An Education in Letterpress: From Apprentice Training to Design Student Charting the History of Letterpress Education in the United Kingdom and Ireland Alexander Cooper, Rose Gridneff, and Andrew Haslam

The number of letterpress workshops within higher education has been in decline since the advent of digital type. Our motivation for undertaking an investigative survey is to identify which workshops are operational, find the locations and institutions, survey what they contain and interview those who use them. Based on the field research data which was systematically gathered through visiting letterpress workshops in further and higher education (FE and HE), this chapter outlines the current breadth and depth of letterpress practice within contemporary art and design pedagogy across the United Kingdom and Ireland.¹

Throughout the major part of the twentieth century, the teaching of letterpress was organised through training centres in technical colleges and art and design schools. This 'training' as opposed to 'educational' model is now long redundant, largely due to the growth of digital technologies the 1980s and the developments in design education. Letterpress printing, however, is more popular than at any time since the 1990s.²

¹ 'Further' and 'higher' education refer to systems of post-secondary education in the UK. 'Further education' refers to programmes that lead to qualifications lower than an undergraduate degree. These tend to be vocational in nature, although not exclusively so, and some further education providers also offer degrees. 'Higher education' refers to the provision of degree-level qualifications, usually provided by universities.

² The prevalence of social media has enabled individuals to connect with others, buy equipment and learn the process. Briar Press (<www.briarpress.org>), which is 'dedicated to the preservation of letterpress-era equipment and the art of fine printing', has 70,000 members worldwide.

The current resurgence of interest in the letterpress process makes this research timely as it examines how the education of artists and designers has changed and developed since the 1960s. Despite the renewal of interest, we are in a transitionary period as it is no longer the norm for letterpress to be taught by someone who has learnt their trade through the apprenticeship tradition. A younger generation of students, educators, researchers and designers are adopting and reinventing what has historically been the principal method of composing and reproducing type for over 500 years. This new generation have appropriated college workshop spaces to reinvigorate the value of letterpress; a proposition that is central to our research investigation of the workshops.

The collaboration between the principal researchers began 2011, culminating in two interconnected research projects. The first linked six academic institutions with active letterpress workshops from around the UK to consider practical and philosophical approaches to letterpress practice. Entitled 6x6: Collaborative Letterpress Project, it was conceived as a mechanism for collectively reviewing and sharing practice-led letterpress research and best practice. The participating institutions were the University of Brighton, Camberwell College of the Arts (University of the Arts London), London College of Communication (UAL), Central Saint Martins College of Art and Design (UAL), Lincoln School of Art and Glasgow School of Art. Each had an established history of using letterpress, and, with the exception of Lincoln, had workshops staffed by a dedicated technician. The participants involved were all from Graphic Design or Visual Communication programmes.

Six staff and students from each of the institutions responded to a common design brief to produce 200 letterpress prints through a collaborative project. The brief asked for a graphic

letterpress response to the immediate area 1200ft around their letterpress workshop, encouraging reflection on its geographic and contextual position. This resulted in three exhibitions and a letterpress-printed book, $6x6.^3$ Work from each collaborating university was supported by a contextual essay that enabled the contributors to consider how they positioned letterpress in their respective institutions. Printed work from the book was exhibited at Her House Gallery, London, and the University of Brighton Gallery in 2012. It then travelled to Winchester School of Art where it was on display during the New Art of Making Books Conference, 2013.

The second part grew out of this first collaboration in 2014. Collaborating with six letterpress workshops led the team to consider how characteristic were these workshops nationally. This prompted an investigation into how widespread is the use of letterpress in art and design education today as compared to its mid-century heyday. Two sources found through research in the Charles Pickering archive at the London College of Printing provided datum points for the number of letterpress workshops in use in technical and art and design education between the Second World War and the widescale adoption on digital type setting in the 1980s. The first was a typed and hand-annotated list, believed to have been compiled by Beatrice Warde, entitled *List of Establishments for Further Education Where Courses or Classes in Printing are held 1955*. The second was the *Guide to Educational Courses for the Printing Industry* produced by the Printing and Publishing Industry Training Board in 1967. Both sources

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³ Alexander Cooper, Rose Gridneff and Andrew Haslam, eds, 6x6 (Bighton, 2014).

⁴ Charles Pickering (1908-1998) worked in the print industry, as a typography lecturer and as an Inspector of Education. The collection held at London College of Communication contains material collected by Pickering covering the history of printing, typography and the book trade from the sixteenth to twentieth centuries. The list is archived in one of his original files labelled 'Beatrice Warde'.

provided a list of courses leading to qualifications related to training for the print trade, along with the institution, its address and telephone number. The 1955 list identifies the number of students studying printing in each institution under six headings: 'total students', 'whole day', 'half day', 'evening only', 'full time' and 'block release'. It reveals seventy-two colleges offered training; the 1967 list had just forty-four, all of which were also on the 1955 list. There were obvious omissions from both lists, including some art schools with longstanding letterpress workshops, and we identified eight institutions that we knew had active workshops in 1967.⁵ A clue to their absence was found in the 1967 Guide. At the end was a telling line that read 'Full-time courses of a more specialist nature, See also Design Courses'. This reveals the division at the time between technical training for typesetting and printing, and design education, and suggests that the ommissions were because they did not offer technical print training leading to a named award but instead had letterpress workshops to support students studying graphic design, illustration and printmaking. We added these eight ommitted institutions to those in the two lists to create a single list organised alphabetically by city or town. The total number of letterpress workshops within educational institutions responsible for the training of designers and printers in 1967 was established as 104.

