-friendly and inclusive design schemes in response. They adopted various service design research methods, such as field research, interview, co-design, rapid-prototype, customer journey and so on. Finally, four design works were developed. The “HUXI”, was to create five-minute slow-life experience for urban white-collar when taking Shanghai ferry. The second work, “Art Stop”, was to the communication innovation via using the social network to make the bus-stop waiting time more interesting with performing arts. The third work, “LBS (Love Bus Stop)”, was to provide convenience for the elders who does not live close to the public transportation. And the fourth work, “Know How”, was the O2O service system to engage the community residents to tourist services. During the field research approach, which included the face-to-face interview with focus group and recorded all the segments randomly. We insisted to find
the valuable information by face-to-face interview, watching what people don’t do, listening to what they don’t say (Brown, 2009). During the field research approach, the discussing group in Wechat were built as social networking platform, where a group of designers, local practitioners, researchers, and stakeholders can freely discuss and sharing the updating information about the topic. We choice “HUXI” and “Art Stop” as the case study.

**Case study 1 – HUXI**

The research group focused on the traditional ferry services in Shanghai. A century ago, the Shanghai Ferry was known as the only option to travel across the Huangpu River, from Pudong to Puxi, and claimed to be the world’s busiest at that time. However, few people take ferry nowadays. After the field researcher circulated questionnaires on street to 60 people randomly, 54 collected response told us that only 1% of people would go by ferry, and surprisingly majority of people don’t even know the ferry services are available transportation choice. The reasons we found out were mostly because the poor quality of ferry services. When the quick and easily reachable metro services were developed, people began to ignore the ferry. As an important historical transportation, Shanghai ferry needs to rejuvenate to provide brand new commuting experience.

The research group went to 4 ferry stations to interview the passengers, the staff and the managers. The passengers considered safety as a problem because the ships had been operated basically over 20 years. A severe accident happened in 1987 with 66 people died in stampede at Lujiazui Dock. The manager of the Shanghai ferry emphasized to add some entertaining elements and promote the historic values. Identification of innovative customers who are likely to be most helpful during new service development (Rogers, 1995 and Hippel, 1988). The research group outlined the target ferry takers who are the young white-collar working in the Pudong financial district since they are very close to the ferry and have willingness to experience new services. They also required high standard of comfort and convenience.

“HUXI” means breathe in Chinese, which explains the main design idea of taking a break and refreshing. It was a good idea to add some entertaining elements and promote the historic values of Shanghai ferry in the 10-min journey to help white-collars release working pressure and enjoy slow-life cultural atmosphere via ICT-based service. In “HUXI” design work, the stakeholders identified included ferry takers, ferry operating company, advertisement provider, groceries and broadly Shanghai citizens. The new customer journey for the innovation customers: By scans the QRCode, the target user can receive a message about the new theme of Shanghai ferry from the subscription. By follows the route recommended by the subscription, user can have a peaceful riverside amble before arriving at the ferry station. By improving the wicket the tunnel and the ferry interior, and providing a special drink, which is different offered by different theme selling with the ferry ticket, to provide a new ferry service experience. First of all, WIFI must be available in the ferry station and ships to let people connected via internet. With the WeChat tool, the target ferry takers would have a new customer journey by scanning the QR Code, receiving messages about Shanghai ferry service schedules, events and discounts. The high-resolution projectors needed to be installed to play music videos during the dull waiting time, creating a private peaceful moment for the white-collars to release pressure on the ship. People could also choose to stand outside at the board to chat with other passengers. Before, during and after the “HUXI” journey, ferry takers could share their experience in the social media which will lift the ferry services as important as metro and bus.

![Fig. 3: The customer journey and the prototype of “Art Stop” O2O system](image-url)
Case study 2 – Art Stop
After the field researching, the research group focused on the bus waiting time and city’s street performers. They had stayed to observe around the bus stations along the streets for hours. 40 questionnaires were distributed and collected from bus passengers, and furthermore another 10 in-depth interviews were conducted both in subway and at bus stops. The community closed to bus station were invited to join and co-design. The key findings included that people might take bus if bus stop is in walking distance (<500m); people would feel boring and impatient when waiting time is more than 10 minutes, and feel fretful if more than 35 minutes. People didn’t have much to do during the waiting time. At the same time, street performers usually gathered at public places to show their talents. Metro stops, bus stops or park entrances were their performance stages. But sadly street performers were frequently driven away by the police or urban supervisory officers. Street performers were tend to been treated as beggars or homeless in China. When we looked outside in Europe, Japan as well as India, street performers were treated as the vagabond artists and allowed to do creative shows in public spaces. The London Underground provides busking permits in tube stations. For many musicians, street performance was the most common means of employment before the advent of recording and personal electronics (Broad, 2014).

The experiences of bus services depend on a variety of non-instrumental factors such as cleanliness, privacy, safety, convenience, social interaction and scenery (Stradling et al., 2007). The social interaction during the waiting time is the key in this project. The mission of the design work was to create an O2O (online to offline) public service system to improve bus taking experience, and create a new O2O social space to connect people. More stakeholders have been involved in this O2O service system, such as the street performers, the passengers, the bus company, which were the sponsors supporting the event and getting profits from ads. An event deviating from customers’ expectations, and the memory of frequently experienced incidents have an impact on customers’ service experiences with the public transportation offering (Friman and Garling, 2001). The customer journey including signing in the app; printing ID card number to ensure that user is the exact person to guarantee the authority and safety of app; the user can apply for a performance and wait for permission; potential audience can search the information of performances; the users can choose it on map or by scanning QR code on the station. The performers were designed to stand inside the “Art Stop” waiting zone on the floor near bus stop, to avoid disturbing traffic and other passengers. Audience can give like or dislike or commends to the performers in the “Art Stop” mobile app. In addition, it is able to send the instant notice of the coming bus so that the passenger would not miss their bus trips. The passenger feedback would be one of the effective appraisal channels to evaluate the quality of performances. If the performances were in high quality, besides giving performers like or unlike or some commends, passengers or even community residents can also financially support the performances by using payment tools in the “Art Stop” mobile app. Of course, the street performances and the events could be promoted for financial sponsors as well. To control the quality of performances, besides giving performers like or unlike or some commends, passengers or even community can also pay for the performances by alipay. Also, performers and the whole event can be supported by sponsors.

Conclusion
“Smart mobility” project was the experimental project, among the first attempt to solve the issues related to public service sectors, though there needs to develop more China specific and innovative approaches to fit the local complexities. The international research team has been also encouraged by the development of the latest information technology that a few big data platforms entered into commercial operations which enable us to dive deeper in behavior analysis for customer experience exploring. Though this is among the first attempts to solve the issues related to smart transportation by ICT-based service design, we have got good feedback from some exhibition visitors and design conference audios. Our future research will pay more focus on the big data technology to articulate the social transition dynamics. The working group have mind to
validate and optimize our service design approach against the feedback along the way going forward, and bring up our study on the prototype of the diversified service innovation as our project subjects in next phase.

Public services are not fancy concepts but those basic topics around people’s day-to-day living behaviors. Service design, as human-centered design approach, has to put more value in people’s life experience than commercial or technic considerations. The nature of the public service design is to achieve fairness and sharing. ICT-based service makes services more accurate with technical means to deliver the benefits to the stakeholders. It also provides the possibility to grant different roles for the urban residents in one service scenario, could be both public service receiver and service provider at the same time, which effectively mobilize the residents’ sustainable well-being enthusiasm.

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Contemporary design practice on meta-interpretation through experimental converging practices of sounds, images and data

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Abstract
The digital representation becomes the dominant form in the modern era, because of its appealing characteristics, such as variability, transcoding, and interaction in relation to multiple professions and disciplines. The invention of digital devices and contents has revolutionized the quality of sound, image, and data, the way in which they are contemplated, and the forms of art that produce activities and aesthetics concepts. The reproduction leads to the hyperreal scenes at the exhibition spaces of Sun Yun-Suan Memorial Museum in Taipei where sounds and images are produced, copied and stimulated in a way that mimetic cannot be told apart from the original data. Through bringing together its curators, historians, scholars, engineers, and design experts in data transcoding, the museum plays a role of the integration of expertise in creating new exhibition experiences and aesthetics, which do help visitors to realize the significance of diverse elements of converging sounds, images and data in relation to its cultural-heritage representation.

Keywords
Meta-interpretation, new media arts, exhibition design, simulation

Introduction
Digital Information communication and new media technology have the immense impact on the development of modern society. The new media revolution, the shift of cultural texts to computer-mediated forms of production, distribution and communication, which makes people start thinking about how to combine arts and design with technology. With the times of the 21st century, the day of emphasizing on logical and effective information replace by the one concerning with innovation, empathy and feeling. High concept and high touch are the main factors of having the creative thinking mode and lifestyle (Pink 2006). For the pulse of the times and trends, the researcher discusses how Sun Yun-Suan Memorial Museum in Taipei (Fig. 1) has employed integrated innovation in exhibition design, since 2014, and delving further into the new media as the carrier. New shapes of exhibition objects have served as communication media so that the images and sounds can be mixed used on the creations, and formed by projecting, framing, inlaying, attaching, hanging, and erecting (Fig. 2).

In addition, the researcher analyzes the role of the integration of expertise in creating new exhibition experiences and aesthetics in the 21st century. The museum helps visitors to engage in the experience of meta-interpretation by mixing a series of innovative technologies and devices, such as the FleXpeaker™ (Fig. 3), invented by Flexible Electronics Pilot Lab of the Industrial Technology Research Institute (ITRI), Taiwan. Therefore, the social-context data are visualized and transcoded into specific images and life photography printed upon both sides of the surface of FleXpeaker™, as well as with sound effects to stimulate visitors’ imagination of the events, the time and the underlying environment. As the result, the exhibition devices and artworks do help visitors to realize the significance of diverse elements of sounds, images and data in relation to its cultural-heritage representation.

Research methodology
The study aims to depict those experimental practices of sounds, images and historical data applied in Sun Yun-Suan Memorial Museum in Taipei, which bring together its curators, historians, scholars, sound engineers, and image-design experts in data visualization. In specific, the author employs case study method to discuss the follow-
Fig. 1: Sign design at the entrance of Sun Yun-Suan Memorial Museum, Taipei

Fig. 2: Diversity of exhibition objects

ing questions:
How do we exhibit the intertextual texts, including sounds, images and archive data? Could we create artistic practices in combining sounds, images and data in terms of the Aesthetics of the meta-interpretation approach? Do the experimental practices of integrating sounds, images and archive data in Sun Yun-Suan Memorial Museum converge to be a hyper-real art practice?

Within this essay, the author acknowledges that the use of semiotic analysis as a research method refers to establish a meta-language that is open to criticism. This kind of semiotic study emphasizes connections among viewers, content, and cultural context. A triadic relation or so-called ternary relation is an important special case in the semiotics. That is, the semiotics treats of a 3-place relation among signs, their objects, and their interpreters (Su, 2013).

“A sign is composed of the signifier, a sound, written word, or image, in addition to the two levels of meaning of denotation and connotation (that is signified)”, said Roland Barthes (1915-1980). All the concepts of certain an expressive form are evoked underlying the process of signification (Barthes, 1967). Barthe's model is useful in examining how historical or cultural objects and images construct meanings: first, the sign is divided into a signifier; next, a signified later can show us that a variety of images can convey many different levels of meaning by their different interpreters. In other words, a sign would represent the content of any cultural heritage turns to be a meaningful form or expression that produces multiple layers of meta-interpretation for different types of visitors, such as local participants, historian and scholars, or foreign tourists.

In addition, there are main characteristics in conducting digital representation of data visualization and transformation, such as variability, transcoding, intertextuality, and interaction with the museum's visitors (Manovich, 2001; Su, 2013/2015). Further, the author addresses to the research questions by focusing on the characteristics of new media and applications of flexible electronic technology within this case-study research as follows.

The case study of Sun Yun-Suan Memorial Museum

Brief review of Sun’s biographical text
Sun Yun-Suan (11th Nov., 1913 – 15th Feb., 2006) was a Chinese engineer and politician. As Minister of Economic Affairs from 1969 to 1978 and Premier of the Republic of China from 1978 to 1984, he was credited for overseeing the transformation of Taiwan from being a mainly agricultural economy to an export powerhouse (Yang, 1989).

During the period of the World War II (Fig. 4), Sun was a college student studied the Engineering in Harbin Institute of Technology (Fig. 5); followed by the GMT government and army, Sun later moved to Taiwan. In fact, he was sent to Taiwan In 1946 to work at the Taiwan Power Company, a public utility.

Managing a staff of several hundred, Sun was able to get 80% of the power network in Taiwan (destroyed during the war) restored in five months. His great achievement contributed to Taiwan Modernization and inscribe in the monument (Fig. 6), erected in 1951.

Curation exhibition of converging sound, image and data
According to Semiotic communication theory of decoding and encoding (Hall, 1997), the curators had followed the procedures to arrange the exhibits:

• The steps of decoding process include, first, to depict the original text written in print and transfer into a renewal collaboration; second, to divide the text into groups of relevant visual symbols as signifiers applied in the exhibition.

• The encoding process includes controlling of visual effects, lighting, color, sound and the speed of motion to imply the connotation of the text; and, arranging those sign of literary scripts and visual symbols as signifiers to facilitate the expression of underlying contextual connotation as the signified.
A specific creative practice applied technology in exhibition design

Taking Sun-Yun Suan Memorial Museum as example in details, the author considered how to integrate creative technology and design practice, and focusing on the achievement of technique research: flexible electronic speaker (i.e. FleXpeaker™, invented by Flexible Electronics Pilot Lab of the Industrial Technology Research Institute – ITRI, Taiwan).

About FleXpeaker™, it developed by Flexible Electronics Pilot Lab of ITRI, Taiwan; FleXpeaker™ is one of flexible electronics applications, which helps ITRI received the Wall Street Journal’s 2009 Technology Innovation Award. There are numerous technologies and products related to flexible electronics; flexible electronics is general term for using organic material, printing manufacturing process, Electronic Circuit, Optoelectronic Components, or the technology of setting on Flexible Substrate with low cost and the characteristics of being flexible. The technology utilizes paper and metal layers as the material with a thickness of less than 0.1 cm and uses standard printing for large-size paper-thin flexible speaker mass production. The great sound quality covers a range of 20 to 200 kHz. It is especially good for high-frequency sounds such as the chirps of birds and insects, where fidelity equals or exceeds that of conventional speakers (ITRI, 2012).

In addition, the FleXpeaker™ uses only 10% as much power of conventional speakers, making it environmentally friendly. The new technology will bring the acoustic speaker industry into a brand-new era, and help create revolutionary consumer products such as memory cards with voice capabilities and ultra-thin MP3 players. It could even be incorporated into other products that are integrated into green buildings, electric vehicles, entertainment and medical devices. The technology of FleXpeaker™ will help create new lifestyles and cater to the pursuit of personalized, humanized applications (ITRI, 2012/2015).

To introduce the social-economic-industrial contribution of the ex-Premier of R.O.C., Sun, Yun-Suan, his biographical social-contextual data are visualized and transcoded into specific images and life photography printed upon both sides of the surface of paper-thin FleXpeaker™ (Fig. 9) as well as with sound effects to stimulate visitors’ imagination of the events, the time and the underlying environment. Therefore, Sun Yun-Suan Memorial Museum came out the integration of arts-design-expertise in creating new exhibition experiences with technology. The museum helps its visitors to take part in the experience of converging sound, images and documentary data by mixing a series of contemporary innovative technologies and devices (Fig. 10). The reproduction of contemporary sounds and images leads to the hyperreal scenes at the exhibition spaces in the museum where sounds and images are produced, copied and stimulated in a way that mimetic cannot be told apart from the original data. Just as “Simulations” of Jean Baudrillard, the digital visual communication media and digital interface changed into various ways and forms. However, it shows the hybrid of contemporary images and sounds. The creations are within the range of the Post-modernism, which stress on the interdisciplinary and inter-textual of semiotic translations.
New digital media aesthetics

As we have known, digital devices had a revolutionary impact on the development of image producing and viewing of exhibitions in Sun Yun-Suan Memorial Museum. All objects, whether they are created from scratch on computers or converted from analog media sources, are composed of digital codes. And, there are principles in conducting digital representation, such as digital representation, variability and transcoding etc., which enhance three aesthetics revolution (Su, 2016) as follows:

Embracing variability of hybrid

Digital trends changed everything and made things possible. Through the image producing, digital coding, fast-and-amount outputting and representation easily of computerization, the digital images took on the crossing type hybrid. They created a new thinking and watching mode of images. Moreover, they became a new method of communication of the contemporary arts creations. As Tsao (2007) mentioned in Taiwan Digital Arts History, the structures of hybrid could show out different levels. Hence, Image media could divide into digital photography, digital recording and computer graphics. Through the digital retouching, the creations could edit with misplacement, collage and combination. The creations showed the regions, sources, types and visual hybrid.

Cross-over interaction through hypertext

Hypertext is a particular case of media, which uses media types — text of words, images and sounds. We can conceive of all possible paths through a media document as being different versions of it from now and then. The shift of all of our culture to digitalization, the sense mode, image concepts, social cultures have the great impact. The alternative readings will take up the differences between a computer screen and preceding its representational conventions and technologies. This is consistent with a general trend in modern society towards presenting more and more information in the form of time-based audio-visual moving image sequences, rather than as text. As new generations of both computer users are growing up in a media-rich environment dominated by e-devices rather than by printed texts, it is not surprising that they favor cinematic language over the language of print. Cinematic ways of seeing the world, of structuring time, of narrating a story, of linking one experience to the next, are being extended to become the basic ways in which digital users access and interact with all cultural data.

The hypertext became the crucial media in the new media arts. Each sound and image like a node is an independent existence with intertextuality. For the forms and viewing experiences of contemporary new media arts, the timing and interactive space of new media arts turned into the center of viewing images. Through the tension of multi-media and peculiar space, the contemporary media arts assembled experiences and forms and created interaction between exhibits and visitors for the museum.

Hyperreal derived from semiotic transcoding

In general, digital media had a revolutionary impact on the contemporary sound-images producing, social structure and senses of human. The theory of simulations of Jean Baudrillard also influenced contemporary new media arts and design (Baudrillard, 1994; original work
published in 1981). According to the progressing of digital media, we had the different aspects and thoughts on creating and curating. Through the digital devices and the cross-platform of images and sounds, the reproduction of contemporary images and sounds leads to hyperreal scenes for their viewers and audience through the deconstruction, collage, appropriation of the original historical or documentary data. The curator transforms the row data later into the synthesis of design objects. In semiotic terms, the digital interface acts as a code that carries not texts, music and visual senses but simulations. Under this concern, the visitors’ interpretations are all enchanted with the hyperreal scenes and experiencing whole new senses.

As D.N. Rodowick has mentioned, the trends of contemporary “new media” are fashioned upon a cinematic metaphor, and helping us see how digital technologies are serving (Rodowick, 2007). The innovation of media has perpetuated the cinematic as the mature audiovisual culture, lasting till the twentieth-first century. And, how we are preparing to embrace the new audiovisual culture whose broad outlines we are only just beginning to distinguish in this era (Rodowick, 2007; Gong, 2008).

Conclusion

The characteristics and principles of new media have revolutionized visual communication meanings, aesthetics concepts, and design creation modes in the exhibitions. In the case study of the Sun Yun-Suan Memorial Museum, the author has observed that its curator interpreted and decoded the main signifier of exhibiting creations for probing into the cross-over and integrated innovation in design with visual communication media. There are also digital sound creations in progress. The exhibition creations are based on archiving, digital editing, photomontage and mixed.

In specific, there are steps for enhancing the innovation and sustainability in providing long-term digitalized access to those substantial data of cultural heritage as follows: meeting variability, semiotic transcoding, and developing interaction through the meta-interpretation of visitors. In the performed semiotic analysis, it is encouraged that visitors of museums can be introduced to several kinds of expression of the digital images design or synesthesia design. And, they can be led to deepening their knowledge of social-cultural context, which also bring the result of improving their recognition as well as imagination of aesthetic connotation. The digital exhibition devices and artworks allow visitors to realize the significance of diverse elements of sounds, images and data in relation to its embedded cultural heritage. Dealing with the different viewed aspects, diverse interactions, polysemous decoding of creations, the exhibition stands for a hope to find new angles of different layers of visitors’ meta-interpretation.

Tradition and modern world hold not the relationship of opposition. As we look back to the past, we find what has passed over is the accumulation of the best. Retrieved from the documentary data of a conventional world whose Sun dedicated to, this case study of the Sun-Yun Suan Memorial Museum might additionally bring the merit of deepening understanding of the economic take-off era in Taiwan, especially toward the period of the late 1960-1980s. As the result, in the progress of digitalization underlying new global scale of the cultural-creative design (Lin, 2011), the contemporary images processing, curating thinking, exhibition creations, and aesthetic concepts all changed dramatically. Through the data access, the texts of Sun Yun-Suan worked in different media interface with ease. The curators who employ the digital devices and the cross platform of images and sounds, the structural difference of digital media, and the rise of innovative digital interface, create new state.

References


Biographical note

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Design Activism: Action research as an approach when design meets social innovation

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Abstract

These years, with the revolution of social innovation, design is enlarging its scope and actively initiated to social and public sector, design activism movement is emerging. Isolation of design practice and research was found in design oriented social innovation projects, new research approach of design activism needs to be explored to suit new situation.

Action research (AR) is a well-used methodology as well as natural practice in social sector since the late 1940s and considered as theory-practice dialectic based knowledge generation and learning process that is useful to integrate research and practice in social sectors. I initially review on the literature about relationship of AR to design. This is followed by a reflective and explorative describing of my reflection on long-term social innovation project-DESIGN Harvests. AR Cycle and distributed innovation network with equal status between researchers and practitioners are crucial in such project. The article predicted that AR that informed by design has the potential to serve as an emerging approach of design activism for integrating research and practice of design.

Keywords

Design activism, action research, social innovation, design practice, design research

Introduction

What is the meaning of design today? In this complex, uncertain and dynamic world context, the pressing of connecting knowledge with action to create systemic social change and improving wellbeing for all human beings is greater than ever. Within and beyond design related discussions, we can see that both academic references and practices are adopting principles from traditional design to deal with “big picture” systemic challenges (e.g. climate change, healthcare, inequality, education). This on-going and necessitates shifting call for both the adaptation of known solutions and the discovery of new possibilities.

Social innovation can be seen as new ideas that satisfy unmet needs and enhance society’s capacity to act (Mulgan, Tucker, Ali, & Sanders, 2007). It is widely considered that design skills and capabilities can recognize promising cases when and where they appear and to reinforce them, while make them to be more accessible, effective, lasting, and replicable (Manzini, 2015). Design was described not just problem solver but also sense maker which create forms of collaboration, multi-disciplinary integration and proactive intervention that can lead to social innovation (Marglin, 2002, Manzini, 2015).

It is obvious that the meaning of design is expanding beyond previous conventions, but the broad role of design in society has not well conceptualized (Margolin, 1989). Although still embryonic and ambiguous, design intervened into complex social space appear to be an on-going emerging occurrence in both academia and practice.

Several worldwide forefront scholars (Fuad-Luke, 2009, Lou, 2015, Manzini, 2015) articulated their thoughts and converted them into positive societal and environmental changes. They tried to explore and clarify the role of design within spaces of social complexity through design activism. Design activism is an emerging movement that puts design as a central focus in solving civic and societal problems. Think-tanks, such as DESIS (Design for Social Innovation Towards Sustainability) Network, Design for America, IDEO and so on, have already worked on exploring approaches and providing real solutions to pressing social, public and citizen complex problems by opening the traditional and professional boundary of design. However, There is a huge demand for design
knowledge but few available, right approaches for design activism still need to be explored.

Designers usually rapidly progress from identifying problems to realizing solutions in multi-disciplinary teams in today’s complex environment. Design, in addition to traditional visual and material skills, still need the capability to analysis, synthesize, organize and evaluate due to specific situations. Design practice is therefore closely linked to research because “no single individual can master this comprehensive background stock of knowledge” (Friedman, 2003).

However, there is a tough crux between design practice and design research in term of such argument: disintegration of research and practices of design. With the influences of positivism paradigm of nature science and ethics of social science, the stance of design researchers is as objective “outsider” and staying distanced from the observed objects in academia of design. The researchers are restricted from grounded understanding of real context, and also cannot merge in practical projects for long term, which cause short time effect.

Most practitioners exhibit a kind of knowing-in-practice, and most of which is tacit (Schön, 1983). They often have such capabilities to reflect their knowledge from action and make them as know-how to cope with the uncertain and complex situations of society. But for the limitation of initiative awareness and right guidance, these precise know-hows cannot be transferred as knowledge, duplicated to generate wider social impact. This isolated situation occurs in most emerging social innovation projects, especially in China. In some cases, such isolated approaches even lead to conflict between researchers and practitioners in the same team.

Action research (AR) could be a balanced approach to achieve both research outcome and practical outcome in social situation. AR is a well-used methodology as well as natural practice in social works since the late 1940s. AR is an umbrella term that includes participatory research, action learning, praxis research, participatory inquiry, collaborative inquiry, action inquiry, and cooperative inquiry (Whyte, 1991). AR is considered as theory-practice dialectic based knowledge generation and learning process. Researchers with practitioners generate new social knowledge about social complex problems, at the same time, attempt to change it to desirable direction (Lewin, 1946; Peters and Robinson, 1984).

Perti Jarvinen (2007) and Cal Swann (2002) argued that AR is similar to design by comparing fundamental characteristics of them. Although AR still struggles with the theoretical justifications for its methodological foundation, this theory-practice dialectic based knowledge generation and learning process have already emerged in some social innovation projects. Meanwhile, academia argued that there was a methodological innovation in practice-based design doctorates (Yee, 2010). AR could be an approach to tackle the disintegration between research and practice of design in social innovation projects.

This study investigated the relationship of design research to AR by reviewing the main developments in design through research (Fallman, 2003) and related these to AR. Then reflective and explorative described our reflection on long-term social innovation project- DESIGN Harvests from a retrospective perspective. As such a research effort, tried to trigger the paradigm shift of design research for dealing with complex social problems.

Relationships of action research & design in social innovation projects

Shifting from design science approach to alternatives

At the germination stage of design research around 1960s, it was believed that design methodology could prescribe an orderly, systematic procedure for arriving at a design solution through “diagnosis followed by prescription” (Dowton, 2003; Gedennyd, 1998), and then this perspective supported by Christopher Alexander, John Chris Jones, Buckminster Fuller, and Herbert Simon (Alexander, 1964; Dowton, 2003; Jones, 1970; Simon, 1969; Zung, 2001, quoted from Frankel & Racine, 2010). The procedures or methods of design research were considered as a valid scientific research subject, and this influential approach persists to today. With this influence, design researchers were encourage to keep objective in design process and distance themselves from concrete context.

In contrast, in the early 1970’s some design researchers began to be aware of wicked problems that design is dealing with and reject the design science approach. They argued that linear structured methods couldn’t understand and define wicked problems (Cross, 2007b; Gedennyd, 1998). Donald Schön offered a constructivist paradigm instead (Cross, 2007a). At the same time, design researchers were beginning to “borrow” methods (like ethnography, Tuuli Mattelmäki developed on it as design probe, 2006) from social science to help designers to understand the users and context better.

However, the original ethics of social science restricted design researchers to change the current situation. This premise isolated design research and design practices in some way, one extreme expression is
that designers cannot well understand the researchers’ conclusion in most domains, and even some designers were against taking design methods (like user-cantered research) in their projects.

There is still one type of inquiry that distinct from the well-established science and humanities research approach. Saikaly (2005) describes this practice-based type of inquiry as a “designerly mode of inquiry”. New relationship between practice and research of design is expected in new era.

Relationship between practice and research of design
The widely acknowledged definition and taxonomy of research pertaining to design, research for design, research into design and research through design, is originated from Christopher Frayling (Frayling, 1993), then modified and explained by Bruce Archer, Cross, Ken Friedman, Richard Buchanan, Christopher (Archer, 1995; Cross, 2007a; Downton, 2003; Findeli, 1999; Friedman, 2003; Jonas, 2007).

research for design: refers to “research to enable design”, this research area provides the information, implications, and data that designers can apply to achieve an end-result in their design projects (Downton,2003; Forlizzi et al.,2009);

research into design: refers to research where art or design practice is the object of the study;

research through design: refers to research where art or design practice is the vehicle of the research. The object of research is creating design knowledge instead of project solution.

Design activism movement does not focus on concrete solution for project or inquiry design itself. It requires opening design to continuously act on social problems, which involves stakeholders in collaborative way to generalize the problem-solving outcomes and knowledge.

Relationship of research through design to action research
The object of research is creating design knowledge instead of project solution. Design activism movement does not focus on concrete solution for project or inquiry design itself. It requires opening design to continuously act on social problems, which involves stakeholders in collaborative way to generalize the problem-solving outcomes and knowledge.

Although these types of research are not mutually exclusive in social innovation projects, greater emphasis is placed on research through design consistent with its closer relation to AR when design tried to tackle social problems. Jonas (2007) considered research through design the only genuine research paradigm because it is here that new knowledge is created through an action-reflection approach (Frankel & Racine, 2010). Cal Swann argued that it would require only a few words to be substituted for the theoretical frameworks of AR to make it applicable to design. Design has already been moving in this direction (emancipatory participation and systematic reflection) and could be fortified by adopting principles that in AR have had time to develop and mature (Swann, 2002). Widely employing participatory design and co-design in social innovation projects can be seen as the shifting process of professional designers’ mind to genuinely include other stakeholders in the design process.

Systematic reflection can make empirical know-how to be design knowledge that is can be accumulated and disseminated. AR includes the researcher as an active participant rather than a passive observer and considered to be less scientific and more relevant to a real-world model of practice. The iterative research process and change-oriented perspective of AR is more suited in trained designers’ working habits that make it very easily to be adapted to the design-driven social innovation projects.

Emerging pattern from long-term social innovation project:
DESIGN Harvests
DESIGN Harvests project was started from 2007 in China. It originated from the personal research interest of Professor Lou Yongqi, aim of the project was to build a new developing model through “design thinking” to integrate rural and urban resources and improve social environments, economic situations and social relations, so as to blur the boundary between rural and urban, thereby achieving balanced development. Acupuncture approach with strong cooperative networked projects brought inspiration and leadership simultaneously in urban and rural fields. All those design projects are prototypes of visions for the future.

I used to be both a design researcher and an active practitioner in this social innovation project from 2012 to 2014. Instead of general relationship between design knowledge and AR are built up, I draw from it as an example in a more speculative and suggestive way.
This paper is a reflective and explorative describing my reflection on from a retrospective perspective. The data was from previous Master students’ thesis in Studio TAO and the book *Design Harvests: An Acupunctural Design Approach Towards Sustainability* (Lou, 2013), and also based on my first-hand practical and empirical work in these related and networked projects.

In order to clarify and present the implications of the AR in DESIGN Harvests project, I draw the map by connecting key events that occurred from 2007 to 2014 (detail description of each event please see the book Design Harvests), as illustrated in Fig. 1.

As following, this paper present the emerging pattern refer to AR in DESIGN Harvests projects by analysing and reflecting on the relationship of these key events.

### Action research as an approach when design meets social innovation

#### Typical action research cycle

AR found its way into DESIGN Harvests, initially yielding what has been called AR Cycle perspective (Baskerville, 1999, Schaffers, Guzman, & Merz, 2008). As mentioned earlier, AR is an umbrella term, each approach has its own particular characteristics while sharing some common distinguishing features which evolve in a spiral through a number of stages—typically four or five. AR Cycle also can be found in “experiential learning cycles”(Song & Nousala, 2015), "action research model" (Cummings & Worley, 2001), as well as “the cyclical process of action research” (Susman and Evered, 1978) in different implemented field.

From this natural development process of design-driven social innovation project, it is interesting to see that the AR Cycle is highly consistent with design process. Design projects usually have a lot of ambiguity while the outcome is open until the very final phase. Design process is iterative which includes empathy/define – ideate – prototype – test these basic phases. Although each phase of design process cannot correspondence one to one with the AR Cycle, they have a strong resemblance to each other. This also could explain why the typical AR Cycle can be found in this design-driven DESIGN Harvests project. A reflection on the similar part of AR Cycle and design process in DESIGN Harvests are as following:

**Diagnosing - empathy/defining: identifying or defining a problem**

DESIGN Harvests project was originated from the personal research interest, aim to encourage the interaction
between the urban and rural to tackle the problem of imbalance development between urban and rural area. But at the beginning of this project, there is no explicit and articulate roadmap or strategies to support the team. The team started the project by understanding the situation and asking questions. This is a typical research through design process, although different way to understand the context, both researchers and practitioners operated in the defining phase with equal status.

**Action planning - ideation: data gathering and preliminary diagnosis, considering alternative courses of action for solving a problem**

Designers have the capability to synthesize and integrate numerous factors to create parallel solutions. As Swann argued that visual form is a valid form of knowledge (Swann, 2002), visualize brainstorming and storyboard were widely used in each project of DESIGN Harvests. Visualize tools worked as carrier to help to make the tacit knowledge of practitioner tangible and also encouraged communication between researchers and practitioners from different background.

**Action taking - prototyping: selecting a course of action**

Design is good at dealing in human interactions with artefacts and situations that contain a great deal of uncertainty. The integrated knowledge seeks to demonstrate the result of ideation as a tangible design product to be informed immediately by the stakeholders.

Prototyping approach is a design tool to generate and test solutions that includes rough mock-up, a realistic model, or a beta-test of the scenario. Technical tools like maps, blueprints, storyboards and interaction maps were used depend on different situation in order to make all the details of the solution clear and visible to the action taking situation.

**Evaluating – testing: studying consequences of an action and feedback of key client or group**

As mentioned earlier, visualized prototyping approach was also efficient in evaluation phase to communicate with stakeholders. When testing the prototype, the ethnographic method is useful for documenting and taking account of the stakeholders’ adaptation to the new design.

**Specifying learning: identifying general findings**

The joint design workshop is found to be a very efficient tool to enable co-creation process within the network, especially in the conceptual and starting-up phase. Studio TAO created a series of workshops based on different contexts in these years. Each of them was divided in multiple steps: theoretical (desk) research, field research and the proposal of one or more final concepts.

Each workshop can be seen as a complete iterative AR Cycle to create solution and trigger holistic change. Researchers worked as coordinator in workshops, in parallel with the practical part, academic activities have been organized. The reflection of one workshop triggers the others, the general findings of DESIGN Harvests are the basic principles, acupunctural design approach and entrepreneurship operating that to be published, distributed by Studio TAO and carried on by social initiative.

**Collaborative innovation network**

Barabasi (2002) and Doz(2001) proposes that networks are (1) centralised, (2) decentralised or (3) distributed refer to position of stakeholder and network configuration. Distributed innovation network is configured as multiplex network structure. In opposite to a centralized network configuration and a hub-node structure in a decentralized network configuration, actors do not have the power or willingness to control innovation activities conducted by the other actors. Distributed innovation network is grounded on an assumption that actors are equal and can select appropriate partners for their activities.

In this case, a distributed network of co-creators, including international design schools, universities, business partners, NGO, local communities and individuals from other backgrounds have been involved. The strength of the network that is from inter-disciplinary to trans-disciplinary, cross-culture to cross-region, the mix of actors analyzes the same situation with different eyes and sensibilities.

Participants as well as multi-stakeholders have been asked not only to carry on an immersive contextual research, but also to generate some concepts with a systemic approach. These solutions have been
focused on one or more topics (like food, tourism, health care) that helped all the stakeholders to see the holistic “big picture” of such social problem. The outcomes of the workshops are not detailed answers, but can be considered as open inspirations for future developments.

However, there is one actor who focuses on coordinating and facilitating networking across the distributed network. For the design researchers in this case, theory informs practice, practice refines theory, in a continuous transformation. To accomplish this, design researchers played different roles, such as observer, listener, planner, designer, catalyzer, facilitator, synthesizer, reporter in various phases of the process since design practices and design research were not always balance in each phase and project.

**Discussion: Design activism which design informed action research**

DESIGN Harvests is a design-driven long-term social innovation project that oriented, explored and operated by designers and design researchers. In DESIGN Harvests project, design has the capability to synthesis all the related and networked problems as system and brought all the problems together in a holistic solution. Reflections on the comparison of design research and AR helped to clarify the existing of AR Cycle and the role of designer in DESIGN Harvests. However, how to apply such AR Cycle and the role setting of designer to empower the other social innovation project especially in ideation and exploration phase, still need to be convinced.

In this study, we predicted that Designerly Way of Action Research is particularly promising approach of design activism for integrating research and practice when AR is to be conducted in knowledge domains where design plays a central role, such as the social innovation field. For future research, the similarity analysis of design research and AR can look into philosophical groundings and focus on the exploration of new approach of design activism. New research culture that change-oriented instead of publication-based research is expected.

**References**


Biographical note

Dongjin Song is PhD candidate at Design and Innovation College of Tongji University in China. Her doctoral research field is on design for social innovation, with a special focus on the mechanism of design-driven Livinglab for social innovation. She has published her research in HCI Conference, The Journal on Systemics, Cybernetics and Informatics.

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Abstract
Latin America has experienced scripting and digital fabrication, and the alliance between designers and artisans. Taking into account that the revival of crafts has proved very promising in Latin America (Borges, 2015), the objective of this research is to analyse the diversity of cases and select those where designers took an interest for strengthening the artisans’ jobs in the field of pottery and textiles. We found that both revitalised the identity and cultural tradition in their own countries, in a moment when craft seemed to drop in front of industrial production. By preserving traditional materials, pieces continue to be unique and customizable, transcending thus their local origin towards new global markets.

Keywords
Digital craft, Latin America, fabrication laboratories, artisan

Introduction
Since 2005, Latin America lives through two phenomena that impact in its contemporary architecture and design history: scripting and digital fabrication (Herrera, 2010), as well as the production between designers and artisans (Duque et al., 2005, p. 11). At the beginning of the 21st century in Europe reappears the interest on “ideas about craft in post-industrial societies” (Ferris, 2009, p.i) and “the revival of crafts has proved very promising in Latin America?” (Borges, 2015, p. 14). If we take into consideration “the uniformity and standardisation of industrial products, craft products are never identical” (Borges, 2015, p. 14), digital fabrications reinforces Borges’ appreciation, since the cost of a part or component “is based on the machine’s time, not shape or variety of parts, so there is no surcharge for complexity or difference” (SHoP, 2012, p. 251).

