

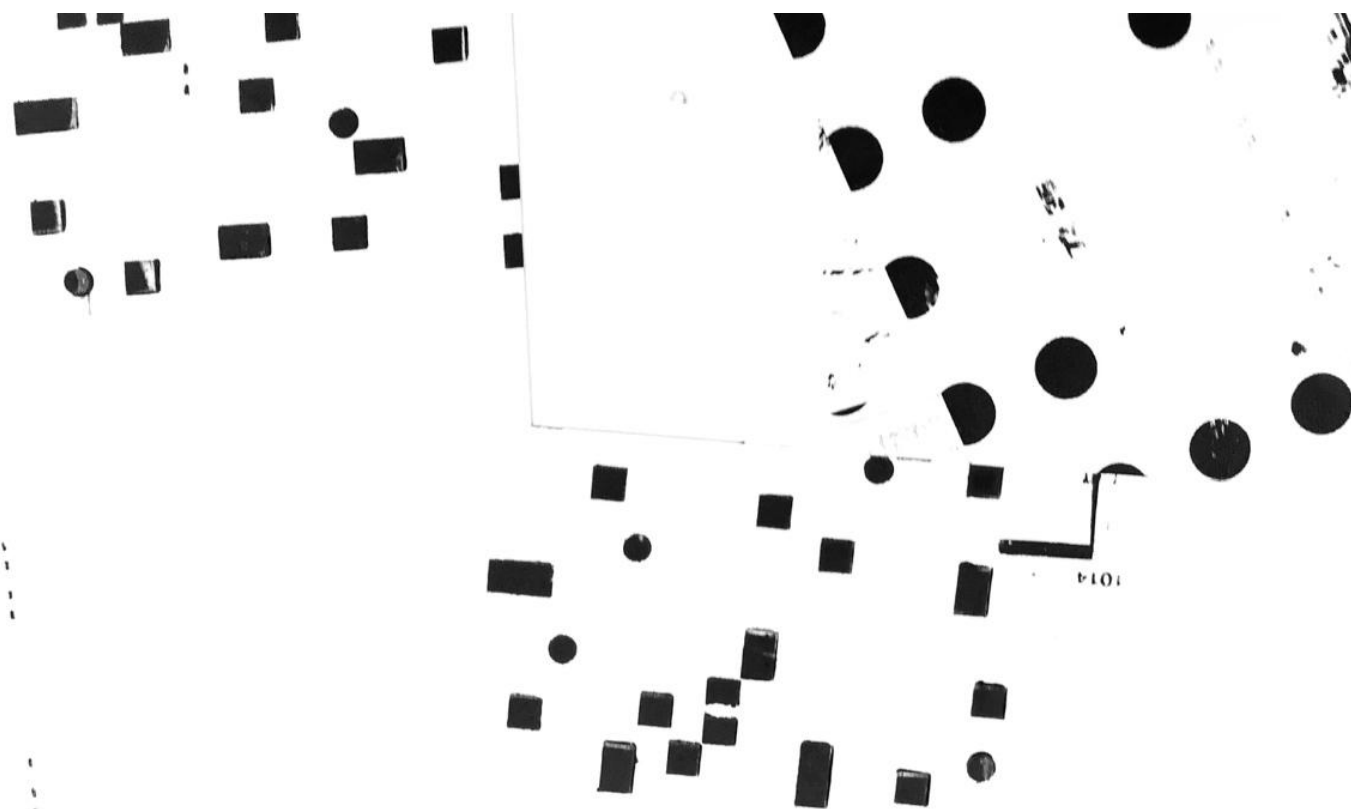
The Printing Types. A practice based study of design principles in experimental letterpress

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Thesis submitted for the degree of Doctor of Philosophy at Birmingham City University

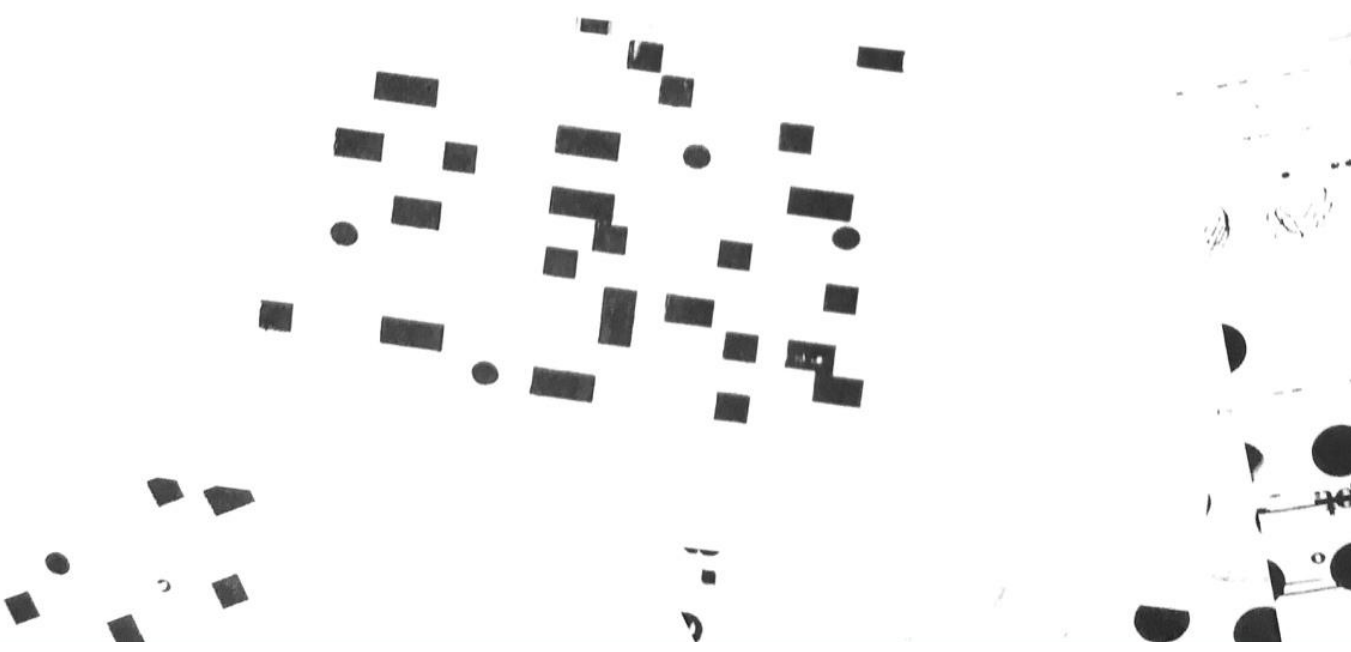
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Abstract

The printing types. A practice-based study of design principles in experimental letterpress

This research proposes that the conventions of traditional printing and typographic knowledge does not sufficiently address the design aspects and locations of contemporary experimental letterpress practice. Taking a hybrid method of historical and experimental practice-based approaches to traditional design principles and environments that are applied to individual and collective creative practice.

This study presents a critical dialogue between the old and the new as well as review of the emergent field in experimental letterpress. Its findings contribute a definition of the field of practice through addressing the formulation of design principles, from historical aspects to the development of new perspectives. This investigation highlights the redefinition of research methods and an understanding of inherited techniques in contemporary design and pedagogical practices.

The creative and pedagogical practices of J. H. Mason, Leonard Jay, Anthony Froshaug and Alan Kitching were identified, through a chronological ordering in the literature review. They were recognised as distinguishable in the field and relevant to inform the debate in this multifaceted study. This research demonstrates new ways to connect the rules situated in the practices of Mason, Jay, Froshaug and Kitching and its importance in design and pedagogies.

Such research reimagines the conventions of letterpress printing that are deeply situated in over five hundred years of a standardised system. It has seen many technological, social, industrial and educational changes while the fundamental approaches to the processes remain the same. The thesis proposes that the contexts in which letterpress were constrained by can now be reordered, and the legacies can help to innovate in revealing new typographic forms and visual systems.

Acknowledgements

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I am hugely grateful to the vibrant contemporary letterpress community of practitioners, educators and researchers. Special thanks to Thomas Gravemaker, Graham Moss, everyone involved with the Letterpress Workers International Summit, Stan Lane and Erik Speikermann. The breadth of knowledge and expertise is astounding. It is a privilege to work with the many women and men of letterpress.

To all the students I have the pleasure of supporting in their studies, have tolerated my ramblings and gone on to have their own successes. Teaching is a special part of my practice and a space to examine how this research can continue the legacies of pioneers in print education. With thanks to David Osbaldestin for discussions of print histories and the teaching of typography. Chris Morris, Prof Andrew Kulman, Associate Prof Rob Gibb, and the MA Visual Communication team for helping with the navigation of teaching activities whilst completing this research. I would like to thank Lee Hale, head of Winterbourne House and Gardens, University of Birmingham for his support in the early development of my letterpress practice at the Winterbourne Press. To Martin Killeen at the Cadbury Research library, University of Birmingham for his enthusiasm for Leonard Jay's story at the Birmingham School of Printing. Special thanks to Olly Wells who understand my vision for a new lineage in the latter stages of the project when hand gestures, nods and mumblings were the ways of communicating in order to realise intentions. I am eternally grateful to Prof Phil Cleaver and Prof. Dr. h. c. Patrick Thomas for their support and generosity through this study. I am thankful for their design knowledge, going back in time, design pedagogies, laughs and counsel along the way. I would like to thank my family and friends for all their support over the years. Especially to Phill and Ben. I can't ever thank you enough for your unwavering support. There is love in every chase, screen, transfer, cut, paste, print and word enveloped in this research.

This study is dedicated to Leonard Jay, head of Birmingham School of Printing (1925-54), the morning star of the printing world.

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Introduction

The initial idea for this doctorate comes from my experience in teaching and creative practice. In particular, my engagement with the debates and implications of contemporary typography and printing creative practice and pedagogy. Most often these debates have been limited to the use of digital processes utilising new technologies. In this doctoral research I critically engage with traditional knowledge in the domain of letterpress practice and synthesise this with contemporary design practices and theoretical directions. I propose that digital techniques are not always required in the development of a design cycle and that new methods in critical thinking for the application of analogue and experimental work are an alternative way to advancing new practical and theoretical knowledge.

The creative and experimental, and often collaborative work, which forms the practical material of *The Printing Types* was developed in various print rooms in the UK and Europe: Winterbourne Press, University of Birmingham; Parkside Print Room, Birmingham City University; P98a, Berlin; Patrick Thomas Studio, Berlin; The New Typography Workshop, London; Letterpress Amsterdam, Amsterdam; Letterpress Workers Summit, Milan; Ffoundri, Wales; and Leipzig Printing Museum, Leipzig. The print rooms were selected based to their localities, the type collections they hold and some to the connections in the research lineages, made in the literature review.

This project intervenes in the discussion in pedagogy and research about the purpose of a print room, the machinery they hold, the processes of instruction, how instruction is imparted and how they can be utilised as a valuable resource in practices today. This debate in turn, allows for a discussion to define how the traditional knowledge that is evolved in print rooms can be a source of discovery and illumination in contemporary design practices.

This written component of this thesis compliments the digital and hard copy portfolios of creative practice, it sets out my systematic approach to the research, frames ways to understand creative practice as a research method and articulates my core thesis. The printed material will be available for viewing at examination following the reading of the written component. However, both the creative and written aspects are intended to be integrated parts of the thesis. The portfolios of printed material are a vital part of the research methodologies. They encapsulate my research approaches, as such I am presenting each of them as capsules of practice and process. These capsules hold preparatory notes, proofs, mistakes, tests and final prints. I have not tidied away any documents for presentation. They reveal the recordings of the processes developed through research methods. It is important that the thesis can enable interactions in this way as the aspects convey the way in which I approached the study.

At key points I use examples from my creative practice to present the visual elements of the research: firstly, in the way I have type set this written component as set out in the editorial conventions section in this chapter; secondly, in the interpolation of pieces of experimental letterpress practice; and finally, by drawing examples from the portfolio. I have also indicated in the narrative where further examples of my graphical interpretations can be found in the portfolios. Likewise, my portfolios provide links back to sections of this written component. This allows anyone engaging with my work to move between the creative exemplars and written discussions at key points in the argument. This is how I would like the reader to view the interventions between the historical and practical aspects.

With this in mind, research methods are being presented with various editorial conventions that I will now set out as a way of how to navigate through the thesis. The typeface selections hold important conceptual and aesthetic considerations. In previous drafts of the thesis, I employed other typefaces such as Baskerville, Perpetua and Caslon to present different areas of the study. As with Gill Sans and Futura they were identified in the review and held in the print rooms of the study. This proved to be a confusing proposition as the navigation through varying forms of text was a distraction of the concepts.

The text has been set in Gill Sans, designed by Eric Gill and released by the British branch of Monotype in 1928. Gill developed this from Underground Alphabet or Railway typeface, designed by Edward Johnston, in 1916. Gill assisted Johnston in the development of Underground. This is important to the historical study and the typographical practice elements of the project for several reasons. The selection of these forms are part of the research lineages situated in the historical and creative practice aspects. Looking to Anthony Froshaug when he selected the typeface in his own printing and in his teaching of typography. It was also used by Leonard Jay in his teaching at the Birmingham School of Printing. Jay was a student of Edward Johnston (1872-1944) at the Central School of Art and Crafts, attending Johnston's calligraphy classes. The printing presses that have been occupied to complete the practice hold Gill Sans metal type blocks as part of their collections, this allows me to make connections and networks in my experimental practice to continue the research lineages.

There is a change of typeface in Chapter 5. Findings – experimental practice, a re-ordering with Patrick Thomas and Leonard Jay to Futura Book and Futura Medium Italic. Futura was designed by Paul Renner and released by the Bauer Type Foundry in 1927. Futura is a geometric typeface that is based around shapes, the square, triangle and the circle. The design of Futura avoids the decorative, eliminating nonessential elements, but makes subtle departures from pure geometric designs that allow the letterforms to seem balanced (Moore, 2014). This is important to the historical study and the collective practice elements of the project for several reasons. The geometric elements in the design of the type forms fit with the modular and abstract graphical elements of the collaborative

practice. The collections of type at P98a, Berlin where Thomas and I completed research practice holds various Futura metal type blocks, which were selected and supported the exploration in experimental practice, as discussed in chapter 5.

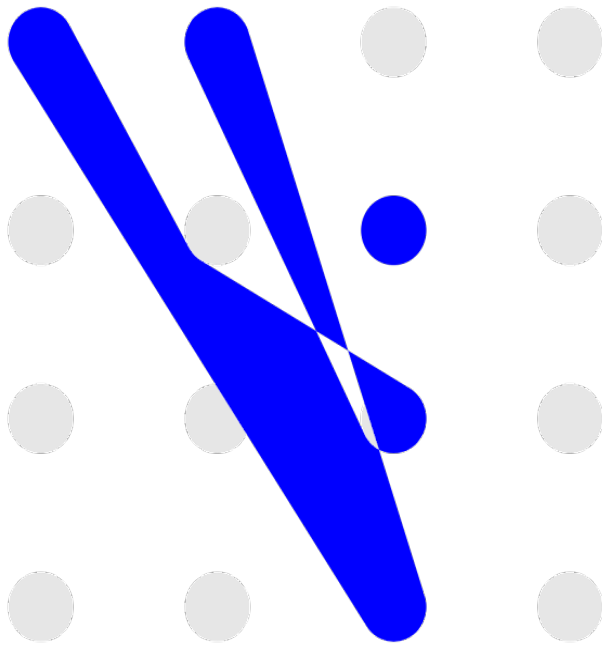
With regards to the diagrammatic, abstract forms and diagrammatic writing. Research connections are being presented in diagrammatical, graphical and abstract forms as well as a written account. Diagrammatical writing elements punctuate the text and are presented in black and red to frame certain elements, to highlight scholarly contributions. These are devices to reorder the written content into a graphical presentation of text, spacing and the deconstruction of the written systems. The development of typographs was created as a way to visually communicate my conceptual, technical, aesthetic and the design principles that interact to explore this area. The research methods are discussed later in chapters 1 and 2.

It is by breaking down the distinction between words and visual forms – ‘using the actual typographic elements of text to create powerful images’ (Chermayeff and Geismar, 1959) – that I demonstrate ways we can reorder a historically-informed experimental letterpress practice in contemporary creative practice. I recognise that this demands more of a reader than a traditional, solely-written thesis, but this allows greater freedom for the reader to explore the central ideas of my thesis and to connect the spheres of ideas, narrative and experiment. For example, in the first of my interpolations of my experimental letterpress practice, I explore visualising research and the interactions and navigation of the thesis using line and dot arrangements through an open-source graphic system.

In visualising method and process, I used Hofmann 1.0.0, designed by Giovanni Abbatepaolo, an open-source platform that can be used in the exploration of concepts and theories. This particular image is based on Armin Hofmann’s Variation 51, 52, 53 from the *Graphic Design Manual: Principle and Practice* (1965)¹. This allowed me to present the relationships between the research concepts, methods and visual experiments. In creating experiments between lines and dots, I draw on Hofmann’s approach to using graphical form to analyse, structure and construct respectively².

¹ Accessed May 2022 at <https://bbtgnn.github.io/hofmann-1.0.0/about.html>

² This is an open-source online space that enables the experimentation of visualisation techniques as part of the development of research methods. [Accessed June 2022 at <https://bbtgnn.github.io/hofmann-1.0.0/about.html>]



Experiment I. Visual research experimentation to explore and present my research motivation using line and dot arrangements through an open-source tool/ graphic system Hofmann 1.0.0 designed by Giovanni Abbatepaolo based on Armin Hofmann's, Variation 51, 52, 53 from the Graphic Design Manual: Principle and Practice (RLH, June 2022)

I now turn to the positioning and perspective of the research and the problem at the centre of this study. I will set out the research question and introduce the ways of looking towards the consideration of the reshaping of traditional conventions.

Reconsidering traditional conventions: the research question

My research questions frame my research by allowing me to interrogate my experimental design practice, so I start by setting out these research questions, before returning to the experience that brought me to these areas and methods of investigation. I start with this question:

To what extent can the traditional creative and pedagogical methods of J. H. Mason, Leonard Jay, Anthony Froshaug and Alan Kitching be integrated into research practice methodology, in order to reimagine and redefine contemporary typographic practice?

This provides a platform for expanding the proposition of this research which is set out in three parts:

- Firstly, to appraise the historical conventions in the pioneering work of Mason, Jay, Froshaug and Kitching in hand composition and letterpress printing, to then explore the lineages through which it could take its place in contemporary typographic practice;
- Secondly, to investigate approaches within individual and collective practice and pedagogies of experimental letterpress design that can be applied in various printing facilities;
- and finally, to explore ways in which experimental letterpress can see a regeneration in design practices that can be applied to pedagogy.

I selected Mason, Jay, Froshaug and Kitching and situated them in the research for a number of reasons. Firstly, their practices are placed within the research timeline, respectively, which starts at the turn of the 1900's until the beginning of 2000's. This twentieth century lineage enabled a clear start and end point to the chronology of the study. Secondly, the interrogation of the historical aspects revealed connections between Mason et al. In turn, I developed the research lineages which are discussed further in Chapter 3. Exposing critical patterns – a historical overview of letterpress and typographic design practices. Thirdly, they were and are influential figures in design practice and education. This connects to my motivations as a teacher of letterpress practice.

This research addresses the formulation of design principles, from historical aspects, to develop a new perspective by investigating the redefinition of historical methods in contemporary practices, and an understanding of traditional conventions in contemporary design and pedagogical practices. I decided to develop research and design methods through the formation of design principles to ensure there were structures and a system to adhere to and to reorder through critical examinations.

In seeking to inform the debate and make connections in this multi-faceted approach through a historical and practical approach, there is an opportunity to search for new ways to connect the rules situated in history to the application of experimental letterpress in design practice and pedagogies. I will also investigate and create new systems of typographic practice in the context of experimental letterpress.

My study explores the following subsidiary research questions:

- to what extent can the traditional creative and pedagogical methods of J.H. Mason, Leonard Jay, Anthony Froshaug and Alan Kitching be integrated into research practice methodology?
- how can methods be part of a reordering of design principles in contemporary design practice?
- how to situate the understanding of historical conventions and apply them in contemporary design and pedagogical practices?

I intend to explore these subsidiary questions through the following aims:

- to critically analysis of the processes of contemporary typographic and printing practices in relation to the design principles developed in the lineages of Mason, Jay, Froshaug and Kitching.
- to explore historical methods and approaches as a frame to classify knowledge in experimental letterpress printing.
- to engage with relationships of master and pupil in lineages of design as a stimulus for experiment and the creation of new forms.

These will examine the conceptual, technical, and artistic values situated in histories, as well as enable the synthesis of theoretical framing within current creative practice. The examination of all these aspects will establish a rigorous proposition in answering the research question.

My aim in doing so is to develop design systems in contemporary creative and pedagogical practices. In presenting the aims of the research, the collective nature of the conceptual, theoretical, philosophical, and visual ideas of the research should be noted. These collective aspects form knowledge obtained through complex interpretations that have been explored within practical methodologies. The works of Mason, Jay, Froshaug and Kitching form part of a collation and assemblage of historical artefacts that bring together different parts of the subject matter rarely investigated in one frame. They have participated themselves through their writings and practical examples of work which has allowed what was initially addressed in a historical context, to be aligned with contemporary design practice. Furthermore, as the assimilation and organisation of the disparate elements formed new connections, it shaped the research narrative which created research lineages, which were an integral to the reflection on approaches to design practice.

Ways of looking: positioning this research, the problem and the perspective in defining the research territory

The research presented here emerges from my own interests and commitments but is deeply rooted in wider debates within the fields of typographic history and experimental letterpress practice and addresses key issues in both areas. I now turn to explaining that experience in more depth, to outlining these debates and highlighting the issues.

My place in the research

The research arose from my experiences and practice working as a designer and lecturer in typographic and graphic design. I have twenty years' experience in the field as a professional practitioner, educator and more recently, researcher. I have found that digital design work, whilst exciting and innovative, has limitations in the development of tacit process and knowledge. This leads to opportunities to revise design methods to address the non-traditional practice approaches in typography and print. There are traditional aspects of typographic education that are under-acknowledged in a hybrid research context of histories and creative practice. This position is a critical perspective in driving the reshaping of design knowledge that will be developed in my creative practice and be developed in my teaching practice as part of the curriculum. The continual reflection around these issues amid my practices as well as my traditional art school education form the foundations of the idea from which the research began to develop. As the day-to-day problem solving was taking place through the development of letterpress practice and teaching approaches, I began to explore this territory to resolve issues, this provided an opportunity to locate a critical examination in formal research as a PhD research project.

The study starts with a historical examination offering a space for further interrogation through creative practice. I take on board John Berger's proposed 'modern historical consciousness' as a mode to start 'a process of questioning' (1972:5). Examining this discourse can evoke new ways of developing intellectual approaches through creative and research encounters. I have specifically taken up Berger's concluding implicit incitement 'to be continued by the practitioner'³. I contend that for practitioners to see the visual world in the way Berger encourages us, we must first learn to look. In this thesis I argue that an opportunity to engage with individual and collective activities can offer a rigorous mode of critical investigation through an experimental letterpress process, proposing an alternative to existing approaches. Thus, revealing the development of this iterative research method to the research question, in turn, assigns a structure for research in the field and

³ Adapted from 'To be continued by the reader', John Berger, *Ways of Seeing* (1972: 166)

the interactions implicit in the experimental materials I present and explicit within this written component of my thesis. I discuss this in more detail in Chapters 1 and 2.

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how this written thesis works?

navigating and ways to look > > > >

The history of ... / and ... practice and experimentation

The relationship between studying the history of letterpress and contemporary creative practice has both tensions and possibilities. The dissemination of knowledge in typography and printing through the twentieth century saw the development from apprenticeship schemes to the writing of courses and programmes situated within schools of art and design and technical colleges. By the time I began a career in design at a college of further education in 1990 my experience of printing was categorised as somewhere in a space between graphic design and printmaking, a blend of commercial design and craft. The landscape in design education had seen many changes as there was no printing trade education taking place and art schools like the one I attended did not have apprenticeship classes. The pedagogical approaches were situated in design education rather than technical instruction. My introduction to design was immersed in a combination of the traditional and modern teachings situated in the Arts and Crafts movement and Bauhaus pedagogies. It was a place where conventions met explorative, experimental, and interdisciplinary approaches submerged in traditional principles and formal elements that enabled a playful navigation through art school. By the time I became an educator in further and higher education in the early 2000's there was a different landscape to the teaching of design and specifically printing. Now, new technologies and digital

applications are used as tools in the design process. The traditional framing that I had experienced as a student through the practice of typesetting and letterpress printing is available and is still a valuable resource in contemporary learning environments, however it is underutilised and seen as part of an iterative design cycle rather than the way to design.

Lupton suggests typographical content can be used to convey messages through the 'shaping of content' (2004: 8) and that typography can be utilised as 'a tool for doing things with' (2004: 8). An opportunity for tacit knowledge to be sought, found, and shared. I identified

a **gap**, and ----- a _____ **space** to

establish practical design knowledge through doing, in formal and academic research knowledge via penetrating analysis of traditional codes to inform new networks. This allows for the old to inform the new through a combination of a historical study and a practice-based project that investigates traditional typographic practice and pedagogy discourse in order to propose how historical conventions can be a new design approach in contemporary practices.

The paths of typography and design practices are always in flux, frequently changing and adjusting to reflect social, cultural, political, ethical issues as well as applying new technologies. In contemporary design aspects, social and digital platforms are specific to different demographics and the ways in which data is designed to present and communicate information is dependent on the intricate and multi-layered issues and problems. 'Today, complex political, social and cultural issues, along with a data-driven technological landscape, yield so-called wicked problems, social or political predicaments that are difficult to resolve – for which designers aspire to generate solutions' (Triggs and Atzmon, 2018:1). There is a need for design pedagogical strategies to reflect ever changing needs of industry and clients. As Baines and Dixon suggest an 'increasing pressure upon graphics courses to include more and more elements as the scope of the design profession shifts ever faster'⁴.

From this point of view, print rooms are keepers of obsolete yet functioning specialist equipment. These historical artefacts are no longer manufactured, but they are invaluable spaces for practitioners, students, and researchers to develop new design systems. Viewing them as spaces that can initiate new conversations as opposed to a facility that is more like a museum would be valuable in design thinking and our understanding of what design history can mean in creative practices. A space to expose the printed artefact is the amalgamation of the interactions in critical debate and the generation of creation of new methods of practice.

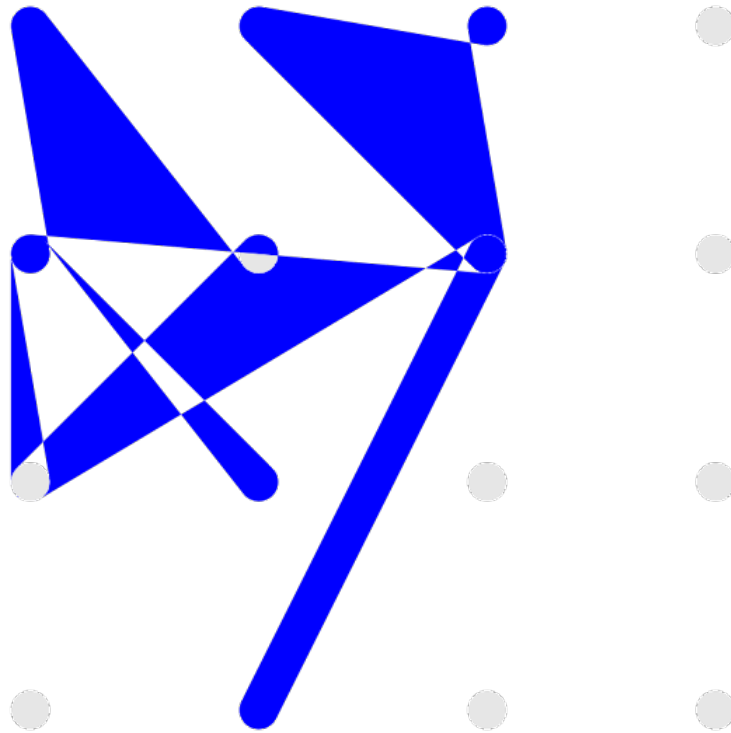
⁴ Bains and Dixon in Changing Perspectives part of the 6 x 6 Collaborative Letterpress Project publication. A research project by Cooper, Gridneff and Haslam (2014). There are no page numbers.

Noble and Bestley suggest ‘experimentation within the design studio’ (2005: 143) in this research, the print room can encourage investigations in practical work through process and materials that support the development of meaning through a set of ‘systematic approaches’ (2005: 143-144) that can be structured as research methods. In the consideration of what an artefact of design history is and can be, Kinross asks ‘what exactly is design history to consist of?’ This research suggests an alternative way of accessing the historical *objet d’art*, perhaps approaching them as Kinross offers as ‘design criticism?’ (1985:17) as an alternative lens for new propositions. Massimo Vignelli advocated a call for criticism, stating ‘pretty pictures can no longer lead the way in which our visual environment should be shaped. It is time to debate, to probe the values, to examine the theories that are part of our heritage and to verify their validity to express our times’ through ‘historical information, introspection, and interpretation’ (1983)⁵.

This invitation of rediscovery can create new hypotheses for conversations ‘in different forms’ (Fuller, 2020). The emergence of new criticism reflects the field of design ‘getting broader and more complex’ (Fuller, 2020)⁶. In this research, I investigate the extent to which these new places can be found in a print room, where individual and collective associations can cultivate critical networks as well as creative practice: a meeting point between critique and practice; theory and design; the obsolete and the emerging. So, again I explore the interactions of the networks, the issue of debate through the variations in the dot and line arrangements through the graphic system seen in experiment 2 overleaf.

⁵ This is in ‘Call for Criticism’, *Graphis* 1983/84, by Vignelli, from *Looking Closer 3*, part of *Classic writings on Graphic Design* eds. Michael Beirut, Jessica Hefland, Steven Heller, Rick Poyner. Allsworth Press. New York

⁶ In ‘Design criticism is everywhere- why are we still looking for it?’ by J. Fuller, published August 2020. <https://eyeondesign.aiga.org/design-criticism-is-everywhere-why-are-we-still-looking-for-it/> [Accessed 18.062022]



Experiment 2. Visual research experimentation to explore and present the research issue of debate through line and dot arrangements. I again use the open-source tool/ graphic system Hofmann 1.0.0 designed by Giovanni Abbatepaolo based on Armin Hofmann's, Variation 51, 52, 53.

An intricate web of critical lineages: research methods

The research methods were developed to determine the critical direction between the historical and practical aspects of the project. The locating of theories and models of research approaches in historical and creative practices were initially, conceptually, and critically led. This critical perspective enabled the research to focus on Mason, Jay, Froshaug and Kitching in the fields of letterpress printing and typography. This path became the foundation from which the methodologies for the experimental practice were determined, thereby forming a myriad of technique focused methodological approaches as discussed in 1. Experimental Letterpress Practice as Research and 2. Collaborative Practice as Research.

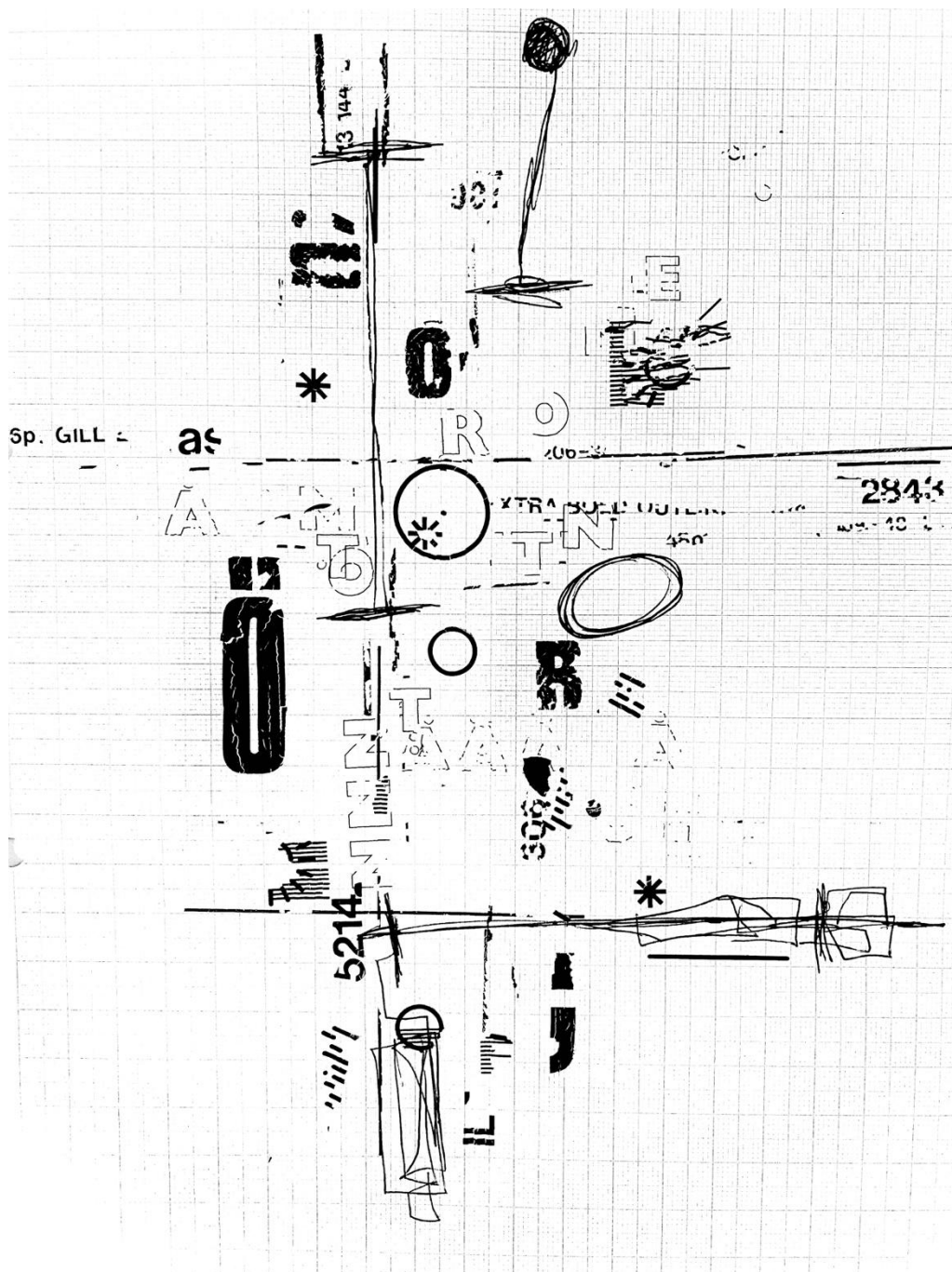
With the direction determined, the practice methodology began to evolve through the development of design principles and practice methods, see chapters 1 and 2 from the work of Mason et al with a timeline of 1890-1990. The historical aspects enabled the formation of research lineages through chronology. Positioned between historiographies and contemporary visual practice, the research forms a vigorous discussion in the knowledge of the field. This is because current research reflects a more linear contribution of either creative practice informed by a theoretical structure or a historical survey. The introduction of the design principles was key to the development of an experimental practice that demonstrates how the methodology is tested in the application of technique and process. The experimental practice offers a focus in answering the research question.

The presentation of graphic forms is representative of the structure and function of extensive analysis that evaluates a representation of the past to reveal new visual languages. As Kepes suggests, 'each new visual conquest creates a new horizon', (1944: 6) and presents new understandings of the historical to inform the present, which in turn creates 'a new frame of reference', (1944: 6) and that can determine a new place to begin, 'for further development' (1944: 66).

Over the last few years there has been a considerable interest in analogue typographic and printing techniques by practitioners, researchers, industry, educators, and students. It is in the field of research where they can be viewed through a critical lens to inform creative and pedagogical practices. Cooper, Gridneff and Haslam suggest, 'research into the positioning of the letterpress process within education is pertinent today, as there has been a marked shift in purpose from technical teaching to a tool for investigation and experimentation' (2018: np). This research is situated within these new considerations of traditional conventions and offers a new conversation in an expanding field to provide a lens that reshapes, reinvents, reveals new systems in scholarly research and creative practice. Meggs suggests, 'if we understand how and why our forms, concepts and imaging techniques emerged, and what graphic artefacts means to the people of their time, we

are in a better position to confront the looming challenges of the twenty-first century' (Meggs, 1994: 178). By developing research systems that encompass these complex interactions, the formation of the historical and creative processes within the research provides a mode of assemblage to present newness in the topography of the academic field. Noble and Bestley suggest, 'as print technologies develop, so new working methods and aesthetic possibilities are opened up for the designer' (2005:147). In considering the historical aspects situated within this critical reflection, the role of historical artefacts in contemporary creative practice is an exploration in several layers of process that can reveal experimental innovations in practical outcomes. Noble and Bestley position this dialogue as 'the history of graphic design is inherently intertwined with that of developing print, mechanical; and more recently electronic reproduction processes' (2005: 147). With the processes spanning several technological changes, 'from letterpress, lithographic and digital printing to the evolution of the world wide web' (2005: 147).

I propose new printing technologies are not required in the development of new methods in critical thinking; more so that traditional conventions are at the intersection of new practical and theoretical knowledge seen in experiment 3. In this way, Barnett outlines critical thinking as 'a praxis; the basis of any new knowledge or further understanding is explored through research; knowledge situated in practice is not as is sometimes implied, a newish form of knowing alongside propositional knowledge, but is a tradition of enduring character' (Barnett, 1997). Where the method becomes 'a logical, pre-defined and systematic strategy by which to undertake and to include, methods of evaluation of experimental outcomes. A technique of organising and analysing or a scheme of classification' (Noble and Bestley, 2005).



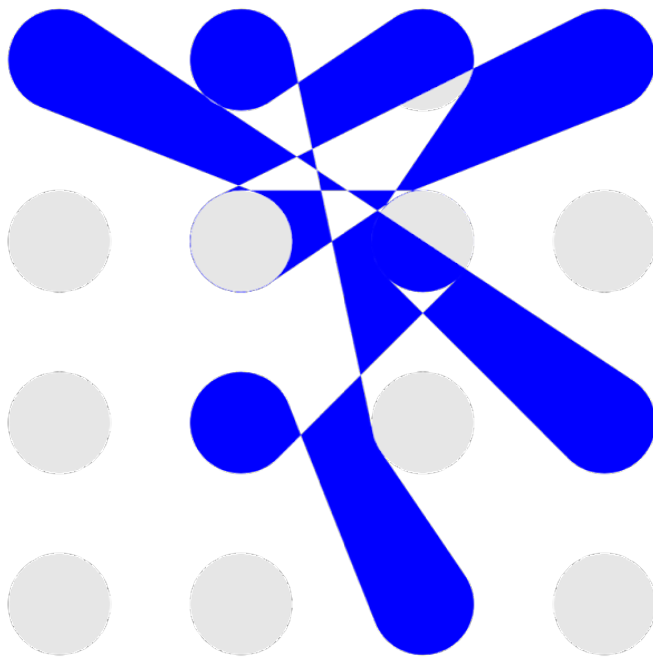
Experiment 3. A visual proposition in the development of new methods in critical thinking from traditional conventions and the intersection of new practical and theoretical knowledge. This experiment explores the intersections through graphical notation made in letterpress, transfer type and hand drawn elements to visualise the critical observations. (2022)

Defining experimental letterpress practice

The term 'experimental letterpress' needs defining to clarify its scope within my research project. The turn of the twentieth century was a time that saw an explosion of creative approaches in parallel to traditional arts and crafts. It is the starting point for constructing parameters and determining the scope of this field. Futurist, Dadaist and Constructivist writers and poets were finding ways to deconstruct functional devices and to shape their texts in expressive ways. Wim Crouwel discusses the different types of experimental work, one of which is driven by self-expression, uncontrolled, unconscious with unknown outcomes and research experiments that have a rational and predetermined problem and process (1980). This study provides a point of reference and a practical way of 'learning by doing' (Gibbs, 1988). A specific dialect created through the similarities and differences of the perspectives of the past, the present and the future. Jury explains, 'the conventions of typography become tradition, and tradition by definition is predictability' (2004:103). It is the predictability that I would like to disrupt whilst embracing and encouraging the tensions. Medina defines experimental typography as a dedication 'to the journey of finding undiscovered, inventive, nonconventional forms of typography' (2004: 239). In *Zeitgemasse Typographie – Zeile, Praxis, Kritik* (1925), Moholy-Nagy explores typographic material through a pasted print, organising the elements in an experimental way that uses old technology to express new ideas. It is the way in which typographic material is explored through old technology that constitutes experimental letterpress in the creative practice approaches. This is achieved through the structure of 'information according to an established pattern or convention is a standard method' and the research patterns 'can offer an aesthetic aspect to the information' (Jury 2004: 102). In this way I can use this device as a system that 'deviates from convention' (2004:101). It is the understanding of the conventions through critical investigations that have led to these deviations, and rule-breaking leads to a duality running through the thesis.

The concept of a dual aspect in typography is set out by Emil Ruder when he surmises, 'there are two essential aspects to the work of the typographer' (1967:5) where there is a need to consider aspects that are 'already acquired' and to 'keep his mind receptive to novelty', (1967:5). By investigating the dimensions of experimental letterpress practice, it becomes clear that the design approaches to concept and process are interconnected with design methodology. Therefore, the practice itself, the way I develop practice and the places I develop the experimental actions are central to the dialogue between historical knowledge and contemporary practice. From this point of view, the design principles that are extracted from traditional conventions are analysed, deconstructed, and go through a system of dialogues and then restructured to cultivate a new language. An emergent critical mode for design discourse is visualised in the exchange, refer to

experiment 4 below, using the dots for structure and analysis, the lines for construction (Hofmann, 1965). By creating experimental letterpress work, there is a continual back and forth of conscious, subconscious, intuitive questioning, adapting and reflection as part of the experiments. An articulation of the process and the method is a 'reflective conversation with the situation' (Schon, 1983).



Experiment 4. I develop visual research experimentation again as a way to explore my experimental practice using line and dot arrangements using Hofmann 1.0.0, (Designed: G. Abbatepaolo)

Re-positioning history: the journey of this PhD

The interrogation of the approaches of Mason, Jay, Froshaug and Kitching enabled connections between typographic practice and pedagogical approaches of the specific institutions to which they are connected via production, associations, networks and output of writings and printed ephemera. Typography is the arrangement of type and letterforms, to visually communicate meaning and message through printed, written, or digital forms. This study is positioned at the intersection of current design practice and traditional typographic methods, an engagement with the two parts as a research method. An inter-play between printing history, practice and pedagogy through experimental typographic process that creates an awareness of a 'duality of approaches' (Meggs, 1994). Steven Heller calls 'practical history' as 'one of the best ways to learn practice, pragmatics and history', and 'to assign students to create a new idea based on vintage principles' (Heller:1). It is this intersection of history and practice where a new mode can be shared, interrogated, and navigated through pedagogical practice.

In *Remaking Theory, Rethinking Practice* (1998), Andrew Blauvelt suggests 'theory provides the basis with which to ask questions not only about work, but through work. And if nothing else, what design lacks in terms of interesting work these days is not necessarily more visual literacy but rather more provocative questions and polemic answers' (102-108)⁷. In the remaking and rethinking through this discourse I reflected on Lupton and Miller when they refer to 'the citizen, artist, producer is not the imperious master of system of language, media, education, custom instead, the individual operates within the limited grid of possibilities these codes make available. Invention and revolution come from the tactical aggressions against the grid of possibilities' (1994)⁸.

In this way, the research operates by learning the parameters of the grid and then deconstructing the matrix to reassemble new critical perspectives in experimental letterpress. The visual interpolation overleaf highlights a strict grid system from and represents the processes of traditional letterpress printing. The development of experimental practice methods seeks to find ways to dismantle and reassemble.

⁷ *Remaking Theory, Rethinking Practice* is part of *The Education of a Graphic Designer*, ed. Steven Heller, 1998 pp 102-108.

⁸ First published in special issue of *Visible Language*, edited by Andrew Blauvelt (1994).

This is an earlier version of the essay 'Deconstruction and Graphic Design', published in *Design Writing Research*.

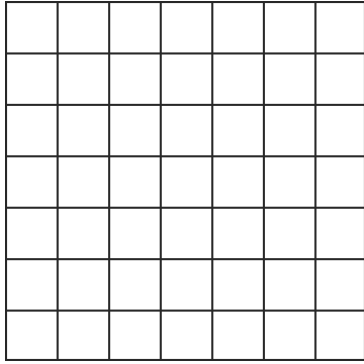


Image 1. The research operates by learning the parameters of the grid and then deconstructs the matrix in the emergence of new perspectives in experimental letterpress

I identified two distinct areas as discussed in the Scoping the Literature Review section that required different approaches to analysis and the positioning in the research. The first was the definition and parameters of experimental letterpress in this study, as seen in *Experimental Letterpress Practice*. The second part was the interrogation of historical encounters, as set out in *The History of Letterpress Practice*. In making distinctions between these two areas of this review, I could then approach the objects in different ways. This initiated a duality between these distinctions, and I wanted to inspect this concept through extending the analysis of sources through diagrammatical elements. Timothy Samara contends 'Design education and practice insist that visual form conveys the nature of content, or data, on both objectively functional and narrative levels' (2021). He considers the presentation of the aspects of duality through what he calls a 'formal duality' that is situated 'within data visualizations to best engage and resonate with audiences' (2021). In this way the visual interpolations of this review present the analysis of the secondary and primary sources and also the way in which I interpret the objects to make judgments in the overlapping of the different areas of the study. The creation of the forms is a record of new observations at the intersection of the critical reflection of the source. Whereas Siegesmund and Freedman suggest this is more like a 'generative image' where 'we can manipulate media to create new forms of visibility that have never existed before' (2013: 19). The proximity of textual and visual elements evokes a sense of the complexities of this binary system of analytics. Hoffman states 'just as scientists intelligently construct useful theories based on experimental evidence, so our visual systems intelligently construct useful visual worlds based on images at the eyes (1998: 12). Furthermore, Siegesmund and Freedman examine Hoffman's analysis offering 'while images can be interpreted consciously, our visual intelligence seems to function unconsciously' (2013: 12). The recording of the interpretative considerations is viewed as 'image as theory' (2013: 19) and not merely as a way to record the visualising of the objects in the review.

The way in which I present the visual qualities of the graphical and diagrammatical compositions as seen below and throughout this chapter are important to the meaning of their contributions. Gillian Rose states ‘compositional interpretation’ is vital in visual analysis (2001: 32). This proposition is applied as part of the graphical statements to engage with the interpretation of compositional aspects of the visual objects but also, to develop visual compositions that present the translations of analysis. However, it is also an interpretation of the layers of theory and practice; the tactility and materiality, as Freek Lomme expresses ‘Tactility is a physical sensation and at the same time it is a mental experience. Tactility becomes ever more hybrid: layered in material. What do we actually feel when we touch things?’ (2016: 5). The diagrammatical interventions offer a way to highlight the layers. An example of a graphical intervention is seen in the diagram over the page. The examination of experimental letterpress secondary and primary matter required analysis in visual and design aspects. The interpretation of materials situated in the history of letterpress practice called for critique of the secondary sources to be evaluated through chronology to interpret the connections. This framed my own research in experimental letterpress practice. In particular, I identified connections between people, places, organisations, practices and technologies in traditional knowledge and this demonstrates a gap in experimental letterpress discourse within contemporary creative and pedagogical practices.

The review revealed an opportunity for me to make adaptations in the way I investigated different types of materials and the approaches in analysing secondary and primary objects. There was an intentional separation of the material to enable the handling of them; in the first was to interrogate secondary objects such as articles and journals written as commentaries and descriptions of specific times in history, the second was to explore historiographies to draw from descriptions in the understanding of the connections of the lines through the research narrative. And finally, the scrutiny of primary objects where visual analysis of formal elements exposed insights into creative practice methods, techniques, and process. Through these complex combinations in the inquiry of the sources I reconstructed the praxis of the study to form a new diagnosis in the understanding of the field and identified ways of understanding and presenting.

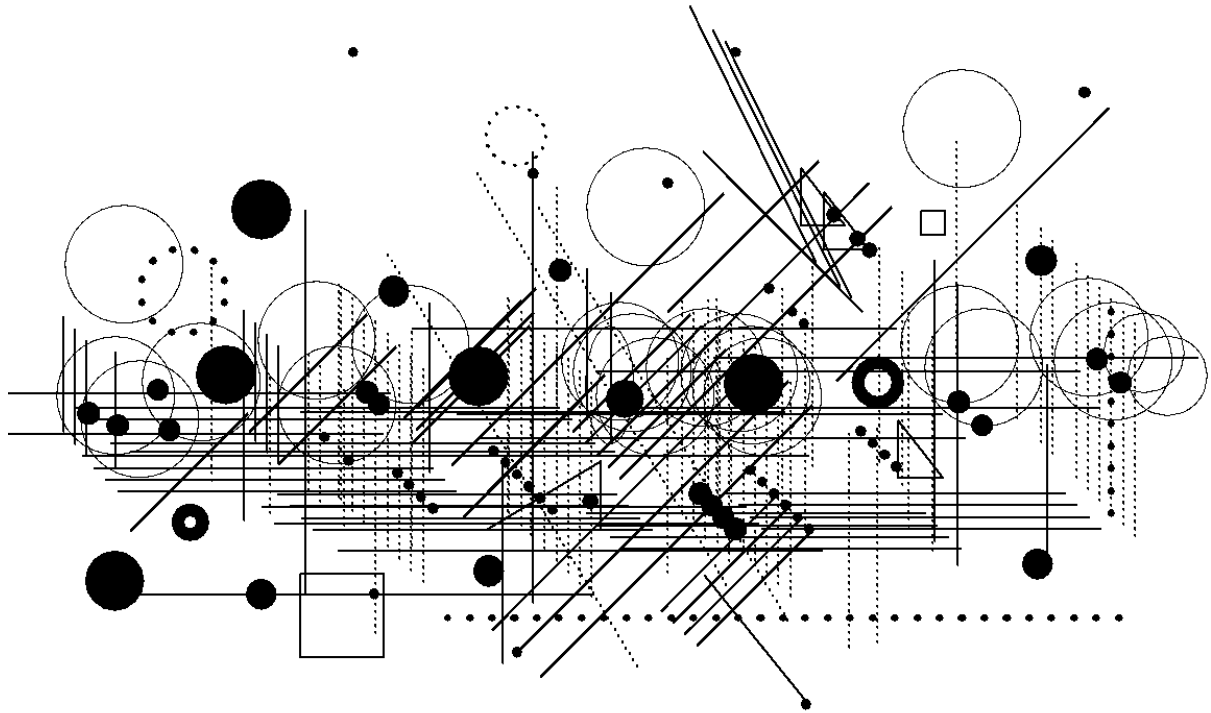


Diagram I. The interpolations of graphical forms highlighting the critical interrogation of objects in the research review. This is a complex structure of lines and dots and circles that present an expository visual device

In the process of establishing strategies for this review, I developed my approach to the visualisation of these findings as a method of exposing patterns and critical relationships. I detail and reflect on this approach further in the I. Experimental Letterpress as Research chapter. My central aim in taking this approach was to establish lineages of creative practice and pedagogy, that, in turn, enabled the lines of inquiry at the core of my research. These lineages highlighted connections, through chronology revealing design methods and principles that were embedded in the development of experimental letterpress practice. Experimental Letterpress practice, The History of Letterpress Practice and The Development of Experimental Letterpress Practice Lineages are areas of the study that are explored to survey the field and to reveal intermissions in the locating of knowledge.

Through the study I have seen the investigation to offer a new manifesto for design practice and pedagogies. A way of absorbing, analysing and interpreting histories in visual and textual methods as a platform for transforming valuable data in repositories in print rooms. In this way, the research is a statement in rebalancing design processes through analogue approaches. Ken Garland (1929-2021) was part of a generation of designers who were dissatisfied with views of, 'staunch attitudes of

British business leaders and the visual communication industries', (Jury:51) Written by Garland and co-signed with other designers, photographers and students, they presented their intentions through the manifesto *First Things First* (1963)⁹. Part of the manifesto was a proposition to 'share our experience and opinions, and to make them available to colleagues, students and others who may be interested'; a rationale that is echoed in this research. *First Things First* was an assertion that looked to those who pioneered the international style. Emil Ruder (1914-70), Josef Muller-Brockman (1914-96), Armin Hofmann (1920-2020) and Karl Gerstner (1930-2017)¹⁰ and the conceptual and stylistic elements that were key in pedagogies at the Zurich School of Arts and the Basel School of Design where 'high standards of craftsmanship allied to a strict design rationality, a precise adherence to grids...led by logic, simplicity and functionality', (Jury:51-52). The strict design conventions were reinterpreted by Wolfgang Weingart (1941-2021) at the Basel School of Design where he 'set out to explore with his students the expressive potential of typography' (Jury:53). In Weingart's approaches, there is a space where typography can be a vehicle for new encounters through printing techniques and processes. A developmental place which, as Weingart says, is for 'collecting of ideas, which are then set down in words and drawings, is an essential step towards further development' (Weingart, 1991). This extension of idea generation allows a 'way into the technical processes of the project and preparing oneself for a new encounter,' (Weingart, 1991)¹¹.