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⁵ These institutions included: The Royal College of Art (founded 1837), St Martins School of Art (founded 1854) now CSM part of University of the Arts London, (merged with Central School of Art in 1989 as part of the London Institute), Oxford School of Art (founded 1865) now Oxford Brookes University, Portsmouth School of Art (founded 1869 as the Portsmouth and Gosport School of Science and the Arts) now Portsmouth University, Harrow Technical College and School of Art (founded 1897), becoming part of the Polytechnic of Central London (founded 1838) and then Westminster University.

The research then focused on those workshops that still existed, those which had been reinstated, and the nature of their use. We identified forty-three art and design institutions which had active letterpress workshops. The majority have evolved through a series of educational, institutional and technological changes. Between 2014 and 2019 we visited and surveyed forty-one workshops, systematically identifying and cataloguing the equipment and presses, typefaces and sizes, both wood and metal. In each case, we undertook a measured survey of each workshop which supported the development of orthographic drawings to a common scale providing a physical representation of the space.

This field research enabled us to open a dialogue with technical and academic staff teaching in the workshops, which together with the inventory of all founts and equipment provided an overview of letterpress practice within each institution. Today all but two technicians who had originally been trained as industry apprentices had retired. Through fostering a critical dialogue with current staff and students we have been able to analyse the connections between the people, the space, the equipment and the range of emerging pedagogic and design practice.

Identifying a time frame and the extent of the field of research

Surveying the letterpress workshops thirty years after analogue had been superseded by digital would merely have provided a snapshot, a moment in time, rather than describe the narrative of change. Instead, taking 1967 as a starting point, we set out to study how the shift from analogue to digital composition affected the institutional place of letterpress workshops. Our research aimed to establish how many workshops were active in the period when metal

type was the principal means of composition and how many remained. We wanted to know whether workshops had been reinstated and whether there had been any new additions.

The dates 1967-2009, provided bookends for our research, with the majority of those institutions visited experiencing lasting change during this span that affected the letterpress workshops. Having established the total in the pre-digital age we needed to establish which institutions had invested in letterpress equipment and established workshops since 1967. We used the University College Admissions System (UCAS) to identify courses and institutions which offered printing, printmaking, bookbinding, book arts, graphic design, typography, visual communication, and communication design. We compared the UCAS list of entries with the 104 workshops from 1967. Over fifty years of further and higher education has seen amalgamations, mergers, takeovers, closures and changes in institutional names, location, buildings and course provision. By organising our combined lists alphabetically by city and town, rather than alphabetically by institutional name, we were best positioned to trace name changes and consider if the equipment from one institution had been inherited through renaming or merger by an institution within the same region.

Tracing the history of institutions on the combined list revealed a narrative that corresponded to the major changes in art and design education in the UK during the period. The first significant change was the adoption of the National Diploma in Design (NDD, 1946–61). Then, in 1960, the Coldstream report outlined plans to develop a Diploma in Design (Dip AD). The new qualification was awarded from 1962–74, with only sixteen colleges offering it in the first round.⁶ It is this legacy that is evidenced in the absence of many of the original

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⁶ First Report of the National Advisory Council on Art Education, London, HMSO, 1960

colleges listed, for, as Nigel Llewellyn writes, 'Coldstream had promised institutional autonomy but his committee's reforms led to increased centralisation and the closure of almost two hundred art schools across Britain.' This was a significant watershed as technical colleges and art and design schools either retained pre-degree courses in further education or developed degrees within higher education. This 1965–92 has been referred to as the polytechnic era and it was dominated by the Council for National Academic Awards (CNAA, 1974–92). It came to an end in 1992, when polytechnics were granted degree-awarding powers and became universities. This new landscape was changed yet again as institutions became more dependent on fees paid directly by students. Fees were first introduced in 1998, but were raised substantially in 2009 so that they largely replaced funding from the state.

Ninety-six of the 104 institutions listed had name changes. Only the Royal College of Art, Glasgow School of Art, Leeds School of Art and Plymouth School of Art retained their original titles. Croydon School of Art has retained its name but as part of Croydon College, which closed in 2019 after 150 years. Likewise Gray's School of Art has retained its name but is now part of Robert Gordon University in Aberdeen. Of the 104 institutions, fifty-nine are within higher education (the Royal College of Art remains the only institution to provide exclusively post graduate provision) and forty-five are in further education.

Our research has focused on trade schools and art and design schools as these institutions have traditionally provided vocational training or an art and design education. Many of the established and 'redbrick' universities have publishing houses attached to print and distribute

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⁷ Nigel Llewellyn, *The London Art Schools: Reforming the Art World, 1960 to Now* (London: Tate, 2015),

books and academic papers. These publishing houses often had a commercial aspect to their work. There were also some universities with letterpress workshops attached to Student Unions, or as part of English departments to teach bibliography and book history (for instance at the University of Birmingham and the University of Leeds). The 1967 list also included Barnardo's Homes, that educated boys for various trades, including compositing and press operators.⁸

Research methodology: the field survey

The field survey set out to answer four interrelated research questions:

1. How many active letterpress workshops are operating within British and Irish higher and further education?

- 2. Where are they located and within which institutions?
- 3. What do they contain and how are they arranged?
- 4. How are they being used?

Having established the number of institutions we thought might have active letterpress workshops we began to systematically contact each by telephone and then email. All the technical staff, course leaders and heads of departments where helpful and able to confirm if there was any letterpress equipment within their institution. We established that forty-three Institutions from 104 had retained letterpress equipment.

