





Collective Individualism in Design Education

Abstract: Interdisciplinarity has allowed design education to expand beyond its traditional practises to integrate methodologies for understanding and addressing complexities, structuring and organising critical perspectives, externalising through visual representations, and reflecting on propositions and intended outcomes. Design establishes itself as a social process when situated within real-world contexts, thereby repositioning collectivity as an inevitable condition of design research and practice. This paper introduces the learning and working dynamics of design research students engaged in self-directed studies to examine how individual practises subsequently influence collective references in forming thematic parallels. Examples of student research are used to illustrate how divergent explorations of design issues converge to produce less insular approaches towards a collective body of knowledge. This paper discusses how individual perspectives contribute to unanticipated collectivity, communicating the value of facilitating a shared learning curriculum for design research and practise.

Theme : Conflicts

Keywords: Collective Individualism, Design Education, Communities of Practise, Curricular Research and Practise

1. Introduction

Today, Asian countries have assumed an international, economic, and cultural prominence. The fast changing cultures of media, music, fashion, and information have radically transformed conventional Asian societies and their visual identities to renegotiate tradition in ways that can be challenging, innovative, and provocative. The tension between traditional and modern cultures forms the dynamic and diverse influences in Asia through complementary debates on issues of traditional to contemporary, old and new perspectives, and local and global concerns. These debates commence an interesting proposition to present the research backdrop of relevant case-studies for students.

In recent years, countries like Japan, Korea, Hong Kong, Taiwan, and Singapore are emerging as major players in design to influence and contribute to the creative economy. Aligned with Singapore's vision of becoming a global city for design creativity, this focus on the creative industries has presented a timely reintroduction of design to the design sectors of Singapore and Southeast Asia. Singapore's strategic, geographical position represents an opportunity to become the meeting point for strategic design, research, and innovation.

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The development of design learning has resulted in a fragmentation of design knowledge against an array of specialisations where the connections and integrations for humanity are misaligned, suggesting that the field of design seek better understandings through new structures of learning and models of research (Buchanan, 2001). As the design environment becomes increasingly interdisciplinary, it requires intellectually inquiring design processes that address physical, aesthetical, communicative, and social needs. This positions the role of design as a catalyst for the breeding of new ideas, approaches to problem solving with more synthesised perspectives on varied disciplines, and evolvement with other non-design related subject areas.

Buchanan's (2001) call for new design research was centred on bringing together knowledge from other disciplines to integrate into the creation of products to impact and serve human life through the accomplishment of individual and collective goals. In its inquiring nature, design is defined by research activities with socially embedded consequences. Within the scope of design, interdisciplinary practise is demonstrated by the ability to employ concepts and methodologies from other disciplines to result in new understandings for the primary discipline (Dykes et al., 2009). According to Cross (2001), the interdisciplinary study of design is evident in the common perceptions, experiences, conversations, and creative activities involved in the making of the artificial world. What designers know explicitly is the human-made world of artefacts, wherein the practise forms its own intellectual culture to allow designers to build new knowledge for their primary disciplines through interdisciplinary design.

This paper introduces the pedagogical framing of a newly launched Masters in Design programme that is set against the interdisciplinary conditions set by the design landscape of Singapore. Through an overview of the postgraduate research framework and examples of student research, the concept of collective individualism is introduced and discussed to build arguments for how individual practise contributes to the collective knowledge of the programme to further inform the trends and directions for design research against the Singapore context and surrounding region.

2. Framework of postgraduate research

2.1 Introduction to the Programme

The MA Design Programme at LASALLE College of the Arts is deeply rooted in a variety of research activities to support creative design processes, applications, methods, and contexts within interdisicplinary design. Buchanan (1999) highlighted the role of design research as being a significant, most sophisticated, and well-grounded form of investigating design. Fundamental to any learning of design, this vital role will prepare researchers and educators to expand existing knowledge through original forms of inquiry.

Underpinned by Dorst's (2015) "Five Lessons from Design" the Programme is positioned to push the boundaries of design fields against open, complex, dynamic, and networked problem situations. The following Table summarises five practises fundamental to the understanding of design and its complexities.