The re-examination of formal principles of typographic practice takes place through the study of traditional methods and a reconstruction of visual and technical elements, to reframe historical conventions of the traditional approaches to explore new typographic forms. The deconstruction and reconstruction of type forms and systems of structures in layout and grids, creating new knowledge in materiality and process. Typographic abstraction, synthesising traditional knowledge, semiotics to re-imagine typographic and graphical forms and offer a reconsideration of traditional rules. This project encompasses a triangulation of methods where my research develops through a historical study, praxical encounters, and tacit knowledge through practice and merge to form an interrogation of the historical, applied in contemporary typographic practice.

⁹ *First Things First* was published in 1963 was revisited and republished in 2000 by a group of new authors and again in 2014.

¹⁰ The international style was also known as Swiss style.

¹¹ As part of an interview with Yvonne Schwemer-Scheddin, for *Eye Magazine*. *Eye* no.4, 1991.

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This research is a series of analogue process-led typographic examinations through alphabetic and non-alphabetic type constructions using new design principles extrapolated from a historical investigation. A range of interlinking relationships between traditional knowledge and praxical interventions, as a device of different positions forming a measured, sometimes unconventional manipulation of tradition. Experimentation is a context to examine a hypothesis within a set of design principles, however, there are some areas of the experimentation process where typographic forms are examined with non-formulaic approach to seek new relationships and interpretations.

My research examines how traditional typographic techniques and processes are disrupted and reconsidered, presenting a critical account of the research journey in the development of systems of research and practice. There are valuable factual knowledge and connections that I have made through the review of this study and these associations have provided new rules in the design and research methods that have been developed as part of the repositioning of printing histories. This correlates to the initial position of the research from my experiences in teaching and creative practices and the debates within current typographic and printing practice and pedagogy. Practice outcomes provide an exemplar of the research findings; the application of new rules, describing the research journey through iterative cycles of theory, design practice and tacit knowledge that can only be formed through highly experimental techniques. An aesthetic visual presentation of the study reflects the complex layering of printed constructions in the expression of the experimental research methodologies.

PhD structure and overview: the presentation of this area of study

The presentation of this research engages with the textual and visual dimensions of the study forming a new typographic language. This is achieved through a series of individual and collaborative practical interventions that demonstrate a new understanding of creative practice through deconstruction and assemblage as modes to draw upon, emphasise and to interrupt the conventions forming new graphic forms and design structures. Ruder explains ‘typography and design are virtually synonymous’, (1967). The following diagram represents the stages of the research study and provides an overview of the flow of research activity. The diagram is a device for the reader to understand a visual synopsis of the research.

The Structure of this PhD Research Project

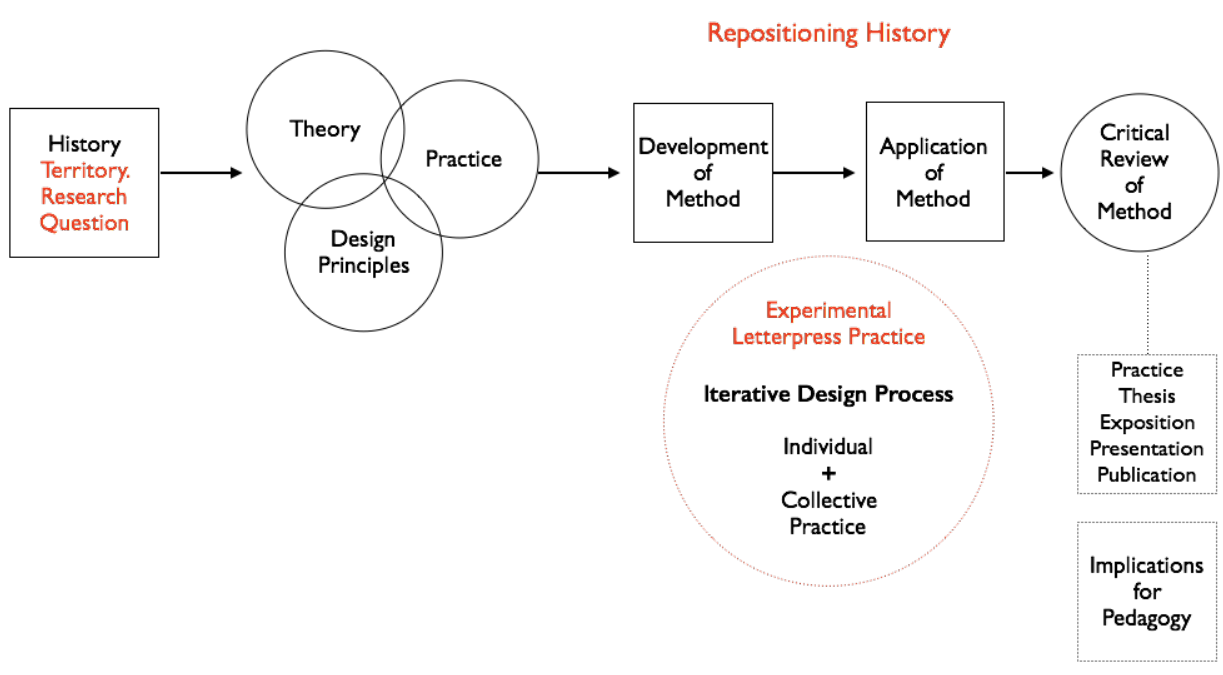


Diagram 2. The flow of the research project and the placement of key areas in the organisation of the strategies and approaches

The research outcomes are demonstrated through visual explorations and printed experimentations. This will be introduced through the written study and an accompanying visual anthology of creative work through a visual digital index system which can be viewed through a link in the appendix 3. The index will display the emergent knowledge through the textual and visual formats. There is a portfolio of printed material to view and to handle. In referring to the positioning of the research in context to contemporary design practice, I consider the relationship between the historical study and the practice-based activities expressed in two languages: textual and visual. Through the textual

parts of the thesis there are visual elements that form part of the visual language that is unique to this research.

The positioning of diagrammatical and graphical forms are integral parts in the communication of the findings and are a way to convey ideas that are interpreted in visual form to indicate the experiential understanding (Spencer, 2011; Martinon, 2013). Walter Herdeg describes ways of visual expression in *Graphis Diagrams, The Graphic Visualization of Abstract Data*, by creating 'suitable graphic transformation' (1976) to describe 'how abstract facts or functions may be given visual expression by suitable graphic transformation' (1976)¹². This research presents graphic and diagrammatical elements which visualise the conceptual and philosophical emphasis around the dot, line, and circle, as set out in Chapter 2. As Munari suggests, 'the circle is essentially unstable and dynamic; all rotary movements derive from the circle', (2015:99). Potter describes diagrams as 'abstract, partial, energetic' (2012:1.22) devices that can, 'establish or convey ideas having an analytical or interpretative purpose'. (2012:122).

The diagrammatical elements are 'useful models of reading activity' (Stiff and Cerne Oven, 2009:161)¹³ in which to visualise the importance of the constructions, deconstructions and reconstructions developed through the research narrative and historical survey. Armin Hofmann discusses the importance of graphical elements with the dot being 'the most important on structure and analysis' (1965:43, 49, 103) whilst the line 'performs the important duty of construction', (1965; 43, 49, 103). These arrangements envision the tensions between praxical interventions and traditional principles to become a unified path to present parts of the thesis. As Kandinsky proposed, 'the geometric point as the ultimate and most singular union of silence and speech' (1926)¹⁴.

The experimental creative practice is presented in two ways: as a visual exposition in digital format and folders of printed work. The folders are capsules of the preparatory notations, tests, explorations, mistakes, mishaps and experiments. Each folder encapsulates part of the integrative and experimental practice. They form a lineage of practice through another chronological ordering. Each capsule (folder) shows a record of the date and of the techniques and processes selected in the particular printing session. This allows me to present the practical aspects in a systematic way and also the opportunity for the reader to handle the material components of the research. To explore the interrelationships between experimental practice and research methods through touch and being

¹² A description of the book and some of the contents by Walter Herdeg [Editor]: *Graphis Diagrams [The Graphic Visualization of Abstract Data]*. Zürich: The Graphis Press, 1976. Second edition. [Publication no. 136] found by accessing <https://modernism101.com/products-page/graphic-design/graphis-diagrams-the-graphic-visualization-of-abstract-data-zurich-the-graphis-press-1976-walter-herdeg-editor/#.YwTOFi2ZNE4> [Accessed May2022].

¹³ In *Typographic Papers* 8.

¹⁴ This is part of a publication by Kandinsky called *Point and Line to Plane* in 1947. Cranbrook Press, Michigan. First published under the title *Punkt und Linie Zu Fläche* 9th of a series of 14 Bauhaus books Eds. Walter Gropius and L. Moholy-Nagy in 1926, found at <https://www.wassilykandinsky.net/book-pointlinetoplane.html> [Accessed 16.06.2022].

with my work. To paraphrase Paul Klee (1953), I would like the reader to find a sense of the relationship between abstracted and graphical forms which transmit the didactic principles of the research¹⁵. The written component is a way for me to articulate the journey through the historical survey and report as well as the practical explorations and the intimate and unique ways I developed research methods to test, apply and to answer the research question. These different components will be presented at viva. The digital portfolio is an interactive platform to communicate the textual, material, and graphical elements alongside the printed artefacts created from the experimental practice and research methods. The printed materials are presented in folders and sketchbooks, allowing the viewer to interact with the tactile nature of the printed artefact. I decided to present in a way to convey the duality of the study and the many facets of the research.

The written part of this proposition is set out in a traditional essay format. This is a way to apply literary conventions aside from the disruptive nature of the visual interpretations. A change of pace for the reader and takes shape through this format; following this introduction the thesis presents a survey of the research territory in three main areas: 1) Experimental Letterpress Practice. 2) What is Experimental Letterpress Practice? and 3) The History of Letterpress Practice.

An overview of the British printing industry, The institutionalisation of letterpress practice and education and 3) Experimental Letterpress Practice Lineages. This critical review provides an overview of the examination to identify connections between people, places, organisations, practices, and technologies in traditional knowledge that could demonstrate a gap in the literature of experimental letterpress in contemporary creative and pedagogical practices. In 1. Experimental Letterpress Practice as Research and 2. Collaborative Practice as Research, the methodological approach of historical research is set out and how it contributes to the knowledge of experimental letterpress practice. This is detailed through the following four areas: 1) Assembling the line in search of a system to unify the field, 2) Typographic abstraction as a method and the development of typographs, typographic data structures to present the complex interactions between the historical, the narrative and the creative practice aspects, 3) Collaborating with histories in the present, the formation and transformation of a collective research practice and experimental letterpress, and 4) collaborative practice as a research method to explore emerging methods in creative practice.

The setting out of critical discussion to elicit direction of examination is drawn out from the work of Mason, Jay, Froshaug and Kitching. It explores the way their approaches provided a focus in creating new design principles for experimental letterpress practice. An area where historical knowledge applied in commercial print settings and instructional technical teachings is now re-examined as a

¹⁵ This has been developed from the writing of Paul Klee when he discusses 'a free creation of abstracted forms which supersede didactic principles with a new naturalness', in the Pedagogical Sketchbook, Faber and Faber, England 1953. First published under the title, Pädagogisches Skizzenbuch, 2nd of 14 Bauhaus books edited by Walter Gropius and I. Moholy-Nagy. 1925.

mode for contemporary creative practice contexts. Using the work of Mason et al in the critical analysis of traditional typography practice alongside other research findings, a new model for experimental practice is applied and a discussion around this is set out in 4. Findings: Historical Lineages and 5. Findings: Experimental Practice; an area of the research formed and presented through the collective research practice activities completed with Cleaver engaging in conceptual and visual methods to explore the sharing of Cleaver's experiences as a student of Froshaug, the imparting of the knowledge gained through collaborative typographic practice activities and design practice. Collective practice with Prof. Dr. h. c. Patrick Thomas is the area of the research I formed through the collective creative practice activities I completed with Thomas, and the findings are presented through the works we created.

I have applied varying editorial conventions as set out in 1. Experimental Letterpress Practice as Research. Through this thesis, another mode to present the exploration of creative collaborative practice, detailed in chapters 1 and 2. As I indicated in these chapters the praxical interventions formed through the creative practice encompass many layers that form the lineages running through this research. The text for the majority of the written parts has been set in Gill Sans, a sans serif typeface designed by Eric Gill and released by Monotype in 1928, Gill Sans is a development of the typeface Underground Alphabet, or Railway, designed by Edward Johnston in 1916. Gill assisted Johnston in the development of Underground. This is important to the historical study and the typographical practice elements of the project for several reasons. Anthony Froshaug selected the typeface in his own printing and in his teaching of typography. It was also chosen by Jay at the Birmingham School of Printing. Jay was a student of Johnston at the Central School of Art and Crafts, attending Johnston's calligraphy classes. Cleaver has selected the typeface in his work. The printing workshops used to complete the practice both hold Gill Sans as part of their collections, this allows me to make connections and networks in my contemporary typographic practice. It is worth noting that many schools of printing between 1920 and the end of the twentieth century would have seen Gill Sans in their type cases. This is the same for commercial printers of this time.

The collective research practice completed with Thomas has been set in Futura Book. Futura was originally designed by Paul Renner and released by the Bauersche Gießerei in 1927. Futura is a geometric typeface that is based around shapes, the square, triangle, and the circle. Moore's analysis of the design aspects of Futura confirms it 'avoids the decorative, eliminating nonessential elements, makes subtle departures from pure geometric designs' (Moore, 2014). The decision to select this typeface is important to the historical study and the typographical practice elements of the project for several reasons. The geometric elements in the design of the type fit with the modular and abstract graphical elements of the collaborative practice. The collections of type at P98a, Berlin where we completed research practice holds various founts of Futura, which were

selected for and supported the experimentation in my typographic practice. In chapters 1. Experimental Letterpress Practice as Research and 2. Collaborative Practice as Research chapters, I set out the results of the typopraxis¹⁶, an exchange of conceptual and visual methods around Jay's design principles and rooted in Thomas's experiences as a student at RCA/ Central Saint Martins. In the Individual Practice section, the development of analogue typographic processes; letterpress, transfer/ rub down type, typewriter and screen printing examine how the thinking and making processes of traditional typographic conventions are all part of the discourse that disrupted and reconsidered the traditional conventions.

The final chapter recounts a summary of the findings and critical contribution to the field. This is set out in the following parts: 1) summary of thesis, 2) Implications for experimental letterpress practice, 3) Implications for experimental letterpress pedagogy and 4) Implications for future research. The impact of practical outcomes in individual and collective activities demonstrates the application of new research methodologies in the exploration of experimental analogue printing processes. The encounters with history and praxical interventions have left an impression on my creative and teaching practices with the manifestation of a new understanding of how research models can govern design practice.



¹⁶ Typopraxis is a research method I developed as part of the creative practice areas of this project. I have set out a discussion about this part of the research in Chapters 2 and 3.

Having said all that, what comes next?

So far, I have defined research space to establish a critical approach to the field of experimental inquiry. The approach is a culmination of reviewing the old to reconsider and redefine contemporary design practice. It will reconsider the positioning of the print room, from a holder of obsolete machinery to a space to contemplate the deficit in areas that can facilitate intersections amongst theoretical critique, design histories and contemporary practice and pedagogy. This study is a network of complex arrangements that are interlinked; historical assemblies with new classifications in creative practice. The acknowledgment of a design problem is presented to show the exploration of contemporary experimental practice through alternative forms; new ways of looking at the conventional and unconventional. The Printing Types is a territory which provokes new perspectives by validating an under-imagined area in design discourse.

In the next chapter I will be detailing the thesis argument from the myriad of positions that were taken through the duration of the project, as set out in this introduction. In doing this, it makes it possible to consider how an immersion in a historical context, leads to the development of approaches in individual and collective creative practices forming a series of connections of the research dots through multiple lines of inquiry. These perspectives are situated in a concrete space, experimenting with a re-examination of graphic language.

Experimental Letterpress Practice as Research

Introduction

In the introduction I set out my approach to the historical area of the study as a basis for experimental letterpress practice as research. This chapter details the research methods I utilised and the way they are rooted in individual and collaborative experimental letterpress practice. I developed these approaches through the study of the historical typographic pedagogies and practices of key typographers. I then used these practices and textual material to develop models of research to frame the various spaces I created for experimental and typographic practice.

In presenting my research I use the same approach I established in the introduction: a written and diagrammatical format. Using this approach, I establish the case for a historical narrative of the formation of lines of associations and lineages between Mason, Jay, Froshaug and Kitching, my creative collaborators and myself. I then show how I used this to draw out traditional and formal principles for my experimental work. I establish the philosophies of the methodological approaches in three parts: as a historian of lineages of letterpress practice; as collaborative practice engaged with the histories of experimental letterpress practice; and finally, as experimental letterpress practice.

I construct a method

this is an experiment.

a calculated
through printing histories, process and **material exploration**
guidelines, **using the old to make the new.**

and big experiment!



am developing a **new** framework for **typographic** practice

to develop a **carefully crafted** set of visual methods and **graphic**

How do I do this?

How do I find things out?



What is new?

I design systems



The printing workshop provides freedom and is part of a territory for theoretical and critical debate, it is not just a place to store specialist equipment. It is not a place of nostalgia; it is in a unique position of transformative design practices and pedagogies to change present approaches. I suggest the practitioner and student can reuse, reform, reorganise the historical tracing to make sense of contemporary design problems. The print room and the unique relationships formed in the print room are intrinsic parts of doing, for instance; making, creating, developing and therefore, an understanding is shaped by sharing knowledge. As Joanna Drucker suggests 'the mind thinks from the hand and eye and not merely through them as instruments of already formed expression' (2022: 20). Thus, creating a new and critical typographic vernacular rather than be inhibited by histories. Therefore, in highlighting the methods I used to develop the written and visual aspects, this area forms this chapter's findings.

Experimental Letterpress Practice as a Research Method to Explore Emerging Approaches in Creative Practice

Teal Triggs defines a typographic experiment as ‘a reflection on the point in the design process when the constraints of convention are released, and the fundamental notions of function and aesthetics are challenged’ (2003: 7). She discussed these ideas further in *The Typographic Experiment: Radical Innovation in Contemporary Type Design* (2003), as being ‘about the expressive potential in the arrangement of type’ (2003: 8). However, the printing practice in this study goes further still, utilising the subversion of historical conventions to explore graphical forms. In a similar approach in subversions, argues Triggs poets Mallarme (1842-98) and Apollinaire (1880-1918) created ‘visual interferences, shaping their typographic experiments to subvert the conventions of literary form’ (2003: 10). Exploring subversion techniques through questioning how the composition of text can be read through exploring the placement of lower- and upper-case forms against large spacing areas with a combination of typefaces and unconventional layout systems. Typographic elements were used as pictorial propositions, as opposed to a functional mode of presentation and communication. This disruption to an established way of representing the content of text saw new connections between literature, design and the reader. The experimental approaches of Filippo Tommaso Marinetti (1876-1944) proposed radical ways of moving away from the traditional compositional arrangements. In Marinetti’s work, the composition was free, expressive, poetic, forceful as a platform to present political manifestos that were devoid of the conventional uses of punctuation, type size and syntax. Laszlo Moholy-Nagy (1895-1946), Piet Zwart (1885-1977), Kurt Schwitters (1887-1948), Herbert Bayer (1900 -1985) and Jan Tschichold (1902-1974)) and the work of the Bauhaus became synonymous with experimental avant-garde design. Typography became part of a range of art and design fields including graphic design to question the traditional and pioneer the new, the modern. Frascara asserts the misunderstanding of design disciplines through ‘the excessive importance given to the avant-garde movement in the context of graphic design history is based on the failure of theory to recognize graphic design as something other than an art form’ (1988). And this way of questioning is applied to the practical parts of the study.

The techniques that are explored through the experimental practice are primarily letterpress typesetting and printing process led activities combined with other printing techniques; screen-printing, transfer type and risography where I develop conventional and unconventional approaches. For example, type forms will be selected from either wood and/or metal blocks from the print room collection. There will be a sustained time at the press, composing, ordering, reordering the forms. An example of my activities at the proofing press is seen in image 1. A print is taken at every stage of the

exploration. Some of the prints will then be developed by exposing forms onto a silk screen, this creates another layer to the printing system where the compositions go through a screen print. The next iteration can see some rub down type elements such as Letraset® added to the letterpress and/or screenprint. There is some cutting and pasting of parts of the forms, they are placed next to each other and create new relationships between the shapes and patterns. The body of work that is produced through each printing session explores combinations of the processes. However, all the explorations are underpinned by the design principles that have been identified in the critical study of the review. The traditional principles are followed and then they are exploited, disrupted, questioned. As seen in the development of research lineages in 2. Collaborative Practice as Research. The development of individual and collaborative practice methods is highlighted in the next section and the research outcomes are set out in 4. Findings: Historical Lineages and 5. Findings: Experimental Practice.

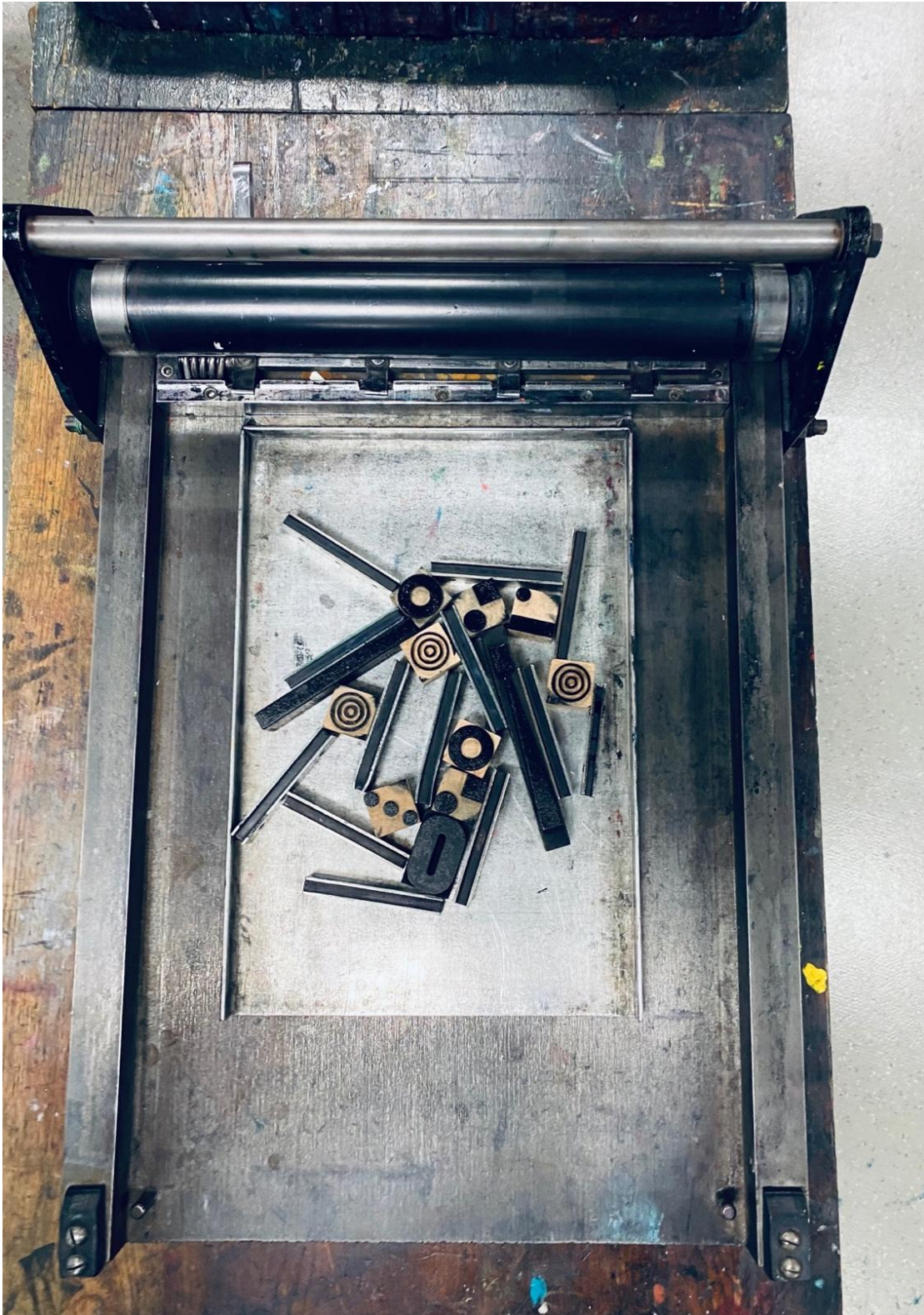


Image 2. An example of composing wood blocks on the table top proofing press to explore and disrupt the design principles

Following Hart (1998), I see methodology as a way to 'promote the collection and analysis of data through a systematic categorisation of rules and methods' (28). For my study, this relates to specific aspects of research methodology and creative practice method in practice-based research rooted in a historical archival study. I have used Macleod and Holdridge's invitation in research procedures that can be a manifestation of theoretical aspects that have already been expressed (2005: 197). Accordingly, in this chapter I set out the methods I deployed in my experimental letterpress practice as a distinct mode of enquiry and discuss my distinct methodological approach to the historical lineages I discuss in greater detail in chapters two and three. In particular, I am alerted to Gray and Malins' (2016) encouragement to investigate the system of assumptions of the techniques and methods used to organise the many aspects of these created practices.

There are philosophical considerations that run through the subject matter and determine the location of the ever shifting and 'characterised by flux' (Haylock, 2020: 252) dynamics in my methodological approaches. These run through the historical dimensions and the development of research and design methods leading through processes to the printed artefacts. There is conflict and similarities within the relationships situated in the discourse that is placed between the terms *concrete* and *abstract*. In this study, I construct my definition of concrete based on Max Bill's rationale that an activity should proceed from compositional principles that are universal and can be applied to various creative situations. In this case, it is the principles that are applied and intentionally revised in individual and collective creative practice activities. This is applied in Bill's series of experimental studies called *Variations* as he asserted 'concrete art holds an infinite number of possibilities' (Bill, 1993: 112) and in consideration of the possibilities with a calculated way to formulate a path facilitating a dialogue in the potential as the 'constructions are developed only on the basis of their given conditions and without arbitrary attempt to modify them' (112). It is the variations in the experimental encounters that transform the concrete (the design principles and historical conventions) to a more abstracted interaction (disruptions followed by a reordering within the creative practice). The focus for a perspective of the term abstract is discussed by James Dyer and Nick Deakin as they draw upon the writing of Alfred North Whitehead in consideration of 'a state of flux' (2022: 54).

The changes and fluctuations in the different parts of the project mean there are continual abstractions taking place that determine the next stages of the discourse. The abstracted manifestations convert a complex occurrence, connection, or interaction into a place of understanding. These abstractions are articulated through the considerable development of textual and diagrammatical research systems to classify the data. Dyer and Deakin propose, 'abstractions are simplifications, they reduce things to make them more stable and tangible' (92) whereas Whitehead refers to this as a 'method of extensive abstraction' (92). These outlines in abstraction form

theoretical and visual frames to regulate the vastness of the experimentation. As Dyer and Deakin surmise this as, 'a technique of reducing to determine'. (92).

The different methods and methodological approaches used to facilitate the shaping of the distinct knowledge within the two research parts are the historical study and the creative practice. From this point of view, these became a series of procedural activities, a range of processes. My definition of process is a reflection from two fields: practice and philosophy. The first is a definition from practitioner Cristoph Grunberger. He describes his project *Analog Algorithmism* as, 'the concept represents a design process in which individual decisions follow much larger and deeper principles than immediate and spontaneous-intuitive actions' (Grunberger, 2019: 42). What is alluring in this description is that the idea is a vessel for the practical and theoretical approaches and the individual parts of the cycle(s) have space within something that is contained in conventions rather than more instinctive situations. However, 'the procedures allow a number of possibilities. The designer is transformed from inventor to interpreter and/or curator' (42). The second part is a philosophical aspect as proposed by Sun, Slusarz, and Terry (2005), who argue for a model of learning that integrates both implicit and explicit processes¹⁷. This integration and synthesis of viewpoints forms an intention between the findings of the historical investigation and the ways in which the creative practice activities are crafted. As such, I have the perspective that there is a duality to the research methods which is a) a series of processes to construct and apply research methods b) process is the way the research models are interacted with. Simply, **method is process / process is**

method in the parameters of this research. The methods that were developed for the historical research are qualitative data activities such as interviews as well as participatory situations and quantitative information from archive visits. There was some ethnographical research completed through the collection of the research 'primary and observational interview data' (Creswell, 2003: 229), collaborative creative practice activities as well as the interrogation of archival material in the investigation. There was also a large amount of auto-ethnographic activities that can be classified as a method where I have written myself into the thesis through the extensive reflective practice that has taken place. This approach enables my experiences and place within the primary sources and the narrative. Therefore, the approaches formed through the interactions of the historical principles and the creative process makes the relationships immersed in the research activities and the context more definitive (Crouch and Pearce, 2013). The practical methods used in the design practice such as; brainstorming, visual mapping, typographic sketching, assemblage, collage, diagramming, type transferring, silk screen print layering and drafting through printing proofs on the press.

¹⁷ This is part of a wider discussion about duality in the context of the research in the positioning of the concepts. Refer to The Interaction of the Explicit and the Implicit in Skill Learning: A Dual-Process Approach by Sun, Slusarz and Terry, 2005.



Image 3. Experimental letterpress practice using typographic spacing material used to create new forms (2022)

To construct the various research methods in this project and bring together the relationship between research and knowledge as well as traditional and contemporary practices, several methodological modes were explored. This facilitated an understanding of the interweaving of the critical and historical knowledge as well as an application in contemporary creative and pedagogical

practices. In looking to organise these dialogues between the critical and the creative practice Triggs reflects on a 'critical turn' (2020: 45). She offers a position 'that the contemporary demands on design practitioners', has taught designers, 'to be critics- that is, to adopt a critical design practice that reframes the boundaries of design' (2020: 46). She expands on this by looking to Andrew Blauvent as he argues 'critical practice is key to the process of discipline formation (2020: 49)¹⁸. It is my reappraisal of the edges and spaces in-between that can facilitate critical reflection through method and process where there is a 'reshuffling and re-inhabiting' (Lupton and Miller, 1996: 3-23) of experimental letterpress practice. I assumed several positions as discussed in the Introduction, in the search for a methodology. There was no pre-existing methodological framework that could be adapted for this research as it is situated between research fields. It was necessary to draw from approaches in humanities and social sciences as seen in 2. Collaborative Practice as Research. The quantitative data that was collated from the early historical and archival research consisted of analysing the technical and visual aspects of printed outputs from the Birmingham School of Printing. This method was discarded as the project changed focus from a historical study to a practical investigation, however, the initial findings remain an invaluable source from a more holistic view of the subject matter.

The mode of organising the literature was demonstrated through a process of constructing typewriter and assemblage techniques structuring a chronological review and the visualisation of connections as described in image 4. In addition, there are diagrammatical elements, referring to typographic abstraction that function as visual interventions, another form of interaction with this thesis. Therefore, the methodological approaches in this research refer to the interaction between the historical and practical parts of the research through text and diagrams. It is a system of visualising through the construction and assembly of a range of typewriter and printed material. The application of collage techniques helped to reveal an order of publications, their placement in the review, the development of the start of key connections. As seen in image 4. I developed several iterations, to structure the review through a visual aid of a paste up method. The methods of assemblage and collage with selected texts and this began the construction of a timeline to curate relationships of sources. This was the first research lineage that was to become an intrinsic method in the research approaches.

¹⁸ This was originally in 'Towards Critical Autonomy or Can Graphic Design Save Itself?' *Émigré* 64: Rant (Sacramento and New York: Émigré and Princeton Architectural Press, 2003) 41.

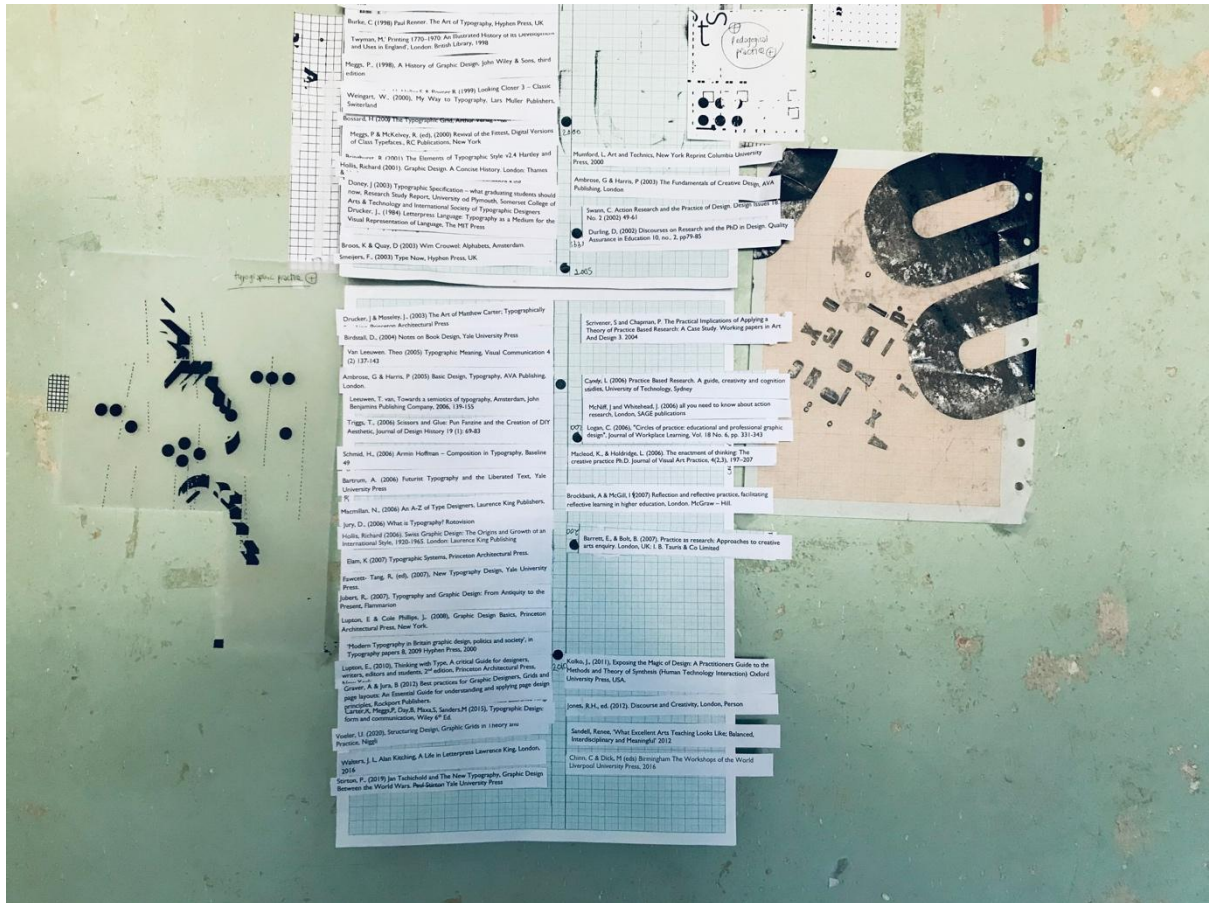


Image 4. An assemblage of literature developed through chronology with examples of design practice developed relating to the design principles and pedagogical methods

The valuable connections that were captured in the literature review, facilitated an expanded praxis of interactions between the historical and the creative practice. In the search for a framework to support the dialogue and transition between the two, the analysis of the creative and pedagogical practices of Mason, Jay, Froshaug and Kitching were collated and interrogated, this is where a set of design principles was determined to test typographic practice. The principles form the framing of a network that has been developed into a system to map the propositions. The correlation between the visual and written materials of this research is one of showing and telling (Spencer, 2011). This relationship is intrinsic and messy as I navigated through a hybrid expanse between design research and creativity.

The sources in the investigation into the educational and professional profile of Mason et al to develop an understanding of his training, beliefs, approaches, and experiences that inform the development of the project narrative. It was not appropriate to develop personal biographies as these have already been well documented, however, the analysis follows professional and biographical chronologies that reveal details in the development of the research discussion to shape the development of research

methodologies and typographic practice. I initially explored chronological ordering and structuring systems through an assemblage of textual matter, to formulate a visual presentation using secondary material that pertains to traditional practices, seen in image 5.

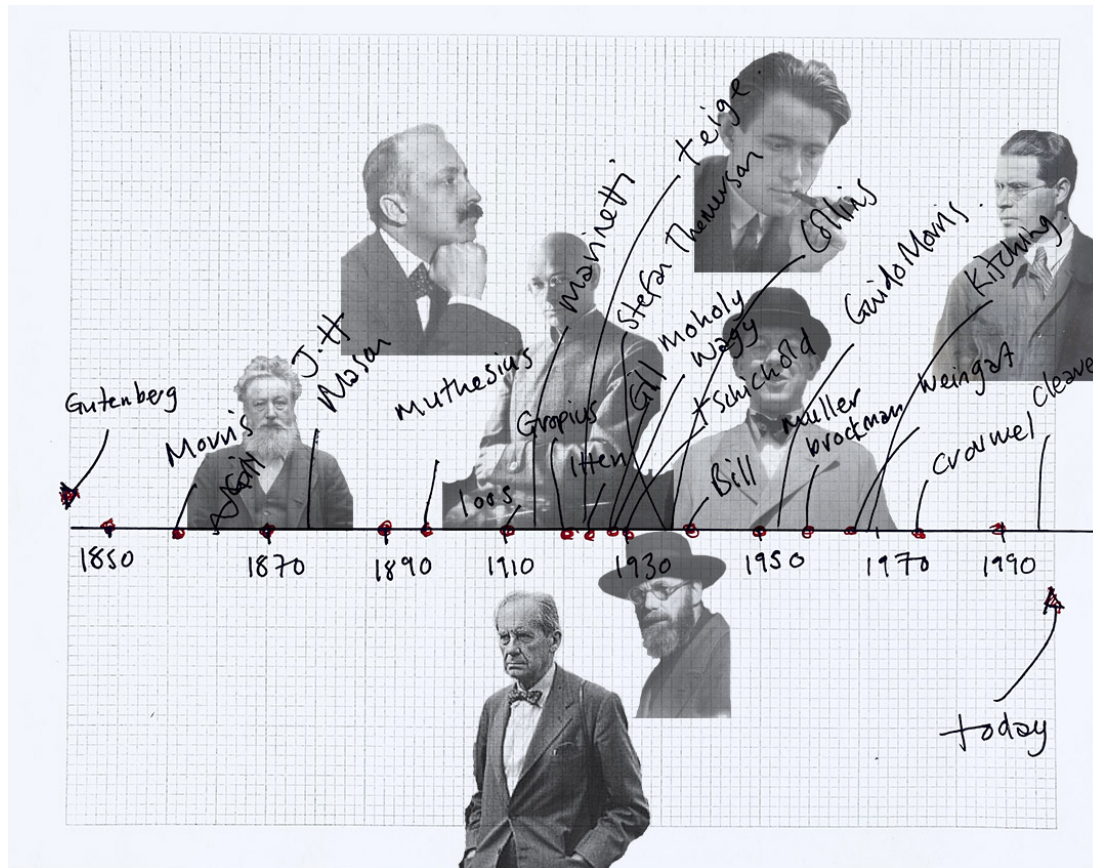


Image 5. Making connections through a visual chronology of influential figures and collaborators in typographic practice and pedagogies

The overlaps and intersects create a series of interconnecting arrangements. A nexus of design principles in typography and printing techniques and processes. Lineages are formed through the relationships of those who played and play significant roles in the development of typographic language through this project and these lines have become part of the modes of research methods. This area of the project provides a way to visualise the research through creating a lineage of interconnecting elements of the historical study and to locate my typographic practice within the sphere of the relationships. I was able to trace lines of inheritance associated with this project to identify conceptual, intellectual, technical, and visual elements that were developed into the next lineage iteration, a time chart.

Further structuring of the data was developed through the concept of a time chart (Themerson, 1961), a visual chronological ordering and positioning of the lineage and connections in traditional

and historical practices to support the framing of data to create an emerging approach to my research practice. Seen in image 6. As Hollis suggested ‘in the pre-history of graphic design, all kinds of visual communication was, in general, produced directly by artisans or craftsmen’ (2014). And in turn, typographic design practice is constructed through the interactions with the historical visual examples and artefacts identified in primary and secondary research.

The lines running through the research are a visual representation of quantitative and qualitative research, an application for design thinking and practical design methods that may not be conceived through other scientific or analytical means (Schon, 1983). The lineage seen in the image 6, was constructed through the assemblage of analogue printing techniques; transfer type and letterpress printing as well as collage of pre-printed material with some hand rendered drawn elements. Mason, Jay, Froshaug and Kitching are placed amongst other influential practitioners and educators, forming the research lineage through chronology. This is a visual method of highlighting the interconnections through the review and into creative practice. A way to depict the intertwining of the research areas and to form connections in a space somewhere in-between discovery and knowledge or as Michael Polanyi describes as a ‘logical gap’ and a sort of ‘illumination’ (1958: 37). Here, this process of making connections through visual elements being placed and ordered becomes a method through process. This line was then developed into the next iteration of visual connectors called typographs, where the method changed from a line of chronology to complex forms of typographic abstraction.



Image 6. The lineage of interconnecting practitioners to trace the lines of inheritance

The technique of iterative sketching through cut and paste techniques enabled the mapping and visualisation of data. At this point I would like to discuss the importance of the iterative approaches that are key in the research methodologies. Each iteration can produce several proofs or drafts of

experimentation. These drafts become versions; each version creates an abstract of the research process as well producing a printed artefact. I would like to present the drafts with equal importance as the finished component and the more resolved printed outcomes. This is because the drafts hold all the versions of the form, process, concept, analysis, and visual systems. The versions are situated within the iterative design cycle and therefore, the reordering of conventions is interlinked with the draft version. An example is seen in image 7.

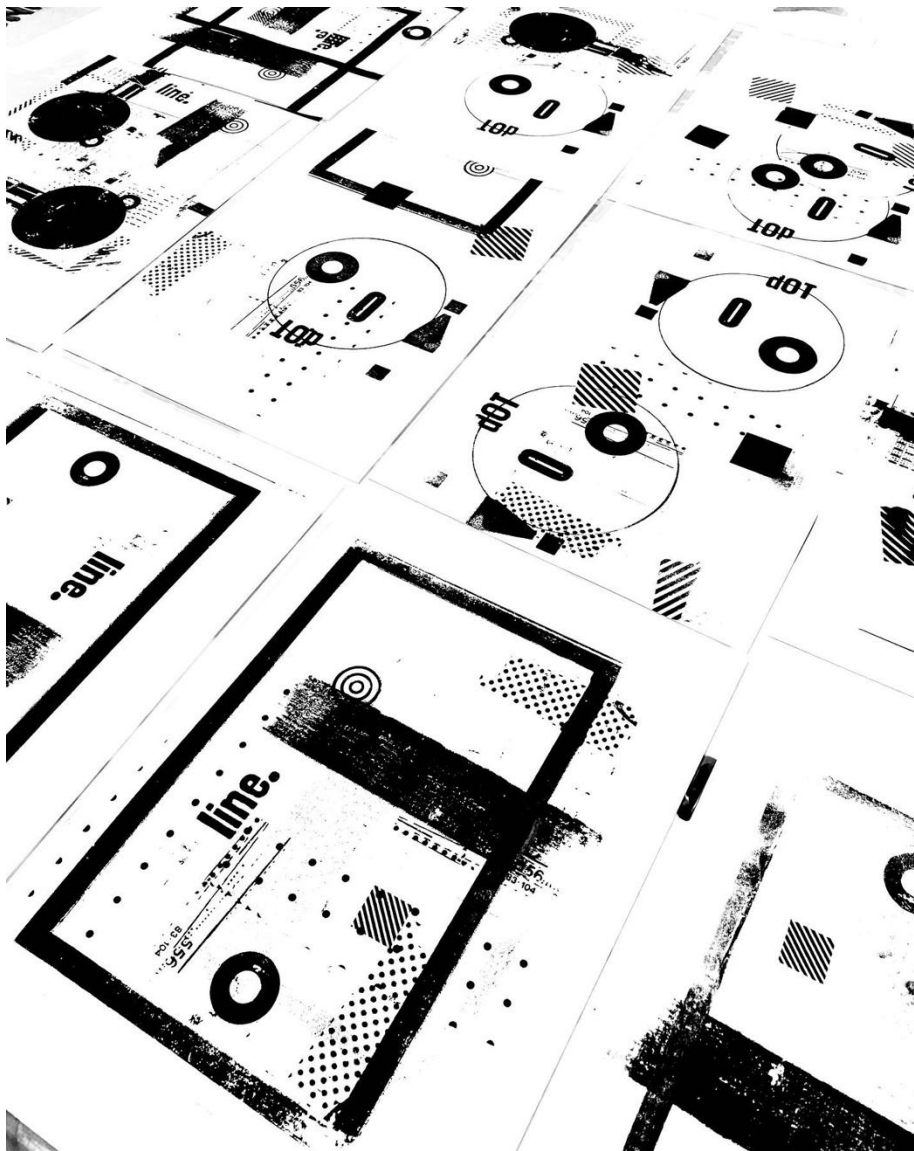


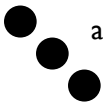




Image 7. Examples of several drafts of experimental letterpress practice on the print room table using forms, spacing material, brass rules, and the chase itself in the printing process

Typographic abstraction as a method & the development of Typographs; the development of typographic data structures to present the complex interactions

As the organisation of historical aspects forms, my attention turns to how to develop the relationships and understanding with the experimental practice. I approach this through drawing upon my experience as a designer in considering a visual form of communication to explore this area of research methodology. The construction of the lines and lineages connected the history with the design process, and it continues to be developed through the construction and deconstruction of typographic elements and material as I reflect the interdependent roles of researcher and practitioner. The interactions within the hybrid of focus are a way to find answers to the research question. There was a need to visualise the connections or as Jon Prosser refers to as a 'visual knowing' framework (Spencer, 2011) Prosser suggests there is a reflexive process that commutes between textual and visual material in the research. Translating data then creating new data and presenting the data collated through the research. This is communicated via diagrammatical and typographical arrangements. It is visual thinking through theoretical aspects and creative practice. This proposition was carried out in a series of experiments exploring the construction of two opposing ways of communicating through analogue techniques. Firstly, the functional, the establishment of sentences that are legible and present a body of text. Secondly, the ways in which to question form, text, and language. In *Word art/ Art Words*, Michael Winkler calls these 'visual transformations' where 'word sequences are transformed into image' (1985: foreword). The sequencing in this research can be a part of a text, the analysis of primary and secondary data, an interpretation of connections and the visualising of concept and theory.

Typographic abstraction becomes a mode to carry out visual, conceptual, and methodological interrogations in disrupting formal conventions. As Dondis suggests, 'The abstract conveys the essential meaning, cutting through the conscious to the unconscious' (1973: 81). The arrangements of type blocks, punctuation marks such as a full stop are used as  to create a series of abstract shapes. For example, a full stop  repetitive elements is used as a dot in repeat it becomes a pattern and then placed

 alongside the letters  and  in different typefaces and different sizes meaning is deconstructed and rearranged to become abstract shapes. The printing process through several techniques of letterpress, screenprint and transfer type systems enables infinite permutations within the arrangements and rearrangements of the typographic material. The

● typographic materials are moved around the bed of the proofing press, overlaid through silk screens, and transferred by transfer type forms. The combinations contain ‘complex visual architectures’ (Muir, 2021). Many hours are spent immersed in this method of ‘learning by doing’¹⁹ printing and reflecting with visual and technical aspects of the process. A transaction emerges from the experience of the process between the printing press and the knowledge as Dewey proposes an experience of a ‘transaction taking place between the individual and the environment’ (Dewey, 1938: 43). The ordering and reordering of structures becomes a methodological approach through the examination of associations where ‘type and patterns merge’ (Ong, 2021).

The abstraction of forms from established procedures is extended to become another way of classifying and presenting research methods in my development of typographs. Typographs are a collection of diagrammatical and abstract structures; they are visual devices to present my research as graphical interpretations. Type forms, spacing, lines, punctuation create a construction and deconstruction to highlight the many layers and complexity of the different parts through a new visual language. In *Abstraction*²⁰ Steven Heller looks to Bob Cato when he ‘addressed how many factors influenced contemporary design and how for over half a century, abstract art and design had gradually merged into a shared visual language resulting in methods and styles’ (2019: 129). It is this interposing of formal elements and design principles that are applied in the methods that create abstraction in the visual aspects of the experimental practice. I started to connect typographic elements and symbols together as a way of understanding and exploring the networks created between my historical research, typographic practice, and the recording of the connections in written parts. Although the creative practice is underpinned by traditional methods, design principles and formal elements there was an opportunity to develop a research model to demonstrate how the research systems interrelate. Existing creative research practice models do not provide a framework to test these relationships. I looked to mathematical frameworks in science, to investigate and organise. In Sherin’s work he observed students’ understanding of physics equations in terms of a vocabulary of elements and he called these equations *symbolic forms* (2001). A way to interpret complex data. The *symbolic form* framework is connected to earlier research on naive physics such as *knowledge-in-pieces* (1988). The connections between symbolic forms and research knowledge in several pieces supported my idea of understanding, reasoning and presenting the web of activity, the threads through my research areas resulting in the articulation of research activities that drove the construction of several typographs, providing a visual language to describe processes. An action that contemplates the theory and practice aspects in conjunction. These graphic representations offer a way knowledge can be exposed through various visual mechanisms. In the examination of Sullivan’s

¹⁹ The research delves into the idea of learning by doing and it is John Dewey’s writings about experiential learning that has informed a position within this project. Dewey (1938), *Experience and Education*, New York: Touchstone. (1997 edition).

²⁰ This is part of a chapter in *Teaching Graphic Design History*, edited by Steven Heller, called *Historiography*, Allsworth Press. 2019, 127-132.

invitation that the presentation in this way 'can vary from written to visual expressions, as long as they serve the goal of describing, or interpreting, or explaining phenomena' (Sullivan, 2005).

The three examples in images 8,9 and 10 encompass elements of the research project: conceptual, historical, analytical, creative practice, written elements and the accumulation of knowledge through design and research systems. There are many more throughout the thesis, they are a typographic manifestation of the correlation and assimilation of these exchanges. As the research became multi-layered, between the historical examination and the creative discipline, the approaches to the way the inquiry was undertaken exposed formal principles used in traditional practice and pedagogies. The next section presents a detailed discussion of the mapping methods used and the significance to the individual and collective practice research.