⁸ These appear on the *Analysis of Trade Enrolments* list with locations in Dartford and Harpenden. No student numbers were listed for either.

Before fully committing to the field survey of all workshops we contacted some of our target group of colleges to describe what the aims of the project were and if they would be prepared to grant survey access to the workshop. All the colleges were very generous providing full access to their workshops and print rooms; in many cases the research took place during teaching sessions. The research was supported by small funding streams from a range of sources, including the authors' respective institutions.⁹

Plotting the scale of the survey

Using an Ordnance Survey (OS) map of the UK and Ireland we plotted the position of the 104 workshops using a yellow dot for the 1955 list, an orange dot for the 1967 list and an orange roundel with a yellow bull for those institutions identified on both lists. ¹⁰ The distribution pattern that revealed the post-war period had a significant number of small institutions with letterpress workshops located across the UK which were linked to major cities towns or urban conurbations. A second map plotted the forty-three institutions with confirmed letterpress workshops. We have broken down these institutions geographically in table one.

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⁹ Funding was received from the University for the Creative Arts, University of the Arts London, and the University of Kingston. Further funding was provided by the Design History Society. The total was £8,300 over a three-year period (2014—2017) and supported travel costs.

¹⁰ Andrew Haslam had previously used this method of plotting workshops, manufacturers and designers on a map whilst researching for *Lettering: A Reference Manual of Techniques* (London: Laurence King, 2011).

Table One. Distribution of active letterpress workshops

Nation /	Number	Institutions
Region		
Scotland	4	Gray's School of Art, Robert Gordon University, Aberdeen
		Duncan and Jordanstone College of Art and Design, University
		of Dundee
		Edinburgh College of Art, Edinburgh University
		Glasgow School of Art
Northern	10	Bradford School of Art
England		University of Cumbria, Carlisle
		Leeds Arts University (two workshops on separate campuses)
		Leeds Beckett University
		Manchester School of Art, Manchester Metropolitan University
		Northumbria University, Newcastle Upon Tyne UCLan
		University of Central Lancashire, Preston Sheffield Institute of
		Arts Sheffield Hallam University
		Southport College
Midlands	5	Birmingham City University
		Coventry University
		University of Derby
		University of Lincoln
		Staffordshire University, Stoke on Trent
Wales	1	Cardiff School of Art & Design, Cardiff Metropolitan
		University

Republic of	2	Cork Institute of Technology
Ireland		National College of Art and Design, Dublin
London /	15	University of Brighton
South East		Cambridge School of Art, Anglia Ruskin University
England		University for the Creative Arts (three in Canterbury, Epsom
		and Farnham)
		Colchester School of Art, Colchester Institute
		Kingston School of Art, Kingston University London
		University of the Arts London (three at Camberwell College of
		the Arts; Central Saint Martins; London College of
		Communication)
		Royal College of Art, London
		Oxford Brookes University
		University of Portsmouth
		University of Reading
		Solent University, Southampton
South West	6	Bath Spa University,
England		Bournemouth Arts University
		University of the West of England, Bristol
		The University of Gloucestershire, Cheltenham
		Falmouth University
		Plymouth College of Art, University of Plymouth

Committing to a field survey

As a team we briefly discussed the possibility of a remote research strategy setting up a digital template which could be distributed to technical staff within the host institution, completed remotely and returned via email. This strategy was dismissed as it would be susceptible to inconsistencies of data and would place a great burden on technical staff. Our other concern was that it may not yielded a comprehensive survey. Reflecting on the 'immersive research' investigation of the 6x6 publication convinced us that it was important to meet with staff in the workshops, as this had previously uncovered unexpected and serendipitous stories and discoveries. We committed to a full field survey, visiting all forty-three institutions (forty-four workshops) and systematically recording the contents of each.

Ensuring consistent data gathering

It seemed unlikely that three researchers would be able to visit all the sites together so the task was divided. To ensure consistency and comparable results it was important to develop a transferable methodology for collecting the data. We decided not to gather the data digitally but to record it longhand as typing proved slow. Each typecase had to be partially pulled out of the cabinet to check the type size and face in relation to the label before the entry could be made. Letterpress type is stored in cases within cabinets which characteristically have space for twenty-two cases. A full cabinet had to be surveyed in twenty to thirty minutes or our surveys would run into days. We designed a simple form with twenty-two lines, and columns for fount, weight, size points/didots and foundry/manufacture (the form was used to catalogue both wood and metal type). A comments section at the bottom was used to record the cabinet maker where this could be identified. As all the workshops contained several

cabinets, each form was numbered. This systematic process provided a record of every cabinet and every case, workshop by workshop. A second form was designed to record the equipment: presses, stones, galley racks, chases, storage for furniture, leading and quoins, bowlers, lead cutters, inking tables stones, drying racks, guillotines, ink stores, paper stores, plan chests, etc.

We made the decision that type was to be recorded as it was labelled, so we are aware that there may be some ambiguities. This is particularly important to note in the case of wood type, which was often unnamed by the foundries and sometimes, as is the case with DeLittle of York, numbered. We recorded a brief description of each case, for example '20-line condensed sans-serif', but also took note of any foundry marks and names used in workshop ('Skeleton' at National College of Art and Design, Dublin, for example). The same approach was taken with the metal type if foundry marks were used for identification.