Craft and digital technology were systematically documented since 2009 in Making Futures, in conferences that explore craft as a change agent in 21st century society. These researches represent a trend associated to two types of users. The first type was defined by Ferris (2013) as specialized and linked directly or indirectly to the maker movement; the second type is non-specialized and professionalized their practice in “a story of grass roots DIY, feminist ‘craftivists’, voluntary material simplicity advocates, and allied campaigners for local recycling and make and mend. All buoyed by broader alternative initiatives like the transition movement, urban farming, local markets and craft fairs, and reaching out to new audiences through internet websites, blogs, Facebook interest groups, and YouTube.” (p. 3)

In architecture and design there are exemplary cases presented in ACADIA (Feringa, 2012), CAADRIA (Senske, 2014), ICDHS (Kipöz and Himam, 2014) and SIGraDi (Cardoso, 2009; Naboni and Breseghello, 2015). Bunell (1998, 2004) also documented the integration of CAD-CAM technologies in ceramics with experiences carried on at the end of the 20th century in PhD theses and works by professors associated to European universities. These cases identified the CAD software and devises utilized, such as CNC, Laser and 3D printer applied to ceramics, fabric and jewelry industries. Feringa (2012) points out “the artisanal inclination of digital craft can be explained partially by the highly involved process of moving from form toward fabrication” (p. 384). This is a tendency that will bring the first implementations to Latin America (Sperling et al., 2015).

Artisan and craft In Latin America
Oxford Dictionary defines artisan as “a worker in a skilled trade, especially one that involves making things by hand”.

Craft and technology in USA and Europe are different as in Latin America, as explained by Borges (2015): “In Northern countries, craft techniques are learned in university courses and are practiced by educated people who see in this activity a form of self-expression (...). In Latin America, it is an activity disseminated mainly throughout countryside areas, but also favelas and fringe areas in the cities, where the artisans make objects collectively as a way of coping with adverse conditions.” (p. 11). This production has always been “purchased by people who wanted inexpensive items mainly because of their use value, or they were bought by intellectuals, professionals and tourists” (Vargas-Cetina, 1999, p. 303). The most remarkable problems run through the region, because “there is a difficulty to access digital platforms,” (CNCA, 2010, p. 36); “the applied technology level in products and processes is limited, there is opposition to capacitación, to applying what has been learned and to modify the words, adding the difficult access to Internet.” (DIRCETUR Puno, 2013, p. 23).

With a post-colonial history since the 18th century and popular arts’ traditions, craft in Latin America is an “economic and cultural activity, destined to the elaboration and production of goods, entirely by hand or using hand-tools, or even mechanical means, using in site materials and related to a production place.” (Organización de Estados Americanos [OEA], 1973). This definition was used by the Concejo Nacional de la Cultura y las Artes [National Council of Culture and Arts] in Chile (CNCA, 2010), by law 13.180 (2015) in Brazil and by law 29073 (DOP, 2007, p. 349898) in Peru through the Ministerio de Comercio Exterior y Turismo [Ministry for Foreign Trade and Tourism], which recognizes the artisan as a builder of identity and cultural tradition. This legal formalization from the 21st century does not specify the incorporation of technologies different to mechanical ones, with initiatives for technologies in making and learning inside state training centers. A different case is the proposal of the Ministerio de Comercio, Industria y Turismo [Ministry for Trade, Industry and Tourism] in Colombia, which creates in 1984 Artesanías de Colombia [Colombian Crafts]. (Duque et al., 2005, p. 70). This country officially defined the profession of the artisan with law 36 (1984) and at the end of 1990s historically linked the work of designers and artisans in programs such as Laboratorio de Diseño [Design Lab] aiming to innovate and improve with technology, research and develop products and enhance human talent. The promoted “computer-aided design methodology, based on the horizontal interaction between the artisan and the designer, permits the stimulation of the artisan’s creative processes. It also allows during the practical session for alternatives of the product to be visualized and conceptualized, facilitating the artisan's imagination to create and recreate.” (Duque et al., 2005, p. 73).

**Methodology**

Scientific production on digital fabrication in Latin America, between 2004 and 2014, represent 11% of the world total (Luli and Minto, 2015, p. 425). However, there are practice cases outside academia, not accounted for. That is the case of non-profit professional experience and FabLabs sponsored by MIT. Craft for these groups became a pretext for applied exercises and the application of material and shape. From a historic classification of implementations (Herrera and Juarez, 2013) and an exhibition that joined 31 digital fabrication laboratories in six Latin American cities (Sperling et al., 2015), we selected only cases where designers and artisans combined their experience.

**Case studies**

Borges (2015) sustains there is not a recipe to revitalization of craft, nor results will be attained by verifying and analyzing from a comfortable distant office with air-conditioned. He proposes analysis in direct contact with place and people, inside the workshops where products are developed, considering Improvement of Technical Conditions, Use of local Materials, Identity and Diversity, Branding, Artisans as Suppliers and Combined Actions. We identify cases compliant with these conditions (p. 59).

Industrial design could have been the first link with craft, but it was architecture instead, triggered by the coming back of masters and PhD students to their countries of origin. They had the chance of experimenting with fabrication equipment, accessing a knowledge that they later applied in craft, in self-managed experiences developed in academic and professional contexts.

**Fab Academy**

Fab Academy is an education program created at MIT to promote digital fabrication. In 2009, it launched a call that works since 2010. Peru was the first country in Latin America to apply the program with help from the Govern of Spain (Herrera and Juarez, 2013). This program identifies two study cases, in Peru and Mexico, related with artisanal weaving.
In 2012, in FabLab UNI, architect Walter Gonzales Arnao fabricated a loom with the premise of reducing budget and time for production. Known as fabable loom (can be made in a FabLab), this machine can be built in an hour and costs around US$100.00. It was tested in a weaving class in the School of Architecture at UNI in 2011. Gonzales’ projects were also part of education programs, like project Fab Loom developed in MediaLab Prado [Madrid, 2014]. This workshop worked like an open sourced platform through Global Fab Awards at Fab10. The idea at MediaLab Prado was to replicate the loom in various FabLabs in Spain. This workshop was directed by Gonzales and three of his designs were built: mini-loom (made with acrylic and laser cut), the belt-loom and the pedal-loom (9 pieces of pressed paperboard joined and cut using a CNC milling machine, optimizing up to a 60% the traditional loom, which uses several materials and is made of around 30 pieces).

In 2014 Gonzales was awarded the Diseño para el Desarrollo [Design for Development] award for his "pedal-loom and his didactic hand-loom" and for creating a technology aiming to improve the living conditions of people in vulnerable or poverty situations, according to the bases of the 4th Ibero American Design Biennial in Madrid. In October 2015, this invention was registered in Peru as a utility model, under the name telar de cintura andino mejorado [improved Andean belt loom]. Different variations of the product were used by artisans such as master Oscar Salome Rojas (Figure 1), known as Outstanding Personality in Culture in 2015 for his contributions to research in belt loom.

In 2013, in FabLab Mexico, architect Gonzalo Pérez took an interest in the impoverished community of women in the state of Chiapas, devoted to weaver. The short duration of FabAcademy limited the original project of a weaving machine. This case is one of many with a social agenda that can make an impact in society. However, transition to reality is complicated because of the several technical problems the participant has to face, since they are not specialists in the chosen problem, mixed with having to learn a new production technique. Best-case scenario, the results allow us to understand the nature of the process, although it is not always the same.

**Great things to people (gt2P)**

Using DIY 3D printers in pottery has some years. Jonathan Keep (b.1958) has said in different conferences, "the form is in the code". Keep (2016) explains that “digital computation is offering very new ways of generating ceramic form and that with time this ‘new’ will become part of tradition. Pottery has always reflected the technology of its time so for me it makes absolute sense to generate my work in computer code and then make it using 3D printing technology” (para. 6).

In Latin America, Great things to People (gt_2P) has a proposal that goes beyond code, fabrication and art. gt_2P is a parametric design and digital fabrication study born in Chile in 2009 by an initiative of Guillermo Parada (b.1981), architect and student of the first scripting workshop at Universidad de Chile in 2006. With the project “catenary pottery printer” (2013) in Figure 2, they come close to parametric non-digital experimentation, introducing the term digital crafting. “This means mixing digital technology (data managing, systematization of variables, digital production) and traditional techniques (handmade, traditional industry, local procedures, local materials)” (Rosso, n.d.). Their work system includes generative algorithms in architecture, art and design projects, which facilitates scaling to different products. They create the DNA to develop families of objects with parametric rules that allow the costumer to decide on the design of each product. They sustain that the produced ceramic objects are based on the idea of computer-aided craft (Figure 3).
gt_2P (2014) explain that “the Collection Losing my America born with the goal of identifying and cadastre techniques and artisans with a high sociocultural and economic value, who have the potential to collaborate with designers through the exchange of knowledge in practice, seeking to systematize the craft work techniques and strengthen their local economies.” (para. 1). It is not casual that this collection was exhibited at Museum of Arts and Design in New York in 2014 (Figure 4).

Architects no longer linked to gt_2p continue to apply digital crafting, like Juan Pablo Ugarte at GSD Harvard (n.d.), “who explore how artisanal creative and productive logics can help produce digital design and fabrication workflows where the material domain informs design more actively”.

Conclusion
This research highlights three cases where, contrary to the idea of craft tradition seeming to fall in front of industrial production, the opposite occurs through participative initiatives and methods. When preserving the use of traditional materials, pieces are still unique and, at the same time, personalized by final users.

On one hand, digital fabrication was used not just to automatize processes but also to maintain the traditional character of the object and the improvement of the technique, with results that could change contemporary design history in the region while encouraging local traditions.

On the other hand, scripting and programming guided by specialists allowed the permanence of the design process in code lines, common to all designers familiar to scripting, or to Rhinoceros or Python for writing programming, or Grasshopper or Dynamo, for visual programming. Under this work process, there is a memory of the shape of the object and a conservation of the tradition of representation and future modifications. We also identified that designers and artisans restored identity and cultural tradition, without losing originality in their proposals. This opens possibilities in a sector that refused to cross the limits of using traditional instruments.

China, Mexico and Peru represent three of the ten major producers of silver in the world, each of them surpassing the 100 million oz. of annual production. However, in Peru, in 2014 just 1% of said production is used in jewelry, according to the Export Association. As with other statistics linked to craft, this is an example of how jewelry has opportunities of implementation according to its vastness. Case studies show methods that could be used in other contexts, especially in emergent populations. Digital fabrication in Latin America finally finds roots of its own that enforce identity and culture and that were in risk of getting lost through urbanization and migration flows to cities. This enforcement, however, cannot happen if memory stays with the object. gt_2P has demonstrated that programming and scripting perform flexible not only changes, but the whole process until the final product. Since in Latin America the use of emergent technologies has been researched from academia and not from practice, as in the northern hemisphere (Leach and Yuan, 2012:9), the effect of using programming and digital fabrication in Latin American architecture schools allowed for students’ initiatives to grow aiming to improve the lives of others without the excessive cost of previous years. This reduces investment in new equipment, using instead ones personalized to the needs of both producer and market. This gives the artisan more time to devote to creative process and directly giving more value to their products.

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contribution to SIGraDi. Guest Editor for the Faber: Digital Fabrication in Latin America President of the Sociedad Iberoamericana de Gráfica Digital (SIGraDi), Co-solutions using scripting, textual and visual programming, including digital fabrication. different associations. He has published 2
Since 2004 he has been part of scientific committees in 29 conferences around the world, belonging to 9
Pablo C. Herrera develops academic activities incorporating emerging technologies in Latin America. Since 2004 he has been part of scientific committees in 29 conferences around the world, belonging to 9 different associations. He has published 23 papers on the result of his research on computational design solutions using scripting, textual and visual programming, including digital fabrication. ACM Senior Member, President of the Sociedad Iberoamericana de Gráfica Digital (SIGraDi), Co-Chair of the exhibition Homo Faber: Digital Fabrication in Latin America and recipient of the Arturo Montagú Award for his outstanding contribution to SIGraDi. Guest Editor for the International Journal of Architectural Computing (IJAC).
The urban public space and design as tools to promote social interaction

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Abstract

We live in a rapidly changing world, where the way we live, work and interact in the cities and with each other is constantly transforming. Through need finding, and understanding the community requirements that depends on the context, designers and managers could decide pertinent strategies and develop future scenarios for creating stories, designing services and experiences that happens in the space and reinforces social interactions and relationships. Is in public space where relations and encounters happen spontaneously. The scope of work suggests an approach to identify, design and develop more efficient places in terms of cost and social benefits, centered in the emotional process of interaction in order to find the meeting point between the system components. This research opens up possibilities for designing spaces through understanding and studying interactions from a human centered perspective and promoting social innovation, by identifying the community needs and involving them in the design process.

Keywords

HCD, public space, social interaction, experience design, systemic thinking

Introduction

In this communication era the only constant is change, we live in a rapidly dynamic world where the way we live, work, and interact with each other are in continuous transformation. People’s lifestyle and interests had been modified; we interact in different ways and dimensions, also in new platforms. Living is constantly modified by new technologies, but life is shaped by common habits. People need to share and interact with each other even if the stage changed. We all enjoy sharing experiences, and public spaces are the natural place to coincide and interact with each other. The public realm is where people find the place for relationships, identification, expression of different opinions, coexistence among citizens, contact and exchange of ideas. It is the place where the community development is reinforced and the ideal platform for promoting social values such as respect, tolerance, compassion, empathy among others. Is in the public space, where people can build healthy, constructive relationships, between different society spheres. As everything in life, public spaces should allow new settings for community life development, and must understand the contemporary living and offer a common space to connect, interact and share our personal stories.

Public space is the setting where we perform our daily community life. The main concern is to develop stories and experiences in the space, reinforcing social interactions and relationships. It is necessary to understand that community needs depend of the context, in order to decide the pertinent design strategies and develop future scenarios for creating new stories. It is not just about designing the space, it is about creating stories, designing services and designing for experiences that are going to happen in the space. By understanding the most important needs of the community and involving them in the design process, the possibilities for constructing citizenship would generate more interaction and improve the quality of life. The importance of the experience resides in the idea that we relate to our environments emotionally, we live stories and situations in the space.

Public space and experiences

The emotional experience in the cities had been discussed by many theorists, in different disciplines like Urbanism, Sociology, Psychology, and Anthropology, among others becoming more relevant in recent times. The modern postu-
lates implied a way of life subordinated through technology, in which the people should adapt to a new order dictated by the Industrial Revolution and the technological changes. In the second half of the twentieth century some authors like Jane Jacobs and Jan Gehl started to question the way the public spaces were planned, and began to claim spaces designed for the people and subordinated by the use of cars (Gehl and Svarre, 2013).

Through history evolution, public spaces were modified with the society and changed to whatever they needed, but since industrial revolution, people started to change and adapt to the new possibilities that technology allowed, which is not necessarily a negative aspect. However, the evolution of the public spaces and life models should be a dialogue between people experiencing the public realm and new lifestyles dictated by technology, it should be a round trip language in which both parts interact.

We are currently experiencing changes in daily life. Overcrowded cities like Mexico City, where heavy traffic, insecurity and social differences are everyday problems, it looks like the transformation happens faster than normal. It seems that urban residents had been denied the opportunity to enjoy the public space; pleasures like sitting in the park and interact with each other, playing with the children, or stroll at night are becoming less frequent. We need to realize that the public spaces are means to a way of life. We just need to make decisions and start taking actions to achieve a lifestyle that provide us happiness.

**Happiness and public spaces**

Charles Montgomery (2013) argues in his book Happy City, The Power for Urban Design to Make Happiness, that the public spaces and cities are capable of improving people’s happiness, through pertinent design decisions and the chance to interact with each other, with nature, and everything the public space offer itself.

To talk about happiness it is necessary to understand the meaning of happiness. Nevertheless, it is impossible to define it; it depends on the individuals, their ideals, aspirations, cultural context, emotional status, age, gender and endless aspects that make the concept of happiness personal and unique for each person. However, through history, psychologists, economists, philosophers, sociologists and other disciplines have studied happiness and how to measure it. What is most common is that everyone translates their ideas of happiness into experiences.

Greeks had the idea of happiness, and the concept to refer to it was *Eudaimonia*, each philosopher interpret their own version of the concept, however Aristotle argued that *Eudaimonia* implicated not only individual pleasures like health, power, good fortune and recognition were enough, but also that a man could achieve happiness only by embracing the high of his potential. He considered that the polis was the perfect vehicle to achieve *Eudaimonia*. (Montgomery, 2013)

This relation between the civic and the individual life was evident in ancient Greek cities, where people could gather together in a shared space to discuss, express opinions and interact with each other. Jeremy Bentham (1907) in The Principle of Utility argues that every action appears to have an augment or decrease of the happiness for the group whose interests are in question. He devised a complex set of tables called “Felicific Calculus” where he proposed a classification of 12 pains and 14 pleasures, by which we might test the “Happiness Factor” of any action. Emotions cannot be pigeonholed in a set; it is more complicated than that. Emotions are not easy to measure, understand, describe and lot less to design, however, understanding the cultural context, where people, tradition, and space converge is essential for planning spaces that reinforces well-being. Economists tried to measure happiness after Jeremy Bentham’s theory into something calculable, so they studied money and people’s decisions of how to spend it. However, happiness is not just about wealth and comfort.

Abraham Maslow (1970) described human needs in a hierarchy in which once people cover basic and safety needs such as food, shelter, employment and resources, the subsequent are not related with economic wealth, but to psychological needs such as friendship, family, self- esteem, and confidence, and at the top of the pyramid the need for self-actualization.

Carol Ryff (2016) research is centered on how aspects of psychological well-being are influenced by social structures. Her studies focus on six dimensions of well-being:

- Autonomy
- Environmental Mastery
- Personal Growth
- Positive Relations with Others
- Purpose in Life
- Self-Acceptance

Ryff comments “Eudemonia is about getting up every day and working very hard toward goals that make your life
Another psychologist, Csikszentmihaly (1990) studied the optimal experience, abstracting on “Flow” model the reasons why people feel happy. He proved that the quality of life depends on two main aspects: The way we experience activities, and how we relate with other people. By nature, we are programmed for being around people, and interact with each other. The way we handle our relationships influences directly in our happiness. The most important psychological effect in public spaces is the way it establishes relationships between people, and providing satisfaction to our lives. But relationships are not just about sympathy with each other; it is also about trust, the more we trust one another, even with unknown person have a huge influence on happiness and well-being.

Human beings are social animals, we need to live in communities in order to survive; animals that live in groups and cooperate with each other are more successful and accomplish almost unbelievable tasks such as ants, bees and so many others.

Jonathan Chapman (2005) suggests that we should co-depend from each other in order to experiment the individual being. In other words, individuality couldn’t exist without society, and vice versa, society depends on the presence of individuals.

Relations with others can make us extremely happy if they are good, or miserable when not working well. People are the most flexible and changing aspect of the environment in which we deal. The same person could cause a pleasant situation and after a few hours cause an unpleasant one. That is why the person who learns to get along with others makes a change for the better in their quality of life. People are not only important because of what they can give us; they are the most satisfactory source of happiness.

This flexibility of relationships is what allows us to transform unpleasant interactions into tolerable and even exciting ones. The way we define and interpret a social situation makes a big difference in how people treat each other and the feelings they experiment while doing it.

In Hassenzahl words (2013) the pursuit of happiness requires procurement of positive and meaningful experiences on daily life. Through a commitment to the world, people can take control of their experiences (as possible) and thus increase or reduce their happiness.

This gives designers a great opportunity to work in different spheres, if designers can help people experiment positive experiences in their daily life, the natural place for this to occur is in the public space where encounters happens spontaneously and all society spheres find a meeting point.

The potential benefits of designing for the experience of living spaces requires a better understanding of the cultural phenomena in order to develop effective design strategies that works satisfactorily in specific socio-physical conditions. Through discussing on how people feel about public spaces in different contexts and circumstances, we can come up with pertinent design solutions that enable social participation, consequently people could create significant connections.

Designing experiences
First of all, what is an experience? Psychologically, an experience emerges from the integration of perception, action, motivation, and cognition into an inseparable, meaningful whole. The intimate relation between those single concepts is reflected by Russell's (2003) model of emotions, which stresses the importance of cognitive processes, such as self-observation, attribution, and categorization, for the experience of emotions.

Most action theories (e.g., Kaptelinin & Nardi, 2006; Carver & Scheier, 1989) assume close links between actions, thoughts and emotions. In sum, experience is “an episode, a chunk of time that one went through (...) sights and sounds, feelings and thoughts, motives and actions(...) closely knitted together, stored in memory, labelled, relieved and communicated to others. An experience is a story, emerging from the dialogue of a person with her or his world through action” (Hassenzahl, 2010).

If we focus on the term Experience Design, we can realized that is commonly used specially in the digital realm, its main concern is in how people feel while using a product or accomplishing an activity. Nonetheless the term “Experience or User Experience is not about technology, industrial design, or interfaces. It is about creating a meaningful experience through [any resource].”(Hassenzahl)

However, designing experiences is complex to achieve. As Elizabeth Sanders (1999) comments, experiences are constructing activities. It requires two parts, as in communications, the one that sends the message, and the one that receives that message. What designers work with is on the process of designing the communication for people to receive the message. Designers should have access to the experiences that influences the reception of the message.
To support this research (currently in progress) the framework developed by Forlizzi and Batterbee (2004) was adapted, it summarizes an interactive system, in three types of user-product interactions and in three types of experience. The task was to evaluate three urban spaces in order to detect which kind of interactions are happening in the context and what kind of experience are resulting from those interactions.

If we take as a basis that, the essence of design is: “making sense of things” (Verganti, 2009). And terms such as “experience” and “making sense” comprise a large part of what social scientists like anthropologist generally call culture - the practices, artifacts, sensibilities and ideas that constitute and inform our everyday lives (Plowman, 2003) this is where we have a wide field to find insights.

The importance of accessing the experiences allows designers to understand people and learn from them, Sanders enlisted different ways to learn from people and it let us know the scene from different aspects:

- **Listen**
- **Interpret and make inferences of what they think.**
- **Watch what they do**
- **Observe what they use**
- **Uncover what they know**
- **Try to understand what they feel**
- **Appreciate what they dream**

Each route allows us to connect in different levels, which Sanders divides in four:

- Explicit. Letting express themselves; however, they only show what they want others to hear.
- Observable. Watch what people do provide observable information that can give a different perspective than just listening; in this case every component plays an important role.
- Tacit. Understand what people feel gives the ability to empathize and sympathize with them.
- Latent. Although is a tacit knowledge, understanding what people expect from the future reveals latent needs that allows designers to work in different directions.

### Table 1 – Interaction-Experience analysis

<table>
<thead>
<tr>
<th>Type of interaction</th>
<th>Description</th>
<th>Lafitte Greenway, New Orleans Louisiana</th>
<th>Klyde Warren Park</th>
<th>Ville Spatiale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluent</td>
<td>Automatic and skilled interaction with artifacts and people</td>
<td>At the heart of the Greenway is a bicycle and pedestrian trail that facilitates travel among diverse, adjacent neighborhoods.</td>
<td>Klyde Warren Park is a 5.2-acre deck park, bridging Uptown Dallas to Downtown Dallas. The park includes a performance pavilion, restaurant, dog park, children’s park, great lawn, shaded walking paths, water features, free Wi-Fi, ping pong and football tables, also reading and games area.</td>
<td>Adapts architectonic creation to contemporary citizen needs related to physical and social mobility</td>
</tr>
<tr>
<td>Cognitive</td>
<td>Focus on the product at hand; result on knowledge or confusion/terror</td>
<td>“The Lafitte Greenway has been a catalyst for focusing attention to this previously desolate train corridor which has resulted in these and many more businesses plus residential picking up prime spots for development. What is happening around Carrollton Ave. has been phenomenal, in part due to the Greenway now cutting through” (New Orleans inhabitant).</td>
<td>“The heart of our city! It changed Dallas for the better!” (Dallas inhabitant)</td>
<td>Information not available due this project was conceptually developed</td>
</tr>
<tr>
<td>Expressive</td>
<td>Help the user form a relationship among artifacts and people</td>
<td>Involvement of the community in the planning, design and implementation of the plan. Community is still involved in the conservancy of the park and also develops projects that reinforce social interaction.</td>
<td>Stakeholders were engaged throughout the planning process in community meetings (project workshops, charrettes, and park-feature surveys). The park now in post-occupancy, continues to promote social interaction and community participation, and provides connectivity to the city.</td>
<td>A multi-story space-frame-grid, which is supported by widely-spaced piles […] This infrastructure forms the fixed element of the city. The mobile element consists of walls, base-surfaces and dividing walls which make the individual division of the space possible; it could be called the ‘filling’ for the infrastructure. All elements which come into direct contact with the users</td>
</tr>
<tr>
<td>Type of experience</td>
<td>“Self talk” that happens when we interact with artifacts and people</td>
<td>Developing shared-use pathways and promoting their use can help urban communities address problems of obesity, congestion and scarcity of open space.</td>
<td>Information not available due this project was conceptually developed</td>
<td></td>
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<td>--------------------</td>
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<td></td>
</tr>
<tr>
<td>An experience</td>
<td>Can be articulated or named, has a beginning and end, inspires behavioral and emotional changes</td>
<td>Greenway awareness gains steam as more citizens become involved and offer their time, efforts, and enthusiasm toward ensuring the corridor comes together. Working workshops, recycle programs and Rails-to-Trails Conservancy Features Lafitte Greenway in their Case Study: Urban Pathways to Healthy Neighborhoods.</td>
<td>Architecture should only provide a framework, in which the inhabitants might construct their homes according to their needs and ideas, free from any paternalism by a master builder. Although it was never constructed, because is an indeterminate urbanism, the project allows infinite possibilities, developing social innovation.</td>
<td></td>
</tr>
<tr>
<td>Co-experience</td>
<td>Creating meaning and emotion together through space use</td>
<td>Community engagement reached through public meetings (workshops) in order to gather feedback from residents.</td>
<td>Information not available due this project was conceptually developed</td>
<td></td>
</tr>
</tbody>
</table>

There are numerous tools that allow designers to understand and empathize with people in these different levels. Even the traditional ones such as observation or non-conventional that includes acting and creating such as emotional toolkits (people create artifact to tell their stories and dreams) or cognitive toolkits (maps, 3d models, diagrams of relationship among others). What is important about these tools is that they allow end-user to get involved in the design process, and let them share their own needs and desires into their ideal experiences.

The more designers allow users to express and participate in the design process, the more effective and pertinent it would be for the community. Designers in all levels should understand and use different resources in order to be emphatic with the people, traditional design methods are not enough; different disciplines need to work together in order to develop new ways to approach the community.

Sanders concept of “Post Design” (1997) claims for a visual language that people can use to express and interpret ideas, an attitude, recognizing that everyone has something to offer, understanding the people who experience spaces; it allows the participation and collaboration, and it is a continuous process of changing and learning. It is a new way to conceive design included in a continuum of changes that depend on people using and appropriating the created artifacts and spaces.

**Conclusion**

Experience Design puts forward a more empathic approach to design the urban realm by understanding feelings and cognitive aspects of people.

We need a different approach for designing public spaces focusing on the potential to create relationships and interactions that offer freedom and autonomy to individuals and in this way, improving life quality. Our task as designers is to make public space “livable”.

Through understanding people’s context and specific needs designers can adopt an informed position and bring pertinent solutions in terms of social benefits.

Developing the ability to observe, listen and learn from those who experience the space is fundamental for the creation of optimal public spaces and happiness. Professionals should become more prepared to accept and learn from the spontaneous and unexpected situations of everyday life. This spontaneity is really significant for engaging individuals and groups in the citizen practices.

It is also necessary to be more flexible and empathic in the way the public spaces are planned and designed, it is urgent to evolve different disciplines in the designing process in a linear way; it is vital to understand the specific context and needs in order to purpose efficient and meaningful spaces.

The design practice is not static, and depends on various factors; however, it is important to consider leading ideas from different disciplines in order to enrich the experience of the public spaces. The more design-
ers concern about living experiences, the more individuals would relate and create symbolic and meaningful references to places, and create healthy relationships and citizen construction.

It is necessary to adopt theoretical methodologies that allow designers to generate social change through dialogue and commitment. There is no room for traditional practices based on imposition. It is urgent for designers to constantly look over and adapt their working methods in order to create a complete picture of the contextual situation that shapes the community and the space.

References


Biographical note

Mia Modak Guevara, graduated as an architect (Anahuac), is currently studying her master’s degree on industrial design at the National Autonomous University of Mexico (UNAM). Works as an architect, her current research refers to the interaction between people and places.

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Measuring impact: Program evaluation and design for social change

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Abstract
The purpose of this paper is to provide an introduction to program evaluation and stimulate a discussion concerning the growing need for impact assessment in social design practice. By advancing social science assessment methodologies for the discipline of design, the paper argues for a critical engagement with evaluation research in order to understand the overall effectiveness and quality, of interventions. Framing the study as both a theoretical and practical space to blend interdisciplinarity with social responsibility; the implications for design’s evolution, when it shifts to a measurable field of practice, is discussed. The findings suggest the integration of practical evaluation concepts into design practice, including the notion of rigor, causality, and theory of change. The framework offers a way for designers to delineate how community resources, environmental components, and contextual variables interact to produce the intended outcomes of a social design intervention.

Keywords
Design for social change, program evaluation, impact assessment, design thinking

Introduction
Establishing the need for evaluation
The multidisciplinary field of social design—a domain encompassing urban planners and architects, graphic and product designers—is driven by a desire to improve the physical, economic, and/or environmental conditions of communities. Contextually and culturally motivated to facilitate change through design, the field is increasingly perceived as a collaborative endeavour between organizations, NGOs, educators, policy makers and individuals interested in social innovation (Brown, 2009). Although the core purpose of social design is to create positive impact through local and global initiatives, the field lacks a comprehensive assessment methodology to determine the success of interventions after dissemination. Occasionally, a client evaluates a design-related outcome after implementation through activities such as a post-occupancy assessment (in architecture) or a user-assessment (in product design). However, clearly defined processes for impact evaluation, with benchmarked milestones, are limited in the scope of social design practice. As such, insufficient systems for assessment continue to perpetuate a system where subjective observations alone determine project success.

Critics argue that the ubiquity and pervasiveness of design make it impossible to establish existing and quantitative impact measures. Others defend the use of narrative or storytelling as an effective tool to explicate outcomes after a project reaches completion. However, what designers must come to realize, is that a cleverly executed design solution, or the final launch of a project, does not equate change (Emans & Hempel, 2014). It is not enough to claim that a project made an impact; designers must explain to a certain degree of surety, what was effective and ineffective, and have a coherent theory to explain why. Even further, the refusal to acknowledge the importance of assessment leaves social designers subject to severe criticism. Without evaluation, the profession could become marginalized and stagnant, unable to champion the value of design within the social change agenda.

If the role of social design is to work as a catalyst for sustained transformation, it must, concurrently, develop a set of tools to track, assess, and evaluate design efficacy. Additionally, there is little research regarding evaluation methodologies as applied to socially-driven design work. By providing an introduction to program evaluation concepts, this paper advances an emerging conversation about how to measure design projects.
aimed at improving the human condition. Questions guiding the ongoing research seek to understand:

- What assessment methods are appropriate for evaluating social design outcomes?
- What evaluation methods are currently used in social design practice?
- What kinds of formative and summative questions are needed to evaluate social design?
- What are ways to involve stakeholders in the design and evaluation process?

**Methodology**

Two principal methodologies were used to understand evaluation and its implications for social design practice. Initially, broad samples of texts were reviewed to provide insights into procedures related to measuring social change. A qualitative content analysis of these foundation guides, handbooks, and toolkits helped to capture the meanings and themes of socially motivated impact assessment. Content analysis was chosen as the overall research method to produce “replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use” (Krippendorff, 2004). Secondly, a Senior Research Associate (specializing in program evaluation, applied social science research, and evaluation technical assistance) was interviewed on an array of topics related to commonly accepted evaluation practices. Over a series of meetings, the expert explained how assessment methodologies, such as program evaluation, could help provide a framework to measure design intervention efficacy.

Through the interview process and review of texts, significant patterns emerged as indicators for measuring impact, including rigor, causality, and theory of change. This paper, consequently, aims to introduce these evaluation concepts and help designers understand a project’s role in eliciting impact.

**Background**

The concept of assessment has a long and rich history in the social sciences with terminology differing across evaluation schools of thought. Variable definitions and theoretical orientations place discrete emphasis on rigor, participatory approaches, and utilization of findings (Thomas, 2006; Hermans, Naber, & Enserink, 2012; Lee & Nowell, 2015). Generally defined, evaluation is “the systematic collection of information about the activities, characteristics, and outcomes of programs to make judgments about the program, improve program effectiveness, and/or inform decisions about future program development” (Patton, 1997). The concept of evaluation design is to function as a mechanism through which statements can be made about the impact of interventions. An intervention can occur at any scale, ranging from a small local project to a collection of concurrent activities by different organizations (Rogers, 2012).

According to experts at BetterEvaluation, impact evaluation examines the expected and unexpected results—or changes—brought about by an intervention (Rogers, 2012). Collected information is used to better understand program effectiveness and make decisions about how to move forward with the program (Patton, 1997). When deciding on an evaluation design, there are many elements to consider, including questions of feasibility, ethics, appropriateness, and confounding factors (figure 1).

Researchers at the World Bank describe the extent to which a project is operating as intended through a distinction between ‘process’ and ‘outcome’ evaluation (Rachel, 2006). A process evaluation explores the ‘what’ of a project by assessing project activities and whether the project is reaching the target audience. This approach focuses on “the types and quantities of services delivered, the beneficiaries of those services, the resources used to deliver the services, the practical problems encountered, and the ways such problems were resolved” (Linell, Radosevich, & Spack, 2002). An outcome evaluation, on the other hand, examines the extent to which a project impacts its target audience as measured by specific indicators and data elements (2002). Knowing the result of a project, as opposed to focusing solely on the process, could help designers understand whether and how well, the objectives of a project are met.

Another way of understanding assessment is through the distinction between formative and summative evaluation (Preskill, Parkhurst, & Juster, 2014). Formative questions typically focus on the intentions of the project, whereas summative questions focus on project impacts (figure 2). A formative evaluation takes place...
leading up to, and during, a project to improve its implementation. Likewise, formative design-research concentrates on questions about process and project scope (Visocky O’Grady, 2006). However, the difference between summative evaluation and design’s summative-research is an explicit emphasis on outcomes and solutions, rather than a representation of the actual impacts of a design intervention. The use of summative evaluation to measure whether a program had an impact, and to what extent, could consequently enrich and expand design thinking and processes.

The language of evaluation
Program evaluators and social designers share the need to understand the impact a project has made on society. However, these two domains often work independently from one another and at different stages of a project. This isolation hinders the growth of rigorous evaluation for design while both fields could significantly benefit from a collaborative approach. Not only could shared vocabulary improve collaboration between the two disciplines, but it could also help deflect criticisms about the gap between social design and decades of social science research in the area of assessment and evaluation. By learning to work hand-in-hand with evaluators to conceptualize appropriate assessment methodologies, designers can become proficient in defending the impact of design in fostering change. As such, three key terms were identified for adoption into social design practice, including rigor, causality, and theory of change.

Theory of change
One of the first stages of the evaluation process is to articulate a theory, or model, about the intended function of a project. This ‘theory of change’ (also referred to as a results chain or a logic model) denotes how a project aims to produce its intended impacts (Amott & Mackinaw, 2006). Similar to a design brief, the purpose of a theory of change is to explain a project’s target audience, components, or elements. However, a theory of change also specifies how the audience will interact with the project and the specific outcomes or impacts expected to result from the project. It incorporates context and variables—such as implementation quality, community resources, and environmental characteristics—to help explain how components interact to produce the intended outcomes (Organizational Research Services, 2004).

A logic model is often used to articulate a theory of change, and although the linear simplification of the model does not always capture the complexities of a project, the goal is to depict how different pieces are expected to produce different outputs and outcomes (figure 3). As long as the logic model accounts for an iterative process, it can adequately represent the interconnected nature of a project and the environments in which it will operate. Likewise, models representing design thinking aim to articulate generative and iterative steps, but, rarely specify defined impacts (Visocky O’Grady, 2006; Brown, 2008; Brown & Wyatt, 2010; Plattner, 2011). By aligning a logic model with a design-thinking model, social designers can begin to integrate evaluative reasoning into their everyday practice.

Rigor & causality
An important component of an impact evaluation is to move beyond simply gathering evidence to show change has occurred; instead, the evaluation should try to establish the project’s role in producing impact or a causal effect. Establishing causality can help designers attribute the effects of an intervention to three main areas: the factual, counterfactual, and alternative explanation.

“For example, if there is evidence that water consumption is decreasing, can it be attributed to the social design intervention or is it due to an alternative explanation? Perhaps there is a radio advertising campaign airing at the same time as the design project is disseminated? Or maybe...
water has become more expensive?” (K. Lyon, personal communication, June, 2014).

The ‘factual’ compares the actual results of a project against those expected if the theory of change were proven true. The ‘counterfactual’ is an estimate of what might have happened in the absence of the intervention; it is a randomized sampling comparing a group that received an intervention, against a group that did not receive the intervention (USAID, 2013). Researchers at USAID explain, “[w]ell constructed, comparison groups provide a clear picture of the effects of program or project interventions on the target group by differentiating program/project effects from the effects of multiple other factors in the environment that affect both the target and comparison groups” (2013).

The observed change in the group receiving the intervention is considered the true measurement of the project’s effects. Taking into account the ‘alternative’ explanation (such as water consumption decreasing due to rising water prices) can provide a well-rounded view of project outcomes (K. Lyon, personal communication, June, 2014).