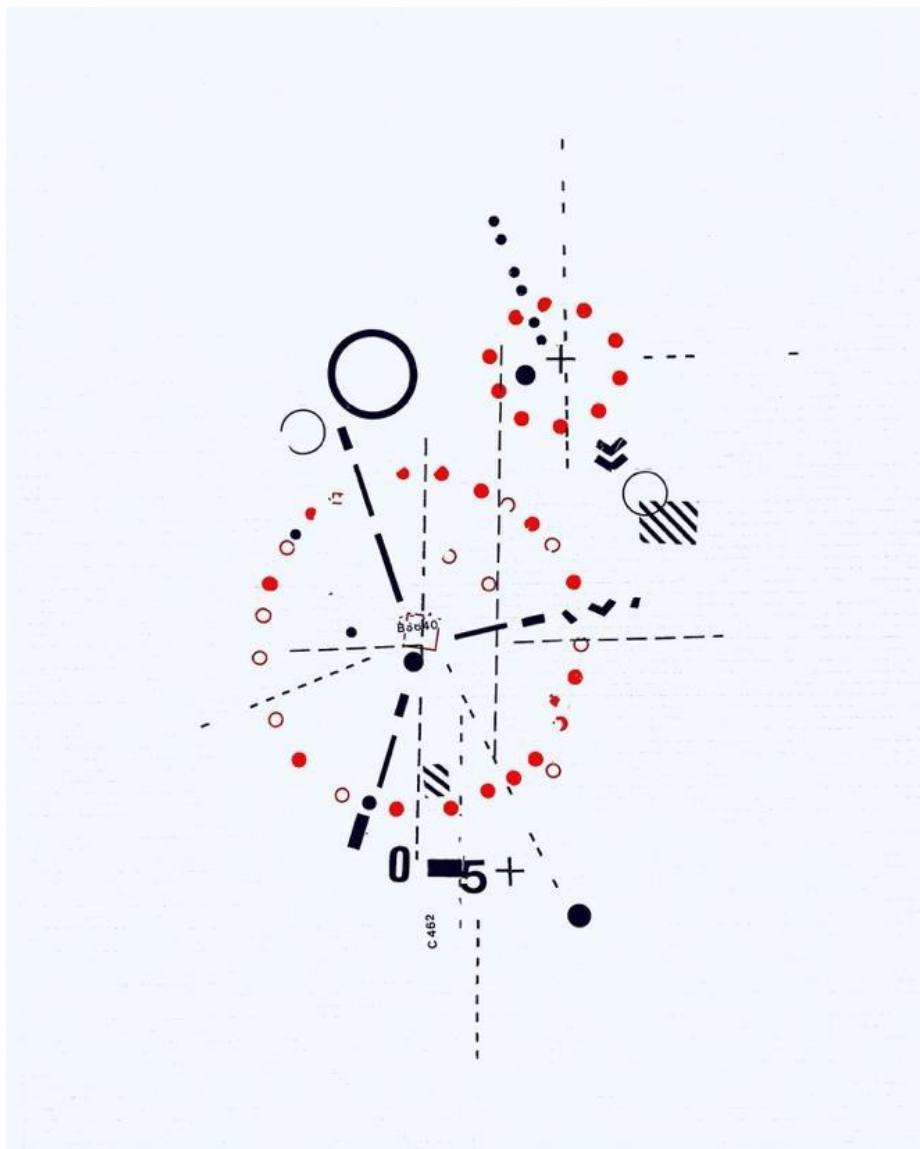


Image 8. Typograph (2021)

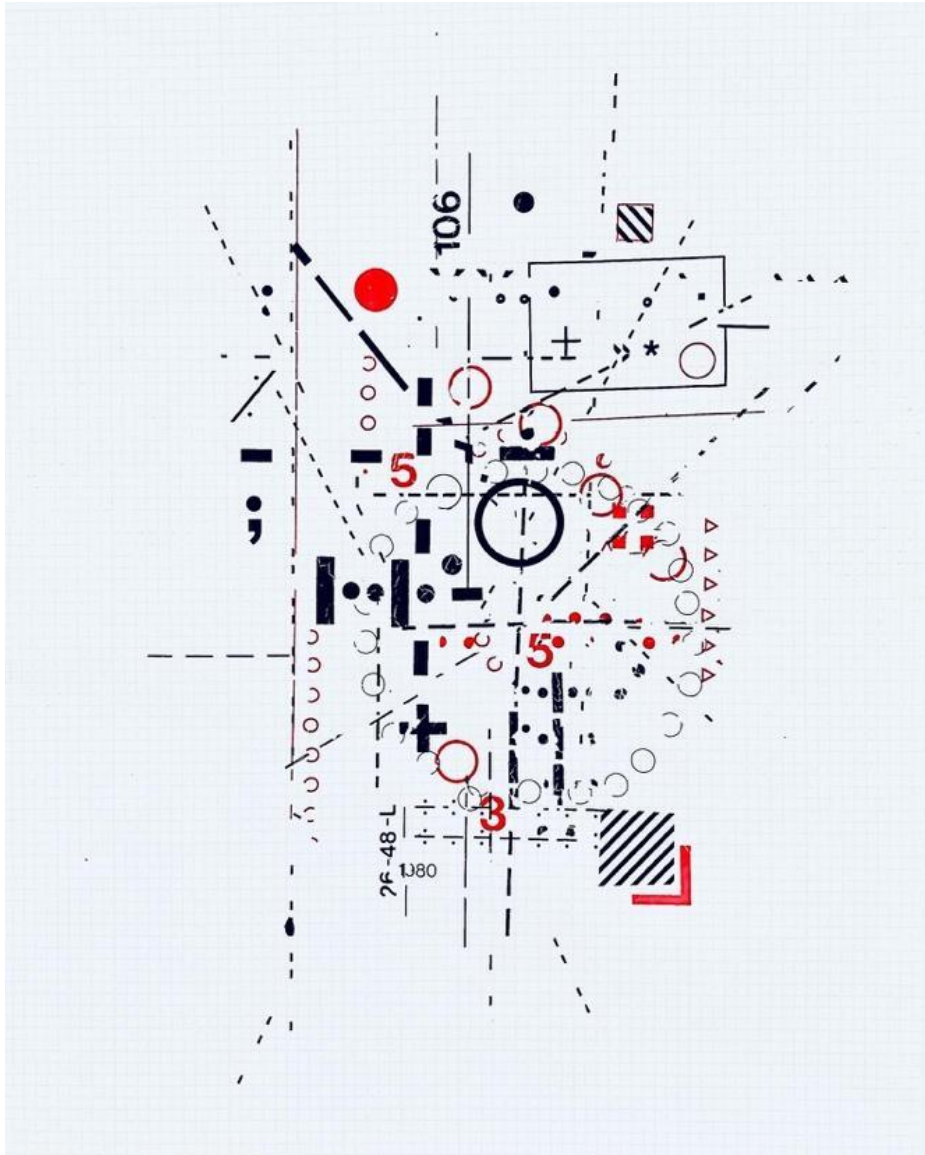


Image 9. Typograph (2021)

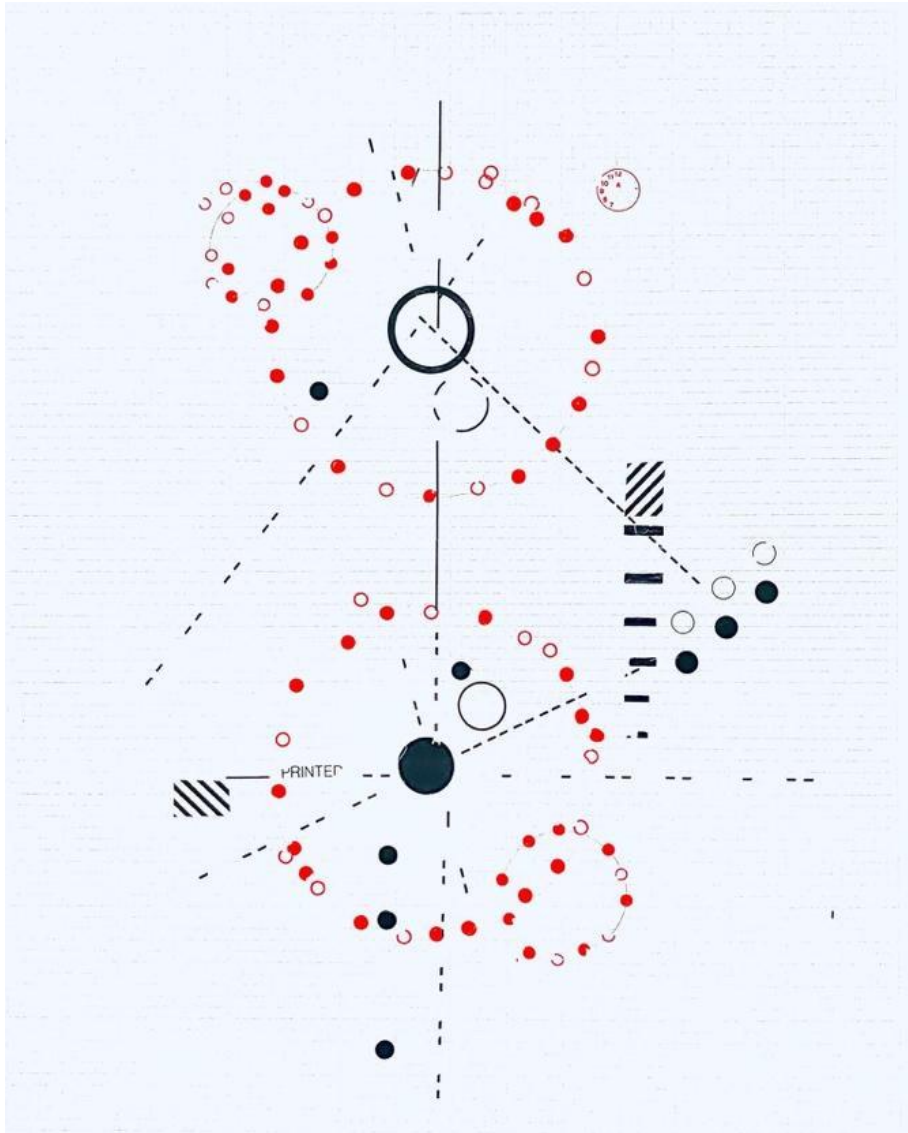


Image 10. Typograph (2021)

Collaborating with histories in the present -the formation and transformation of experimental research practice

This part of the thesis will set out the way I collaborated in experimental letterpress practice using the lineage of key letterpress creative and pedagogical patterns. See Chapter 2. This indicates how creative practice strategies are implemented through individual and collective methods. Following on from the quantitative and qualitative methodological approaches in the historical study, the emphasis changes as the research space evolves into creative practice and my methodological approaches are informed by the nature of these changes to offer tangible applications of process. Frayling proposes three ways of undertaking research in creative practice: research into the practice; research for the practice; research through the practice (1993). Whereas a model based on Vaughn’s model can be situated within the approach; considering, to use in application; towards, to understand what has been done historically and/ or critically; concluded, to use the actions and sites of the practice as a means of discovering something useful in the intentions and outcomes of the practitioner-researcher’s inquiry (2017). Typically, this construct will be applied separately, however in this practice, the *for*, *Into* and *Through*, the *into* was the initial starting point of the project that has been reapplied in the *Through* several times seen in diagram 3.

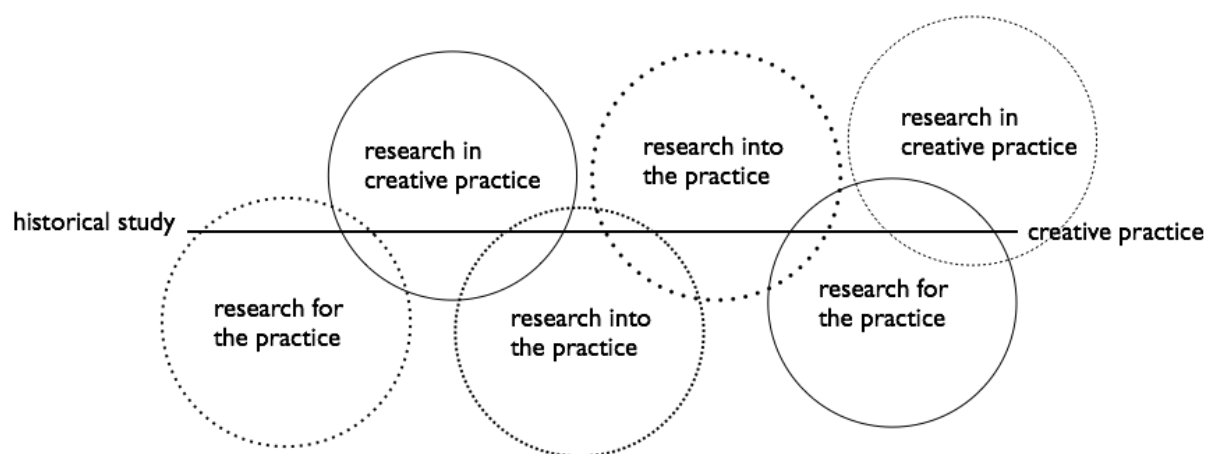


Diagram 3. the arrangement of research, *For*, *In* and *into* creative practice research, based on Frayling’s model (1993)

These interactions were a space in-between the layers of historical and contemporary practices, a space with multiple and complex layers of the old and the new. As Friedman describes, ‘a laboratory of ideas’, (2011). A place to critically investigate a rational organisation of material and in- flux, a

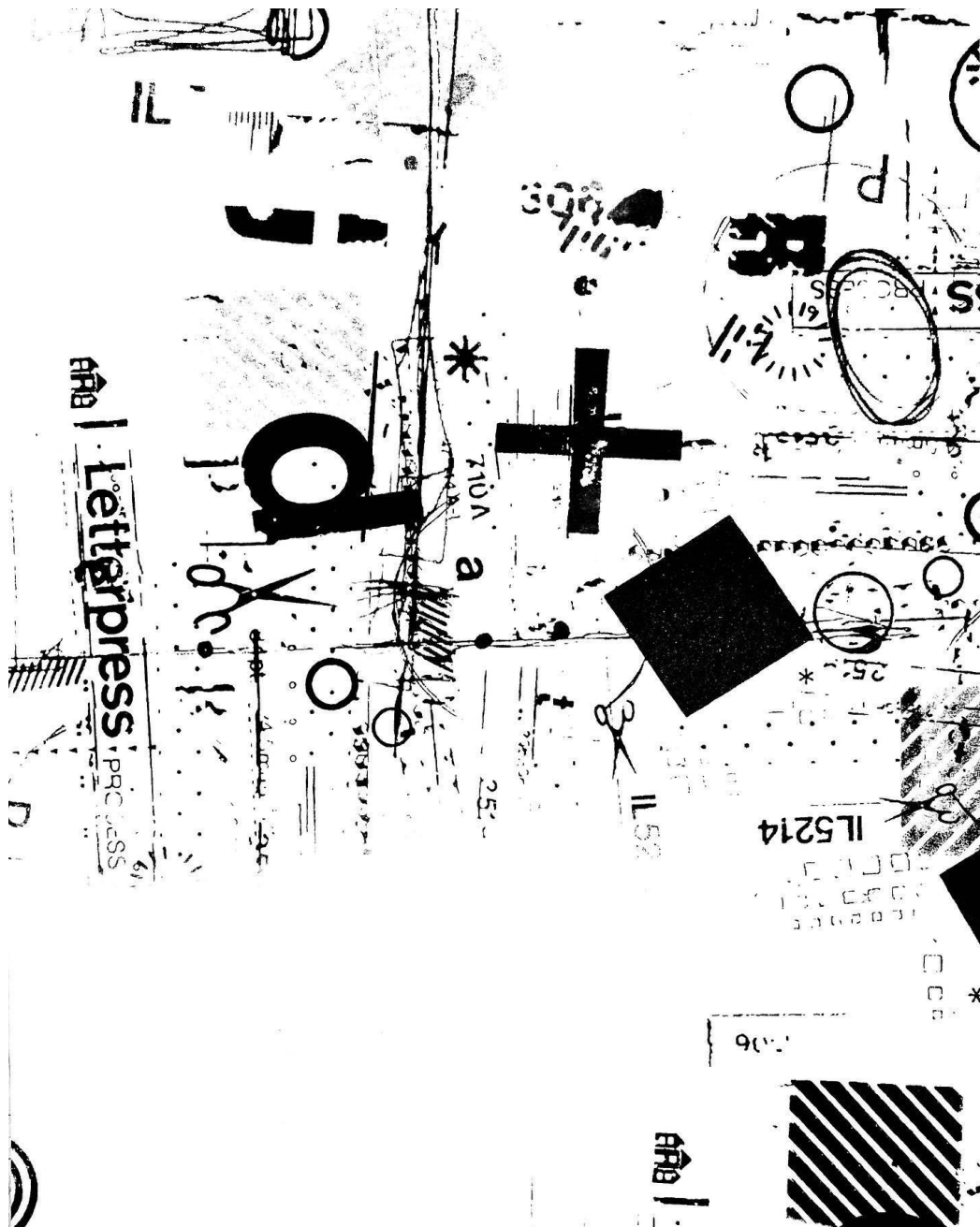
fluxus²¹ exploration of processes and the applications within a specific set of design principles. We tracked and traced the principles through typesetting and printing. The practice emerged forming new structures and patterns in the research project. I wanted to develop a device for reflecting on and structuring the evolution and changes through collaborative parts of this project called typopraxis. Typopraxis describes the collective activities and the application patterns made through working together and how that is arranged. Typopraxis presents the exploration of the organisation of the areas:

- Creating a new typographic grammar that is made from these collective interactions in printing
- Intersections of creating a system of creative practice
- A graphical interpretation of research methods
- An interplay between logic, rules, principles, structure, reasoning and play, exploration
- A visual explanation of typographic material and the organisation of the material

A space in the research where, 'reflective practice is a dialogue of thinking and doing' (Schon, 1983: 31). It is this where the application of the thinking (concepts, design principles) and doing (print room actions) can be a form of knowledge that Polanyi defined as tacit knowledge and is a mode of sometimes, intuitively, research practice. The value of individual and collective tacit knowledge in this project is gained through the execution of practice or as Schon proposes as 'knowledge –in action' (1983). Where the practitioners work through the tasks in the print room, sometimes instinctively articulating and applying typographic conventions and other times with a strict and intricate approach to each step of the process. And it is at this point I would like to reposition Schon's ideas of "tight cycles of evaluative action research regarding each design 'move'", (Tonkinwise, 2017) towards the cycles being intuitive and reactive to the tools and materials. As Barbara Bolt discusses working with Martin Heidegger's 'notion of 'handlability', I propose that in creative arts practice, 'research' commences in practice – in our dealings with the tools and materials of production, rather than a self-conscious attempt at theorisation (2004). In comparison with Schon as he outlines a more structured way to progress through the iterative process as he describes 'reflection –in action' as a progression from following the rules to examine, challenge and refine the hypothesis through a continuous process, referring to this as a 'reflective conversation with the situation' (1983). Whereas Bolt's proposition of 'operating between these two spaces of order and chaos or flux, starting the task with the rules and then deviating as the techniques are developed' (2004) accepts a more organic way to pursue the development of ideas. These combinations of structure and chaos and approaches in the embedding of the critical analysis

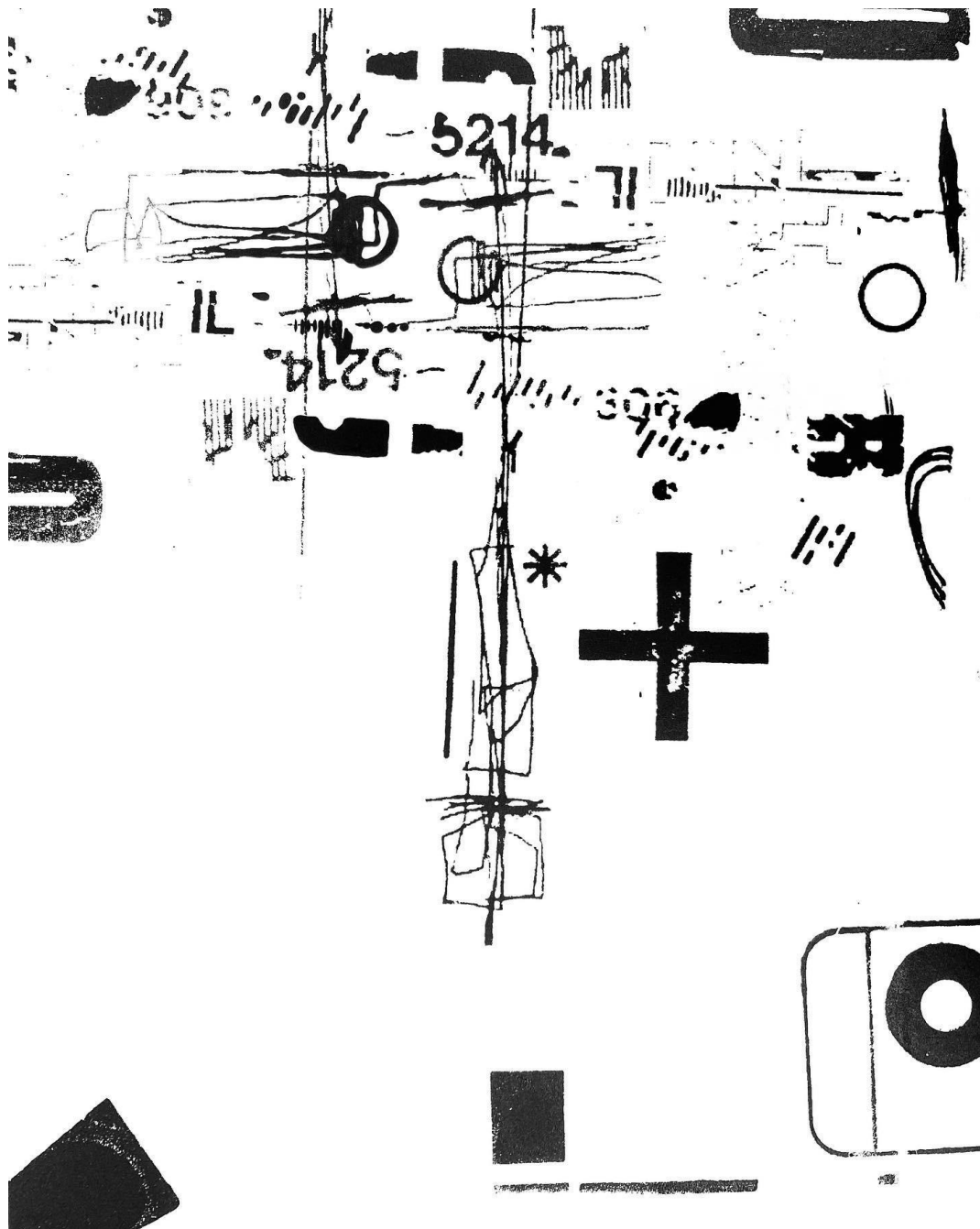
²¹A definition of Fluxus is available here <https://www.moma.org/collection/terms/fluxus>

alongside the practice can help to locate knowledge in between the layers of method and process. The two-way action or mutual reflection between practice and theory, in what has become termed praxis, becomes central to my rethinking of the relationship of theory and practice in creativity. Bolt continues 'following this logic, I would argue that art can be seen to emerge in the involvement with materials, methods, tools and ideas of practice. It is not just the representation of an already formed idea'. (Ihde 1979: 117 and Bolt, 2004).



Experiment 5. Praxical engagements between ideas, process, method and materials

In this formulation many engagements with tools, materials and ideas there was an emerging experiential practice being developed through print workshop interactions with Prof Phil Cleaver and Prof. Dr. h. c. Patrick Thomas, as discussed in chapter 2 with reference to the historical artefacts that has identified design principles as set out in this project research practice. Where the ethnographic and auto ethnographic methods are intertwined through interviewing and reflective practice. The interactions and praxical interventions have created new ways of knowing and doing. There is an installation of various factors that are part of the design and research processes which sees the embedding in creative and academic contexts to convey and communicate conceptual and theoretical framing. A way in which to theorise these relationships and occurrences is to look at Borgdorff's positioning through the iterative design process as it is 'immersed in aesthetic experiential activities and culminate in design outcomes' (Biggs and Karlsson, 2010: 45).



Experiment 6. Influx interactions

The way in which I visually represent the interactions and the new systems and constructions that are created through the synthesis of the narrative, using a collage of type and image arrangements and combinations in a diagrammatical way are developed, added to, refined with various textual elements and insertions. Another method of research that is presented in a complex series of lines and dots to signify networks and overlaps. In her ethnographic work on the use of visual representations Henderson (1999) found that visual representations had an ability to be a holding ground for and

negotiation space for explicit and tacit knowledge and this space is enabling the formation of a new community of practice (Wenger, 1998). Wenger affirms ‘artifacts without participation do not carry their own meaning; and participation without artifacts is fleeting, unanchored, and uncoordinated. But participation and reification are not locked into each other. At each moment of engagement in the world, we bring them together anew to negotiate and renegotiate the meaning of our experience. The process is dynamic and active’. Where a ‘a duality’ of ‘overlaps, connections’ that are ‘distinct and complimentary’ (107, 118, 134, 136–7).

That said, what does it all mean?

In this chapter I have explored the initial arrangements of my method by tracing, drawing and redrawing of my line of enquiry. This involves developing and interrogating a complex network of data. I critique the key writings of print practitioners /pedagogues at the centre of my studies together with commentaries in the literature of historical and practice-based as an emerging contribution to research in the field. These sources enable me to develop design principles and systems of practice which are then tested through my print room practice. I show how these typographic principles are situated in three categories; typography, print and design, and can be used in combination and selected to test the principles. The historical methodological aspect of this research comprises an investigation of these sources to reveal the narrative which underpins the development of typographic practice methodologies. The mapping and documenting of production details have been recorded to offer a way to facilitate visual expression through what Barbara Junod describes ‘the process as illumination’ (2014)²². This informed the development of the ways in which I interpret materials to stimulate new typographic process, and they provide a framework for understanding for contemporary practice through the development of design systems as a research methodology.

This is, in essence, a reconstruction, reinvention and reimagining of historical techniques and processes in print, typography and pedagogical methods. In the next chapters I go on to show how this can be explored through experimental combinations of techniques, to form an anthology of printed artefacts. This task of defining and redefining experiential and reflective practice methods takes place through collaborative and individual creative work. The exploration of a number of theoretical and methodological approaches have been designed to integrate research and practice. As the practice develops through kinaesthetic engagement, with materials, processes and tools, a

²² Junod gave a gallery talk called ‘The Process as Illumination’ at the retrospective exhibition Weingart Typography at Museum für Gestaltung Zurich (May-Sep 2014) which she also curated. Available at: <https://muirmcneil.com/weingart-typography-museum-fur-gestaltung-zurich-07-may-28-sept-2014/> [Accessed June 2021].

new relationship is formed with the historical research data and the systems I develop out of that material. Intrinsic to this, is a commitment to investigate the correlation of printed and typographic technique and process of their production, allowing me to reconnect these traditional techniques and processes in their historiographical and creative environments.

2. Collaborative Practice as Research

Introduction

In this chapter I focus on my collaborative methodological approaches. I start by detailing the development of lines of research in mapping historically-located practice and the development of the creative lineages from which my experimental work emerges, and the way I arrange them as distinctive historically-located elements. The second section examines the way I have engaged with histories in the present by developing a network diagram in the visualising of a design system that can be applied in experimental letterpress practice. While the third details the collaborative practice as a research method I used to explore emerging methods in synergetic creative practice more generally in my field. I set out how the analysis of the literature review and methods are applied throughout the thesis to inform the research process and develop connections between the historical study and the creative practice. For example, I show how the secondary sources of literature not only informed the narrative of this thesis but also the understanding of connections to people within traditional typographic practices and pedagogies. This identified influential practitioners in the field who could form collective interactions in experimental letterpress practice as a research method to explore emerging methods in creative practice and led to my collaborative practice interventions as part of research methodology in answering the research question.

Mapping historically located practice and the development of research lineages

This historical review was a valuable way to examine existing typographic knowledge and the process of conducting the review has uncovered critical relationships through the literature. It is highlighting the practical and philosophical approaches by Mason, Jay, Froshaug and Kitching in their approaches to design and pedagogical practice contexts. It significantly influences the direction of the research and provides a rationale for developing systems to structure a synthesis of the historical and experimental practice and the leading to the design framework development for contemporary practice. It demonstrates the deficit within literature through the valuable interconnections of the contexts. There are three main areas critical to the study: primary pedagogical and practical sources; visual examples of work produced by Mason et al and their students, in commercial and artistic situations, primary research; the writings of Mason, Jay, Froshaug and Kitching including published articles and personal letters, secondary research; literature published during the last century on the subjects of typographic practice, typographic pedagogy, creative practice and pedagogical practice. There are several repositories and print workshops that were identified as part of and visited as part of the review; The Mason Archive at Central St. Martins, UAL, London, holds examples of student work. There is also a collection of learning resources that can highlight methods employed at the Central, by Mason. The Anthony Froshaug archive, The Design Archives, University of Brighton, the Mason archive, CSM, UAL, London, Birmingham School of Printing printed ephemera, The Typographic Hub, Birmingham City University, Birmingham School of Printing archives, Birmingham School of Arts and Crafts archive BIAD archive, Birmingham City University, Special Collections, Cadbury Research Library, University of Birmingham, The Charles Pickering archive, at University of the Arts, London (UAL) houses the working papers of Charles Pickering (1908-98) and holds material on several schools of printing. This is of significance as Pickering was an Inspector of Education (HMI) for schools of printing, thus giving another viewpoint of the differing training techniques at various institutions and offers contextualisation and comparative material. Special Collections, London College of Communication, UAL, London, Watford Library, St. Brides Library, London, Modern Records, University of Warwick, personal collections of students of Anthony Froshaug, private collections of work by J. H Mason, Leonard Jay and Alan Kitchings' Typography Workshop, Kennington, London.

A comprehensive collection of publications (books) produced by apprentices and pre-apprentices at the BSP exists across the holdings of the Typographic Hub (BCU), Birmingham Institute of Art & Design Archives, Cadbury Research Library (University of Birmingham), Birmingham and Midland Institute and Library of Birmingham. In addition, other work, including pamphlets, catalogues and

advertisements and other ephemera produced as classroom exercises can also be found in these and other archives. This material reveals printed output from the years of Mason's tenure as head of typography at the Central, Jay's tenure as head of the school of printing at BSP, Froshaug's various teaching roles and Kitching's range of teaching positions and gives an insight into training and education at the Schools. Visual examples, catalogues and exhibition pamphlets created by staff and students at the schools used to illustrate the work of hand composition along with the Monotype and Linotype machine composition, as well as the experimental nature of workshop activity, provide evidence of the interaction with current technologies and contemporary typeface trends. The choice of text also gives an insight into the ideals and philosophies relevant to the time frames. The printed output identifies the collaborations that took place with illustrators, photographers across the schools and other partnerships. The Cadbury Research Library at the University of Birmingham is a repository for personal and professional material relating to Jay and his career at the BSP. These include his apprenticeship indenture; a City and Guilds certificate; testimonials and tributes; and substantial correspondence dated 1950-1963 with friends and colleagues, they cover some of Jay's working life, the letters are important for the light they inform of Jay's philosophy behind his approaches to typographic practice and pedagogies. Other papers, 1916-40, relate to George W. Jones (1860-1942) who was the editor of *Printing World*, and an influential publication at that time. These papers give an insight into how Jay may have applied Jones' ideals to BSP. Jay himself has left a body of published work which have been reproduced privately and in editions of *The Torch*, produced by the staff and students. This material provides first hand insight into Jay's typographical philosophy. Printing trade journals throughout the period also contain articles relating to Jay and the BSP which discuss some biographical details that relate to his life. The Design archives at the University of Brighton reveal sources for analysis to continue the lines and connections with Froshaug and Kitching. And finally, the mode of research changed through a visit to Kitching's workshop where experimental practice was completed with Kitching present.

Following the critical reflection and findings, highlighting the analysis and lines of connections as set out in chapter 5. This part of the research sets out the practical methodology in the location of a set of design principles emphasising technical, conceptual and philosophical approaches as a way to rationalise the highly individual and collective experimental expression.

Through the historical study, I revealed a narrative that made connections and networks between Mason, Jay, Froshaug and Kitching. I also developed a set of design principles that underpinned what became part of the creative practice method in experimental letterpress practice. In consideration of the complexities amongst historical conventions and creative intuition and interpretations and how different these are situated in contemporary practice, Jay reminds us of the 'direct aesthetic training naturally falls in the technical curriculum when the technique is that requisite for an artistic craft, and

if followed out to its fullest extent is one of the greatest arts that have reference to the creations of the human mind. It does not consist in the observation of hard and fast rules, or fair proportion; it is, or ought to be, a science of feeling more than rule, a ministry to the mind through the eye' (1929: 31). As the historical study is redefined to encompass creative practice research, where my role changes, Pedgley suggests, the researcher plays multiple roles (2007: 463-483) and the design practice area of the study emerged from the critical engagement of historical data and was developed through an experimental, material and process led examination. This required an explicit connection of the two areas of the study, the linking of conceptual abstractions to the construction of practice.

The development of mapping and diagramming methods in the transition from the historical study to the creative practice was an invaluable way to correlate the differing aspects of this research. A method for finding relationships between interrelated and complex areas (Lawless and Smee, 1998). The designing of concepts proved instrumental in the analysis of historical material. It is based on action learning and an iterative cycle method, to develop principles to integrate into creative practice. The development of a device, to facilitate and collate empirical data. The model has been based on an iterative design process (Jones, 1992) that oscillates between analysis, synthesis and evaluation and an action learning formula (McNiff and Whitehead, 2006) adding observation and modification to the cycle to extend the parameter. It presents a visual representation of a tool to analyse and translate a set of complex data in an organised review. Although McCullagh suggests, 'if a problem can be framed in an appropriate context, the subsequent design process will probably be more efficient and its solution more appropriate' (McCullagh, 2000: 41).

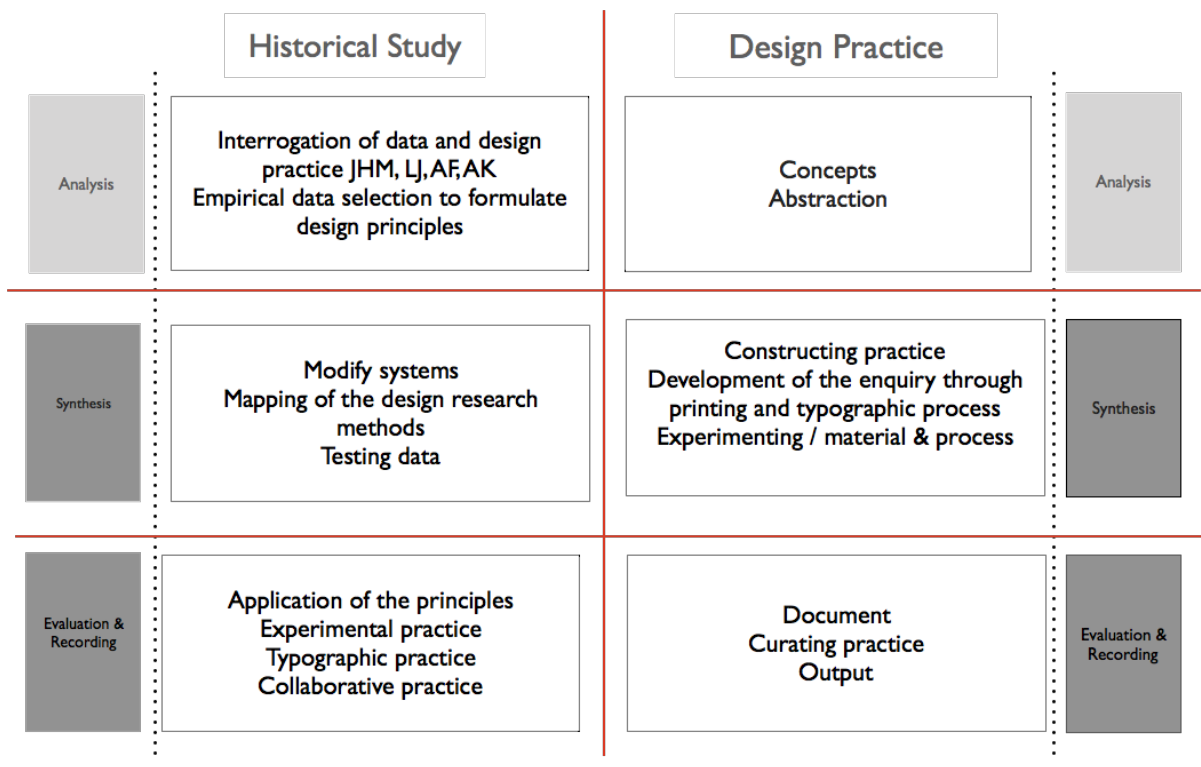


Diagram 4. Critical connections between the historical and creative practice aspects

The identification and collation of large quantities of material, led to the designing of a framework creating a method to analyse and document; an iterative inquiry that creates data on the development of design practice through material process and technique. Exploration of techniques associated with traditional letterpress printing processes has enabled context through a system to categorise design conventions through the assemblage of three main areas: Typesetting/ Type/Typography, Presswork/ Printing and Design Methodologies. Diagram 4 shows the critical connections between the historical and creative practice and the development of the theoretical model that has been devised from analysis of studies in research processes through a number of models designed to inform the framework. The diagrams 5, 6, 7 and 8 relate to the analysis of Mason, Jay, Froshaug, and Kitching and they show the mapping of analysis formed by examining the content of archival and printed ephemera analysis. The selection of the principles went through a process of inclusion and exclusion through the examination of the approaches and writings of Mason et al. This system was designated to outline a combination of universal design aspects that they referred to and employed in their teachings and writings such as layout, proportion and legibility. There are more specific and local elements that pertain to their individual approaches, such as intellectual vision (Jay), and communicating ideas (Froshaug).

The system can be approached by the selection of individual strands and can be selected in combinations, in individual and/ or collaborative experimental practice. For example, this selection of

principles can be applied to the experimental process: typography, then, one-character type where the sequence can be applied. In this way, the selection and engagement with parts of the framework was used in the individual and collective parts of the creative practice research. This initial way of diagramming was an effective way to examine what was to become a major part of the survey and the relationship to the research field. It showed how the principles emerged and the interconnections and distinctions between practices. These arrangements were to form the next methodological iteration, the network diagram set out later in the research method.

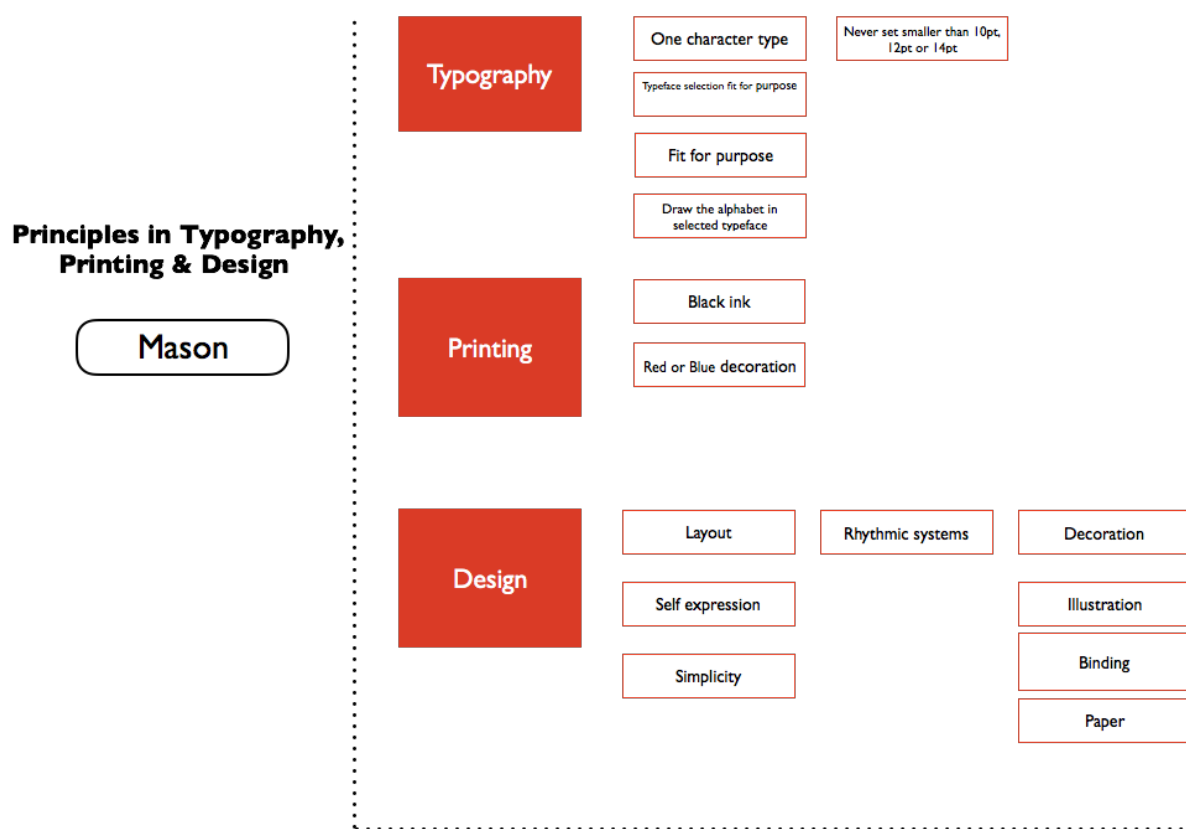


Diagram 5. Principles in Typography, Printing and Design – J.H Mason. The development of conceptual abstractions formed from the analysis of archival material, printed ephemera and writings of Mason (2019)

**Principles in Typography,
Printing & Design**

Jay

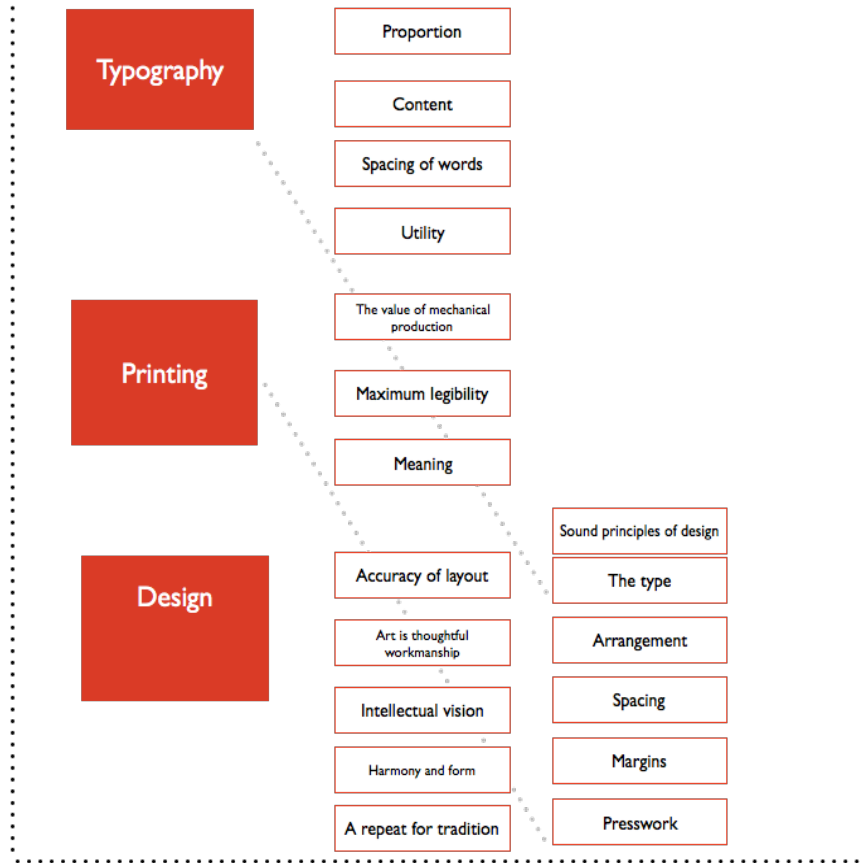


Diagram 6. Principles in Typography, Printing and Design – Leonard Jay. The development of conceptual abstractions formed from the analysis of archival material, printed ephemera and writings of Jay (2019)

**Principles in Typography,
Printing & Design**

Froshaug

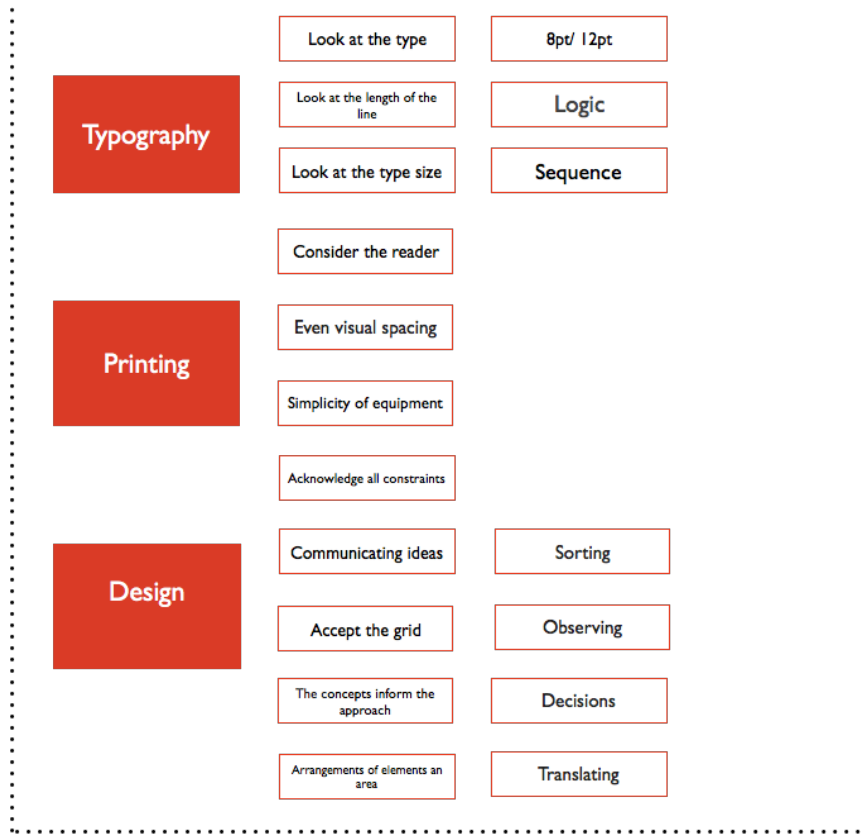


Diagram 7. Principles in Typography, Printing and Design – Anthony Froshaug. The development of conceptual abstractions formed from the analysis of archival material, printed ephemera and writing of Froshaug (2019)

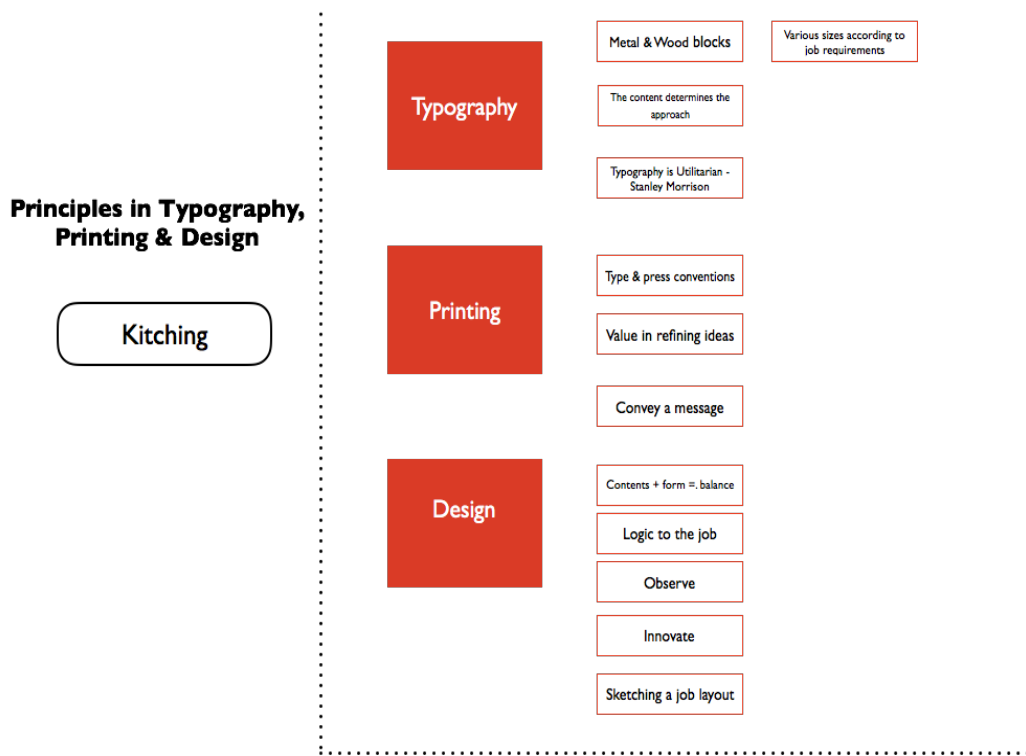
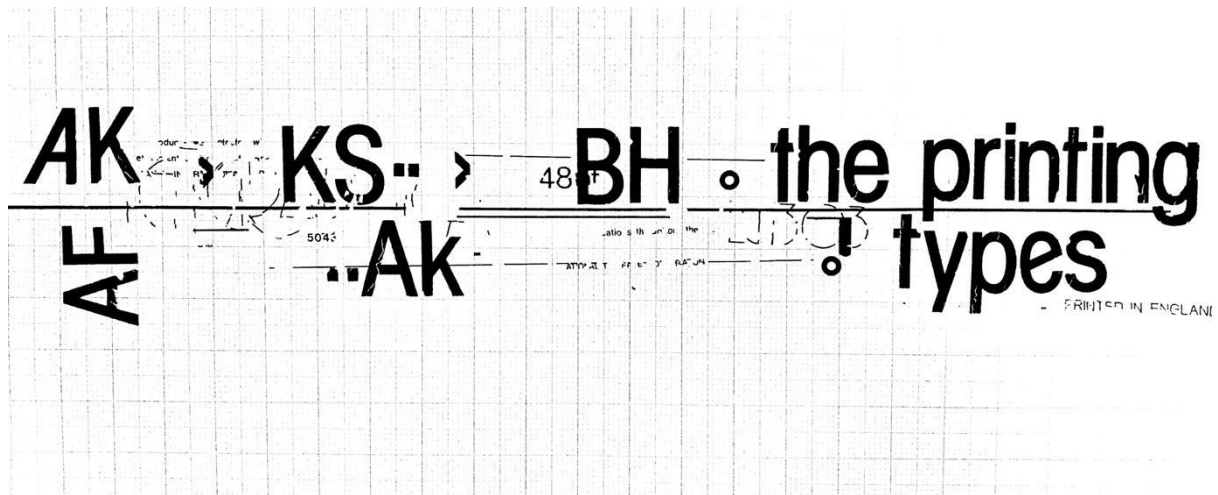


Diagram 8. Principles in Typography, Printing and Design – Alan Kitching. The development of conceptual abstractions formed from the analysis of archival material, printed ephemera and writings of Kitching (2019)

In referring to the literature review in chapter 3. I identified the accessibility to Kitching and his work as a form of primary research through workshops at his print shop in London. I visited The Typography Workshop, London. Kelyn Smith, who has been working with Kitching and Kitching himself shared their knowledge in the letterpress process. I completed some experimental letterpress tests in the print room, under the instruction of Smith who had been taught by Kitching. Smith now has own practices and teachings to continue the lineages, identified in this research, in other ways. Meanwhile, Kitching was sharing his thoughts and talked about Froshaug. This was an early example of the collective practice model, seen in the typographic sketch I. that was formed through the research lineages. Where Froshaug and Kitching developed knowledge, individually and together through the experimental workshop at Watford College, Kitching shared this knowledge with Smith who then disseminated the knowledge through workshops at The Typography Workshop. This interaction was a way to start to formulate a method through the positioning of collaborative practice through praxical interventions and placing myself in the lineage.



Typographic sketch I. An initial model exploring collaborative practice through the research lineage as a research practice method

As well identifying ways of organising primary and secondary sources to inform research methods, I undertook a survey of the personal correspondence of Mason et al which provide as they reflect. In order to examine and understand the material, a method of analysing material in an objective and systematic approach was developed based on Berelson and Krippendorff's content analysis methods which identifies several frameworks that can be employed to collate data and to identify and create approaches in the research project. See the table below for categories.

Purpose	Questions	Research problems
Description of Content	What?	<ul style="list-style-type: none"> To define trends, arguments and themes in Jay's correspondence To relate known characteristics of Jay to the messages and themes he wrote about in his letters.
	How?	<ul style="list-style-type: none"> To analyse how Jay structured his arguments To analyse style (vocabulary, literary conventions, formalities)
	Who?	<ul style="list-style-type: none"> To relate to the audience and the messages produced for them. To determine patterns of communication – tone, length,
Content	Why?	<ul style="list-style-type: none"> To identify aspects of culture and cultural change within the printing industry and printing education.
	Who?	<ul style="list-style-type: none"> To gain an insight into the personal relationships of Jay
	With what effect?	<ul style="list-style-type: none"> To measure if the personal insights had impact on professional matters/ relationships To assess responses by connecting correspondence identifying patterns and themes. References to recipients responses

Table I. Content analysis (based on Berelson, 1952) 2016

The method was tested using a selection of Jay’s correspondence, part of a large amount of material in the archives. The objects were selected to reflect personal thoughts and philosophies to inform strategies in the development of the research methods, in this way I could interrogate part of the object from the Jay archive against the research analysis method. An example of how the methodology in action can be demonstrated is highlighted in the following extraction of the content analysis method using an extract from Jay’s letters, dated 28th May 1960. He writes, ‘I do not wish to be recorded only as a book man, but that my principles of clarity, beauty and truth governed the production of all classes of printed matter, from business cards to tabular work to posters and four colour work, and that I was convinced that with the aid of machinery controlled by the well-educated craftsmen I could then produce work the equal to that done by hand, not for the cultures and discerning few only but for everyone. There is no difference between artistic work and commercial work, for artistic work can be commercial work and commercial work can be artistic work – it all depends on the standards set up by the printers. I believe in education and training through art and craft and not through cogs and wheels. The word art was so thoroughly misrepresented, abused and misunderstood when all it really implies was the well doing of what needs doing, fitness for purpose, right making’.²³ The selection of the text can enable the analysis of the following areas of the survey; Purpose; content, Question; What? How? Why? With What Effect? And the Research Problem; To define trends, arguments and themes in Jay’s correspondence; To analyse how Jay structured his arguments; To identify aspects of culture and cultural change within the printing industry and printing education; To measure if the personal insights had impact on professional matters/ relationships.

Purpose	Questions	Research problems
Content	<i>What?</i> <i>How?</i> <i>Why?</i> <i>With What Effect?</i>	<ul style="list-style-type: none"> ● To define trends, arguments and themes in Jay’s correspondence ● To analyse how Jay structured his arguments ● To identify aspects of culture and cultural change within the printing industry and printing education. ● To measure if the personal insights had impact on professional matters/ relationships

Table 2. Detail of content analysis data

This organisation and categorisation were completed when the study concentrated on Jay and the Birmingham School of Printing. The project has since developed, and this is reflected in the design of a model to incorporate the developments required in the discourse analysis framework and will be

²³ An extract from Jay’s letters, Typographic Hub, BCU.

part of ongoing tests. Drawing on the work of Foucault, the critical discourse analysis in this research considers the point that ‘discourse is not neutral media for describing the world it constructs and regulates knowledge’ (Foucault, 1980) in the framing of analysis of specific and specialist data. The aim of this section was to create a typographic profile for the Mason, Jay, Froshaug and Kitching analysing the philosophies in visual language as expressed in their letters and personal writings, and how those philosophies manifested themselves in the printed material produced in practical and pedagogical situations, refer to table 3 overleaf.

As the analysis of historical material developed, there was an opportunity to establish the analytical models further. I developed two methods that enabled an objective analysis of data. The first method promoted a combination of cataloguing and analytical bibliographical techniques developed when the project concentrated on Jay and the BSP. To enable an accurate and consistent analytical bibliography, Fredson Bowers established a formula for recording the physical makeup of the book. He describes the objective of a bibliography as ‘providing sufficient data so that a reader may identify the book described, understand the manufacture, and recognize the precise contents’ (1974). I adopted the basic function of this analytical bibliography in order to present all the evidence about the typographic practice of Mason et al. The second method presents a critical visual methodology which I used to support the analysis of the design and production of the material in order to engage critically with and interpret the work. The implementation of a framework helped to place emphasis on the material in a measured way rather than a subjective response to material. In order to do this, I adapted the advice given by Gillian Rose in *Visual Methodologies – An Introduction to researching with Visual Materials* as the basis for a critical approach to analysing the material (2012). This first analytical bibliographical model in table 3 was designed when the area of study was Jay and the BSP. The project was developed to form a different set of aims and objectives. The model has been adapted to address these changes. After a time of reflection and revision, the model is deemed appropriate for the study with amendments. As seen in the model in table 4 dated 2020.