Surveying physical workshop spaces

As well as the type and equipment we wanted to survey the physical space. Many practical guides to letterpress such as Harry Whetton's *Practical Printing and Binding* (1946) and Glen U. Cheeton and Charles W. Pitkin's *General Printing* (1941) provide schematic layouts of printing workshops for letterpress and lithography. These feature a range of workshop sizes and often indicate how many compositors, press supervisors and printers were able to work within the space. These layouts were designed to support efficient workflow and production in a commercial printing houses. Recording the arrangement of the educational workshops through simple schematic line drawings presents an insight into the way the space is used. The organisation and arrangement of a workshop for teaching was likely to be

different from that of commercial printing houses, supporting immersive learning rather than mass production. Initially we experimented with making simple measured drawings on site, and during two early survey visits to both the Cambridge School of Art and the Glasgow School of Art temporarily made use of a type slope as a drawing board. However, this proved time consuming. Subsequently we made rough drawings, measuring the workshop dimensions and labelled the equipment. The numbering system for the type cabinets was used to identify the positions on the rough drawings. Where possible we worked in pairs, one measuring, one marking up the rough drawing. We then made 1:50 digital scale drawings after the visit. Most of the equipment in the workshops was designed to imperial measurements, for example press bed sizes 20" x 34" inches (Farley), stones 28" x 40" inches whilst the workshop buildings were either imperial or metric depending on their age. We considered contacting estates departments at colleges requesting scale drawings on which we could then mark the equipment positions. This was quickly dismissed as it seemed unlikely we would be able to get the drawings prior to the visits. The scale drawings enabled us to compare workshops in terms of size, organisation, workflow and student capacity. The survey combined with conversations with technical and academic staff revealed how many students could be taught in each workshop. This is a critical feature of modern higher education where staff/student ratios are often applied to funding models which can restrict small group workshop teaching or make it prohibitively expensive.

Workshop initial findings: type

We completed surveys of forty-one of the forty-three institutions (forty-four workshops), a further three surveys have yet to be undertaken. The forty-one workshops surveyed to date contain a total of 490 cabinets or type frames, which hold 9,272 cases of type. This figure can

be further broken down into metal type (8,132 cases), wood type (1,140 cases) and acrylic type (22 cases). We estimate that there are a further 330 to 500 additional cases to identify. Today there are no institutions with the capacity to cast their own type. The restrictions of Health and Safety requirements in the UK make the risks involved of working with molten metal prohibitive. All the Monotype and Linotype compositors and casters together with Supercasters and Ludlow macines for producing headlines have been removed. It has not been possible to establish how many workshops had the capacity to cast type in 1967 as this would require a detailed survey of each of the college prospectus at the time so we do not know how many casters have been lost, merely that none remain. In some cases, however, it has been possible to trace the changes. The Monotype casters from the London College of Communication (formerly London College of Printing), for instance, were donated to the Type Archive in 2003. As a consequence of these losses, the quality of the type catalogued varied tremendously across different workshops. Some had seen heavy usage, some remained pristine in cases – particularly smaller, composition sizes that are labour-intensive to typeset and print. Most workshops have not attempted to replace or recast their collection of metal type as this is an expensive, specialist activity. Many have, however, purchased second-hand cases of type to supplement their existing collections. Camberwell College of Art – perhaps because it has been in the same building for over 100 years – has a pristine collection of 165 boxes of unused metal type stored in a former boiler room. The college had a close relationship with a Monotype representative who, so the anecdote goes, got the bus past the college daily and used it as an opportunity to sell his product. This type has been in store, unused, for nearly 50 years. The majority of the lead type at the workshops across the UK is Monotype, which was cheaper to produce than foundry type as it contained less tin.

There are many examples of type in composition sizes by foundries such as Figgins, Stephenson Blake, Star and De Little. There were geographic variations, with type from Sheffield-based Stephenson Blake (1818–90s) type more prominent in workshops in the north of England. Some workshops hold rare material, with National College of Art and Design (NCAD, Dublin) possessing one of only twelve cases of Gaelic or Irish type cast by Monotype in 1903. The history of each workshop can be traced through the type held. The workshop at London College of Communication contains twenty cases of 12pt Baskerville that was originally used in the teaching of hand composition to groups of apprentices. The University of Bradford had a similar history of apprentice training and has retained twelve cabinets of identical type with the cases ordered in the same arrangement labelled 'For exam use only'.

As part of the survey we collected case lays from each location. Again, these showed geographic variation. The Scottish case lay was used at Glasgow School of Art, Edinburgh School of Art, Duncan and Jordanstone School of Art, and Gray's School of Art. The Californian case lay was the most popular, combining both upper and lower case sorts. The London College of Communication has its own case lay, probably a hangover from the days of apprenticeships when a training college could not be seen to be allied to a particular employer, each of whom had their own discrete case lays to prevent the easy movement of staff. The Monotype Gaelic alphabet found at NCAD has 18 characters and the case lay based on Latin upper-case compartments. The survey revealed some cases of Hebrew, mathematical figures and musical notation. In 2015 Bath Spa University was donated a complete set of 7,000 Chinese metal type characters from the Ri Xing Foundry in Taiwan and

¹¹ For comprehensive information on the identification of case lays, see David Bolton, 'Type Cases', *Alembic Press* (1997-), http://www.alembicpress.co.uk/Typecases/Index.htm>, accessed 21 June 2021.

the compositor who donated the type, Chang Chieh-kuan, was invited to print in the workshop using an Adana press.