In social science evaluation, a rigorous evaluation typically involves comparing data gathered from project participants, against people who did not participate in a project (Morino, 2011; Wassenich & Whiteside, 2004). A comparative model is particularly important for social designers, who often do not utilize group or participant comparisons to explain the impact of a design intervention. For example, in experimental design, similar groups of people are randomly assigned to the participant or non-participant groups. This comparative assignment is rigorous because it assures that the two groups of people are the same, and therefore, can implicate the outcomes (or difference) to the intervention (Lyon, 2014). There are also various forms of quasi-experimental designs that use non-randomly selected comparison groups, along with approaches that compare historical data (before the project) with contemporary data (during and after the project) (Stern, 2015). Although rigorous impact evaluations require careful planning and often involve extra costs for data collection, they can generate substantial evidence about the effects of interventions (USAID, 2013).

The concepts of rigor and causality, along with a theory of change, can help designers describe the degree to which a design intervention is operating as intended by either meeting quantifiable strategies (as planned) or examining the change that has occurred (as a result of the project). While a theory of change can help designers engage stakeholders in a common understanding of the conceptual framework of a project, an understanding of the causal effects of an intervention can provide substantive knowledge about an intervention’s effectiveness. By adopting a collaborative and multidisciplinary perspective, designers can contribute to program development and begin to defend, definitively, the role of design in eliciting change.

**Conclusions**

Although projects and initiatives devoted to social change abound, there are telling gaps in design’s collective understanding of evaluation practices. In response, this research aimed to galvanize a discussion on the role of impact assessment in contemporary design practice, and urge designers to integrate evaluation terminology into social design thinking. Program evaluation can help designers delineate how community resources, environmental components, and contextual variables interact to produce the intended outcomes of a design project or intervention. Knowing the result of a project, as opposed to focusing solely on the process, could help designers “judge performance, suggest ways to mitigate negative impacts of a project, drive future work, and show the genuine consequences of a social design project” (Emans & Hempel, 2014).

In a field dedicated to people and communities, designers must learn to justify the value of social design through the language of causality and rigorous assessment. Ongoing research in the social sciences should continue to reveal appropriate methodologies to describe design efficacy and impact. By understanding and espousing evaluation processes, designers can help combat disciplinary isolation and support a socially motivated
agenda for change. With a concerted effort towards integrating assessment concepts into design thinking processes, social designers can enter into a measurable and impact-driven dialogue centered on improving the human condition. Furthermore, evaluator-led instructional scaffolding could increase stakeholder involvement, enhance collaborations, and, ultimately, broaden professional opportunities.

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References


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Total design of participation:
Ideas of collective creativity by Tim Brown,
László Moholy-Nagy and Walter Gropius

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Abstract
The idea of design as an art made not only for the people, but also by the people is an old dream going back at least to William Morris. It is, however, reappearing vigorously in many kinds of design activism and grows out of the visions of a Total Design of society. The ideas of participation by Tim Brown can be compared to considerations by László Moholy-Nagy and Walter Gropius on the training and education of active and capable citizens. This opens, though, some dilemmas to discuss: To what extend is the capability of creativity then a (pre)condition to be a citizen of the society wished for? To which degree should everyone be educated in 'design literacy' to participate? Total design of participation is an artistic intervention in society and must be discussed in this utopian tradition.

Keywords
Participation, Total Design, Design Thinking, Bauhaus, Gesamtkunstwerk

Introduction
Participation of users, citizens and different experts in design processes is a strong focus in current design theories, but ideas of participation have had a long history in art and design. They have mostly related to big scale challenges in total design, i.e. more or less utopian projects to address social or cultural critiques, where design should raise collective creativity and new forms of communities. And this is still the case, if we look at the manifest of Design Thinking, Design for Change, by Tim Brown of IDEO. "If we are to deal with what Bruce Mau has called the “massive change” that seems to be characteristic of our time, we all need to think like designers." (Brown 2009, 37)

To solve the grand challenges everyone has to participate and perhaps even act and think like designers. Admittedly, it is not quite clear, who are “we” in this quote, or to which extend laypersons are to participate as designers, but I will address such questions in a broader historical scope. This is not a critique of utopianism by Brown or Mau, but comparisons with earlier understandings and discussions of participation by “design thinkers” to point out some critical topics.

Despite the alert call, Brown does not regard Design Thinking as a new phenomenon. He refers to both engineers, architects and artists from the 19th century and throughout design history as role models (ex Brown 2009, 228). Beyond Bruce Mau, Papanek and Buckminster-Fuller he mentions William Morris, where he finds the basic critique of the loss of meaning in the accelerating, wasteful consumption (Brown 2009, 114). It can't be more classical, but as Brown mentions, his book is not written to designers (who are raised in the very long tradition of thinking this way). His ambition is to open this mental toolbox to boardroom executives and social entrepreneurs. The rich experience and the tool kits of IDEO as a hugely successful design consultant organization are, of course, a valuable contribution in this discussion of how to deal with grand challenges. Brown evokes, however, great spirits of the design tradition without reflecting on, how they understood and dealt with dilemmas as for example participation.

I will visit earlier discussion of participation in the writings of the Bauhäusler László Moholy-Nagy and Walter Gropius, who raised them in connection with large-scale goals of Design-for-Life and Total Architecture, and address some of the dilemmas that might still be challenging. If participation means creative understanding or even to act and think like a designer, to what extend is the capability of artistic creativity then a (pre)condition to be a citizen of the society wished for? To which degree should everyone be educated in “design literacy” to participate?
Total Design

Participation is discussed widely today, and many contribution are much more pragmatic and oriented towards more limited goals and might avoid such dilemmas. But the earlier ideas, I focus on, were connected to grand challenges that called for holistic approaches beyond specific individuals or professions and solutions beyond singular design object in reorganizing production, communication and society. Design was thought to tap into all these fields, engage with all arts and sciences and work in all means and medias, so that the solutions aspired to be total designs. The same, grand scale is evoked by Mau and Brown; societal and ecological challenges are calling for interdisciplinary participation. “We are designing nature and we are subject to her laws and powers. This new condition demands that design discourse not be limited to boardrooms or kept inside tidy disciplines.” (Mau 2004, 16)

If we go to László Moholy-Nagy and the book Vision in Motion, 1947, his design definition left little to be added by later design thinking. “There is design in organization of emotional experiences, in family life, in labor relations, in city planning, in working together as civilized human beings. Ultimately all problems of design merge into one great problem: ‘design for life’." (Moholy-Nagy 1969, 42) His students were taught in material and visual experiment in the Bauhaus-tradition, but he wanted their way of working to spread to all working citizens. “This implies that it is desirable that everyone should solve his special task with the wide scope of a true “designer”, with the new urge to integrated relationships." (Moholy-Nagy 1969, 42) Any task had to be solved through a holistic understanding of modern society, a complex thinking in relationships across scales and fields.

In direct continuation of this quote he mentions the range of artistic means as set off for design solution. “It further implies that there is no hierarchy of the arts, painting, photography, music, poetry, sculpture, architecture, nor of any other field such as industrial design. They are equally valid departures toward the fusion of function and context in “design”.” (Moholy-Nagy 1969, 42) It might be puzzling that he seems to plunge back into artistic forms with this reference, but it was experiments across all artistic medias – visual, material, sonic, bodily, and spatial forms – that were the base of the development of total design at the Bauhaus School (Forgács 1997, Munch 2012a). And this kind of total design should help people to see and engage with modern reality, i.e. science, technology, economics, and mass media (Margolin 1997, Munch 2012b). The composition of artistic medias unfolded as a communication of a new experience and understanding of the complexities of modern society; in the end a new way of “thinking in relationships”, as it is called in the writings of both Moholy-Nagy and Gropius (Moholy-Nagy 1969, 12; Probst & Schädlich 1988, 183). This phrase in it self is clearly an earlier version of Design Thinking.

Who are “we”

The positions I have mentioned and quoted oscillate between referring to the whole people or a more professionally trained team as creative collaborators. And this is also the case reading Brown and Mau. The later makes precise, though, that his “we” doesn’t mean any exclusive professions or special interests. “When we use the term “we”, we don’t mean designers as separate from clients, or as some extraordinary class of powerful overseers. We mean “we” as citizens collectively imagining our futures.” (Mau 2004, 18)

Tim Brown goes so far to suggest a “new social contract” and sees a dissolving of the opposition of interests between consumers and companies in an emerging collaboration. “Companies are ceding control and coming to see their customers not as “end users” but rather as participants in a two-way process. What is emerging is nothing less than a new social contract.” (Brown 2009, 200) It is IT and social medias, which challenge the control of commercial interests, and also makes the contributions of users and customers useful to firms. The terms of this social contract, though, is not discussed much here. Brown continues by stating a demand just to the public part.

“Every contract, however, has two parties. If people do not wish companies to treat them like passive consumers, they must step up to the controls and assume their fair share of responsibility. The implications are clear: the public, too, must commit to the principles of design thinking […]” (Brown 2009, 201)

Though, it is fair to state a responsibility on both parts of this “contract”, it is critical just to redefine the one part from “passive consumers” to a participating public capable of design thinking. If it is hard to define the “we” out of common interest, we run the risk of restricting the common participants to people with a socio-cultural surplus to engage or even capability to perform in creative processes.
Creativity as literacy?
The reason why Gropius and Moholy-Nagy insisted on the core position of artistic creativity in the organisation and building of society was that they saw a threat in the accelerating specialisation of experts and professions with a diminishing overview and understanding of society as a whole, culture as relations, and the importance of common interests. (Gropius 1955, 171) Art was in their understanding part of a common education, where artists had to have an interest in all parts of science and society, and art had to be part of every citizen’s cultural education. And just as important, artistic experiments showed the ability to connect, investigate, challenge and transform the relations all the specialized field of science and society.

"Not given the tools of integration, the individual is not able to relate all this casual and scattered information into a meaningful synthesis. He sees everything in clichés. His sensibility dulled, he loses the organic desire for self-expression even on a modest level. His natural longing for direct contact with the vital, creative forces of existence becomes transformed into the status of being well informed and well entertained." (Moholy-Nagy 1969, 19)

This was the dystopia of the passive individual in a disintegrated society. But any kind of creative engagement was thought to better the situation, empower the individuals to see and think in complex relation and transform them into active, participating citizens. "In fact one could say that all creative work today is part of a gigantic, indirect training program to remodel through vision in motion the modes of perception and feeling and to prepare for new qualities of living." (Moholy-Nagy 1969, 58) In this sense all the creative experiments across arts, medias and sciences Moholy-Nagy did built into the curriculum of his Institute of Design were only a model of all creative work in modern culture, where people experienced to work and think in relationships. This would “prepare for new qualities of living” – which are not further explained – but surely this also had to teach people indirectly to understand and appreciate these Modernist qualities. It was an education of aesthetic literacy.

Walter Gropius returned to these ideals in his late writings in the 1950s, where he wrote on Total Architecture as the “entire visible world around us, from the simple house equipment to the complex city” (Probst & Schädlich, 192). In his text, Scope of Total Architecture, Gropius went a step further and asked for training in creativity throughout the educational system to make future citizens able to participate in planning processes. "It means, in short, that we must start at the kindergarten to make children playfully reshape their immediate environment. For participation is the key word in planning. Participation sharpens individual responsibility, the prime factor in making a community coherent, in developing group vision and pride in the self-created environment." (Gropius 1955, 177)

Creative practice was also in line with the reform pedagogy that initially inspired the Bauhaus curriculum. "Experience in action" (Gropius 1955, 177) should form, not only the designer or artist, but everyone from early childhood on.

This way of thinking is part of important educational and political ideals that has lead the development of modern welfare states, but in Gropius’ version it seems close to the more speculative experiments of the Aesthetic State (Chytry 1989). These ideas seems more determined by logic of the work of art than politics or ideology. The suggestion in the quotes above is initiated by the question: "Because what we need is not only the creative artist, but a responsive audience and how are we going to get it?" (Gropius 1955, 177) This "responsive audience" is, again, understood as free, but engaged individuals, capable to discuss the creative solutions. The logic here seems, however, to belong to the total work of art, where you have to calculate and compose every aspect, even the audience, as part of a total experience (Koss 2010, Munch 2012a). The ideas of participation, we find in the tradition of Total Design, carry a subtle understanding of the participants as part of the material to be designed. We have to stage participation, design processes and compose roles in future scenarios and plots for design fictions. Participation in Total Design calls for "genuine teamwork" (Gropius 1955, 178), and the results might be open-ended. But what are the requirements to participants as both “materials” and actors, and how far does it change our roles as citizens?

Staging participation?
Contemporary designers avoid references to art; they work in teams and do not strive for masterpieces. But this move is exactly also, what our spokesmen for Total Design, asked for; the move from art to life practice, implemented in modern society of industry, mass media and science (Munch 2012b). There are, of course, other important inspirations for participatory design, but I think, it helps us to discuss the central dilemmas to recall this tradition. Tim Brown
claims the necessity to implement design thinking in education in line with Gropius. “How might we use those methods not just to educate the next generation of designers but to think about how education as such might be reinvented to unlock the vast reservoir of human creative potential?” (Brown 2009, 222) He doesn’t reflect, though, what the implications might be, and what is meant by creativity. In which sense is creativity empowerment or perhaps rather requirement to future citizens?

The Kolding Municipality in Denmark has since 2012 run a regeneration program based on participatory design processes, that has crystallized in the headline: *Kolding – We Design for Life* (Julier & Leerberg 2014). The broad notion of design here can be understood in the sense of Moholy-Nagy’s Design-for-Life quoted above, but it is less clear, if all citizens have to act and think with “the wide scope of a true designer”, or who “we” are? Another slogan here, *From Diapers to Doctorates*, shows a focus on education in creativity and design thinking right from nurseries and kindergartens to the local school of design and university campus, and this seems close to the ambition of Gropius, but it is again less clear, if the goal is the long term education of future, responsive citizens participating in planning, or rather the instant introduction of the lingo of design thinking for communication of political decisions, as alternative to New Public Management? Quite many citizens have attended meetings and events, so there is lot to learn in this grand scale living lab. But it is hard to tell, how far citizens understand of the processes, and what they expect as results. One have to ask, whether this is just a renewed “arms race” to compete with neighbouring city for not only the most, but also the right citizens, the Creative Class, to pay tax, to consume high-end goods and culture, and start up or just support new creative businesses (Julier & Leerberg 2014).

Is very difficult to evaluate such projects, where idealism, politics and economic are so tightly bound, and my wish is only to dig deeper down into this way of thinking and find new ways to discuss both premises and results. First, we have to discuss and explicate what we understand by creativity, and how creative you have to be as a participating, full-rate citizen, part of the new social contract? Moholy-Nagy saw creative expression as human empowerment and the whole range of creative work as the way to new qualities of life. However, you had to be creative to see the purpose and take part in this future society. To substitute the notion of art with a fluffy concept of creativity is not to democratize it. But Brown insist in this way of thinking:

> “We can learn how to take joy in the things we create whether they take the form of a fleeting experience or an heirloom that will last for generations. We can learn that reward comes in creation and re-creation, not just in the consumption of the world around us. Active participation in the process of creation is our right and privilege.” (Brown 2009, 241)

The “reward” await us in creativity, but he doesn’t consider, how everyone needs aesthetic literacy to understand, take part and enjoy this.

Second, we must be able to distinguish critically between the creative means and the political and cultural goals of participation, because they are so mixed up in our life style and media culture, the Society of the Spectacle (Munch 2012b, 36). We ARE staging participation; we ARE designing processes, composing plots, acting and using a lot of other aesthetic means for this communication. There are artistic logics in the synthetization of the many views and complex relations, and these logics are different than the political logics of democracy. The total design of participation is an artistic tool, which can be very valuable as communication to reach political goals, for both citizens and politicians. But in this sense, design is once more just as much bound to confirm and communicate the existing societal order as to stage alternative scenarios.

References


**Biographical note**
Design and journalism – challenges and opportunities:
A dialogue between two cultures

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Abstract
Communication has become increasingly multi-semiotic and particularly more visual. The shift from a culture dominated by texts to a visual culture is particularly observable in journalism. Besides images, design is coming into play as a crucial semiotic mode for making meaning. In news features, special reports, or data visualizations, we can find a rich and complex interplay of different semiotic modes, e.g., text, image, and layout, which constitute the meaning-making process. However, the multimodal interplay also entails tensions since design and journalism are different disciplines with different semiotic resources, practices, and ways of thinking. In our paper, we focus on the relationship between these two disciplines by using a multimodal approach for our empirical analysis based on social semiotics. In a case study, we will examine the role of design as a semiotic mode in journalistic artifacts and discuss challenges and opportunities of the relationship between design and journalism.

Keywords
Multimodal analysis, semiotic modes, design, visual journalism

Introduction
Breaking news are depicted in timelines, financial facts are reported in real time graphs, demographic data is visualized in data visualizations and infographics, revolutions and the refugee crisis are told as nonfictional comics. The way we communicate news is undergoing a radical change. Besides texts and images, visual design is coming into play as a relevant resource for making meaning. Of course, design has always been present on website and newspaper pages, particularly in form of typography and layout. What is new is that visual design is becoming an essential semiotic mode. As such design has the potential to shape the meaning of a news story and by doing so to contribute to the meaning-making process.

For a long time, journalism has been thought in terms of the verbal mode. In the last decade the media landscape has changed. Writing is no longer the central means of conveying meaning. The visual language – often regarded as bystander or the inferior sister of verbal language – is becoming even more relevant and evidently discernible (cf. Küpper 2015, 2014; SND 2015). Sara Quinn, the president of the Society for News Design (SDN), quotes one of the print judges of the SDN 37 competition, “‘In the winning papers I see that every part of (the design) has meaning and is integral to the understanding of the reader,’ said Joe Hutchinson, design director for Rolling Stone. Winner entries are ‘not over designed. (They are) simple but effective with good use of typography with visuals. I am impressed with how much room is being devoted to visuals’”. (Quinn 2016) What has changed in journalism is that nowadays the verbal and the visual language are on a level playing field. However, it is striking that only a few scholars have started to study the role of visual design in journalism from a theoretical and practical perspective (Macin and Polzer 2015; Ananny and Crawford 2015).

In this paper we draw attention to the growing role of visual design in journalism and its semiotic resources. The aim of the paper is to show how design can shape the meaning of a story. In a case study we will examine the role of visual design as a semiotic mode adopting a multimodal approach (sections 2, 3). Following up our insights of the analysis, we will discuss implications for the collaboration between designers and journalists (section 4). The paper concludes with a summary and future perspectives (section 5).
Design as a semiotic mode

The social semiotic approach of multimodality assumes that communication consists not only of language but always of various modes (e.g., Kress 2010, Bezemer & Jewitt 2010). Kress defines mode as “an organizing and shaping meaning-resource” (2010: 114). Modes answer the questions: “How is the world best represented and how do I aptly represent the things I want to represent in this environment?” (Kress 2010: 116). The modes that communication experts, journalists, and designers use in their daily routine are e.g., writing, speech, image, moving image, layout, and color. Each mode refers to a set of semiotic resources. For instance, writing has words, word classes, clauses, sentences, and grammar; on a text level we have paragraphs and blocks of writing. Furthermore, writing has a set of graphical resources such as punctuation marks, font, size, or line spacing.

The semiotic resources designers and illustrators use for making meaning are e.g., colors, light, shade, lines, points, areas, size, shape, spacing, positioning, or alignment – to mention just a few (cf. Horn 1998, Bertin 1983). The resources and modes are historically and culturally shaped through social processes and practices in different social environments. They do not have a fixed meaning but meaning potentials depending on the combinations of the resources and the given context; and they have a set of affordances – the potential uses of an artifact: what can be communicated easily with the resources of the visual mode might not be expressed in the verbal mode in the same way (Kress 2010: 84–88). Writing can name things and arrange words into sentences in order to express causality, coherence, and logic, whereas images and design can provide visual evidence, can make things immediately visible and visualize complex information so that the users are able to grasp the message at a first glance.

What a mode is depends on whether a community or a culture regards it as a mode. Traditionally, journalists make use of the semiotic inventory of linguistics to reach their goal. They choose between different word classes, lexemes, and grammatical rules to produce sentences, whereas this might not qualify as a mode amongst the community of designers who are familiar with the range and potentialities of font, color, and layout (cf. Kress 2010, 84-88; van Leeuwen 2011). We argue that in the course of media convergence graphic designers and writers working together in the social environment of a newsroom must know how meaning emerges from a multimodal artifact. They must be aware of the whole inventory of both the visual and the linguistic resources. In other words, they must know, “[w]hat functions do visual elements perform best? What do words do best?” (Horn 1998: 159) and what is the best way to tell the story, to convey the message correctly, efficiently, and attractively.

Multimodal analysis

The multimodal approach enables us to systematically break down an artifact into its basic modes, to analyze the interplay of the modes, and to determine the set of resources available to designers. As Machin and Polzer (2015: 13) puts it, “[i]t allows us to progress from describing design decisions only in aesthetics terms.” The three metafunctions of multimodality that are based on the systemic functional linguistics will serve as an analytical framework for our analysis (cf. Djonov and Knox 2014; Kress 2010).

(1) The ideational/representational metafunction communicates something about the world – the world around and inside us like actions, states, or events. Regarding our case study, this leads to the research question RQ 1: What content is represented, what excluded? How is content organized semantically?

(2) The interpersonal/interactive metafunction says something about those involved in the communication – the relationship between the author(s) and the audience. This leads to the research question RQ 2: How is the content presented to the reader, factual or sensational, neutral or subjective? What attitudes are communicated?

(3) The textual/compositional metafunction refers to how the other two functions are interwoven to produce a coherent whole. This leads to the research question RQ 3: How is the page composed to make a meaningful whole from the single units?

These questions will guide us through the analysis of our case study.

Case study

For our case study, we use the special report Der Grosse Krieg – a feature on the World War I, which was published in the NZZ am Sonntag, the Sunday edition of the Swiss newspaper Neue Zürcher Zeitung. The feature extends over two spreads and contains text, a timeline, diagrams, and illustrations in a style that is reminiscent of comics (Fig. 1). We are referring to the use of black outlines (“inking”) to delineate characters and environments combined with the use of flat colors. The sequential structure and the similarly spaced picture frames show further similarities to a
traditional comic. It was awarded the European Newspaper Award 2014 (Award of Excellence) and can be seen as a representative example of the current trend in newspaper design, that is to say: visual storytelling by combining infographics, photographs, illustrations, and text (SND 2015; Küpper 2015).

Fig. 1. Feature “Der Grosse Krieg”. NZZ am Sonntag, 4 May 2014, pp. 20-21. Production team: Michael Furger, Patrick Imhasly, Marina Bräm (infographic), Melk Thalmann (illustration). (http://marinabraem.com/DOSSIER-WORLD-WAR-1-2014)

RQ 1: What content is represented, what excluded? The topic of the special report is World War I. The social context was the centenary of the First World War in 2014. Along a timeline, the feature covers the background and origin of the war and its progress, important dates, milestones that have led to the disaster, battles, military factors, equipment, weapons, political and military alliances, economic effects, financial costs, peace treaties, the number of casualties, and aftermaths. The content is represented in three content zones: The first third of the spread depicts the story in the form of illustrations and thematic cartography (visual mode). The illustrations in comic style portray milestones of the World War I such as the trigger of the war (the assassination of Austria’s Archduke Ferdinand) and the battle of Verdun. The map shows the countries that participated in the World War I. The second zone contains units of text classified with headings (mode: written language). The text units are linked to a timeline (visual-numeric mode) and illustrated by smaller pictures in the same comic style as the illustrations in the first content zone. The last third deals with the visual-numeric mode: data visualization in form of statistical graphs (cf. Weber and Engebretsen 2017). The figures of the war are depicted in bubble, pie, area, and bar charts. What attracts the reader’s attention is the design of the whole page. The design does not convey the impression of a feature that deals with the First World War. It is not a text-heavy page illustrated by photographs of those years what readers might have expected – photographs are intentionally excluded. Instead, the page surprises the reader with illustrations in comic style, data visualization, and a fresh, modern and catchy look due to the color. The feature is not dominated by text. The page design follows the principle “show, don’t tell”.

RQ 2: How is the content presented to the reader? The communicative function of the feature is to inform and to explain, to provide facts and figures, and to give background information. This is the reason why the feature is not based on text, which is conventionally organized in columns, but resembles a big information graphic with the timeline as a backbone. The white space provides lightness and gives room to breathe and think. The font of the copy, a sans-serif typeface (which is not the usual font of the newspaper NZZ am Sonntag except headline and lead) underpins the effect of lightness and appears modest. The content zone of data visualization gives a look of objectivity and restraint; it can be read as visual arguments that corroborate the text, which is written in an objective style too. The colors used in the diagrams are soft colors, shades of blue, red, and grey, which correspond with the coloring of the illustration.

The attitude communicated in the diagrams differs strikingly from the more subjective approach of the illustrations in comic style. While layout, data visualization, and text communicate a fact-based, objective and sober attitude, the illustrations stand for emotion, sensation, drama, and disaster. The stylistic devices are typical cartooning techniques like motion lines, distorted perspectives, strong brushstrokes that provide motion, energy, and action. Here, the design mode expresses the dramatic side of the story and relates the human aspect of the story to the reader. The illustrations act as a counterbalance to the soberness of visualized data. So, the design mode represents two opposing attitudes: soberness, logical reasoning, (allegedly) objectivity because based on numbers, and...
fact-based storytelling in the data visualization versus emotion, energy, exaggeration, artistic interpretation, subjectivity, and fictional storytelling. In combination, these two aspects of the design mode present a multi-faceted view of the events, which could not be achieved in an isolated approach of either design-style: an empathetic engagement of the reader balanced with the objective facts.

**RQ 3: How is the page organized?** Here, the key terms are framing and salience. Visual devices that frame the feature and provide visual coherence are lines, borders, spacing, and colors. We find the same range of colors in the illustrations, the graphs, and the timeline. Lines connect the dates of the timelines to the units of text. White space and thin lines separate the different elements. At the same time, these semiotic resources provide user orientation. The layout is clearly structured, the various elements are neatly arranged however without suggesting a reading path. The reader is invited to explore the page. Only the timeline suggests a possible starting point for the reading process. The most visually salient elements that capture the reader’s attraction immediately are (i) the headline and the lead and (ii) the illustrations in comic style. Especially the illustrations work as eye-catcher, which should seduce the audience to start reading the text.

Regarding typography, we find a hierarchy from the headline (in large font) to the lead (smaller font size) to the headings of the text (bold font) to the units of text (small font size, sans-serif). The pages are framed by the running title at the top and can be regarded as a corporate design element that links the feature to the wider context of the newspaper.

This short and incomplete multimodal analysis outlines exemplarily how a complex artifact can be analysed and how visual design as a semiotic mode influences its meaning. The analysis is incomplete because within the limits of this paper we cannot display the detailed analysis of images, infographics, and text.

**Implications for research and Practice**
The shift from a journalism ruled by text to a more visual journalism leads to complex multimodal artifacts where meaning is made not only by text but also by the images and design. This shift implies challenges and opportunities. As the production team of our case study told us, the feature was designed on a visual basis in the first place starting with the timeline and the illustrations. It is the result of a close collaboration between a graphic designer, an illustrator, and two journalists.

One challenge faced by the production was whether the comic style is appropriate to portray a severe issue such as the World War I. Comics are (still) associated with fiction. The illustrations show a subjective component since they are an interpretation of the illustrator even though they are based on original material of that time. The captions only name the events depicted in the illustrations but provide no source or link to historical documents. So, how can readers assess the historical value of the illustrations? Does the whole feature run the risk to be perceived as fictional and therefore unreliable and untrustworthy due to the comic style? How to find the right balance between fact-based storytelling, which might appear credible but boring, and fictional storytelling, which might be emotional but not authentic? Journalists strive for authenticity and factual reporting; journalism is traditionally ruled by ethical standards like accuracy in reporting, truthfulness, credibility, fairness, and objectivity. In contrast, aesthetics, creativity, originality, innovation, and entertainment belong to the toolbox of a designer rather than to a journalist's one. Design implies a subjective interpretation of the designer/illustrator in terms of color, shape, style, placement, etc. This refers in our case primarily to the illustrations, but to a lesser extent also to the design of the data visualizations even though they give us the impression of objectivity. We argue that all the ethical standards that apply to reporters also apply to designers when they are part of a journalistic team. The factual content provided by the journalistic research strongly informs the visual design process, and the visual interpretation of the designer enriches and adds to the journalistic experience. As the SND stresses in its Code of Ethics, "[i]logic and literalness, objectivity and traditional thinking have their important place, but so must imagination and intuition, responsible creativity and empathy". (SND 2014)

**Transparency** is a current key term in the journalistic discourse (e.g., Silverman 2014). Transparency means that journalists disclose their opinions about certain subjects, their motives, their research methods, their sources, so that the audience can understand what actions were performed. However, in research studies in the field of journalism, visual elements including design elements have received little attention regarding transparency, credibility, and authenticity (Gynnild 2013). That leads to the next question regarding authenticity: What are possible stylistic authentication strategies visual journalists use to appear authentic and reliable? Weber and Rall (2016) have outlined several authentication strategies regarding comics journalism, e.g., providing historical photographs so that the visual journalist or illustrator reveals his or her artistic transformation from the photograph to the drawing.
From a practical perspective the collaboration of journalists, designers, and illustrators also implicates a change in the production process and methods. Given that a multimodal artifact is designed on a visual base in the first place, sketching and storyboard become an important device for visual communication between interacting parties as well as a tool to structure the main creator’s visual thought process. In general, drawing remains an ideally simple and fast tool to share ideas and discuss ideas with others (cf. Tversky and Suwa 2009). Traditionally, these visualization methods do not belong to the toolbox of journalists, however are becoming crucial in an interdisciplinary team.

These aspects mentioned above call for an interdisciplinary and transdisciplinary research approach where scholars of both disciplines are in a continuous dialogue together with practitioners. Such a dialogue, that has not started yet (Machin and Polzer 2015: 167–173), offers several opportunities. A dialogue can foster the visual literacy and critical design thinking, the awareness of design routines, the interest in analytical tools, the right handling between aesthetics and accuracy, entertainment and efficient information presentation, or to put it briefly: the mutual understanding of the vocabulary, the methods, the tools, and the way of thinking. If so, the community of journalists (whether verbal or visual) will be better positioned to design better products for the society-at-large and to master the challenges of new fields in journalism such as animated news or immersive journalism. In addition, this dialogue might contribute to the evolving field of design criticism.

**Concluding Remarks**

This paper has presented a multimodal approach to journalistic artifacts since written language is no longer the main mode for conveying information. Our framework can be seen as a starting point for analyzing design as a semiotic mode. Even though it is built on an approach that stems from linguistics, our framework goes beyond linguistics and accounts for the growing importance of multimodal communication, which includes design too. Further research is needed to complete the framework with categories that derive from ethnographical studies in newsrooms and interviews with designers in order to cover the full range of analysis of visual artifacts in its multiple existing incarnations, e.g., interactive visualizations (cf. Weber 2016). On a higher level, the framework can be further developed for genre and discourse analysis. Starting a dialogue between design and journalism will enable the practitioners to find effective ways of how to harness this whole inventory of semiotic resources to produce new hybrid artifacts that meet the information needs of tomorrow.

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Biographical note

Prof. Dr. Wibke Weber teaches visual semiotics and digital journalism at Zurich University of Applied Sciences (ZHAW). Her research focuses on visual storytelling, genre studies, multimodal discourse analysis, and data visualization. She is editor of the book Kompendium Informationsdesign (Springer 2008) and Interaktive Infografiken (Springer 2013). Publication list: https://www.zhaw.ch/en/about-us/person/webw/

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Pioneering entrepreneurs and inventors: Technical imagination and new technologies in the early patents system in Chile (1840–1880)

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Abstract
This paper analyzes the practices and representations made in the areas of industrial property in Chile between 1840 and 1880, in particular, in the field of patents and introduction, with special attention to the attitude of the inventors and domestic and foreign to technology and innovation in products and processes entrepreneurs. In this context, the problem of rising nineteenth-century industrial competitiveness and the participation of the State in these matters innovation is examined, using applications for patents and the testimonies of the agents involved as "discursive texts". Also, the early use of terms in vogue today such as "design", "entrepreneurship" and "innovation". Finally, the emergence of a technical imagination that emphasized progress and that was also consistent with a tendency to imitation and adaptation of foreign technologies to the geomorphological conditions of the country.

Keywords
Industrial property, invention patents, native technology, technology transfer, innovation

Introduction
The study of the old invention and introduction patents and the register of the right of property of an invention or improvement of a well known device or procedure, turns out in a state of the art documentary source of an implicit discourse to learn about technological advances, as well as, the minds of a geographic zone in a well determined historical context. However, this practice will prioritize the technical description of inventions, above the opinions of who created them. Therefore, it was an implicit discourse, mixed with formal descriptions, demands of protection and administrative documents. As a matter of fact, it should be mentioned that recent research in relation to these practices has mainly been due to the analysis of its legal organization in terms of the study of the rights of industrial property in the past, more than its technological implications. The emerging of modern mechanisms of regulation over industrial property rights of the statement of the “rules of the game” (North & Hartwell, 1981), searched for the encouragement in the inventiveness of enterprising people, as well as the putting into practice of finds and technical advances, by means of granting exclusive privileges or temporary monopolies. At a regional level, the introduction of a first concrete lawmaking on invention patents took place in Brazil, due to a regulation published in 1830; 2 years later, a similar regulation was promulgated in Mexico, which had the support of the public and private sectors. The following law-ranking decree was announced in 1840, as part of the rights of the industrial property on a well determined product or procedure.2

Beginnings of the industrial property right in Chile: The law of invention patents of 1840
The implementation of a first regulation system of industrial property in Chile, was kept in a context of internal code under a moderate political climate, with clear signs of more institutional stability, even in relation with the rest of the

1. An “invention patent” stands for the creation of something new, that did not exist before, while an “introduction patent” means a product or procedure that was already discovered and is introduced in a country for the first time.
2. As follows, in a correlative form, related regulations were issued in Venezuela (1842), Paraguay (1845), Uruguay (1853), Argentina (1864), Colombia (1869), Perú (1869), Ecuador (1880) Cuba (1884), Guatemala (1886), Costa Rica (1896), Nicaragua (1899), El Salvador (1901), Honduras (1902), Panamá (1905), República Dominicana (1907), and Bolivia (1916).
Latin American nations. Indeed, during the decade of 1840, an advance program was initiated, which combined the promulgation of laws—with the purpose of introducing improvements in the State administration for the production of goods and services— with the arrival of the first steam boats and the starting steps in construction of roads, railroads, cabotage navigation and telegraph systems, as well as instruments for the expansion and integration of the national territory. In such scene, on November 9th 1840, the first law of industrial property was put into practice. Its main articles announced as follows:

The author or inventor of an art, manufacture, machine, instrument, preparation of materials or any improvement in them […] will turn up at the Department of the Interior, making a clear description of the work or invention, swearing that it is his or her own discovery, unknown in the country, together with samples, drawings or models […] The Department of the Interior will appoint a commission of one or more experts to examine the work or invention, and to report on its originality […] Once it has been found out, the President will grant the exclusive privilege for a period of no more than 10 years (Muñoz Sierpe, 1911).

In order to access the right of exploitation of an industrial patent then, a previous exam was required of a committee of experts, which tried to measure the degree of “innovation” and “usefulness” of a product (industrial object or machine), of a procedure (technical process) or of an industrial means (part of a device, chemical agent or mechanical resource) based on the checking of plans, models and samples required. Strictly speaking, the innovation and usefulness of what was privileged, was granted by the State, being the temporal monopoly the most proper way—or maybe, the least harmful— to establish the property rights on an invention or discovery.

In this context, 8 patents were registered in 1840. This amount is representative of the yearly average of registers in the decade where requests for the extraction and melting of minerals predominate and, to a lesser extent, the elaboration of basic food, cabotage and navigation, yarns and fabrics, milling, water transportation, construction material elaboration, benefit of artificial salt mines, timber treatment, gas production and elaboration of fungible and durable goods. Thus, between 1840 and 1850 a total of 74 patents were given—patents of invention or introduction— 14 of which reached good results, 11 were implemented with slow progress due to the lack of economical and technical resources and 49 failed in the middle of process or simply because they were not carried out.

During the first 10 years of the coming to effect of the system, the main applicants were Chileans, English and Frenchmen; then, Scots, Germans, Italians, Spaniards, Americans and occasionally, Latin American citizens (Argentina, Brazil and Peru). Possibly, in terms of the nineteenth century progressive culture that was transferred by the immigrants, the technical wisdom was acquired “from failure, rather than from success” (Petroski, 2011), a trend that was not only given in Chile, but also in a great part of the West. Due to this fact, the idea that inventions not only have to promote technological creativity, but also must be an instrument to protect the national industry, is already discerned in some of these early patents.

In relation to the aspects of modern orientation, that the 1840 Chilean law showed, we must emphasize the demand of an expert’s report which, to some extent, allows to determine the innovation and feasibility of the application of the invention or discovery; the adoption of a well ordered and systematic record of patents, and the availability of a space to keep written documents, plans, models and prototypes. Comparatively, the Mexican law of 1832, at first, did not consider the technical evaluation of applications and its characteristics of originality and usefulness. Moreover, between 1840 and 1850 the patents that were given in Chile reached twice as much the ones that were given in Mexico (Beatty, 2011). In the case of Brazil, 155 registers were made since 1830 until 1870—a yearly average lower than 4— while in the national territory, during the space between 1840 and 1870, 293 applications were approved.

Thus, a growing influx of capital, technicians and foreign entrepreneurs took place in Chile. They acted as the main mechanism of technology transfer and reception of ideology bonded to the promotion of

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3. The National Archive of the Brazilian Empire started record the documents in relation to the requests of the patents that were accepted, only since 1870, once four decades had passed since the system had started to work.
invention capacity from leading nations such as England, France, The United States and Germany, where a great part of the immigrants and enterprising people came from, who patented inventions of their own or foreign discoveries, apart from machines and unknown procedures, which were temporarily monopolized by means of an access to an exclusive privilege.