Category	Description
Author	Editors, introductions.
Date	Date of printing
Title Page	A transcript of the title page with rule lines and adornments
Summary	A summary of the publication
Materiality	A description of the physical attributes of the material, paper
Printing techniques and processes	A summary of typeface, type size, and production techniques
Illustrations	A description of the illustrations including printing process (woodblock, etching), measurements and relationship to the text; name of illustrator
Copies Examined	The number of copies and repository
Format	The dimensions of the publication,
Printer(s) who? Where?	Staff, students
Binding	Type of binding: cased, soft, sewn, wire-stitched
Priority of publication	Edition, impression, issue, sequence, date(s), differences in priorities, colour, type, decorative elements
Citations and references	Links to articles, chapters which refer to individual publications

Table 3. The application of analytical biographical model (2016)

Category	Description
Date	Date produced
Contents	A summary of the contents in the publication
Printing techniques and processes	A summary production techniques, methods employed
Typeface	Identification of the typeface (s) selection and size
Typographic grid system	A summary of structure, layout, organisation
Priority of publication	Edition, impression, issue, sequence, date(s), differences in priorities, colour
Image	Decorative elements., image
Format	Dimensions of the publication, ephemera
Copies	The number of copies examined / sequential development
Printer(s) who? Where?	Staff, Students, collaborations
Context & Purpose	Commercial, Artistic

Table 4. An adapted model of the application of an analytical biographical model (2020)

In Images 11 and 12 there is the presentation of excerpts taken from documents containing the details from the analytical bibliographic model. The application in the interrogation of the categories was used to analyse the material associated with Jay and the BSP as a method to collate data referring to the categories set out in the bibliographical model to enable the emerging patterns and themes to be identified.

Production Details					Binding		Typography				Composition			Decoration				Classes	
Author	Title	Year	Format	Extent	PB	HB	Typeface	Type Size	Line Length	Spacing	Linotype	Monotype	Handset	Illustration	Photograph	Ornament	Colour	SG	Letterpress
Batey, C.	In Praise of Famous Men	1950	230 x 155		/		Granjon	14pt			/			monogram			Orange		
Beasant, B.	Westminster	1951	220 x 155		/		Granjon Old Face	12pt			/			Woodcut of Baskerville					
Brockwitz, H.	In the Judgement of German Contemporaries	1937	230 x 120		/		Baskerville	12pt				/					Black		
Fischenden R.B.	Craftsman and the Printer	1950			/		Granjon	12pt			/								
Bramah, E.	Kin Weng and the Miraculous Tusk	1941	220 x 145			/	Baskerville	12pt				/		W.J Martndale					
	Sermon of the Plough		370 x 250			/								Patterns					
Khayyan O.	Rubaiyat	1937	240 x 155			/						/		Figure in repeat					
Goldsmith O.	The Desert Village	1933	250 x 185		/		Estienne	18pt			/						Green	/	
Gray, T.	An Elegy	1929	250 x 170		/							/							
Ellis, H.	The Song of Songs	1937	280 x 190			/	Aldine Bembo	16pt				/					Silver	/	
														Pattern in Repeat					

Printing Process				Binding		Location		Teachers		
Class-	Comps.method-	letterpress	Method- litho	Meth- other	Paper	Sewn	Class- Cc	Method- I	Meth- other	Paper
					Faded					Faded
					Green					Green
					grey					grey
					Beige					Beige
					cream					cream
/						/				
					green cover					green cover
					Green Cover					Green Cover
					Grey Cover					Grey Cover
					Grey Cover					Grey Cover
					Grey Cover					Grey Cover
					Blue Cover					Blue Cover
					Orange					Orange

Images 11 & 12 excerpts taken from a document containing the details from the analytical bibliographic model of BSP materials and objects of the literature review
 As the connections between historical aspects and creative practice began to share a dialogue between historical and contemporary practices, I found the practice based inquiry emerged from the

critical engagement of historical data through an experimental, material and process inquiry, demonstrating the practice as emergent knowledge in this research context. The innovation of critical typographical practice methodologies and the invention of new design principles develops from praxical activity in a design practice study. The identification and collation of large quantities of primary and secondary material, required a framework that encourages a measurement and documentation of analysis. The iterative and reflective nature of the inquiry creates a record of the engagement of acquiring knowledge from the historical ephemera and the understanding of the knowledge through typographic process and technique. As Pedgley suggests, the researcher plays multiple roles (2007) and the need for clarity in the documentation of the enquiry is necessary. The historical study identified a number of approaches that can be explored in experimental practice. The use of techniques, processes, and aesthetic elements have been identified and extracted from the writings of Mason, Jay, Froshaug and Kitching to form a code of visual language. The exploration of techniques associated with traditional letterpress printing processes and Modern typographic communication has enabled a context through a development of a system encompassing design conventions into three main areas: typesetting, type, typography, presswork, printing and design methodologies.

Design concepts are developed through my experimental practice in individual and collaborative activities, as Frayling suggests this is, 'highly personal and focuses on individual creative practices' (1997). Within these approaches, there is 'reflection, analysis, and theory regarding personal design activity outcomes that must be included in practice-led research. Researchers must also publicly disclose their private design discourse' (Frayling, 1997). Barbara Bolt proposes, 'in creative arts practice, "research" commences in practice, in our dealings with the tools and materials of production, rather than a self-conscious attempt at theorisation (2004). As the point of convergence between the complex arrangements within the iterative design cycle can focus on, 'enunciative practices, that is, the systems of fabrication rather than systems of signification' (2004) which has the ability of 'opening up the field of an 'art of practice' (Bolt, 2004). However, Barratt argues 'praxical knowledge implies that ideas and theory are ultimately the result of practice rather than vice versa (2004). I would resist the idea that the praxical interactions through creative practice form a clear line through the research when there are chaotic and a disorder through the critical and practical engagements.

Don Ihde extends the idea of personal interactions with the material elements is central in his deliberation of 'technics' (1990) which he refers to as a set of 'human actions involving the manipulation of artefacts' (1990), where knowledge can then emerge through the interactions with material technique and process. The processes are predicated on the tacit in their precise operations that cannot be predetermined (Barratt, 2004). Building on Spencer Jordan's writings,

amongst other areas of expertise, about historical and experimental writing (2019) observing a hybridic (Jordan, 2019) mode in the affiliations, in this research, between practice-based research (praxis) and the historical study (criticality and theory) forms the interventions and the methodological approaches of the practice. From this methodology, the interconnection of the theory and creative work, the knowledge that is formed through the praxical knowledge is made explicit and within the context of the scholarly fields of typographic and design practice, typographic pedagogy and pedagogical practice.

Category	Process	Methodology
Practice the technical skills involved in making	<ul style="list-style-type: none"> ● Hand typesetting ● Letterpress printing ● Transfer type techniques ● Screen printing ● Grid systems ● Layout 	Identification, selection, development and completion of a wide range of projects and collaborative initiatives to explore practice; Exhibitions Residencies Competition/ live briefs Pedagogical delivery
Praxis the reflexive application of theory to the practice, forming praxical knowledge	<ul style="list-style-type: none"> ● Traditional typographic techniques ● Experimental typographic techniques 	Application of traditional and experimental practice developed from the analysis of practice by JHM, LJ, AF,AK
Research the wider theorisation of the praxical knowledge	<ul style="list-style-type: none"> ● The development of a reflective practice gallery ● Development of critical commentary ● Recording of workroom practice ● The development of specific grammar of practice 	Presentation of practice gallery Documentation of workroom practice / sketchbooks, photographic records Critical writing of practice, including grammar specific to the study

Table 5. Application of practice research framework (based on Jordan 2020)

Visualising the Research Design System

As the interventions between the praxis, the criticality and the theory began to form, there was value in situating these in a visual form. This enabled further structures to situate the research and creative processes. The network diagram, seen in appendix 3, is an example of developmental thinking, designed to visualise the connections between the historical aspects and experimental practice. As Garland suggests, ‘we can express the purely connective property of a geometric figure by means of a network diagram, the sole purpose of which is to show how the points are joined together’ (1966: 14). Whereas Alfred H. Barr (1902-1981) the first director of the Museum of Modern Art, New York looked to a different way of presenting connections in a diagrammatical way. As Glen. D Lowry notes Barr, in his presentation of a survey of the early history of abstraction charted the ‘sources and evolution of modern art’ (2012: 359) in ‘an attempt to map’ (359) in a ‘complex overlapping and intersecting of lines’ (359)²⁴. The visual system did not just highlight ‘an instrument of classification to something more dynamic and engaging, its processes equally rigorous’ (361). It is in this way that I sought to develop visual methods of the connections in collaborative practice research as discussed in 4. Findings: Historical Lineages. Therefore, the system to map the principles and to visualise a network of design principles, overlaps, a series of interconnecting systems that underpin typographic practices in the past and in contemporary practices. In her essay *Reading and Writing* (2011) Ellen Lupton discusses ‘visual writing (61) when ‘visual elements can come in all shapes and guises’ and are ‘key to the story they are telling’ (61). In *Visual Writing*, Alex Baratta considers the connections between visual aspects that form an understanding to support textual elements through ‘the visual instruction provided in turn helps to facilitate mental visuals from which knowledge can start to develop’ (2010).

The network diagram maps the relationships among Mason, Jay, Froshaug and Kitching all of whom played significant roles in the development of typographic language. A nexus of design principles in typography and printing techniques and processes. The data was captured through the analysis of their approaches emerging from the critical engagement of historical data and was developed through the experimental, material and process led examination.

This is a method in the connection of the two areas of the study, the linking of conceptual abstractions to the construction of practice. The identification and collation of large quantities of material, led to the designing of a framework creating a formula to document and record practice; an iterative inquiry that creates data on the development of design practice through material process

²⁴ Seen on a dust jacket for the catalogue for Cubism and Abstract Art, an exhibition at the Moma, March- April, 1936) as part of an exhibition catalogue *Inventing Abstraction 1910-1925 How a Radical Idea Changed Modern Art* at the Moma (2012) as seen in an image at https://www.moma.org/momaorg/shared/pdfs/docs/archives/InventingAbstraction_GLowry_359_363.pdf.

and technique. Exploration of practices associated with traditional letterpress printing processes and Modern typographic communication has enabled context through a sustained period of classify design conventions through the assemblage of three main areas: typography, printing and design methodologies. The three areas have been selected to articulate the interconnecting relationships that occur through research practice. The overlapping and interactions of these areas are a nexus of the research systems and principles; the focus in this thesis are defined as, **typography**, meaning the arrangement and design of printed type forms. **Printing** is the production and process of creating printed material and **design** is conceptual and planning of typographic practice. The diagrams 5, 6, 7 and 8 show the mapping of analysis formed by filtering the content of archival and printed ephemera analysis for Mason et al. The system has been extended to include a wider range of design principles as typographic practice has developed and experimental practices have required new engagements with varying parts of the design system. The visualisation of the design system networks explores typography, printing and design practices as a range of historical ideas and as emergent typographic practice. The approaches of Mason et al are more closely linked than generally understood and are represented through the construction of the network diagram. This understanding had an influence on the creative practice approaches and how I collaborated with histories through individual and collective practices.

Experimental letterpress practice as a research method to explore emerging methods in creative practice

This part of the chapter is an extension of my explanation of the ways in which I collaborated with others to explore letterpress histories in the present. This reflects on how the historical and creative research methods and processes are interconnected. I expand on the understanding of experimentation in collaborative situations, the application of research methods to new work and the emerging knowledge generated in this creative practice.

To do this, I draw on ethnographic and auto ethnographic approaches in my interactions with historical practice. My creative research practice comprises the development of individual work and collaborative work with others in the research network, I discussed in chapter one. There are two associations in particular that transformed the parameters of this research project. These alliances with Cleaver and Thomas were formed first in my historical study and continued to form further collaborations using the historical artefacts I had identified. These interactions were initially via interviews, but through these discussions I started to develop and then apply new methods of research. The interviews offered the opportunity to access invaluable insights from Thomas and Cleaver on their experiences, their recollections of the historical data and their own creative work. It revealed their thinking towards design problems, without the limitations or concerns of others (Laurel, 2003; Gray and Malins, 2016). This was complimentary to the knowledge found through the collective practice experiences. Through these alliances I have been able to form a deep understanding of the research landscape and how I can transform the landscape to form new understandings as Jarvis suggests, 'practising is situated and is itself a unique and ever-changing performance (Jarvis, 1999).

The study of historical data supported formulas to develop experimental interventions in collaborative spaces. The activities did not fit within a linear structure of a collective situation. Findlay discusses a 'design collaboration' (1997) where he explored Bauhaus philosophy and pedagogy and where 'authority in the work is shared and individual' (Findlay, 1997) and changes are documented through a 'collaborative critique' (1997). The idea of the collaborative not being linear or vertical but a pattern of activities and behaviours is seen through several parts of the working relationship; discussion, idea generation, analysing the historical data, designing a practice plan, Cleaver and Thomas sharing knowledge with me, we developed typesetting techniques, documenting a thinking and making process together through notes and a photographic journal to

complete designs. We were also working individually developing designs, reflecting and evaluating together. The idea of these collaborations being more of an ecosystem (Hypeinnovation.com 2017) that 'are governed by certain rules and norms that influence the relationships between members' (Hypeinnovation.com 2017)²⁵.

As I highlighted earlier, the interviews and discussions with Cleaver and Thomas revealed their approaches in their personal practices. There were significant experimental methods applied in their work. The lines of research also identified the backdrop of their educational experiences at the Central and the RCA,²⁶ and how these experiences would inform the approaches to research.

mason

thecentral

jay

froshaug

therca

bcu

thomas

howson

Thomas was an undergraduate student at Central Saint Martins, London (formally the The Central and currently London College of Communication, part of UAL). He completed a Master's at the RCA. It is this how the geography of his experiences contribute to the lineages of this project. Thomas developed his creative practice, in part, the printing press that had been set up by Mason and was used by Jay and Froshaug. He attended CSM just after Froshaug had left his teaching position there and attended the RCA where Froshaug and Kitching undertook teaching practice. This places Thomas in a unique position in the research lineage. By analysing the work of Jay and the students at the Birmingham School of Printing, Thomas and I were able to formulate some approaches to our collaborative work.

²⁵ These being the typographic principles developed from the historical study.

²⁶ The lineage revealed Thomas as an undergraduate student at Central Saint Martins, London (formally The Central and currently London College of Communication, part of UAL). He completed a Master's at the RCA.

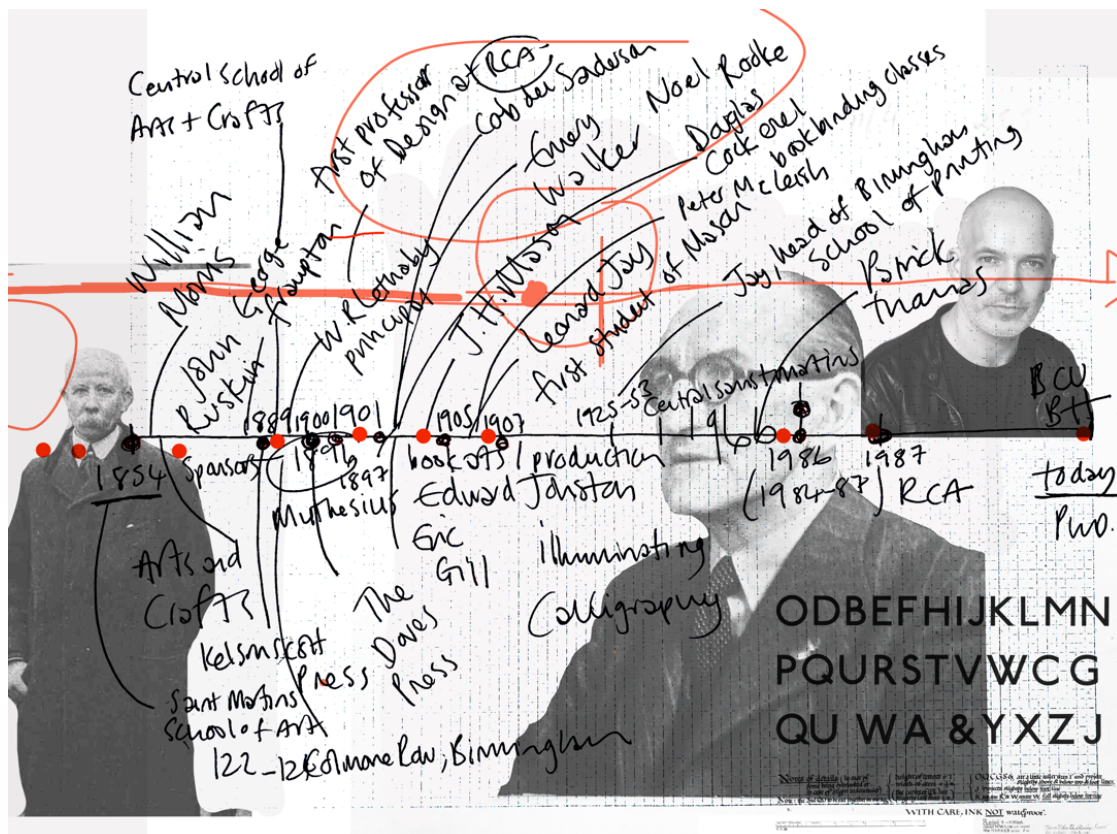


Image 14. A visual chronology of the Central school of Arts and Crafts, the influential figures and the lineage to the research practice

These relationships and the geography of experiences contribute to the lineages of this project.²⁷

This places Thomas and Cleaver in unique positions in the research lineage. In analysing the work of Jay and the students of the BSP, Thomas and I were able to formulate some approaches to our collaborative work. As presented in chapters 4 and 5. These interactions were within historical analysis of the material however the discussions looked towards ways of developing and creating new. As Vaughn says, ‘practitioner – research is deeply situated, and it accepts that although there are norms of practice there are also infinite variations’ (Vaughn, 2017). The idea of variations is repeated throughout this research, through the theoretical, conceptual and visual aspects.

In looking to Bunnell’s exploration of the framing of learning styles which asserts the notion of learning by doing and therefore, absorbing new knowledge through tacit investigations in creative practice. I would like to expand the concept methodology and the ways of creating knowledge are central to the

²⁷ Thomas developed his creative practice, in part, the printing press that had been set up by Mason and was used by Jay and Froshaug. He attended CSM just after Froshaug had left his teaching position there and attended the RCA where Froshaug and Kitching undertook teaching practice.

emergent forms. These emerging points through method and traditional knowledge are created through the iterative design process, as discussed previously in Chapters 1 and 2. The drafts of the experimental process expose the tensions and patterns through repetitions of continual formation and transformation. As the collaborative intermissions develop and expand so does the way I interact with the positioning of the context (Gray and Malins, 2016). This part of the study method is informed by Schon's examination of 'reflective practice' (1984), specifically when it converges with the 'tacit knowledge' immersed in the collective design process. It becomes intrinsic to the research and the way I frame the transactions in collaborative exchanges.

There can be a calibration between Bunnell's model alongside Schon's approach when it comes to emergent research approaches situated within this experimental practice in a series of collective positions.

Through the personal pathways of Cleaver, Thomas, as discussed later in this chapter, as well as my position in the study, the unique interactions and methods of research are intuitive, as Schon proposes, personal knowledge that cannot be described. Here the collective interactions become a 'reflection – in –action' (Schon, 1984 & Malins, 2016) or an accumulation of knowledge through creative practice. Where the research and reflection through and in actions can be an activity where creative, research and pedagogical practitioners can reflect on their work and reform their activities as they are doing (Schon, 1984; Gray and Malins, 2016).

Froshaug > cleaver > howson



It is also important to note that the knowledge that Cleaver has from first-hand experience from the tutoring of Froshaug enables him to impart a triangulation of knowledge.²⁸ Where, there is a

²⁸ Embedded in the typographic practice of the collective practice are experiments which encompass the conceptual and technical systems set out by Froshaug to form the development of typographic pedagogy in a print room session, Cleaver, a student of Froshaug. The pedagogical approaches to *Typographic Norms* (1964) were used in the session, seen in images ten and eleven, with Cleaver imparting ways in which Froshaug had approached instruction through demonstration and sharing of instructional notes, handwritten by Froshaug. The exploration of systems is based on a strict, logical set of rules using type and spacing to create a visual methodology of order of tabular forms, the organisation of material through the setting of em, en, a thick, mid and thin spacing in lines and columns to create a typographic table. Froshaugs' way of presenting these principles is part visual descriptor, part participation in a typesetting master class is a process that connects typographic concept to sequential development.

continual interplay and added complexity to the layers of method and process, in just the same way there is a continual interplay between thought and action. The work of Hans-Georg Gadamer reveals a 'process involves interpretation, understanding and application in one unified process' (1975). This in turn becomes another method of research practice. By deconstructing the original work and approaches of Cleaver and Froshaug, through a tacit interrogation, the processes of production enable an accumulation of new knowledge through collaborative praxis, and it is a development that generates emerging knowledge. This unique praxical encounter manifests through a series of interconnecting pedagogical situations; Cleaver receiving instruction from Froshaug, Cleaver completing the tasks, gaining tacit knowledge, imparting instruction, for the purposes of this study, based on written and verbal recollections of the teaching methods of Froshaug and Cleavers' own experiences as a designer and educator, the instruction is then discussed with me. As presented in the lineage in image 15. The experiential process of a conceptual enquiry and tacit investigations through typographic exploration the synthesising of theory and practice. As Froshaug explains, 'it would seem creativity only enters the problem when the problem is defined, and the necessary techniques or components are selected, to coordinate sometimes apparently opposing constraints this may mean that creativity can only be assessed in relation to a specification and be used after such assessment, as a means of solving other problems' (Kinross 2000).

School of Graphic Design
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First Year DipAD Course, Autumn Term 1970-1

Intrusive Brief (Anthony Froshaug) for Tuesday 3 Nov. abor

0 You are asked to design a set of numerals 0 1 2 3 ... under the following conditions:

0.1 The alphanumeric set is to be used in a railway (air terminals to announce the time of arrival for departure) of trains/aircraft from various destinations

0.2 The announcement display is amplified by a grid of electric lines which are switched either on or off

0.3 In order to facilitate switching in a lot of cases, each character in position, each character may be as a 'normal' typewriter character or to occupy, appear to occupy or otherwise dispose of an available space (eg. how can a character be replaced by, say, numeral 2, lie between with other numerals or letters?)

1 Your presentation, which should be in the form of a lay-out on an A2 (approx 60 x 90 cm) should show the following:

- 1.1** The design for each character, simulating the holes either by unit border material or by numeral holes of a stated dimension
- 1.2** A specification of dimensions, both of the grid structure and of the size (and where type is used to simulate) of each element
- 1.3** One or two examples of the typeface in practical use

2 On occasion, economy of means can oppose freedom of design. Your design should show:

- 2.1** To minimise the number of typefaces used
- 2.2** To maximise the legibility
- 2.3** - remembering always that design may be the solution to an already-compromised situation

3 I hope that you will get this brief early on Tuesday 3 November. This brief should be criticised at 2pm on that day. The final crit will be on Tuesday 17 December. Any one intermediately worried could try to phone me at home (01-607 1602) or, between 11.00 and 17.30 at the Central

Handwritten notes:
 #FF
 Caroline Newman
 Goldsmiths College
 School of Art & Design
 15, Borough Rd, Deptford
 London SE16 5PU
 Design School
 15, Borough Rd, Deptford
 London SE16 5PU
 Teaching at the Central
 Workshop / Waterloo
 U4M / Gruppe 47
 Studies in Architecture

Timeline of typographic practices:
 1920 1930 1940 1950 1960 1970 1980 1990 2000
 Typeface: Location Sizes available

References:
 Conspicuous with Jan Tschichold writes to Max Bill.




Image 15. A chronology of Froshaug typographic and pedagogical practices that of Cleaver's practices— an assemblage of textual matter

In any case, what comes next?

In this chapter I established the historical methodological of this research that comprises an exploration of sources to reveal a narrative which then underpins the development of my typographic practice methodologies. I have shown how this informed the ways in which I interpret materials to stimulate new typographic process and provide an understanding for contemporary practice through the development of design systems as a research methodology. I see this as a reconstruction, reinvention and reimagining of historical techniques and processes in print, typography and pedagogical methods. I have also explained how this is explored through experimental combinations of techniques, to form an anthology of printed artefacts which I then interpret in new textual and visual contexts.

/c O l l e c t i v e p r a c t i c e *
-----an --- invitation ^ to * e x p l o r e + a n d
>

e x p e r i m e n t a l ^^ d e s i g n * p r i n c i p l e s + t o r e i m a g i n e
/

sharing k n o w l e d g e w i t h ___ t y p o g r a p h i c ----- s y s
t e m s

LINEAR LOGIC AND PRAXICAL INTERVENTIONS

the construction of a working system
(dis)order

I have shown how the task of defining and redefining experiential and reflective practice methods took place in the application of individual and collaborative practices. The mapping and documenting of production details I produced are recorded as a network diagram. By exploring several theoretical and methodological approaches I have integrated research and practice. I have also explained how I built my collaborative practice with other letterpress designers' synergetic creative practice for research. I also showed how my secondary research informs a narrative of the lineages of typographic practices and pedagogies. It is in the next chapter, therefore, that I detail my historical overview of letterpress and typographic design practices.

3. Exposing Critical Patterns. A Historical Overview of Letterpress and Typographic Design Practices

Introduction

This part of the thesis critically examined the current positions of knowledge in printing and typographic design by scoping the literature in research and creative letterpress practices. This review of extant historical work assimilates and then communicates my secondary research using the same combination of written analysis combined with visual elements that I have used so far. The relationships between the written, typographic and graphical insertions enables me to tell a rich history of a series of lineages of letterpress practice. The syntactic written account represents a traditional way of presenting key moments and writings in chronological ordering, while the graphical notations and statements offer a different way to explore this material; a device to present the layers of criticality in the various parts of the review. I turn to Andrew Howard when he positions these critical conversations as ‘a new kind of dialogue’ (2005: 127). He stresses that ‘design is not an abstract theoretical discipline – it produces tangible artifacts’ (127)²⁹. In this way, the review of design objects has created new components that are both material and critical. This review combined with my exploratory work acts as a dialogical device to express the changes of the research from a purely historical investigation to a blended inquiry situated in a convergence of theory and practice. I see this, following Lupton and Miller, as a space where ‘history meets theory’ (1994:np)³⁰ and then, as my research develops the frame changes to history meets theory meets practice meets history.

²⁹ A new kind of dialogue, by Andrew Howard. Available at: <https://studioandrewhoward.com/extracurricular/a-new-kind-of-dialogue>. This is an amended version of an essay first published in the Canadian magazine *Adbusters*, issue 37, *Design Anarchy*, 2001 and later (2002) reproduced in the anthology *Looking Closer 4, Critical Writings on Graphic Design*, Allworth Press, NY.

³⁰ Available here: https://www.typotheque.com/articles/deconstruction_and_graphic_design_history_meets_theory. First published in a special issue of *Visible Language*, edited by Andrew Blauvent (1994). This is an earlier version of the essay ‘Deconstruction and Graphic Design’ published in *Design Writing Research*.

Scoping the Literature Review

To construct an approach in the critical examination of knowledge in the review relating to letterpress and typography practices and pedagogies, I developed a categorisation system, a programme for secondary and primary sources. In *Designing Programmes*, Karl Gerstner describes a programme as a ‘creative arrangement’ (2017: 2.3)³¹ where ‘constellations’ are formed from the ‘permutations’ of the elements within the arrangements (2.3). Whereas Wickham and Grolemond in their discussion about the ‘grammar of graphics’ in the contemplation of ‘data exploration’ being the ‘art of looking at your data’ (2016). They look to *The Truthful Art* by Alberto Cairo (2016) as it ‘doesn’t teach the mechanics of creating visualisations, but instead focuses on what you need to think about to create effective graphics’ (2016). In consideration of this, I began the arranging and rearranging of the collections of objects encompassing the historical and contemporary milestones. I was able to identify the patterns specific to this review through the extensive sorting of data that could allow me to build a new frame.

This created a programme of ordering that generated a new lens to synthesise reasoning to inform new arrangements in the research. This was displayed on a timeline to present a visual chronology. I organised the identified literature into four groups: typographic practice, typographic pedagogy, creative practice and pedagogical practice. The diagrams are visual devices to organise these categories, to enable a focus on the approaches to secondary and primary sources, as discussed in the introduction to the section. These are inter-related parts of my practice-based research and the historical study, sitting at the heart of my work.

In diagram 9, the model provides an initial viewpoint to visualise the start of the iterative nature of organising the review, situated in the historical study and the design practice. It was a first endeavour to organise the objects of the review. Setting out categories in: typographic pedagogy, typographic practice, pedagogical practice and creative practice to emphasise the different areas of the review. However, as the review of literature progressed, I identified some more complex interrelationships between the sources. This in turn led to the development of ways to structure the data and saw further adaptations that culminated in research lineages as discussed in 4. Findings: Historical Lineages.

Wickham and Grolemond suggest an iterative process is ‘another tool for reducing duplication’ (2017), this confirms that the continual development of arranging and rearranging allowed several sub-categories which have been distilled from the initial four categories and represent the scope and

³¹ The first edition of *Designing Programmes* in English was published by Niggli in 1964.

nature of the literature review. In this way, I created a space where the arrangements of data can be constructed between the functional sorting and become part of the iterative design process in graphical forms. This way of adopting differing applications within the review presents the crossover and interplay between the two as the interrogation of historical literature informs the development of creative practice. The identification of further sub-themes from the primary and secondary objects enabled the application of a next iteration of the sorting and mapping exercise. The table (6) following diagram 10 sets out the next data iteration.

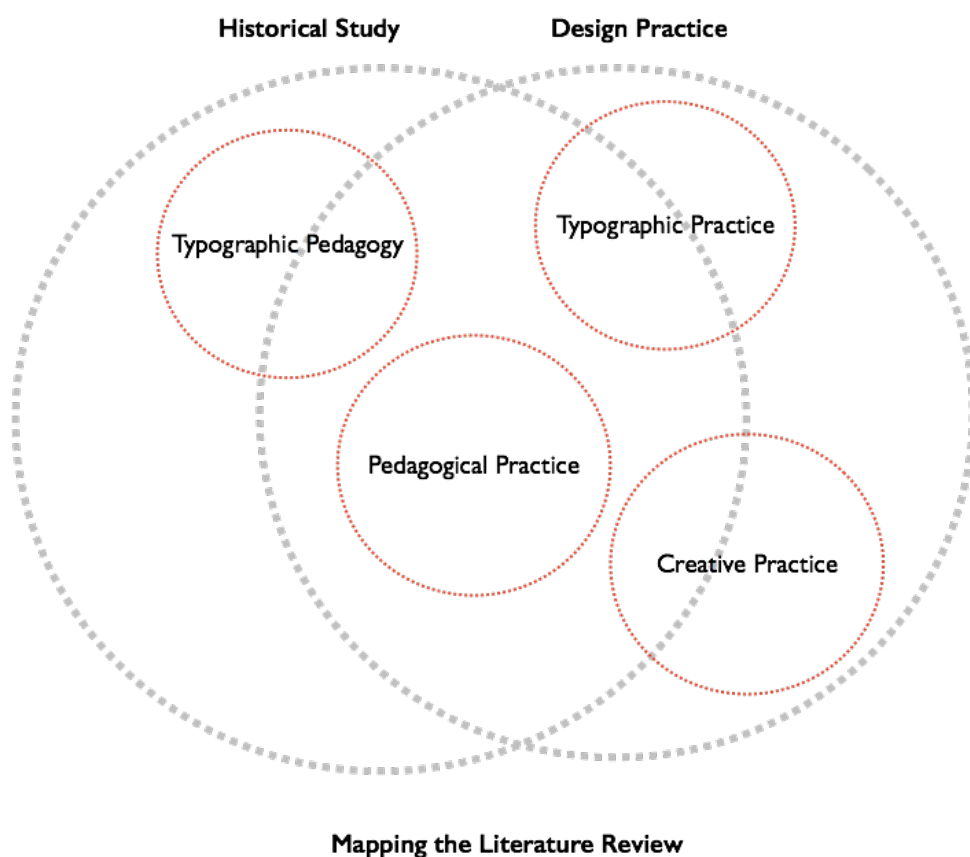


Diagram 9. The initial distribution of the literature review categories that started the sorting and organising of secondary and primary materials in the review. This was a starting point for arranging systems and creating a programme to enable a critical investigation of the sources. 2020

Typographic Practice	Creative Practice	Pedagogical Practice	Typographic Pedagogy
Typography Principles	Art Movements	Action Learning	Historical Methods
Printing Techniques and Processes	Theory of Design	Tacit Knowledge	Critical Writing
Layout	Historical Approaches	Reflective Learning	Anthologies of Practice
Grid Systems	Critical Writing	Discourse Philosophy	Technological changes
Book Design	Design Principles	Practice of Design	Industry requirements
Technological changes	Stylistic Elements	Historical Methodologies	Key Teachers
Craft to Design	Conceptual Approaches		Key Institutions
Editorial Design			Visual Examples
Designers			Technical Instruction
Composition			Art, Design & Craft
Cut & Paste Techniques			Government / Changes in Educational strategies/ reform
Visual Examples of Printed Materials			
Historical Techniques			
Experimental Approaches			

Table 6. The categories of literature and the identification of subcategories that enabled several iterations of organising the interrogation of material. This early iteration of the system to organise the categories of research supported the development of a more visual way to synthesise the critical examination of secondary and primary sources.

This organisation was a descriptive way to structure data. It was useful in the initial stages of the review. However, to create a critical investigation this formation was developed through new arrangements. In interrogating the materials further, I created assemblages of visual and textual combinations. Adam Jaworski describes as ‘multimodal writing’ (2020) or layers where text and image are different forms of language that form critical interpretations through the examination of the objects of the review. This categorising of areas, the collation of printed materials and the cutting and pasting of these objects enabled me to start to formulate a map to visualise the relationships. The sequences created through the iterations and visualisation of the material form new arrangements. Image 16 displays an example of my process of assembling a lineage through various analogue printing techniques; it is a collage of typewriter marks and text, letterpress printed elements, transfer type sketches, risography prints and screen-printed material to develop a visual map of the publications of chronological ordering. In a recent workshop at Hands-on Type Learning From Letterpress Heritage at ESAD (2022) Rick Griffiths referred to ‘living collages’ (115) as a way

of exploring using type blocks and photo plates³². Reflections on the workshop Dias and Miera discuss this way of creating collages as forming networks 'from the multiplicity of elements, the typographic elements and the graphic elements in networks correspond to the search for a formal exploration' (2022: 116). They highlight the use of reusing materials in a similar way to this review as 'a wealth of opportunities is opened up by the construction of compositions from fragments. It also opens the perspective of reusing disused materials, which cannot often be replicated. In this sense, the form and application of these materials are reconfigured, giving them a new life' (116). This procedure went through several iterations to visually sort the review. I developed a technique of an iterative cut and paste of printed ephemera to allow a structure to form, to establish a way of sorting the literature leading to the identification of a space where a critical dialogue was established.

³² Taken from the accompanying publication to the conference and workshops.

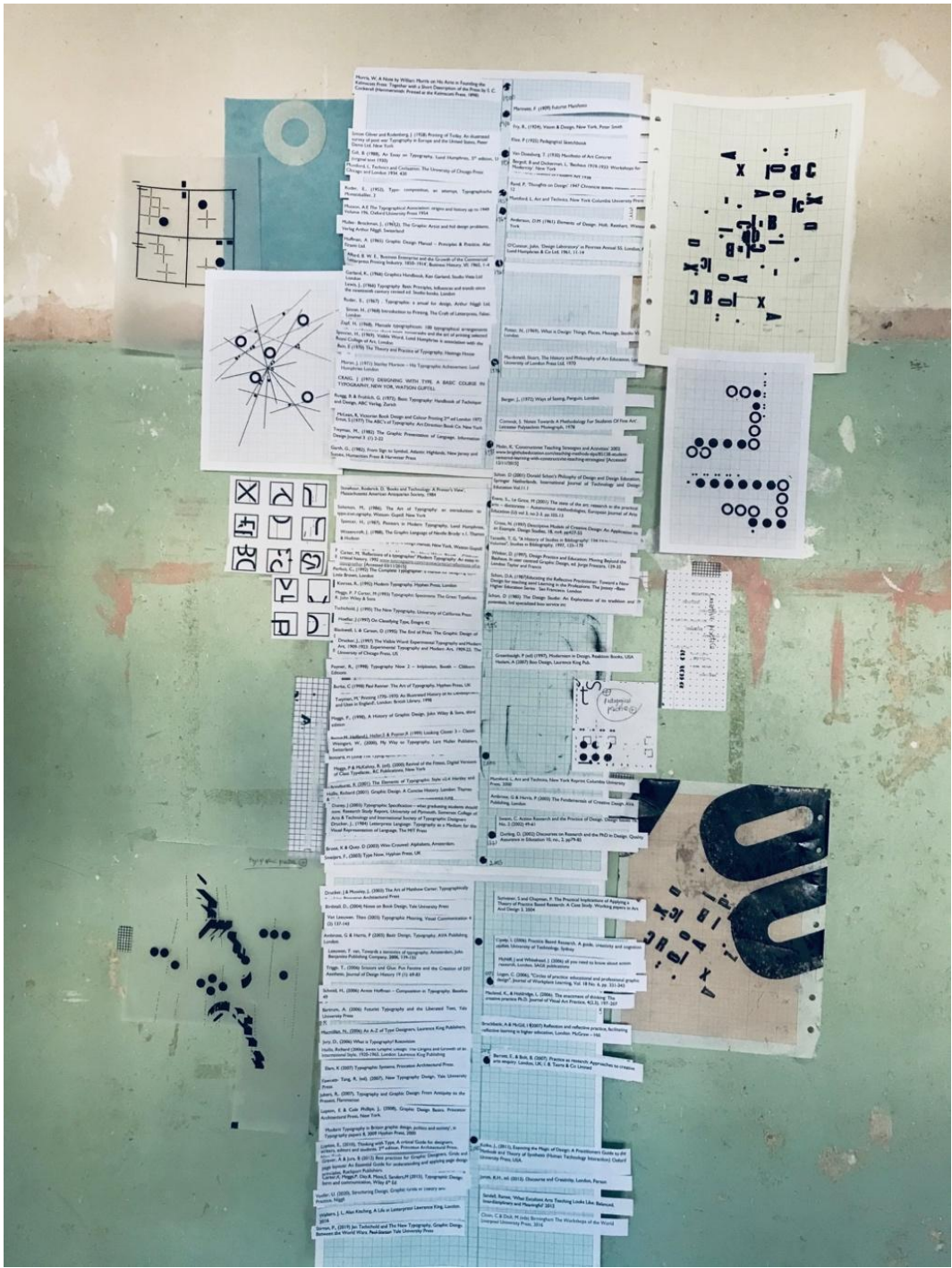


Image 16. Assemblages of pedagogical practice, typographic practice, typographic pedagogies, creative practice literature alongside a timeline, with examples of design practice developed relating to the design principles and pedagogical methods, extrapolated from the publications

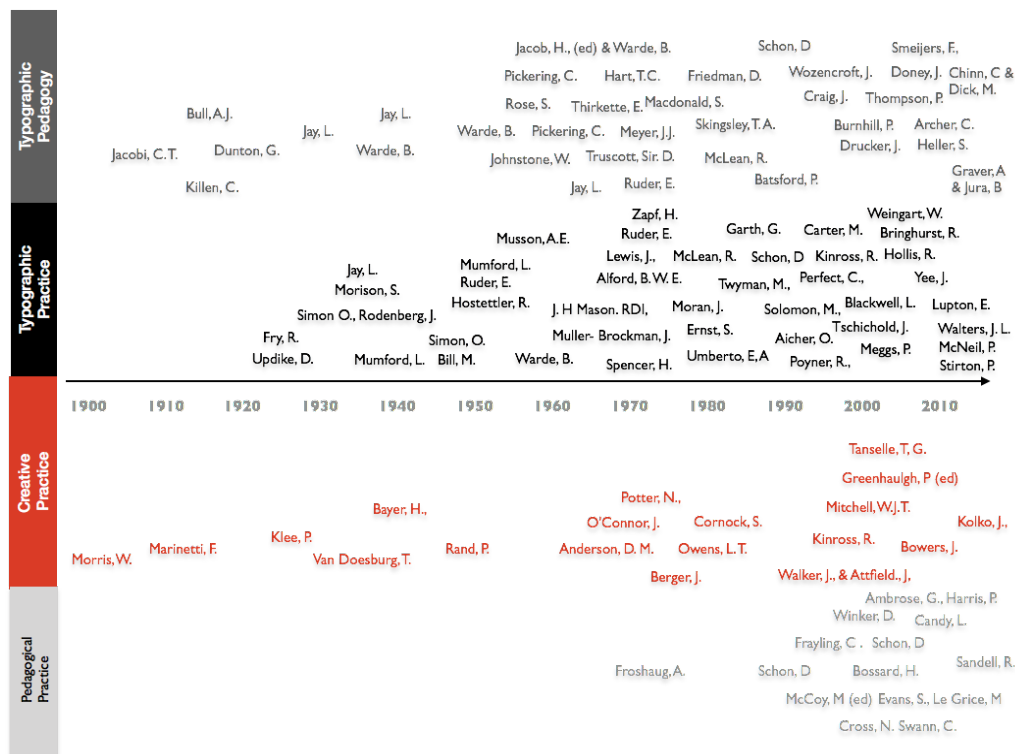


Image.17 An initial digital map of the literature review between 1900-2010. This version of categorisation was developed to test the order and structure of data in digital platforms in contrast with the analogue cut and paste techniques of the previous iteration

This appraisal expressed critical patterns that enabled the relationships of the publications and therefore the critical discussions of history, practice, principles, theory and pedagogy. There were several visual developments, the first of which was an initial iteration as seen in image 16. This image shows the mapping of key texts situated within the four initial categories. This saw a transition from many disparate sources in the review to a structure through a timeline. From this part of the appraisal that was created using a typewriter and printing techniques, which supported the reinforcement of ideas to visualise connections and ascertain the parameters of this research space. The next iteration was developed through the design and construction of a digital literature map, discussed in 2. Collaborative Practice as Research, as seen in image 17. The development of a time chart to observe a research system that I discuss later in this chapter.

It is important to reflect on this area of the study as it plays a pivotal role in the direction of the rhetoric. The critical review supported the structure of relationships between ideas and methods allowing me to find and construct links to facilitate a discourse. The array of visualisations from the diagrammatical forms to the assemblages of printed artefacts of this review made it possible to see the scope of thematic areas in conventional processes that led to a critical focus of principles and methods of experimental printing practice. Consequently, the introduction of a platform for the identification and application of experimental letterpress processes in print rooms to address the research question.

Experimental letterpress practice

What is Experimental Letterpress Practice?

In this section of the review, I explore existing critical positions and creative practice knowledge in the field of experimental letterpress by presenting an overview of the history and origins of experimental typographic practices. This enabled me to create the parameters and definition of experimental letterpress practice in this study. Peter Bil'ak advises 'an experiment is a test of an idea; a set of actions performed to prove or disprove a hypothesis (2005)³³. And in the testing of the idea, 'experimentation is an empirical approach to knowledge that lays a foundation upon which others can build' (2005). As the print room became a laboratory of invention through process driven activities, the criticality of the reflective praxical interactions started to generate an oscillation of convention and new observations. Whereas, in positioning the experimental in letterpress practice, Cooper, Gridneff and Haslam advocate the 'research into the positioning of the letterpress process within education is pertinent today as there has been a marked shift in purpose from technical teaching to a tool for investigation and experimentation' (2014)³⁴. In this way, the investigation opened new avenues for different perspectives in creative and pedagogical exchanges.

The Typographic Experiment: Radical Innovation in Contemporary Type Design (2003), is a secondary source that created a frame for critical connections in this chapter. Teal Triggs calls a 'typographic experiment is a reflection on the point in the design process when the constraints of convention are released and the fundamental notions of function and aesthetics are challenged' (2001), it is 'about the expressive potential in the arrangement of type' (2003). However, the printing practice in this study is the subversion of historical conventions to explore graphical forms. In a similar approach in subversions, poets Mallarme (1842-98) and Apollinaire (1880-1918) created 'visual interferences, shaping their typographic experiments to subvert the conventions of literary form' (Triggs, 2003). In taking the observations of Triggs' of Mallarme and Apollinaire and the threads drawn through this review I began experimenting with techniques in subverting through questioning how the composition of text can be viewed. Some of the practical activities tested the placement of lower- and upper-case forms against large spacing areas with a combination of typefaces and unconventional layout systems. Here, I disturbed conventional syntax and reordered typographic elements using them as pictorial propositions, as opposed to a functional mode of presentation and communication.

³³ Experimental Typography. Whatever that means. By Peter Bil'ak (2005) Found at: https://www.typosphere.com/articles/experimental_typography_whatever_that_means. No page numbers in this online article.

³⁴ Taken from the 6 x 6 Collaborative Letterpress Project publication. A research project by Cooper, Gridneff and Haslam (2014). There are no page numbers to add to this reference.

These disruptions are a way to establish new contexts and like Avant-garde artists using typography as a design tool in making new connections between literature, visual aspects and the reader. The experimental approaches of Filippo Tommaso Marinetti (1876-1944) proposed radical ways of moving away from the traditional compositional arrangements. In Marinetti's work, the composition was free, expressive, poetic, forceful as a platform to present political manifestos that were devoid of the conventional uses of punctuation, type size and syntax. Laszlo Moholy-Nagy (1895-1946), Piet Zwart (1885-1977), Kurt Schwitters (1887-1948), Herbert Bayer (1900 -1985) and Jan Tschichold (1902-1974) and the work of the Bauhaus became synonymous with experimental avant-garde design. Typography became part of a range of art and design fields including graphic design to question the traditional and pioneer the new, the modern. Frascara asserts the misunderstanding of design disciplines through 'the excessive importance given to the avant-garde movement in the context of graphic design history is based on the failure of theory to recognize graphic design as something other than an art form' (1988). And this way of questioning is applied to the practical parts of the study as highlighted in the next section.

What Can We Learn from Literature on Experimental Letterpress Practice?

By setting out the parameters of What is Experimental Letterpress Practice? I could then turn my focus to how this can provide an understanding of what can be learned from the review. It has provided me with a location to explore unfolding connections, using a critical lens to identify how the concepts, philosophical and design aspects of experimental practices can be explored in the development of my own individual and collaborative practice. I have approached the practical parts of this project as an expanded experiment through a range of non-commercial briefs and projects in analogue printing techniques using a variety of print rooms as laboratories to test traditional design principles while at the same time disrupting from the conventions in letterpress practice. The research developed over several years, in several laboratories, is a culmination of an exploratory exposition sometimes accumulating by chance rather than following a tried and tested formula. Sometimes by following strict traditional conventions. Bil'ak suggests 'the scientific usage of the word (*experiment*), where an experiment is designed to add to the accumulation of knowledge' (2005).

the dots start to connect



The differences between the fields, he describes as 'in design results are measured subjectively, there is a tendency to go against the generally accepted base of knowledge. In science a single person can make valuable experiments, but a design experiment that is rooted in anti-conventionalism can only

exist against the background of other conventional solutions' (2005). I contend that in this research I provide a vision that the experimental processes of the practice are a context to develop new design conventions. It is the processes and procedures within the experiments that become a place of rationale rather than a set of conventions that are insistent. As Potter suggests, 'design is a field of concern, response and enquiry as much as a decision and consequence: to a known and defined sense of situation the student must bring an awareness of his position, a constant search for a place of value in a world of facts, and a full command of the tools and techniques with which he can validate his intuitions' (1964). And in this way, the study was a place of discovery through an examination to reinterpret conventions found within the review, to reorder objects found in the research lineages and to expose new patterns. The printing workshop provides freedom and is part of a territory for theoretical and critical debate, it is not just a place to store specialist equipment. It is not a place of nostalgia; it is in a unique position of transformative design practices and pedagogies to change present approaches. I suggest the practitioner and student can reuse, reform, reorganise the historical tracing to make sense of contemporary design problems. An example of the reordering of the print room material can be seen in image 18. This example shows where the typographic spacing material is re-appropriated to develop a new visual language. It is traditionally used to create spacing and gaps in the composition of a forme. The units are not printed as they are made to be lower than the height of the type blocks. Here, they not only used as part of the architecture of letterpress forme layout, they are used as part of the reordering of letterpress conventions.

These explorations are conceived through the praxical interventions in the print room. The unique relationships formed in the print room are intrinsic parts of doing, for instance; making, creating, developing and therefore, an understanding was shaped when the elements of auto- ethnographic and collaborative activities were drawn from the examination of established rules found within this review. Thus, creating a new typographic vernacular rather than be inhibited by histories.



Image 18. Typographic spacing used as part of the printing process. Traditionally the spacing and furniture units are used to create space as opposed to an imprint. In this research project, the units are used to create printed forms as part of the typographic language

An Overview of the British Printing Industry

Following on from the previous review of literature situated in experimental letterpress, this is a critical review of the British printing history and will form a continuation of the understanding and positioning of secondary sources in the research, to draw links between the literature, the narrative and the lines of inquiry that form the research lineages as discussed later in this chapter.

This section offers an overview of the industry and forms the basis for the argument that innovations in printing education were required to meet industry needs and technological advances. This leads to the examination of Mason, Jay, Frohaug and Kitching how their pedagogical and practice approaches could be part of a field of inquiry in contemporary practice as well as part of design history. The importance of this narrative exposes the consideration of reordering traditional approaches can promote new relationships between design theories and contemporary debate. The review has drawn insights from two main positions; the historical commentaries offer descriptions that facilitate an understanding of a perspective in a moment of time, that were written and recorded within the timeline of this project and also the viewpoints from historians and researchers that enable signposts to moments through the lines of the historical study.


In 1837, Schools of Design were formed and in 1849, by the Department of Practical Art created under the Board of Trade. Letterpress was the most prolific printing process in the early industrial period, being responsible for the bulk of books and journals as well as ephemera (Twyman, 1998). This period saw the transition of printing from craft to large-scale industry as print production and distribution was revolutionised in the mid twentieth century to the turn of the twenty-first century. These revolutions saw a move from the craft -based trade of letterpress and hand type setting to a technology –based industry of machine composition, lithography then to phototypesetting. From individual print shops as type foundries, to global type foundries such as *Mergenthaler Linotype Company*, founded in 1886, in the United States. And as the technology evolved, the way in which printers were trained moved from the traditional apprenticeship system to an art school and technical college education.

Printing organisations moved from office-based ‘chapels’ and local typographical societies to regional and then national unions (Musson, 1949). These technological and economical changes demanded significant changes to the training and education of compositors and pressmen; journeymen overseen by a master and the demand for better conditions and training for printers. C. Turner Thakrahah described conditions before the development of the industry, ‘Printers are kept in a confined atmosphere, and generally want exercise. Pressmen, however, have good and varied labour.

Compositors are often subjected to injury from the types. These, a compound of lead and antimony, emit, when heated, a fume which affects respiration, and are said also to produce partial palsy of the hands. The constant application of the eyes to minute objects gradually enfeebles these organs' (1832). In an article called *Practical Education* in the *British Printer*, 1892 it suggests that there was a gradual shift in the industry from craft based techniques to science based processes' and that 'all industrial art had more dependence on science. Between 1881 and 1937 there was extensive changes to the law, by government that education and trade required development to meet the social, economic and industrial needs during this period of time, with the introduction of the Schools for Science and Art Act 1891, the Technical Institutes Act, 1889, to which the the Science and Art Department had the authority to approve what was included in the curriculum. The Factory and Workshop Act 1878.

The introduction of the Education Act 1918, enforced compulsory education from five to fourteen years and also included provision for compulsory part-time education for all fourteen to eighteen year olds, Day trade schools in 1900 and in 1904, Technical day classes, another Education Act in 1936 and the the Education Act of 1944 was created to meet the demands of social reform, after the war as well as The Factories Act 1937. As a new century began, printing had become mechanised and apprentices were unable to undertake the same training as those before them. Therefore, to enable progression in the trade, schools of printing emerged taking printing education out of the workshop and into institutions designed for academic study. This helped shape and form developments in technical and design education with pioneering advances at the Central school of Art, London, that reverberated around Britain, to provincial areas, schools of printing encompassing art school sensibilities with the needs of local industry. A complex set of pedagogical frameworks such as ensuring theory supported practical hands-on classes and an artistic understanding and values supported the technical excellence that was required by the printing trade. A balancing of traditional methods of hand typesetting as well as embracing new technologies.