Collections of wood type are vulnerable to theft as the attraction of acquiring a large wooden initial has appealed to generations of design students. There is a healthy second-hand market and on eBay a good quality case costs approximately £200–400. As a result, we found many cases of wood type labelled 'mixed', where incomplete cases had been combined. Modern digital technology has enabled laser cutting, 3D printing and CNC routing. In several workshops we saw student and staff designed founts and type blocks cut on end-grain wood as per historical manufacture and single designs mounted on type-high MDF in the manner of relief block printing. This integration of modern digital technology with relief printing shows letterpress is not now exclusively defined by the use of moveable type.

Workshop survey initial findings: presses

The workshop survey only records the position on the measured drawings of presses which were used for letterpress printing. It does not record all the relief printing presses, which may be used for lithography, etching or mezzotints etc, nor those unused presses displayed in entrance halls and lobbies as artefacts. The range of equipment, and particularly presses, varied across the different workshops. The forty-one workshops surveyed to date contained a total of eighty-four large presses located in fixed positions within the workshops. There were a further seventeen Adana portable presses, either stored in cupboards or bench mounted. The large presses can be subdivided into five types. There were sixteen Farley galley presses and one Vandercook SP15, both of which are hand inked and manually operated. There were two different types of iron, lever action presses: the American Columbia and the British Albion.

The survey identified seven Columbia presses, with the famous iron eagle perched on top, and twenty four Albion presses, which are generally lighter in construction and make use of a lever toggle mechanism. All the Columbia and Albion presses were used by the students under technical supervision. The survey has identified thirty-three flatbed electric proofing presses produced by five manufacturers: two Soldan, four Vandercook, five Western, eleven FAGs and eleven Stephenson Blake presses. All these presses are also used by students under supervision. The final type of press found within the workshops was the platen press. The survey identified three original Heidelberg cylinder presses; however, one was unserviced and not in use, one has subsequently been returned to the printer who donated it, leaving just one operational Heidelberg remaining at Central Saint Martins. The Heidelberg is designed for large scale production runs up to 3,000 sheets per hour and can only be used by a trained operative and not by students. There were examples of treadle presses which had been donated to art schools, such as the one at Portsmouth University given by the Museum of London, but none were in active use.

Without exception, each workshop contained galley and/or proofing presses. This has a significant impact on how the students produce work. As each print relies on hand-feeding the press, it is only possible to produce small editions. The popularity of flatbed proofing presses reflects the technological changes and the shift from the division of trades over the past forty years, as many of the workshops – particularly those used for the training of compositors – would have had accompanying print and print finishing facilities capable of professional level outputs. These areas previously had apprenticeships aligned to them, and in many instances were used for in-house print jobs.

Today the advantage of relying upon proofing presses within the letterpress workshops is that students can use them under supervision. This has democratically opened up the possibilities of print production as students have authorship over each stage of the process of their work and are physically responsible for its execution. By contrast digital printing is often used by students to prototype, or produce a one off for a critique or review. Letterpress offers the student opportunity of working with metallic inks, florescent and pastel colours. Students can emboss, deboss and foil block. Educationally, this promotes a freedom and a range of print that is not possible within digital production.

We collected the serial numbers of the presses, and have been able to trace back the origin of many with the assistance of the press engineer, Basil Head (1924-2019). Basil was a Vandercook trained engineer, working across the UK installing and maintaining presses for Western that were manufactured in the UK under licence from Vandercook. Post-retirement, Basil found that his services were in increasing demand due to the renewed interest in the letterpress process and lack of expertise in press engineering. He began working again in the late 2000s and continued until his death in 2019, when his archive was donated to London Centre for Book Arts and is in the process of being catalogued for public use. Thanks to his meticulous record keeping we have been able to identify some of the presses that are still in use in their original locations, such as the Western Proofing presses that were installed at London College of Printing in 1957 and are still in use today. Flatbed proofing presses are in high demand since manufacture ceased in the 1980s. Consequently, the market price for Vandercook, Western and FAG proofing presses can run well into the thousands. It is often universities that purchase these when they become available. Adana presses featured prominently in many of the workshops visited, with 17 recorded. This would not have been the case historically – particularly within institutions where commercial training was the

central tenet – as the Adana is a small, table top platen press that was aimed at hobbyists from its inception in 1922. In 1987, Caslon Limited purchased the Adana Company and continues to supply the presses and equipment through a refurbishment programme and has recently begun to manufacture them again due to this increase in interest.

Workshop survey initial findings: Layouts and patterns of use

At each workshop visited, the space and set-up had significant influence over how the process was both used and valued by the broader institution. Through the surveys and drawings we were able to identify four different patterns of workshop arrangement and use:

- Workshops in which the type is stored separately from the presses, in a composing
 room, case room or design studio. This arrangement enables students to set type when
 technical or academic staff are not supervising the space but does not support
 independent printing.
- 2. Workshops in which the equipment, type, presses and drying racks are contained within a lockable space supported by a dedicated letterpress technician in which students can compose, print and distribute type under supervision.
- 3. Workshops in which the letterpress equipment is contained within a larger general printmaking room which may also support, mono printing, etching, mezzotints, lithography, and screen-printing and is supported by several technical staff with a range of printmaking expertise.
- 4. Studio spaces containing type cabinets and a hand proofing press, characteristically a Farley, which enables students to compose and print independently.

Only two dedicated workshops that had escaped closure were largely unused and without technical staff. The oldest letterpress workshop remaining in its original position, unmoved since it was installed in the building in 1906, is at Camberwell College of Arts.