Consolidation of the system of industrial property and of imported technology

The trend in the sectorial orientation of applications for inventions (less frequent) and of the ones for introduction (of greater demand) was produced within a cycle of expansion of the national economy between 1830 and 1860. At that moment, the State provided the import of mechanic means and the fitting out of factories that were built by citizens, mainly foreigners, with the purpose of moving the micro and family business of the production to a manufacturing regime of longer technological range and volume of industrial production capacity. This meant the movement of the traditional inventiveness (popular and autochthonous), formed by a sector of native craftsmen, half-castes and enterprising creoles towards an industrial futurology of productive orientation and of a larger scale, which encouraged the presence of foreign technicians and mechanics. The modern paradigm for private exploitation of the empiric knowledge was gradually internalized. The operations of technology transfer gave an importation turn. It was monopolized by commercial houses overseas and by a group of new entrepreneurs with access to patents of “introduction”. It broke up the colonial inventive tradition and although it was not eradicated, it allowed a kind of speech and practices which under the system of industrial property, promoted competitiveness and the use of an increasing technical language in which, mathematical representations and measuring slowly substituted stories and descriptions based on practical experience and personal lines of arguments.

It was a positivist rhetoric of technological development statement that was due to the convergence of principles and learning, coming from the scientific terminology that was in fashion and to the modern specialized legal language, where the term “art” was understood as the technical command of a procedure for the elaboration of a well determined manufacture and the term “design”, without distinction, as a plan (sketch, drawing) or product (machine, object of applied art). In this context, the “usefulness” that it could bring to the country and in the second place, the “originality” of the proposal, were arguments of ordinary control in the applications for patents during this first historical cycle, above all, when reference was made to the term “innovation”, a concept that was gradually applied since 1820 (Bernardo O’Higgins’s government) to the disruptive inventions, as well as to the improvement of processes and products, mainly in the mining and agriculture areas. In respect to this last point, Domingo Faustino Sarmiento, a resident in Chile and an active enthusiast of technology pointed out in 1841:

It is true that the spirit of company and innovation has not been developed at a great deal in Chile yet, to establish the foundations for the improvements that we need; however, it is seen that under the benign influence of tranquility that is enjoyed, many subjects have been improved and others move forward fast towards a certain kind of prosperity (Sarmiento, 1896).

The use of well combined mechanical resources and the application of steam, were usual topics in the applications for patents, as well as the need of “constant observation” and the demand of carrying out “previous trials” by the inventor. Factors such as “economy” “duration” “manipulation ease” and “time saving” were considered as essential comparative advantages at the time of informing about usefulness and innovation of the inventiveness. On the counterpart, the lack of capital showed as anti values of a wrong enterprising.

However, during this considered period, maybe the most important facts in relation to technical procedures and doctrine of law subjects, were three determinations: First, the report of August, 1st, 1851, which stated the need that the designated experts, who made the exam of the applications for patenting, will not only evaluate the
“usefulness” of an invention, or an imported technology, but also the “disadvantages” that the granting of the exclusive privilege could bring along to industry, or the national economy, apart from making it clear if it was an invention or the introduction of something already known abroad; secondly, the legal difference between a patent of “invention” and the one of “introduction”, sanctioning this latest one –under the law promulgated in 1872– with the possibility of accessing, to a monopoly that was limited to a maximum of 8 years, and subject to intellectual property, which was brought from abroad. Since 1883 there was the option of extending up to 20 years an exclusive privilege given for a new invention by virtue of the importance or nature of the invention, according to the expert’s report and to the President’s opinion. All this, under the official instruction of conciliating the individual initiative and enterprising with the necessary interest for the community.

Towards 1880, the exporting mining sector and the partial mechanization of mining extraction continued being the main national economy motor, a phenomenon that was directly related to the patenting of imported technologies and to a lesser extent, to the production of local inventions which managed to be installed, although with some budgetary and technical difficulties, as well as to the rising of a metallurgic industry of foundries which provided supplies that were consigned to the provision of armaments and pieces pointed towards an incipient market, giving later on, a turn to the production of machinery for the benefit of niter. Precisely, this last production sector was directly overlapped with the favorable turn of the national economy, once the Pacific War or “Niter War” was ended, situation that to a great extent tended to replace the previous system of a transition mixed economy (urban-rural) by a unidirectional capitalist system, driven from the European community to its “American appendix”.

Final premises

Although the rising doctrine of the natural law emphasized the right of the individuals to private property and legal protection of the results of their mental and physical effort, the regulated concession of rights of patent brought an underlying problem: The imbalance between the stimulus to the local invention and the opening to the transfer of technology on the side of the State.

In relation to the agents who took part of the rising system of industrial property, impelled by the Chilean government, we can distinguish four groups of social actors. First, the core of craftsmen, who were the worst affected ones with the law of patents, promulgated in 1840, which did not capitalize, by means of a creole industrial advance, the domestic knowledge inherited from the demand of the traditional domestic market; next, and although it was not a group as large as the former, the group of foreign technicians and mechanics, protected by the political ruling elite, who provided the commercial fitting out of some strategic economic sectors in a short period; a third point, maybe the one with the most weight at the moment of achieving exclusive privileges or temporary monopolies, constituted by the advance of foreign merchants, enablers and consign agent of transnational commercial houses; finally, a handful of Chileans belonging to the ruling political class, to the landowning oligarchy and to the select group of citizens with professional studies (mainly lawyers, agriculturists, engineers and doctors).

Likewise, a part of the sector that was given to the technologic change and mechanization of the product, was not necessarily bonded to the scientific or university activities, the sphere of the industrial property or the importing commercial elite; moreover, some enterprising people –themselves– searched for fame and economic success by the addition of some small technical innovation or by the improvement of some mechanical object already
known. Typology added, particularly in Chile, the amateur of popular origin and the educated inventor, without necessarily having some kind of specialized scientific knowledge or studies of engineering or mechanics. In fact, the occurrences of this popular “underworld”, sociably invisible, were not always patented or did not always have the results that were expected, due to the lack of finance or to the evident disconnection with the slender protection instruments that the State offered.

Summing up, the embryonic Chilean regulations on industrial property, originated in 1840, which kept relatively steady until 1925, was a recognized institutional mechanism, to which some improvements were gradually introduced as applications for patents and the complexity of the projects to be implemented were increasing. That is why, refuting the statement of the ubiquitous historian Francisco Antonio Encina, who straightly explained that the system did not succeed (Encina, 1962), many of the main manufacturers of the analyzed period, asked for and obtained a successful or failed exclusive privilege, which necessarily implied the introduction of new procedures and advanced mechanical technology. This situation ended up taking over the inventive production of craftsmen and artisans established in workshops and potential zones of enterprising of native origin.

References

Biographical note
Pedro Álvarez Caselli is a designer, Masters and PhD candidate in History at the Pontificia Universidad Católica de Chile. His research interests include design and visual communication, history of material culture, technology and industrial property. He works professionally as a designer and consultant. He is the author, among other books, History of Graphic Design in Chile, Chile Trademark: History of Trademarks and the Imaginary of Consumption in Chile, Mechanical Domestic: Advertising, Modernization of Women and Technologies for Home, Graphic History of Industrial Property in Chile, and Luis Fernando Rojas, Graphic Work.
Luis Ferando Rojas: Visual Chronicler of Chile 1875 – 1942: Illustration as a communicative tool and the problems of technological obsolescence

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Abstract
This paper discusses a selection of the work of Luis Fernando Rojas, arguably Chile’s most important illustrator and illustrated reporter between 1875-1942, who depicted not only what was happening in Chile, but also international events. At the time, photography was used for portrait work or landscapes, and rarely applied to daily life, so the drawings were the way to communicate. It seems paradoxical that the father of the cutting-edge technique of lithography in Chile would see himself directly affected by technological innovation and the modernisation of publishing, a process that would eventually leave him obsolete and forgotten.

Keywords
Early photojournalism, collective imaginary, modernisation of printing techniques

Introduction: A modernising republic
During the second half of the XIX century, Chile underwent a particularly fertile period of growth due to a convergence of several factors: the country’s social order was becoming more complex with the influx of foreign migrants; the economy went through a number of booms in mining, agriculture and commerce; and transport and communication were thriving. This foundational period was all about seeking out European “models”, finding the human resources and technical tools that would bring about material progress, thus achieving the apex of what was then deemed the ideal vision of the future. This led to the establishment of a modern industrial society in Chile, and paved the way for the first period of real expansion in the national economy.

The liberal economic policies that lasted until the second half of the XIX century in Chile were based on the maxim of “to produce is to move” (Álvarez, 2008), a refrain that allowed for the development and foundation of a number of media outlets. Within these new organisations, illustrated reporting became a powerful tool for promoting political agendas, social policies and international culture throughout the literate population and, although to a lesser extent, educationally marginalised areas (thanks to the presence of the illustration and the ability to reproduce thousands of copies cheaply).

This economic, political and social context was the making of lithographer Luis Fernando Rojas, whose career from the end of the War of the Pacific1 in 1883 to the mid XX century will be discussed in the following pages. At the time, photography was used principally for portrait work and typical scenes within Chilean high society. For these reasons, the work of the illustrative journalist Rojas, who drew (national and international) social classes, lifestyles, fashion and interior design and much more, provides a visual snapshot of Chilean and world history and not only as a product of literature. Unlike the latter, illustrations can be readily understood by people from all walks of life, and Rojas’ lithographs were accessible to all, regardless of education or cultural background. It was uncommon at the time to find illustrators who would draw news stories or political events and, even more uncommon to see them working with historians to produce books about Chile, some of which remain authoritative to this day.

Nevertheless, the extent of Rojas’ work as an illustrated historian, and his significant contribution to Chile’s collective conscience, has gone unrecognised in studies of national art and design, in photojournalism,
Luis Fernando Rojas was born in 1857 in Casablanca, to a family of very little wealth. At fourteen he was sent to Santiago in order to study at the prestigious Instituto Nacional state school. Following that, he enrolled at the Academy of Painting, and was trained by renowned teachers including: Cosme San Martín, Ernesto Kirchbach, Giovanni Mochi and Alejandro Cicarelli. From early on, Rojas stood out as an illustrator, winning Academy competitions for drawing the human form. However, after an incident with his teacher Giovanni Mochi, Rojas decided to leave the Academy, and its classicist and historical legacy, to begin an autodidactic career free from links to this institution and the School of Arts and Trades. This decision effectively meant his was giving up the chance to be a “professional” artist in elite academic circles, and instead heading for a more modern and socially unrecognised trade. This is significant, as it was a golden age for the fine arts, where “artists” were highly prized and could travel to Europe to polish their skills. Of course, there was also the chance to begin a career as a graphic illustrator at a time when printing in Chile was growing steadily and the demand for lithograph artists was increasing day by day. Rojas learned the techniques of lithography as an apprentice of the renowned Alberto Saling’s, and began to make a living drawing portraits. In 1875 he took the first real steps of his professional career working for “El Correo de la Exposición”, a publication documenting the Santiago International Exposition, an important event for the country which showed off Chile’s technological and industrial advances. At the time, the import of printing goods such as paper for new formats, more colourful inks, mobile typographical characters and lithography presses meant that printers could produce more eye-catching, original and creative publications. Rojas headed down the path of lithographic pencils, and would follow it for half a century as it wound through areas as diverse as portrait drawing in newspapers including “La ley”, “El figaro”, “La lucha”, “La nueva república”, “Los Lunes” and others; caricatures and socio-political satire in “El Padre Cobos”, “El Padre Padilla”, “El cuco” and “El Poncio Pilatos”; historical drawings and journalism in books including “El álbum de la gloria de Chile”, “Historia general de Chile”, “Episodios nacionales” and “Diccionario biográfico colonial de Chile”; adaptations of historical novels such as “La bandera negra” and “La ex-generala buendía”; literary illustrations in “La lira chilena”, “La revista cómica”, “sucesos” and “El corre vuelta”; and a range of modern advertisements for products from cigarettes to oils, soaps and beers, all produced domestically. Furthermore, Rojas was among the first to hold the then nascent position in Chile of Artistic Director at a number of these publications. Today's designers holding similar positions can look back on Rojas as a pioneer in the history of their field in Chile.

Rojas' active presence in the national print media would lead him to work simultaneously at a number of different publications. His work was so successful that in 1895 he was able to establish Luis F. Rojas Printing and Lithographs Co., which soon was unable to keep up with printing demand and forced to close again.

Despite his humble origins, Rojas took part in a number of aristocratic events thanks to influential friends and the respect he had earned as a talented illustrator. From an early age he was close with Diego Barros Arana, a leading Chilean historian of the XIX century, due to their similar political leanings and struggle against ecclesiastical power. Likewise, he became friendly with Pedro Pablo Figueroa, José Toribio Medina and even the Nicaraguan poet Rubén in publishing, and even in national historiography.

Tracing an outline of Rojas
Luis Fernando Rojas was born in 1857 in Casablanca, to a family of very little wealth. At fourteen he was sent to Santiago in order to study at the prestigious Instituto Nacional state school. Following that, he enrolled at the Academy of Painting, and was trained by renowned teachers including: Cosme San Martín, Ernesto Kirchbach, Giovanni Mochi and Alejandro Cicarelli. From early on, Rojas stood out as an illustrator, winning Academy competitions for drawing the human form. However, after an incident with his teacher Giovanni Mochi, Rojas decided to leave the Academy, and its classicist and historical legacy, to begin an autodidactic career free from links to this institution and the School of Arts and Trades. This decision effectively meant his was giving up the chance to be a “professional” artist in elite academic circles, and instead heading for a more modern and socially unrecognised trade. This is significant, as it was a golden age for the fine arts, where “artists” were highly prized and could travel to Europe to polish their skills. Of course, there was also the chance to begin a career as a graphic illustrator at a time when printing in Chile was growing steadily and the demand for lithograph artists was increasing day by day. Rojas learned the techniques of lithography as an apprentice of the renowned Alberto Saling’s, and began to make a living drawing portraits. In 1875 he took the first real steps of his professional career working for “El Correo de la Exposición”, a publication documenting the Santiago International Exposition, an important event for the country which showed off Chile’s technological and industrial advances. At the time, the import of printing goods such as paper for new formats, more colourful inks, mobile typographical characters and lithography presses meant that printers could produce more eye-catching, original and creative publications. Rojas headed down the path of lithographic pencils, and would follow it for half a century as it wound through areas as diverse as portrait drawing in newspapers including “La ley”, “El figaro”, “La lucha”, “La nueva república”, “Los Lunes” and others; caricatures and socio-political satire in “El Padre Cobos”, “El Padre Padilla”, “El cuco” and “El Poncio Pilatos”; historical drawings and journalism in books including “El álbum de la gloria de Chile”, “Historia general de Chile”, “Episodios nacionales” and “Diccionario biográfico colonial de Chile”; adaptations of historical novels such as “La bandera negra” and “La ex-generala buendía”; literary illustrations in “La lira chilena”, “La revista cómica”, “sucesos” and “El corre vuelta”; and a range of modern advertisements for products from cigarettes to oils, soaps and beers, all produced domestically. Furthermore, Rojas was among the first to hold the then nascent position in Chile of Artistic Director at a number of these publications. Today’s designers holding similar positions can look back on Rojas as a pioneer in the history of their field in Chile.

Rojas’ active presence in the national print media would lead him to work simultaneously at a number of different publications. His work was so successful that in 1895 he was able to establish Luis F. Rojas Printing and Lithographs Co., which soon was unable to keep up with printing demand and forced to close again.

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Joaquín Edwards Bello, another important figure on Santiago’s literary scene, met Rojas and singled the solitary illustrator out in his writings, calling him “the first ‘people’s illustrator” (Edwards, 1976).

Another key figure in Rojas’ career was Benjamín Vicuña Mackenna –one of the chief driving forces behind what we could call the graphical representation of XIX century Chilean republicanism-, with whom he worked on the book “Album to the Glory of Chile”, a homage to the army and navy after victory in the War of the Pacific. The book was a true pantheon of war, combining biographies of the combatants with Rojas’ illustrations and a clear purpose of deifying the soldiers and sailors. Thus, Rojas became the war’s principal visual historian, and he was on friendly terms with ex-combatants such as Lieutenant Colonel Eleuterio Ramírez and Enrique Phillips. This closeness, and the military’s admiration for his work, led him to be named a “Veteran of 79”, a symbolic recognition as a war hero with the title of “War Correspondent”, a unique event in the history of Chile. It also gave him the chance to become the only civilian buried in the Military Pantheon in 1942, the year he died.

**Visual chronicler of Republican Chile**

Rojas was arguably the most important illustrator in Chile during the XIX century due to his participation in the creation of the “Album to the Glory of Chile”, with which he established himself as a national visual historian.

The War of the Pacific was a dramatic landmark in the history of South America. Indeed, it was one of the most significant wars of the XIX century, and the repercussions of the territorial changes it precipitated are still being felt in the region today –an example of this is the Bolivian demand for sovereign access to the Pacific, presented in 2015 at the International Court in The Hague.

The conflict did not only result in significant territorial gains for the Chileans, but also sparked an economic boom as the country moved towards the much-awaited “national progress” and its grandiose aspirations for the future. Just like any other war, the support of the people was vital to legitimise the conflict and allow for its documentation. Rojas was the man who, using testimonials from soldiers and letters sent from the north of the country (where the battles took place), illustrated events as they unfolded. He helped to publicise the war among the people, and to give it a “face”, as he sketched out in illustrations the republican sentiments of the period. Once victory was assured, he lauded the heroes and glorified the battles with chivalrous, strongly nationalist imagery, exemplifying popular feeling at the time. Rojas also sketched international navy battles. Examples of these are the numerous illustrations that he made of the Russian-Japanese war in 1904, which were published that year in *La Lira Chilena*.
Russia and Japan were disputing Port Arthur which promised to become a territorial benefit, a strategic position in the Pacific Ocean, and a commercial port that would bring immense economic profit. Rojas sketching enabled Chileans to have access to images that defined the profile of the Japanese soldier, Emperor Mutsuhito, Empress Harou-ko, Geishas; and even images of the Battles of Yalu and Yentai. Even more, they included the bombardment of Port Arthur and maps that picture the development of the war. Without leaving aside his liking for political satire, Rojas created several drawings were he makes ironic comments of issues related to the war. As an example, Japan’s high weaponry development; the disputing of the countries for the alleged territories, and the alliances that began to be created between the countries. Just as a reminder, for a short time Japan dominated the island of Taiwan, Port Arthur and Korea – after the Shimonoseki Treaty in 1895, the first Chinese-Japanese war from 1894 to 1895, but after the Russian intervention, Germany and France forced Japan to return Port Arthur and Manchuria in China. In 1905, and after its victory, Japan consolidated as a world power.

At the same time as Rojas was drawing his war pictures, he was also entrusted with the work of varied extensive important books of the History of Chile, working with distinguished historians of the time, such as: Diego Barros Arana, José Toribio Medina, and Pedro Pablo Figueroa among others. These became key publications in Chilean Historiography, depicting the stages of Chile during the Conquest, the Colony, Independence and the Republic.

Another especially significant book in which Rojas participated was Armando Silva’s “Episodios Nacionales” (National Events), published in 1942. The book recounted 150 important events in the history of Chile, starting with the origins of the Inca Trail and culminating in the Alpatacal rail disaster of 1927. It has become part of the library of the annals of Chile, and as such is a rich source of information on national events throughout four centuries of Chilean history, illustrated in its entirety in black and white by Rojas. Moreover, the book was approved by the Chilean Army, the Universidad de Chile and the Ministry of Education, institutions which provided documented evidence describing its valuable contribution towards the publication of historical knowledge and strengthening of patriotic fervour.

Interest for the printed reproduction of multi-tome editions exalting the glories of the armed forces and patriotic values allowed Rojas to consolidate his position as a specialist in the genre, and he thus always maintained a certain degree of importance even towards the end of his life. His work as the illustrator of Chilean collective conscience during important moments in the nation's history stirred popular feelings of respect and admiration towards the same patriotic symbols that would later be used on stamps and bank notes.

Rojas made full use of patriotic ideals, but at the same time he also turned his critical eye towards the poverty and destitution of the people contrasted with the privilege and customs of the creole elite. His in situ registry of the daily life of country folk, landowners, dandies and city dwellers was a faithful representation of the social and economic transformations of the end of the XIX century.

Final thoughts: The disappearance of a master

This essay is based on the book “Luis Fernando Rojas Obra Gráfica: 1875-1942” (The Graphic Works of Luis Fernando Rojas: 1875-1942), which is the only publication to date that has attempted to describe the artist’s work as the first Chilean visual historian. Although there had been two exhibitions of his work, they were of little impact and there are no records available, meaning the artist is still almost entirely unknown. Only in 2014, with the launch of this book, did the over 155 year-old debt to this great man for his services to the country, and national and international history begin to be repaid. By means of his sketches, relevant milestones and events taking place around the world became available to Chileans as images of what was happening. One might question how real or true these images were, but it is a debate which is set inasmuch for photography, audiovisual records and news in social media.

2 Book published in 2014 by LOM Ediciones. Authors: Carola Ureta and Pedro Álvarez.
Rojas worked actively for more than sixty years across a range of different genres of illustration. Nonetheless, perfection in the printing process and journalistic genres caused an acceleration in supply that was to adapt to the ephemeral nature of daily news printing, making publications strictly production oriented. Likewise, the incorporation of the modern and mechanised technique of photography sparked a collapse in the manual illustration industry, especially in newspapers and magazines. This transformation in the design and format of print media had a direct influence in the trailing off of Rojas’ career. In spite of everything, he continued to work as a freelance illustrator instead of an artistic. Nevertheless, he ought to be considered a pioneer in that he was one of the first to occupy this kind of role in Chile, a role that, even today, is so important in the fields of design, marketing, publishing, photography and audio-visual production.

The arrival of new foreign illustrators, alongside the appearance of new Chilean caricature artists trained at the modern Zig-Zag magazine, also contributed to Rojas vacating his position as Chile’s leading illustrator, and he was not hired by any more magazines or newspapers after the first few years of the XX century. To some extent, Rojas had become typecast as an illustrator of historical events and battles after his work with Vicuña Mackenna, and he was no longer considered for other kinds of illustration.

The fact that he renounced the Academcy of fine Arts, and the decision to become self-educated, set him apart from his teachers and the academic world; and so, there are few references about him in books or studies about the history of Art in Chile, even though he was known as the “greatest illustrator of the time” (Pereira, 1992, p.267). Rojas’ drawings certainly incorporated the reigning Victorian aesthetics of the period, taking as referents Honoré Daumier, J.J. Grandville and Paul Gavarni, and were also influenced by the bourgeois and French-style Art Nouveau typical of the transition from Romanticism to Modernism. However, despite his external influences, Rojas came to carve out his own style and was one of the first Chilean artists to incorporate the so-called “Chileanity” into his work. By drawing all of the social strata of the XIX century, Rojas contributed to the construction of a national identity. In any case, his style was consistently realist thanks to the job offers he was apt to receive.

Similarly, the period also saw conditions emerge for the beginning of mass access to culture, which in turn encouraged material progress. Cultural diffusion went beyond the printed word for the first time with the advent of radio. This backdrop of technological transformation in the publishing industry, added to the economic crisis of 1929, meant that the demand for illustrated publications dropped off sharply, and Rojas’ productivity with it.

Unfortunately, neither before nor after his death did Rojas receive any kind of significant recognition –from his peers or the authorities- for his extensive work as a visual historian of colonial to interbellum Chile. It seems paradoxical that having defended national interests during the War of the Pacific and guaranteed the protection of economic interests in the area of conflict that came to represent the country’s progress, it was this very progress that led to Rojas’ obsolescence as he was left out in the cold by innovative printing techniques. Although Rojas was a skilled lithographer, the arrival of photoengraving in Chile pushed him out of publishing circles and into obscurity. Nevertheless, his work is still alive in the collective conscience of Chilean history permitting history to become fixated in images which depict national and international events.

Just as an article published in Mapocho magazine points out: “Rojas was a man who became part of our national heritage, and gave the impression of being a living breathing national monument” (Ojeda, 1994).

References

Biographical note
The design of fire retardant textile products: An exploration of design characteristics

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Abstract
This study examined the processes involved in the design of fire retardant textile products with an emphasis upon processes undertaken by designers’ who are committed to a design for career and volunteer fire fighters. Qualitative and quantitative research was undertaken with career and volunteer firefighters in mainland United States, Hawaii and Taiwan. Analysis revealed the need for a garment less bulky than traditional bunker gear and yet still protective at a fire scene. Researchers followed the six themes or stages in the design process for protective apparel: resources and research, consumer need, inspiration, creative exploration, product samples, and design completion. Prototypes were developed based on the information gathered through research and the design process. Application of the resulting garment is expected in lower risk environments (vehicle accidents, extraction) or by officers who are not expected to enter a structure fire but must be present at the fire scene.

Keywords
Fire retardant experience, design-process, protective apparel

Introduction
In 2013, there were an estimated 1,140,750 fire fighters in the United States, approximately 354,600 career and 786,150 volunteer fire fighters (United States Fire Administration, 2013). There are about 13,000 fire fighters in Taiwan (National Fire Agency, 2015). Fire fighters, on a daily basis, respond to a number of diverse emergency calls including fire, health aid, hazardous materials and vehicle accidents. Fire fighters may also encounter a variety of weather conditions, from freezing to extremely hot/humid in addition to the intense heat of a fire. The creation of fire fighter personal protective equipment (PPE) must take in to account all of these varying conditions while providing protection as laid out in the National Fire Protection Agency’s established standards (NFPA, 2013).

The purpose of this study was to develop a compact and easy to store prototype design for emergency response purposes as an alternative to bunker gear. This garment was envisioned to be an upper torso covering such as a jacket or shirt with a hood.

Resources and research
As not all calls fire fighters go on involve entering a burning building, a secondary garment which would provide minimal protection from fire was deemed useful. As firefighter bunker gear is designed with enough protection to protect the wearer in otherwise unsurvivable conditions, firefighters may be overprotected, and even negatively affected, by current gear. On average the basic set of gear (jacket or coat, pants, boots, helmet, gloves and air pack) weigh approximately 45 pounds. However, when you add in the different tools (axe, radio, hose, ladder, flashlight, etc.) needed for a particular job the extra weight can jump up to 75 or even 100 extra pounds of equipment.

Consumer need
Qualitative and quantitative research was undertaken through questionnaires and focus group sessions with more than 300 career and volunteer firefighters in mainland United States, Hawaii and Taiwan. Data on specific issues
were collected through follow-up intensive interviews with career and volunteer fire fighters. Participants in the focus groups expressed concern about how their current gear affects them both physically and physiologically, especially since the majority of firefighter fatalities are caused by heart attacks (USFA, 2013). The focus groups discussed that their current gear creates additional heat stress, muscle fatigue and reduced mobility due to the weight and bulk. Current bunker gear has very limited methods of releasing heat build-up causing the body temperature to rise which causes extreme discomfort and could lead to heat stress. In addition to this, the bunker gears inner thermal barrier traps heat and moisture which can take days to dry out – leaving the firefighter to wear wet gear. In the winter, this can cause the gear to freeze when outside a fire and heat to build up faster when in the fire all of which reduces the level of protection.

In follow up interviews, the fire fighters all agreed that their current PPE over-prepares them for almost all of the non-fire calls. They noted that temperature, perspiration rate and heart rate all increased when they were wearing their PPE. One participant noted that “street clothing is often more suitable” when on a non-fire call. Mobility was also a concern while wearing their PPE and most participants attributed this to the bulkiness of the apparel.

Participants also complained about burns around the face and ears due to the shifting of the protective hood. The current hoods are made of a knit fabric which loses its dimensional stability over the life of the garment causing gaping around the face when worn.

In conversations with fire administrators, it became apparent that many of them do not necessarily wear bunker gear on a fire scene as they would usually be in command of the action at the site. However, they stated that sometimes they need to get closer than they are comfortable without wearing protection if their presence is required at a certain location. These participants wanted more protection but not wear a full set of bunker gear.

**Inspiration**

Research is vital to all design, particularly in designing PPE. At this point, the process was exploratory – keeping in mind the objectives of the final design and looking for any possible solutions or ideations. The research started very broadly looking at all varieties of garments used in a variety of working conditions. The designer/researchers separately looked at a variety of sources for inspiration including the history of firefighting bunker gear, bunker gear used in different parts of the world, athletic gear and even street wear.

The designer/researchers spent hours discussing alternatives to the fire fighters PPE for non-fire responses. At this point, the research narrowed and became more in-depth as the discussion led to a variety of possible solutions. It was determined that an alternative garment could be developed which the fire fighter could wear as an alternative to suiting up in full bunker gear.

When searching for inspiration, the designers kept in mind some basic requirements for the design based on participant responses. The new item must have fire protection for the head, arms and upper torso, pocket for the radio and gloves, easy to don/doff and, in an emergency, be worn under the protective coat.

This stage also required the research and gathering of different materials which could of be use in our design. The fabrication had its own set of requirements, though not as stringent at what is required for bunker gear. The fabric was required to be heat and flame resistant, not bulky and easy to care for in a home environment. The selection of fabric was deemed the most important as it would be essential in the success of the final product.

**Creative exploration**

Watkin’s (1984) model of product design and development provided a context by which to explore inclusion of environmental performance criteria within the design process. Once a variety of inspirations were found and once it felt the research was exhausted, each designer shared their research and discussion took place as to possible avenues to explore more in depth. The designers individually sketched out dozens of ideas based on the research and discussion. These ideas were compiled and put into categories based on particular attributes such as closure, pockets, hood style. The designers discussed each idea within each category determining if the design met the criteria set forth in the original statement. If the design did not hold to the statement, it was set aside.

Idea such as building in joint articulation at the elbow level were discussed but determined not to be necessary with the use of lighter weight and less bulky material. Reflective tape was also deemed not a requirement on the first model as the garment was not intended to be worn within a structural fire, though this may be
revisited later based on feedback. A variety of closures were discussed. Fire fighters had mentioned that zippers can be difficult to engage and then pull up when trying to don items rapidly and hook/loop tape was deemed not durable enough (particularly after numerous washings).

Pocket placement was important to the participants. Though many stated that their pants pockets were used more frequently for tools, they required at least one pocket on the upper torso for their two-way radio.

It was determined that the hood would need to fit under the helmet and allow for movement of the neck and shoulders. The area around the face would need special attention to ensure good fit to reduce the elimination of burns and the fabric should have good dimensional stability so that the protection would not be reduced after washing and wearing.

We determined that the fabric should be constructed as a knit to allow for some allowances in fit and to incorporate the hood into a single garment. Numerous fabrics were researched to find a fabric which was flame and heat resistant and had a soft hand. Pyron® was chosen for its superior performance against aramids and flame retardant polyester. Pyron® is an oxidized polyacrylonitrile (OPAN) carbon fiber developed and trademarked by the Zoltek Company headquartered in Missouri, USA (Zoltek, 2015). Pyron® does not melt, burn or drip and completely blocks flame even after being subjected to a 1250° c flame test (Zoltek, 2015). Even after exposure to flame, it will retain its dimensional stability and soft hand. It is currently being used in racing and stunt apparel as well as welding aprons.

Once the fabric was identified, it was decided to create two prototypes and get feedback on each before proceeding.

**Product samples / prototypes**

Two prototypes were developed based on the designed from the creative exploration. A third design was developed when one of the designers found an issue with the shoulder shape of the garments and decided to change it.

Male participants were recruited to try on the garment and an activity assessment was performed. Participants gave feedback on fit, mobility, ease of donning and doffing as well as protective functions. Specific movement assessment was conducted to determine if the jacket interfered with any performance tasks. Pockets were checked to determine if the size and shape were suitable for the required instruments, such as a two-way radio, and if the location of the pocket allowed the wearer easy access to their equipment.

Qualitative research was done at this phase through individual interviews with the participants in order to ascertain any wearing issues that could not be observed. One major theme that emerged was that the lightweight fabric chosen for the design did not feel protective enough to the wearer and they stated that they would not feel safe.

Based on feedback from the participants, additional iterations of the design need to be developed. A full test is expected to be completed in 2017 to fine tune the design based on wearer’s feedback. It is expected that the test will be conducted in the field during a practice fire drill in order to complete a more in-depth observation of the success or failure of the design.

A final evaluation of the garment would include determining final cost and manufacturing considerations as well as fit and sizing.

**Conclusion**

This study followed the six themes or stages in the design process: resources and research, consumer need, inspiration, creative exploration, product samples, and design completion to develop upper torso protection for a fire fighter not actively engaged in a fire situation. While more studies need to be conducted in order to finalize the design, we have shown how the process works for PPE. This process offers a structure to help identify a variety of resources, ideations and can help lead to a successful conclusion.

This study also shows the importance of soliciting end-user support and guidance in order to create a successful end product. By including the end-user in the design process by identifying a problem and providing feedback, it creates a more meaningful experience and can lead to increased satisfaction with the end product.

As fire fighters have a strong sense of tradition, adoption of this garment may be difficult. The
change from long jacket to the current coat/pant combination took some departments almost 20 years to adopt. The design may need to change to fit the wearer’s perception of what a fire fighter “should” wear. Secondly, as our first prototype feedback indicated, education must be done to ensure the population that lightweight can be protective.

Future research will include additional prototypes and wear testing. Through this process of developing prototypes and soliciting constant feedback, it is hoped a solution will be forthcoming. Additionally, as textiles advance in their fire protection properties, additional research on the entire bunker gear ensemble should be ongoing to help reduce the weight and bulk yet keep the protection constant or improving.

References

Biographical note
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Dr. Shu-Hwa Lin is an Associate Professor in the Fashion Design & Merchandising program at the University of Hawaii at Mānoa. Her research examines new forms of textiles and clothing that contribute to the health, protection, comfort, utility, and appearance concerns of individuals and groups with special needs.
Re-enactment as method:  
An action research project on art and design

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Abstract

In the 1960s, a group of artists called Gruppo T, by combining design, arts and technology and through the production of interactive environment and kinetic artifacts, pioneered a history of arts alternative to the one based on traditional craftsmanship: they turned the audience into active users and developed the principles of a multiplied art, made for everybody. Aim of the paper is to describe the methodology of the application of practices related to open design, the development of open source software and hardware, and the use of open licenses as means to investigate the connections between the principles introduced by Gruppo T and contemporary practices in art and design based on the use of new technologies. The results highlight a novel approach to design and art history investigation, based on the combination of hands-on activities, participatory practices, and the concept of re-enactment as method.

Keywords

Programmed art, Gruppo T, open source technologies, fablab, interaction design

Introduction and context

Arte Programmata or Programmed Art is the name given to the body of works produced by a group of Italian artists active between the late 1950s and 1960s. The term was coined by Bruno Munari and Umberto Eco in December 1961 for the Almanacco Letterario Bompiani (Almanacco Letterario Bompiani 1962), and subsequently used in the exhibition held at the Olivetti showroom in Milan, in 1962, which showcased works by Bruno Munari, Enzo Mari, and the artists of Gruppo T (Giovanni Anceschi, Davide Boriani, Gianni Colombo, Gabriele Devecchi and Grazia Varisco) and Gruppo N (Munari 1962). The artists produced objects by applying processes similar to those of technological and design research, namely by creating prototypes which were then reproduced as series of ever-changing artifacts. The idea that works of art could be completed with the action or interaction of the viewer emerged in the early 1960s, thanks to the experimental work carried out by these artists, who pioneered the use of technology and an algorithmic approach in art. The pieces produced by Gruppo T are representative of what is known as Programmed Art, which subsequently paved the way for the development of interactive art. Space-time, transformation, variation, and participation: these are the keywords of Gruppo T.

It was the beginning of the 1960s, yet their art was already interactive and immersive. Nevertheless at that time their artworks were difficult to read, understand, and accept. The interactive artworks by Gruppo T involved the body of users: the public was no longer passive. The user was given a free rein to play with the artwork, and became a co-author. The user was programmatically put at the center of the work. If Futurism put the audience at the center of the artwork, Gruppo T transformed the audience together with the artwork. Interaction was one of the key concepts that Gruppo T used to disrupt the art world. Reproducibility was another concept they used to reach this goal: Giovanni Anceschi asked Gianni Colombo to exchange his artwork $0 \leftrightarrow 220$ volt, and got as a reply: “Do it yourself!”. This answer suggests the concept that Gruppo T’s works could be re-made starting from the new industrial materials and technologies which seemed cartoonish for their initial clumsiness and fragility.

The third element of Gruppo T’s artistic production was the application of methods similar to the ones of design research: the group worked on series of artworks that explore specific effects and aesthetics by generating ever-changing images. They developed a kinetic multiplied art that was close to the manufacturing of...
industrial design pieces: a multiple edition of 99 numbered pieces plus 9 artist’s proofs was developed from the Miriorama objects that were featured in the exhibition Miriorama 8 at the Galleria Danese in Milan in 1960 and reproduced in collaboration with artists, heirs, and archives of the members of Gruppo T in the re-edition project of Officina Alessi in 2010 (Alessi 2010).

The 2010 re-edition highlighted a continuation of something that had started fifty years before, and had faced difficulties in its reception: the artists of Gruppo T envisioned the art of the future as reproducible, interactive, distributed, and multiplied.

Interaction, reproducibility, and multiplication were the key points that led a group of researchers and artists to start an action research based on the idea of re-programming, not just re-making, with the purpose of studying the art by Gruppo T. We chose to investigate the spirit of Gruppo T on one hand by betraying the uniqueness and originality of the artworks, and on the other by answering new questions concerning the conservation of artworks that cannot be simply contemplated, but call for the active participation of the audience.

Re-enactment through design and making

In the field of ethnomethodology, the researcher as a competent participant in fieldwork tries to understand the social order by studying it and by reproducing its activities until one is fully competent at it (Goffman 1989). In the words of Erving Goffman, the fieldworker has to acquire the rhythms and personal aesthetics of the people or practices being studied: hence our attempt at action research tends to transform the participants into the “phenomenon” itself, to understand it from the inside.

In the case of Kinetic and Programmed Art, carrying out research means reconstructing, namely understanding what works are made of and how they are made, the materials used, and the algorithms deployed to incorporate an element of chance into the program.