5 LESSONS FROM DESIGN		
PRACTISE	DESCRIPTION	
Coevolution	Constant iteration of analysis, synthesis, and evaluation between the design spaces - problem space & solution space Design practise is the bridging of two design spaces, leading towards the creation of ideas	
Developing Problem Situations	Occurs through abstraction to examine past and present conditions to understand future contexts	
Handling Frames	Requires use of metaphor to allow the contextualisation of the design problem Episodic and defined by freshness	
Exploring Themes	Informal process of design for the purpose of sense-making - captures the underlying phenomenon Meaningful elements of the design situation	
Fostering a Discourse	The physical and intellectual environment for inspiration and reflection Defines a new space for approaching the problem situation	

Table 1. Five Practises for Framing Design (Adapted from Dorst., 2015)

Designers have crafted new platforms, carved new roles, and added new competencies to meet emerging challenges. This has led to the forming of 'design clusters' to investigate the broader capacities of design and ever-changing roles of the designer. Design is not constant and requires the ability of designers to reinvent themselves to fit into changing environments and situations through interdisciplinary approaches to challenge existing design norms.

The MA Design Programme builds upon the above conditions, set by Dorst (2015), in its pedagogical approach to support the relationship between research and practise through interdisciplinary design. According to Dykes *et al.* (2010), interdisciplinary design contains at least two disciplines and an interdisciplinary designer should demonstrate specialist knowledge in more than one field. The ability of the interdisciplinary designer to work across several fields of knowledge, through designerly activities, strengthens the primary discipline while influencing the emergence of new forms of design practise.

2.2 Synthesising Ideas from 4 Core Themes

The four themes below form the research engines for postgraduate students to develop their research-practise projects. These research themes (Table 2) are termed 'super-clusters' (Figure 1), as broad frames for the various contexts of design. Each theme presents students with the opportunity to identify, examine, and evaluate design challenges against the context of current and evolving societal, cultural, political, and technical issues.