Reinstating letterpress

Many of the staff with responsibility for the workshops have more investment and influence on the type collections than at any period in history. Far from being the mere custodians of a space we found several workshops where the collection was owned by academic staff who were committed to embedding letterpress within their teaching practice. At Arts University Bournemouth Sally Hope (Course Leader, Visual Communication) has bought and built up a collection of wood and metal type, cabinets and cases and a Farley Press through which she introduces students to the process. At Staffordshire University in Stoke on Trent Sarah Rushton (Head of Illustration) has collected wood type, recovered printing equipment and reorganised the small workshop. The Illustration curriculum has been developed so that students are encouraged to link text and the reproduction of their images through printing short editions.

Designers and academics Barry Tullett and Philippa Wood at the University of Lincoln house The Caseroom Press within the undergraduate Graphic Design Department. Their collection of predominantly wood type and typewriters is closely connected to their practice and this, in turn, informs their teaching. Students across all three years are taught the process through workshops that enable them to explore the physicality of type. The workshop has survived several college moves, from a temporary space in their former studio that was situated within an old department store to a new purpose-built design school. This commitment to sustaining

letterpress for students' practice despite pragmatic difficulties regarding space has been forged from Tullett and Wood's own experiences as students. Writing on their use of the process, they noted that 'we are of an age where the experience of going to Art School was very different from that of a University. Art Schools had a core business of reading and drawing. Art Schools were very physical experiences. They all had workshops; ceramics, sculpture, glass, photography... and print rooms. These were full of processes such as etching, stone-based lithography, screen-printing – and, of course, letterpress.' 12

The latest Letterpress workshop to be reinstated is at Kingston School of Art, Kingston University London. It was founded as the 'noblepress' in May 2017 by Susan Noble, Eugene and Audra Noble, and named for the Ian Noble (1960—2013), who had been the Course Director of MA Communication Design at Kingston University and had previously led the BA Graphic and Media Design and MA Graphic Design at the London College of Communication. Kingston Polytechnic had a letterpress workshop until 1992 (the same year it gained University status) when with the retirement of the technician and an investment in new Macintosh Computers the workshop was dismantled and the presses sold off. In 2014 under the leadership of the Dean and with the support from the Head of the Design School and the Technical Manager Kingston began to significantly change how the workshop facilities were used. The Faculty of Art and Design developed a clear philosophy of 'thinking through making' and this philosophy became the guiding principal for the Kingston School of Art. All the workshop facilities were made available to all students regardless of course or discipline, an opportunity afforded by an investment of £67,000 by the university.

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¹² Barrie Tullett and Philippa Wood, 'Lincoln College of Art and Design: 3.49°N 0.10°E Letterpress Workshop', in Cooper, Gridneff and Haslam, eds, *6x6*, unpaginated.

New building and the impact on the workshops

Throughout the survey we have observed a sharp rise in new buildings developed by art and design institutions over the last ten years. Many of the original buildings on our 1967 list of addresses are still standing, but the colleges have vacated or changed the use. The planning of a new building for art schools and universities is a point which prompts reflection on the past and vision and practical propositions for the future. There appear to be two post-war phases of building which have influenced the institutions within our survey. The first phase followed the Coldstream Report (1960) and the subsequent restructuring of art and design education in the United Kingdom. One of Coldstream's recommendations through the establishment the Diploma in Art and Design (Dip AD) was a proposal for purpose-built art schools prioritising 'building programmes to the requirements of schools which will run the new diploma courses'. 13

The second phase of committed building work followed the introduction of £9,000 tuition fees in 2012. The visits to each letterpress workshop were undertaken during a period of immense change for higher education, with a greater number of students attending university that at any period of British history. The introduction of a competitive marketplace saw a notable rise in the investment of buildings and facilities. This-showcasing of location and the perceived quality of facilities and this has contributed to universities spotlighting the visibility of both letterpress and other practical workshops as marketing teams are keen to offer something tangible that prospective students may not have experienced at school but can understand and position themselves within. A room full of computers and digital

¹³ First Report of the National Advisory Council on Art Education (London: HMSO, 1960).

equipment holds little novelty and echoes the familiar learning spaces in schools and sixth form colleges nationally. However, workshops such as letterpress present a different kind of offer and many institutions have begun to use this to their advantage.

Workshops and curriculum developments

The use of the letterpress process within each workshop varies according to the history and culture of the institution. The technical teaching of letterpress composition was phased out at all colleges by the late 1980s when digital composition rendered print apprenticeships irrelevant. The impact, scale and speed of change on the print industry and its knock-on effect on technical education it was colossal. Little more than a decade earlier, the print industry of 1970 employed 300,000 people in the UK.¹⁴ As late as 1985, 266 printers traded in the City of London, one of London's major print areas, 111 of these were letterpress workshops.¹⁵

There is evidence in many of the institutions visited that in addition to serving as a training environment the letterpress workshops were used to produce in-house print jobs for the college creating printed ephemera such as tickets, certificates, magazines, catalogues and promotional material. Examples of these include the University of Brighton and London College of Communication, and The Royal College of Art, where the degree certificates where printed in house using letterpress. Although production continued beyond the training of apprentices, items were generally produced in small runs and not for commercial gain.

¹⁴ A Printer's Life for You (London: British Federation of Master Printers, 1970).

¹⁵ Lucy Harrison and Rosa Ainsley, *Lightboxes and Lettering*, (London: Rendezvous Projects, 2020). Pg 22. The source data is from the printing trades directories, St Bride Library.