The work Scultura da prendere a calci (“Sculpture to be Kicked at”) by Gabriele Devecchi (fig. 1), for example, has a conservation record that under the heading ‘condition’, merely states ‘poor’. This poor condition is a direct result of the artist’s intention: the sculpture was designed to be kicked at until unrecognizable, in pieces, annihilated. Using the work, as part of its performance, also leads to its destruction.

Fig. 1: Gabriele Devecchi, Scultura da prendere a calci (“Sculpture to be kicked at”), 1959. ph. courtesy of Archivio Giovanni Anceschi.

In order to study Gruppo T’s artworks and the key aspects of their artistic investigation (interaction, reproducibility, multiplication) we experimented making- and design-based processes. On September 1-7, 2014, we asked five groups of artists, designers, and researchers, together with two members of Gruppo T to meet at SUPSI fablab in Lugano (Cangiano, Fornari, Seratoni 2015). The goal was to build prototypes of kinetic artifacts that would translate the main principles of Programmed Art into the codes of contemporary culture, following the tenets of peer production, namely open source hardware and software and digital fabrication technologies. The hands-on workshop was the initial activity of an action research aimed at updating Programmed Art by reprogramming the artworks with new tools, using the techniques and processes of interaction design, as well as maker and DIY culture. During the action research, each artist set about translating Gruppo T’s artworks into a form that would enable anyone to reproduce, repair or subvert it, in order to elicit reflections on the practices involved in creating visual effects, visualizing physical phenomena and interactions, manipulating mechanisms, and playing with materials and technology.
The results of the research are five artworks whose specifications and source files are released under open and Creative Commons licenses. They are artworks, but also experiential prototypes that allow the public to understand Programmed Art through direct interaction. The prototype Esaco (fig. 2), for example, is a translation of the concept that generated the series *Strutturazioni cilindriche virtuali* (1963–1966) by Giovanni Anceschi. The concept is described in issue 22 of the magazine *il verri*, but was never produced due to the limits posed by the technology of the period. It is a cube suspended by one corner which has six motors embedded into each side. The motors drive two rotating rods that draw six truncated cone shapes in space, creating virtual volumes. The speed varies from motor to motor, and as a consequence so does the effect of the six shapes drawn in the air at the sides of the hanging cube. The prototype Magnetic Drawbot stems from the principles of the work by Davide Borioni, who in the series *Superfici magnetiche* presents machines that perform a single program generating changing and developing images (fig. 3). Magnetic Drawbot is the result of a research project with a playful element: ferrofluid unexpectedly turned out to be an unpredictable sort of ink, which created very distinctive graphic effects when animated and magnetized by hand.

![Fig. 3: Magnetic drawbot by Giorgio Olivero, Fabio Franchino (TODO), 2015, ph. courtesy of Sara Daepp/SUPSI.](image)

**Open sourcing as preservation strategy**

The initial concepts of the action research reside in the key changes within the field of participative creation and development of interactive artworks: open source hardware and software, open design and the use of Creative Commons licenses, all foster collaborative design processes, and the users or co-creators are members of widespread, networked communities which share knowledge in order to complete or expand on the work of artists and designers (Kennedy 2011).

The open source paradigm applied to the realm of physical things implies that the documentation of a design artifact is made public so that anyone can study, modify, distribute, make, prototype, and sell the artifact based on that design (Open Design Definition 2015). Fablabs and the various kinds of distributed infrastructures for DIY and peer-to-peer production enable anyone to benefit from the constructive and creative potential of technology that for a long time was too complex for the layperson. Open sourcing the artistic practices by re-making masters’ artworks became in our case the act of re-programming them with open technologies and principles: building upon existing knowledge, releasing a complete documentation, source files and bills of materials, applying an open license such as Creative Commons in order to allow other people to make artifacts without asking permission. In this context we envisaged the possibility to be in tune with the utopia of Gruppo T about a multiplied art made for everybody by using the model of open source development: the parts and the files of the derivative artworks that are built upon Gruppo T’s artworks are open source.

The action research project sought to evoke the ‘T method’ and reframe its pioneering, innovative spirit in the light of the paradigm of peer-to-peer design and production.

**Re-enacting the transnational collaboration**

Gruppo T’s origins are rooted in the cultural exchange between Italy and Switzerland. The collaboration was set up between Milan, Bellinzona, and Lugano. Since the end of the 1950s, Davide Borioni, Gianni Colombo, Gabriele Devecchi and Grazia Varisco were all students of Achille Funi at the Accademia di Brera, where they learned fresco
technique. Giovanni Anceschi was studying philosophy at Milan’s Università Statale, attending Enzo Paci’s courses on temporality and relationality, and Husserl’s Cartesian Meditations in particular; he also attended Cesare Musatti’s courses on perceptology and psychoanalysis. He was bent on an artistic career, however, and Funi accepted him in his classroom at Brera.

Since before its official foundation Gruppo T was spontaneously formed in the class of Achille Funi. Together with the realization of the fresco series, they started to experience the idea of method and collective work that would allow them to deal with the theory and realization of the very first kinetic works.

Achille Funi’s course at the Accademia di Brera was also attended by Kiki Berta (Bellinzona 1938). Berta invited Boriani to organize a show in Switzerland and Boriani extended the invitation to Colombo and Devecchi, with whom he already worked.

In June 1958 the exhibition was held in the Sala Patriziale in the city hall of Bellinzona, Switzerland. Several months after this episode, Berta, Boriani, Colombo, and Devecchi were invited again for another exhibition, this time at the Lyceum of Southern Switzerland in Lugano, in November 1958.

In his review, the Swiss art historian and critic Gualtiero Schönenerberger wrote: “Gianni Colombo, Davide Boriani, Gabriele Devecchi and Kiki Berta from Bellinzona are barely twenty years old. Thus, first of all, their works want to document an orientation of today’s youth. Yet the diversity of their characters, often successfully expressed in their paintings, shows that these young people were able to listen to their inner tone: and this is a good omen”. Kiki Berta was later replaced by Giovanni Anceschi, who became a founding member of Gruppo T in 1959.

Aware of this episode of Gruppo T’s history evoking a Swiss-Italian cultural exchange at the end of the 1950s, we framed the action research in the context of a bi-national cooperation program between Italy and Switzerland promoted by the Swiss Arts Council Pro Helvetia. The aim was twofold: to recreate the experience of such an encounter among young artists and the beginning of a collaborative process that initiated Programmed Art. Secondly, we wanted to reconnect that spirit of collaboration at an international level thanks to online document sharing and the connection among spaces such as fablabs.

The result of re-enacting the encounter stimulated a reinterpretation process of Gruppo T’s artworks and, in general, of Programmed Art principles from the point of view of young artists and designers based in different countries. All artists and designers were already sensitive to topics such as algorithmic art, computational design, and open hardware and design. Their perspectives on those topics helped connect the Gruppo T to contemporary practices in design and art mediated by new technologies. Moreover, their view of Programmed art helped show how this kind of art can be investigated through a process of collaborative transnational design.

Collaborative transnational design is also a key aspect proposed by the fablab network that consists in a network of connected libraries sharing common tools and practices for creating physical artifacts. By creating open derivatives of Gruppo T’s artworks that can be made with the use of digital fabrication tools available at fablabs, the group of young Swiss and Italian designers and artists involved in the project reenacted the transnational collaboration of the so called New Tendencies that Gruppo T was part of. New Tendencies was a movement that brought together personalities with different backgrounds and drove the whole field of art towards the future, blending technology and perception studies together. New Tendencies produced a new kind of operational figure who innovated the ways in which works showed their aesthetic and perceptual qualities, spread the idea of art for everyone, and foreshadowed new forms of activities connected to research methodology (Anceschi 2014). Art became one of the disciplines whose purpose is to produce knowledge. New Tendencies was a cohesive transnational community open to the future and to a scientific view of the world, showing the connections between art and design that anticipated the creation of a network of spaces such as fablabs.

**Conclusion**

The approach of historical investigation proposed by the project Re-programmed art highlighted how the method of re-enacting practices rather than the re-making of artworks activates an exchange of knowledge whereas the tangible outcomes of the prototyping activities is merely a manifestation of this exchange. The exchange was an outcome generated through transnational collaboration between artists and designers from Switzerland and Italy that is now entrusted to the community of people active in the fablab network or in the open design and hardware movement.
References

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Abstract

Play was an important concept for Finnish architect and designer Alvar Aalto (1898-1976). He emphasized the importance of play in design activities. Aalto seems to have been influenced by Yrjö Hirn (1870-1952), a Finnish aesthetician and author of *Barnlek* [Child's play, 1916]. From the late 1920s to 1940s, Aalto designed not only buildings, but also furniture. In functionalism, which spread from the early 1920s, experimentation with wood for furniture played a very important role for Aalto. He emphasized that this experimentation was closely related to the idea of play. This study demonstrates Aalto's suggestive idea through an analysis of his furniture design. It can be said that the concept of play guided him to develop this idea.

Keywords

Alvar Aalto, Yrjö Hirn, play, furniture design, functionalism

Introduction

Alvar Aalto (1898-1976) was a Finnish architect and talented designer of furniture, glassware, lamps, and so on. He placed a lot of emphasis on play, a trait he shared with the Finnish aesthetician Yrjö Hirn (1870-1952). In 1916, Hirn wrote the book *Barnlek* [Child's play], where he explained the importance of play.

Aalto wrote an article entitled ‘Koetalo, Muuratsalo’ [Experimental house at Muuratsalo], published in the Finnish architectural journal *Arkkitehti* [Architect], where he stated the following:

> Whether or not Yrjö Hirn was the direct cause, at any rate the influence of his personality contributed to my firm conviction and instinctive feeling that in the midst of our laboring, calculating, utilitarian age, we must continue to believe in the crucial significance of play when building a society for human beings, those grown-up children. (Aalto, 1953, Shildt [ed.], *Alvar Aalto in his own words*, 1998, p. 234)

It seems that perhaps this idea influenced him earlier. Aalto uses the word play to explain not only his architecture, but also his early furniture designs.

My research focuses on Aalto's furniture design, which he devoted himself to from the 1920s. Functionalism, which arose from the early 1920s, changed the state of the design field. Although Aalto was also influenced by this trend, he did not accept its rationalistic and mechanical character at face value. His furniture designs and wooden experiments indicate his unique, new ideal very well.

In this paper, firstly, I present an overview of design in the 1920s, when Aalto started working on furniture. It is said that Scandinavian countries blended modernism idea with their own identities, and Aalto was one of the most important figures at this time in Finland. Secondly, I focus on Aalto’s furniture and examine his thesis by studying the changes in his design. Experiment enabled him to blend traditional material with new trend. Finally, I consider the role and meaning of play in his design activities, comparing him with Hirn. Aalto insisted on the importance of play when functionalism arrived, and this will be one example of how the idea of play still affects design today.

Scandinavian functionalism

In the early 1920s, the field of design in both America and Europe underwent a revolution: the age of modernism had come. In 1919, Bauhaus opened an academy, and in 1920, Le Corbusier heralded the machine age. In 1927, at the
Weissenhofsiedlung Exhibition, functional buildings and apartments that featured white walls and flat roofs were created. In this way, the new style of the 1920s was shown to feature rational and technical aspects. Originally, it did not aim at a specific style, but it ended up creating a new one.

In the Scandinavian countries, it has been said that this functionalism as it was practiced did not succeed: instead, it was blended with their traditional crafts and materials. The Stockholm Exhibition of 1930 highlighted the nature of functionalism in the Scandinavian countries. Although this exhibition was based on modernist idea, it was intended to present “Better Things for Everyday Life,” which the Swedish arts and crafts society had advocated. This revealed the need for beauty, mass production, and low-cost items for people’s daily use.

In Finland, furniture designing was not an independent profession in the 1920s. Even large furniture companies used foreign designers, though at times a few pieces were designed by the factory owners themselves. After the late 1920s, however, the situation gradually changed and architects began to enter the field. Exhibitions were held one after another to display new furniture designs or new housing styles.

Aalto designed not only buildings, but also furniture: and he played a leading role in this new functionalism. However, he did not accept it at face value and searched for his own version.

**Functionalism and humanizing Aalto’s furniture designs**

Aalto designed several furniture patterns. Especially from the late 1920s to 1940s, he designed a number of wooden pieces. These works are still sold today at Artek, which was established in 1935 by Aalto and his wife and another couple. This period and the works he produced had a deep impact on Aalto’s later design activity. If we conduct an overview of his designs, we find three important points that reveal his essential design concept.

In 1929, he exhibited a chair called *Folk Senna* [fig. 1] at a furniture exhibition in Turku. Its design was based on that of another chair called *Senna* by Erik Gunnar Asplund, which was exhibited at the International Exposition of Modern Industrial and Decorative Arts held in Paris in 1925. Its gently curving form, matching the shape of the human body, made it the first of its kind. This curved form was also used in Aalto’s famous *Paimio Chair*. However, *Folk Senna* was not comfortable when sitting upright and was not suitable for mass production.

The next important change occurred in 1930, with the design of a chair called the *Hybrid* [fig. 2], which used metal pipes for the legs. The spring of the chair, like Marcel Breuer’s *Wassily* chair with a wooden seat, enabled comfortable sitting and the metal pipes were suitable for mass production. However, Aalto immediately thought about replacing the metal pipe legs with wooden ones. That is, he felt that it was better to use wooden legs if the spring could be kept the same, because wood is visually more pleasing and comforting to the touch than a cold metal pipe.

In 1933, these changes gave rise to the famous feature called the *Aalto Leg* [fig. 3]. A feature of this leg was that it took into account the wood fiber’s direction when bending the birch that was used [fig. 4]. Aalto considered this leg ideal from both a functional and aesthetic point of view and therefore considered it as an order of architecture. Thus, Aalto’s furniture developed to satisfy all needs and cover practical problems such as cost and standards, comfort, and aesthetic appeal. Aalto was influenced by functionalism, but immediately he began to create his own style by using wood, which took into account function, human physiology, and aesthetic needs.
Aalto blended traditional wooden material from his home country with new functionalism. Thus, he translated modernism principles into the language of the Finnish tradition of materials. He explained that this attempt succeeded as a result of play, and suggested play had meaning and importance.

**Aalto’s experimentation: The role of play**

Aalto held several exhibitions of his furniture designs and received high praise. For example, at the Nordic Housing Fair in 1932, Arttu Brummer-Korvenkontio, a respected interior architect and resident critic for Domus magazine, esteemed Aalto’s understanding of the nature of plywood and how his furniture suited the mind-set of the people of that era. In another case, Sigfried Giedion praised Aalto’s vent plywood for its form and flexibility.

These evaluations were the fruit of Aalto’s experimentation with wood. When he started designing furniture, he used birch wood, which was cheaper than beech in Finland, to make plywood furniture. In 1929, Aalto became acquainted with furniture maker Otto Korhonen (1884-1935), whose knowledge of plywood helped him begin his experimentation with the material, leading to furniture designs using birch wood.

This form of experimentation on materials was suggested by László Moholy-Nagy (1895-1946), who taught at Bauhaus. Moholy-Nagy emphasized the importance of using various materials to experiment on form, tactile sensation, surface treatment, and others. His thoughts on experimentation may have had a considerable influence on Aalto.

At his own exhibitions, Aalto presented wooden statues alongside his furniture [fig. 5]. As Philip Morton Shand stated, these statues played a role in making people realize that Aalto had come to understand the nature of wood through experimentation.

However, this was not enough, because not all of these forms and statues could be put to practical use. For example, the statue in 1947 [fig. 6] was made by putting birch sticks into a mold. However, this was not a useful technique, because the material fell apart according to the direction in which each fiber was molded. Aalto, however, explained that it was not an issue whether these statues were useful as furniture or architectural decorations, because they were only play. At an exhibition in Stockholm in 1954, he exhibited his furniture, light fixtures, textiles, and wooden statues. He explained:

> It is my firm belief that this preliminary laboratory phase should be as free as possible, often actually totally free from utilitarian ends, for the desired results to be attained. In this exhibition, I have included some of my “experimental toys,” some of which never led to any practically viable architectural details, remaining on the level of mere play. (Aalto, ‘The constructive form exhibition in Stockholm, 1954’, 1954, Shildt [ed.], *Alvar Aalto in his own words*, 1998, p. 258)

Thus, his wooden statues were considered meaningful not because of their practical applications, but their non-practical ones: they were examples of mere play. His experiment related to play: then, what is play?

As mentioned above, Aalto noticed that he shared the idea of play with Hirn. Hirn, the Finnish aesthetcian, published his most famous work, *The Origins of Art*, in 1900. In this, he explained the relation between play and art as advocated by Friedrich von Schiller and Karl Groos. Hirn stated:

> Play and art have indeed many important characteristics in common. Neither of them has any
immediate practical utility, but both of them do nevertheless serve some of the fundamental needs of life. All art, therefore, can in a certain sense be called play. (Hirn, 1900, p. 28)

Here he points out that both play and art lack any practical utility, and this is their common nature; however, both of them can satisfy humans’ fundamental need for pleasure. After this work, in 1916, Hirn published Barnlek and furthermore his research on play. In a chapter about the circus, Hirn described that it is the acrobat’s performance that brings spectators in and stimulates more senses than any other type of play, because the acrobat’s mentality is perfectly irrational, unconscious, and reflective. He emphasized that the mind is free from rational calculation and conscious effort. If these calculations and efforts become a part of an acrobat’s performance, his motion will stop.

Hirn considered this mind-set as the heart of play: and indicated it can provide artistic inspiration. He stated that the body, nerves, and senses are all inspired together in the mentality that is located in play: “In the literal sense, thinking and reflecting are deadly for acrobats, as they are in the figurative sense for poets and artists” (Hirn, 1916/1926, p. 215). Hirn emphasized that although technical training is absolutely essential for an acrobat, the vital factor is absorption.

Thus, the significance of play can be said to lie in its freedom from practical goals or utility. Aalto’s argument for not centering his designs from a rational and technical standpoint seems to have been influenced by Hirn’s play theory and forms the basis of his design thesis.

As seen above, experimentation was essential in helping Aalto apply traditional materials to his new functional style. However, Aalto emphasized playing over experimenting. He said: “Thus, we must combine serious laboratory work with the mentality of play, or vice versa” (Aalto, ‘Experimental house at Muuratsalo’, 1953, Shildt [ed.], Alvar Aalto in his own words, 1998, p. 234). Although an experimenting is related to using the right technique toward achieving the actual goal, he believed dealing with materials as a toy guides us to discover much more things.

Aalto’s case shows that when we want to achieve a practical goal, we must free ourselves from actual goals: this is how to find the solution. The wooden statues exhibited along with his furniture embodied the role of play in his design work.

Conclusion

Scandinavian countries blended their own identities with modernism, creating what is sometimes called Scandinavian functionalism. Alvar Aalto was a significant figure in the Finnish version of this: and he emphasized that we must believe in the importance of play in the new functional age.

Through an analysis of his furniture design, I showed his ideal of associating traditional materials with new functional value. His designs were based on satisfying both functional and human needs. To accomplish this, experiments on materials were essential.

It can be said that the fruits of Aalto’s furniture work were supported by the idea of play. He noticed the importance of connecting the mentality of play with experimentation. He dealt with materials in a free state of mind: that is, he played with wood materials. Although this design process seems Aalto’s unique one, we can see his suggestive idea. Being influenced by Hirn’s play theory, Aalto believed that we must be free from actual goals if we want to achieve practical goals; we must have the mind-set of a child at play.

References

Biographical note

Mayu Kamamoto was received the B.A degree in aesthetics from Osaka University, Osaka, Japan, in 2015. She is now a master course student of Osaka University. Her research interest includes the history of architecture and design in Finland.
Phantasmagoria: Ghostly entertainment of the Victorian Britain
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Abstract
Phantasmagoria is an early projection show using an optical instrument called a magic lantern. Brought to Britain from France in 1801, it amused spectators by summoning the spirits of absent people, including both the dead and the living. Its form gradually changed into educational amusement after it came to Britain. However, with the advent of spiritualism, its mysterious nature was re-discovered in the form of what was called ‘Pepper’s Ghost’. Phantasmagoria was reborn in Britain as a purely ghostly entertainment, dealing only with spirits of the dead, because of the mixture of the two notions brought from France and the United States. This paper aims to shed light on the role that phantasmagoria played in Britain during the Victorian period, how it changed, and why. Through observing the transnational history of this particular form of entertainment, we can reveal a new relationship between the representations of science and superstitions.

Keywords
Phantasmagoria, spiritualism, spectacle, ghosts, the Victorian Britain, superstitions

Introduction
Humans have been mesmerized by lights since ancient times. Handling lights was considered a deed conspiring with magic or witchcraft until the sixteenth century, owing to its sanctified appearance; thus, some performers were put in danger of persecution. At that time, most people, including aristocrats, were not scientifically educated, because science itself was in an early stage of development. However, the flourishing thought of the Enlightenment in the eighteenth century altered the situation. Entering the age of reason, people gradually came to regard illusions as worthy of scientific examination. That is, they learned to show their interests in light itself from a seemingly scientific, or seemingly logical perspective.

In that vein, many optical instruments were invented and improved, and they were introduced all over Europe in the eighteenth century. Although the complicated details have prevented recent research from verifying the origins, it is certain that Europeans at that time had a great deal of interests in optical illusions and invented one after another. Among them, the illusion that especially achieved tremendous popularity was phantasmagoria, an early projection show using an optical instrument called a ‘magic lantern’ (or ‘phantasmagoria lantern’). Of course, its fame reached England. By the Victorian era, phantasmagoria became one of the most successful shows, and the spirit of Victorian society was greatly influenced by contemporary optical shows (Oppenheim, 1988, p.25).

Phantasmagoria parallels the social change of the age. In Victorian Britain, ghosts came to open up new possibilities for representing the era, in which a scientific education was required for a person to be an exemplary gentleman or gentlewoman. From a novel entertainment to a tool of moral or scientific education, the face of phantasmagoria had changed corresponding to social roles. However, there is no research into the Victorian spirit in phantasmagoria’s transition. Even the research referred to in this paper only makes references of its achievements that elucidated the contents of the shows’ performances; in other words, the Victorian mentality in phantasmagoria requires further study.

This paper aims to propose a new relationship between science and superstitions, and to examine the role of ghosts in phantasmagoria. Taking ghosts as a case study, we focus on how French phantasmagoria became a tool of scientific enlightenment in Victorian Britain, and was transformed by American spiritualism.
Integrating three notions derived from each country into one, we show that phantasmagoria came to play a role in giving advanced knowledge to people and society. It shows us an actual power balance of these two polarised ideas at the time. The moral and rational dimensions supported by science were highly appreciated.

Development of Phantasmagoria: from France to Britain

Popularized as a novel entertainment in the eighteenth-century France, phantasmagoria spread all over the Europe. On account of its widespread nature and transformation, we first need to touch on two lanternists who performed in Paris and the traits of their phantasmagoria. Paul Philidor (also known as Paul de Philipsthal), a German performer who held phantasmagorias in Paris for the first time, and Étienne-Gaspard Robert (also known as Étienne Robertson, his stage name), a Belgian lanternist, contributed to its great success as entertainment.

Phantasmagoria in Paris was conducted by Philidor in 1792 for the first time, and was enriched as optical entertainment by Robertson. The early phantasmagoria, performed by them and their contemporaries, allowed spectators to enjoy the ghosts of the dead, living, or fictional characters, irrespective of their life, death, or reality. The shows were generally exhibited in a room or theatre of about twenty meters by seven, with a six-meter screen consisting of a curtain and mirror, as in Figure.1. Spectators, gathered in the darkened space, were frightened by the figures of a ghost and skeleton projected onto the big screen. We need to refer to the diary of François Martin Poulter-Delmotte, who joined Robertson’s phantasmagoria show held on the 24th March, 1798. Delmotte’s record vividly described the first meeting with Robertson, and the prologue, delivered by himself, claiming that he used no fraud and could display any ghost whom spectators asked him to summon in the phantasmagoria. Incidentally, when another spectator, joining in the same show, asked him to summon Louis XVI of France, he declined, saying that he had forgotten the formula to summon the King (Iwamoto, 2006, p.42-45).

All sorts of absent people, including living celebrities, were projected in French phantasmagoria to amuse spectators, though it sometimes failed due to lanternists’ intended direction to forget how to summon a certain character; for there was a precedent that Philidor was once ‘arrested and taken to the prison’, as Marie Tussaud’s biography shows, for projecting Louis XVI’s ascension to heaven, though he was never intended to let him ascend (Heard, 2006, p.83).

In October, 1801, Paul Philidor brought phantasmagoria to Britain and started to give performances there. The first newspaper article in which phantasmagoria appears is the Morning Post on the 29th October, 1801:

The Grand Cabinet of Optical and Mechanical Effects: in which will be produced, the phantoms or apparitions of the dead or absent, in a way more completely illusive than has ever been offered to the eye on a theatre, as the several objects freely originate in the air, and unfold themselves under various forms and sizes, such as imagination alone has hitherto painted them, occasionally amusing the figure, and most perfect resemblance of the heroes, and other distinguished characters, of past and present times (‘Novel Exhibition’, 1801, p.42).

As this article suggests, phantasmagoria as entertainment remained in Britain. In the same advertisement, Philidor
was introduced by his Frenchman-like name, Paul de Phillipsthal. The uses of foreign names are commonly seen in the Victorian era to give readers a good impression. In reality, it was frequently carried out by the Victorians to apply French-sounding name to dishes, expecting to make a favourable impression (Onozuka, 2012, p.124). Likewise, it is possible that phantasmagoria was brought to Britain intentionally to be represented as French entertainment, and it was agreeable to push its Frenchness. The early phantasmagoria in Britain, its Frenchness contributing to the ghostly nature of the entertainment, broadly spread from London to every region of the country.

**Assimilation in the Victorian society**

Frenchness in phantasmagoria, however, gradually weakened as time passed. The slides connected with superstitious creatures, including ghosts, have been almost completely excluded from the list in a contemporary book (Fun for Winter Evenings, 1833). In the background of this disappearance is the social currency of being reluctant to discuss unintelligent things openly.

> It is very unwise to terrify children…. The design of this little work is to benefit the rising race, by shewing how easily we may be deceived by appearances, and that what may be thought to be supernatural objects are not so (W. Chapman, 1828, p.5).

The possible reason why the author omitted ghosts from the list of phantasmagoria slides is indicated in the quotation above. Even though phantasmagoria was intended as amusement, ghosts and other monsters terrifying children was presumably unacceptable in ‘respectable’ Victorian society. To make the show morally agreeable, the programmes apart from superstitious elements had to be openly advertised.

The styles and contents of phantasmagoria kept changing around the 1850s, and were adapted to Victorian society, where training people in higher morality was regarded as a duty. A contemporary work clearly refers to this change.

> The Magic Lantern, which was formerly used merely to amuse children, by the exhibition of miserable caricatures and grotesque figures, has of late years amused a different character, by being adopted to the representation of subjects of Natural History, Botanical and Astronomical Diagrams, the Costume of different countries, &c, &c (A Companion, 1855, p.54).

Judging from many slides categorised as ‘Mammalia’ and ‘Portraits of the Kings and Queens of England’ introduced in this work, it becomes clear that phantasmagoria had been confined to the academic sphere until the 1850s. Compared with the eighteenth century, in which it was treated as a subject of study, we have to note that it was given an active role in people’s education. What phantasmagoria began to contribute to at this point was social progress, and progress, growth, and increase in knowledge was defined as modernisation (Charlton and Andras, 2003, p.4). Phantasmagoria thus gradually symbolised modernisation from this point. The programmes terrifying children were completely deleted from the list, and themes that were instructive to children and adults were thought to be appropriate instead. What we defined as Frenchness in phantasmagoria was, at this moment, overwritten by Victorian didacticism.

In connection with that, we need to consider two significant events that happened in phantasmagoria of the day: the price reduction and the introduction of the machine itself into every home. The popularity of phantasmagoria led to many inventions and improvements to magic lanterns and their slides. While it had cost 2 shillings to join in one two-hour show in 1801 (‘Novel Exhibition’, 1801, p.42), Victorians around the 1850s could buy one slide from 2 shillings (A Companion, 1850, p.22) and a magic lantern from 2 pence 5 shillings (The Magic Lantern, 1865), and enjoy it whenever they pleased. Consequently, this allowed more than middle-class families to afford to enjoy their favourite shows in their own houses, and resulted in the active publication of many how-to books for the beginners. Directions were provided for these beginners to display the phantasmagoria and to give effective motion to the projected figure as shown in Figure 2 (A Companion, 1850, pp.60-65).

This domestication of phantasmagoria also owes a great deal to the activities by the Royal Polytechnic Institution (RPI). The RPI was an association of scientists established by the scientist, Sir George Cayley, in 1838 and aimed to demonstrate and publicise the latest technologies and inventions. Phantasmagoria was frequently displayed, and the mechanism of its effect scientifically explained, as part of its activities for the public. Phantasmagoria’s inclusion in the science lectures at RPI, phantasmagoria effected its entrance into the academic field.

**Pepper’s Ghost and American Influence after the 1860s**

Those who supported RPI as the home of phantasmagoria were Henry Dircks and John Henry Pepper. Henry Dircks
was a civil technician who performed phantasmagoria at the RPI in the 1860s, based on his idea of a new style of show. His performance, called ‘Diricksian Phantasmagoria’, attracted many Victorians because of its novelty; however, his show ‘would have required an entire specially-constructed auditorium, and even then could only be witnessed by a small number of people in an upper gallery during the hours of daylight’ (Heard, 2006, p.229).

The improved version of Dirck’s device was Pepper’s Ghost. The system was reinvented by John Henry Pepper, a well-known chemist, though he only changed the angle of the glass plate used for Dircksian Phantasmagoria (Heard, 2006, p.229). At this point, Pepper’s Ghost should also be included in the history of phantasmagoria, even though it was not referred to by the word ‘phantasmagoria’. Figure 3 shows the exhibition of ghosts in Pepper’s show.

Pepper’s Ghost, as a new generation of phantasmagoria, meant a great change in its style. It can be said that phantasmagoria, which turned into instructive entertainment for society and contributed to the people’s moral training, reacquired a very strong superstitious aspect, with the word ‘ghost’ as a part of its title. Still, Pepper’s Ghost itself actually retained the role that phantasmagoria took after the 1820s. Pepper had ‘never pretended that his ghosts were anything but illusions – as some have pointed out, a refreshing change for a time when mediums abounded who insisted that their trickery was real’ (Taylor, n.d.). Phantasmagoria was involved in the very situation that should be called ‘fight ghost with ghost’. At the same time, the range of topics that phantasmagoria handled was confined to spirits of the dead by the time it was reinvented as Pepper’s Ghost, while its early form had included all sort of spirits. That is to say, ghosts themselves, which had been deleted from the central stage of the entertainment, were brought back to life, being entrusted with the mission scientifically to educate Victorian citizens.

We can conclude that phantasmagoria turned from a superstitious amusement into a scientifically and morally instructive one. In connection with that, the ghost was also given a new meaning as an artificially generated tool for scientific education. Because of the birth of Pepper’s ghost, both phantasmagoria and ghosts are conjoined in the flow of modernisation.

The Influence of Spiritualism

As discussed above, there were various inventions and improvements brought to phantasmagoria from its establishment as a ghostly entertainment in eighteenth-century France to its transformation into the form of Pepper’s Ghost in Victorian Britain. Through its history, responding to the needs of Victorian society, phantasmagoria’s role transformed from mere ghostly entertainment into a way of advancing civilisation. This change should be attributed to the desire to improve corrupted Victorian British society, for it was thought at that time that much education was needed to maintain their strong empire by training acceptable citizens.

In that situation, there is an important social context to the reason why phantasmagoria regained its ghostly character through its reinvention as Pepper’s Ghost. It is stated that ‘the reason for Dircks’ renewed activity may well have been the sudden revival of interest in ghosts, or to be more exact, ghost-raising activity that had originated in America in 1848’ (Heard, 2006, p.229). The idea for having connections with dead people through spiritual interactions had been introduced to England by 1850. Although its superstitious character created many controversies over authenticity amongst its contemporaries, a new kind of belief ‘became part of Victorian subculture with its mediums, specialist newspapers… private and public séances’ in the 1860s (Diniejko, 2013). These situations clarify phantasmagoria’s two-faced and transnational dimensions. With the advent of spiritualism, the instructiveness of phantasmagoria mingled with the American idea, and came to take on a strong superstitious aspect.

Phantasmagoria’s change shows that the Victorian educational and scientific systems were supported by superstitions coming from the US. That is, two positions coexisted in phantasmagoria. From the educational point of view, it worked as a countermeasure to the entertainment’s taking advantage of spreading unscientific beliefs in supernatural power. However, it must be noted that it also played a supporting role for contemporary science, judging from the example of Pepper’s ghost. The change and truth of phantasmagoria reveals that superstition secretly bolstered science, while science was prone to reflect on superstition. In phantasmagoria and its ghosts were the signs of modernisation combined with Victorian pragmatism.
Conclusion

Phantasmagoria had transformed into a symbol of the Victorian contradiction, transcending the borders between France, America, and Britain. Established in France as a ghostly entertainment dealing with spirits of absent people, it was introduced to Victorian Britain by Paul dePhilipsthal, and gradually regained its instructive aspect. Although its horror was completely lost in the 1850s, when Pepper’s Ghost was created by Henry Dircks and John Henry Pepper, it came to hold a more obvious ghostly essence, and was recovered as a tool to fight ghost with ghost. Conversely, the actual reason why the purely ghostly educational tool was invented was that the Victorians were keenly interested in, so to speak, the religious science called spiritualism, the American-born idea for scientifically understanding the dead. The two-sidedness of phantasmagoria shows that Victorian science actually borrowed the authority and popularity of superstitious beliefs. The entertaining character established in France was conveyed to Victorian Britain, and was integrated with the contemporary new sciences to become a purely ghostly entertainment.

Fermenting Euro-American ideas in the Victorian Britain, phantasmagoria at last took on a role in modernisation. The mixture of three conceptions, derived from the different lands and periods, also revealed the secret attitude of Victorian science towards so-called superstitions: that it took advantage of the popular spiritual theory called spiritualism. Contrary to the conventional view, these were not always polarised and confronting each other. Phantasmagoria and its ghosts came to symbolise a mutually supporting system between science and superstition, and brought modernisation to Victorian society.

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Biographical note

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Spatializing design history: Considerations on the use of maps for studies on print culture

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Abstract
In the last decades, there has been a growing interest in the use of geographic information for historical research. Parallel to that, there has also been an increasing interest for data visualization as an aspect of information design, leading to a significant number of studies and developments in the field of cartographic design. The main argument of this essay is that historical GIS and spatial history are relevant approaches for design history. This is demonstrated with examples of research on the history of typography and print that benefited from the use of analogical and digital maps.

Keywords
Graphic design, design history, graphic memory, typography, spatial history, historical GIS

Introduction
Since the 1980's, as part of what has been described as the ‘spatial turn’ in the humanities, a growing interest in applying spatial data and geographic information to studies in various fields, and in particular to historical research, has been recorded by various authors (among them, Urry 1990, Warf & Arias 2008, Withers 2009). According to Knowles (2008, p. 4), the French Annales school, and in particular Fernand Braudel’s idea of *geohistoire*, along with Paul Carter’s concept of ‘spatial history’ (Carter 1987) are some of the main precursors of this line of inquiry, which eventually gave rise to current historical GIS. In a more recent definition of spatial history, White (2010) mentions Henri Lefebvre and William Cronon as authors who contributed to the idea of considering space as central to understanding history, but describe them as exceptions within colleagues that ‘still routinely write about political change, social change, class relations, gender relations, cultural change as if the spatial dimensions of these issues matter little if at all’ (White 2010, p. 2).

Geographic Information Systems (GIS) are computer systems developed to gather, organize and visually render spatial data (for a more detailed and nuanced definition, see Maguire 1991). Although geo-referenced data is of course central to GIS databases, it can be, and very often is, combined with other kinds of information. In the case of historical GIS, or of systems intended to deal with dynamic events, spatial data is combined with temporal data and to data related to system elements’ attributes and relationships (Peuquet 1994, Andrienko et al 2003, Pérez Asensio et al 2012). Examples of historical GIS include detailed studies of very specific areas in short periods of time, like the Battle of Gettysburg, Pennsylvania in July 1863, and very broad infrastructural projects like the China Historical GIS — a system developed to combine spatial and temporal data related to the territory and population of China from 222 BC to 1911 AD (both described in Knowles 2008).

Within the field of information design, the interest for dynamic and interactive maps has also been growing since the 1980’s, along with the development of digital tools and communication networks. Two whole chapters of a recent compendium on infographics (Meirelles 2013) are dedicated to maps and ‘spatio-temporal’ structures, and examples of ‘relational’ and ‘textual’ visual structures based on geographic representations are highlighted in other chapters. Many examples of how designers and artists have approached the quest of mapping territories and networks in physical and virtual space, including locative media applications, navigation systems, dynamic diagrams and computer animations have been gathered in Abrams & Hall anthology *Else/where: mapping* (Abrams & Hall 2006).
In what regards possible contributions between the fields of geography, information design and design history, an early argument in favour of collaboration has been put forward by Woodward (1985). According to the author, ‘maps are among the most intensely designed graphic products of man’s material culture. […] It would be curious, indeed, if the study of maps and their design could not shed some light on the field of design history in a real, as well as metaphorical, sense’ (Woodward 1985, p. 69). Despite the traditional use of cartography in fields like architecture, landscape or urban design, a specific argument for the use of maps and mapping technologies in design history research —for spatializing design history, in the sense suggested here—, has not yet been done.

**Spatializing print**

If we consider print culture and the history of the book as part of (graphic) design history, the most famous and influential demonstration of the relevance of maps for the understanding of cultural, economic, social, and technological change within the field can be found in Lucien Febvre and Henri-Jean Martin’s *L’apparition du livre* (1958). Building on the pioneer work of François de Dainville on book publishing in France between 1764 and 1945 (Bousquet-Bressolier 2002, pp. 28–31), Febvre and Martin base their discussion of the geography of the book and of publishing on two maps, showing the location of printing offices in Europe up to 1500, which are used as visual evidence for their arguments on the spread of printing. In a recent literature review on the geography of the book, Keighren (2013) calls for a wider approach, that would not be limited, as ‘much (although not all) extant scholarship’, on ‘the printed (non-fiction) book’ (p. 752).