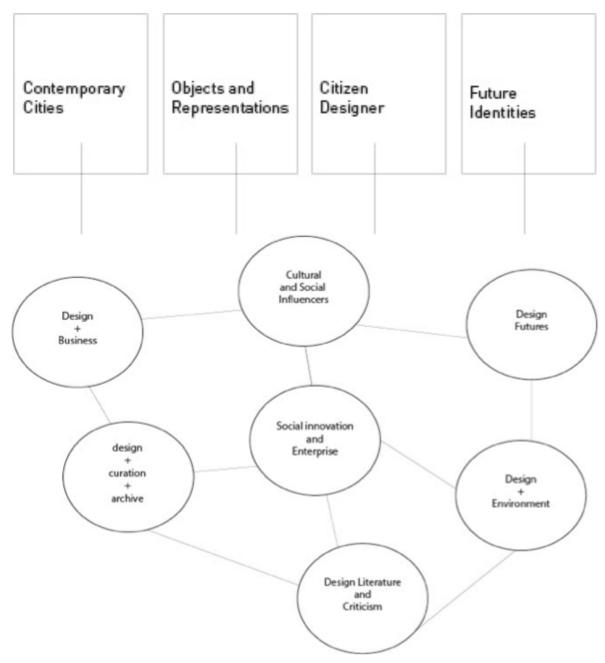


Figure 1. Super-Clusters

Table 2. Research Themes

SUPER CLUSTERS		
THEME	DESCRIPTION	
	Uses design to inquire after new modes of behaviour for contemporary society and what it means in terms of urban transformations.	
	Focuses on how designers can transform the everyday experiences and worldviews of urban dwellers by questioning how notions of the contemporary city can be both profoundly local and dynamically global.	
CONTEMPORARY CITIES	Provides a contextual framing of the complex economic, political, social, and environmental conditions through a critical vocabulary that is capable of creating opportunities for dialogue between various social, technological, economic or political constituencies in influencing urban growth and development.	
	Probes new ideas of how we will live in cities in the future.	
	Questions the quality of reflective design practice to propose new creative perspectives and critical paradigms for design futures.	
FUTURE IDENTITIES	Embarks on investigations on what the future might hold for design through speculation, critical thinking, and devising appropriate design and innovation strategies that can address changing markets, competitor contributions, organisational capabilities and business objectives.	
	Contributes to changing trends, new research or applied knowledge that can lead to innovative design models to improve the built environment and the human condition.	
	Focuses on designed objects and their various effects on the material culture of today to open up discussions on history, philosophy and the relationships between people, objects and representations.	
OBJECTS & REPRESENTATION	Questions interactions existing within social relations to objects beyond the superficial, beyond the ordinary.	
	Investigates relationships between man and his object/s for future discourse.	
CITIZEN DESIGNER	Questions how designers can affect political or social change, and what that means for social designers to be design conscious against the fast-changing environments of Asia and beyond.	
	Questions the impact of design on citizenry by raising issues existing in the minds of conscientious designers dealing with issues at the educational, individual, corporate, and grassroots levels.	

2.3 Key Exercises – Questioning Design

Students in the MA Design Programme work across and respond to various design labs and tasks to support any of the above research themes. The primary objective is to uncover the research threads that can develop into research-led practise processes and new research areas, providing sufficient grounds for the dialogic and critical discourses of design. Projects are led by different research methods and focus on three key design exercises to assess the design context and situation, explore different possibilities and perspectives, and design a research plan.

	DE	SIGN LAB PROJECTS	
KEY EXERCISE	SCENARIO DESIGNING	CHANGING ROLES	EVIDENCE & ARTIFACT FINDING
OBJECTIVE	Looks at current trends and emerging socio- cultural themes to push the boundaries of individual research areas	Students are given different existing roles in the creative industry and put on different 'thinking hats' based on these roles to answer the key question, "How would I respond to this if I was a ?"	Focuses on fact finding and collating visual research pertaining to research themes.
OUTCOME	Listing of key words linked to their research.	Navigates into different territories and expands the interdisciplinarity of their own projects.	Develops design processes through filtering, selecting, archiving, and documenting the knowledge, information evidences, and visuals into a concept map visualising the research area.

Table 3. Key Design Exercises

The MA Design Programme was developed to foster research-led ideations and expand on design processes through interdisciplinary research. According to Bremner & Rodgers (2013), interdisciplinarity requires the designer to connect history and theory to practise so as to overcome specialisation and address problems characterised by complexity. Interdisciplinary design demonstrates the use of methods to construct overarching frameworks that connect history, theory, and practise to new sets of problems. This positions the student researcher with the challenge to negotiate broader views and understandings to extend specialist knowledge into other disciplines through contextualising and reframing the role of design.

3. Individual practise to collective individualism

The MA Design Progamme requires students to undertake individual research within any of the four themes (Table 2) and interdisciplinary approaches are encouraged to support the triangulation of

research, theory, and practise. Interdisciplinary research is suggestive of collaborative activities to exchange knowledge across people and disciplines. In contrast, individual research comprises notions of autonomy and independence as part of developing unique perspectives, methodologies, and interpretations for addressing design problems. This section discusses how individual practise produces a form of collective individualism, wherein exchange lends itself to the cross-pollination of ideas to inform new research issues and themes.

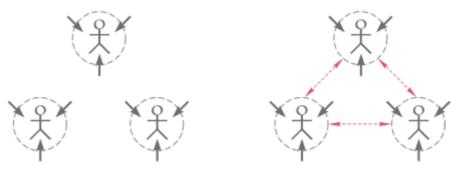
3.1 What is Collective Individualism

The constructs of collectivism and individualism have been studied to understand cultural differences from the fields of psychology and sociology, producing a range of measurements for how individual self-concepts vary according to cultural predisposition, environmental factors, social interaction and context. Singelis *et al.* (1995) outline four distinctive dimensions of collectivism and individualism (Table 4).