There is another aspect to the narrative that runs through this timeframe and that is the classification of terms to explain all the different facets of roles and skills found in the industry. The terms commercial art, typographic art, advertising art, graphic design, visual communication, graphic art, typographer is situated in the printing industry. This initiated debate around the complexities of the roles of the designer, compositor, printer and how the imparting of training was situated between the fields of art and science. In 1922, W.A Dwiggin called for new approaches to the field. In his writing, *New kind of printing calls for new design*, he uses the terms craft, design, art and graphic design in the same context, asserting 'printing is not an art and art is not essential to printing' and where 'the history of printing is largely a history of individual artists. The names that stand the foremost in the biography of the craft are the names of men conspicuous for a fine taste for design'



(1922). The use of these many terms in the context of printing is representative of the entanglements of the history of letterpress found in this review. The conversation continued many years later when Katherine McCoy discusses, 'the description of our field's educational requirements is very muddled, cobbled together and modified over the years. Odd that a student should go to school in graphic design to become a 'graphic artist', with 'little mention of the intellectual process that distinguishes design from a craft or trade'. (1997).

arts * science >craft.graphic design+trade

Looking to Jay, he suggested the aim of education in printing was to make more efficient and better craftsmen. He said that 'students attending Linotype classes at the BSP are not only instructed in the manipulation and mechanical knowledge but in such matters as are calculated to have a keen fitness of things. Instruction is given in design and layout for book, general commercial and advertisement work and every opportunity is embraced by bringing before the students' examples of the best modern work of the best modern craftsmen'. Lewis Mumford observed, 'technics and science demand autonomy and self control that is freedom in the realm of thought. The machine cannot know more or do more than the human eye or hand or mind' (1934: 420).

It is the autonomy and freedom in contemporary experimental letterpress practice that can now exploit the conventions that were set to meet the needs of the printing industry that are no longer required in the context of industrial considerations.

The Institutionalisation of Letterpress Practice and Education: The Master Craftsman and the Apprentice

This part of the study will review the development of letterpress education in Britain to offer an overview that is the basis for the argument that the examination of traditional printing education approaches can question the application of approaches in contemporary pedagogies and practice. The examination of material demonstrates the importance of printers' connections with local industry and the influence these networks had on the education of printers. From 1450 to the turn of the nineteenth century, letterpress printing continued to be a process completed by hand, an industry where printers and compositors learnt their trade on-the-job as apprentices for five to seven years. Printing education took its first steps at the end of the nineteenth century, in the Schools of Art and then in the newly established polytechnics. During the early twentieth century the number of Schools grew steadily, and their numbers increased further when in 1944, the Government passed an Education Act, which made it mandatory for Local Education Authorities to provide technical educational facilities to any industry for which there was a provable demand. By 1961, just fifteen years after the Education Act, there were upwards of sixty schools of printing and by 1970 this figure had more than doubled to one hundred and forty training centres across the UK, each providing printing apprentices access to specialist training, and giving experienced men the opportunity to further advance their knowledge. However, the provision of mandatory technical education for the printing industry was transitory: by the close of the twentieth century, the industry had undergone a digital revolution and the need for highly skilled and trained craftsmen diminished: today all the schools of printing have vanished.

Traditionally, journeymen were craftsmen who had completed an apprenticeship and were working for a master (Moxon, 1683-4:36). In the second half of the nineteenth century, printing was one of only five industries associated with the new-style of apprenticeships and kept the traditional seven-year term with rigour. Apprentice printers came from an increasingly wide variety of backgrounds and faced conditions of work which, whilst not immediately hazardous, were exploitative and would result in negative long-term health consequences. Despite their difficulties, many demonstrated a tenacious determination to continue their education and took every opportunity of improvement offered to them. Their experiences were shaped by the office environment — the products of the press and the people who worked there — but the effect these had on their character and attitudes were not usually regarded by apprentices themselves in a negative light (Liepmann, 1960:1). In 1913, evening classes were placed to supplement the education of workmen as the compulsory education leaving age was insufficient at fourteen.

Secondary schools were also established to support the continuation of general education until sixteen or seventeen. However, many families were unable to financially afford taking advantage of these developments. The London County Council developed Trade Schools for a number of years and was established as a form of education by the Board of Education and formally recognised as Junior Technical Schools, the preliminary training was given to boys (Bull, 1914:177). In *The Value of Technical Education to the Allied Printing Trades* Dunton describes 'in the average printing establishment, a boy enters the employ of the firm to learn the printing trade; he starts at the bottom, running errands and sweeping the floor, as he advances he is given in charge of some comp, or pressman and is tutored by him or them and this is all the education which he is given in his chosen trade' (Dunton, 1916: 97-99). He explains the changes that are taking place, 'the subject of technical education is beginning to receive the attention both within the ranks of the employers and employees, not only within the close field of the allied industries connected with the printing trades but sporadically within some of the commercial industries.

The past application of technical education has been in a widely separated and isolated spot. It has never been universally adopted by any industry or sub-divided branch of such industry. Trade schools are being developed and are starting the training of the future artisans. (Dunton, 1916:97-99). The first exhibition of the Arts and Crafts Society was held in 1888, where Emery Walker gave a lecture on printing, perhaps this influenced the decision in 1892, by London County Council to commission Hubert Llewellyn Smith to report on technical education and to make recommendations for the future. He suggested that printing should be taught by craftsmen, whether or not they were qualified teachers, and that all art schools must teach an artistic craft in relation to a manufacturing process. The trades are suffering through the abandonment of the apprenticeship system. With the present subdivision in labour it is not possible that any system of apprenticeship can meet all the educational requirements. Attendance at technical classes will have to form an essential feature of any system of apprenticeship in the majority of trade skills' (Llewellyn Smith, 1892: 79).

In 1909, The London County Council Education department set up the first bookbinding committee then a Letterpress committee consisting of three masters, three trade unionists and three members of the LCC. On the advice of this group, the Central opened the first experimental day training school for boys in Printing, Bookbinding and general book production. It was opened up to boys between the ages of thirteen and fourteen who were to be apprenticed at the end of their first year to some form of recognised standing and given day release (Rubens, 1976: 220)³⁵. The Royal College of Art had its origin in 1837, as a result of a report of a select committee on Arts and Manufacturers which recommended the establishment of a School of Design. in which 'not theoretical instruction

³⁵ Taken from the minutes of the London county councils technical education board or the minutes of the LCC Higher Education Subcommittee

alone, but also the direct application of the arts to manufacturers should be deemed an essential element. (Reubens, 1976: 223)³⁶.

In the early twentieth century, Killeen observed the differences in the development of technical education, years ago a boy off the street was good enough to bring in and start to learn process work. Now times have changed and young men of brains and college educations and business experiences are entering the work and raising the standard, both as to knowledge and personnel. These are the ones we see passing the older but, stuck in a rut man' (1914: 37). Beatrice Warde wrote an enlightening viewpoint on the developments of schools of printing. 'So the craft schools have always had to face that devastating comment of any real printer. Very pretty if you can afford it upon a private –precious job (1935: 35). She suggests a way to deal with such criticism is 'to make the most of the artist/ craftsmen's insulation from competitive industrialism. The London Central School of Arts and Crafts to begin our concrete instances where sound typographical training did begin in England, has gone instructing future celebrities. It is a place for the cultivation of good taste and craftsmanship by discipline of the mind and hand; the ideal craft as opposed to the polytechnic school' (35). Warde then turns her attention to provinces and gives a description of how Birmingham was exhibiting its pioneering print pedagogies, 'the Birmingham School of Printing has shown what else one can do when technicians start using the word art as mockery. The school has produced a series of exhibition pieces, collectors' items, which at first were thrown away by the local printers. Little by little, rumours got round that so and so apprentice in some miserable little shop has emerged from price-cutting ignominy into prosperity. There have always been catalogue settings in those grandiose Birmingham year books, machine set jobs that played the game economically and yet seemed to say to the printer; Wouldn't we fetch a better price than usual even though we cost no more? The difference is in the design and the choice of good face. That is campaigning. And the result has been – not only a growing waiting list of students but far more important a get free of financial and moral support that will make this one of the leading schools for printers in the world' (35).

Educational reform helped shape and form developments in technical and design education with pioneering advances at the Central that reverberated around Britain, to provincial areas. For this project, archival research has identified that the schools of printing were encompassing art school sensibilities with the needs of local industry. A complex set of pedagogical frameworks such as ensuring theory supported practical hands-on classes and an artistic understanding and values supported the technical excellence that was required by the printing trade. A balancing of traditional

³⁶ Taken from the minutes of the London county councils technical education board or the minutes of the LCC Higher Education Subcommittee.

methods of hand typesetting as well as embracing new technologies in technics and machines. All of which instilled the craft of printing to the new craftsmen at a time of social reform, technological change and war through several art movements, Gothic Revival, the Arts and Crafts Movement, the Modern Movement. During the period of 1925-1955 there were schools of printing that were flourishing and producing a very high standard of output. By the 1950's art schools were introducing print shops as part of studio spaces. For example, The Royal College of Arts launched its own printing press, in 1953, called The Lion and Unicorn Press. This led to an increase in departments offering design education, evolving into schools of graphic design and visual communication.³⁷ This review helped give context to the industrial aspects of letterpress as a trade. In the next section The History of Letterpress Practice, I will set out the narrative that developed through the research review.

³⁷ Taken from the RSA annual report (1954).

The History of Letterpress Practice

This part of the study considers the history of letterpress practice and pedagogies to inform my individual and collective creative practice. In this section the research approach was of critical historiography. This is a when my position in the study shifted from investigating design methods to a critique of design history. Maria Goransdotter and Johan Redstrom argue 'for the need of design histories that also address the origins of our design methods with respect to contexts, values and ideas in order to understand what these actually bring to the contemporary design situation' (2018:2-130). Whereas a recent symposium, organised by the Faculty of Creative and Cultural Industries, University of Portsmouth, and Department of History (Historical Studies), University of Bristol, called *Revisioning the Past. The Artist/ Designer as a Historian* called for a 'fresh perspective to debates on creative historiography' (2022)³⁸

In this way, the interrogation of secondary objects situated in archival investigations was set out through the following areas to reveal different viewpoints to initiate different ideas in design methodologies; From craft and chapels to the marriage of technical education and artistic values through the private press movement, turning to technological changes and the impact of how typography was taught in Classic Revivalism through technological revolutions and modernity, then a consideration of the repositioning of context to graphic design in The influence of Modernity and visual design methods and finally, moving to breaking the rules in The experimental typography workshop. The structuring of the review was organised through the interrogation of key texts and secondary and primary objects as a way to understand the changes to the edges of design industries, technologies and education. As Dias and Meira surmise, we are 'learning from letterpress heritage. The historical influence of letterpress and movable type, in the midst of the digital age'. They convey 'the ability to master hundreds of year-old typographic techniques allows us to broaden horizons and create innovative solutions to contemporary issues'. And, they suggest there is a need to 'return to the past to recover and re-contextualise typographic printing (2022:13-16).

With this in mind, the examination of sources permitted me to consider a way of creating arrangements between the disparate documents. The approaches in organising the material was set out to reflect the chronological ordering of the historical study as discussed in the introduction. The connections I made through the materials formed a juncture between the historical study and letterpress research practice. The initial development of the research methods, seen in 1. Experimental Letterpress Practice as Research and 2. Collaborative Practice as Research are intertwined with this part of the review.

³⁸ Organised by, Olly Gruner, Louis Netter and Will Pooley.

The review revealed a deficit in formal secondary literature that directly analyses the printed material of Mason and Jay's contributions. This provided a conversation on the problem of how to survey historical typographic materials. This in turn, led to identifying the valuable and in depth insights into Froshaug's work, by Robin Kinross. Kitching is still practising and teaching, he holds seminars and workshops to discuss his approaches, access to his print shop, my opportunity to consider a collaborative workshop participation as set out in 2. Collaborative Practice as Research.

There are numerous articles in trade publications, in the UK and worldwide, that refer to the work of the Central and BSP. I discovered literature that discusses twentieth-century typographic design. *Penrose* annuals highlight trends in typography and printing techniques; *The Fleuron* (1923-30) and *Signature: A Quadrimestrial of Typography and Graphic Arts* (1935-54) are publications that give a part scholarly and part trade viewpoint which will provide a commentary on the typographical landscape at that time, to enable a mapping of trends, methods of production to discussing the application in new technologies in the creation of work, the *British Printer*, will provide a picture of technological trends. The Design Archives at the University of Brighton holds an extensive collection of commercial and pedagogical work by Froshaug and his students. Work including editorial design, exhibition pamphlets, exhibition catalogues, project briefs and other ephemera produced as classroom exercises can also be found in these and other archives. Kinross has written extensively about Froshaug in several articles and publications. In *Anthony Froshaug: Typography & texts and Documents of a life*, Kinross presents two volumes of personal and biographical details as well as a professional record in practice and pedagogy. As Kinross knew Froshaug well, there are many viewpoints that the archive cannot offer. There are publications relating to Hochschule für Gestaltung, Ulm where Froshaug taught (1957-61). The Ulm Journal of the Hochschule für Gestaltung is a valuable record of the work produced by students. The Mason Archive at Central St. Martins, UAL, London holds examples of student work and teaching aids as well as examples of typographic work by Mason. The review has identified limited secondary sources however the publications that have been located are valuable in a personal and professional profile. In a *History and Philosophy of Art Education*, Stuart McDonald (1970) gives an illuminating presentation of the social, political and industrial issues around schools of art. L. T Owens provides a document of the life and work of Mason, *J. H Mason 1875-1951, Scholar- Printer* (1976) Another publication, by John Mason was located called *J. H Mason R.D.I, A Selection from the notebooks of a scholar- printer made by his son John Mason* (1976). This publication sets out personal and professional details from a unique perspective. The *Design Archives* at the University of Brighton hold personal and professional materials regarding the professional relationship with Froshaug. Secondary sources include *Alan Kitching: A Life in Letterpress* (2017) and *Alan Kitching's A-Z of Letterpress: Founts from the Typography Workshop* (2014). It is worth noting that there is a vast amount of visual examples of Kitching's practice on social media. Access to viewing Kitching's practice and in meeting and working with him is ongoing. This can be through attendance at exhibitions and various online galleries spaces. Kitching is a practising graphic artist and instructor in his workshop, London.

The analysis of source material has identified the direction of the narrative and the identification of methods of practical. Several systems to organise primary and secondary sources are employed to critically analyse the source materials. The approaches in interrogation required differentiation and two main approaches; 1. analysing the textual and 2. analysing printed ephemera. A system has been developed to structure the selection of secondary literature. The categorisation of the material enabled a cohesive approach to extensive literature in the fields set out in the scoping of the review;

- History of typographic design methods and principles practice and pedagogy
- Critical writings of design practice and typographic pedagogy
- Author reputation, educator, critic, practitioner
- Recommended reading by educational and professional peers

From craft and Chapels to the Marriage of Technical Education and Artistic Values Through the Private Press Movement

My research practice seeks to re-engage with the ways that typographic knowledge was traditionally imparted and acquired. Kinross (2004) recounts the way a master printer imparted knowledge to an apprentice through instruction and supervision, in a workshop setting. Typesetting was taught through a specific set of technical training instructional tasks which applied compositional and printing practices that had been employed with the exacting standards for centuries before. These practical processes, together with art and design methods, were introduced through new courses in art schools and rooted in the Arts and Crafts movement (c.1860-1914). Owens (1976) shows us that The Doves Press (1900-17) worked with the London County Council and this enabled Walker, Cobden- Sanderson and Mason to introduce technical day and evening classes in the school of book production at the Central school of Arts and Crafts (1896-1965).

The literature at this time gives a commentary of typographic practice through industrial need and educational training. Mason found himself surrounded by the influential founders of the Private Press movement, Walker had set up the Kelmscott Press with William Morris, in 1891 and the start of a typographical adventure in pursuit of the beautiful book. McLean later suggested, 'The Kelmscott books, all uniform in general style, did not show how books should be designed. They were quite unsuitable for reading. They showed that books could be magnificent, Kelmscott books are rich and satisfying artefacts. They caused things to happen' (Owens, 1976). In 1896, the Central school of Arts and Crafts opened under the direction of W. R. Lethaby and G. Frampton. By 1905, Mason was leading instruction at evening classes (1976). In 1909, Mason accepted an invitation by Lethaby, to undertake a full time teaching role and the headship of the institute of day classes and the school of printing. The deep rooted beliefs of the Arts and Crafts Movement were set by Lethaby, as Johnstone explains, 'Morris by the example he set at Kelmscott Press, Walker by his wide knowledge and practical experience as a printer and Lethaby through his extensive influence as a teacher, advisor and writer. Walker spoke of the needs, so frequently ignored in Victorian England, that are fundamental to all good printing; firstly, a thorough understanding of the essential materials-ink, type and paper and the expression of their unity alike in imposition and impression. And secondly, of the importance of arranging the book opening so that the pages opposite to one another are integral parts of a single design. This enabled Mason to draw on his experience in a private press, to set and instil standards in his instruction. He stated 'the principles of the Doves Press were introduced into the teaching of printing'. (Johnstone, 1953). Where 'a supply of good typefaces was strictly limited' (Owens, 1976:48). Mason didn't care for Modern faces. In 1926 he wrote a pamphlet entitled *Printing considered as an Industrial Art* for the *British Institute of Industrial Art*

(50) calling the Modern 'this ugly design' (50). Owens suggests 'a study of Mason's books will show, in his work at the Central School, although some of the smaller of the early books employ Old Style, he favoured the use of Caslon Old Face, almost to the exclusion of all else' (51). Caslon Old Face was to become the typeface of preference and a strict and austere teaching style was ever present in the print rooms. This marked the beginning of a prolific time in print education and the continuing alliances and collaborations that strengthened the dedication and influential imparting of knowledge, at the School, in 1928, Mason set out a manifesto, sharing his vision for day technical education and in doing so extended his influence at a time of great change in modern printing; a wider scope for the day technical school. Considering the cost lines of modern equipment and the obstacles in the way of finding suitable instructors for very small groups of students, the school now admits students who have been awarded scholarships or exhibitions by authorities outside of London. The School prepared too, to send Day technical boys whose parents consent, to be apprenticed in the provinces, in cases where suitable arrangements are made for the accommodation and supervision of the boys (1976). He set out a pedagogical framework that revolutionised the way printers were educated, by bringing the private press movement into an educational institution.



Image.19 Two composing sticks in the print room. The composing stick is a tool used to assemble metal type in the composition and layout of typesetting in letterpress printing. The type is then transferred to a galley and added to a forme that is locked ready to print on a press. Traditionally, the compositor would select type from a type case and compose the line of text by hand

Classic Revivalism Through Technological Revolutions and Modernity

The influences and visions Mason set out changed the way print education was viewed and valued by the work of his first student, Leonard Jay. Jay began teaching in 1913 at the Central at a time when an esteemed group of artists and craftsmen were teaching there, including Noel Rooke, Edward Johnston, Eric Gill, and John Singer Sargent. At this time, Bull discussed, 'the London County Council has for some years been developing another type of school, the Trade Schools. These may now be considered to have passed the experimental stage and to be an established form of education. The Board of Education has fostered these schools and they are now formally recognised under the name of Junior Technical Schools (1913). In *Modern Typography*, Kinross suggests that industrialisation was not the sole reason for the degeneration in the printing industry but that William Morris' 'typographical adventure' encouraged a viewpoint that required books to be 'dream like' works of art whereas there was a need for typography and printed matter to be functional and to be developed within a design framework to meet industry needs (1992).

There was a different approach to typographic practice at that time, in Holland, H. N. Werkman (1882-1945) was producing experimental typeface collages using printing blocks, through letterpress printing, a presentation of ideas and concepts, rather than a pursuit of technical excellence in typographic technique and process. Werkman found a collaborator in Willem Sandberg (1897-1984) who was the director of the Stedelijk museum in Amsterdam (1928 – 1962). This collaboration saw publications *Experimenta Typographica* and *The Next Call* being circulated and presenting an entirely more experimental proposition to typographic practice whereas Jay was insistent that typographic work should be 'physically fit for the purpose, based on sound principles of design' (Wallis, 1963). At this point, Killen observed of printing education, 'There have been great changes made in process work in the last few years. Many new methods have evolved and great improvements in the mechanical and artistic part of the profession have taken place. Each year shows an advance over the proceeding one, yet there is one improvement and one of the greatest that has not been followed up as close as it should be. That is the improvement of the man. But little improvement of the brains on which so much depends' (1913). This review has identified several advances in the typeface design and the dissemination of new stylistic elements to a typeface, being introduced and would determine new directions and aesthetic values in typography and printing. These new typefaces produced were *Futura*, designed by Paul Renner (1927), *Gill Sans* (1928) designed by Eric Gill, and *Kabel*, designed by Rudolf Koch and Victor Caruso in 1927, within nine months of one another. Jay became head of the school of printing at Birmingham School of Art and Craft in 1925 'While the technics have their proper place in the education and training of the printer, the cultivation of aesthetic appreciation must be considered as an important part of the curriculum. For if a person does not know what is

good printing he cannot produce it' (1929). This was a bold approach to typographic education in the 1920s, which not only benefited the printing industry in Birmingham but also the wider international community (Archer, 2015) and initiated discussions on the relationship between art and technology in the training of printers. Traditional texts were selected to work with, for example *The Eve of Mark* a poem by John Keats (1819) and text referencing other cultures such as the fantastical adventure, *Kin Weng and the Miraculous Tusk* by Ernest Bramah Smith (1941). Jay selected these texts with consideration to encourage students to gain experience of different systems of language and communication. In the 1920's the introduction of new technology was viewed with caution as to its ability to produce work that could be attained by hand.

The debate continued into the 1950s, as Lewis Mumford deliberated 'of their origin and purpose, the meanings of art are of a different order from the operational meanings of science and technics' (Mumford, 1932). This was a view that was reflected by Aldous Huxley, when he related that the 'sensible thing to do is not to revolt against the inevitable, but to use and modify it, to make it serve your purposes. Machines exist; let us then exploit them to create beauty—a modern beauty' (1919)³⁹. Jay discussed the inter-relationship between the craftsman and machinery, firstly in '*Art and technical training in the printing trade*' an address delivered to the Birmingham and Wolverhampton Printers Managers and Oversees Association (1928), which was followed by *Modern Linotype Typography* (1930) and 'Of making many books there is no end' (1933) recognising that printing needed to be fit for purpose following a sound design framework whilst ensuring the same rigour in creativity and imagination.

A revivalist typographic approach taken from analysis of the review may be summarised as follows:

- Carefully selected and proper use of materials: type, ink, paper
- No difference in approach in artistic and commercial printing
- Intellectual enlightenment
- Printing as an artistic craft
- Typeface selection; Garamond, Imprint, Caslon, Baskerville

The one hundred and fifty publications issued by the Birmingham School of Printing present a high level of technical skill and knowledge combined with traditional aesthetics for artistic bookwork, alongside a more Modern approach for commercial work. The typographic detailing under Jay's instruction as seen in image 19, is set out with the accuracy and quality of a private press. For example, for book work, a serif typeface was selected alongside illustration and ornate borders to add decorative elements. The commercial work was usually set in a sans-serif typeface with geometric ornament, an example of commercial work can be seen in image 20 overleaf. The output of the BSP followed convention and traditional standards, to showcase a myriad of typographic and

³⁹ Found at www.gutenberg.org.

print distinction and quality which placed students on an international platform, as the work was highly regarded around the world. There were ongoing tensions around aesthetics and processes employed to produce this beautiful ephemera and the elaborate synthesis of tradition, technology, process, function, form and message were constructed with superiority. There was opposition surrounding the way in which classes were run. The BSP meeting minute books of 1931 outline the opposition from the Typographical Association strongly disputed the pre-apprenticeship classes; the sessions were subsequently suspended. A return to the old system was advocated as cases were documented of men unable to get their sons into the trade.

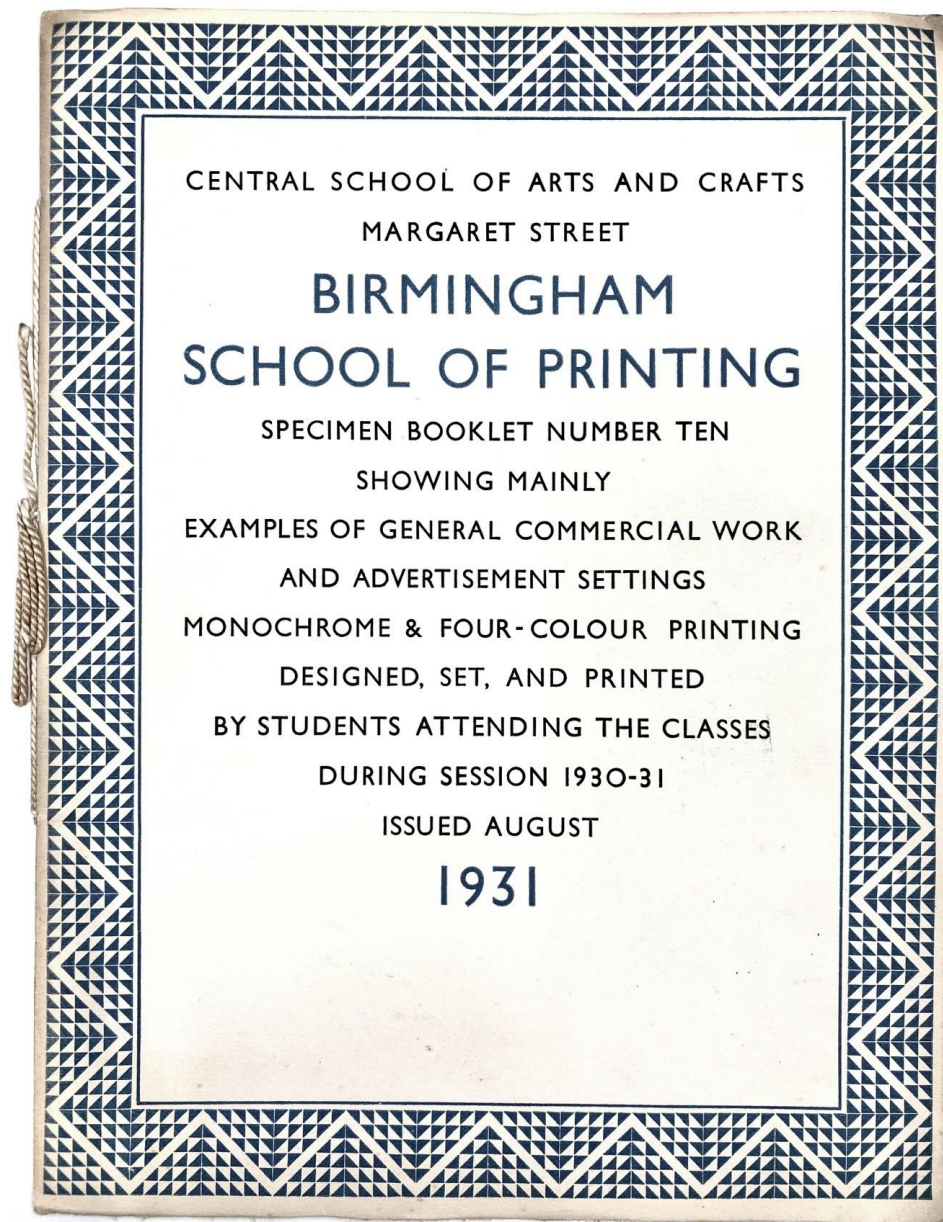


Image 20. An example of letterpress work by students and staff at the Birmingham School of Printing, dated 1933, under the direction of Jay

This discussion continued in academic years to follow with the Typographic Association stating the scheme has failed to produce boys of the right type and has superseded the systems whereby men already in the industry could apprentice their sons. Jay's approach to typographic pedagogies continued in an essay written in 1931, entitled, *Modern Linotype Typography*, 'Modern typography is expressing modern ideas in a modern way and modern methods. Modernism is the twentieth century means of simplifying all forms and arrangements. It is forceful, not academic, beauty first, last and all the time. Modernism recognises that printing must be first physically fit for purpose for the purpose it is designed for' (1933). While Jay understood that printing machines could 'duplicate vulgar art, vulgar design and vulgar typography' they could also produce work that equalled past masters and it all depended on the 'designers and craftsmen in command' (1933) of the machines. Jay's idea that modern printing had 'simplicity of thought, simplicity of character, simplicity of expression' (1933) were instilled in the students and staff at the BSP and enabled outputs that achieved a beautiful aesthetic quality using machines to create high quality printing.

An idea that was echoed by Paul Rand when he wrote 'the designer is aware of the scientific and technological developments in his own and kindred fields. He improvises, invents or discovers new techniques and combinations, He unifies and simplifies' (1933). In making better craftsmen he suggested, 'there can be no adequate technical training which is not liberal, which does not widen both trade skills and intellectual vision and the aim of technical education is to make efficient and better craftsmen' (1933) and the School's publications, issued under Jay's direction, offer an insight into the practical application of his evolving educational theories. Beatrice Warde recognised the significance of the output as a result of Jay's ideals, to make better craftsmen 'This school has produced a series of exhibition pieces, collectors' items, which at first were thrown away by the local printers; it has idealistically offered every lad a chance to work for once in his life on an 'untrammelled' job- some splendid page of which anyone could be proud. We may yet see in Birmingham a rival to the Leipzig Graphic Institute with the most renowned graphic artists of the land on the same staff as the most brilliant technicians'. (1935).

Meanwhile Jay was suggesting the aim of education in printing was to make more efficient and better craftsmen. He said 'students attending Linotype classes in the BSP are not only instructed in the manipulation and mechanical knowledge but in such matters as are calculated to have a keen fitness of things. Instruction is given in design and layout for book, general commercial and advertisement work and every opportunity is embraced by bringing before the student's examples of the best modern work of the best modern craftsmen' (1933).

Whilst later, Mumford observed 'technics and science demand autonomy and self control that is freedom in the realm of thought. The machine cannot know more or do more than the human eye

or hand or mind' (1952). These observations give an insight into the multiplicity of factors involved in the design and processes of letterpress practice and the teaching of these areas within the trade.

The Influence of Modernity and Visual Design Methods

A new movement saw methods of design combined with traditional craft sentiments and artistic formal elements as experimental approaches were introduced in a Modernist typographic revolution. There were tensions between these conventions and new ways of typographic expression. Stanley Morison insisted on the traditions of typographic design and that typography was 'essentially utilitarian and only accidentally aesthetic' with an unwavering 'obedience to convention' (Morison, 1930). Beatrice Warde supported Morison's new traditionalist viewpoint by expressing 'printing should be invisible, 'printing demands a humility of mind, for the lack of which many of the fine arts are even now floundering in self-conscious and maudlin experiments' (1955). Jan Tschichold focused on a form of new typography principles of communication. Kinross describes the unconventional typographic approaches being viewed as 'an incursion of artists blundering into the quiet preserves of book printing and therefore violating the wisdom of tradition and convention' (2004).

●
typographic ● dialogues
the interrogation of historical artefacts

The inquiry of existing and limited literature about Froshaug identified extensive writing by Kinross. This supported the understanding of a timeline setting out personal and professional connections. They revealed a publication *Anthony Froshaug, Typography and Texts/ Documents of a Life* (2001) It is a biography of Froshaug with a large collection of personal artefacts, printed ephemera, Froshaug's writings, personal letters and photographs, similar to a catalogue format with biographical elements. The documentation is meticulously arranged and presented by Kinross who assumed the role of Froshaug's editor instead of biographer. Kinross was a friend of Froshaug and he started writing the book in 1984 after Froshaug's death. The book is delivered in two volumes and is presented with chapters covering chronology, a selection of Froshaug's work and texts. The typesetting and page design was developed with advice from Karel Martens, and is an homage to Froshaug's concern of the practice of printing and design. The clarity of Kinross' approach in presenting this body of work lies in his thorough assimilation and dissemination of Froshaug's

papers that were not stored as an ordered archive of life and work. The valuable and thoughtful additions are his annotation presented through a footnoting system that is more like an ongoing and knowledgeable dialogue between the main parts of the books and thinking out loud, reminiscing, observations, interpretations of the data.

The personal insights and commentary are an intimate viewpoint of a writer and editor who has spent decades with the material and memories. I identified opportunities that were not explored in Kinross' book. A practical exploration of Froshaug's visual methods, his position on typographical theories, pedagogical approaches and design concepts. I wanted to explore the line that started in Kinross's book and a historical source developing into contemporary typographic practice. The documents and artefacts that were included in Kinross' publication were gifted to the *Design Archives* at the University of Brighton and this is where my visit to the *Design Archives* revealed a piece of printed material that became an integral area of primary research. This object was a piece of student work, completed with Froshaug. The student was Phil Cleaver and this was to make new connections in the research, as discussed in 2. Collaborative Practice as Research.

The archival study revealed many examples of Froshaug's work in which I was able to analyse, interrogate, touch and feel the documents. The examples of student work under the direction of Froshaug enabled me to view the project briefs, written by him in various pedagogical roles and the responses by students.

Froshaug registered *Isomorph Ltd*, his own publishing company and would go on to work with Tschichold and Max Bill (1908-1994) to publish their work. This gave him very close proximity to the thoughts and methods of two leading designers of the Modernist movement. Through these commissions and publishing jobs with Tschichold, Froshaug found a text called *Typografische Entwurfstechnik* (1932), a manifesto for typographers and designers on how to approach layout systems. This proved to be a highly influential text and enabled him to set out his own typographic classification systems, principles and layout design including *Visuelle Methodik/ Visual Methodology/ Methodologie Visuelle* (1959), *Typographic Norms* (1964), *Experimental Printing Workshop* (1966), *Typography as a Grid* (1967), *The Field of a Majuscule* (1975) that were to inform his instruction of typography and print, some of which, were used in his teaching.

The close proximity to the traditional and the education of the printing trade, at the Central and the work with pioneers of modern typography, was to form an intersection between the philosophies of a private press and the new typography, a new art that would inform Froshaug's teaching, theoretical writing and practice. Tschichold had further influence in the way Froshaug approached design. Many other designers and educators around the world were also enthused by the presentation of *The New*

Typography when it was published in 1928 and for decades to follow. Like *Typografische Entwurfstechnik*, it was a guide, a manual, a handbook for modern designers. It formed a historical and theoretical discussion with reference to typographic principles and categories. In his declaration, Tschichold insists, 'the new typography is distinguished from the old by the fact that its first objective is to develop its visible form out of the functions of the text'. He goes on to explain the dialogue between form and function as it was 'essential to give pure and direct expression to the contents of whatever is printed; just as in the works of technology and nature, form must be created out of function, only then can we achieve typography which expresses the spirit of modern man' (1928) and this spirit is transmitted through the 'the function of printed text is communication, emphasis (word value) and the logical sequence of the contents. (1928).

A modern typographical approach, from a review of primary and secondary sources of may be summarised as follows:

- The use of punctuation and syntax to divide and arrange text
- Layout to express ideas
- A statement of intention
- A sans serif typeface; Gill Sans, Futura, Kabel.

In viewing a selection of examples of work by Froshaug, there is a sense of all of the principles set out in *The New Typography*, where functionality, order, designed without decoration or embellishment is central to the approaches in typographic design. A space where typography becomes a system to question rather than a system to arrange typographic elements. Although that is also what Froshaug was demonstrating.

It is the concept of the creation of a system(s) to situate questions for new knowledge that supported the definition and scope of this research project. The combinations of hand typesetting and an experimental typographic approach can be seen through the changes in a central point and axial arrangement. A grid system and layout design is in place, through vertical and horizontal typesetting. A clinical approach to composition, with 8pt and 10pt Monotype Gill Sans serif, being selected to compose type to create a perfect balance through a combination of type size. Black and red ink are selected to ensure an unfussy uniformity to create a clear approach to presenting information and data. Functionality and experimental elements are explored through flourishes of experimental shape and scale are experimental, layered, employing techniques in overlapping and juxtaposing line and type form to explore visual language, with a consistency of order and structure. Hollis described Froshaug teaching approaches, 'what I would call 'scientific', ' It was very mathematical' (2016). Tschichold defines the creation of 'a new meaningful form. We believe it is wrong to arrange a text as if there were some focal point in the centre of a line which would justify such an arrangement. Such points of course do not exist, because we read by starting at one side'

(1928). He describes the conceptual and visual aspects through, 'axial arrangements are illogical because the distance of the stressed, central parts from the beginning and the end of word sequences is not usually equal but constantly varies from line to line (1928).

Froshaugs' typographic practice and pedagogical practice is a dialogue, a crafted conversation with interconnecting arrangements between practice, commercial work and his teaching. An example of this can be drawn from designs he was developing for Penguin books, the experimentation of layout and grid systems was used as a resource in his teaching. A generous way to support students in the understanding of approaching a brief that requires exacting standards to meet the needs of the publishers and the methodologies employed as a designer, such as aesthetic considerations that form an appropriate response.

Teaching at the Central School (1952-53) was conflicted, 'those running classes for printing –trade education and the typographic and graphic designers' (Kinross, 1992). Froshaug had been 'chosen for the job partly for his experience as a printer and he also stood for the new graphic design, breaking with the old illustration-based commercial art approach and this 'must have represented a threat to the trade printers at the school' (1992). Viewing archive material on the preparation and delivery of sessions, the clarity, sharpness, articulation and authority of the documents suggests lessons were designed with the same structure and aesthetic styles as his practice. Froshaug began to reframe the teaching of typography with ideas of how typography and print could be delivered in a more experimental way. Throughout the 1950's and 1960's Hansjorg Mayer (1943-) was developing experimental typographic works using a letterpress printing and Futura sans serif typeface and echoes the work from the Bauhaus in the 1930's.

Concrete art approaches were developed which were also indicated at the Hochschule für Gestaltung, Ulm, founded by a student of the Bauhaus, Max Bill, who would later work with Froshaug. Various teaching positions are documented at Hochschule für Gestaltung, Ulm, a guest professorship position at the University of Trondheim in Norway and at the RCA in 1961. Stuart Rose noted the commercial aspects of the teaching in the School of Graphic Design at the RCA, 'the subjects taught are commercial design, typography, lettering, illustration and bookbinding. Emphasis is laid on the fuller understanding of the interrelation of all branches of commercial design, not with the object of producing Jack-of-all-trades, but with the purpose of encouraging students away from the particular side of design in which they excel, but their eyes are turned towards the place they can best occupy in the worked of commercial design and their hands taught to grasp their subject with a professional firmness' (Rose, 1954). In 1953, the RCA had set up a printing press called the Lion and Unicorn Press and it published printed work until 1978, 'where students may become better acquainted with all the pitfalls inherent in print production. It is not intended that students

should study the technique of print production, the School is after all for designers and not printing operatives, but at a time when the closer relationship of a printer and designer is a matter of utmost importance the establishment of a press within a school is a most welcome sign of realism' (Rose, 1954).

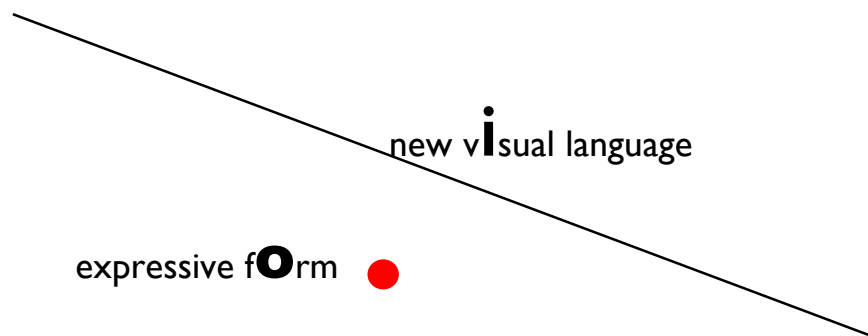
On viewing examples of the publications, there appears to be a traditional way of approaching typographic layout and printing at the time Froshaug was teaching. Examples of some work are reminiscent of that of the Birmingham School of Printing under Jay's directorship, many years earlier. Technical aspects of the practice hark back to a time when typography and print education was immersed in the private press movement. Ellis Thirkettle was considering the London School of Printing and Graphic Arts, moving to new premises at the Elephant and Castle, 'the purpose of the new building is not merely to rehouse the present work of the school in an up-to date- premises; it is equally important to make provision, as far as reasonably possible, for future developments in the printing industry and technical education' (1961). Detailing an extensive project that was to be completed in 1962, he explains the inclusion of new machines and traditional printing techniques, 'increased provision is made for practical instruction. These includes teletype setting, photo composition, colour masking, electronic engraving, powder less etching, plastic plate making flexography, film and foil printing, die stamping and photogravure printing, rotary letterpress, tin printing, box and carton manufacture and publishers' edition bookbinding. Separate workshops for research will be provided in the departments of graphics reproduction, lithographic printing and letterpress and foundry work' (1961).

The different approaches seen at this time, in numerous institutions show great disparity and the discourse in the development of print education differing from one institution to another. Froshaug wrote in 1967 'Typography, as taught in schools of art and captioned in the illustrated books, is mostly but a word delimiting a field of art-/craft history; books of types, of typographic ornaments and rules, of title pages. Typography has become the study of placing letters on a field: typography, a more precise form of lettering. It is time, after half a millennium, for the re-assessment of typography'⁴⁰. The aesthetic influences in his creative practice are Modern and far from the traditions of the old art school. The sensibilities of the Modern are embedded in Froshaug's practices, writings and teachings. However, in his personal printing press there is a conventional set up as in a private press. As the aesthetic aspects become experimental, the long established ways continue to underpin innovation and new technologies.

⁴⁰ Taken from Anthony Froshaug - Documents of Life, Typography & texts, edited by R. Kinross, Hyphen Press, London, 2000.

The Experimental Typography Workshop

As the industry made changes in the methods of design application, to dry transfer type and then the embarkation of a digital revolution, the terms graphic design and graphic art were introduced instead of compositor and printer, Richard Hollis explains that his generation 'went from hot-metal to photosetting to digital' (2001). At a time when 'computers changed everything, bringing total control to the designer' (2001). The literature published between at the beginning of the 1960's included a book by Josef Muller – Brockman called *The graphic artist and his design problems* (1961). This received notoriety of international authority on Swiss typographic methods and the principles of graphic art; the eliminations of decorative effects, unadorned typography, sans serif typeface selection, unjustified text. Educational institutions such as Basle School of Design, Switzerland developed programmes to respond by training graphic designers to be well versed in the graphic arts and embraced Muller- Brockman's design principles. Several technological changes demanded typographic pedagogy reflected the needs of industry and continues to follow a part instructional, conceptual, theoretical and practice led approach within a traditional print room setting. Kitching was a traditional apprenticeship and was a trained compositor. In *A Life in Letterpress* (Walters, 2019) he reflects on the printing department at and was 'They (the college) had three Monotype machines, a Linotype and an Intertype. The whole printing works, with beautifully polished floors and big windows, was absolutely gorgeous. All the equipment was brand new and sparkling and I was thrilled to bits' (2017).



In 1964, Anthony Froshaug who was to become Kitchings' mentor, took a position as senior lecturer. Froshaug renamed the print room, Experimental Printing Workshop. Kitching and Froshaug then developed a visual identity, at this time to develop an identity for a workshop was not the norm, 'Froshaug was brilliant at self-promotion and knew the value of it. He designed the letterhead. He came in one day with a pencil layout that was a great joy to typeset and print. We did an A4 letterhead and an A6 and so on. Black only, one size of type. I was totally absorbed' (2017). The workshop was initially led by Froshaug but as the relationship developed, Kitching started to contribute to more aspects of the design in the experimental workshop with work by the staff and students. This would form the basis of both Kitching and Froshaug's teaching and practice ethos, working in partnerships, collaborations, with discussions and an in depth inquiry. Froshaug documented how he valued Kitchings' pedagogical approaches 'Kitching was not originally engaged to teach; but the way in which he got on with all those using the workshop has led him to the position in which he has become consulted, more and more frequently, not as a 'mere' technician, but as a fellow – member of staff who encourages the enthusiasm of students; he has become a teacher in all but formal terms of appointment'. (2017).

Several books were produced, in collaboration with Mark Boyle. In 1970, Kitching published the *Typography Manual*, which was a tribute to Froshaug's *Typographic Norms*. Kitching explains the book was designed 'to facilitate greater accuracy and precision in the execution of typographical layout and specification than is normally achieved with standard specimen sheets' (2017). This typographic resource was set in a combination of various typefaces through hand setting and Monotype machine types. The Typography Workshop, London, was the end of jobbing printing and the start of letterpress workshops as a business. Froshaug and Kitching continued to create a new typographic language, through experimental letterpress techniques and processes. At this time, there was an intense period of experimental typographic approaches from Wolfgang Weingart (1941-2021) and this expressive form of typography, an invention of a new visual language was disseminated as he contributed to a publication, *Typographic Process*, (printer G. Gissler Basle). Literature published during the 1970's appears to present methodologies by reinforcing aspects from earlier decades. Lewis (1978) and McLean (1980) present typographic elements in a historical context, with process led concerns such as print production and legibility.

These publications at this time as with material throughout the decade are a valuable reference tool for the student or practitioner, to view the technical processes of typographic knowledge and creative processes. In *The Fundamentals of Creative Design*, the publisher describes the approach of the publication 'through detailed diagrammatic explanation, associate theories and historical

references to explain the underlying principles of design. Accompanied by examples from contemporary designers and practitioners' (Ambrose and Harris, 2003), This format to design practice aims to present and disseminate practice within a historical and contemporary context to inform practice-led approaches. In *Elements of Design* (Anderson, 2003) the aim of the publication is to present a range of design artefacts, across disciplines and through a timeline outlining aesthetic elements associated with the period, a beneficial device to the connectivity of aesthetic elements and design history by period.

The literature sets out functional methods in the application of typography through historical and/ or technical. The 1980-1990's saw a renaissance in radical typographic experimentation through new digital technologies. The review identified many designers and practitioners who contributed and led at this time, very few through publishing their practice, for example, Tomato (1999), Fuel (1997), the review identified little evidence of theoretical observation and/ or debate. Rick Poyner produced a critical survey of postmodern typographic practice, explaining a move away from typographic principles. In *No More Rules*, Rick Poyner set out an argument that reverberated through the graphic design industry. As designers declared an overt challenge to 'conventions or rules that were once widely regarded as constituting good practice' (2003). By the end of the 1990's and moving into the new millennium, the re-examination of traditional typographic practice and pedagogy Robert Bringhurst (2001), Phil Bains and Andrew Haslam (2004), Ellen Lupton (2004) indicates how looking back can inform the new and now. Educational institutions developed programmes to respond by training graphic designers to be well versed in the graphic arts and embraced Muller- Brockman's design principles. Several technological changes demanded typographic pedagogy reflected the needs of industry and continue to follow a part instructional, conceptual, theoretical and practice led approach within a traditional print room setting.

The workshop was initially led by Froshaug but as the relationship developed, Kitching started to contribute to more aspects of the design in the experimental workshop with work by the staff and students. This would form the basis of both Kitching and Froshaug's teaching and practice ethos, working in partnerships, collaborations, with discussions and an in depth inquiry. Froshaug wrote, 'Kitching was not originally engaged to teach; but the way in which he got on with all those using the workshop has led him to the position in which he has become consulted, more and more frequently, not as a 'mere' technician, but as a fellow – member of staff who encourages the enthusiasm of students; he has become a teacher in all but formal terms of appointment'. (Walters, 2017) Several books were produced, in collaboration with Mark Boyle. In 1970, Kitching published the *Typography Manual*, which was a tribute to Froshaug's *Typographic Norms*. Kitching explains the book was designed 'to facilitate greater accuracy and precision in the execution of typographical layout and specification than is normally achieved with standard specimen sheets' (2017). The *Typography*

Workshop, London, was the end of jobbing printing and the start of letterpress workshops as a business. Froshaug and Kitching continued to create a new typographic language, through experimental letterpress techniques and processes. At this time, there was an intense period of experimental typographic approaches from Weingart and this expressive form of typography, an invention of a new visual language, his work was disseminated as he contributed to a publication, *Typographic Process*, (G. Gissler Basle). Kitching's place in the chronological ordering of the research leads us to today, as he is still practising and teaching through workshops. The printing industry and print education is a very different landscape now. I now turn to the recent and current activities in contemporary letterpress practice.

A Topography of Letterpress Practice

The Letterpress Workers International Summit (founded by Officina Tipografica Novepunti, 2012) is an annual exposition where printers from many countries congregate in Milan, Italy to print, present, debate and publish. A project that brought together different institutions is the *6 x 6 Collaborative Letterpress Project* (Cooper, Gridneff, Haslam, 2014). These are now part of an established and ongoing community of printers, typographers and designers. From practice and pedagogy perspectives, the field is buoyant and dialogues between staff at various institutions are ongoing, looking for opportunities to use print room equipment to facilitate cross disciplinary projects. More recently, *Hands on Type Learning from Letterpress Heritage*, Esad College of Art and Design, (2021). A conference and workshop programme that sought 'to explore and reflect on graphic production, the use of moveable types today and the promotion of teaching methodologies based on know-how' (Dias & Meira, 2021).

From a commercial perspective there are letterpress printed cards and stationary in many retail outlets. Print shops are open for workshops and commercial projects, albeit this is still a challenge for print shop owners and designers as it is usually conducted on a part time basis and is subsidised with other means of income. An example of letterpress in a commercial print shop setting is Typoretum is a family run creative letterpress printing and design studio in Colchester, UK. Founder Justin Knopp runs the studio with his wife Cecelia. Knopp runs the print shop for commercial projects, creative projects, workshops to share knowledge, as well contributing to academic locations. Their work is published in *The Wall Street Journal* (Jemima Sissons, 2012), *Letterpress – The allure of the handmade* (David Jury, Rotovision, 2011) and *Reinventing Letterpress* (Charlotte Rivers, Rotovision, 2010), in conference *Letterpress: Forward Thinking* (St. Bride Library, 2010) and in exhibition *Reverting to Type* (Standpoint Gallery, London, 2010-11). Knopp demonstrates that there is a value in letterpress that goes beyond the print shop walls. He indicates this in the way that he interacts with all these different facets of his practice in dialogues that can be applied in many formal and informal ways. A consideration that is time specific is that one of the master printers who share their knowledge in this research are retiring. Thomas Gravemaker has transferred the running of his print shop Letterpress Amsterdam on to others in the letterpress community. Letterpress Amsterdam is where I completed residencies in typesetting and letterpress printing under the instruction of Gravemaker. He is sharing through workshops and helping others set up print shops and his knowledge runs through this study through the time spent printing with him in Amsterdam. This is an exciting prospect where this research and my pedagogical practices can help to fill a void through the practice lineages as discussed in the next section.

Experimental Letterpress Practice Lineages

This area of the project provides a way to visualise a complex set of networks that were highlighted in the review, creating a series of lineages of interconnecting elements of the historical study and to locate my typographic practice within the sphere of the relationships. I am able to trace lines of inheritance associated with this project to identify conceptual, intellectual, technical, and visual elements. The structuring of the data through a time chart, a chronological ordering and positioning of the traditional and historical practices to form the logic of methods has created an emerging approach in my practice.

/ • design descendants;

lineages _____ in the research project

My typographic design practice is constructed through the interactions with the historical visual examples and artefacts identified in primary and secondary research, accessed through archival research. The emerging typographic experimentation is developed through print workshop interactions with others in activities such as Letterpress Workers International Summit and Thomas Gravemaker, as discussed earlier. The experimental practice with Cleaver and Thomas identified the development of work with the design principles, as highlighted in this project research practice. The interactions and praxical interventions are now creating new ways of knowing and doing. The findings of these connections can be seen in 4. Findings: Historical Lineages.

The concept for these visual manifestations of chronologies and connections has been adapted from Stefan Themerson's *Kurt Schwitters on a Time Chart* (1961)⁴¹ where he placed Schwitters on a map of time. In this way, I have placed connecting elements in a series of research lineages. The lineages depict systems and constructions to show the synthesis of the narrative. I did this by using a collage of type and image arrangements and combinations in a diagrammatical way that is amended, added to, refined with various textual elements and insertions. A complex series of lines and dots to signify networks and overlaps. In her ethnographic work on the use of visual representations Henderson (1999) found that visual representations had an ability to be a holding ground for and negotiation space for explicit and tacit knowledge and this space is enabling the formation of a new community of practice (Wenger, 1998).

⁴¹ Published in *Typographia*, Issue 16, (December 1967).



Image 21. The research lineage. A collage of printed materials, in the Parkside print room at Birmingham City University. Preparing for letterpress and screen print overlay elements. A way of visualising the connections made through chronology

Furthermore, what happens from here?

This historical survey reveals several aspects that informed my research methods as a dialogue between the historical study to experimental practice. I have sought to create a critical dialogue that goes beyond the commentary of historical, social and technical aspects that dominates extant work. In doing so I have identified both the strengths of our existing knowledge and the opportunities to develop new forms of understanding. In particular, I would highlight the most useful insights as follows:

- Printing and typographic knowledge has been traditionally learnt through practical experiences. The primary sources of the writings of Mason, Jay, Froshaug and Kitching enables us to identify the approaches and philosophies applied in their creative and pedagogic practices, while the secondary sources inform a wider history, that provides an observational and or commentary of the approaches of the individual letterpress designers in their educational, social, political, cultural landscapes.
- Experimental typographical approaches were being applied earlier than is usually suggested, as traditional methods occupied a central approach in pedagogy. Experimental examples are found in the Mason archive at Central Saint Martins, London under the headship of Mason, *A Typographical Experiment (1935)* and this changed radically how I saw experimental practice as research
- The majority of the literature I reviewed presented a functional perspective. There are distinctive exceptions that present a uniquely critical approach to practise. These include Teal Triggs's *the Typographic Experiment: Radical Innovation in Contemporary Type Design (2003)*, Robin Kinross's *Anthony Froshaug, Typography and Texts/ Documents of a Life (2001)* and Wolfgang Weingart's *My Way to Typography (2000)*
- Pedagogical Practice literature is vast and has been approached by locating sources in praxis, practice-based research, practice-led research, arts-as-research and action learning.