Today, the workshops are used by a broader community of art and design students. Groups of graphic design, visual communication, illustration and printmaking students use the spaces. When open access policies were adopted, photographers, fashion students, architects and product design students often work alongside each other. The mode of teaching delivery varies from institution to institution, but the majority of colleges have an induction process to the workshop area delivered by technical staff. This enables students to work independently with access to specialist support and technical guidance. Students at the majority of colleges are encouraged to explore design briefs through a range of media which may include interaction, film, publication, print and print processes including letterpress. Some, including Cambridge, Glasgow, Kingston and Lincoln, stipulate a letterpress outcome on workshop or project briefs and therefore ensure that all students gain an induction into the area. Others have attempted to further embed it within the curriculum through assessment submission requirements. In a strategic move to protect the workshops, courses have explicitly mentioned the letterpress process within validation documents, ensuring the preservation of the workshop. This was achieved when the workshop at London College of Communication was under threat in the early 2000s after several years without a dedicated technician. Both of these approaches mean that each student on the course gains experience of the process, and work on the assumption that the most engaged students will return to undertake longer projects throughout the duration of their course. The wider adoption of letterpress as a medium by students is therefore primarily through self-selection.

Workshop inductions and short projects present a unique problem; how to teach the letterpress process in a short period of time that historically had a seven-year apprenticeship? Student inductions vary but where technical staff are committed to the process there is a rigour and sequence to the teaching. Students are introduced to safe working practices. Staff

characteristically demonstrate each stage, followed by students undertaking each element individually with support. Each demonstration stage builds into the next. Students learn to lift the cases onto the slopes, how the cases are arranged and how type sizes are measured. They are shown how to set the stick to a measure, pick type from the case following the case lay diagram and compose it within a stick. Students learn to consider and adjust horizontal space addressed through alignment and kerning, and vertical space through leading. Confidence is gained handling and locking-up type, inking and proofing. This is followed by marking up the type and correcting on the stone, before reproofing. Decisions are made about ink colour density and paper stock. Students learn how to take and register a print, consider the quality of the impression and produce a short edition.

It was important to consider the way the workshops were used in relation to curriculum. Edwin Pickstone at Glasgow School of Art identified the advantages of the caseroom for visual communication students. For Pickstone the workshop presents the history of type. This is important, he argues, because the 'principals of metal type underpin the systems which controls what's going on digitally today.' Letterpress provides today's graphic design students with a direct link to the process of reproduction key to the historical dissemination of knowledge through the printed book. For students who are familiar with digital type through word processing the origins of terminology including typeface, size, columns, kerning, leading and alignment are made real through metal. The letterforms of type can be traced back to calligraphy, notation and writing systems leading to the origins of the alphabet. The link with history was a common thread with staff responsible for workshops. As Pickstone states, 'in some ways "Graphic Design" has a very short history. Unlike architecture, the term "Graphic Design" was only really coined in the 20th Century.' Digital outputs are often used to present work for review and critique but these are presentations anticipating reproduction

through lithography. Pickstone notes with letterpress that 'the prototypes are the real thing'. Students can make decisions about 'paper stock and mix and test ink, experiment with over printing using the full range of pantone inks: metallics, fluorescents, and pastels and opaque whites.' Pickstone describes the process as learning 'discipline, explanation, endeavour and development'. He recognises in both his own work and that of the students the workshop naturally supports collaborative practice. The disadvantages of letterpress are that the students have to be taught in small groups of 8-10 at a time. The process is slow and there is a significant learning 'attrition rate', the number of students who complete inductions but don't return to the workshop. However, for those students who don't choose to use the process again they have acquired an understanding. Pickstone reflects, 'Perhaps not all knowledge gained through practical learning needs to be applied'. He describes the letterpress workshop as integrated into the curriculum as all the third-year students on the Visual Communication degree have to compete an assessed piece of work within the workshop.

Initial survey Workshops: People

As the function of the letterpress workshops have changed between 1967 and 2020, so has the demographic of the those responsible for them. Those running workshops within the trade schools of the 1960s were usually trained as compositors or printers. The restricted practices applied by the print unions determined all compositors employed as technical staff through this route were men. As computers began to replace letterpress in education though the 1980s, colleges with powerful print chapters made a resolute defence of the compositor's employment rights which in some cases successfully ensured the preservation of the workshop and their roles within it. Through the early 1990s there was a period of transition, when some technicians retired and others retrained transferring their analogue knowledge of

type to digital composition. The apprentice curriculum was predominantly determined by the examination syllabus set by print guilds and associated trades – lithography, photoengraving, photogravure, general bookbinding, papermaking, print finishing etc – and accepted by the unions. The influence of the unions on the workshops within art and design schools was less significant. Today the gender balance is improving, staff responsible for the workshops surveyed included twenty-one women and twenty-eight men. The interviews with staff responsible for the workshops have revealed a range of routes into letterpress and a variety of career journeys with a design-based education predominant.

Both Manchester School of Art (surveyed in November 2017) and Plymouth University (surveyed July 2017) have trained compositors. Paul Collier at Plymouth began work as apprentice printer and learnt to set type by hand in a jobbing printers in Plymouth, before training as a Monotype compositor. Much of the work was for the Royal Navy, printing stationary, forms, and documents. Recognising the 'change to digital' was a 'serious threat' to the print industry he applied for a post as technician at the university. Collier has 'curated' the workshop space, drawing on his commercial connections he has found, been offered, and bought equipment and type which he has meticulously organised. He supports students within Art and Design and across courses throughout the wider university.