4 CONSTRUCTS OF INDIVIDUALISM AND COLLECTIVISM			
CONSTRUCT	CHARACTERISTICS		
Vertical Collectivism	Individual sees self as an aspect of an in-group Self is interdependent and different from the self of others Inequality is accepted		
Horizontal Collectivism	Individual sees self as an aspect of an in-group Self is interdependent and the same as the self of others Equality is essential		
Vertical Individualism	Autonomous self is postulated Self is independent and different from the self of others Competition is important		
Horizontal Individualism	Autonomous self is postulated Self is independent and the same as the self of others Equal status is accepted		

Table 4. Vertical and Horizontal Cultural Dimensions (Adapted from Singelis et al., 1995)

Horizontal individualism postulates that the spirit of individuality is exerted autonomously from the influences of others, yet leans toward collectivist thinking when placed within social relationships. The conceptualisation is further discussed in this paper as *collective individualism*, positioning the horizontal individual as an active group member in the concomitant outcomes of the collective whole. The individualised practises of students are representative of independent research that result in a shared body of knowledge, suggesting that individualism can only be expressed against collectivist dimensions to produce a network of collective individualism.



Horizontal Individualism

Figure 3. Horizontal to Collective Individualism

Collective Individualism

3.2 Individualised Research & Practise

This section introduces three examples of ongoing postgraduate research to review how individual conceptions of design practise undergo the cross-pollination of ideas to inform thematic parallels of design research and identify emerging issues for future curricular planning.

1. The Value of Narrative (Nicholas Ooi)

This project looks at how the role of storytelling, through representation and meaning, assigns and regenerates the value of objects. Narratives allow designers to effectively translate and communicate an object's intended meaning, developing a visual language or code by which a design taxonomy can be produced. The main objectives of the project review the profound feelings of emotional loss with material objects and how the processes of refurbishment and reappropriation produce new emotional connections, aided by use of narratives. An initial prototype of a piano bench was developed (Figure 3), combining the adjustability of the student's bench height with the stationary seat of the teacher, to allow for the bench to grow and develop with the student.



Figure 3. The Value of Narrative (Ooi, Nicholas 2017)

2. Walkability of Jakarta (Jocelyn Sufiana)

Jakarta is one of the most densely populated cities of the world, where failed urban planning and infrastructure have resulted in the loss of walkability. This project identifies what makes urban dwellings walkable and how Jakarta's infrastructure can adopt the principles of urban placemaking to promote concepts of livability and walkability for its citizens. The research identified the key cultural factors and economic variables contributing to the current 'unwalkability' of Jakarta, producing a proposed urban plan that introduces a new way of life with pedestrian-friendly areas and spaces in West Jakarta.

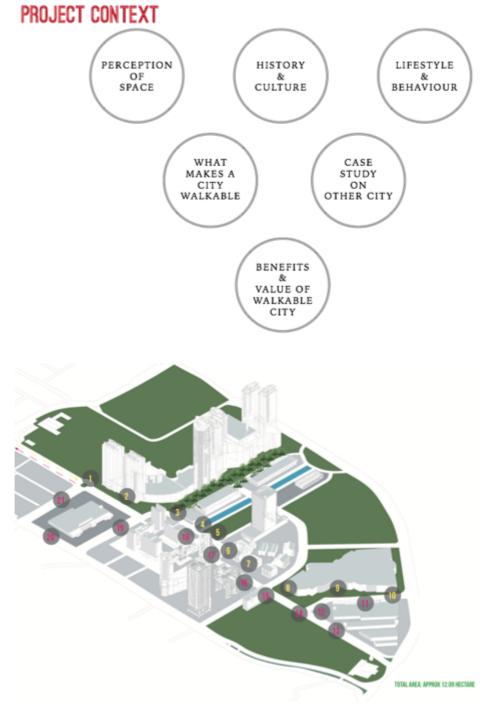


Figure 4. Walkability of Jakarta (Sufiana, Jocelyn 2017)

3. The Governance of Time (Siang Hwee Tay)

This project examines the rapid development of Singapore as a critique on the conceptions of time, space, and productivity among its citizens. The project studied the significance of 'pause' and how the slowing down of life, activities, pace, and thinking allow for more meaningful and intentional experiences to occur. It is only through moments of reflection and pause that memories are triggered and their significances recalled. Through a series of design-led activities, the role of intentional pauses was studied and documented to further understand how pause acts a precondition of reflective practise.