I extrapolated from this literature to create a diagram of practice research framework to represent a structure of typographic practice; to develop a *design context* as a response to the dominant *creative context* category to enable a more focused approach to a vast amount of literature. This acted as a bridge for my thinking about the knowledge required for contemporary typographic practice and pedagogy. As a contribution to rectifying the shortage of literature for principles of traditional typographic practice for contemporary experimental typographic practice, I established a practice-based framework that can be implemented through creative practice. I also drew out examples of experimental practice throughout the historical period I examined. This can be used as a springboard

for ongoing collaborative practice with peers, academic colleagues, practitioners to create a body of experimental practice that demonstrates conventional design principles in contemporary work.

This assessment has enabled a way for critical approach as a field of historical inquiry. The approaches did not have any blueprints to follow. The review allowed a way to develop systems in visual experiments that encompass strict typographic conventions as well more fluid, flux areas. To relate this to the research question; exploring ways of reformulating experimental Letterpress practice, its scope and potential in pedagogical situations is a way to assist in the bridging of a theoretical gap between design histories, contemporary practice and pedagogy. My proposition is to place the practice of contemporary experimental letterpress practices within the context of a set of established conventions as identified in this study to form a code to address visual communication problem solving;

- The creation of a reference/ resource of traditional principles to be retrieved and applied in the development of practice and a portfolio of experimental work
- An inquiry is generated through the development of experimental work and a critical discussion through praxical interactions
- New networks can be developed amongst students and practitioners initiating new visual systems of practice

There is an adaptation of conventions, as seen in diagram 10, to form the research methodical approaches. A way to continue the understanding of historical and traditional design knowledge and the connection of process and praxis. In order to propose a repositioning of experimental letterpress practice as a field of study there is consideration given to the sharing of skills and knowledge by educators. This is a time critical issue in contemporary practices, as the lineages in this research reveal. Cleaver and Thomas amongst others who have contributed to the collective knowledge in this project form a vibrant passing on of their skills and are revered in creative circles. The praxical interactions through collective practice sessions supported the development of hybrid exchanges. The historical components were necessary to engage with a system to apply the knowledge. This is where new categories were investigated. An intersection and a tension between the old and the new. In the understanding of design culture, design history, the criss-crossing of method and theory Kjetil Fallan argues 'design history is no longer primarily a history of objects and their designers, but it is becoming more a history of translations, transcriptions, transactions, transpositions and transformations that constitute the relationships among things, people, ideas' (2010: 10). This stimulates a critical approach, an opportunity for a more self-directed discovery and design practice. This is in relation to the methodological approaches explained in section, 1. Experimental Practice as Research and 2. Collaborative Practice as Research and in 4. Findings –

Historical Lineages and 5. Findings – Experimental Practice. In chapter four I use this broader history, and the conclusions I have derived from my analysis of this work, to detail the key lineages I have worked with and how they have informed my collaborative and individual experiments.

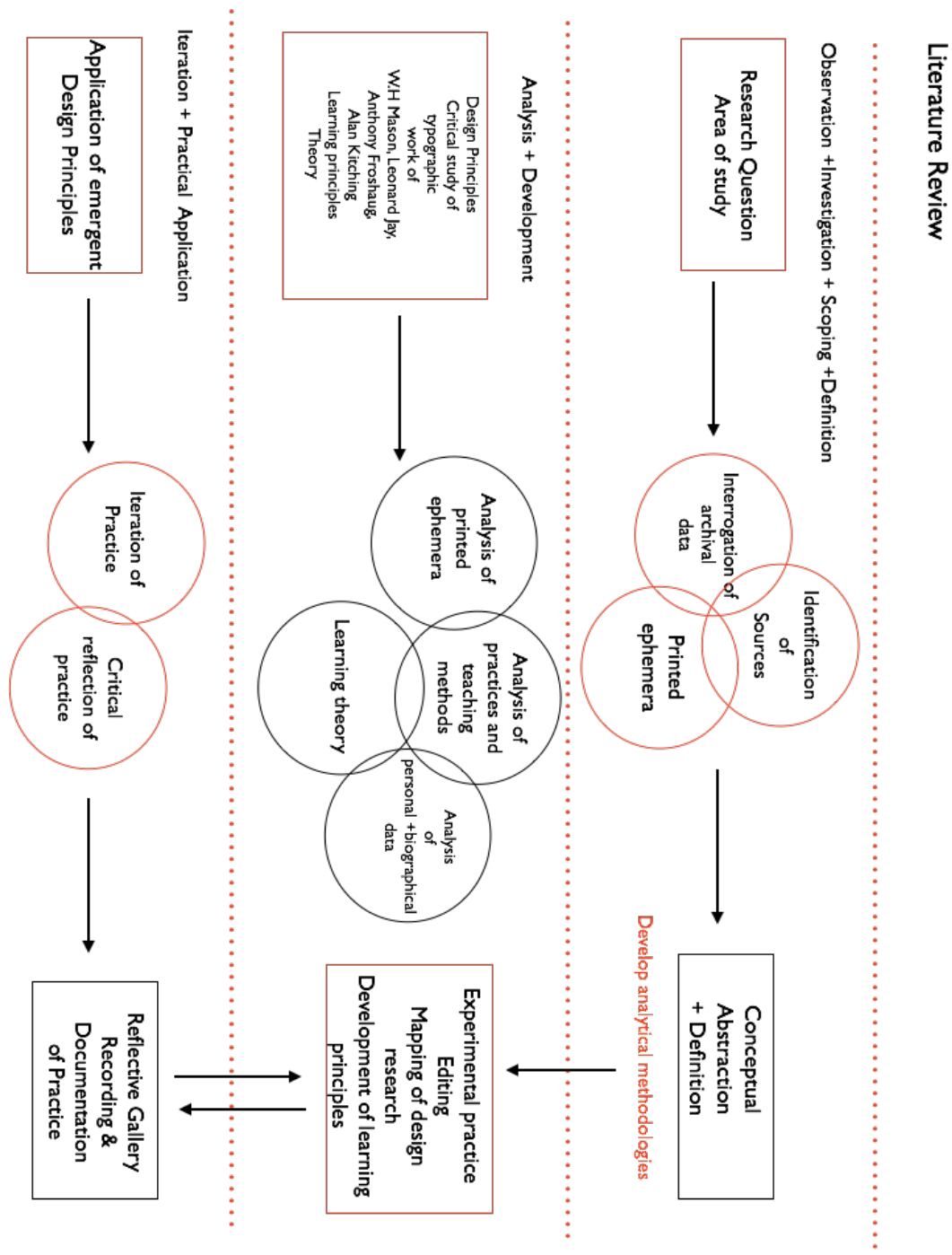


Diagram 10. This is the research literature review workflow that sets out the iterative and developmental approaches. 2020

4. Findings: Historical Lineages

Introduction

●

This part of the study builds on the outline of the research methodologies and the historical context in the first to chapters. It progresses through the development of the creative lineages that are at the centre of my study, informed by the literature review and the exploration of letterpress practice through individual and collection experimentation. My findings on three lineages are presented in this chapter. These lineages provide an interesting contrast of direct and indirect transfers of knowledge. Firstly, in the *Assembling the line*; a system to unify the research field section below, I identify associations with several practitioners and educators that emerged as part of the research network and developed into creative practice. The practice, seen in *Collective Practice with Cleaver and Froshaug* is a lineage of knowledge that follows a direct line from Froshaug to Cleaver, then to me. The second lineage, detailed in the *Collective Practice with Thomas and Jay* section, draws upon an indirect network of learning where concepts and principles are explored through the study of letterpress objects and philosophical aspects concerning concepts of ornamentation that were identified in the review. They are also the product of Thomas' education and teaching practice as part of the Mason, Jay, Froshaug networks at the Central and RCA. I am part of this broader, indirect lineage encapsulated in my own education and teaching practice at the Birmingham School of Art. The third lineage is presented in *Experimental letterpress practice – the possibilities and the limitations*. This is another distinct line of knowledge where the networks of learning are defined through research findings formed from the combination of individual and collective practices. These developed through and in the research lineages where an emerging lineage was created as I worked with a postgraduate student at BCU who was studying the MA Visual Communication programme.

In the consideration of these direct and indirect lineages of knowledge, I look to Triggs and Atzmon when they highlight Object Orientated Ontology (Bogost 2009, 2012) as a 'school of thought that emerged from philosophy' (2019: 863). Object Orientated Ontology suggests that graphic design artefacts have their own qualities and networked 'social lives' (2019; 863). This is where 'their frameworks for design thinking change those who make, use them, experience them and those who make and use artefacts are likewise changed by them' (863).

These three lineages were developed from the connections of and to people within traditional typographic practices and pedagogies that were identified as part of the review and became embedded in the creative practice exploration and not only interrogated the arrangements through

the lineages but also created 'living networks' (Vinh, 2011: 131). Vinh's viewpoint is that 'living networks' are created through 'crafting' (2011: 126). This is where designers 'iterate solutions in response to each other' (131). To this extent, the links made through the lineages encourage participatory crafting and create new liaisons. As Triggs and Atzmon assert 'traditional graphic design processes and artefacts stand-alone' (866). However, it is how they mesh with iterative actions through the three lineages in interpretative engagement with analogue techniques.

The positioning of Mason et al and current influential contemporary practitioners in the field of letterpress practice created an area for experimental research. These collective interactions as a method to support the main argument led me to construct creative practice situations that exploit conventions and see new ways though experimental printing methods and processes. Howard Bloom describes this as a 'collective learning machine' (2000: 42). Whereas Paul McNeil discusses the concept of 'mechanical sequences' (2019: 9) when he is introducing Analog Algorithm by Christoph Grunberger. In these ways, the mechanics of the combined practice are the methods of the grid system (design principles), as discussed in chapter 3. McNeil goes on to discuss Grunberger's visual system as 'prescribed procedures ... (driven by) constraints, rules, conditions, grids, codes, permutations' (9). Like Grunberger's device for exploration, the collective practice in this study has offered an interrogation to create meaning in answering the question. As such, the historical connections, the historical lineages and the grid system became shared interactions in contemporary practices throughout the duration of this project. Mason, Jay, Froshaug and Kitching are situated in the design research starting in the historical survey, the forming of the narrative through experimental letterpress process and method. I will discuss my approaches to creative practice research through histories, the emerging practice and the profound way these activities enabled the extensive development of experimental practice. This manifested itself through a series of visual lineages and culminated in a visual index; a crossover of the research lineages and the experimental practice discussed later in the chapter.

Assembling the Line: A System to Unify the Research Field

The assembling of the research line(s) is a simple way to suggest how the connections between the historical elements and the creative practice were approached. However, it was the most complex of areas to organise. And it was in this complicated, messy part that needed structure to make sense of the disorder through visual arrangements. The forming of a structural visual framework was established as a way of sorting the lines of research and lineage. I looked to Alfred Barr in the way he presented complex networks of data through a diagram for the exhibition *Cubism and Abstract Art* at the Museum of Modern Art, New York in 1936. Lowry framed Barr's approaches as 'an attempt to map how abstraction came to be so important in modern art' (2013: 359). This sees Barr design a 'series of interconnecting lines through a chart that has' two principal axes: on the vertical, time and on the horizontal, styles and movements' (359). In 2019, the artist Hank Willis Thomas reimagined Barr's diagram as *Colonialism and Abstract Art*. Thomas exposed a more sophisticated graphical presentation as new technologies are now utilised in the design process, in comparison to Barr's map that gives a more visually naïve teleological approach. It is in this comparison between the two diagrams that my intentions for the visual elements in this research, through the lineages, showed the method of analysis rather than displaying a consideration of aesthetical aspects. The networks and maps are part of the method of documenting in visual ways to help structure the relationships in histories and contemporary practice. I approach this by creating collages of processes with a combination of two, three or all of the following collections; images, printed artefacts, typewritten elements, transfer type, letterpress, screen prints and hand written notations as seen in image 21. They show the formation of the lineages through analogue process. Some of the lineages feature pictorial elements to highlight a different kind of grammar. Hofmann describes 'an abundance of insights emerges when one pictorial object is confronted with a second one. Just as letterforms are signs, pictorial signs also function, in a certain sense, like an alphabet. It is very important to realize that, in addition to the grammar of the word, there is also an authentic grammar of the picture' (2020: 34)⁴². Jessica Svendsen points to letterpress processes as a way to understand the visual and textual, she reflected on this 'as I set type, letter by letter, I began to understand the relationship between the textual and the visual. I realised that the form could not only illuminate the meaning of the text but also create new meaning' (The Recorder, 2014: 97). It is the layers between type and images, the lineages highlight a metatextuality between the historical objects (the explicit) and the interpretations (the implicit) through analogue printing processes.

⁴² Armin Hofmann on the *Significance of the Sign*.

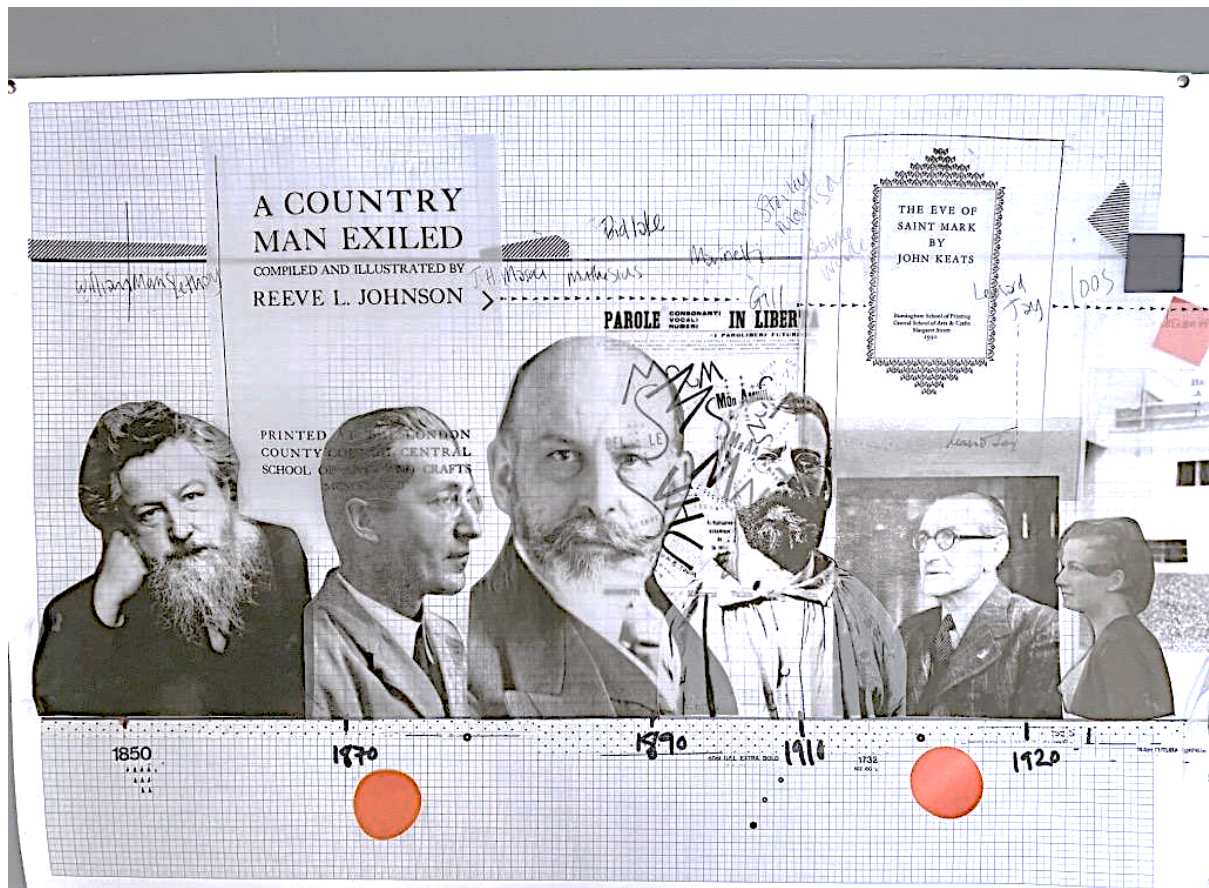


Image 22. This is a section of one of the historical lineages showing a timeline of the horizontal axis with key connections in pictorial form. Textual notes and typographic elements are added alongside the relevant milestone in chronology

In *Visual Research, An Introduction to Research Methodologies in Graphic Design*, Noble and Bestley discuss the concept of visual research as ‘the designer as author and graphic design as a form of visual journalism’ (2005: 90). Building upon this proposition lends itself to the positioning of the analysis of the historical artefacts to inform the methods of chronology that supported approaches in the printed objects in the creative practice parts of the research. This saw a duality in the research; firstly, it became a space where I was composing in letterpress and printing processes through the construction of the lineages and secondly, being an editor and broadcaster of the visual elements in graphical interrelations of experimental practice. Noble and Bestley go on to surmise ‘the terminology used in the analysis of texts might be replicated in the description and construction of new material in order to qualify the intention of the designer more clearly; this can be seen as the shift from the analysis to proposition (92). The methods in visual chronology enabled ways in the consideration of my place in the histories as Hollis observes ‘if you learn from what people have done very well previously and try to reconstruct what was happening, both in their minds and at the time, and what technology was available, it helps you to understand the process of design’ (2020:

191)⁴³. This was a time to transform connections found in the review of secondary and primary materials through visual interventions, seeing them as connectors in the continual shift in positions and positioning of the data and artefacts. These translations were formed from network analysis (Scott, 1991) where 'building upon definitions of points, lines and paths' (1991). In this part of the research, the points became dots, the lines continued as a line and the paths became abstracted type forms in the consideration of interpreting the material. Sharon Helmer Poggenpohl argues that network analysis discloses 'interpersonal networks' (2019: 264) that when examined can reveal 'their overlaps based on shared interest and ideas to form a community of practice' (284)⁴⁴. With this in mind, I became part of a line of design descendants in the lineages of the research.

The translating of historical articles led to the identification of critical patterns enabling the relationships of connections between and amongst the publications and artefacts in the review and therefore the discussions of history, practice, principles, theory and pedagogy. The assemblage of explorations showed the process of how the critical review facilitated an investigation in the reinterpretation and reordering of traditional aspects. It also provided the layers of research that fluctuate between method and process, to construct knowledge. These are presented as complex textual and visual forms to encapsulate the multiplicity of method and process, as Sullivan describes 'while the mode of communication is language based, the means of representation invoke many artistic forms that are used to capture, reflect and inquire into the multiple textural realities being explored' (2006: 23). The valuable connections that were captured in chapter 3 promoted an expanded praxis of interactions between the historical and the creative practice. As set out in Chapter 2. In the search for a framework to support the dialogue and transition between the two, the analysis of the creative and pedagogical practices of Mason, Jay, Froshaug and Kitching were collated and interrogated, this is where a set of design principles was determined to test typographic practice. The situation of the principles means there is an assertion of determining an arrangement of rules, specific to this study, to connect ideas and different elements. Karl Gerstner (1930-2017) describes this as 'designing programmes' in the 'creative arrangement' where an essential line lies in between 'the design, to design, the designer, etc. and the programme, the to programme, programmatic, etc.' (1964). The framing of the research network has been developed into a system to map the propositions and this in turn creates a platform for experimental exploration. The interrelationships between the textual and visual materials of this research is one of showing and telling (Spencer, 2011) although Noble and Bestley offer a 'synthesis' (2005:167). They look to Jan van Toorn in his essay *Thinking the Visual: Essayistic Fragments on Communication Action* (1994) when he discusses 'critical reflection' (172) in research. The lineages hold this reflection by what Andrew

⁴³ This was originally an interview between Brad Haylock and Richard Hollis in 2016, in London and published in *One and many mirrors: preservatives on graphic design education*, edited by Luke Wood and Brad Haylock (2020).

⁴⁴ First published in *Visible Language*, 42 (3) (September 2008): 213-36.

Blauvelt positions as 'rethinking practice' (172) arguing for an integration of theory and practice' (Noble and Bestley: 172). However, the research assimilations are explicit through the connections that are 'visual explanations' (Tufte, 1997) and retain the dots, lines and forms in 'critical visual thinking, to display the evidence of making research and design decisions' (Tufte, 1997).

The ways in which I present the textual parts of the telling, of how I developed the methods of research and subsequently the findings are sometimes best described in an unconventional use of syntax where the formal patterns are disrupted to show my creative idea. The text will be presented through the visual artefacts of the creative practice as well in the text. Consequently, the visualisation of disparate sources enabled a way to take abstract information, a tool for thinking (Rood, 2010). This research investigates the connections between abstract data and visual form through experimental visual language. Looking to Weingart's approaches in experimental typography he provides a terrain with 'a wide variety of syntax' (Zurker, 1978: 2) through a combination of 'the creative idea, the typographic elements and the practical techniques employed' (1978: 2). This culminates in the text 'not being presented as absolutely and objectively readable' (2), inviting 'intensive discussion' (2). It is in this way that I have positioned the lineages through the project as part of the typographic process. This relationship is intrinsic, tangled and in flux as I navigate through an amalgamation of order and irregularity. The research methods, or programmes create the order to enable a new field to examine conceptual, theoretical, philosophical and experimental practice situated in this study. The sources in the investigation into the educational and professional profile of Mason et al to develop an understanding of their training, beliefs, approaches and experiences informs the development of the project narrative. It was not appropriate to develop personal biographies as these have already been documented, however, the analysis follows professional and biographical chronologies that reveal details in the development of the research discussion to shape the development of research methodologies and typographic practice. I explored chronological ordering and structuring systems through an assemblage of textual matter, to formulate a visual presentation using secondary material that pertain to traditional practices. In *Explorers: Thoughts on Mapping in Design Research*, Megan Anderson suggests 'visualising complexity is one of the key ways we add value in highly collaborative settings' (2020). Timelines 'can be conceptualized as a sort of map: a map of time' (2020). Through the visualisation of chronological ordering, 'design research methods are able to capture all sorts of historical data (2020). An online platform, a timeline of histories called *Historiography* designed by Matan Stauber, created as a final project in Bezalel Academy of Arts and Design is an interactive timeline that draws historical events from *Wikipedia*. The viewer selects events 'where every dot is a historic event'⁴⁵. On reflection of this kind of

⁴⁵ Accessed on <https://histography.io>.

mapping, it is an invaluable resource to locate events in chronology, however, the data, whilst structured and accessible, does not receive the nuances and in depth analysis of a review in secondary and primary objects. The viewer can zoom in and out of chronology and slip between inventions and constructions however, complex historical ideas and theoretical rhetoric. Whereas, in *Cartographies in Time: A History of Timelines* by Daniel Rosenberg and Anthony Grafton ask 'what does history look like? How do you draw time?' (2010: 26). These questions from my point of view as a researcher and designer are tantalising because there are so many problems to solve within these two concise propositions? However, the research question is not about timelines so I will focus on why I am visualising the data.

I explored graphical and abstract forms as part of the dialogue between the different areas of the study. The lineage in image 23 is an example of one of the iterations of the lines of enquiry and refers to the links between the chronological ordering and the graphical elements.



Image 23. Making connections through a visual chronology of influential figures and collaborators in typographic practice and pedagogies. The lineage starts with William Morris and sets out the connections through through the historical and the collaborative elements drawn together through the study

A line was drawn through the review and inquiry of this part of the project. A line that saw the convergence of several practitioners and educators. This allowed for a network of connections that can trace the historical through to my experimental letterpress creative and pedagogical practices. And the formation of various lineages, through several iterations and processes shape the project and outcomes. Daniel Friedman indicated a process as ‘a system of operations or a series of changes or actions in the production of a result’ (1978: 10). While Lupton suggests ‘design is a messy process’ (2010: 4). She advocates ‘three basic phases of the design process: defining the problem, inventing ideas and creating form’ (6).

In the development of lineages, the analysis of historical objects was part of actions to facilitate emerging practice through individual and collective practices. Friedman goes on to suggest 'each result in the sequence of events therefore becomes an expression of each part of the process' (10). In each of the lineage iteration or sequence, the evaluation of information was a way to encourage testing of the method through a method of 'structuring, emphasising and de-emphasising' (10).

Lineages one, two and three presented in the following pages, set out the lines of inquiry that respond to the research question. The way in which the knowledge is explored, shared and developed in individual and collective ways brings clarity and purpose to the sharing of data through systems of practice as set out in 1. Experimental Letterpress as Research and 2. Collaborative Practice as Research. With this in mind I gave consideration to Jeremy Aynsley when he evaluates Dick Hebdige's arguments around the reading of material as 'a process of negotiation, a multi-layered and variable process can co-exist' (2019: 149)⁴⁶. In these layers of the lineages there is an interpretation of the historical through the relationships among the practitioners and educators. This demonstrates how visual and diagrammatical structures facilitate critical exploration. Furthermore, there is an interconnectedness in the understanding of the layers. I reflected on Triggs and Atzmon when they consider the text *Design Literacy, Discourse and Communities of Practice*' (2008) by Poggenpohl as she discusses 'the differences between tacit knowledge, learning by doing and by imitation and explicit knowledge, learning through explanation, analysis and transformation' (2019: 214). The organisation or translating of the data through the lineages sees a combination of tacit and explicit knowledge to create a new cooperative of letterpress practice in the visualising of the research method as opposed to one approach in the promotion of new philosophies.

The lineage in image 23 shows the interactions of the connections that were identified in the research review and expanded through the creative practice. This research time chart offers a visual way to interpret the lineage of interconnecting practitioners, to trace the lines of inheritance. There are many interactions through the study, however, there are two main collaborations within the lineages where the knowledge manifests through a series of interconnecting creative and pedagogical encounters. This happened with Cleaver and Thomas. These associations were approached in different ways, as discussed in 2. Collaborative practice as research. The experimental practice developed and produced through the exchanges was also different due to the conceptual and methodological approaches; there was, however, a consistency drawn from the traditional conventions and design principles. It is here the study saw several 'emerging languages' (Paradis, Fruh & Rappo, 2013: 131-180) through distinct collective actions.

⁴⁶ This was art of an article in *Gebrauchsgraphik* as an early graphic design journal, 1924-1938 by Jeremy Aynsley, published in *The Graphic Design Reader*, edited by Teal Triggs and Leslie Atzmon (2019): 149 This was first published in the *Journal of Design History*, 5 (1) (1992): 53-72.

I consider Weingart when he proposed a series of covers for *Typografische Monatsblätter* (1960-1990) exploring the themes of 'Seeing, Reading and Learning' (153). The series 'consisted of typographic interpretations where he 'cited designers from published works or personal correspondence' (153)⁴⁷. In this way, I am seeing, reading and learning through collective activities submerged in the historical lineages drawn from the secondary and primary objects in the research review. In the next section I will discuss the findings of the collaborative practice with Cleaver and through this alliance, with Froshaug as well.



Image 24. The research time chart presented an opportunity to reveal critical lineages between the historical and creative practice areas of the study through a combination of print processes. There are various techniques used to develop this lineage; transfer type, letterpress printing, screen printing, digital printing, hand drawn elements and collage. This creates a dialogue between the elements drawn together on line of time.

⁴⁷ This was originally part of *My Way to Typography* by Wolfgang Weingart, Lars Muller Publishers, 2000, p392.

Collective Practice with Cleaver and Froshaug

In reflecting on the collective practice with Cleaver, there is a line to trace in the network of associations. Cleaver had received tuition from Froshaug imparting his knowledge to Cleaver, Cleaver then completing the tasks set by Froshaug, gaining tacit knowledge, then sharing and imparting that knowledge with me, initially through instruction and then in a collaborative way. This was based on written and verbal recollections of the teaching methods of Froshaug and Cleaver's own experiences as a designer and educator. The collaborative practice was formed from a combination of Cleaver's experiences under the tutorship of Froshaug, my analysis of the primary source material held at the Design Archives, University of Brighton, and Cleaver's personal archive of work. In diagram 12 sets out the collective practice approaches. The collaborative experience started with several planning conversations about how to approach the activities including the print room locations. The print room at Parkside, Birmingham City University and the Winterbourne Press, University of Birmingham were selected to explore the different collections of wood and metal type and printing presses. A text was selected as an anchor for the exploration of typesetting. The early stages of the collaborative practice were like a traditional learning mode of a master-apprentice like dynamic. I was experiencing a learning and teaching model similar to Cleaver's own experiences with Froshaug, my participation in the design process was to receive instruction.

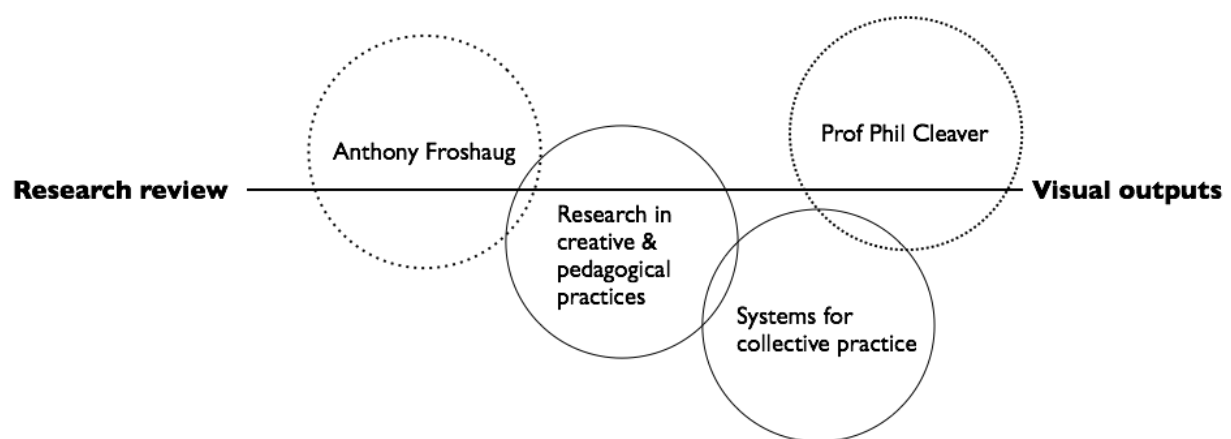


Diagram 11. Lineage number 1, 2022

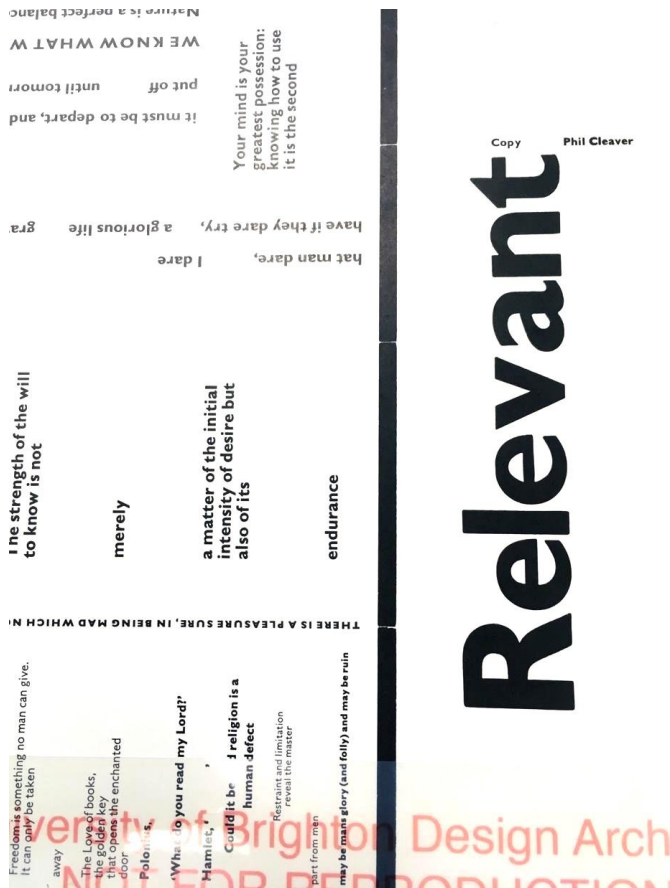


Image 25. An example of Cleaver’s letterpress work as a protégé of Froshaug. Accessed at the Anthony Froshaug Collection at the Design Archives, University of Brighton

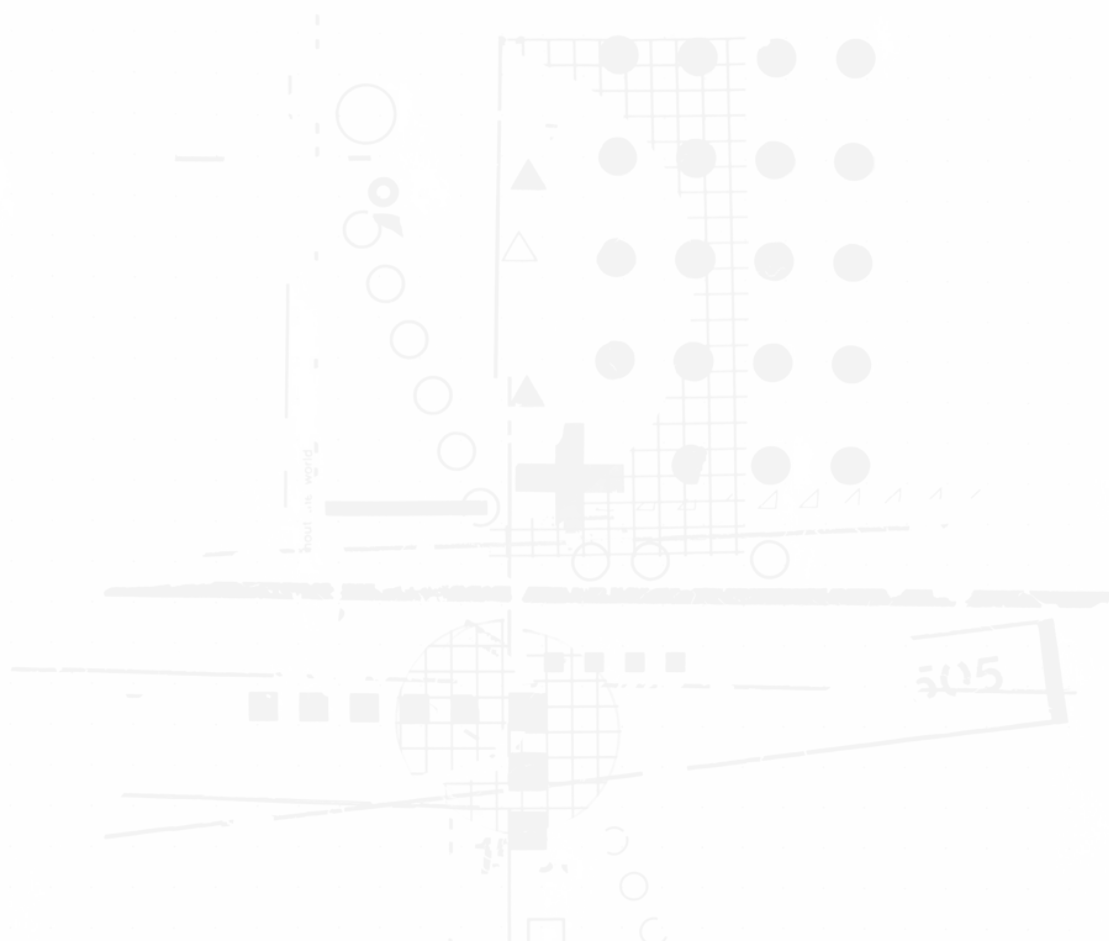
This was in parallel to the referencing and analysis of material found in the review. This changed as we progressed through the sessions and I was then contributing to form-making and aesthetic decisions by selecting the combinations of typeface and the technical elements of typesetting and printing. The arrangement of visual material was via a grid system that was formed from the analysis of the content and reflected the tone of the text. Refer to 1. Experimental Letterpress Practice as Research and 2. Collaborative Practice as Research.

froshaug* ○ : howson

● |cleaver

● ○

The building of the forme, a term used to describe the arrangement of typographic material that is placed in a chase which frames the composition of metal and/ or wood blocks. This enabled an exploration of the visual material and restricted the print room collections and matter. It is these restrictions that helped to structure a complex job. A specific typographic vernacular (Edgar, 2014) was developed as the typographic conventions were employed and the design principles were embedded through the selection and composition of type that were part of the collections in the print rooms. These anthologies of historical artefacts are selected by those in charge of the print room as well as those acquisitions through donations and gifts. This culminates in an eclectic mix of metal and wood blocks that may have characters missing and sometimes damaged. An idiosyncratic print room dialect, as James Edgar suggests, 'can simply be ingrained by the personal choice of the head of department'. In this research practice, the typographic vernacular is formed through the exploration of the historical and sometimes obsolete materials and collections and forming a relationship within contemporary typographic practice. To present the 'legacy of the type that has arrived at the printing workshop' (2014). Following the collaborative sessions, I developed and extended my typographic practices, in the print room through individual practice; another way of reconstructing and reassembling. As seen in 5. Findings: Experimental Practice. This revealed ongoing and developmental propositions from the collaborative experience. This can be applied to a part of the practice, however, the research retains the rules and then dismantles them to restructure and reorganise, a deviation that embraces errors whilst applying order to disorder. The connections through the lineage ensured that I collaborated with Cleaver and Froshaug. I turn to another example of collaborating with histories through experimental practice with Thomas and Jay.



Collective Practice with Thomas and Jay

I now turn to the collective practice carried out with Thomas and Jay. This section of the chapter reveals connections through the research lineage that became part of the network through discussions with Thomas. As recorded in Chapter 2 the interactions took place in various print rooms, and as these actions developed, the research took on new dimensions as discussed in chapter 1. Through discussing my area of research with Thomas, I identified that he was also part of the research genealogy. These interconnections are visualised in the lineage below. Thomas studied at Central Saint Martins (1984-87) and the Royal College of Art (1987-89). He experienced the print workshop that was once Mason's chapel, where Froshaug was prohibited by Mason from entering, years later where he taught. It became part of Thomas' place to explore typography and printing processes. The associations made through the development of the project narrative are outlined in the visual chronology which show a network of figures associated with the Central and the RCA. Jay was the first student to enrol on Mason's course. In another interconnection, it was also Cleaver's space to hone his practice, where Cleaver was taught by Froshaug in the same workshop. Later in the line, Thomas also developed his practice. The network converges at BCU where Jay, Thomas and myself have undertaken teaching practice. Lineage number two shows the interactions through the research from Leonard Jay, Thomas and my creative and research practice.

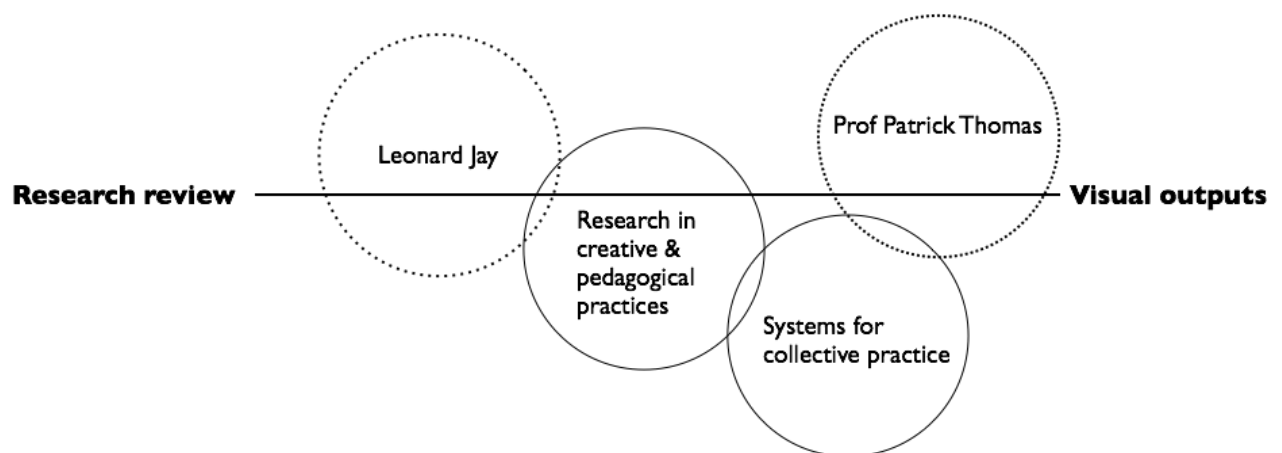


Diagram 12. Lineage number 2, 2022

In his creative practices, Thomas explores analogue techniques and processes such as screen printing and combines with new technologies and digital platforms such as coding. There is a clear sense of the adaptation of historical form to present new ways through new applications and machines. Like Jay, interpretations of the old through a considered approach to creative outputs that are for commercial and artistic purposes. An intricate conversation between the historical, modern, post-modern and technology underpinned by strong conceptual messages through the selection of texts. Outside of the parameters of this research project, we had discussed how Morris and the work created at the Kelmscott Press was influential in the development of modern typography (Rigley, 2007), these further considerations support the wider contexts of these collaborative interactions. Thomas was an undergraduate student at Central Saint Martins, London (formally The Central and currently London College of Communication, part of UAL). He completed a Master's at the RCA. It is this how the geography of his experiences contributes to the lineages of this project. Thomas developed his creative practice, in part, in the printing press that had been set up by Mason and was used by Jay and Froshaug. He attended CSM just after Froshaug had left his teaching position there and attended the RCA where Froshaug and Kitching undertook teaching practice. This places Thomas in a unique position in the research lineage, in diagram 13. By analysing the work of Jay and the students of the BSP, Thomas and I were able to formulate some approaches to our collaborative work. The interactions conducted at P98a, Berlin, Patrick Thomas Studio, Berlin and the Museum für Druckkunst, Leipzig were completed following discussions prior to printing. This is when conceptual and theoretical aspects were set out in Chapter 2. The associations with the histories of this study alongside our collective practice activities hold a 'critical positioning' (Blauvelt, 2012: 80)⁴⁸ in the research lineages. Blauvelt, in referring to essays found in *Visible Language* volume 29, issue 1, as a range of 'case studies that represent a critical position in relationship to their object of study, focusing on the roles of historical interpretation' (81). This is a consideration in the interactions between the lineages and Thomas as his roles of practitioner, educator, collaborator, activist, social commentator and visual chronicler to name a few aspects of his practices. As Meggs comments 'history becomes a reflection of the needs, sensibilities and attitudes of the chronicler's time' (1983)⁴⁹. There are wider considerations that contribute to an expanded lineage. Thomas in a way is looking back to his time at CSM and RCA in his interactions in this study. His current creative practice sees him explore digital platforms to pose questions and create new meaning. He revises histories in new technologies. Thomas is an explorer of new ideologies, transforming form through new technologies.

⁴⁸ New perspectives: Critical Histories of Graphic Design is part of *Graphic Design, History in the Writing 1983-2011* by Sara De Bondt and Catherine de Smet, 2012. First published in *Visible Language*, vol. 28 no.3, 1994.

⁴⁹ Philip B. Meggs, *A history of Graphic Design* (New York: Van Nostrand Reinhold, 1982) n.p.

thomasonthecentraljaybspfroshaugcleaverkitchenthercabcut
omashowsonmasonthecentraljaybspfroshaugcleaverkitchent
ercabcutomashowsonmasonthecentraljaybspfroshaugcleaver
kitchenthercabcutomashowsonmasonthecentraljaybspfrosha
ugcleaverkitchenthercabcutomashowsonmasonthecentraljay
bspfroshaugcleaverkitchenthercabcutomashowsonmasonthe
centraljaybspfroshaugcleaverkitchenthercabcutomashowson
masonthecentraljaybspfroshaugcleaverkitchenthercabcutom
ashowsonmasonthecentraljaybspfroshaugcleaverkitchentherc
abcutomashowsonmasonthecentraljaybspfroshaugcleaverkitc
henthercabcutomashowsonmasonthecentraljaybspfroshaugcl
eaverkitchenthercabcutomashowsonmasonthecentraljaybspf
roshaugcleaverkitchenthercabcutomashowsonmasonthecent
raljaybspfroshaugcleaverkitchenthercabcutomashowsonmas
onthecentraljaybspfroshaugcleaverkitchenthercabcutomasho
wsonmasonthecentraljaybspfroshaugcleaverkitchenthercabcut
homashowsonmasonthecentraljaybspfroshaugcleaverkitchent
hercabcutomashowsonmasonthecentraljaybspfroshaugcleave
rkitchenthercabcutomashowsonmasonthecentraljaybspfrosh
augcleaverkitchenthercabcutomashowsonmasonthecentralja
ybspfroshaugcleaverkitchenthercabcutomashowsonmasonth
ecentraljaybspfroshaugcleaverkitchenthercabcutomashowso
nmasonthecentraljaybspfroshaugcleaverkitchenthercabcutom
mashowsonmasonthecentraljaybspfroshaugcleaverkitchenther
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ntraljaybspfroshaugcleaverkitchenthercabcutomashowsonth
ecentraljaybspfroshaugcleaverkitchenthercabcutomashowso
nthecentraljaybspfroshaugcleaverkitchenthercabcutomasho
wsonthecentraljaybspfroshaugcleaverkitchenthercabcutomas
howsonthecentraljaybspfroshaugcleaverkitchenthercabcu

Experimental Letterpress Practice – the Possibilities and the Limitations



This part of the research findings is formed from the combination of individual and collective practices developed from the research lineages where an emerging lineage was created. The lineage, seen in image 26 was developed in collaboration with Olly Wells, a practitioner and colleague who teaches in the School of Art, Birmingham City University. It is a new line that encompasses the histories and contemporary experimental practice. It is a digital visual index to organise and present the new line of experimental practice.

Index is a visual system developed to order the methods and systems formulated through the project. Triggs and Atzmon discuss 'editing as critical curation' (2019: 8), they look to Joanna Belcher in the framing of a practice-led investigation of design as a process (Bletcher, 2016: 15). In this way, this part of the research and the development of the index is a mode of critique through the visualising of the design process. The formation of the new lineage; the artefacts of the experimental printing processes are curated on a different platform to define a new dimension emerging from the changes in the field through this research. This reflects the plurality of the past and the present; the positioning of contemporary letterpress practice as well as the traditional conventions.

Index is an inventory of new experimental practice, a place where the research is a 'new form of information visualisation' (2019: 5) where the analogue lineages are integrated to digital platforms becoming 'entangled in iterative processes' (2019: 7) of letterpress, transfer type, collage, screen printing and applications in newer technologies. And with this integration there is a consideration of how this can be viewed and read. Victor Margolin looked to El Lissitzky's *Of Two Squares* (1922) which 'originated as an argument for a new reading strategy which had implications in Lissitzky's thinking' (2019: 50)⁵⁰. The book was revised in 1925 by Jan Tschichold for his new typography where 'it was re-contextualised and its original meaning was altered' (2019: 52). Along these lines, the index is a revision of the findings from the historical study, to be absorbed through a combination of analogue and digital processes. *Index* is a re-consideration of the context of the experimental practice. The printed artefacts become part of a curated lineage, as part of the conceptual and philosophical aspects through the processes and methods of production. At this point, I reflect on

⁵⁰ First published in *Visible Language*, 28 (3) (Spring 1994): 233-43.

the writing's of Zak Kyes and Mark Owens, in *Forms of Inquiry: The Architecture of Critical Graphic Design* (2007) when they reflect on the magazine *Dot Dot Dot*, founded by Peter Bil'ak, Stuart Bertolotti and Jurgen X. Albrecht (2000-11) as work 'that is motivated by a shared impulse to reframe the circumstances surrounding contemporary graphic practice by using modes of investigation to probe the boundaries of the discipline' (Fuller: 2021)⁵¹

This collaboration with Wells started in experimental printing practice, in the print room when he was a Master's student in the School of Visual Communication, BCU. The interactions progressed to approaches in how experimental design practice can be presented. Collectively, we became editors in how we could extend the concept of the historical lineage to convey design concepts, visual and graphical language, design thinking and the dissemination of these ideas. It can now be viewed as an educational resource for students and practitioners.

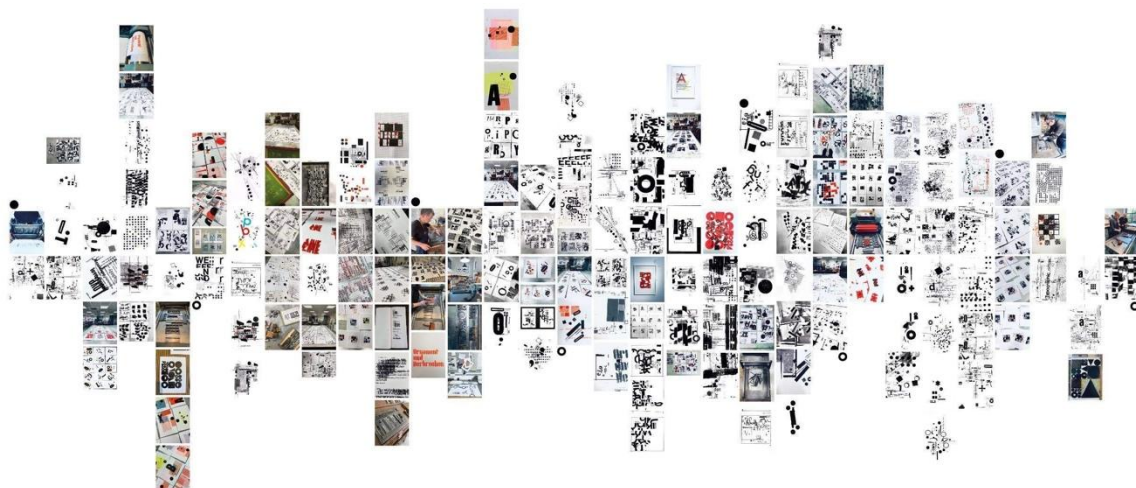


Image 26. Index. This is a visual index of experimental letterpress practice. A new lineage has been created through the individual and collective experimental practice through this project. The lines of historical and practice based enquiry run through this visual chronology of practice.

I am situated between the lines of the historical study towards the development of experimental

⁵¹ Part of an article entitled *Dot Dot Dot Is the Most Influential Design Magazine You've Never Heard of* by Jarrett Fuller, AIGA Eye on Design <https://eyeondesign.aiga.org/dot-dot-dot-is-the-most-influential-design-magazine-you've-never-heard-of/> [Accessed September 2021].

practice and pedagogical strategies. There are ligatures that are constructed between and run through my practices, those of my professional collaborators and students. I have initiated and participated in several encounters where systems of practice that have been developed through this study are applied and implemented in pedagogies. These have occurred in various settings such as lectures, discussions, workshops, tutorials and international projects between institutions.

During the time of this study, letterpress practice has seen significant interest in creative industries and in educational institutions and its methods, production and consumption are being utilised. For example, when the research began there were developments in letterpress collectives such as the Letterpress Workers International Summit and projects such as *6 x 6 Collaborative Letterpress Project* (Cooper, Gridneff, Haslam, 2014) and these are now part of an established and ongoing community. From practice and pedagogy perspectives, the field is buoyant and dialogues between staff at various institutions are ongoing, looking for opportunities to use print room equipment to facilitate cross-disciplinary projects. From a commercial perspective there are letterpress printed cards and stationery in many retail outlets. Print shops are open for workshops and commercial projects, albeit this is still a challenge for print shop owners and designers as it is usually conducted on a part time basis and is subsidised with other means of income. There is also another challenge, the master printers who shared their knowledge with me and others are retiring. For example, Thomas Gravemaker has shared his print shop Letterpress Amsterdam where I learned my understanding of typesetting and letterpress printing, onto others in the letterpress community. Gravemaker is still imparting his knowledge through workshops and helping others set up print shops.

There is a space in formal education settings to draw out traditional conventions and the technical training that Gravemaker participated in. This is another part of the lineage as he shared his knowledge with me through collective practice interactions. Through this research project Gravemaker's approaches combined with the development of my experimental practice and the research methods in this research can be situated as a mode of criticism (Triggs: 2020)⁵² where this collaborative engagement can find a new place in contemporary design and pedagogical dialogues situated in print rooms. The engagement between Gravemaker and me does not need to remain a linear connection, from him to me. It will be disseminated through this research. This is where this research and my pedagogical practices can help to fill a void. In diagram 14 the lineage number three; a way to position the systems of practice developed in this research to connect pedagogical strategies to histories and visa –versa. In the way that I have approached the connections made

⁵² Part of a wider discussion in *The critical turn: education of a design writer 2020* by Teal Triggs in *one and many mirrors: perspectives on graphic design education*, eds. Luke Wood, Brad Haylock.

through a critical lens whilst the processes of designing and creating are continually exploring through experimental methods.