Much of what is described as studies on print culture, and even on the history of print or of typography, are in fact studies on book production, based on the point of view of editors and authors. As argued elsewhere (Farias 2014), the study of print culture should not be restricted to books or to graphic artefacts produced with letterpress —and therefore should include all kinds of other printed things, like lithographed sheet music, silk-screened posters and photocopied fanzines. Also, taken as an approach to design history, it is not sufficient to consider printed artefacts as abstract entities that circulate between authors, editors and readers —material and formal aspects have to be taken into account too.

Twyman’s directory of London lithographic printers (Twyman 1976) is, in this sense, a pioneering effort in the visualization of historical data related to print culture. The growth in number of printers in the first half of the nineteenth century is shown in two diagrams, combining a bar chart and a more detailed timeline of a critical period. A series of maps in the last pages of the book, based on old city plans, shows where the printing shops were located, and also how the geographic distribution of printers evolved over time. The spatialization of the otherwise purely textual information serves as a basis for the author’s interpretation of historical data: maps clearly show a tendency for printer’s addresses to move from Westminster towards the City, while the kind of job the majority of them specialized in also changed, from artistic to commercial. The relative frequency in the change of address of specific printers, and the occasional occupation of the same premise by more than one printer, are other spatio-temporal data observed by Twyman that, although not visually rendered, provide information on the size and working habits of nineteenth century lithographic printers.
In their review of the use of GIS for studies on print culture, MacDonald and Black (2000) correctly start by characterizing print culture in a wide sense, but all the cases they discuss are based on book (or newspaper and book) history datasets. One of the examples discussed by the authors is the Historical Atlas of Canada, a publication that, in its current online version, includes interactive maps showing information on local extant libraries (date of foundation, location, number of volumes) and published newspapers (location, circulation, political viewpoint, spread) from 1752 to 1900.

According to MacDonald and Black (2000, pp. 513-515), GIS technologies allow for the visualization and analysis of wide and complex datasets, providing support for 5 kinds of queries: location (attributes of a given place), condition (locations fulfilling certain conditions), trends (changes in attributes over time), patterns (spatial distribution) and projections or models (potential patterns based in past data). As for the types of research endeavour facilitated by the use of GIS, the authors list the “simple” mapping of individual factors; the analysis and subsequent mapping of interrelationships between and among several factors from a single database; and the analysis and report generation (with or without mapping) of information drawn from disparate source databases (MacDonald and Black 2000, p. 517).

While an analogical or printed map serves well as a piece of evidence within a printed or otherwise static text, interactive maps and GIS are better as heuristic tools and for testing theories and assumptions. Examples of the first are the maps used by Febvre & Martin (1958, pp. 219, 295) to ground their interpretation of the spread of print in Europe. Precise as they might be, they do not allow for experiments or tests unless one redraws them. The interactive map available in the Atlas of Early Printing, on the other hand, allows for many different visualizations, combining date (from 1940 to 1500), the location of printing shops, universities, paper mills, fairs, conflicts and trade routes. Because one of the sources of data regarding the spread of printing in the Atlas of Early Printing is Febvre & Martin (1958), it is possible to obtain, for example, a map comparable to the French authors’ Carte no.2 (figure 1).

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1 Available at <http://www.historicalatlas.ca/website/hacolp/national_perspectives/society/UNIT_35/index.htm> [8 Feb 2016].
2 The Atlas of Early Printing was created by Greg Prickman, Head of Special Collections & University Archives at the University of Iowa Libraries (USA), and made available in 2013 at <http://atlas.lib.uiowa.edu/> [8 Feb 2016].
Once the *Atlas of Early Printing* does not have visual variations for locations related to different periods of time, the representation of the whole era results homogeneous and less informative (figure 2). The comparison between specific periods, however, becomes clearer when examined separately (figure 3). Combining the location of printing shops with data regarding the output of each location, drawn from the British Library *Incunabula Short Title Catalogue*, it is possible to observe that while the overall number of printing shops decreased, the output of some of them significantly increased in the last decade of the fifteenth century (figure 4).

Interactive maps and GIS are frequently conceived with several layers of information (Gregory 2005, p. 19), by means of which spatial and temporal data are combined with data related to element's attributes and relationships between elements. Element's attributes, in most current print culture GIS, are usually given in written verbal language only. In the case of the *Atlas of Early Printing*, by clicking on each dot in the map we have access to strictly textual information on the printing shops, universities, paper mills, fairs, and conflicts they refer to. The same is true for the public libraries and newspapers in the *Historical Atlas of Canada* ‘The Printed Word, 1752-1900’ interactive map. As for relationships between elements, ‘The Printed Word’ map includes the visualization of the ‘spread of newspapers’, where ‘transplants’ of newspapers from one city to another are represented by oriented arrows (figure 5).

From the point of view of graphic design history, as well as for the concerns of analytical bibliography, however, some key questions remain: What do those books, newspapers and printed outputs looked like? What kinds of letters and images do they used? How were those printed artefacts configured, visually and materially?

The *Bulgarian book history from the Liberation to Independence of Bulgaria (1878-1908)* seems to be one of the few print culture GIS initiatives so far to include visual information on the published material — in this case, images of title pages of Bulgarian books, associated with a timeline (although not with the interactive map itself). Another initiative is the Geocontexting the *Printed World 1450-1800* GIS, an ongoing project that intends to connect maps and information on early (and so far only European) printers with a huge collection of initials and ornaments used by them. The reconstruction of the typographic repertoire of nineteenth century São Paulo city printers is the focus of an ongoing research coordinated by the authors of this paper, and should result in a website that combines geo-referenced data (printing shop locations) with information about printers and their outputs (newspapers, books, almanacs and ephemera).

Plans for creating a comprehensive database of typographic elements are discussed by Dijstelberge (1998), and an example of the procedures adopted for identifying and reconstructing part of the typographic repertoire of a nineteenth century São Paulo city printer are presented in Farias & Onoda (2015). A database such as that envisioned by Dijstelberge (1998) would facilitate the comparisons between different printers and type founders repertoires carried out by Farias & Onoda (2015), and its spatialization would provide support for arguments about of the circulation of typeforms such as those suggested in Farias et al (2012, pp. 509-510) and Farias & Onoda (2015, p. 891). Initiatives such as these should build up a more detailed and complex history of print and visual culture, which might eventually provide new knowledge regarding the transnational networks created by the circulation of typefaces and typographic styles.

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3 Result of a research project coordinated by Vasil Zagorov, a professor and Head of Library Studies Department at the University of Library Studies and Information Technologies in Sofia (Bulgaria), available at <https://gbbookhistory.unibit.bg/en> [8 Feb 2016].

4 A preview of this project, developed by Paul Dijstelberge, from the Universiteit van Amsterdam (Netherlands), is available at <http://arkyves.org/view/geocontext> [8 Feb 2016].

5 The current version of the site is available at <http://www.fau.usp.br/tipografiapaulistana/> [8 Feb 2016].

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![Fig. 5: The spread of newspapers in Canada (1752-1900) (‘The printed word, 1752-1900’, *Historical Atlas of Canada*)](image-url)
Discussion

Spatializing design history, by locating historical information in maps, in particular in digital and interactive maps, allows for the observation of patterns and trends that are otherwise difficult to detect, especially when dealing with large amounts of data. GIS technologies and digital maps dedicated to that should combine spatial and temporal data with element attributes rich enough to describe design artefacts and the agents involved in its production (an eventually also of its circulation and discard), as well as the relationships between those elements.

If historical GIS are to be relevant to design history and design studies, it is crucial that they include visual representations of the artefacts involved, besides the also relevant textual and numerical data. The absence visual data in the GIS dedicated to print culture presented above might be interpreted as research field bias (visual information might have seem to be secondary or of no importance for some researchers), but also as the result of a difficulty in dealing with images as data, or to have access to comprehensive and relevant image datasets.

In the case of print culture GIS, the dominance of books, in detriment of other printed matter, is certainly related to the difficulty of finding library collections that include anything other than books, and in particular archives that include ephemera like posters, packaging and catalogues. The incorporation of visual datasets generated by the growing digitalization of books and printed matter collections around the globe might be just a matter of time — and also, in some cases, of financial support. The level of detail and the resolution and size of those images will also have to be considered, depending on the task at hand. Minute observation of typefaces in small body sizes, for instance, require images in a resolution level much higher than the one needed for examining the overall typographic arrangement of a poster.

Finally, if we are to consider not only the production, but also the circulation and eventual discard of designed artefacts, better strategies for the visualization and analysis of connections between locations, and of changes in space through time must be devised. Although all maps in figures 1 to 5 above represent ‘the spread’ of printed documents (an event that involves changes in space through time), only one includes the visualization of the direction of such ‘spread’ by means of connections between locations (figure 5). The two others require the comparison of different patterns of locations distribution, something that demands cognitive effort of abstraction (figure 1), or practical effort of producing and comparing two different static images of an interactive map (figure 3).

In the concluding topic of ‘Using GIS for spatial and temporal analyses in print culture studies’, MacDonald & Black (2000) predicted that ‘macrostudies examining whole countries or analyses of the interplay of print culture factors in an international context [would] emerge when there are datasets of sufficient quantity and size to make it feasible to employ GIS’, and argued that until then the technology would be applied to microlevel cases, based on ‘relatively narrow geographic areas and time periods’ (MacDonald & Black 2000, p. 257-258).

More than 15 years after, if we agree on the need to achieve a better understanding of the transnational aspects of design history, the effort of creating consistent datasets for visualising and analysing spatio-temporal aspects of the field, even if just for microlevel cases, is still worthwhile. This effort should be combined with the best practices of data visualization, that design itself can provide.

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References


Biographical note

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Beech eating machine:
A new materialist critique of the Thonet no. 14 chair

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Abstract
This paper adopts a new materialist framework, developed from Deleuzian-Guattarian concepts of affect, to assess the socio-environmental relations of the Thonet No. 14 chair in forestry, industry, culture and labour. The hybridity of industry, forestry and human force with the chair’s materiality, operating by processes of sensation and perception, is examined in the context of manufacturing and consumption culture. The chair’s lightness, stiffness and strength, its experimental design and innovative use of steam power, is shown to have triggered production and consumption events with social and environmental consequences. Material expressions are framed as micropolitical affects that propagated into macropolitical fields via the sensory experience of the chair’s material conditions and forces, binding consumers and producers into patterns of behaviour. These are discussed in reference to cafe culture, lion taming, and the expansion of the Thonet empire – including their labour practices, use of proprietary currency and effect on European forestry. The value of this kind of new materialist inquiry to contemporary aspects of production and consumption is briefly speculated.

Keywords
Furniture design, affect, new materialism, Thonet, production, consumption

Introduction
One of the most successful consumer products of the nineteenth century, the Thonet No.14 chair (1859) (fig. 1) was the world’s first industrially produced bent-wood chair and the first mass-produced chair; selling by the millions (Rawsthorn, 2008) (Doick, 2009). The chair was designed for transport and local assembly; each chair comprises six pieces of wood and ten screws (fig. 2), that can be packed in a small shipping crate with enough parts to assemble 36 chairs (fig. 3) – now considered the first instance of ‘flat-packed’ furniture (Doick, 2009) (Miller, 2005: 285). The chair is recognised the world over, commonly associated with use in cafes and restaurants, and was influential to certain changes in society and industry during the late-nineteenth and early-twentieth centuries.

One of the most successful consumer products of the nineteenth century, the Thonet No.14 chair (1859) (fig. 1) was the world’s first industrially produced bent-wood chair and the first mass-produced chair; selling by the millions (Rawsthorn, 2008) (Doick, 2009). The chair was designed for transport and local assembly; each chair comprises six pieces of wood and ten screws (fig. 2), that can be packed in a small shipping crate with enough parts to assemble 36 chairs (fig. 3) – now considered the first instance of ‘flat-packed’ furniture (Doick, 2009) (Miller, 2005: 285). The chair is recognised the world over, commonly associated with use in cafes and restaurants, and was influential to certain changes in society and industry during the late-nineteenth and early-twentieth centuries.

A 2012 article for the New York Times by design critic Alice Rawsthorn introduced a relationship between the No. 14 chair and the philosophical concept of affect (Rawsthorn, 2012). A number of material aspects sensible in the chair are described; for example, the machine-assisted curvature of its wood, the discrete number of components and its light weight. Rawsthorn identified perceptions dependent on the expressions of these materialities, including robustness, strength, reliability and humanism, borne from its assembly-line precision and gentle, undecorated curvature (Rawsthorn, 2012). Rawsthorn described these expressions as affects. While noting that such expressions may spark or activate emotions in those who experience them, she nonetheless invoked the early distinction made by Baruch Spinoza (1632–1677) between affect and emotion, in which affect is distinguished...
by a “transformative” agency (Rawsthorn, 2012). It is this idea of transformative agency expressed in the chair’s affects upon society, culture and environment, that grounds the work of this paper within the theoretical framework of ‘new materialism’ developed by Jane Bennett (2010) and based on concepts of affect from Gilles Deleuze and Félix Guattari (1987, 1994).

The affect-based framework of new materialism lends itself to such inquiry because of its theoretical capacity to connect material, via sensation, to human and non-human experience (Deleuze and Guattari, 1994: 172–179). This is an inquiry that intends to uncover details of the transformative experiences potentialised by the No. 14 chair, including broader socio-ecological consequences within systems of production and consumption. The opportunity is to grasp the connection and movements of affects between production, consumption and ecological concerns simultaneously, rather than as discrete areas of investigation. This movement is not limited to human experience, but flows between non-human things as well, be they objects, things, systems or animals (Bennett, 2010: xiii–x). Deleuze and Guattari describe affects as human/non-human hybrids, “non-human becomings of man” (Deleuze and Guattari, 1994: 169) The consequence for design is that an object, such as a designed product, can activate a passage—a set of relations—between a user, consumer, or producer, and many other things, including ecological or cultural systems—via sensations in material. I will explain how the affects of the No. 14 chair transmit through material, modulated by designed features that have capacity to draw out form, structure and other sensory qualities, and in doing so, place humans in transformative relation with the world (Smith, 1996: 40–41).

For Jane Bennett, new materialist theorisation considers a vitalistic agency across all forms of matter and material—whether human, animal, plant, mineral or other—for the discovery of ecological and political interactions. This theorisation destabilises the anthropocentric analyses paradigmatic to Cartesianian frameworks and the conception of matter as inert (Bennett, 2010: x, xx, 21). Bennett believes that the traditional view of matter as inert may encourage the “earth destroying” practices of contemporary production and consumption, and that a converse view of matter as alive and active may foster improved ecological awareness (Bennett, 2010: ix). An
example of a new materialist analysis relevant to contemporary production and consumption of furniture is Tom Roberts’ research on the brand Ikea, that posits Ikea is a vast interrelated system “from petrochemicals to pine” with extensive ecological relations emergent and sensible within the design of their products and retail spaces (Roberts, 2012: 2526). In the following analysis, I likewise intend to show how a thread of affects flows between the No. 14 chair, as a material object, and its presence in human and environmental ecologies. This analysis is an act of following material qualities into systems of production, consumption and use.

### Analysis

The *No. 14* chair has certain expressions identified in the discourse. A Modernist interpretation is that its steam-bending manufacture expresses an ability to control nature, but also a tension between technology and nature (Gleining, 1998: 40). Straight sections of beech tree are manipulated via a machine-driven power – the heating of water to produce steam. This was a defining technology of the Industrial Revolution and, from around 1855, Michel Thonet used a custom-built steam engine in his factory to expedite production (fig. 4). A similar expression of captured, natural force is embodied in other steam-based inventions of the time, most notably the steam train and the steam ship. However, unlike steam trains and steam ships, the No. 14 chair was small, light and modest in price. Rawsthorn argues that the chair, being comfortable and friendly in contrast to the new noisy, smoky machines, helped make the Industrial Revolution palatable to society (Rawsthorn, 2008).

Steam power is therefore domesticated within the design of the chair, but nonetheless, its presence is still felt. Thonet chairs are made from solid square profiled sections of beech wood, softened by heat and pressure in steam ovens, attached temporarily to metal strips and bent in cast iron, hand-operated jigs (Vegesack, 1996: 32 & 65) (figs. 5 & 6). The square profiles are then sanded to become round. The form and structure of wooden material that arises from this manufacturing process accounts for a strong relationship to trees. Not because it is recognisable as being made out of wood, because that is typical to much wooden furniture, but because the curvature of its forms recalls the branches of a tree. A hybrid of chair and branch, the *No. 14* activates a non-human becoming and introduces a particular sensation – a perception of the forest – into a consumer product.

This can be clarified by examining the difference between a *No. 14* chair and other types of wooden chair in which a piece of timber is cut out of a tree and processed by straight saws, lathes, hand-carving or other subtractive production techniques. These techniques extract and isolate the timber from its origin within a tree. The timber that we touch on such chairs is perceivably the *internal* material of the tree – not necessarily something that connects directly to the sensory experience of a whole tree. Conversely, the pliability of the *No. 14* chair draws to mind the thinness and flexibility of young branches or saplings because the components recall whole branches shorn of surface bark and bent into shape (though this is not actually how they are made).

This perception develops from resemblance to common human experience; a familiarity with bending young tree branches through the experience of strolling in a forest or climbing trees as children, perhaps, or, at least, a familiarity with such things in picture books or film. The Thonet chair exerts this perception (it returns unchanged to the viewer at the moment of seeing the chair), but it also modulates that perception by sustaining the duration of the bend. The curves are held indefinitely. This is an affect – a force becoming sensible: a force of plasticity and permanency, or permanent curve, embedded in the chair.
It may be that the potency of this force in perception has diminished since the initial popularity of the chair in the 19th century, but recent incarnations of the chair, such as the Thonet 214K chair (figs. 7 & 8) works to renew this original expression of plasticity, as do some contemporary, experimental derivatives (figs. 9 & 10).

The sensible force of plasticity is the result of an affective hybridity; the consequence of the power of steam and industry bound within the material of the forest. The Thonet No. 14 is a forest-factory-chair hybrid. This expression of factory and forest has broader ecological ramifications, notably the culpability of the chair in environmental degradation. Rawsthorn views the chair through the prism of contemporary sustainability concerns, noting that the wood from early chairs was sourced from local forests and that factory tools were likewise locally produced (Rawsthorn, 2008), but at the time, during the first Industrial Revolution, natural resources were seen as being “immune to human activities” (McDonough, 2000). Alexander von Vegesack’s research reveals a pattern of Thonet factories depleting local resources and the company subsequently opening factories elsewhere. The first factory relocated because of the cost of transporting wood to Vienna down the Danube. The replacement factory in Koritschan was chosen because of its proximity to “virtually untouched” forests of beech in Moravia (Vegesack, 1996: 32). Three years later, that factory was producing 200 chairs a day and a shortage of wood prompted the opening of another factory fifty kilometres away, closer to new beech supplies. Six years later, yet another factory opened in Hungary, its location near “huge beech forests” – by which point, the two older factories had depleted their local resources (Vegesack, 1996: 32–36).

A new materialist inquiry does not give attribution of these events to human, managerial decisions, but looks for non-anthropomorphic, non-intentional, material flows and processes. It is not that the factories should be praised for using local resources, but that the factories, once hybridised with the forests, developed an agency to assert their hybridity, moving, like beech-eating machines, to locations that could feed their demand. This movement, an affect mediated process - the ‘feeding’ of a factory machine with wood – explicitly ignored national borders or boundaries of human design, and moved transnationally, guided by environmental conditions, forestry resources and waterways for the transport of wood. This is a transformative expression – the factory-machine, having been created by hybridisation with the materials of forest, expands by means of the forest.

This complicity in deforestation is sensible within the form of chair in the subjection of wood to the work of human and machine power. Just as this power moves in one direction to affect forest ecologies, it moves in another direction towards the consumer. It is sensible, in particular, in the use of the screws that lock curved wood components in place at the legs and seat. The wood is bent into shape by steam and industry, but it is not fully subjugated. A force of the forest preserves in the tendency of the wood to return straight and pull away over time, applying outwards force to the screws. This is considered normal and expected by Thonet, and paper labels are typically glued to the underside of the seat rim, advising the consumer to intermittently re-tighten the screws (fig. 11). That the screw is metal and made from machines is not what constitutes the affects of the factory within the chair, rather it is the force and action the screws apply to the chair to maintain its shape in use that reasserts the work of the factory. The screws maintain a presence of the factory-machine within the chair, however, it is incomplete without human labour. In use, consumers become bound to these forces by the act of intermittent re-tightening and in doing
so the chair's human-forest-machine hybridity preserves from production into consumption.

The use of screws in the No. 14 is also consequential to the globalisation of the chair and its success in the tropical Americas. Michel Thonet had discovered that the animal-based hide glues of his day were unsuited to the tropics. Shipments of his earlier chairs had delaminated and come apart. The simplification of the No. 14 design with its small number of components held together only by screws enabled the spread of the chair into the tropics, expanding Thonet's market (Vegesack, 1996: 30 & 65). While this story has been interpreted in the discourse as a sign of Michel Thonet's intelligence and intentionality, from a new materialist perspective it is better understood as an example of an environmental force, a climatic condition, acting back on the role of materials in the design of products – the kind of actant that Bennett argues have tremendous capacity to affect human conditions (Bennett, 2010: 9, 24–28). This climatic agency describes a zone of transition and intensification – temperate to subtropical to tropical – that acts dynamically and in disregard of human convention. While Thonet would have measured success by the opening of one national market after another in the Americas, a non-anthropocentric interpretation is that an act of tropical selection opened a new, climatographically defined flow of beech wood. Already selected for its tolerance to steam, the hybridity of beech wood with screws capacitates new zones of inhabitation. Such interpretations don't change any particular facts, but reframe the history of the chair in different conceptual language to gain alternative insight into the design of products and their interrelation with the environmental.

Regarding consumer use, the preservation of the machine-forest hybridity, mediated by the haptic and kinaesthetic senses, found expression in new human behaviours. Thonet's pioneering technologies mean that, when lifted and moved, the chair is preternaturally light, stiff and rigid. So much so, that it was put to unexpected uses in dance, theatre and performance. One novel application was its use in the circus to oppose animal force: the chair was considered light and resilient enough to be used in lion taming (figs. 12–14). Thonet chairs are held in one hand as a defensive shield, the four wooden legs working to confuse the senses of the lion (Beaty, in Witney, 1995: 39–40). The chair becomes a prosthetic, an extension of the lion tamer's body, that serves to increase their size and power to the senses of the animal. The chair must withstand the incursions of the animal, such as a paw swipe or bite (fig. 15). This circumstance indicates the potential of products to enter into affective relationships with other things, such as performing animals, for which they were never intended.

The use of the chair in lion taming was, however, rare, and its exceptional lightness and durability had far more impact in more conventional human affairs – particularly in cafe culture. Historians have noted that the chair was as important as electricity to the spread of the cafe culture across Europe in the late-nineteenth and early-twentieth centuries (Flitch 2006: 21). The chair is referenced in descriptions of famous European cafes of the kind that fostered intellectual trends and revolutionary society (Grafe and Bollerey, 2007: 134, 181). The chair has been praised for its ubiquity as a "classless" object of cafe culture, found in equal use in upmarket and downmarket establishments (Grafe and Bollerey, 2007: 39–40). While this cafe culture may have begun in Vienna, as with the spread of Thonet factories across European forests, the movement of the chair as a cafe-culture object was also transnationally spread throughout Europe.

From the point of view of the manufacturer, the relationship between the No. 14 and cafe culture is intentional and causal; in the late nineteenth century the company developed sophisticated marketing strategies targeting hospitality industries, including cafes, restaurants and theatres (Vegesack 1996: 41). From the perspective of an affect-based analysis, however, the material qualities of the chair, and the perceptions they potentialise, lay beyond the manufacturer's intention. A transformative agency of affect can be imagined in regard to cafe management and employees. For example, moving chairs up onto tables for floor cleaning, or in and out of cafes at opening and closing times, is made easier with light and strong furniture. Furthermore, the lightness of the chair makes it easy to for customers to move chairs around, to join other tables and revel in de-stratified seating arrangements. These affordances transmit affectively from the chair's material properties into the action of muscles moving and lifting. The bodily sensation at the point of contact between person and chair – the interactivity of forces (such as the weight of the chair meeting the kinaesthetic receptors within human muscle) – potentialise a set of behaviour-modulating perceptions. These triggered behaviours could be: deciding to extend cafe opening hours, talking to a stranger, or performing with a lion. The inclusion of the broader social or cultural consequences of these is the concern of micro- and macropolitics, a Deleuzian-Guattarian concept of affect. Micropolitics is the field of interactions at the level of the human body that take the form of "micro-shocks"; small shifts in perception and consciousness that potentialise the larger-scale social behaviours that is the subject of macropolitics (Massumi and McKim, 2009: 4–6) (Deleuze and Guattari 1987: 213–16). Thus, lightness and strength, perceptions of material qualities captured by the encounter of wood with steam and industry, activate a series of affective possibilities that convert the micro-
sensibilities of a lion tamer or cafe manager into macropolitical characteristics of American circus culture or class mobility within European cafe culture.

The consumer popularity of the chair is an example of what Betti Marenko understands as the epidemiological and “viral” like potential of affective movement in market systems (working from the concept of passionate interests developed by the 19th century sociologist Gabriel Tarde) (Marenko, 2010: 144-46). This is to examine material products as triggers that propagate affective fields with the capacity to bind consumers into patterns of behaviours (Marenko, 2010: 139). Affective fields also occur in production and, through engagement with consumption patterns, trigger imitative behaviours that give rise to macropolitical conditions. The intense energies invested into producing and reproducing the chair is one example of these imitative behaviours. By the early 1890s, more than 50 companies were producing similar furniture throughout Europe and North America (Harwood, 1994: 92). The largest competitor, Kohn, had themselves twelve factories and over 6000 workers by 1904. Despite vigorous competition, Thonet continued to expand as well, and their workforce is documented as 7,000 employees by 1913 (Kyriazidou and Pesendorfer, 1999: 145). The Thonet workforce was sufficiently large to support the creation of schools, housing estates and shops for employees and their families, all provided by the company (figs. 16–18).

The monopolistic conditions of this service, accentuated by the issue of wages in a proprietary currency for the purchase of company-supplied goods and services, made employees highly dependant. Vegesack describes it as the actions of an “autarkic empire” (Vegesack 1996: 37). Thonet pioneering the “American” system of assembly line production, in which components were standardised across different chair models to obtain production efficiencies – observable in period photographs of the Thonet factory (fig. 19) and in Martino Gamper’s contemporary derivative (fig. 20). – is consequential to this situation. Workers were segregated by task and became machine-like in their specialisation. The system of production was also extended into the supply chain, for example by building their own train lines to decrease reliance on rivers and waterways and more fully control the transport of forest resources. The flow of materials, from forests to machines, into components and products, became centrally planned and fixed. The human aspects of the process, the lives of workers, attuned to the factory machine by imitative behaviours within an affective field, likewise became fixed.

Implications for understanding contemporary conditions

A key illumination of subjecting the No. 14 chair to a new materialist inquiry is the indication that contemporary production and consumption scenarios can likely be understood as also developing from material expressions and affective movements. The example of the Thonet empire demonstrates the historical relationship between such material expressions and macro-scale social and industrial conditions – a set of relations through which a thread of affects can be traced, however unpredicted it may have been at the time. Expressions in the use and consumption of contemporary products can, and probably should, be linked to material aspects of production. For example, in the case of consumer electronic products, such as telecommunication and computational devices, manufacturing and production conditions can be interrogated in...
regard to the global material flows from which they emerge – mined African metals, Arabian oil-based polymers, Asian component assembly, etc. – and in consideration of how these material flows express or articulate within design and use. And vice versa: how does design or use of an electronic device trace back to the environmental or labour conditions from which it emerged? To do so may help discover new ways of examining contemporary threats to social, cultural or environmental ecologies that, rather than being considered the fault of others or a consequence of self-interest or intentional design, are better understood at broader and deeper systematic levels addressing material relations between humans, things and ecologies. Critical illuminations may be otherwise unknown if investigative frameworks remain overly anthropocentric or focused on human intentionality.

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References

Biographical note
Guy Keulemans is a multi-disciplinary designer, artist and researcher working across product design, graphics and installation. In his practice he produces critical objects informed by history, philosophy and experimental methodology. Major themes are repair, generative processes, and the environmental concerns of production and consumption.
Towards a creative economy: 
Design with cultural value as an income opportunity for developing countries

Florencia Adriasola / Universidad Diego Portales / Santiago / Chile

Abstract
This paper reflects on the role that Design plays in the success of local economies by promoting cultural and/or emotional values in their exports. Donald Norman and Bruno Latour’s theories will be discussed. Latin American economies are experiencing a tighter integration with Asia, based primarily on exports of finite natural resources; generating opportunities, but not without risks. The main case study is the Chilean Economy: flourishing but based on the export of raw materials, especially copper. China is its main buyer, making the countries vulnerable and dependent. Nevertheless, this market opportunity offers the chance to acquire capital to invest in other sectors and diversify industries; for instance, Creative Industries like Design can strengthen a country’s image, creating exports, which incorporate local narratives, generating protection for the land and rural populations. In sum, Design, can add emotional value to raw materials and expand the international market for regional design.

Keywords
Developing Economies, Cultural Values, Economic Dependency Latin America, Asia, Chile

Economic dependency on raw materials: Latin America-Asia

“Peripheral countries” have historically provided raw materials in a model that emerged in the sixteenth century. First were Spain and Portugal then the Dutch Republic, France and, England. This changed in the twentieth century when United States also participated by adding high-value in production. But this has moved towards a more complex integration in the last decades, incorporating high-end cognitive cultural activities in advanced economies in North America and Europe but that can be also found in Asia, Latin America and parts of Africa. These new leading sectors constitute strategic nodes in global networks, interconnected through flows of goods, services, knowledge and people. It is obviously hard to disentangle the web of causal factors behind this sea change in the world economy, but two interrelated factors can be singled out, namely technological change, which can be attributed to the Information and Communications Technology (ICT) revolution (Lambregts, B., Beerepoot, N., & Kloosterman, R., 2016).

“Peripheral countries” have always exported raw materials, but they now have the chance to integrate other market exchanges that bring other opportunities, if we think that economies that are only supported on raw materials face different risks. Bruno Latour (Philosopher, Anthropologist and Sociologist of Science) links psychology with economic growth; he believes that because our economic model needs growth, politicians and investors behave as if the environment is not affected. Creating a balance and assuming that resources are finite is imperative. Latour states that we do not confront the fact that human activity is the main factor for climate change. Facing this new disconnect, many of us move from admiration in front of the innocent forces of nature to complete despondency and even lend an ear to the climate deniers (Latour, 2011). He remarks: “The Economy is not the basis for the world finally revealed to everyone thanks to the benefits of globalization but a cancer whose metastases have gradually begun to infect the entire Earth” (Latour, 2013, p. 384).

Latin American examples like Venezuela and Chile, help to explain the risks and opportunities of that exchanges based primarily on commodities. According to Mark Turner (Analyst in Latin American stocks markets for Hallgarten and Company), Venezuela bases its economy in one commodity, oil. Depending on this, as does Chile on copper. Since 2004, the composition of Chilean copper exports has changed from 35% to 40% of its total exports and up to 60% in late 2007. Moreover, the Central Bank of Chile (CBCh) said that the quantity of copper exported
Asia-Pacific Economic Cooperation (APEC) serves as a bridge between these regions. For example, China’s involvement Latin America has dramatically increased, in the past fifteen years, China has gone from having no presence to being a leading trade partner of important economies as Brazil, Peru and Chile. (Strauss, 2012).

<table>
<thead>
<tr>
<th>Exports by sector</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining</td>
<td>44,360</td>
<td>48,846</td>
</tr>
<tr>
<td>Copper</td>
<td>37,617</td>
<td>40,350</td>
</tr>
<tr>
<td>Other mining activities</td>
<td>6,743</td>
<td>6,553</td>
</tr>
<tr>
<td>Agriculture, livestock and forestry</td>
<td>4,366</td>
<td>5,066</td>
</tr>
<tr>
<td>Fruit</td>
<td>3,886</td>
<td>4,274</td>
</tr>
<tr>
<td>Other agriculture, livestock, forestry and commercial fishing</td>
<td>680</td>
<td>792</td>
</tr>
<tr>
<td>Industrial</td>
<td>20,071</td>
<td>27,600</td>
</tr>
<tr>
<td>Food, beverages and tobacco</td>
<td>7,849</td>
<td>9,767</td>
</tr>
<tr>
<td>Salmon &amp; trout</td>
<td>2,053</td>
<td>2,917</td>
</tr>
<tr>
<td>Agricultura</td>
<td>789</td>
<td>1,002</td>
</tr>
<tr>
<td>Wine</td>
<td>1,551</td>
<td>1,732</td>
</tr>
<tr>
<td>Other foods</td>
<td>3,444</td>
<td>4,116</td>
</tr>
<tr>
<td>Forestry and wood furniture</td>
<td>1,881</td>
<td>2,332</td>
</tr>
<tr>
<td>Pulp and paper</td>
<td>3,102</td>
<td>3,692</td>
</tr>
<tr>
<td>Pulp</td>
<td>2,404</td>
<td>1,032</td>
</tr>
<tr>
<td>Other paper</td>
<td>698</td>
<td>937</td>
</tr>
<tr>
<td>Chemicals</td>
<td>4,929</td>
<td>6,108</td>
</tr>
<tr>
<td>Other industrial products</td>
<td>4,510</td>
<td>5,695</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>70,697</strong></td>
<td><strong>81,411</strong></td>
</tr>
</tbody>
</table>

Fig. 2: Main exports by sector (2010-2011). Central Bank, May 2012, cited in ProChile, 2012

![Pie Chart](image)

Fig. 1: Chile’s main buyers (2010-2011). Central Bank, cited in ProChile, 2012

![Pie Chart](image)

Fig. 3: Perception of Brazilians about Chile’s productive sectors, Fundación Imagen de Chile

The Chilean case

Chile’s case will be examined in-depth to explain the dangers and opportunities of an economy based on natural resources, with one main buyer. Copper has always been the main pillar of the Chilean economy, however, in past few years, this dependence became stronger (Turner, 2007). As Steven Anderson (Director, Global Human Resources Modular Mining Systems) explains, Chile is the world’s main copper provider with over a 34% of the world supply in 2010. (Anderson, 2012), and China is its main fast-growing buyer due to the increasing demand for copper electrical wiring, and also for the manufacturing of other products.

As can be seen in the pie chart below in 2010 the recipients were led by Asia. ProChile also established that in 2011, Chile exported a total of USD 81,411 million and USD 40,333 million of it was copper.

In total, Chilean exports are ranked 45th out of 222 countries, as stated by the Central Intelligence Agency (CIA), position that is competing with larger territories and populations, such as China and United States. Although this is an important position, Chile has not gained major recognition abroad as Elvira Chadwick...
As the previous graph shows, the majority of its exports are raw materials not connected with emotions or immaterial values. They are commodities lacking identity; sold mainly because they are the best or the cheapest; therefore, they do not help to create a strong country image. It could be concluded that it is risky to rely on just one resource, which could potentially be affected by different factors, as it happened to Chile with nitrate before.

The case of Nitrate is relevant to review; it was used as fertilizer and to create explosives, and for Chile, it was synonymous with foreign investment and growth. “From 1880 until 1930, nitrate was the nation’s main export. Chile gained control of the valuable […] deposits in the War of the Pacific (1879-1883), but most of the nitrate exploitation was handled by British capital and in less extent by Germans” (Monteon M, 1982, p. 66). However, Chile obtained economic prosperity through exportation taxes (Lüders R, Wagner G, 2003).

After the start of the First World War, the British effectively blocked the Germans from the resource, so the latter created synthetic nitrate in 1918. This development put an end to the industry; luckily, copper became relevant, helping to mitigate the crisis. (Maskaev, 2001). This left behind ghost cities; some, like Humberstone and Santa Laura, became UNESCO protected in 2005 (UNESCO, 2003-2005). Although they are not inhabited today, their immaterial value is recognized. Thus, it can have emotional connections if associated with the workers narrative, history, built heritage and/or if local values are integrated.

**Links between raw materials and emotional values**

An example of the aforementioned occurred at San José mine in 2010. In August of that year, 33 Chilean miners were trapped 720 meters below ground for 70 days before being rescued. The organization Fundación Imagen Chile stated that social networks mentioned the event in more than 3 million places; 12,000 photographs related to Chile and its miners were posted in the space of a week on Twitpic. It was the first time Chile was mentioned in such a massive and global scale. Ustream, the leading global provider of streaming, mentioned that this was their most watched news ever, with 5.3 million users between the 11th and 12th of October, surpassing the death of Michael Jackson with 4.6 million and the inauguration of Barack Obama with 3.8 million.

**Fundación Imagen of Chile**, also carried out a study in Brazil, in which (although not explicit), it is interesting, to compare the perception of Brazilians about Chilean mining a year before and after the incident at San José; it is possible to observe how an emotional event can place in people’s mind the perception that Chile is a mining country. Theories of cognitive science, like Donald Norman’s, (Director of The Design Lab at the University of California, San Diego and author of Emotional Design) support the relevance that immaterial values can have on products. “What matters is the [...] associations that people have with the objects, and the memories they evoke” (Norman, 2004, p. 46); if people have an emotional connection to a country, they will, for example, have an opinion about it, and possibly buy things that represent its lifestyle. “Consumers tend to buy things that have meaning for them. The styles of objects you choose to buy and display often reflect public opinion” (Norman, 2004, p. 54).
Adding local values

Thus, narratives can be added to activities related to the extraction of commodities, but this can be easier to understand if related to other common products, as the ones that are part of our daily life e.g. furniture, clothing, also a landscape, etc. Branding uses this, as it can be seen in the wine market. David Cohen, Daisy Dawson and Dr. Joanna Fountain, refer to the wine market and the importance of creating land narrative to evoke emotional connections (2011). Moreover, if the Chilean wine market recognition is compared with copper, it can be observed that wine exports reach USD 1,732 billion in contrast to the USD 40,333 billion generated by copper (refer to figure 2); but the former is more recognised as a Chilean product abroad than the latter, as it can be seen in studies made by Fundacion Imagen de Chile, 2010, in seven different countries, Chile was mainly associated with wine production. It can be deduced that wine has been sold with an emotional narrative, which people can recall. The wine market contributes to overseas acknowledgment but it is necessary to increase the number of markets in which Chile is well recognised, in order to generate collective narratives.