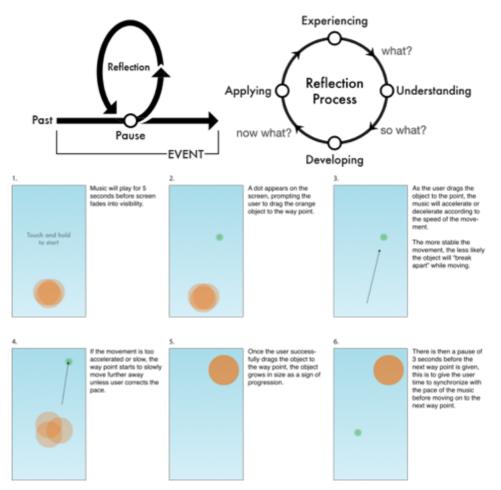


Figure 5. The Governance of Time (Tay, Siang Hwee 2017)

The three projects above address larger conceptions for how design is situated and positioned to influence individuals through product semantics and emotional design, urban and cultural placemaking, and reflective activities. Each of the projects reviews the contextual framing of design against historical facts, socioeconomic influences, cultural implications, and the human condition to build upon the research themes of the Programme.

3.3 Forming of Research Themes

The MA Design Programme comprises four research themes that serve as the overarching concepts under which independent research is situated. Table 5 outlines how each of the student projects integrates the core themes to inquire into the current state of design with key themes arising from preliminary research and practise. Individual experiences are design-centric in how the problems are theoretically framed and the manner with which they are conceptually questioned, tested, and explored through design practise. The overarching research themes expand upon the contexts of the projects through divergent thinking while individual practise refocuses the broad scope of research through the convergence of underlying concepts and themes.

The interdisciplinary curriculum of the MA Design Programme adapts Dorst's (2014) steps for framing design and its complexities through the negotiation of problem and solution spaces, examination of past and present contexts, framing of design problems, exploration of themes for sense-making, and the development of a discourse. In the exploration of themes, students have identified key themes relating to their individual research to inform the research parameters of the Programme. The key themes are defined by design intentions, values, implications and categorisations. These themes lead to the building of discourses, allowing students to fully contextualise the project scope and formulate the main research objectives.

EMERGENT THEMES OF INDIVIDUALISED RESEARCH				
PROJECT TITLE	- 	THE VALUE OF NARRATIVE	WALKABILITY OF JAKARTA	THE GOVERNANCE OF TIME
DECE 4 DO		Objects & Representation	Contemporary Cities	Contemporary Cities
RESEARCH THEME	1 1 1		Citizen Designer	Citizen Designer
	 		Design Futures	
	DESIGN INTENTION	Meaning-Making	Place-Making	Time-Making
	DESIGN VALUE	Object	Space	Pause
THEMATIC PARALLELS	DESIGN IMPLICATION	Metaphor	Way of Life	Appreciation
	DESIGN CATEGORISATION	Emotional Design	Emphatic Design	Disruptive Design

Table 5. Thematic Parallels of Individual Research

Horizontal individualism is evident in the directions that students lead in further challenging the boundaries of existing knowledge and design practise through individually developed inquiries into design problems. The students assume the role of designer-researcher, reifying the shared sense of self in holding equal status, while autonomously processing and applying information. The collective dimensions are demonstrated in the common body of knowledge built from the sharing and feedback of ideas throughout research progression.