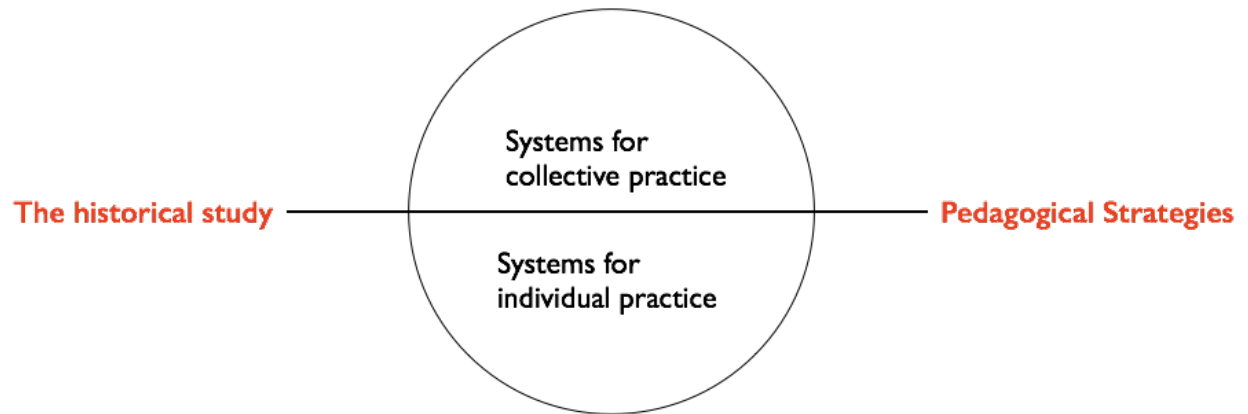


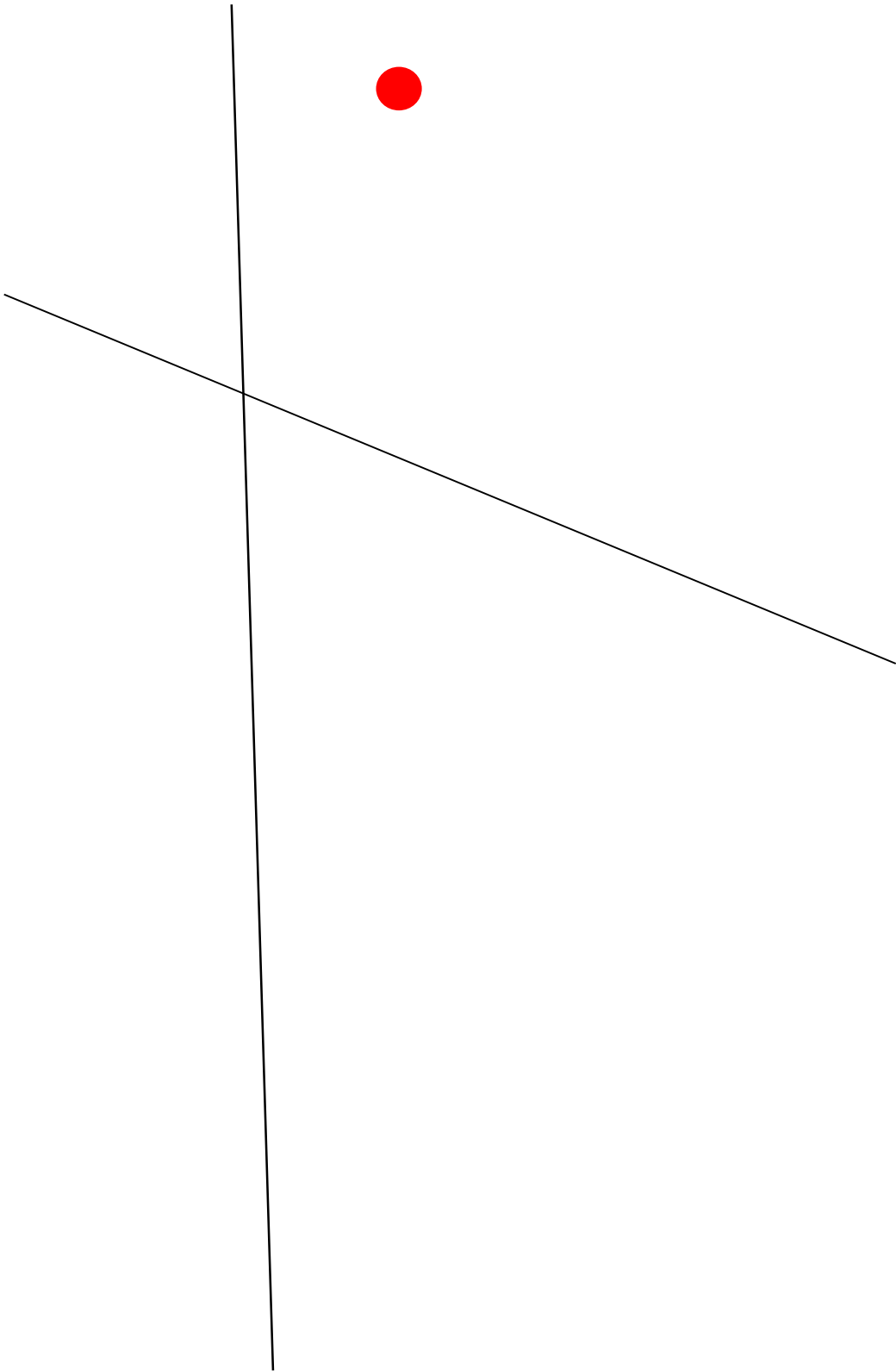
Diagram 13. Lineage number 3, 2022

Having said all that, what comes next?

In this chapter I have emphasised the lineages of knowledge as interconnections between histories and contemporary experimental letterpress practice. This position enables the emergence of new perspectives in experimental practice and academic research, and the possibility of new developments. In this way, the study reimagines the position of historical conventions through the lens of a practitioner. As I have described, the formation of, and learning with the lineages in this study contributes to my commentary of the literature on best practice. That is, the extraction of critical debate through visual aspects can now be extended through the continuation of experimental letterpress, informing new research directions. The collective interventions are now situated in the research lineages alongside the exchanges with Cleaver, Froshaug, Thomas and Jay, Mason, Kitching and others that are part of this study.

Furthermore, the research lineage methods confirm a way to critically understand a place for contemporary experimental practice within the historical context. The acknowledgment of the roles of formal principles and the deployment of a playful and expressive interpretation of the rules is an indicator of the possibilities of emerging discussions. This is explored through a combination of explicit and tacit knowledge gained through the processes of designing and creating the lineages. The location of this research design method vernacular, both conceptually and visually shifted the parameters of the research project and subsequently the objects of experimental practice. It enabled the historical study to inform the individual and collective experimental practice as opposed to some themes that emerged from the study forming part of a narrative with perhaps tentative links. Here, the lineages are a way to convey the 'visual narrative' (Triggs and Atzmon, 2019: 216) in the 'plurality of history and design discourse' (216).

Despite the messy inconsistencies in the dialogue between the historical artefacts and experimental practice, I have created a critical space that elicits further future collaborations and the potential application in teaching. The print room is a place where these conversations can be defined through the development of visual methodological systems. This generates critical connections which can be deconstructed and then used to interpret the printed objects and the findings turned into new modes of experimental practice. It is to these approaches that I turn in the next chapter.



5. Findings: Experimental Practice

Introduction

This part of the written component of my research thesis demonstrates the findings of experimental letterpress practice as a mode for a critical examination alongside the historical lineages I set out in the previous chapter. There are three main areas to this chapter: the first is the collective practice with Prof Phil Cleaver and Anthony Froshaug; the second with Prof. Dr.h.c Prof Patrick Thomas and Leonard Jay; and finally my individual practice. The order of these sections reflect the chronology of my practice-as-research activities. In this chapter I reflect on how the development of experimental printing research emerged from the historical lineages I have identified. The lineages, and therefore the creative practice, is an advancement of the core thesis of this project and furthers the understanding of complex connections of people within the narration of traditional typographic practices and pedagogies. In this way I combine the identification of influential contemporary practitioners in the field as a direction for creative research with collaborative interactions as a method.

This opened up stimulating practice situations in which to exploit letter press conventions and create, following Fischer (2011) new ways of looking and the locating space for combining different perspectives in the generation of new knowledge to contribute to ‘collaborative process engineering’ (Kock, 2009: preface). Using the ethnographic and auto- ethnographic approaches I discussed in chapters one and two as part of this collaborative approach has allowed me to construct a distinctive research approach. These areas enabled praxical interventions through materials and printing instruments which supported the processes of experimentation. The processes I outline in individual and collective practice are an exploration of what Dias and Meina (2022) suggest is ‘the physical and material exploration and experimentation, that allows the expansion of the way of thinking with the working methods’ (170).

The dialogues that emerged as the experimental practice progressed opened up a series of stages of experimental practice. At the start of the evolution of the practice there was a space where ‘theory and process stand side by side’ (Dondis, 1973) or, as Joost Hochuli puts it, a ‘connection with a consciousness of history and traditional typography’ (2013: 134)⁵³. Then, there was a period of disruption of the conventions in the theories as we dismantled those historically-located practices. In this way, I look to Felix Berman, designer for *Typografische Monatsblätter* when he argued ‘our world

⁵³ Joost Hochuli wrote ‘Leben und Werk des Typographen Jan Tschichold’ in *Typografische Monatsblätter* no.1 (1978).

consists of inconsistencies, contradictions where different people come together to form a larger unit' (2017: 141).⁵⁴

With this in mind, this chapter explores these collective interactions as they emerged throughout the duration of this project. In each, I discuss my approaches to creative practice research, how I implemented testing of methods, the emerging practice, and the profound way these activities enabled the extensive development of experimental practice.

⁵⁴ Found in *Emerging Landscapes. 3.2 Research and Creation of New Ideas and Languages. 30 Years of Swiss Typographic Discourse in the Typografische Monatsblätter* (2017) eds. Paradis, Fruh & Rappo. Originally in 'Über das' *Zeitgemabe* TM, no 6/7 (1963), p.446. transl. by Lousie Paradis.

Typographic Interventions with Phil Cleaver and Anthony Froshaug

This area of the research was formed and is presented through my collective research practice activities completed with Cleaver. The document is a written and diagrammatic proposition, highlighting the engagement of discussions with Cleaver whilst observing the printed artefacts of his time under the tutorship of Froshaug. As Cleaver talked through the techniques and processes undertaken in his practice as a student and subsequently his professional practice as a designer, he also gave an account of the unique relationship between him and Froshaug. As the conversations continued, we began to discuss the conceptual and visual methods as ways to explore the sharing of Cleaver's experiences as a student of Froshaug. The imparting of Cleaver's knowledge was shared through our collaborative typographic practice activities in the print rooms. The design practice is embedded and developed further in discourse structures and then in my individual experimental practice.

A reinterpretation of 'old reproduction processes and their working methods' (Dias and Meira, 2022: 169) through type and spacing found in typographic cases. The approaches and philosophies in the design and pedagogical practices of Cleaver from his time as a student of Froshaug and his extensive professional knowledge are shared through a series of collaborative practice sessions and will form part of a design system in the development of my experimental typographic practice. This is completed through activities in the print rooms at the Winterbourne Press, University of Birmingham, Parkside, Birmingham City University and Gloucester Typesetting with Stan Lane.

The analysis of the archival material as set out in chapter two as well as the time spent handling the historical objects revealed elements of visual, technical and conceptual in Cleaver's student work under the direction of Froshaug. An example of this work is seen in image 27. This example shows how Cleaver designed layout in the letterpress printing process. It is experimental, however it follows strict typesetting conventions. It is extraordinary in its composition and highlights the exceptional approaches to the formal elements such as form, shape, line and scale. The examination was expanded to form research practice structures. The aim was to define the methodological approaches and the activities undertaken to evidence new ways of exploring expressive and experimental compositions through traditional printing processes. This draws upon a defined set of design principles and formal systems, to create new visual language and a collection of outcomes as seen through the research creative practice.

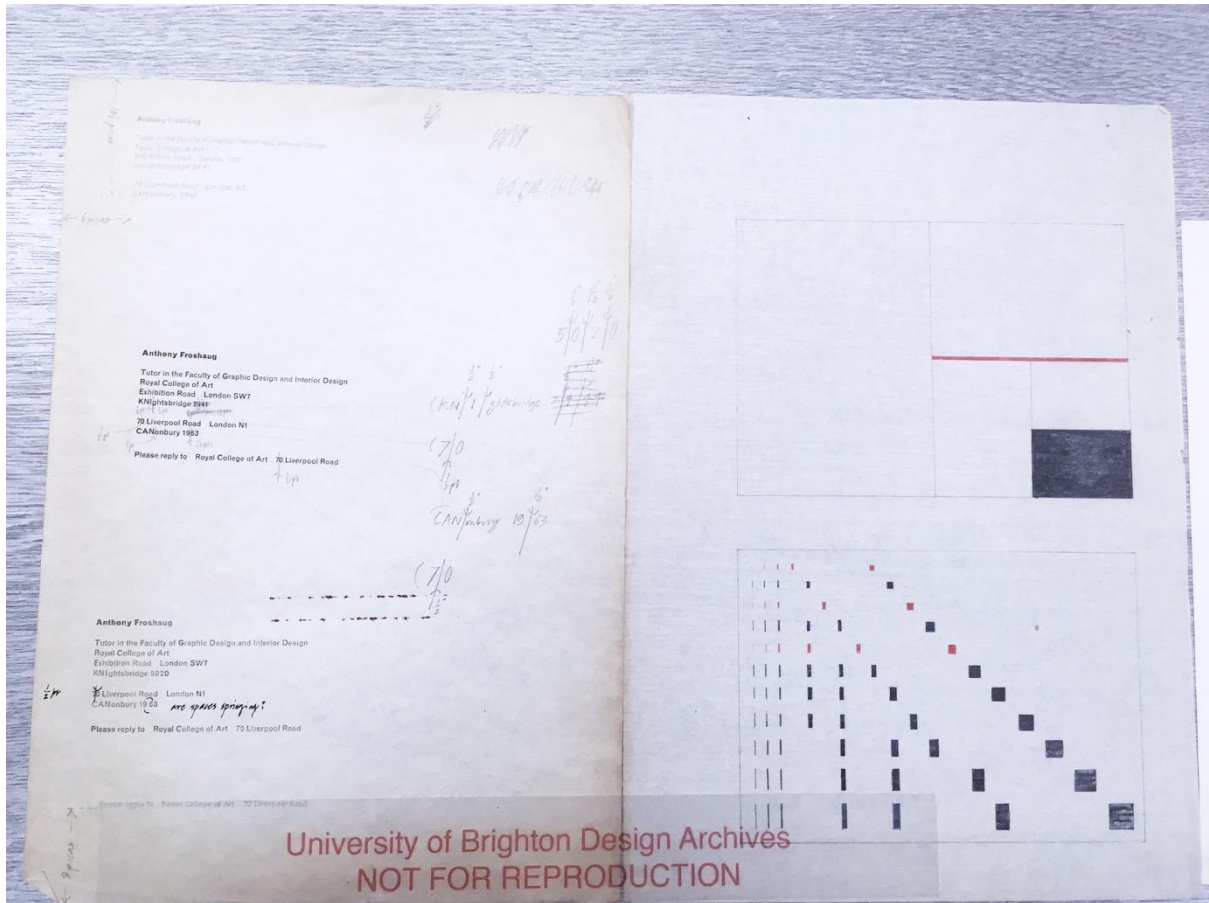


Image 27. An example of Froshaug's design and letterpress work when he was teaching at the RCA. These distinct approaches are seen in Cleaver's today. Part of the Anthony Froshaug archive at the Design Archives, University of Brighton

A Synthesis of Knowledge Sharing and Collaborative Typographic Practice

The collaborative practice is a combination of Cleaver's experiences under the tutorship of Froshaug and my analysis of the primary source material held at the Design Archives, University of Brighton and Cleaver's personal archive of work as set out in chapter three. These complex interactions needed to be organised to form a methodological research approach. The diagrams overleaf set out the approaches to the synergetic connections. The collaborative experience started with several planning conversations about how to approach the activities including the print room locations. The selected print rooms were The Winterbourne Press at the University of Birmingham where I had completed my training in letterpress and the Parkside print room at Birmingham City University. These were selected to explore the different collections of wood and metal type and printing presses. A text was selected as an anchor for the exploration of typesetting.

A poem called 'Love' by Jessica d'Este was selected as a text that would encourage the development of design approaches through the selection of typefaces specific to the print room to explore the concepts and narrative of the poem. The print room collections of type do not have consistent acquisitions, the challenges and limitations of working in these environments. There may be some forms missing or damaged. This encourages adaptations in the design elements of the process. I discuss these limitations further on in this chapter as they form a key part of my approaches in contemporary design and pedagogical situations.

In responding to the requirements of typesetting the poem, it created disruptive intertextuality between the poem by d'Este and our reshaping of the visual aspects 'a vehicle for the dissemination of messages' (Triggs, 2003: 55) through letterpress process as it formed new patterns as we made compositional decisions. These formed layers of dialogue between the experimental process and conveying the messages of the poem. Gui Bonsiepe argues there are 'layers of meaning' in the organisation of text to 'arrange the structure of the text visually and to bring forth meaning' (1999: 66). I would argue that the meaning in these activities is presented through the combination of developing a process through conventions that are expanded in the iterative experimental techniques that see the generation of many printed proofs. Each of these proofs are a receptacle for possibilities in typographic structures, visual language and the manipulation of the formal. These vessels operate alongside design interpretations in scale, hierarchy and rhythm resulting in the appearance of new formations. As Triggs proposes 'there is a meaning-making process in which the designer or typographer establishes meaning' (2003: 56). These new forms saw patterns emerging as

our perspectives were different to those of d'Este. The experimental methods through 'visual expression' (Triggs, 2003: 55) and the exploration of changing traditional 'compositional structures' (Kress & van Leeuwen: 1996: 2) allow the patterns to impart linguistic and visual messages. Ormerod and Ivanic acknowledge text 'carries meaning about a topic' (2002: 67) and therefore 'reflects meaning through the linguistic and visual' (67). On reflection, these printed repositories transmit more than a linguistic meaning through the visual components of the process, they bring understanding of the emerging visual form through shared actions.

I was experiencing a learning and teaching model similar to Cleaver's own experiences with Froshaug, my participation in the design process was to receive instruction. This changed as we progressed through the sessions and I was then contributing to form-making and aesthetic decisions by selecting the combinations of typeface and the technical elements of typesetting and printing. The arrangement of visual material was ordered via a grid system that was formed from the analysis of the content and reflected the tone of the text. The building of the forme enabled an exploration of the visual material and driven by the print room collections and materials. These restrictions helped to structure a complex job and also to express a transformation of our methods. I turned to Triggs when she was discussing Daniel Friedman's (1945-95) approaches in developing a methodology in typographic practice. She observes that Friedman would see the structuring of a method as 'a foundation of, not a replacement for personal expression' (1994: 44). With this in mind, Cleaver and I explored a vernacular that we developed as the inquiry into typographic conventions and design principles were embedded in the experimental. The type collection was a combination of acquisitions either by those in charge of the print room and through donations and gifts culminating in an eclectic mix of metal and wood blocks that have characters missing and sometimes damaged. A typographic vernacular as James Edgar suggests, 'can simply be ingrained by the personal choice of the head of department'. In this research practice, the typographic vernacular is formed through the exploration of the historical and sometimes obsolete materials and collections and forming a relationship within contemporary typographic practice. To present the 'legacy of the type that has arrived at the printing workshop' (2014). Following the collaborative sessions, I have developed and extended my typographic practices, in the print room, on my own; another way of reconstructing and reassembling. This revealed ongoing and developmental propositions from the collaborative experience. Paul Freyerabend says 'the only principle that does not inhibit progress; is anything goes' deviations and errors' he suggests are 'essential preconditions of progress' (1993)⁵⁵.

⁵⁵ Paul Freyerabend, *Against Method*, London and New York, Verso, 1993, (Third edition; first published 1975) p.5. This was read in *No More Rules. Graphic design and Postmodernism*, Rick Poyner Lawrence King Publishing, London, 2003, as part of a wider discussion about deconstruction in the development of research methodology.

This can be a consideration as part of the wider scope of the research project however, the research practice has been developed and retains the rules and then dismantles them to restructure and reorganise, a deviation that embraces errors whilst applying order to disorder. There are protocols that have been implemented as a way of bringing historical features into the contemporary sphere.

Collaborative research practice

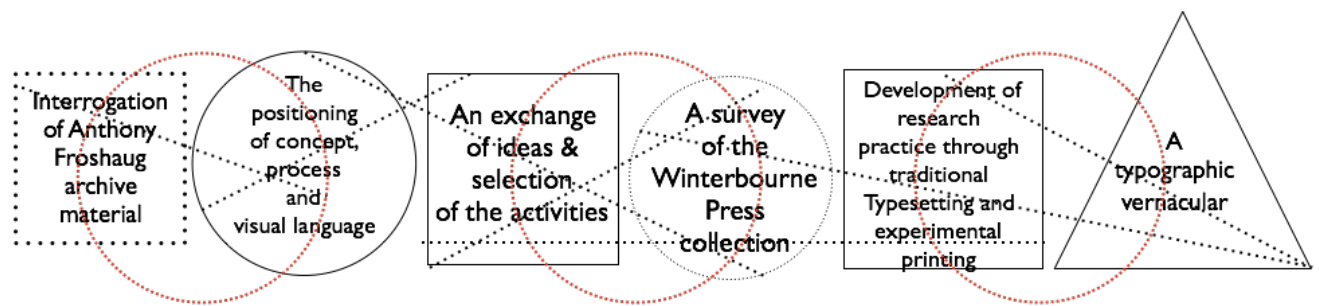
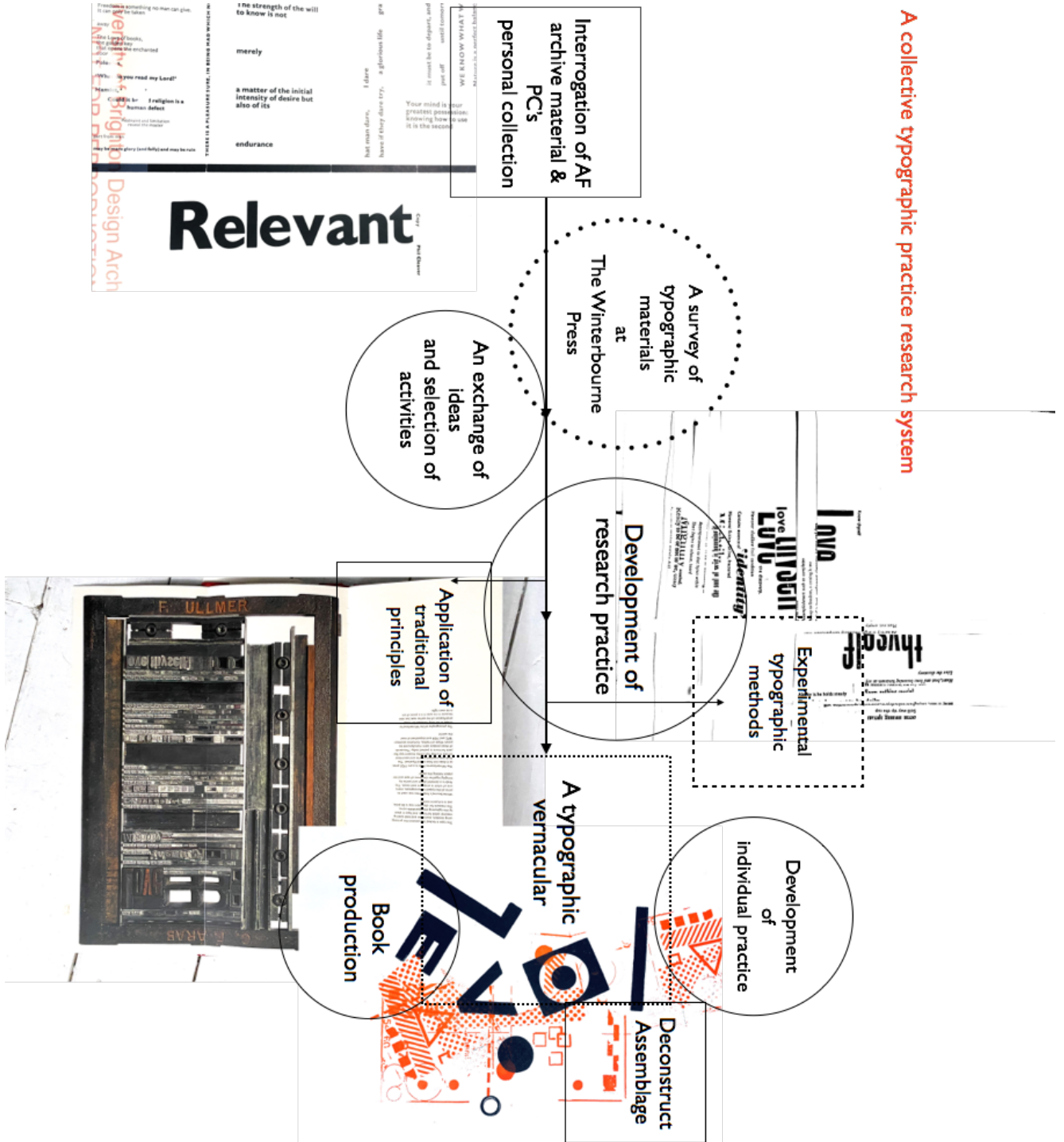


Diagram I4. The initial development and organisation of the collaborative research practice with Cleaver at the Winterbourne Press, UoB (August and September 2021). This was initially a more cyclic approach to collective interactions. However, the approach was developed further as the practice expanded



A collective typographic practice research system

Image 28. A diagrammatical representation to outline the development of a collective typographic practice research system between Cleaver and my interactions. Here the collective research system follows a more iterative arrangement. His starts with the interrogation of secondary and primary objects, the design of a creative practice method, the disruption of the method, resulting with the outcome

The collective typographic practice research systems in the previous images categorise the shaping of new knowledge through a hybrid model of diagrammatical and image elements that visualises the strategic, experimental and technical parts of the collective practice. The early attempt to organise the interactions presented in the first diagram was designed to represent the overlapping and cyclic nature of the collaborative practice, however, as the interactions developed and a reshaping of how the collaborative printing was undertaken, there was a need for the system to reflect this.

Therefore, the mapping of the practice seen in image 28 becomes a collage, an assemblage of construction, deconstruction and the synthesis of the interruptions and disruptions to form the new forms.

To support critical observations on typographic deconstruction, part of my creative practice in this design research study, I drew upon the theoretical frame of *parergon*, a term created by Jacques Derrida and discussed by Lupton and Miller's in their text *Deconstruction and Graphic Design* (1996). They propose deconstruction as 'chopped up, layered, and fragmented forms imbued with ambiguous futuristic overtones' (1). They uphold that 'deconstruction is not a style or attitude but rather a mode of questioning through and about the technologies, formal devices, social situations and founding metaphors of representation' (13). In categorising deconstruction, they suggest it as belonging to both history and theory and a strategy of critical form making (2). This is an area that can be constructed as a way to frame my research practice and can be situated to enable the development of new critical strategies as a way to order and reorder experimental interventions.

The graphic interpolation explores the concept of chopping up, repetition of the form and layering with two letter forms. A way to question and test the how deconstruction techniques can be applied in typographic abstraction practice and as a device to set off the reordering of the typographic principles that have been revealed in the historical study and applied through collaborative typesetting and printing activities. As Bil'ak suggests 'in scientific context, an experiment is a test of an idea, a set of actions performed to prove or disprove a hypothesis' (2005).⁵⁶ Whereas in the context of this research, 'experimentation is an empirical approach to knowledge that lays the foundation upon which others can build. It requires all measurements to be made objectively under controlled conditions' (2005). In reviewing Bil'ak's proposition that the conventions are undertaken with a measured objectivity, I would contend there are possibilities in the subjective experiences that occur from the strict utilisation of the traditional rules.

⁵⁶ Online article found on https://www.typotheque.com/articles/experimental_typography_whatever_that_means with no page numbers.

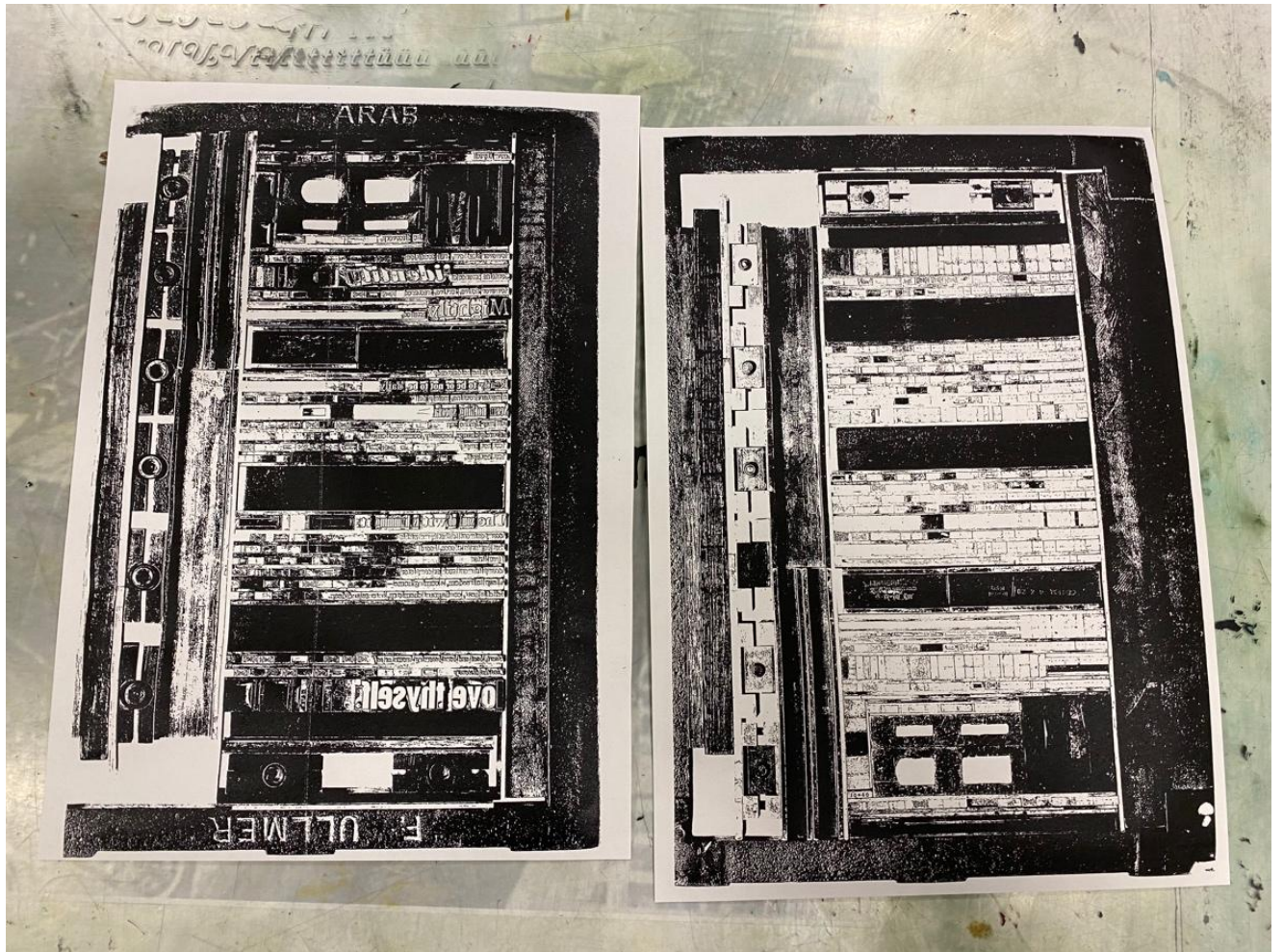
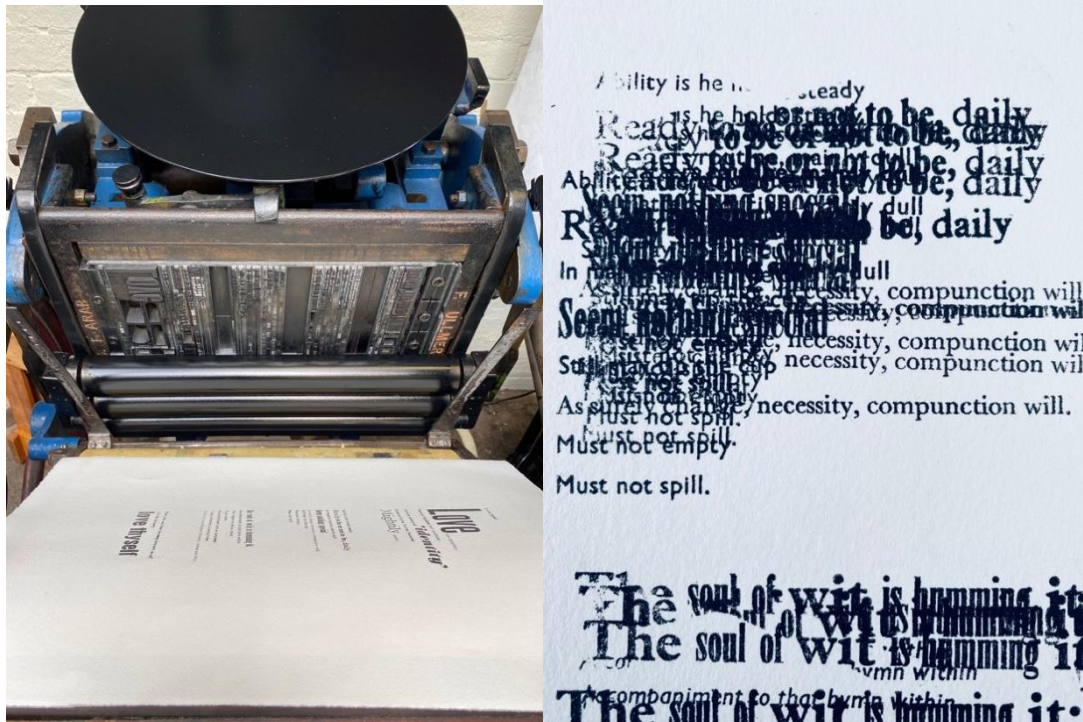


Image 29. The front and back of the form. The composition of the text using a variety of metal typefaces at the Winterbourne Press, UoB. Cleaver scanned the Winterbourne Chase and I exposed the images onto a silk screen and screen printed the images. This highlights the typographic architecture of spacing material and type forms



Images 30 & 31 Left image; Printing a proof following the collective typesetting on an Albion Press at the Winterbourne Press. Right image; the disruption of rules by overlaying and repeating the forms to create new typographic systems with Cleaver at the Winterbourne Press, University of Birmingham, July/ August 2021

A Typographic Vernacular

These investigations and typographic encounters have shown how a traditional typesetting construct, a deconstruct and a reconstruct can explore visual language through exploiting the conventional letterpress techniques. These sometimes ambiguous forms are developed through a reconstruction of a letterpress print that is devoid of linguistic meaning. I consider Paul Elliman and his experimental font *Alphabet* (1992) which Triggs describes as an 'alternative visual grammar and corollary syntax, forming visual statements' (56). In this sense, the combinations in our collective practice is one that is formed by employing syntactical conventions and then disrupting the typographic assemblages to convey new systems and visual language.

There is a different typographic organisation that has been applied through traditional order and a careful examination of disorder. The development of devices and strategies in deconstruction and assemblage that embrace these orders and principles and create irregularities through a calculated and a deliberate theoretical positioning through the experimental and rearranging of conventional methods, material processes, graphical abstraction revealing a new typographical vernacular⁵⁷. I repositioned this term as a way to frame this analysis in the collaborative actions. There are two parts to A Typographic Vernacular research practice model that has been designed as a reflective lens of the collective activities. A system that is overlapping and sees repetitions in its cycle. Part one, seen in the interpolation below is the area where Cleaver and I were working together in a print room, the existing knowledge and emerging knowledge was transferred between us through the working with the print room collections and that sometimes required an adaptation of how Cleaver would approach jobs with Froshaug due to the limitations of the type collections.

part I / survey of print room type collections • knowledge * typesetting

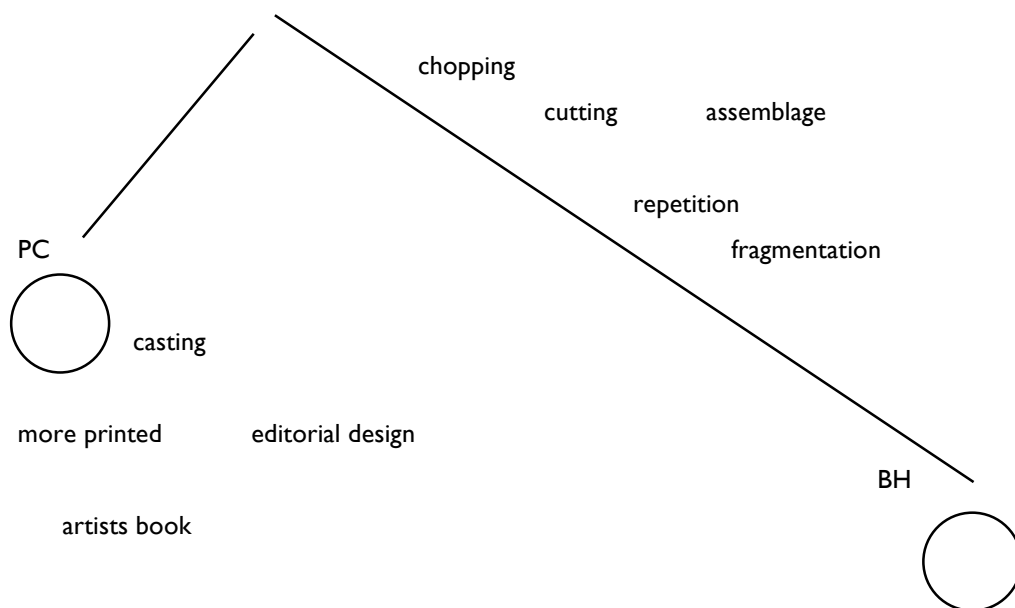
> printing [emerging knowledge

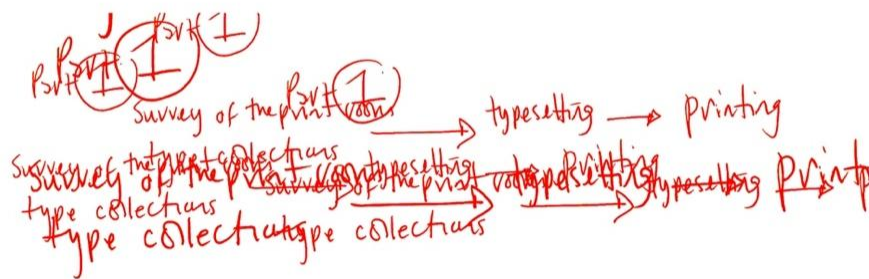
Part one of A typographic vernacular created in the collective practice activities with Cleaver. The interpolation shows the way in which existing knowledge was disseminated and emerging knowledge was developed

⁵⁷ The term typographic vernacular is found in *Graphic Archaeology* by James Edgar, part of 6 x 6 Collaborative Letterpress project publication by Cooper, Gridneff and Haslam (2014). Edgar is discussing the print workshop at Camberwell College of Art and the term is used in a way appropriate to the context. I have explored the term in another context for a research method and this creates a typographic vernacular specific to the creative practice in this project.

The second part, seen in the interpolation overleaf, is where the collaborative work has then been developed individually by Cleaver in his studio and by myself in several print rooms. The collective work is embedded in the individual practices, however, it takes on very different paths. The individual work was shared and discussed with each other to gain feedback and to reflect on the developments that happened through individual activities. This approach formed a unique typographic vernacular that consists of many layers of the collective and individual practices; the print room materials, limitations of the type collections, design principles, processes, the tacit knowledge that was formed through the integrated working and the approaches in individual typographic practices.

part 2 / Typesetting + Printing



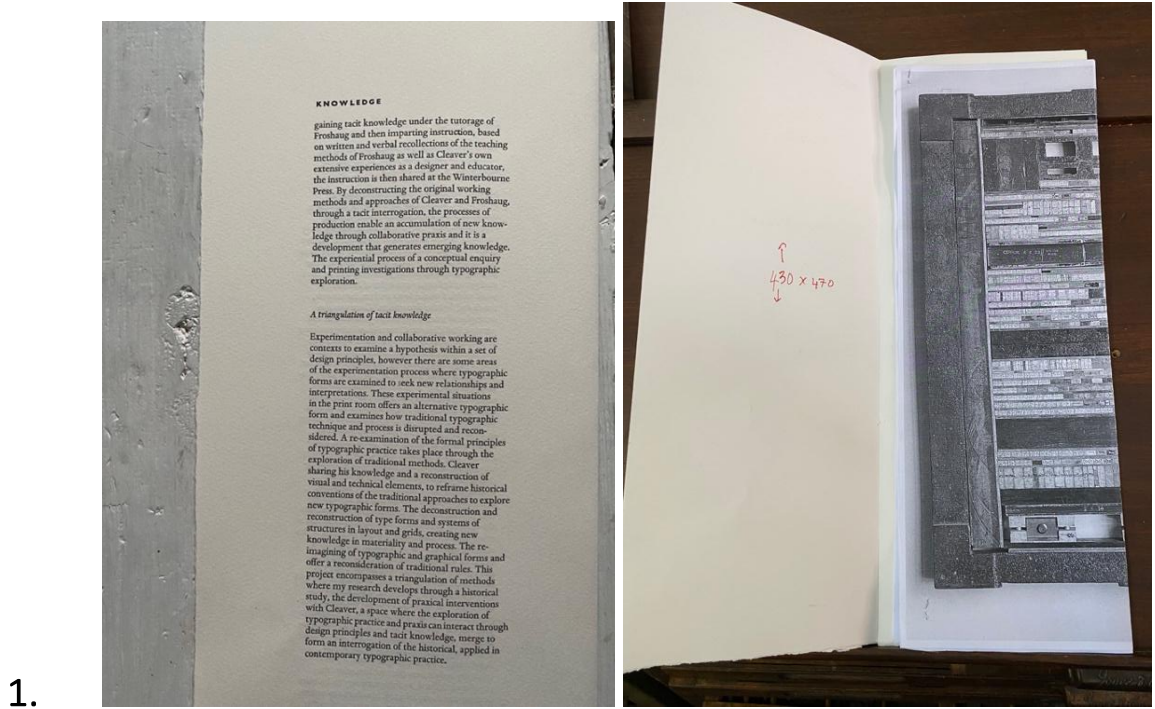


Part two of A Typographic Vernacular created in the collective practice activities with Cleaver. The interpolation shows the overlapping of tacit knowledge in collaborative research practice

There was another consideration of the environments we printed in and how we developed understandings in the localities of the collective experimental practice. Guy Debord formulated ‘psychogeography’ (1955)⁵⁸ as a term to describe the effect that a location may have on a person’s feelings and/ or actions and the interconnections between people and places. In adapting Debord’s expression, I positioned the interactions in the print rooms as psychogeographical exchanges. These exchanges are site specific forming the particular vernacular, as discussed earlier in this section. They cannot be recreated in any other location with any other person. This in turn sets the scene for the development of Cleaver’s individual practice that was created following our collective activities. Cleaver developed our collaborative work into an artist’s book seen in the following four images. The typesetting and printing that we completed has been included and Cleaver has then continued more typesetting with Stan Lane at Gloucester Typesetting. These interactions created more psychogeographical exchanges where the vernacular shifted again due to the locality of Lane’s print shop. I have written for this publication discussing the PhD research project through the historical and practice based. This is an unexpected part of this study as it wasn’t part of the research method. However, it is a way of reflecting on how the collective practice is developed individually and how

⁵⁸ Published in the essay, Introduction to a Critique of Urban Geography, Les Lèvres Nues, Vo. 6, by Debord in 1955.

the research can expand to other contexts. The scope of the research can change, adapt and be modified as the practice develops in other print rooms.



Images 32,33,34 & 35. These are details from Cleaver's book. The typesetting and printing was done by Cleaver and myself at the Winterbourne Press, University of Birmingham as seen in the bottom right image. Cleaver then developed the book design with Stan Lane at Gloucester Typesetting, seen in the top right and bottom right images. Cleaver invited me to contribute to the writing in the book as seen in the top left image

A Reordering with Patrick Thomas and Leonard Jay

This is the area of the research I formed through the collective creative practice activities with Thomas. The editorial conventions change to Futura as I have explained in the introduction. The findings are presented through the works we created together. This section is again presented as a written and diagrammatic proposition employing the editorial conventions. The results of the exchanges in conceptual and visual methods are around Jay's typopraxis, rooted in Thomas's experiences as a student at Central Saint Martins, formally the Central and the Royal College of Art. This chapter highlights the collective practice areas of the project I completed with Thomas and, through the lineage of practice, with Jay as well. This section addresses three key aspects of my work: firstly, the shaping of the way the collaborative practice was undertaken through the conceptual, technical and aesthetic approaches that were established; and secondly, the processes and print room locations that informed the praxical interactions; and finally, the knowledge that has been developed and formed through our collective typopraxis.



Image 35. Dot and Line, an experimental letterpress print Leipzig printing museum. Using an overlay technique using two different typefaces. This creates a typographic vernacular specific to this collective practice, research and location

A Reconsideration of Conventions Through an Adaptation of Graphical Form

Thomas and I met at Birmingham City University in 2017 and have worked together in pedagogical situations several times over the last few years. We discussed my research project and through these I identified that Thomas is also part of the complex network of people and places connected to the Central. He had studied at Central Saint Martins (1984-87) and the RCA (1987-89). He experienced the print workshop that was once Mason's chapel, where Froshaug was prohibited by Mason from entering, years later where he taught and Cleaver's space to hone his practice. It too became part of Thomas' place to explore typography and printing processes. The connections made through the development of the project narrative are outlined in the visual chronology as set out in 4a. Historical Lineages, which show a network of figures associated with the Central and the RCA, Jay was the first student to enrol on Mason's course. Cleaver was taught by Froshaug in the same workshop and later, Thomas was also developing his practice. W.R Lethaby was appointed the first professor of design at the RCA and Thomas completed his Masters there. These interconnections will be discussed later in the section, firstly I turn my attention to Thomas' practices and philosophies.

In his creative practice, Thomas explores traditional techniques and processes and combines with new technologies and digital platforms. There is a clear sense of the adaptation of historical form to present new ways through new applications and machines. Like Jay, a revival of the old through a considered approach to creative outputs that are for commercial and artistic purposes. An example of this re-appropriation is seen in Thomas' design Willow Boughs originally by William Morris (1887), seen in image 36.

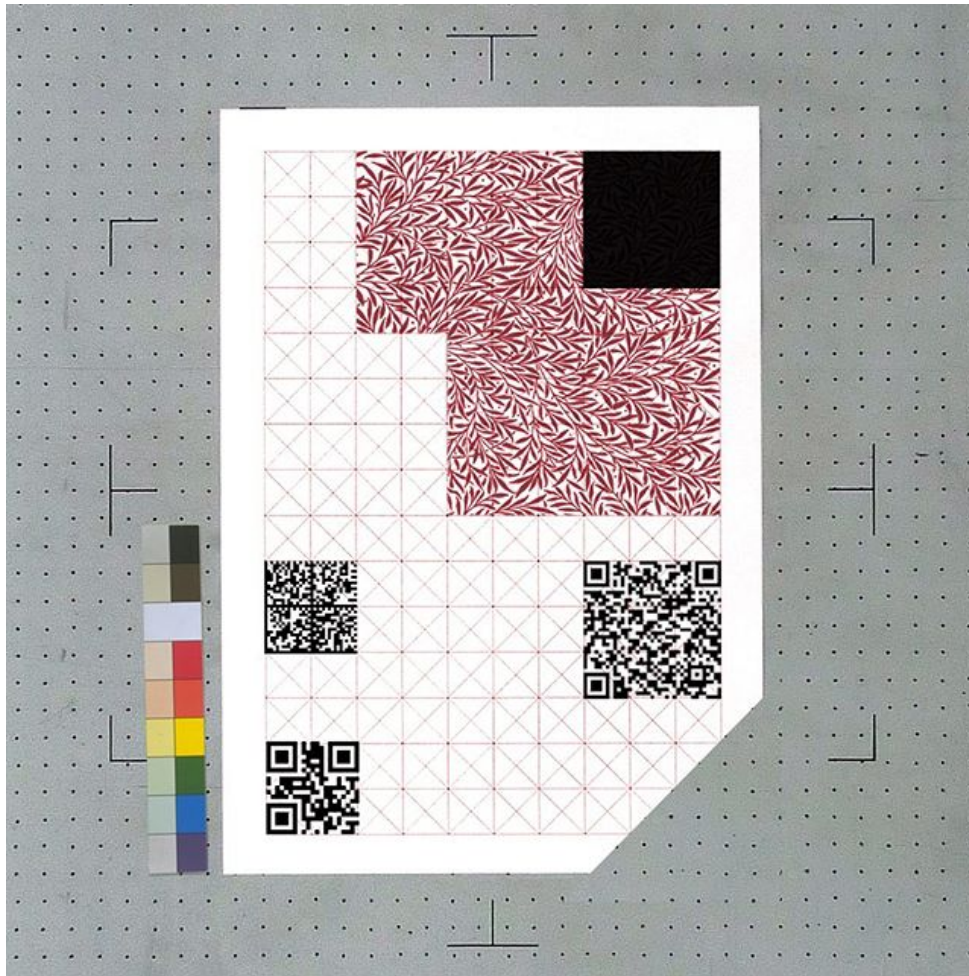


Image 36. Willow Boughs, Patrick Thomas, 2021

Thomas interprets and develops a new visual system through screen printing and digital applications, reflecting the dialogue between the historical artefact and contemporary issues. This is explored through subversive translations in visual and typographic elements. In this example it is a pattern that is explored as a way to convey a message. It is positioned to communicate a different directive than that of the original design. A territory between the historical, modern, post- modern and new technologies underpinned by strong conceptual messages. This occurs through Thomas' position in the chronology of the research. In looking at the lineages Thomas has a unique location the time of his learning to his creative practice and teachings. In establishing a way to facilitate an area in collective practice I looked to Triggs as she suggests a definition of spaces (2003: 54) describing a shift in the communication of a message (57). This seems pertinent in the revisiting of historical materials. Triggs draws upon Katie Salen's proposition when looking to compositional arrangements that can be seen as adaptations of the traditional engaged 'to violate conventional interpretation'

(1993: 297-300). In this contravention Thomas and I found a new 'way of looking at design' (Zelman, 2000: 57) and our typographic experiments 'transform our way of thinking' (Triggs, 2003: 57). Thomas and I discussed the connections between the Arts and Crafts movement and Modernity, highlighting the influential writings of William Morris on Bauhaus pedagogical approaches. In *An Ideal Book* Morris stated 'a work of art, I think bears less of ornament' (1893)⁵⁹. This became an important starting point for the positioning of our collaborative experiments. As Rigley suggests 'William Morris had significant influence upon the development of modern typography with the work produced by the Kelmscott Press' (2007).

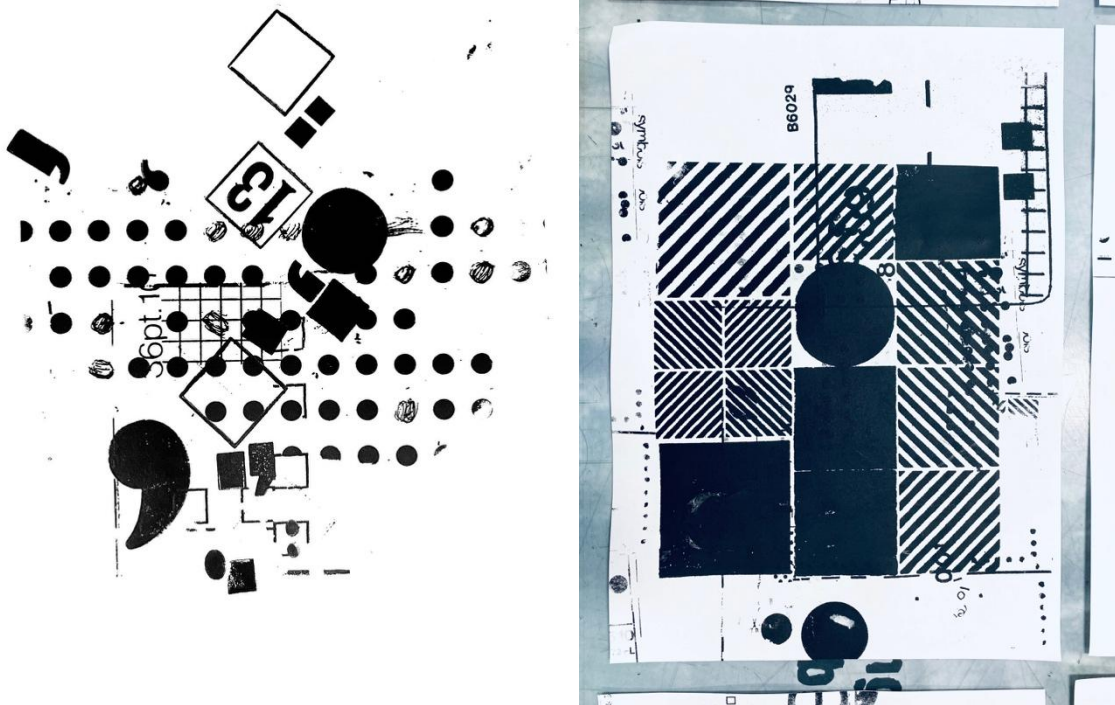


Image 37. Letterpress prints; a new assembly line as an example of the constructions, deconstructions and reconstructions within the process. Using various wood type blocks, cutting and pasting, overlaps to form new compositions. Letterpress printed in Berlin and Birmingham, 2021

⁵⁹ Morris delivered an *Ideal Book* on 19th June 1893, at the Bibliographical Society, London

The practice that we developed together, started with a review of several examples of practical work completed by the students at BSP from the Birmingham Institute of Creative Arts archive collection. Due to Thomas' schedule I decided to make an initial curation of BSP examples as I had previously spent time in the archive and had a prior insight into the repository. I pre-selected several examples of BSP that introduced Thomas to the range of approaches employed by Jay and the students. This included a range of typefaces, ink colour, commercial work, book work, prints with illustrations, ornamental elements, different paper stock and binding methods, as set out in 2. Collaborative Practice as Research.