By contrast, Edwin Pickstone has a full-time post at Glasgow School of Art that is made up of design lecturer/researcher, designer in residence, and letterpress technician. Pickstone was a student on the BA Visual Communication Design course in the School. During his final year in 2004, Steve Rigley (Programme Leader) set a project 'What is the value of letterpress?'. Rigley's project was both a provocation and invitation. Pickstone and a number of students were inspired by the project which became the central focus of his final year. His

enthusiasm for the caseroom was recognised and after graduating he was offered a day-a-week visiting lecturer role. In 2005 this was extended to 'Designer in residence' with the support of a small grant from the National Heritage Print Fund. Fraser Ross, who had trained as a compositor before working as Senior Technician in the School from 1976 was considering retirement and a combination of wise succession planning and opportunity enabled a period of handover from September 2005 until April 2006 as Pickstone worked alongside him. Pickstone recognises the importance of this generational handover. 'Though he didn't have six years to train me, I learnt rigour, and discipline from him', Pickstone writes, and he progressively added to his knowledge and skills through what at times seemed 'long and slow tasks.' The caseroom is now greatly valued and has survived three moves in the last decade. The Director of the School recognised the 'appeal of the 'caseroom', whilst taking the Governors on a tour: 'it was difficult to move them on to the new, but anonymous rows of computers', recalls Pickstone.

Chris Wilson at Northumbria University (formerly Newcastle Polytechnic, previously Newcastle College of Art & Industrial Design) sees the letterpress workshop as a research laboratory and has used it as a base for his practice-based PhD. Wilson followed a similar route to Pickstone. After completing the BA Graphic Design course he became a cover technician, initially working with screen-printing then moving to letterpress before become a graduate tutor. He was inspired by a week intensive workshop in the Netherlands with Thomas Gravemaker. Wilson has been working with letterpress for ten years at Newcastle and sees his role as multifaceted: design tutor, researcher and technician. In an interview with Andrew Haslam, Wilson, like Pickstone, sees similar advantages to letterpress. 'The workshop provides students with a historical context for typography,' he says, yet he does not want 'the workshop to become a museum or window dressing for Open Days.' It has to be 'a

place where students actively make work'. The 'physicality of type' provides students who are 'visually aware, with a way to learn through doing, by designing on the press.' The modular nature of type appeals to Graphic Design students who 'like playing with Lego'. He identifies the constraints as a positive aspect of letterpress, as students can 'overcome the restrictions of limited number of typefaces and sizes' whilst also acknowledging that some students find it 'difficult to adjust to both the restrictions and the slow and considered approach to design and composition' as the cultural conditioning of 'the digital world provides instant gratification.' ¹⁶

Conclusion

We set out to answer four principal questions in relation to letterpress workshops within Further and Higher Education in Technical Colleges and Art and Design Schools in the United Kingdom and Ireland.

- 1. How many active letterpress workshops are operating within British and Irish higher and further education?
- 2. Where are they located and within which institutions?
- 3. What do they contain and how are they arranged?
- 4. How are they being used?

We have established that the number of workshops active in 1967 was 104, this figure has dropped to forty-four workshops in forty-three institutions in 2020, although there may be some vestiges of type workshops as yet undiscovered. The research has traced the multiple name changes of the institutions and revealed that only seven of the 104 institutions have

¹⁶ Chris Wilson, interviewed by Andrew Haslam, November 2019. For more on Wilson's practice, see Sidney Shep and Ya-Wen Ho, this volume.

retained their original name from the 1967 listings. Of the forty-three institutions with workshops forty-two are in the higher education sector within post 1992 Universities; only Southport College in the further education sector has retained a small element of letterpress.

None of the institutions identified offer any of the print apprenticeship or degree courses which link directly to careers in the print or related production trades. Instead, all workshops located within universities provide courses within art and design schools and faculties that offer three, or four-year undergraduate degrees, or postgraduate courses in graphic design, visual communication, communication design, or illustration. The workshops in some institutions also accommodate students from broader disciplines such as fashion, textiles, architecture, product design and photography.

We have confirmed all institution names, locations and addresses and the technical or academic staff responsible for the spaces. There are a further three field research visits to undertake at the time of writing. Once these are completed the data will provide a comprehensive overview of all the type and equipment within art and design education in the UK and Ireland. We have established that forty one workshops surveyed contain a total of 490 cabinets or type frames, which hold a total of 9,272 cases of type. These consist of: 8,132 cases of lead type, 1,140, cases of wood type and 22 cases of Acrylic type. The workshops contain 84 large presses and 17 tabletop presses. There are 16 galley presses, 31 lever-action presses, 33 flatbed electric proofing presses, and 3 platen presses. Since 1967 all the Monotype compositors and casters have been removed and therefore no institution has the capacity to cast new hot metal type within the workshop.

Through the measured survey of each workshop we have identified four approaches to organising the space which support and enable student access and independent working. The demographic of the staff responsible for the workshops has changed. There are two technical staff who have trained as compositors and printers and the remaining forty seven members of staff have learnt to use letterpress equipment through a design education and characteristically have a graphic design, illustration or fine art printmaking background. The nature of the curriculum taught within the workshops has changed radically from the acquisition of technical skills interchangeable skills for the print trade, to a creative workspace which places the student designer at the heart of design and production. Today, the workshops are learning and teaching spaces, research spaces, production spaces, and experimental studios where students can play with type, letterform and image through the integration of analogue and digital technologies.