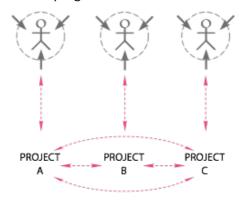


Figure 6. Collective Individualism to Knowledge Sharing

Table 6. Cross-Pollination through Collective Individualism

KNOWLEDGE SHARING				
PROJECT TITLE	THE VALUE OF	WALKABILITY	THE GOVERNANCE	
	NARRATIVE	OF JAKARTA	OF TIME	
DESIGN	TIME is necessary to	MEANING is a precondition	PLACE affords	
INTENTION	Meaning-Making	to Place-Making	Time-Making	
DESIGN	PAUSE is necessary to the	OBJECT is necessary to the	SPACE is necessary to the Value of Pause	
VALUE	Value the Object	Value of Space		
DESIGN IMPLICATION	Metaphor as a form of APPRECIATION	Way of Life as a METAPHOR	Appreciation as a WAY OF LIFE	
DESIGN	Emotional Design through	Emphatic	Disruptive Design through EMPHATICS	
CATEGORISATION	DISRUPTION	Design through EMOTION		

The key themes are indicative of how individualised research presents thematic parallels from the different student researchers, leading to the setting of parameters for the Programme's structure in prescribing the necessary themes to organise future design research activities. As students engage in sharing and feedback sessions, the domains of project-specific knowledge are shared to contribute to a collective body of knowledge. Collective individualism is evidenced by the shift from individualised practise towards an exchange in ideas, conceptions, areas of focus, themes, and understandings of design (Table 6). The collective dimensions of individual practise inform the thematic parallels influencing the development of individual research that, in turn, produce a shared knowledge base supporting the research themes of the Programme.

4. Educational implications

Interdisciplinary research is a complex undertaking that requires critical approaches to effectively implement design as a problem-solving practise. The development of innovative pedagogical approaches and emphasis on the triangulation between research into theory, theory into practise, and the theorising of practise pushes design boundaries towards a much-needed paradigm shift for design education in Singapore. This is evidenced by the MA Design Programme's pedagogical framework which encourages *divergent thinking* to expand on knowledge, *convergent thinking* to develop a focused research plan, and *converging-diverging* thinking to situate the outcomes against relevant contexts and situations.

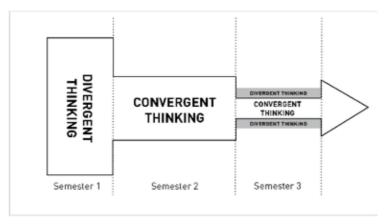


Figure 2. Pedagogical Framing

According to Poggenpohl (2015), an important contextual change affecting design is the need to extend beyond the individual experience with knowledge and skill contributions from different disciplines to produce complementary methods, interactions, and processes of knowing. Human experience reveals the existence of problems and possibilities, positioning the role of designer-researchers to become readers and thinkers to pragmatically frame research problems. The Programme embeds the divergent-convergent scaffolding to provide better design potential contributing towards the building of a body of design knowledge.

Demirbas and Demirkan (2007) distinguish between diverging and converging learning as abductive and deductive perceptions toward concrete experiences. Divergent thinking is carried out through individual practise, where students develop an appreciation for the conditions of design and build upon specialist knowledge from neighbouring disciplines to develop the capacity towards interdisciplinary research. Convergent thinking is demonstrated in the synthesising of theories, ideas, and preliminary research findings to form the key themes of research. This paper discusses how individual practise, embodying the principles of interdisciplinarity, shifts into the dimensions of collective individualism through knowledge exchange and transference to create a shared base of knowledge. The communication of research stages and progression allow students to engage with new perspectives, thematic concepts, and information.

The plurality of design suggests the indeterminacy of its approaches to practise or research implications, as the role of design is dependent upon specific contexts of meaning. Poggenpohl (2015) states that the building of communities of research practise reconciles gaps between research and practise, requiring teachers of design to initiate students to share research and engage with other practitioners for the extension of design's future through knowledge building.

This paper has introduced the interdisciplinary foundations of a newly launched MA Design Programme through discussions of how students embark on individual research and practise, contributing to the collective development of research themes and concepts. Individual practise was introduced through examples of ongoing student research to illustrate how collective individualism occurs through knowledge exchange, where the cross-pollination of ideas produces thematic parallels to influence individual practise. These parallels in research direct future themes for the Programme, creating a knowledge base specific to the design landscape of Singapore while contributing to larger communities of research practise.

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