Chilean design studios, re-thinking heritage

Design can also integrate value, using local raw materials; examples of this are some pioneer Chilean design studios which work with the recognition and enrichment of heritage so as to reinvent, interpret, integrate or create what could be called “new traditional”, adding narrative processes and cultural values to Chile’s main exports, such as copper and wood. In 2011, The Consejo Nacional de la Cultura y las Artes (CNCA), in charge of the Creative Industries, formed a design area for the first time, (Figueroa, 2014) whose aim is to support Chilean designers. One strategy was to present their works in international festivals.

As an example, at the London Design Festival 2012, the Dirección de asuntos culturales, (DIRAC) in charge of the cultural events of Chile abroad, in collaboration with CNCA and ProChile, placed a Chilean pavilion with six small studios, receiving around 100 people, mostly press, designers, and traders, as shown below.

One of the studios was bravo! They exhibited a set of containers called La familia, in which typical materials were used, in this case, copper and a special wood, Lenga, from the south of the country. They rescued Chilean carpentry techniques in a vital redefinition of such traditions.

The studio has also presented at the Salone Internazionale del Mobile Milano, Stockholm Furniture Fair, WantedDesign, New York, among others. (Bravo, 2016). Rodrigo Bravo (bravo’s director) mentioned that be part of an international circuit allows them to appear in international magazines like DAMn, ICON, WGSN, and opens opportunities as being in shops like La Rinnace (Milan), Mint Gallery (London) and Bensimon (Paris), Monoqi (Germany-Belgium). In Chile, they also created relevant projects as the interior architecture of Centro Cultural Gabriela Mistral (GAM) [One of the biggest cultural centres in Chile]. (Página 12, 2016).

At the same time, The Andes House studio, uses typical materials and traditional craft legacy, with new design shapes to reinvent the results to embody Chilean identity and preserve the knowledge of traditional craftsmen (Made in Mimbre, 2010). This studio has also represented Chile in the same exhibitions than bravo! and others like Bienal Iberoamericana in Madrid, MALBA Buenos Aires, Stockholm Furniture Fair and Llavoretes in Valencia, and the like (DIRAC, 2012) and published at Wallpaper*, dezen, designboom, among others. The following graph shows the publications where these studios were mentioned a few weeks after the London Design Festival 2012 ended.

They also sell their products at Mint Gallery, Malba (Buenos Aires) and Puro Chile (New York). In relation to their incomes, it can be mentioned that on October 2012 they aimed to end the year with 17,4000 USD (120 million CLP), (Capital, 2012) which is good for a small
Chilean design studio. It is important to continue efforts like this one to create relevant Chilean ‘ambassadors’. If their products capture people’s interest, it could help with the diffusion of the country and create connections in people’s minds. This could increase the knowledge and awareness of Chilean products, lands and people. Also, it could lead Chile to invest in Design innovations, thus diversifying the market and weakening the dependency in economies based only on raw materials.

The Chilean scenario is changing, in 2014, the CNCA, mentions that Creative Industries experienced a growth of 14% in the last 5 years. Conversely, Chile cannot continue basing its economy in one commodity. Vicente Mira (Vice-President of the Foreign Investment Committee) mentioned that Chile started moving towards a knowledge economy, trying to be less dependent on copper and focusing more on intensifying added value and services. (Mira, 2016).

**Conclusion**

In sum, Latin American Economies, are experiencing a tighter integration with Asia; however, this exchange is based primarily on finite natural resources. The increase in the export of these goods generates opportunities, but with risks. The example of the Chilean Economy, based on goods exported on a large scale, with China as its main buyer, makes Chile’s economy dependent on China, thus vulnerable to a shortage or depletion of resources, the decline of demand, etc. Despite being the result of their effort, the exporting country and local workers go unnoticed. Nevertheless, this market opportunity offers the chance to acquire capital to invest in other sectors and diversify industries, which can, in turn, integrate cultural value and contribute to the international recognition, generating protection for its land and rural and primary populations. Design is a tool that can introduce value. It can help to strengthen a country’s image by promoting new innovations, creating exports, and/or incorporating local narrative, hence, disseminating knowledge and local human capital. Thus, providing visibility and new income opportunities.

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Abstract
Colors of costumes clearly reveal social status of roles, dramatic function, and intricate relationships among other roles. This study used Saussure’s principle of binary opposition and symbol theory to investigate how to use “binary opposition” and “color image” to shape the roles and characters in Shakespeare’s “Measure for Measure,” outline the original meanings of the play “Measure for Measure” using costume color contrast and black-and-white dialectic, and convey the second meanings of internal social, moral, and conceptual values of roles. It is hoped that the research results can be provided as reference for future interpretation of Shakespeare’s play.

Keywords
Costume design, color image, binary opposition, Measure for Measure

1>前言
今年適逢英國莎士比亞(William Shakespeare, 1564-1616)逝世 400年;全球掀起莎翁熱潮。莎士比亞一生共寫了38部劇本；約有一半仍在世界各地廣泛地被以各種語言演繹。Dennis Kennedy（1993）指出：「莎士比亞的藝術是一種關於生活的藝術，莎士比亞的每一齣戲都是對事件最真實的描寫，莎劇的經典在於其延展性（Malleability）」(Kennedy, 1993: 301; 陈芳, 2011: 84)。莎劇中的語言充滿多層次的意義，將整個世界濃縮於劇作舞台，展現人類的通性，在劇情結構上呈現出豐富的戲劇張力，以及象徵性與比喻性的符碼。正如雨果所述：「莎士比亞傾其力於對偶之中，整體由對立面構成，有暗中交織的光輝」。莎士比亞的對稱，是一種普遍存在的對照；生與死、冷與熱、天使與魔衹、天與地、靈與肉、觀客與主觀以及公正與偏倚等(余秋雨，2006)。

二元對立原則(Binary opposition)是索緒爾(Ferdinand de Saussure, 1857-1913)創立現代結

### 2>「對比手法」之構築與分析

莎劇《量·度》文本中角色眾多,分為上下兩層的社會階級，而角色之間的從屬與利益關係相互糾結,不同的劇中人物都在用不同的觀點進行各樣的「估算」與「論斷」。市井無賴、廟堂顯貴，都各自忙著衡量利益得失、估價值以及議論是非。依據布爾迪厄(Pierre Bourdieu,1930-2002)提出的「場域是⼀個對立⼒量的空間」;從符號分析的⾓度來看,文本中的場域建構出劇中人物的關係網絡,透過「⾓⾊關係圖」的繪製,即可依據角色間的對仗關係、從属關係或同構關係梳理出劇作家對於⾓⾊間運作的邏輯(Bonnewitz, 2002; 孫智綺譯, 2002:80-81)。女主角伊瑟⾙、公爵及安其洛(公爵代理⼈)之間的三⾓關係,以及不斷糾葛與審判彼此的聲音,編織出《量·度》重重疊疊的「法網」。因此解析《量·度》文本中莎翁的對⽐手法實為重要,透過文本分析整理出角色關係圖(圖1),以粉色表示⼥性⾓⾊、藍⾊表示男性⾓⾊;另以色彩的明暗度標⽰階級(上層階級以⾼明度的淺藍⾊、下層階級以低明度的深藍⾊),將⾓⾊間的網絡⽴體化、視覺化。

#### 2.1>性別

李維·史陀(Claude Lévi-Strauss,1908-2009)以關鍵角色的二元對立性,勾勒出「象徵性符碼」(Symbolic code)的辯證關係:如男性/女性、誠實/謊⾔、天真/世故(Stam,1992; 張梨美譯,1997:307)。側戲《量·度》文本中的男性大多有自己的賺錢能⼒,符冒泡不只有錢,一年還有收⼊三萬銀元;阿寶則提到⾃⼰當警官的賺錢能⼒。文本中的⼥性大多是沒有賺錢能⼒,只能依附嫁妝與丈夫的錢財,男性則具有賺錢能⼒。例如朱莉的嫁妝被親戚所保管,她無法掌握⾃⼰的財產;莎翁對於性別的描寫中,女性較為柔弱而被保護,像是開場中討論到犯了通姦罪的朱莉未被處以死刑,伊瑟⾙在與安其洛的交涉中也因為其性別⽽處於完全弱勢;男性則在⽗權社會中則被期待剛強且無畏死亡,因此柯樂迪被處以死刑、遊街,安其洛也提到法律對男性的嚴厲,甚⾄公爵對安其洛的審判也毫不留情。

除了男性與⼥性的對⽐,⼥性與⼥性之間的自我意識強度也有著很大的對比,馬蓮娜在第 13 景就充分表現出為己⼥性的卑微。

馬蓮娜: 大⼈,請原諒;我不能露出我的臉,除非是我丈夫吩咐。
公爵: 怎麼,妳結婚了嗎?

另一方面,阿寶的妻子卻展現出極高的性自主,甚至寵貝也提到他對婚姻中女子的畏懼。

寵貝: 大人,如果是我單身漢,我就能;但如果是結過婚的男人,他的頭就是他太太的頭,婦道人家的頭,我可就砍不了啦。^2

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1 彭鏡禧譯(2012)。量·度。莎士比亞著。臺北：聯經，頁 57。
2 同前註，頁 41。
2.2 > 階級
劇中的上層階級有財又有權，如柯樂迪所形容的安其洛，以及公爵口中揮霍的年輕人，甚至有錢的符冒泡在遇到官司的時候，也能夠非常容易就全身而退。

柯樂迪：大權在握的人簡直像神，能叫我們為罪過付出完全的代價，如聖經所說。³

對比之下，下層階級困苦，太多依賴性產業，服務上層階級維生，不易生存。

歐過當：咱們郊區所有的休閒賓館當真都要拆除？

龐⾙：⽚⽡不留，媽媽桑。

歐過當：哎唷，年頭真的不一樣了！這樣叫咱們以後要怎麼生存呢？⁴

2.3 >法律
文本中的安其洛與公爵分別代表著嚴格與鬆散的執法人，安其洛對於通姦罪毫不留情面，而公爵卻長年來執法鬆散，從柯樂迪和公爵本人所言皆可得知。

安其洛：處罰罪過，卻不處罰犯人？哼，各種罪過還沒犯就訂有罰則。我的職務豈不是空有其名，如果只處罰明文規定的刑責，卻放走犯人？

伊瑟⾙：啊，公正但嚴苛的法律！⁵

安其洛：你要知⾜，姑娘。是法律，不是我，定你弟弟的罪。就算他是我親戚、兄弟、或兒子，也要這樣處理。明天必須處死他。⁶

另一方面，鬆散執行的法律，艾適可在執法上自然傾向公爵的作法，因此也相較於安其洛來得寬鬆許多。

公爵：…但這麼多年來法令鬆弛，猶如洞裡一頭臃腫的老獅子，不去獵⻝。如今，我們的律法沒有執⾏，等於已經死亡。⁷

以法律的嚴苛度而言，安其洛制定相當高的道德標準，以至於即使柯樂迪與朱莉真心相愛，他也不願從寬。然而出於角色而言，法律是具有人性，而可以被商議的，像是伊瑟⾙和盧逑都曾表示安其洛的標準過高而不合情理。此外，從安其洛的罪行被揭發後，也可以看出嚴苛度上的對比，安其洛當下就要求被處以死刑，但公爵卻考量到馬蓮娜而放他一條生路。

2.4 > 人性
《量度》文本中對於各種人性的描寫相當豐富，例如安其洛的理智，在遇到伊瑟⾙之後就因為自己的慾念而與其情慾產生很大的衝突，兩者的對比在安其洛的獨白中相當明顯。

表1. 理智對比情慾

| 理智 | 安其洛：…啊，呸，呸，呸！你怎麼了？你是什麼啊，安其洛？難道為了她的德行，你竟想要染指她？§
| 情慾 | 安其洛：遠離妳，甚至遠離妳的美德！這是真的嗎？是什麼？是誰的罪更重。哈？不會是她，她也沒有誘惑，而是我。"¹⁰ |
伊瑟⾢的態度是本劇的一大重點，原本對安其洛的脅迫感到憤怒，不斷追求公義的伊瑟⾢，在最後的關鍵時刻抉擇了原諒安其洛。伊瑟⾢態度上的對⽐帶出了文本中的寬恕意含。

### 表 2. 公義對比慈悲

| 業 | 伊瑟⾢:哈!沒有榮譽竟還要人家相信,而且是最惡毒的目的!偽裝啊偽裝!我要揭發你,安其洛。|^11 |
|---|---|
| 業 | 伊瑟⾢:你必須死。你太髙貴,不會為了保命而運用卑劣的手段。|^12 |
| 業 | 伊瑟⾢:[跪下]主持公道啊,公爵大人!請先聽完我真實的控訴,還我一個公道、公道、公道、公道!|^13 |
| 業 | 伊瑟⾢:[跪下] 最親密的⼤官,您若願意,請看這個死刑犯,就當作我親弟弟還活著。在某個程度上他的作為原先確實出於真誠,只是後來見到了我。既然如此,別讓他死。我弟弟是罪有應得;他的確犯了那件死罪。至於安其洛,他的行為並沒有達成他的惡意,因此應該一筆勾消,只當作半途消失的意念。思想不受起訴,意念僅僅是思想而已。|^14 |

### 3> 莎劇《量 · 度》戲劇服裝設計之色彩意象

羅蘭·巴特（Roland Barthes, 1915-80），以索緒爾的語言符號理論作為基礎，將日常生活事務以符號學的手法進行解碼；於《S/Z》一書中表示：「每個符號都是一種力量」(Barthes, 1970；屠友祥, 2004:24)，而符號包含了「形式」與「內容」兩個面向。凡斯·帕卡德(Vance Packard, 1914-1996)提出：「服裝是一種最明顯、最方便顯露階級差異的媒介物」。另一方面，服裝不僅是提供觀察所扮演的角色、人格和地位的視覺資訊，亦提供顯示服飾的社會場景(Horn, 1981:172-175)。格倫則提出「語言可以表達出對立之間的辯證關係。」《量 · 度》一劇以律法、宗教、慾望為中心議題，探討人性與道德、罪與罰在不同社會階級之間所顯現的結果。宗教/律法和人性/慾望之間的拉扯與運動，《量 · 度》的莎劇演繹以1930年代上海為背景，服裝以風格化來表現「怎麼量與怎麼度的天秤上的兩端」，運用西風東漸下的中式和西式服裝設計詮釋上下兩社會階層。以符號學觀點進行《量 · 度》的文本分析，經由⾓色分析、創意造形設計發想以及⾊彩對比的構築分析整理，於服裝設計過程中運用款式上的「色彩對比」，對應到⾓色分析中的「內容對比」，物種對比、意識形態對比、情緒對比(翟治平、⺩⾱堯, 2009)。依據文本的符碼分析進而塑造整體⾓色形象，從而體現出宗教/律法和人性/慾望之間深刻的內在矛盾。

### 表 3. 安其洛的「白色偽善」對比伊瑟⾢的「黑色堅定」

穿著獸慾薰⼼動物紋印花背心的安其洛

穿著黑色修女服的伊瑟⾢

### 3.1> 黑色與白色的對比

黑色與白色的第⼀層表意結構為黑夜與⽩晝、陰與陽的意象關係。女主角伊瑟⾢和男二角安其洛:一黑一⽩的對⽐。伊瑟⾢的女性角色深深
影響本劇的發展走向，伊瑟貝以傳統修女服穿梭全劇，卻因為親弟弟的牽連而扯進安其洛假道學的色情染缸，其堅定
的信仰和良善的個性如同其身上穿的修女袍服，忠貞且仁慈。宗教服飾在偌大的舞台上，產生強烈的指涉性，有助於
觀眾理解伊瑟貝的堅定意志，黑色符號的莊重深穩、嚴肅凝重; 黑色的修女服搭配純白色的領片，簡潔的色調，讓觀眾
的注意力完全聚焦於伊瑟貝的臉部表情。伊瑟貝(黑色修女服)除了對比安其洛虛假的清廉形象(白色西服)，亦喻意著伊
瑟貝面臨被安其洛脅迫的黑色壓力。

安其洛表面上是公正不阿的執法人，但背後卻被慾望所操弄，色慾薰心、貪婪，筆挺的白色
西裝是其披在皮囊外的偽裝，而黑、白色的曲線動物紋印花背心; 指涉安其洛骨子裡錯綜複雜的獸慾和狡詐。

3.2> 紫色權貴與灰鼠色囚犯的對比
整齣戲的展開皆因公爵而起，文慎修公爵是劇中的策畫者，個性外向、冷靜、謀略、追根究底、敏銳及自我中心，劇
名為量度，劇作家將命題之意體現在公爵身上，法律本身不會去審判，端看執法人如何拿捏那把尺。

尊貴的紫色，原為萃取自貝類的染料，源於古代西方須消耗的二千個貝類方可以得出一公克的紫色
染料，十分珍貴;故紫色引申了貴族、華麗之意。布爾迪厄指出習慣所構成的兩個部分: 一個是內化的實踐價值(Ethos),
掌管理日常生活的行为;再一個是身體的儀態(Hexis)，將體態與身體的關係無意識的內化(Bonnewitz, 2002; 孫智綺譯,
2002:100-101)。文慎修公爵掌握重權，神秘難測，一身華麗紫色燕尾服和具有紫色暗示性飾邊條設計的偽裝神父袍，
象徵公爵在角色互換之間的開關以及操弄眾人命運的權力。
對比監獄囚犯巴拿酊，蓬首垢面屈身於幽暗不見天日的牢籠，衣不蔽體的敞開前胸，一來刻意突顯刺青纹身的軀體，
二來展現毫無紀律的監獄管理，將劇場符號「生成能力」的特徵靈活化。

表 4. 「位高權重的公爵」對比「落魄囚獄的巴拿酊」

4> 結語
皮爾斯將符號概念運用於分析人類
「思想」和「思考」的過程。符號為
心智所運用，藉以理解事情，而文字
和語言就是關於想法的符號(孫秀蕙,
陳儀芬, 2011:24-25)。自文藝復興中
期以來，宗教、政治與經濟鬥爭紛起，
資產階級與王權的聯盟出現裂痕、封
建主義與資本主義的相互拉扯的
「惡」，以及善惡之間的鬥爭，反映
於莎劇《量度》的文本。格雷馬斯
認為：「人物活動構成的事件組成文本
的表層結構。」在莎劇中，人是生活的
主人，人們對物質與精神生活的追
求都從道德意義上得到了充份的肯定。固然莎翁肯定人性的主導面是善，但這種善不是現成的充滿性，而是否定性、
鬥爭性的，需要時時克服惡才能實現。「量度」的文本劇情結構推展，經過莎翁「善－惡－善」的精心鋪展，本文
經歷符號結構的對比手法解析，透過角色分析、創意造形設計發想以及角色「對比」關係的構築整理，在這齣製作中，
戲劇服裝設計產生「色彩對比」的設計法則: 1) 直接應用白色與黑色的隱含特質: 創造安其洛的「偽善」對比伊瑟貝的
「堅定」效果，並意味著兩位主人翁在事件與主旨中所顯示的戲劇功能: 2) 應用色彩的特定意涵，協助喻喻的功能: 紫色
不僅引申了文慎修公爵的位高階權重，同時可以協助角色在進行變裝後，視覺符號的指涉與連貫性，以幫助觀眾理解
角色關係的建立，不但使原始的意涵更豐富，也刺激了戲劇的高潮，讓戲劇服裝設計藉由索緒爾的二元對立原則服
裝符號系統的構成，突顯了色彩意象形塑角色性格的重要性，更鮮明了莎翁筆下的人物形象。
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Towards a new paradigm:
Applying industrial design processes to the craft bamboo industry

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Abstract
Designing for emergency preparedness with the advantage of social media has become a priority for mobile app developers, medical practitioners, and agencies from public sector. To uncover the possibility of location-based social media use in life-saving emergent situations, this study takes a qualitative content analysis approach to identify the underlying purposes, emotions, and behaviours of the users who check-in the hospital emergency room on social media. A leading medical centre in Taiwan was selected as the data collection site. A total of 1,063 location-based check-in posts from January to May 2015 were collected and analysed.

Keywords
Self-disclosure, location-based service, Social Network Sites, Facebook Check-in Service

Introduction
The use of social media is not only popular for social and entertainment purposes, but is also prevalent in reporting emergency. A recent American Red Cross survey reported that more people now use social media tools to report emergencies or call for help, to seek and share information or to inform their relatives and friends that they are safe and well. Medical practitioners are strictly confidential about patient information available online because details of the treatment procedures and personal health records and history are personal. In contrast, many users or even patients choose to disclose their health information by themselves on SNSs visibly. Designing for emergency preparedness with the advantage of social media has become a priority for mobile app developers, medical practitioners, and agencies from public sector. To uncover the possibility of location-based social media use in life-saving emergent situations, this study takes a qualitative content analysis approach to identify the underlying purposes, emotions, and behaviors of the users who check-in the hospital emergency room on social media. The Facebook presence of a leading medical center in Taiwan-National Taiwan University Hospital- was selected as the data collection site, and check-in posts at this location from January to May 2015 were collected, resulting in a total of 1,063 location-based check-in posts.

Literature review
Self-disclosure on SNSs
Nowadays, SNSs (Social Networking Sites) have become extremely prevalent with billions of users around the world. People tend to disclose their personal information more than anytime ever as the SNSs grows popular. Almost all SNSs are based on the sharing personal information at a certain level. It allows, and sometimes even, encourages their members to self-disclose and self-present by maintaining their personal profiles and by posting photos, videos, and preferences (Ledbetter et al., 2011). Self-disclosure refers to the act of revealing personal information to another person (Derlega & Chaikin, 1977). It is also defined as the behavior of revealing private or personal information about oneself to others (Archer and Burleson, 1980) to facilitate the establishment of mutual understanding, intimacy, and trust in interpersonal relationships (Varnali & Toker, 2015).

An abundance of research effort has been made in regard to self-disclosure. However, as Varnali and Toker (2015) pointed that, even though many researchers have made a great deal of contribution toward the understanding of self-disclosure in computer-mediated communication (CMC), but most of them are conducted in...
experiment settings instead of actual social setting. Lee, Noh, and Koo (2013) also argued that the effects caused by self-disclosure remained not clear.

**Location-Based service and Facebook Check-in service**

A location-based service (LBS) is defined as “any service or application that extends spatial information processing, or GIS capabilities, to end users via the Internet and/or wireless network” (Koeppel, 2000). Facebook launched “Places” in August 2010. It is a check-in service, with embedded LBS features, allowing Facebook users to notify their friends to their presence at a particular location. This service discloses one’s location, and shares activities with others, and establishes links between his/her physical and social worlds.

The recent rapid expansion of use of mobile devices, such as smart phones and tablets, with global positioning systems (GPS) capabilities has facilitated the massive usage of LBS, such as Facebook Check-in service. Lin et al. (2014) conducted a study about why people continue to use such service. The results indicated that perceived playfulness exerted a significant influence on satisfaction and continuance intention, but privacy concerns did not seem to influence the direct path between satisfaction and continuance intention. However, none of the research efforts on location-based information disclosure has yet answered the question regarding why on social media do people check-in to places where medical attention may be needed.

**Social media use in emergency situation**

According to a survey study conducted by American Red Cross in 2012, social media and apps would motivate people to prepare in emergency situation (American Red Cross, 2012). The key findings in this study include: (1) Social users are also most likely to seek and share information during emergencies; (2) 76 percent Americans expect help in less than three hours of posting a request on social media; (3) 40 percent of those surveyed mentioned they would use social media tools to inform others that they are safe.

Because of the increasing social media use in emergencies, many look into the potential of implementing and integrating social media to cope with disaster and emergency preparedness. Sanghoee (2015) highlighted Facebook’s new feature called Safety Check, and its ability to help people track their friends and family during the suffering period of Nepal’s tragic earthquake in 2015. She also stated that “Emergency response is enhanced tremendously by information, especially about people’s whereabouts, and social media is uniquely equipped to provide that to first responders.” Merchant, Elmer, and Lurie (2011) argued that social media “can also be used to improve preparedness by linking the public with day-to-day, real-time information about how their community’s health care system is functioning.” They also suggest the need of the studies to evaluate the reliability and validity of public health–related information communicated through social media.

Identifying why people use social media to check in emergency rooms, and analyzing the content and characteristics of their posts on Facebook may provide fruitful insights on enhancing emergency preparedness and medical resources allocation.

**Study design and methods**

In order to uncover the reason why people check in to hospital emergency room on Facebook and what they comment on the such life events, we selected one of the leading national medical center in Taiwan- National Taiwan University Hospital, and collected the Facebook check-in posts at this location from January 1, 2015 to May 19, 2015. A total of 1,063 Facebook check-in posts were collected and analyzed.

**Data collection and analysis**

National Taiwan University Hospital (NTUH) was founded in 1895. Currently, the hospital has over 6,000 employees, 2,400-odd beds and serves over 8,000 outpatients daily. Over the last hundred plus years since its founding, NTUH and its’ medical school has nurtured countless professionals in medicine, including medical students, specialists, pharmacists, nurses and technicians. With its respect to medical service, the quality of NTUH’s clinical practice is well known and highly trusted by the people of Taiwan. Therefore, ER of NTUH is one of the most popular check-in locations in hospitals in Taiwan.
The content of check-in post we collected including text message, emoticon, photos, links and such. An example post is shown in Figure 1.

After collecting the first 271 sets of data to identify the grounding coding schemes, we were able to divide the research themes into three parts: "Format" "Purposes" "Identity Disclosure". We divided these three categories into the following items:

- **Format** – Check-in only; with text; with selfie; with photo (real time); with photo (other source), with emoticon; with film; with link.
- **Purposes** – Describing Conditions; Describing Treatment Effect; Expressing Emotions; Complaining; Showing Blessing; Asking Questions; Can not Identified; and Others.
- **Identity Disclosure** – Patient; Patient's Friends/Relatives; Health Care Professionals (Doctor or Nurses); Hospital Volunteers; Non-Emergency Related Person; Can not Identified; and Others.

In order to better understand the purposes, we further divided "Expressing Emotions" into the users' specific observable emotions, including negative moods such as tired, angry, sad, scared, worried, sick, bothered, confused, and positive moods such as pleased and relieved. "Complaining" is an important finding in the research as well, whom and what users complained to were two aspects we attempted to understand.

**Results**

**Formats**

Different information is articulated in different formats of posts on Facebook. Emotions are commonly shown on posts with emoticons. Real-time photos may display patient's health conditions, physically or mentally, such as bleeding cut on the body or an angry face.

As shown in Figure 2, "Check-in with text" is the most common form at that people use to check-in at NTUH E.R (53%), followed by "Check-in with photo (real-time)" (29.8%), "Check-in with selfie" (11.9%), "Check-in with emoticon" (11.1%), "Check-in Only" (8.3%), and "Check-in with photo (other source)" (3.0%). The least two are "Check-in with film" and "Check-in with link", which are both fewer than 0.5%. The percentage of "Check-in with selfie" and "Check-in with emoticon" are almost the same.

![Fig. 2: Formats of check-in posts at NTUH](image)

**Purposes**

As shown in Figure 3, "Expressing Emotions" is the main reason that people check-in E.R on social media (32.6%). In the category, we found "Sad" (21.49%), "Worried" (20.92%) and "Tired" (18.62 %) were the most common negative emotions in those users, as shown in Table 1. We were able to define their emotions by emoticon on posts, the crying face or the sad face appeared in the beginning of the post. Over all, people check-in E.R. were mostly in negative emotions. Surprisingly, some positive emotions also appear in the emergency room, for example, "Pleased" (3.15%) or "Relieved" (2.58%), they are found especially when the patient finished their treatment and prepared to leave E.R. "Describing Conditions" (27.3%) and "Describing Treatment Effect" (22.4%) are both important purposes.

The users wanted to share situation in real time to friends/relatives on Facebook. Sometimes users asked for further information (9.7%) about their situation and solicited advices. Religion also plays a role in the purposes, users hope to be blessed by praying or pasting a chapter of Sutra (9.7%). There're only 7.5% users com-
plained, mostly about "Problems of medical resources" (29.33%) of complain) such as in sufficient bed. Users also engage in self-blame (14.67%) due to their careless behavior that caused to an accident.

Identity disclosure
As shown in Figure 4, people who check-in most often in E.R. were friends/relatives of patient (43.6%). Patient self were also love to check-in in E.R. (28.1%), and there're lot people we can't tell from posts. There're only few Health care (Doctor or Nurses) (5.2%), Hospital volunteers (0.4%), Non-emergency related person (2.7%) check-in on Facebook.

Conclusions and implications
People share their feelings by check-in in E.R
In this study, we are able to conclude that people share their feelings to friends by complaining, seeking to be blessed, or expressing their emotions on Facebook. It could be that people need emotional support when their family members or themselves are ill. They usually can receive comfort from the responses to their check-in posts.

Real-time information by check-in E.R. may suggest medical resources Allocation
There are many photos or text posts that describe the status of the check-in posts, like photos with gauze on the wound or arms with drips. They want to inform their friends and relatives of the good news or bad news in E.R. Good news may tamper those who care, some people even selfie their bleeding wound with a smile. On the other hand, knowing the bad situation is effective for offering advices or allocating medical resources with professionals or friends of similar experience.

Most of the expressed emotions are negative
Since emotion expressing is one of the most common purposes that people check in to E.R. on social media. The expressed emotions were further divided to 12 sub-categories (Sad, Worried, Tired, Scare…etc.). Only 2 of them are positive, the others are negative. These negative emotions took almost 93% of all the expressed emotions analyzed in our study. There may be an opportunity for the hospital or healthcare practitioners to identify a better way to release their negative feelings.

Implications of location-based service and SNSs in E.R.
Our study identified three grounding coding schemes by analyzing 1,063 Facebook check-in posts at NTUH E.R. In the future, it is hoped that more studies on social media use for healthcare setting can be attempted, to show an even greater prospect and dimension of using these results, such as a real time E.R. response system, or automatic E.R. healthcare quality review mechanism, to serve the field of health informatics and social media innovation.

References
Why people check in to emergency room


Biographical Note

Tsung-Yeh Lee is a PhD student and a librarian of National Kaohsiung Normal University Library. He has worked for an executive search firm from 2008. Then he worked for National Library of Public Information as an Assistant Counselor from 2010. He works for NKNU Library since late 2013.

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Evaluating inclusive design products from the accessibility chain

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Abstract

When talking about the Accessibility Chain, one can easily identify the points where a person with disabilities cannot continue with the activity he or she was doing. But, when talking about Inclusive Design, it is much more difficult to assess whether the products or combination of products represent more a barrier than an aid, in developing any daily activity in public spaces. By analyzing products from within the chain, it becomes more obvious where the braking points are and what characteristics or lack of features make the products become either a nuance or essential, or even if some characteristics should be found together in a single object or unbundled in several.

From this point of view, the question is if the degree of usefulness of any given product found in public spaces can be measured as to assess a degree of inclusiveness for any and all of disabilities; and so the purpose of this investigation is to try to attain a well balanced evaluation instrument to assist such enterprise, by identifying the critical points in direct relation with visual dysfunction and the task performed, in a specified public surrounding.

By inferential observation and the active involvement of diverse users, we can identify the most relevant needs that people with disabilities have and the features that cover them in a most satisfying manner; translating them into categories, and variables, and logically relating them for measurement. As a byproduct of this research, it would be desirable for designers to take into consideration the needs of people with disabilities and come up with more inclusive mainstream products and also, for the general public, to be familiar with them and thus to promote a broader culture of inclusion and non-discrimination towards people with disabilities and vulnerable populations.

Keywords

Inclusive design, accessibility, disabilities, evaluation

Introduction

Nowadays, as societies, we have a moral debt towards people with disabilities and vulnerable populations for we have, consciously or not, built urban environments structured by physical barriers which, at the same time, have created more barriers in our own minds, flowing in a permanent relationship and thus creating a vicious cycle. It has been a gradual process, but has advanced with steady pace for many years, beginning when we introduced standard measures for the human body, creating a false image of the "average" individual. This trend increased with the establishment of industrial processes and the ideal concept of a good, efficient worker for a factory job. Fortunately, a different consciousness is growing, taking down those barriers, both physical and cultural, but where much is to be done yet.

According to the United Nations’ (UN) International Convention on the Rights of Persons with Disabilities, “disability is an evolving concept and results from the interaction between persons with impairments and attitudinal and environmental barriers that hinders their full and effective participation in society on an equal basis with others.” It is worth mentioning that not only persons with disabilities live and deal with impairments, we also have to consider vulnerable populations like the elders, obese persons, children and even persons from different cultures and languages, who, at a certain moment, face some type of barrier.

Also for the UN, "Universal Design" means the design of products, environments, programs and services to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design. "Universal Design" shall not exclude assistive devices for particular groups of persons with disabilities where
this is needed.” So it means that there is an intention to give service to the greater extent of people possible, in a general, and in particular manners.

Regarding Inclusive Design, the main difference with Universal Design is the application purpose. The word “Inclusive” implies an adaptation has been made, sometimes to a preexisting space or product, to accommodate or include certain needs so that a person with disabilities may access and/or use it. This is a more discerning method that analyzes what is really needed, where it is needed, and when. These concepts aim to give the person with disabilities, through the surrounding environment, the capacity to do any activity with autonomy, in a secure manner, comfortably and with dignity and self-esteem. Talking about urban environments, there are some factors that should be taken in account like the scale at which the activity is taking place: urban - streets, open spaces -, or buildings - closed spaces of different scales and uses -. The products found at each of these spaces have particular design considerations and may be used by very different people, one at the time or maybe even several persons at the same time. From this points of view the concept “Accessible Chain” plays a main role as it analyses the activities along the four moments of use -approach, enter, use and exit- and wherever the “chain” of tasks “brakes” or has to make a stop, there is where a physical barrier is identified. It should also be taken into account that usually there is more than one product involved in satisfying the needs of the population using that determined space, which can make even harder to determine if all the users needs are being satisfied properly. It is pertinent to make clear that this is a work in progress and will be presented as such, with the results attained at the time of the presentation.

Identifying variables and their relevance

The purpose of this research is to give the basis to further achieve an evaluation instrument for all types of disabilities; that is, physical, intellectual or sensory related. Nonetheless, the extent of the particular needs for each one is too big to handle at the same time. Even though, it is worth mentioning that one of the first findings at the beginning of the research was that there are common needs shared by sensory and intellectual disabilities and this can give a firm foundation to further developing this instrument.

Taking in account the estimate number of individuals that have impairments of each type, the biggest percentage belongs to the physical group, the second to the senses and lastly to the intellect. So the first decision to take was as to whom to consider for the project. The decision turned towards the sensory disabilities, in particular the visual ones, because that population is not usually considered first hand when designing or adapting public spaces, at least in Mexico City, base town of the research; and because some regulations that apply to the building or remodeling of public spaces in search of accessibility, do not explicitly consider this segment of the population.

As a first approach, a revision was made to the International Classification of Functioning, Disability and Health (ICF), adopted by the World Health Organization (WHO) in 2001, as an aid to identify the particular dysfunctions related to visual disability and the environmental requirements related to it. Even though the ICF’s approach is strictly medical, it gives a valuable overview of the needs that have to be satisfied by the physical surrounding for the persons with disabilities. It is fair to mention that the Classification does not take in account what is known as remanent abilities, which therapists rely so much on for the development of particular daily activities, when working with a persons’ autonomy. It is with these abilities that designers also need to work with to provide the needed aids, focus on what can be done instead of what cannot be done.

The Classification uses a series of ranges to assess the degree of functionality or disability a person has,
which are:

0 – No disability - 0% - 4%
1 – Light - 5% - 24%
2 – Moderate - 25% - 49%
3 – Severe - 50% - 95%
4 – Complete - 96% - 100%

Next, the identification of the most common products used in public spaces and their main characteristics was required. For this step, several national and international recommendations for achieving accessibility were consulted, identifying the products mentioned in the documents. The most relevant documents were the America with Disabilities Act (ADA)’s 2010 Standards for Accessible Design, the National Organization of Spanish Blind People (ONCE)’s Accessibility for Blind People or with Visual Disability, and Mexican Secretariat for Social Development (SEDESOL)’s Norms for Urban Furniture. The main products identified were classified in: Vegetation and Ornament, Rest, Communication, Information, Physiological needs, Commerce, Security, Hygiene, Services and Infrastructure.

At the same time, walks around popular buildings and facilities were taken for the same purpose. The main products identified were urban equipment and furnishings, and related products like vending machines, information and transportation modules. During the exercise there was the possibility to observe people with disabilities interacting with those same products, which later resulted in a list of objects’ main features in relation to boldy functions or structures, that is to say, the human interaction with certain parts of the objects themselves. This provided a particular approach to the specific needs of certain individuals and a first glance at the user point of view.

At this point, it became apparent that, in the same way that intellectual and sensory disabilities shared needs, some needs identified for people with sensory disabilities were also common to some needs for mobility impairments. This finding reinforces the need to continue the research and develop the instrument to assess the needs of the whole of disabilities, at the greatest extent possible. From this perspective, the needed evaluation instrument is complex but still, attainable. It also became apparent that there would necessarily be more steps involved to assess the accessibility or inclusion of a certain space by means of the products involved; but in any case, this project could be used as a platform or point of departure for further investigation in other projects.

Depending on the use of certain characteristics like Braille applications, formal differentiation of buttons and their dimensions, to mention some, it is possible to determine if a product is a facilitator in the development of a certain activity; and the lack or wrong use of this same characteristics, results in the product becoming a barrier.

Finally, the ultimate purpose of identifying the barriers is to eliminate them, but in doing so, frequently there are budget limitations so the adjustments are usually done by stages. To identify the most urgent needs, it was imperative to assign a degree of usefulness to every characteristic and so determine which is the biggest barrier to give it priority in attendance. At this point it was necessary to apply ergonomic and anthropometrical principles, assigning acceptable and unacceptable ranges of dimensions, valuing the convenience of use of certain geometrical forms or profiles for certain parts of the products in direct contact with the user, for example. To accomplish this, it would be necessary to refer to certain norms and tables on one hand, and to establish a range of qualitative parameters on the other.

It is hard to establish objective methods or techniques to evaluate if there are no means of measure, so the proposal is to establish certain parameters in relation to standardized measures and accessibility recommendations, in combination with a more qualitative method like Maslow’s pyramid of satisfaction or a Likert scale.
To grasp a notion of these satisfaction parameters it was indispensable to approach the user, blind people, to assign these values to the products and their specific characteristics. For this stage, two qualitative methods were used; a questionnaire as a first approach, and afterwards, semi-structured interviews were held with blind people, resulting in a listing of products and general features of facilitators and barriers as well.

The results pointed mainly towards the lack of information, audible and in Braille or generally tactile, but also in relation to people. Interpreting the results, it is noticeable that autonomy is quite limited due to contextual barriers relating to information in the first place, and secondly towards the interaction with people, regarding disposition, sensitivity or lack of disabilities culture. It was noticeable that urban disorder plays a relevant role in relation to transit and orientation, maybe even more than the particular features in the products themselves. The products location within the environment is the first step towards accessibility.

On the other hand, the resulting listing of products was then applied to develop a triple entrance matrix interrelating the variables action-task versus functions-abilities and particular characteristics of products, along the stages of an activity.

The degree of usefulness was determined by a 5 degree color code value in such a way that the output of the instrument can be visualized graphically, making it easier to identify the ruptures of the chain and which are the features needed to provide the required assistance and where.

### Basic Matrix

<table>
<thead>
<tr>
<th>(Moment of the accessibility Chain)</th>
<th>Facilitators</th>
<th>Maneuver</th>
<th>Manipulation (group)</th>
<th>Reach</th>
<th>Information</th>
<th>Illumination</th>
<th>Obstacles</th>
<th>Finishing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban or architectural element</td>
<td>Product</td>
<td>E.g. Area, slope, height</td>
<td>E.g. size, shape</td>
<td>E.g. height, location</td>
<td>E.g.: clear, complete, tactile, audible</td>
<td>E.g.: location, intensity, color, (temp.), automatic</td>
<td>E.g.: at floor level or higher</td>
<td>E.g.: material, texture, extensor</td>
</tr>
<tr>
<td>Approach</td>
<td>Translate</td>
<td>E.g.: touch, turn, press</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exit</td>
<td></td>
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</tr>
</tbody>
</table>

Fig. 3: shows the basic matrix and how it relates the 4 main moments of the accessibility chain with the main problems found in relation to the autonomous development of persons with disabilities, linked to particular actions taking place with architectural or product configurations. Own authorship.

### Target user

This research aims to provide the people interested in adapting public spaces to make them accessible with an instrument to aid in identifying the points of interest and to assess a degree of inclusiveness of that space and its surroundings by the means of the products used in those environments. Preferably these persons should have a basic knowledge of inclusive design and maybe architecture to better take advantage of the instrument. So far, the skills needed focus on basic ergonomics and accessibility recommendations. If adapted as a digital instrument that could guide the user step by step, it may also be applied by any person with interest in physical inclusion, as a design reference. The next stage is to run trial tests to verify the usefulness of the instrument in pinpointing the barriers as well as the degree of usability for blind people of certain characteristics applied to products used in public spaces.

Following this logic, there are still other tests to be run to determine if this instrument might as well be useful during the first stages of the design processes, when the main characteristics or functions of any given product are being determined. It would certainly be desirable that the principles of inclusive design were applied to all mainstream products to achieve a change in the awareness of today’s societies in relation to the persons with disabilities and the exclusion they have been victims of.
Fig. 4: This section of the matrix shows the display of the features related to some products found in the streets, during translation, and the actions that could be done with them.

References


Biographical note

Patricia Guadalupe Landeta Gonzalez, Studied Industrial Design at the National Autonomous University of Mexico. Worked at the Electoral Institute of Mexico City, where she developed several products to assist the vote emission of people with disabilities and the elders. Worth mentioning is the Braille Stencil for the ballots. With her partners, provides consultancy in accessibility.
Transition of a Western dream into an evidence of Guilt: 
The case of Mekap shoes in Turkey

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Abstract
This paper aims to document the case of Mekap-shoes in Turkey upon their social, political and economic testimonies, with a focus on artefacts-politics relationship in the core. Within a polarized society in terms of identity issues, and a partially closed economy with state-controlled import barriers, Mekap became the first company producing sneakers in Turkey in 1970’s. With its stylish, affordable and durable models, suddenly it had gained an important market-share and popularity especially among youngsters and middle classes. But by mid-1980’s, the destiny of the shoes had been changed unexpectedly and unintentionally, in parallel to the economic and political shifts in the country; as Mekaps begun to be associated respectively with working class, left ideology and an armed movement, by the help of various actors, especially politicians and mass-media. First appeared in the market by rendering a western dream to middle classes, by time Mekaps turned into sacred terrorist shoes or resistance objects depending on the standpoint.

Keywords
Material culture, design history, design as politics, resistance objects, Mekap-shoes

Introduction
This paper aims to present the recent history of Mekap-shoes in Turkey, as an unstudied but prominent case for objects’ appropriation by different communities and user groups; and their intermediating roles in social contexts. In contrast to many politicised objects where historical or ideological references were built/invented deliberatively beforehand; this case presents an association gained by pure functional and use-related reasons, and without the intention or involvement of neither its manufacturer nor imagined users. This paper, which is placed at the intersection of design history and material culture studies, may be divided into four sections. First, a conceptual framework will be presented, which will be followed by a two-phased research on the history of Mekaps, and a final chapter of conclusion.

Conceptual framework
Artefacts are to present some hidden but valuable and also reliable knowledge derived from their social lives, their production-consumption-mediation cycles, the environments and contexts they appeared, and the actors they had interacted with. According to Lees-Maffei (2009), the world is mediated through objects, whereas studying mediation means studying the phenomena that exist between production and consumption, that is to inscribe and illuminate meanings for objects (Lees-Maffei, 2009). In this sense, some everyday objects that used to be perceived as nameless, vain or ordinary, had begun to gain scholarly interest by their potential of revealing hidden knowledge upon their social, economic, cultural and political testimonies.

Entities of our built environment are situated under grift web of social and cultural relations. Beyond their primary and physical functions, they also have immaterial, multi-layered meaningful cores embedded in them. The objects with recognised political/ideological meanings, which are central to this study, may mobilise or prioritise specific social or ideological groups, movements, classes or sub-cultures that are forgathered for specific purposes. These groups tend to embrace the object, symbolise, politicise, transform or manipulate it by imputing novel meanings, usually with historical references, invented traditions or myths, and rarely with functional or practical
reasons. These appropriations can be consciously planned and compromised, or incidental and spontaneous. According to Fallan (2010), these appropriations generate a rich medium to study objects in order to examine how customers/users re-contextualise commodities by integrating them in their own worlds.

The case this paper deals with, the story of a footwear, suits the category of dress and accessories, which used to be the most visible area of such associations by their supreme visibilities and physical relationship with the body. According to Himam (2007), the stories of dress in specific time periods form important mediums to see that country’s historical evolution and individuals’ transition in a historical context (Himam, 2007). In addition to well-studied official, imperial or military dress codes, many social groups, tribes, ideological or paramilitary movements had also been recognised by their specific dresses or even designated themselves upon their symbolic and unique clothing, such as Camicie nere (Blackshirts), Sturmabteilung (Brownshirts) or Ku Klux Klan. Edensor (2002) agrees that specific clothing used to represent specific ideological or national belongings and senses. For instance Zhongshan/Mao uniforms represent Chinese solidarity, Nehru jackets represent anti-colonial Hindu movement, and American jeans represent democracy, comfort and freedom (Edensor, 2002). Similar examples are also visible in Turkish history, especially on headgears, whereas the histories of fez, turban, fedora, casquette, kalpak, kufiya or headscarf reveal some hidden knowledge through their historical testimonies, and act as historical documents and agents to enlighten social and cultural histories (Ozturan, 2015). Such cases indicate that, individuals tend to use these visible accessories to reveal and publicise their social, cultural, ethnic or political identities and also belongings to specific groups. Apart from the individuals, these common uses of specific objects also function for the community itself; as Simmel (1971) states that fashion is a product of class division, and it both functions by holding a specific group together and also making that group closed to others.

**Mekap shoes: A historical case study**

The story of Mekap-shoes is to present a prominent case study on the semantic transformation of a commodity, upon social and political appropriations and testimonies. The case both presents frameworks on the brand’s intended interaction with its targeted users, and an unintended interaction between the commodity and the user. In that sense, it largely overlaps Gottdiener’s (1995) model for mass cultural semiosis. His two-staged model argues both the relationship between the producer and the user, and also between the object and the user. According to his model, in the first stage of semiosis the exchange value of production turns into the use value of consumption, which forms a relationship between the producer and the user by the discourse of advertising. And in the second stage, the relationship between the producer and the user turns into the relationship between the user and the object, as consumers make certain objects act as their cultural codes within society to differentiate/identify themselves, either as individuals or groups (Gottdiener, 1995).

**Chasing a Western dream: Mekap at 1970’s and 1980’s**

This section covers a brief historical background on Mekap’s early years, with a parallel reading on the economic, social and political background of the mentioned years. The relationship between the producer and the user to be stated here fits the first stage of Gottdiener’s (1995) semiosis model. And another point to be noted here is, although Mekap produced various models throughout time, all the references in this paper belong to its one of the earliest and by far the most famous yellow/brown sneaker model.

Founded in 1972, and today still acting with the brand name Mekap, the company holds a production capacity of two-and-a-half million pairs of shoes per year, in its factory in Trabzon. Having an almost closed economy with state-controlled import barriers in 1970’s, Mekap became the first Turkish brand producing sneakers with polyurethane injected soles, and used to be a well-known actor in the local market since then. In 1996, the company changed its focus on work-safety shoes with commercial concerns, as a benefit derived from the brand’s established perception regarding reliability, durability and safety (Url-1).

According to Karlklı (2003), rarely seen sneakers in Turkish market at 1970’s were some Adidas, Converse or Onitsuka Tiger products that had individually supplied from foreign countries, and some that are secured from American soldiers based in the country. Yet, such sneakers were quite popular among especially youngsters. Observing this rising passion and demand for sneakers among young people, entrepreneur Hikmet Kurşunoğlu transferred a new technology for the polyurethane injection, and Mekap brand had born with its first produced yellow and blue shoes (Karlklı, 2003). In an interview in 2004, company’s second-generation representative and acting-chairman Kenan Kurşunoğlu declares that, Mekap had its commercially best years between 1977 and 1980, whereas daily production was around six-eight thousand pairs. In the same interview, he also states that in its
first six months there were not enough interest in market, but later the company started an advertising campaign, and suddenly a massive interest on the shoes appeared and Mekaps became popular urbane and collegiate shoes in a short period of time (Şen and Gemic, 2004, February 26). By the help of the closed economical setup resulting lack of competition, and the durable, stylish and affordable models they produce, suddenly Mekaps gained a significant popularity and market share, and regardless of the purchasing power or the social class, many people had been fond of these new sneakers. Karlikli (2003) defines this status as the creation of a classless and coherent society, especially among young people. With the prominence of this sector, in the following years Mekap started to have competitors, and when Esem brand had appeared in the market with a more similar look to foreign models, soon Esems started to address upper-middle classes, while Mekap-shoes retained its hegemony for low-income segments. And mid-80’s witnessed an economical shift in Turkey, with the opening of customs stations and national economy’s articulation to the global and liberal market. This change resulted the import of celebrated foreign brands that are to target mainly upper classes. And finally at the end of 80’s, more affordable models had started to be imported from Far East, which made a final trigger to end the monotype sneakers era (Karlikli, 2003).

In order to understand the brand’s self-promotion and self-positioning, and on the other hand the mediation between the producer and the consumer, having a look at some examples of brand’s advertisements would be useful. When the digital archives of newspapers are reviewed, it is visible that the brand used printed media for advertising especially at late-70’s and early-80’s. These advertisements usually target the end user and rarely retailers. Summing up the advertising strategy of the brand, it could be claimed that the concepts of comfort, durability, strength, accessibility and health appears as key themes. Some references to the use of high standards in materials and production technology, and the sneakers’ harmony with Western lifestyle and dress are also visible. For instance, an advertisement from 1981 was to emphasize durable, healthy and functional Mekap (Figure 1).

**Mekap as an ideological commodity: From 1980’s to today**

The former section covering the first stage of Gottdiener’s (1995) mass cultural semiosis model, which focuses on the relationship between the producer and the consumer may sound decent and ordinary, as a commercial history of a brand. But when focusing on the second stage of Gottdiener’s (1995) model, to deal with the user-object relationship, an unexpected and unpredicted case appears; as the object, the Mekap-shoe starts to act as an independent social agent.

During 70’s and 80’s, within the lively ideological polarization driven by the left-right trajectories, expectedly Mekaps’ association with lower-income groups had been carried to ideological scene, whereas Mekaps started to be perceived as workers shoes or leftist shoes. That resulted Mekaps becoming a powerful symbol and identity indicator among leftist and revolutionist groups, just as some other clothing such as green parka. In parallel, starting from mid-80’s, but mainly in early-90’s, a stronger and more function-based association was about to be occurred. Apart from Mekap’s associations related to class and ideology, newly-formed militant left-wing movement PKK (Kurdistan Workers’ Party) appropriated Mekaps in a purely functional manner, with their economically affordable, logistically reachable and physically durable features. PKK is an armed guerrilla movement, listed as a terrorist one by several states and organisations, and self-identifying its struggle on Kurds’ cultural and political rights and self-determination in Turkey. Following its initial visibility in urban areas, by mid-80’s they had adopted a Maoist approach and guerrilla methods, and started to act mainly in the mountainside of the South-eastern Turkey and Northern Iraq. Expectedly, this arduous geography and lifestyle gave rise to new physical needs for PKK militants whereas the self-declared characteristics of Mekaps, “comfortable, durable, healthy” was totally fulfilling them. When the ease in their accessibility and affordability had also added to these features, in a short period of time they started to use Mekaps in great numbers (Figure 2). This unpredicted appropriation could be claimed to be the result of brand’s self-promotion and positioning in the market, the product’s functional properties, widespread sales channels, and its already established leftist/revolutionary connotations. For instance, journalist Hasan Cemal narrates a
Fig. 2: A scene from a video clip that is banned by Turkey Radio and Television Supreme Council in early 2016 (Url-2)

memory on Mekaps, from his interview with a PKK leader in 2013. On their way through mountainside and after mentioning that mountain-hiking is also included guerrilla training, his interviewee looks over his newly-purchased rubber shoes and tells they may slip on wet rocks or grass, and declares that “the best is our guerrillas’ Mekaps, they do not slip” (Cemal, 2016). On contrary to the similar cases seen in subcultures, this long lasting and still lively association had not been publicised by PKK militants or sympathisers. Instead they had probably just functioned physically, as durable and affordable shoes in guerrilla life, whereas no proof or clue had been found in these years’ press regarding the movement’s self-designation on Mekaps as identity indicators. Yet, it was the state, the political figures and the mass media that publicised and popularised this appropriation. First, it was Turgut Özal (Turkish prime-minister 1983-1989, president 1989-1993) who defined PKK militants as “a handful of youngsters hiking in mountains with their Mekaps”. As this association strengthens and popularises, the state and law enforcers perceived the shoes as an artefact out of favour; people using or selling Mekaps especially in South-eastern Turkey were suffered oppression, wearing Mekap is regarded as an evidence of terror affiliation, and even according to some personal narratives their sales had been banned for a while in 90’s (Url-3, Url-4). This association between Mekaps and PKK militants, and its usage as a metaphor had been increased by years, especially during the times that the political debates, peace talks or military actions were livelier. For instance, recently, after 2013 when the Turkish state and the PKK began the peace negotiations explicitly, Mekaps again appeared on press metaphorically, referring the PKK militants. Within this discourse Mekap in a way clarified from its functionality and physicality, and just handled as something abstract, as a metaphor, although it had continued to be used physically in mountainside among guerrillas and in urban life among sympathizers. A few cases among many could be illustrated whereas at 2002, when the state of emergency ended at the region, one could read “wearing Mekaps are free in East” on the headline of a newspaper (Url-3); at 2009, Prime Minister Recep Tayyip Erdoğan was uttering his discomfort on the Mekaps of the former guerrillas returning legally to Turkey (Url-5); at 2010, on a legal prosecution, a suspect’s demand of Mekap shoes in a eaves-dropped phone call had been mentioned in accusation as “suspect’s demand for the specific brand of shoe that the terrorist organization members use” (Url-6); at 2013, Selahattin Demirtaş, co-leader of the pro-Kurdish political party BDP, was describing walking, the probable scenario of guerrillas’ leave of the country, metaphorically as Mekap method (Url-7); and in a demonstration aiming solidarity with Kurdish fighters that are in war with self-styled Islamic State in Kobanî, it was written “the ones with yellow Mekaps will defeat ISIL” in a poster (Url-8).

On the other hand and in the commercial scene, the company had commercially suffered from this association for decades, and several times declared their support for the state, condemned the terrorism and the PKK movement and repeatedly stated they have no influence on guerrillas’ access to the shoes. At 2013, while complaining about this association, they even declared that if terror will end as they stop manufacturing Mekaps, they would resolutely do that. Besides they claimed their support to recent peace talks, in a sense that a probable peace could result Mekap-PKK association just remain as nostalgia (Oğhan, 2013, May 5).

And lastly, to render the recent situation on the issue, it can be stated that the company’s focus had been shifted to a new area, work-safety shoes; it still discomforts the general anti-PKK public who perceive it as a separatist/terrorist symbol; most PKK militants still use it in a physically; for civilian PKK sympathisers, it derived into an identity symbol and a blessed commodity; and the media still use it as a metaphor to point out guerrillas.

**Conclusion**

This paper aimed to document the story of Mekap-shoes, which had not found scholarly interest yet in spite of its wide publicity. It could be stated that most of the objects emblematized by ideologies or social movements in history are products of conscious and intended appropriations, usually far from or with a little reference to the object itself, to its physical functions or its use. On contrary, what makes the case of Mekaps prominent is also its appropriation’s reasoning and dependence on physical needs and functions. Mekaps’ association with PKK had begun in a pure functional context, and it was not the members or sympathisers who first build this semantic association, although it had also embraced and used by them later on. Instead, different actors, mainly political figures and mass media had constructed this semantic association. In addition, the object gained political, ideological, legal, and even criminal
associations; yet none of them were intended or controlled by the manufacturer or the imagined user. While all the actors involved in in this semantic journey had significant roles, the leading roles of political figures and mass media cannot be overlooked. For both, that a
re targeting large masses through a direct and simple communication, these associations and metaphoric uses became favourable and functional. But on the other hand, they gave rise to a popular and novel cultural code, a strong identity symbol, that may either be admirable or bete noire. Either labelled as a blessed resistance object or a cursed terrorist shoe, Mekap’s story renders a Western dream turning into an evidence of guilt. Yet, the case shows that apart from the biased political history of the near past, the testimonies of objects and the narratives generated upon them may also contribute to enlighten alternative histories.

References

Biographical note
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Design activism from past to present: A critical analysis of the discourse

Abstract

The primary objectives of this study are to explore the different phases of design activism in its forty-five years of history, and to examine the ideology and structure that lie behind the discourse. The theoretical framework of this study postulates design activism as a movement within the design community which stems from mainstream social movements opposed to socioeconomic developments of the twentieth century. The method of the study employs Critical Discourse Analysis on design activism discourse, with a focus on industrial design. A sample group of publications is selected and analysed through CDA to reveal the historical progress of design activism discourse and to provide insights into the content, as well as the contexts design activism exists in, and the strategies formulated to achieve the movement’s objectives. The results are critically interpreted, and the deficiencies of design activism are discussed in furtherance of design activism movement.

Keywords

Design Activism, Design Discourse, Design History

Introduction

Design activism indicates, in Julier’s (2011) words, “a voluntarist, politically motivated impetus: a desire for amelioration, to make a better world”, and design activism has grown recently, in parallel with awareness of global environmental, social, political, and economic issues (p.1). Fuad-Luke (2009) introduces a preliminary definition of design activism as, “design thinking, imagination, and practice applied knowingly or unknowingly, to create a counter-narrative aimed at generating and balancing positive social, institutional, environmental and/or economic change” (p. 27). Design activism serves as an umbrella term that incorporates many design approaches which share the aims defined. Despite the increasing interest by design community, the rising number of organizations and activities (Fuad-Luke, 2009), and growing number of academic publications, the outcomes of design activism are almost invisible, not only for public audience, but even for design community itself.

The main motivation for this study is to thoroughly comprehend design activism through a critical analysis of its discourse which has evidential value regarding the ideology, epistemology, and ontology of the concept. Exploring the different phases of design activism in its forty-five year history is another objective of this study. Although the extent of design activism affects most design disciplines, the scope of this study is limited to the discourse associated with industrial design discipline.

Historical context of design activism

Design activism subject has often been discussed throughout the extensive history of design, dating back to William Morris and design reform movement (Fuad-Luke, 2009; Julier, 2011). In some studies, design activism is also referred as a design movement (Clarke, 2013; Julier, 2013). Further to that, this study postulates design activism specifically as a social movement. This is based on the premise that the roots of design activism rest upon the social processes and social movements which emerged as results of the processes of change, namely advanced industrialization and globalization, in the second half of the twentieth century.

According to Jordan (2002), before the 1960s social movements were based on class struggles, and they were considered as extremist, destructive and vicious. However, in the 1960s, general framework of
social movements shifted to equally important, but more diversified political struggles (Jordan, 2002). Therefore, their significance for society and attitude towards social movements have changed. Tarrow (2011) places social movements within the sphere of contentious politics, whereby ordinary people join forces to confront authorities, elites and powerful opponents. He defines social movements as “… collective challenges, based on common purposes and social solidarities, in sustained interaction with elites, opponents, and authorities. This definition has four empirical properties: collective challenge, common purpose, social solidarity, and sustained interaction” (p.9). According to Julier (2013), design activism has arisen as a movement contesting the structures and processes of neoliberalism which have dominated the planet for thirty years. Hereby, this study conceives design activism is a social movement.

At this juncture, Karl Polanyi’s “double movement” theory, depicted in The Great Transformation (1944), is valuable in understanding the social, political, and economic complexity of our time. Briefly, Polanyi’s proposal is of a two-phase movement, first marketization, and following of social movements for self-protection (Udayagiri & Walton, 2003). This theory provides the basis for an interpretation of globalization and its global countermovements in the last decades. In consequence, design activism movement can be seen as a relatively moderate and still a contentious manifestation of concurrent mainstream social movements – against industrialization, and globalization – within design profession. There have been many notable critiques of the consequences of industrialization, and industrial society (marketization, in Polanyi’s terms) in the late 1950s and during the 1960s, including those of Vance Packard, Ralph Nader, and Herbert Marcuse (Lang & Gabriel, 2005; Marcuse, 2002; Whiteley, 1987). Yet, the first critique directly associated with industrial design profession did not arrive until Victor Papanek’s seminal book Design for the Real World (1971). For this reason, this study posits Papanek’s book as the inception of design activism discourse.

**The analysis of design activism discourse**

Critical Discourse Analysis (CDA) approach is used to analyse design activism discourse over a sample group of publications. The aim is to combine a micro-level textual analysis with meso and macro-level intertextual analyses which draw attention to wider discursive frameworks, and to reveal broader elements shaping the texts (Fairclough, 1995). According to Wodak and Meyer (2001), CDA assumes that all discourses are historical; they can only be understood in connection with their own context. Discourses are also ideological; therefore their manifestations and remarks are not arbitrary. CDA attempts to explain the genesis and the structure of a discourse, and to disclose power relationships that are generally hidden, thus allowing conclusions that can be practical and relevant (Wodak & Meyer, 2001). In this case, CDA is an effective method for disclosing the power relationships between industrial design profession, and politics, economics, society, and environment. Although a multidisciplinary approach may reveal the historical context and development of design activism discourse, the scope of this study is limited to industrial design field. Therefore, the analysed materials within this study belong to industrial design domain.

After an overall literature review the fundamental concepts of design activism discourse were clarified. Primary resources that are leading the discourse and defining the concepts of design activism are selected. Based on the fundamental definitions and explanations of the design activism concept, further materials that match with the framework of design activism concept are sought for analysis. By going backwards towards the material cited in those resources, and by going forward towards the materials that cited primary resources on the discourse, a pool of resources is gathered via an on-going process throughout the analysis along with the substantive database search.

A hundred and twenty two publications are examined thoroughly and a set of resources was identified for the further analysis of design activism discourse. Three criteria for the filtering of the examined resources were; the date of the publication; between the years of 1971 and 2015, the type of publication; published books, journals articles, conference proceedings, and the field of design that the publication is related to; which is industrial design. The sample group for analysis comprises sixty three resources (Table 1). Three ground levels of the critical analysis in this study can be explained as follows: 1) The content; how the approach is termed and identified and what constitutes design activism discourse; 2) The context of the discourse; in which context design activism is discussed; and 3) The plan for design activism; what the course of action is in order to achieve the main subjective of the approach. The content of the analysed materials are deeply studied and scanned by using linguistic instruments – such as detecting the repeating terms or mentions – to find out clarifications regarding these three steps. The findings of the analysis are presented in the following sections.
The Substance Of Design Activism

Four distinct topics come to the fore in design activism discourse; social issues, economic issues, political issues, and environmental issues. Figure 2 displays the historical disper-

**Table 1: Sample group**

<table>
<thead>
<tr>
<th>ARTICLES</th>
<th>AUTHORS</th>
<th>YEAR</th>
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<tbody>
<tr>
<td>Precautionness and ambiguity: Industrial design in dependent countries</td>
<td>Gui Bonfiglio</td>
<td>1977</td>
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<td>Designing for need - radio talk</td>
<td>Peter Loyd Jones</td>
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<td>Twelve methodologies for design - Because people count</td>
<td>Victor Papanek</td>
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<td>The coming of post-industrial design</td>
<td>Nigel Cross</td>
<td>1988</td>
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<td>Understanding the role of the designer in society</td>
<td>Jill Grant, Frank Fox</td>
<td>1992</td>
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<td>Design, Environment and Social Quality: &quot;From Environments minimun&quot; to Quality Maximun</td>
<td>Erio Manzini</td>
<td>1994</td>
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<td>Design for a Sustainable World</td>
<td>Victor Margulis</td>
<td>1998</td>
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<td>Human dignity and human rights: Thoughts on the principles of human-centered design</td>
<td>Richard Buchanan</td>
<td>2001</td>
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<td>Rethinking Design Policy in the 3rd World</td>
<td>Sufiirak Amir</td>
<td>2004</td>
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<td>Alternative design scholarship: Working toward appropriate design</td>
<td>Deen Nunnemers</td>
<td>2004</td>
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<td>The challenge of responsible design</td>
<td>Ikse S. Taniun</td>
<td>2004</td>
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<td>Rethinking Design Education For The 21st Century: Theoretical, Methodological, And Ethical Discussion</td>
<td>Alain Fidelle</td>
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<td>Ethics and altruism: what constitutes socially responsible design?</td>
<td>Rachel Cooper</td>
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<td>Altruism in design methodology</td>
<td>David Sturis</td>
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<td>Design and Democracy</td>
<td>Gui Bonfiglio</td>
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<td>Problems or Opportunities?: Overcoming the Mental Barrier for Socially Responsible Design in Turkey</td>
<td>Ozlem Er, Cijdena Kaya</td>
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<td>Design for development: A capability approach</td>
<td>Ise Dostekak</td>
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<td>Design's role in sustainable consumption</td>
<td>Ann Thorpe</td>
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<td>Design Thinking for Social Innovation</td>
<td>Tim Brown, Jocelyn Wynn</td>
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<td>Small, local, open and connected, Design for social innovation and sustainability</td>
<td>Erio Manzini</td>
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<td>Socially responsible design: Thinking beyond the triple bottom line to socially responsive and sustainable product design</td>
<td>Gavin Melles, Ian de Vere, Vanja Misic</td>
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<td>Poland Wroclaw a World of Socially Responsible Design</td>
<td>Boja Bockovska</td>
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<td>The Urban Precariat, Neoliberalization, and the Soft Power of Humanitarian Design</td>
<td>Cedic, G. Johnson</td>
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<td>Design with society: why socially responsive design is good enough</td>
<td>Adam Thorpe, Lorraine Gammun</td>
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<td>Reflections on Design Activism and Social Change</td>
<td>Grace Less-Mattie</td>
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<td>Design for social innovation: emerging principles and approaches</td>
<td>Annick Chick</td>
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<td>&quot;Actions Speak Louder&quot;: Victor Papanek and the Legacy of Design Activism</td>
<td>Alison J. Clarke</td>
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<td>From Design Culture to Design Activism</td>
<td>Guy Julier</td>
<td>2013</td>
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<td>Global Design Activism Survey</td>
<td>Hamn Kazgan, Gay Julier</td>
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<td>Material Preference and Design Activism</td>
<td>Guy Julier</td>
<td>2013</td>
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<td>Empathy or inclusion: A dialogical approach to socially responsible design</td>
<td>Carla Cipolla, Roberto Bartolo</td>
<td>2014</td>
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<td>Designing Development: Humanitarian Design in the Financial Inclusion Assemble</td>
<td>Anke Schwitters</td>
<td>2014</td>
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<tr>
<td>Critical making as materializing the politics of design</td>
<td>Carlo Döhlavu</td>
<td>2014</td>
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| Design for the real world; Human ecology and social change | Victor Papanek                  | 1972 |
| Design for society | Nigel Whitehead               | 1993 |
| The green imperative: Ecology and ethics in design and architecture | Victor Papanek                 | 1995 |
| Design for micro-staples: making the unthinkable possible | John Wool                     | 2007 |
| Design revolution: 100 products that empower people | Emily Pillian                 | 2008 |
| Design as politics | Tony Fry                      | 2011 |
| Architecture and design versus consumerism: How design activism confronts growth | Ann Thorpe                     | 2012 |
| Social Design: How products and services can help us act in ways that benefit society | Nynke Tromp                    | 2013 |

**PROCEEDINGS**

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| Design for the Surreal World: A New Model of Socially Responsible Design | Davey et al.                  | 2005 |
| Design Against Crime: Design leadership in the development of emotional values | Davey et al.                  | 2005 |
| Sustainable and humanitarian design education | Ursula Tschner                | 2006 |
| Design in activism: A conceptual tool | Ann Thorpe                    | 2008 |
| Design for humanity in the century of famine and warfare | Alkan Korkmaz                 | 2009 |
| Everyday People: Enabling User Expertise in Socially Responsible Design | Christine Caruso, Los Frankel | 2010 |

| Political Economics of Design Activism and the Public Sector | Guy Julier                     | 2011 |
| Designing with a social conscience: An emerging area in industrial design education and practice | Mariano Ramirez Jr.           | 2011 |
| From the Industrial Revolution to the Era of Ideas: Emergence of "Anarchism of the Objects" | Juan Casco Rubio, Daniel Cabello-Rain | 2011 |
| Designing Anti-Activism: Apocalypse faster! | Tatiana Matilla                | 2011 |
| Can design go beyond critique?: to compose together in opening productions | Anna Saravalli                 | 2013 |
| Achieving responsible design within the commercial remit | Stewarton et al.             | 2014 |
| Our Common Future? Political questions for designing social innovation | Rama Moue                       | 2014 |
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Design activism from past to present

Social issues are the most frequent subjects among the discourse. This topic incorporates the increase in the social welfare state in local or global contexts, bringing positive social change, and satisfying the needs of neglected segments of society, including the elderly, handicapped, and the poor. Following social issues in design activism discourse are environmental issues, covering overall arguments regarding sustainability, limited natural resources, global warming, preservation of habitats and ecology, and particularly, their relation with design. Economic issues are the third most frequently addressed issues. This area relates to the socially adverse and destructive outcomes of the economic phenomena such as capitalism, neoliberalism and globalization; social stratification, consumerism, and the designer’s role in the context of these economic phenomena.

Political issues are much less common in design activism discourse compared to other topics. The relationship between politics and the social, economic, and environmental problems referred in the discourse forms the content of the political issues. Notable topics include the role of design in development strategies and policies, and the regulations which ultimately shape the industrial design practice.

In order to analyse the context in which design activism is discussed, the figures, institutions, and organizations addressed within the discourse are described and discussed. Almost all of the sources discuss design activism within the context of designers’ own practices. However, design activism is mostly contextualized in multiple contexts, shown in figure 3.

Design education’s inadequacy to provide designers with necessary skills to cope with social, cultural, environmental issues etc. is another context addressed within design activism discourse. The relationship with clients and employers, those who make the final decisions for the realization of designed product or service, is the least considered context within design activism discourse. Only one quarter of the sample group postulate that design activism is relevant to politics, which indicates the lack of concern over the role and the relationship of designers with local governments, policy makers, legislations, and public service policies. Again, only one quarter of the sample group consider that NGOs and similar organizations provide designers with an adequate course for activist practices.

Regarding the geographical context of design activism, half of the sources approach the subject in the context of developed countries, in which the primary focus is the struggle with destructive consequences of design decisions in developed countries. On the other hand, fewer sources consider design activism within the context of developing countries. The main approach in this context, in general, can be described as seeking to overcome the existing problems and empowering societies through design.

The Course of Design Activism

According to the analysis, design activism discourse comprises four main strategies to achieve its objectives; “designers’ initiative”, “opportunities in economic order”, “design as politics”, and “design in the local context”, presented in Figure 4.

“Designers’ initiative” implies the necessity to consider social, economic, environmental, and political conditions while designing a product or a service. “Designers’ initiative” is the most frequently formulated method to achieve design activism’s
objectives, and can be typically exemplified with Papanek’s (1971) approach, which triggered the discourse. The second most commonly proposed approach is “design in the local context”. This aims to establish design-driven operations which act at least partially, if not fully, outside economic rationale, in order to generate social, environmental, and economic benefits in particular locality. John Wood’s (2007) and Ezio Manzini’s (2010) publications are exemplary in this manner.

The opportunities concealed in contemporary economic order for activist designers is another proposed approach for achieving the objectives of design activism. This approach suggests that the neo-liberal economic structure allows designers to bring about positive change, especially in the public sector. Margolin & Margolin’s (2002) and Julier’s (2011) approaches are good examples of this argument.

“Design as politics” implies change in policies and strategies related with design and productions of goods, services and systems that affect social, economic, and environmental conditions. Bonsiepe’s (1977) argument entreats a focus on developing, peripheral countries, and Tony Fry’s (2011) criticisms on developed countries essentially elucidate this perspective. The analysis suggests that “opportunities in economic order” and “design as politics” are the models that have been considered the least in the achievement of the objectives of design activism (See figure 8).

Conclusion

In this study, a sample group of texts illustrating design activism discourse was selected and analysed through CDA to reveal the historical progress of design activism discourse, and to provide insights about the subject matters that design activism deals with, as well as the contexts it exists in, and the strategies to achieve its objectives. The analysis results clearly propound that relatively long background leading to the recent rise of design activism should not imply the movement is yet perfectly accomplished and effective. Most arguments within design activism discourse neglect to challenge the established economic and political aspects of the design profession.

In this circumstance, I would argue that design activism’s inadequacy is the failure to understand, and perhaps ignorance of the interwoven relationship between the issues and contexts addressed in the discourse. For instance, an approach which attempts to deal only with social issues, such as poverty or inequality, is a vain venture not only for designers, but for any profession or organization. Instead, designers must recognize chain-like interdependency of social, environmental, economic, and political issues. In this regard, politics and economics are major determiners over environmental and social conditions. In today’s conjuncture, the influence of politics and economics go far beyond the local or national scale, as it is evident in the case of globalization (McMichael, 2003). Since design activism is arguably the most critical and contentious form of discourse, any lack of scrutiny of economic and political aspects will result in inadequacy in the design profession in general.

Therefore, I argue that “designers’ initiative” is an unavailing course of action and it has failed to achieve design activism’s objectives. Even though designers are capable of overcoming problems and generating feasible alternatives, the autonomy of design profession remains limited (Julier, 2008; Margolin, 2007). Emphasizing the designers’ role and calling them to action is more of a diagnosis than a treatment. In contrast, the other three alternatives strategies are more pragmatic, solution-oriented and more effective models for achieving the desired positive change. “Opportunities in economic order” is an opportunist approach that works through the channels of an existing regime and structure, while “design in the local context” is more of a maverick model aiming to by-pass or act outside of the mainstream economic order (Manzini, 2010). Both are bottom to top approaches, aiming at fragmental change via grass-roots activities. Yet, the potential for change is limited by reason of their restricted contexts, particularly when compared to the global scale of the addressed issues.

On the other hand, a top to bottom model of action may lead to larger scaled positive change. Although politics is a neglected subject within design profession, policies and regulations are crucial with respect to the social, economic, and environmental problems and their solutions. Regulations are the principal mechanisms for restraining markets and destructive outcomes of the market operations. Policies are critical determinants for the markets to drive the competing corporations towards the desired outcomes as they draw the lines for the markets.

Finally, according to Rucht & Neidhardt (2002), certain movements can be institutionalized as supplementary political interest mediator elements in modern social systems. Rather than substituting political parties or interest groups; they may be able to persuade them to consider their demands. In this respect, “design as politics” is a more far-reaching method compared to the others. Therefore, developing stronger political arguments and institutions is more likely to lead to the achievement of the broad objectives of design activism in the long term.
References

Biographical note
Ozgur Deniz Cetin is an industrial designer and a Ph.D. student. He was a research/teaching assistant in the Industrial Design Department at Izmir University of Economics for three years, where he assisted design project courses and other applied courses as well. His research interests are design activism and local design initiatives.