The analysis of BSP printed artefacts through viewing the work and pulling out of design elements, technical specifications and the conceptual approaches of Jay revealed aspects that we were both drawn to and commonalities in what visual and technical aspects to draw from the interrogation of the material. This identified some secondary sources that could connect the visual considerations to a theoretical frame as discussed in The Formulation of Collective Practice Approaches section later in this chapter. The interrogation of this material identified abstract compositions and patterns located within the historical data that we wanted to explore in our practice. Following on from the viewing of historical objects, we began to draw out aesthetic considerations to form an initial system to develop the ideas. In looking to transform typographic form to abstract arrangements, Triggs highlights Frances Butler when, in 1995 he 'introduced the notion of new demonic typography' (2003: 16). An approach that saw the 'redefining of punctuation, substituting conventional marks (dots, commas, dashes) with idiosyncratic devices (arrows, backward letters, diagrams, boxed words)' (16). Butler described the printed page when reviewing these techniques as 'packed so fully that much of the surface becomes invisible' (1995: 91-92). That said, Thomas and my approaches included the introduction of idiosyncratic elements through combinations of forms and structures. They became part of our way to explore the theoretical and critical debates through graphic forms.

The exploration of typographic abstraction and a reconciliation of traditional knowledge is a way to re-interpret graphical and abstract forms. David Crow reminds us 'experimental typography should challenge convention' (2003: 71). Whereas Cheryl Towler Weese considers experimental typography 'that is used in a way that surprises, that provokes wonder and curiosity' (2003: 177). It is a curiosity that envelopes our collaborative practice. It is the

ongoing discussion between the traditional and the modern; the Arts and Crafts movement and modernity, specifically modern typography, that initiated some of the typographical approaches in this project, exploring themes through a deconstruction of conventions leading to experimental and graphical abstraction. As we explored the bringing together of the typographic material, we were developing a new language and structures for disrupting traditional typographic principles. Lupton and Miller disclose a study of a typographic deconstruct, 'would reveal a range of structures that dramatize the intrusion of visual form, the invasion of "ideas" by graphic marks, gaps' (1994). In the application of research methods in this project, I consider this a language of abstract and modular forms with typographic ornament which is a synthesis of the historical study, the collective practice interactions and the reshaping of contemporary experimental practice. Byrne and Witte suggest 'deconstruction' refers to the breaking down of something in order to 'decode' its parts in such a way that these act as 'informers' on the thing, or any assumptions or convictions we have regarding it'. (1990). It is the examination and dissecting of the traditional standards that have enabled the reinterpretation of the 'contextual assumptions concerning the typographic page' (1990), encouraging the 'fascinating deviations from the norm' (1990)⁶⁰. The iterative design process of this part of the project was multifaceted; encompassing the planning and organisation of several components; the interrogation of archival material, conceptual thinking, theoretical framing, devising a strategy to test the design system developed in the historical study, selection of techniques and process based on the historical examples and the location of the print room.

The practicalities of where we were going to complete the work was important as Thomas lives in Berlin. I contacted Erik Spiekermann who owns P98a, a typographic workshop in Berlin, who agreed to working in the printing press. This affected how Thomas and I approached ideas and development as P98a would have its own type collections and our planning. At P98a we surveyed the collections and started the explorations with quick typesetting tests to initiate some ways to draw together our concepts and the design principles of Mason, Jay and Froshaug. These tests developed into further experimentation as the process started to emerge and then expand.

⁶⁰ A Brave New World: Understanding Deconstruction, originally published in Print Magazine November/ December.1990. Published as part of Looking Closer. Critical Writings on Graphic Design, edited by Michael Beirut, William Drenttel, Steven Heller and DK Holland, Allworth Press, New York, 1994.

As Thomas and I created new relationships in visual language I considered an invitation by Crow 'can the visual language clustered around a particular set of ideas or issues be utilized to a set of signifiers that do not rely in the conventional alphabets?' (71). In this way, we were defining an emerging graphic language through an inquiry at the printing press. Our printed explorations reminded me of Butler's appraisal of experimental typography from the 1990's when he observed a 'mix of old and new letterforms, type and script, changing letter direction overprinted images, changes in scale and ambiguous syntax' (1994: 94). In response to Butler's critique of experimental practices, Triggs describes it as 'visual complexity of the typographic page' (16). This can be applied to our experiments when some were completed with a less precious submission of our concepts and the design principles, more the enjoyment of the complex reshaping of typographic form at the printing press, perhaps in the recreation of a reimagined demonic typographical proposal?

Spiekermann was present and became another layer of intervention, adding to the practice, as he proposed, demonstrated and conversed through the collaboration. The work was then developed by Thomas in Berlin, digitally exploring the printing we had completed at P98a. I continued typesetting and printing in Birmingham. We would meet remotely, discussing individual experimentation and reflecting on if these actions were within the parameters of our intentions. We expanded the work together in Leipzig at the printing museum.

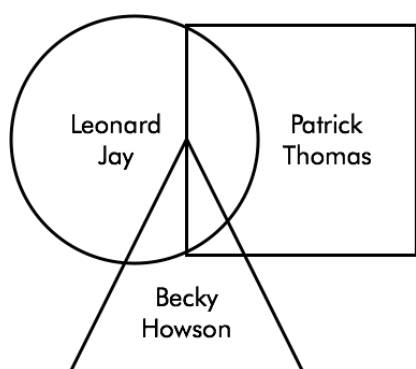


Diagram 15. An initial research model to reflect the triangulation of collective practice between Thomas, Jay and myself through secondary sources and printing practice

It is worth noting the achievements and subject specific knowledge that Spiekermann holds as it impacted on the collective practice in another layer of the conventions, the vernacular and the contemporary through the lineage. Although he was not part of the planning of the collective research practice, he became an invaluable part of the explorations through his contributions; sharing his knowledge and demonstrating method and process with his extensive experiences. He is an art historian, printer, type designer (see Meta, Officina, Unit, Info, Fira, Real, et al) information architect, author. He is an honorary royal designer for industry, Britain (2007). He received a TDC medal & National German Lifetime Achievement Award (2011). Spiekermann is a member of the supervisory board of EdenSpiekermann, Berlin, San Francisco, Amsterdam and Los Angeles.⁶¹ He runs P98a, an experimental letterpress workshop in Berlin⁶². P98a is a space in which one can go 'back to the future' (2014), where analogue and digital printing methods are utilised together and in unison, dependent on the task. This supported the collaboration between Thomas and me as our individual practices are a conversation about the historical in contemporary practice. As Thomas suggests we were, 'provoking a dialogue between different cultures: British and German and analogue and digital' (2022).

⁶¹ As described at spiekermann.com.

⁶² As described at spiekermann.com.

The Formulation of Collective Practice Approaches

The formation of a system to work with started before we were printing at a press. I used the collection of visual examples from the BSP archive at the BIAD archive, Birmingham City University repository and combined them in a photographic catalogue as part of the visual and material research analysis, copies were sent to Thomas. This was the first time that Thomas had viewed the work created by Jay and BSP students. The collaboration started with several remote meetings (as Thomas is based in Berlin) to view the output together, to analyse, discuss, and interrogate these print materials. Kalman, Miller and Jacobs propose, 'the study of design history is a way of filtering the past; it's a way of selecting what's important to remember, shaping it and classifying it' (Kalman et al 1991). Perhaps in the reclassification of historical rules is part of the selection of what is relevant to contemporary experimental and pedagogical practices, adjustments made in the application of the methods. We became typographic archaeologists, excavating the archival material to ascertain how to define a design system to work in, to 'construct a lens' (Kalman et al). The study required boundaries so that we could operate within the collective practice and that framework was constructed by surveying the historical artefact not just by its artistic and technical attributes but also its social and political aspects. We also extracted the visual language from the context of the material as a way of starting to re-contextualize the rules. The language and principles are abstracted from their original historical situation and 'the abstraction occurs because abnormal and stylistic features are discussed apart from the content of a given work' (Kalman et al). The diagram below shows an initial way of organising collective practice, however, as the interactions developed, the way in which experimental practice expanded. The next image shows how the categorisation of typographic practice is identified through the development of print room work completed with Thomas and this helped to develop a design structure for the research practice.

Collaborative research practice

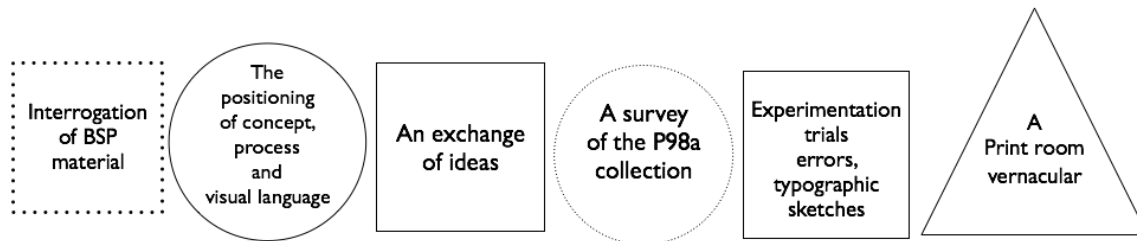


Diagram 16. A model setting out the approach to the collective research practice work with Thomas. This follows an iterative approach starting with the interrogation of BS material, through ideation, through to printing at P98a to inform a new typographic language

The setting of the modular type to design a border was a connection to Thomas' practice and to my design practice. We viewed this pattern as decorative, ornamental, this initiated some questions around how ornament could be reimagined. As we did not have prior knowledge of the collections at P98a, we decided on an approach that would enable us to complete the practical encounters by selecting the material when we went through Spiekermann's collection. We were devising a system or as Friedman suggests a 'process in typography' (1978) to connect the concept, design and production of the practice. The experimental typographic practice at P98a, Berlin started on a table top proofing press to enable a quick exploration with the material, a 'typographic sketch' (Ashworth 2020)⁶³. We explored different compositions individually and together to manipulate positions, weights, size, spacing and through this exploration of structure, composition, sequencing and creating an order, the visual language and expression came as we experimented through the process. The process of typesetting and the parameters of the collection enabled a focus as we worked with the collection. Through a reflective process of evaluating our printed proofs we also stepped outside of the system. Sometimes there was a dismantling of the order and a more playful and

⁶³ Chris Ashworth is a graphic designer. His designs were published in Ray Gun Magazine (1992-2000), founded by Marvin Scott, part of an extraordinary time for design in publishing. He shares his approaches and processes on social media channels. The term 'typographic sketch' was discussed on the Instagram platform, accessed in 2020).

manipulative offer was carried out, to test, to question the method and processes with a continual reminder of the historical importance of the design principles being disrupted.

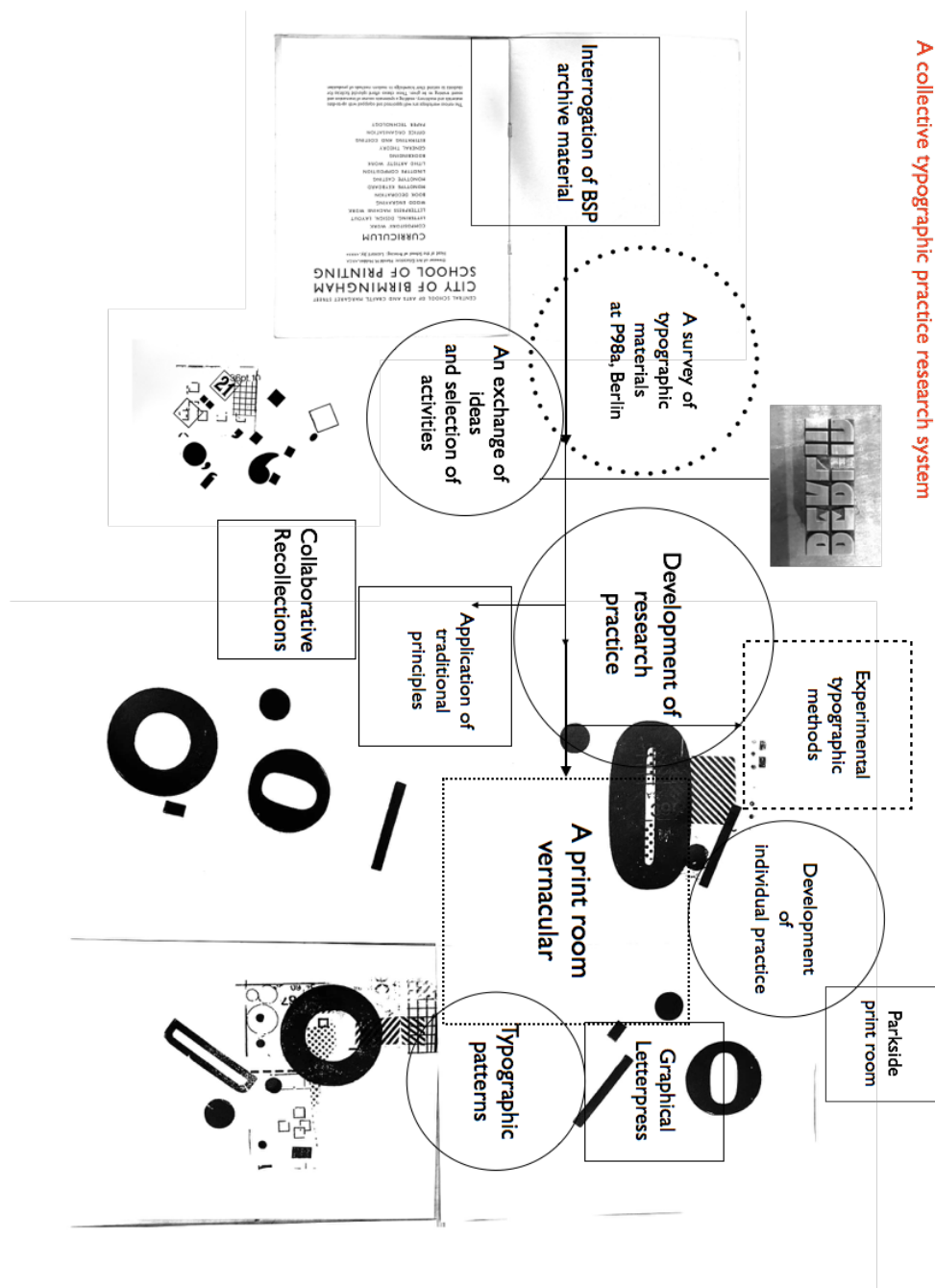
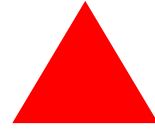


Image 38. A diagrammatical presentation of the collective typographic practice research system between Thomas and me. The method followed an iterative design cycle that started with a survey of secondary and primary materials and then developed through experimental techniques. There is a strong concept underpinning the explorations and this enabled a critical dialogue

A New Ornament: Graphical Letterpress



These reflective exchanges allowed me to identify a way to refine the method. Thomas and I had discussed two key texts and drew conceptual approaches that led aesthetical considerations from the writings of Jones and Loos. The themes in *The Grammar of Ornament* by Owen Jones (1856) and *Ornament and Crime* by Adolf Loos (1910) enabled us to initiate a discussion about how typographic ornament was used traditionally and how we could interrupt those traditions by forging new relationships between typographic and ornamental form. Loos advocated a new curiosity of the decorative ‘as ornament is no longer a natural product of its culture, and therefore represents backwardness or even a degenerative tendency’ (1910).

In *The Decriminalization of Ornament*, Alice Twemlow discusses ornament in graphic design as ‘oscillations of style’ (2006:90) where a ‘modernist – derived philosophy that has dominated twentieth-century design empties ornament of meaning and separates it from function, this rendering it superfluous in the eyes of the canon’ (89). Along these lines, Thomas and I were reconsidering the function of ornament in experimental letterpress practice.

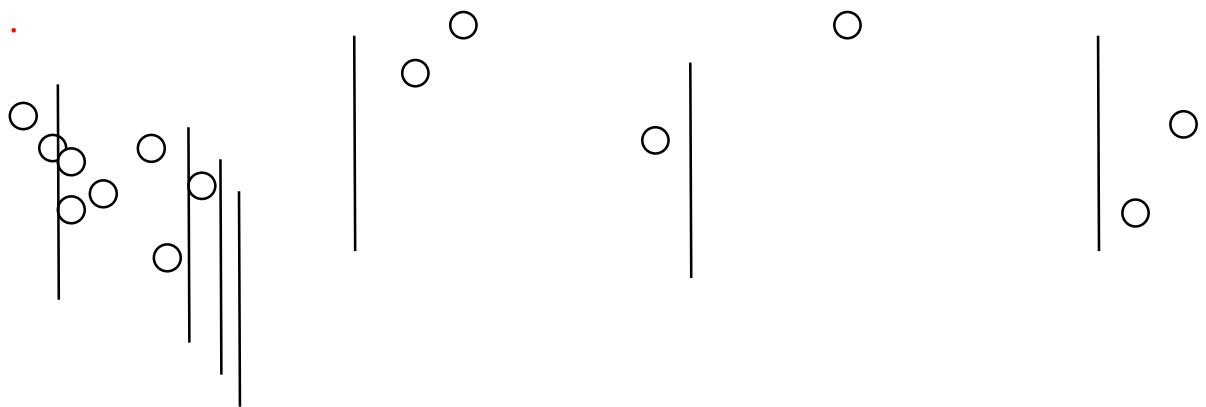
This initiated an approach of how we can facilitate an exploration of repositioning ornament from a decorative addition to a typographic piece of work towards a discussion that highlights shape and pattern in repeat that is a way to situate historical design principles in contemporary practice. In consideration of using traditional conventions and the placement of them in this research, we looked to Owen Jones’ writings when he discusses the attempt ‘to build up theories of art, or to form a new style, would be an act of supreme folly. It would be at once to reject the experiences and accumulated knowledge of thousands of years. On the contrary, we should regard as our inheritance all the successful labours of the past, not blindly following them, but employ simply as guides to find the true path’ (1856). With regards to the visual aspects of Jones insisted that ‘all ornament should be based on geometrical construction’⁶⁴. With this in mind, we developed this to form the conceptual framing to underpin explorations in typesetting techniques in the development of new typographic

⁶⁴ This is Jones’ proposition number eight of thirty-seven propositions in the *Grammar of Ornament*.

patterns and language and ornament. We selected Futura Schmuk ornaments, designed by Paul Renner (1878-1956) in 1927, to collaborate with histories and to reshape the concept of ornament. Renner was the author of texts such as *Typografie als Kunst* (Typography as Art, 1922) and *Die Kunst der Typographie* (The Art of Typography, 1939) where he set out guidelines for typographic and graphic design approaches. He taught with Jan Tschichold in the 1930's and was a prominent member of the pre-Bauhaus Deutscher Werkbund. Renner 'was guided by a strong belief in the union of art and industry, and was, as Futura brilliantly demonstrates, a staunch opponent of ornament' (Hefland, 2007). This selection of geometric forms became an exciting aspect of the practice as it created an area for us to express ornament as design as opposed to the conventional way of decorative additions. In his writing, Renner details the attributes of forms found in a natural state as 'the simplest forms of nature may well be spheres, cylinders, cones, cubes, spindles and such....' (1922: 33). However, 'their composition within reasoned relationships do not occur in nature' (Renner: 33), only when there is an 'abstraction into squares, circles, and triangles...essential to the expression of the specific and purposeful artistic volition' (33). The selection of Schmuk proved as Hefland describes 'type extends and amplifies its message through more robust gestures in form, scale and composition' (2007). It allowed a graphical expression through the relationship between the press, the historical design principles and a drive towards exploiting shape through repetition. Weil derives 'a new grammar of ornament through recurring arrangements of stripes, rectangles, triangles and dots and the frequency of the forms' (2021). These experiments developed through a flux of ideas when we were standing at the press and started a new graphical letterpress discussion.

In 1913, Filippo Tommaso Marinetti set out a manifesto against formulaic design and the 'destruction of syntax, radio imagination, words in freedom' (1913). He asserted 'my revolution is directed against the so-called typographical harmony of the page, which is contrary to the flux and reflux' (1913). It is, as Marinetti describes, this flux and reflux as the tension between the historical and the collective practice as the investigations through the formation of the abstract shapes of Schmuk that creates knowledge in referring back to the research question. As we experimented, we began to collect typographic components that we would later develop in our own spaces. As Thomas describes, a 'cross pollination' of our collective typesetting and printing where typographic and abstract forms collide and reform.

As these forms emerge I contemplate how our abstract interactions take on a concrete approach. Max Bill discussed the aim of concrete is to create 'a visible and tangible form' (1944) in the course of making the distinction of the formations, 'which did not previously exist, to represent abstract thoughts' (1944). However, Gerstner asserts that graphic design had nothing to do with art but that could certainly benefit from the rigorous disciplines of Concrete Art which he and others extended into design (Hollis, 1994:130). I offer a way to approach design practice as an exploration of the limitations of principles and conventions but not a straitjacket that restricts. A way to articulate the playful collisions and to reinforce my answers to the research question. The lines and circles seen in the interpolation overleaf is a visual device to describe the layers of collisions between the explorations of design principles and the emergence of new forms.



We also selected a typeface to develop the experimental typographic practice called Joschmi, seen in image 39, this formed a new area to test our concepts and design system.

Spiekermann explained the typeface was designed as part of a project called Hidden Treasures – Bauhaus Dessau with Adobe and the students studying typography design at the Bauhaus Dessau Foundation to revive unfinished Bauhaus designs. Spiekermann suggested the designs were 'lost to history' (2018) as presented in the typographic interpolation below.

L o S t t o h i s t o r y

Spiekermann and the students referred to a range of hand-drawn letter fragments, typography sketches and posters from the Bauhaus archive. (Dezeen, 2018). Type forms were printed with the modular blocks that were cut from these designs created using a digital application. The completed typeface is a collection of lines and dot forms, with a stencil-like approach to dissecting the lines and chopping up circles to form curves and blocks that seem to flow from one form to the next. It is reminiscent of Josef Albers Kominationschrift designs for a universal typeface (1926) and Jan Tschichold's Transito typeface design (1929) where simple geometric shapes, the circle and square are repeated and the form seems like it is sliced and placed alongside other components to form other forms in relation to the line of the stencil that is a prominent visual feature of both designs.



Image 39. Joschmi typeface is named after Joost Schmidt, a teacher at the Bauhaus. Designed by student Flavia Zimbardi (2018). Thomas and I used this typeface in some of the experimental work

Joschmi, like Kominationschrift and Transito, are modular designs that enable the compositor to develop abstract forms. These modular and geometric design aspects enabled an unplanned praxical intervention. We set and printed a quote by Loos 'Ornament und Verbrechen' (1910) using the Joschmi typeface and a composition in German was a way to explore structural possibilities. Meggs and Purvis describe the term vernacular design as a combination of visual aspects and of a specific time and/ or place, as it is 'referring to artistic and technical expression...of a locale or historical period' (2016). The collective practice encompassed many layers of technical and artistic elements to explore. The culmination of the elements formed a new way of discussing a visual vernacular through a collaborative praxis. Catherine Dixon discusses the term vernacular values in relation to the legacies of typographic scholarship of Nicolette Gray (2018). In the collective practice we were exploring various forms of a visual and critical vernacular through the typographic design practice, creating emerging research specific values.

As Thomas and I tested concepts through the application of typesetting and printing, we added a new meaning to the legacies found through the overlaps of histories, traditional processes, new technologies and new interactions. By working with these artefacts that have been revised from historical documents we were able to participate in several spontaneous interactions that led to the manifestation of practice of a particular moment, space and an exchange between cultures. A process of revaluation and reinterpretation that sparked new debates. The collaborative work that was completed at P98a followed a graphic design device – a grid. This was selected as part of a traditional way of organising material and gave a sense of organisation and structure. Byrne and Witte discuss construction and organisation through grid systems as, 'one means of organizing visual material a means to an end in themselves' (1990). There is a need for the grid to reflect the needs of the task and they should be, 'based on a general evaluation of content and reflect the particular character and presentation requirements of that content (1990). This system worked well through the collective interactions adding order as we sought to reorder. However, the systems that were set up in the collaborative research were to be dismantled as I continued the development outside of the collaboration. The typographic pattern overleaf is a way to present a reordering of systems. Spiekermann urges us to 'reuse, reform old technologies to create the new; re(becca) (2021).



Image 40. A collection of Futura Schmuck ornaments at P98a, Berlin. We selected these for part of the printing activities



Image 41. Spiekermann and Thomas at P98a, Berlin. There were layers of collective intervention in the research practice. A sharing of knowledge and a critical reflection of practices

The development of work, started at P98a, Berlin, and continued remotely with Thomas in Berlin as I worked in Birmingham, via a video link (Zoom) where we could review the work, experiment further and extend the practice together with further developments in layering, deconstructing and reconstructing our letterpress prints, we developed ideas individually and as a collective. We continued experimental printing at the Museum fur Druckkunst Leipzig. And through this process we were able to reflect on the method, collaborative and individual approaches. This is where I began to find confidence and a fluidity in my techniques. The conceptual, visual and technical elements began to connect in a more informed way that would not have happened without the foundations being established at P98a. In the development of typographic practice that is situated outside of the collective practice I wanted to investigate other ways of disrupting the historical norms to reveal new parameters and edges to the investigation. This area of the study encompasses new and unique methods where my research develops through the historical study, the development of praxical interventions, with Thomas and a space where the exploration of typographic practice. These arrangements see further abstractions and constructions in my individual practice which I will discuss in the next part, Individual Practice.

Individual Practice

Following the collaborative practice areas of the research I have detailed above, this part of the study has been conducted through an exchange of traditional and experimental typographic practice discourses forming an area of visual research within my own work. This is again presented in a written and diagrammatical format. The development of analogue typographic processes; letterpress, transfer/ rub down type, typewriter and screen printing I set out examines how the thinking and making processes of traditional typographic conventions are disrupted and reconsidered in my work. In the field of typographic practice, the originality of this area of research focuses on the visual production and design elements to present and describe, for the first time, the development of the typographic practices of Mason, Jay, Froshaug and Kitching within the timeframe of 1890-1990. The connections made between typographic practice and pedagogical approaches through the specific institutions Mason et al provided a backdrop for the production, associations, networks and the output of this time, writings and printed ephemera. This study is positioned at the intersection of current design practice and traditional typographic methods. An inter-play between typographic history, letterpress practice and design pedagogy through experimental typesetting and printing processes.

In this section, I explore three key areas of my own research practice. I start by arguing the case for working between the historical record and my contemporary practice in a particular way. Primarily, I press for a contemporary practice that goes beyond experimental artistic archaeology by applying historically located principles in my own work to finding a space between the present and the past. From here, I explore how I joined the dots literally and metaphorically. Finally, in the longest section of this chapter I set out the new forms which emerged in my work by applying these processes.

Out of the Archive: Finding My Critical Space Between the Present and the Past

The central positioning of print room practice enabled me to engage with visual, conceptual and material elements drawn out of the historical study. These activities facilitated 'a network of processes and research through practice' (Frayling, 1993) The transition from the historical part of the project to the experimental practice-based area required a framework to test the praxical encounters, (Bolt, 2004), emerging knowledge and the design principles drawn from the historical investigation. The formulation of a way to test the explorations connected traditional techniques with the new research practice, through active design research (Weingart, 1986) and the designing of a 'collecting process' (Fruh & Neuenschwander, 2016) of typographic techniques and processes. The idea began with a concept by El Lissitzky when he provided a starting point in *The Topography of Typography of the Book*⁶⁵. The concept of situating the physical features and how the elements are distributed of printed ephemera seems to make sense. The organisation of the visual aspects of the typographic forms and the technical and process parts of the research is part of a system that, as Lissitzky discusses 'you can see how it is that where new areas are opened up to thought patterns, there you find new typographical designs' (1923). This systematic classification of the types of typographic explorations are situated alongside the categorisation of printing processes. It is organised through visual thematic analysis of practice outcomes, covering typesetting and letterpress printing, transfer type techniques, typographic sketching, typographic collage and assemblage, deconstruction of forms and digital manipulation. Table 7 shows the initial sorting of the different components of the creative practice process categories and the analysis outcomes. As the practice developed, there was a need to reflect this in the organisation of the methods and processes. As a result of the changes, the following diagram shows the classifications within the method and exemplars of experimental work. This allows for a system to be formed from the vast and complex nature of praxical interactions. The limitations of the complexities found in the practice processes are explored and the framework enables greater control of the printed outcomes. As the body of my work expands, the scoping exercise without affecting the freedoms of experimental activities.

⁶⁵ Originally published in Merz, No.4, Hamburg, 1923. Found in "The Look of Russian Literature", Walter de Gruyter GmbH, by Gerald Janecek, 1989.

A topography of typographic practice categories with examples of praxical interventions

Typographic Practice Category	Outline of Techniques & Processes	Analysis outcomes
Typesetting & Letterpress Printing	Print room activities, setting type, using traditional methods to explore printing processes and to test the design principles	The exploration of typographic and printing techniques to explore traditional techniques and processes
Typographic Sketching	Combinations of printing methods; letterpress printing, screen printing, transfer type to explore composition, materials, concept, design principles	Testing and refinement
Transfer Type Techniques	Letraset and other rub down type tests to explore experimental typographic techniques; experimentation with processes that can be completed outside of the print room	New structures within typographic practice, new ways of working
Typographic Collage and Assemblage	Combinations of Letterpress prints, Transfer Type, layering, paper, pre-printed ephemera, traditional cut and paste techniques.	Digital Manipulation Experimental data. New combinations of processes and aesthetic approaches
Deconstruction of forms	The dismantling and rearranging of typeforms and Letterpress prints to develop new form and language	Reordering of visual and typographic language, typographic abstraction.
Digital Manipulation	Applying new technological methods to the testing of the principles; Risograph printing, Adobe Photoshop	Contemporary technologies in combination with traditional and analogue methods

Table 7. A Topography of Typographic Practice. An initial attempt to classify experimental letterpress practice. This was the starting point of the organisation of the research processes through an iterative design cycle

A topography of typographic practice categories with examples of praxical interventions

Typesetting & Letterpress Printing



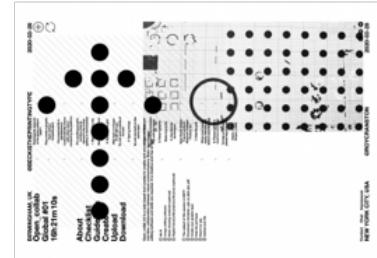
Typographic Sketching



Deconstruction of forms



Transfer Type Techniques



Typographic Collage & Assemblage



Digital Manipulation

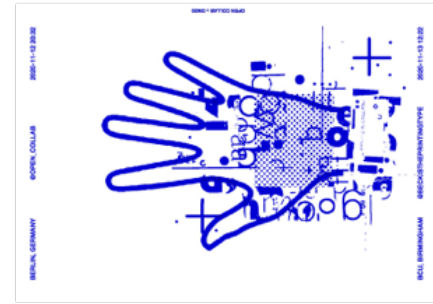


Image 42. A diagrammatical way to position the classification of individual experimental practice through a series of residencies, projects and briefs. This way of organising the praxical interventions allowed a system to be developed and to test against in the evaluation of methods and processes

Having set out the space between the past and present that I work in, I now turn my attention to contemporary design practice. My typographic practice explores the relationship between experimental making processes, where the processes have also become the outcome, another order of discourse. This research practice is a series of analogue processes-led typographic examinations through alphabetic and non-alphabetic type forms. A range of interlinking relationships between traditional knowledge and praxical interventions, as a device of different positions forming and measured, sometimes unconventional manipulation of tradition. In doing so this forms a disruption, a deconstruction of the visual and philosophical elements. With this in mind, I turn to the writing of Rick Poyner in his book *No More Rules* (2003). He argues that 'deconstructivism does not want to demolish, decompose or destroy a structure; instead it seeks to disrupt, dislocate and deviate by incorporating a disturbance' (48). He discusses an article by Philip Meggs in 1990 called *De-Constructing Typography*. Meggs defines deconstruction as 'taking the integrated whole apart, or destroying the underlying order that holds the graphic design together' (1990: 135). The idea that a system or in this case, traditional rules can be dismantled without being sabotaged is central to the findings of my individual practice. A deconstruction through experimentation is a context to examine a hypothesis within a set of design principles, however, there are some areas of the experimentation process where typographic forms are examined with non-formulaic approach to seek new relationships and interpretations. A re-examination of the formal principles of typographic practice takes place through the study of traditional methods and a reconstruction of visual and technical elements, to reframe historical conventions of the traditional approaches to explore new typographic forms. The deconstruction and reconstruction of type forms and systems of structures in layout and grids, creating new knowledge in materiality and process.

Here there are several layers of systems that were being developed; typographic abstraction in terms of visual elements, a synthesising traditional knowledge alongside disruptions in conventional syntax to reimagine graphic forms and the offer of a reconsideration of traditional rules. Lupton and Phillips describe the process through a series of anticipatory actions by 'blocking, cutting, or distorting letterforms, designers exploit the tension between meaning and abstraction, familiarity and strangeness,' (2008:100). The type forms are a series of lines and curves, a collection of shapes when combined form patterns as part of a visual language. The activities in type composition, dissection and construction create unique patterns and language. They become their own visual dialect; their own code particular to the research.

This project encompasses an exchange of orders and reordering of printing practice, a merging of an interrogation of the historical, applied in contemporary creative research practice. This focus encouraged knowledge as I explored a network of relationships between these primary secondary

sources and developed new insights into creative work. The historical and explorative design layers of the research stimulate an assimilation of traditional processes into creative new knowledge. This process itself is dependent on the principles extrapolated and developed from primary and secondary sources. Different components of the network of different types of research are drawn from different sources and reassembled to craft new typographic conventions through, as Vinh suggested, “analogue crafting” (2011).

I drew on archival material to support the interrogation and critical analysis of the writings of Mason et al. I took these insights into the print room to explore in practice the models developed by these theorists. The print room exploration, in turn, enabled a reinterpretation of the data found in the archives. I used secondary sources to reveal the critical commentaries and histories of typography practice and pedagogy and the literature by designers and practitioners on ‘best practice’ that were then explored in the print room. The primary research that I conducted through a series of practice workshops, residencies and live design briefs has broad objectives to apply and test experimental typographic approaches rooted in my historical context and engagement with contemporary practice layers of investigation. I am participating in, as Barbara Junod suggests, ‘collaborative historiography’ (2016: 226) through the interrogation of the collation of sources to re-examine the field. This creative practice has been completed individually to test the methodologies originally developed by Mason, Jay, Froshaug and Kitching developed through collective and individual time at the printing press. As such, my print room practice is a way to test principles and so set out connections from the historical study to a critical conclusion. It provides an intersection \cap of contexts and methods to expose new data and create knowledge through multiple lenses. It forms a relationship where I position myself at the centre of analogue processes-led typographic examinations through alphabetic and non-alphabetic type forms extrapolated from historical investigation. ‘The composing room becomes a laboratory and testing place. New artistic and technical impulses have to be tried for their effectiveness. This way of working in the area of the spontaneous, the accidental and the rhythmical is necessary, so that typography does not grow stale, trapped in established principles’ (Ruder: 171).

Wolfgang Weingart describes these junctions as ‘a triangular relationship between design idea, typographic elements and printing technique’ (1987: 224). I employed a triangulation of the design process through experimentation to examine the methods underpinned by the set of design principles. However, there are some areas of the experimentation process where I examine typographic form and process with a non-formulaic approach to seek new relationships and interpretations. This constitutes a triangulation of methods where my research develops through

historiographies, praxical encounters and as Yoko Akama suggests, 'reveal and capture tacit knowledge' (2019: 249) to form an interrogation of the traditional applied in contemporary typographic practice.

I use letterpress printing as the primary method of the investigation, with screen printing, typewriter entries and dry transfer type also enabling my experimental approaches into typographic abstraction. The abstraction of the forms is another way to deconstruct and reconstruct the forms. The division and reorganisation of code is seen in the work of Norman Ives (1923-78) who developed a 'disciplined abstraction', (Heller, 2020:6). Using a grid system in the composition of 'letter fragment experiments' (Hill, 2020: 10), he cut up alphabets and then, 'cut apart to construct collages' (2020). Through the assembly of the collages, Ives used the grid system as a 'subtle linear structure unifying the entire field' (2020). In a cross-over of ideas and processes in the using the deconstruction and reconstruction of letterforms as 'variations on typographic form... an aesthetic and conceptual state of art', (Heller, 2020:6). Typographic notation is a process to record the dialogue between research and typographic practice. and to present 'the graphic variables', (Twyman, 1981). Twyman offers different combinations of lines using 'x', 'l' and 'o', becoming abstract graphic form, 'to demonstrate in simple terms how principles of Gestalt psychology relate to typography and how the spatial organization of elements could be used to provide readers with some advance notice of the structure of a piece of information' (1981)⁶⁶. This research provides not lines for graphic variables but collections of exchanges between research methods and abstracted aesthetical considerations. H. N Werkman (1882-1945) created drawings from a typewriter labelling them *tiksels* from the Dutch infinitive *tikken*, to type (Purvis, 2004). Werkman made these around the same time, 'as similar constructions that appeared in *De Stijl* by Piet Mondrian, however while those in *De Stijl* were described as sound poems, Werkman's *tiksels* were pure abstraction' (54). The *tiksels* in this practice are another way of synthesising various elements and techniques in the reimagining of historical typographic and graphical forms. It is an offer of a reconsideration of the traditional rule of using a typewriter as a functional way of recording data, rather than a way of exploring graphical elements through experimentation. In this way, the material objects I produce have importance, however, it is the iterative design process and the tensions between this disruptive approach, through the experimental making processes that will become an outcome of my research as another order of discourse.

⁶⁶ Found in: Geoff Andrewartha. "Improving the presentation of printed text for tertiary level distance education: Literature review and survey", Distance Education, 2006.

The Emergence of a New Form

My final focus, on the new approach that emerged in my individual practice, takes longer to explain and exemplify. I make three broad points; firstly, what are the parameters of experimental letterpress in this research? The situating of the approaches leads to how I position individual experimental practice and finally, how that contributes to a new typographic vernacular.

In the development of typographic practice that is situated outside of the collective practice I wanted to investigate other ways of disrupting the historical norms, the construct, to reveal new parameters and edges to the experimental investigation. There is a need to designate some lines to define this experimental practice in order to measure what the experimental approaches achieve. In *Experimental typography. Whatever that means* (2005), Bil'ak considers the word

experiment

used as, 'very few terms have been used so habitually and carelessly. He explores the use of the word, in the fields of typography and graphic design as a noun that 'has been used to signify anything new, unconventional, defying easy categorisation' (Bil'ak, 2005). This research finds the experimental parts of a design process play a vital role in creative practices that are embedded in pedagogies to ensure exploration and invention are embedded as part of an iterative approach. Experiments in printing through a series of proofs are sensitive to error and it is the errors that can encourage unplanned directions and new tactile dimensions.

In *The Typographic Experiment: Radical Innovation in Contemporary Type Design*, Teal Triggs (2003) suggests experimental typographical design 'is about the expressive potential in the arrangement of

type' and that the term *ex press ive* can be defined 'as a way language is articulated through

the use and arrangement of type' (Triggs, 2003). David Carson takes a different viewpoint, perhaps aligning to the originality of the explorations, suggesting 'experiment lies in the formal novelty of the result' (Triggs, 2003). In 1928, Morison, who was alerted to the use of 'bright' typography or 'typographical eccentricity', wrote about experiments in what he describes as a laboratory 'it is a pity that such pieces are so limited in number and courage'. (Morison 1928). It is this space in this research project where print rooms become the laboratory to develop the meaning of the experimental in these practices and where typography becomes a 'visible artefact' (Triggs 2003).

Whereas, Bil'ak suggests 'an experiment has no preconceived idea of the outcome; it only sets out to determine a cause-and-effect relationship' (2005). This can be a valuable way of approaching an experimental way of working however, there are ways in which an experienced designer can experiment and hold the knowledge of how the actions will inform the outcomes. We can consider Bil'ak's suggestion that, 'experimentation is a method of working which is contrary to production–

orientated design' (2005), however, there is an opportunity for those working in creative industries where the method of working encompasses experiments or tests in every job, due to the technical restraints of the processes or the requirements of the client. Therefore, this is in opposition to his thoughts 'where the aim is not to create something new, but to achieve an already known pre-formulated result' (Bil'ak 2005).

In this research laboratory there is planning and formulations that are established to exploit the formal organisations. Some of the inquiries are unplanned to stimulate unforced, unconstrained results. In his laboratory, Willem Sandberg (1897-1984) explored the idea of traditional placement of type and the arrangement of sentences by arranging letterpress type forms. Observing Sandberg's *Experimenta Typographica*, his hand made publications, designed and printed through the 1940's-1950's. We are taken on a typographic escapade via hand-rendered and printed collections of quotes through scale, repetition, shape, pattern, colour and alternative systems in layout using recycled materials. Where 'the interplay between expressive form and intended function is a key element in typographic experimentation that governs the visual organisation', (Triggs 2003). Bil'ak forms the conclusion that, 'there is no definitive explanation of what constitutes an experiment in typography' (2005). There was a need to formulate a definition as part of this field of study as it is a very large area to study. However, Bil'ak urges there is a need to 'continually redefine the purpose of experimentation and become aware of its moving boundaries' (2005) which lends itself to the expansion of the role of experimentation to a mode of continuous flux and disruption to define and redefine dependent on the contexts of creative and pedagogical practices.

The redefining and continual movement within this experimentation creates a departure from a method that can't be defined. It is a field that constantly shifts and reshapes. It has outputs that can only be made from a strict research frame where play and critical reflection can serve to reshape histories. It is this reshaping that forms the experimental praxis for structure and definition. I expose how a collection of traditional typesetting techniques could be deconstructed with the considerations of traditional conventions, as Jessica Hefland suggests, 'to fail to address the degree to which design history plays a fundamental role in any typographic course of study is nothing short of tragic'⁶⁷ This creates a juncture between the different parts of this research.

Beatrice Warde reminds us of a need for typography to be invisible, quiet and revealing, however, other threads can be drawn to other parts of her essay *The Crystal Goblet*, where Warde suggests 'the most important thing about printing is that it conveys thought, ideas, images, from one mind to other minds' (1956). In the context of this research, the printing process can be a way to elicit

⁶⁷ As part of an essay entitled *Type Means Never Having to Say Sorry*, by Hefland, 2007, in the *Design Observer* <https://designobserver.com/feature/type-means-never-having-to-say-youre-sorry/6147> [Accessed May 2020].

conceptual elements to encourage and 'convey specific and coherent ideas' (1956). An experiential territory in printing where the process and research methods can be tested through the 'selection of types with clearly legible, geometrically simple lines' (Teige 1927). A conversation between 'contrasting the typographic material to emphasize the contents' (1927).

Turning now to a part of the individual research practice where experimental approaches became a series of typographic assertions and the emergence of new techniques through the decisions I made about creating new codes with the wood and metal blocks as well as the typographic spacing material and typographical furniture. Spacing and furniture is, as Ruder suggests, 'does not normally produce an impression', and if used in the printing process, relinquishes, 'its subordinate and auxiliary role and become visible', producing, 'purposeless form which cannot, however, be denied a beauty of its own' (1967: 210-211). There are no conventions that I can draw from however, I draw on a recollection from Edward Wright discussing his approaches to teaching in evening classes at the Central, 'Froshaug gave me the idea and the opportunity to try out what Lawrence Gowing has aptly called 'extempore typography'. The method was to arrive at a design or typographic statement by moving printing units around the bed of an Albion press, while making a series of impressions from wood letter and other type high printing units'⁶⁸ (2000:94).

⁶⁸ In Anthony Froshaug; Documents of a Life, London, Hyphen Press, Robin Kinross (ed).



Image 43. The setting of a combination of forms and spacing material on the table top proofing press (2022)

As I planned the development of the experimental process, I considered how Wolfgang Weingart defines typography as; ‘enhancing the communication process, adapting to changes in message and culture; and also expressing subjective patterns of thinking and designing based on artistic and personal qualities’ (1978). His approach to typographic experimentation in the 1960’s as he was, ‘adjusting type size, and spacing to enhance expression’, (Weingart, 2000: 271-303). Rick Poyner suggests Weingart was not constrained by his training in typesetting and that he used ‘lead type and letterpress to investigate basic limitations of reading, such as size, weight, slant and letter spacing and he stretched words and lines until the text was unintelligible’ (2004: 20). He describes Weingart’s work as ‘spontaneous and intuitive’ (2004: 20). Poyner identifies a space in Weingart’s practices that is pertinent to this research. A location where the formal aspects of letterpress are reevaluated and

the rules are changed as a curiosity of how the processes can be applied to critical graphic dimensions.

A new context to 'question established typographic practice, change the rules and to re-evaluate its potential' (2000:112). As Zurker suggests of Weingart's work, 'it invites intensive discussion' (2000: 61). It is that opportunity for new discussion that initiates some further experimentation that disconnects with traditional principles. A new exploration of 'spacing, framing, punctuation, type style, layout and other non-phonetic marks of difference constitute the material interface of writing' (Lupton and Miller, 1994). A move from the 'traditional literacy and linguistic research' (1994). In this research practice, typographic spacing material such as leading and furniture are traditionally used to create space and to support the arrangements of the typefaces to form the layout and structure of the job. The counters the negative space within the type forms is an important part in the composition of type in the chase. The relationships of the semi circles and apertures in the forms add to the balance and hierarchy. A practice that Hansjorg Mayer (1943-) used in a series of works called the First Alphabet (1961-62) in what König describes as 'mantling and dismantling' (2014) through the repetition of letterpress blocks that are positioned and rotated in what Max Bense describes as a 'ornamental character' (2014). However, Mayer is not using the type forms as decorative elements to add to a text, he exposes occurrences through multiple abstract constructions. I selected a hybrid collection of forms, including letter forms and punctuation forms and spacing as seen in image * that are organised to receive the ink to print. A space where typographic spacing material is utilised in the printing process and not the unseen, unprinted and technical composition of the form. The first attempt was unsuccessful as the furniture is not type high and needed to be elevated to the same height as the forms. I did this by adding a paper platform under the furniture elements. The processes become part of the visual aspects as well as technical systems to operate within the research practice. In terms of the visual elements, the processes that take place during the typesetting and printing have become part of the aesthetic considerations and not just the technical aspects. An 'expression of a process' (Friedman, 1994). For example, in image * the furniture creates a linear abstraction as part of the visual composition. However, adding the piece of furniture as part of the typesetting process is part of the system that contributes to the testing of the principles.

The processes of changing, modifying, destruction, transformation and reordering form the communication. In the collective practice part of this study, with Thomas, as discussed in the collective we explored ornament and modular type forms conceptually and visually consolidating Loos' desire to avoid decoration in *Ornament and Crime* (1908) and Jones book *The Grammar of Ornament* (1856) by reinterpreting motifs. I extended these explorations in individual work embracing, 'a mix of formal structure and organic irregularity' (Lupton and Phillips-Cole, 2008),

culminating in a new signature through the experiments or 'individual authorship' (2008). I chose and assimilated a combination of the forms that have various functions such as punctuation, ornament, symbols, letters, purposely selecting forms that do not fit a naturally coherent set of shapes or symmetry. Geometric shapes are placed next to a full stop or an exclamation mark from a serif typeface. A study of order and disorder This process of constructing repetitions and geometries are modified and formatted again and again on the press. A print is taken of every adjustment and transformation. Some of the contrasting and discordant elements are devoid of linguistic meaning and some are drawn from the conventional typesetting that used specific texts to explore and develop the methods. Modular forms and systems in modularity were developed as a mode of constraint to work within 'systematically varying the elements', (Lupton & Phillips – Cole, 2008). As I organise the different elements running through the research, I observe the nature of the different parts of the visual, conceptual and technical attributes that form connections. Lupton and Phillips-Cole describe this as 'a module is a fixed element used within a larger system or structure' (2008). The blending of the fixed, the strict criterion and the variables of elements, the shifting and irregularities formed the invention of new and unexpected associations.



Image 44. Examples of typographic practice in Parkside print room where ideas and concepts are explored in intense and sustained investigations in techniques and processes. (2021)



Image 45. Examples of experimental letterpress and screen printed processes at Parkside print room. The practice was developed from the collective practice completed with Thomas. Extending the ideas formed within collective interventions and deconstructed and reconstructed in individual practice. (2021)



Image 46. Experimental practice at Parkside print room. An example of form and spacing material in the exploration of emerging typographic language (2022)

The printing processes are part of a complex set of design statements that are revealed in the tacit and analogue understanding through the alternative ways of arranging typographic material and subsequently the visual expressions. Dixon and Baines discuss Froshaug et al as wanting to 'handle type, so that they could better explore the possibilities of working beyond the 'norms' of practice as had been presented to them' (2014). This positioning is pertinent to the practice situated within this project. The rethinking of traditional methods can be explored through the printing process and the organisation of visual components, 'exposing and revising' (Lupton & Miller, 1994) by 'discovering structures and patterns', (1994). A further development to construct a new norm in the typographic printing process was examined through the deconstruction and assemblage of printed type forms creating new typographic visual grammar.

A new approach to calibrating typesetting and letterpress printing emerged through the evolution of this project particular typographic vernacular (Edgar, 2014) a mode of research that has facilitated the construction of a series of typographic maps; a way to dismantle the formal techniques through disassembling the prints created in the print room to form a map of printed fragments to form disrupted compositions and typographic language. This part is reminiscent of the work of Kurt Schwitters (1887-1948) and the exploration of collage and abstraction, the re-appropriation of discarded fragments from the printing process to form lithographic prints. An example of Schwitters is seen in image 47. This photograph was taken, standing on front of Schwitters print at the Barber Institute of Fine Art, University of Birmingham. Part of their special collection in printed work. Taking into this viewing of the print enabled a way to form dialogues with the past and the way in which one can formulate ideas by being in close proximity to the layers of historical, philosophical and technical aspects that may not be transmitted through a reproduction in a book or a computer screen.

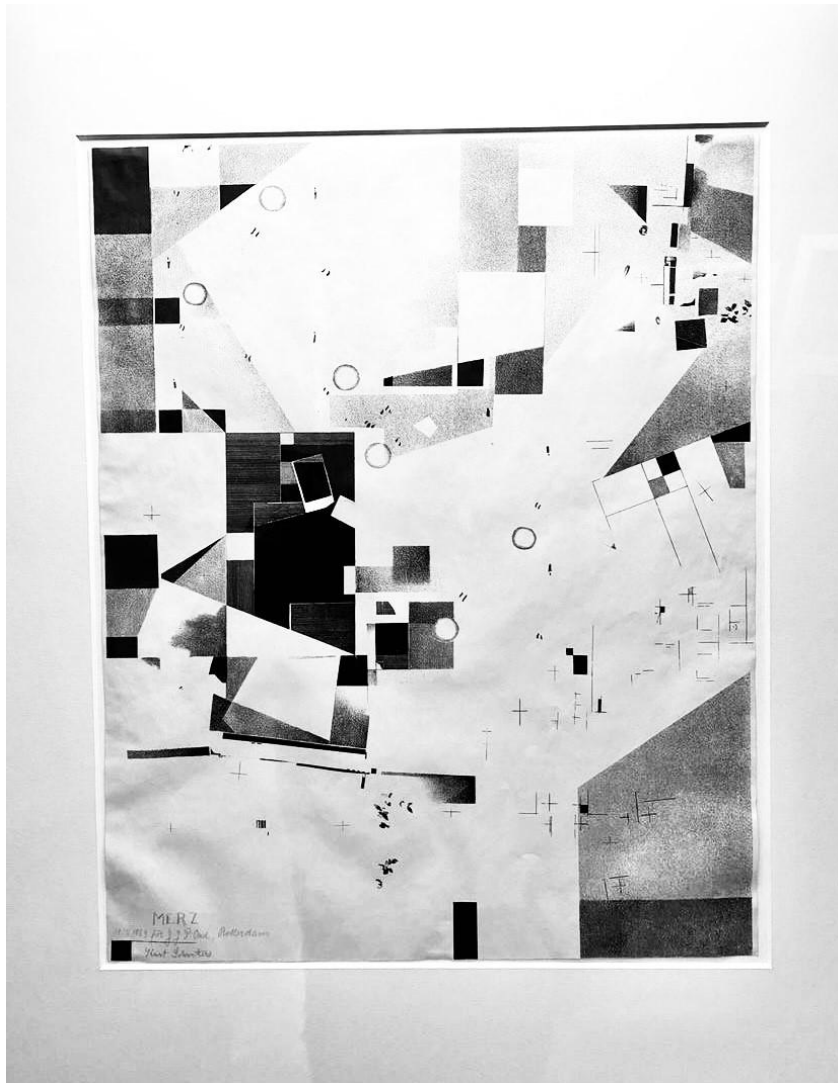


Image 47. Merz V, Kurt Schwitters, Berlin, 1923, Special Collections, Barber Institute of Fine Art, University of Birmingham

In image 48 the typographic map is a subversion and deconstruction of the formal elements that were undertaken in creating the original letterpress print with Cleaver. The techniques of cutting, layering, assembling are developed to order the new. The design principles that were adhered to in the collaborative practice are now exploited. I have retained and reused the principles extrapolated from Mason et al and creating structures and then rearranging them through the experimenting with irrational chopping and cutting; deconstructing, reconstructing and retaining the traditional typesetting processes, embracing the rules and the principles and then dismantling the forms through experimental methods. As Lupton and Miller explain, the relationship between the layers in 'a history of deconstruction, running alongside and beneath the evolution of transparent formal structures' (1994). And the overlays of 'Derrida's writing draws on experimental forms of page layout, and countless forms of irrational order appear across the discourses of the printed letter' (1994).

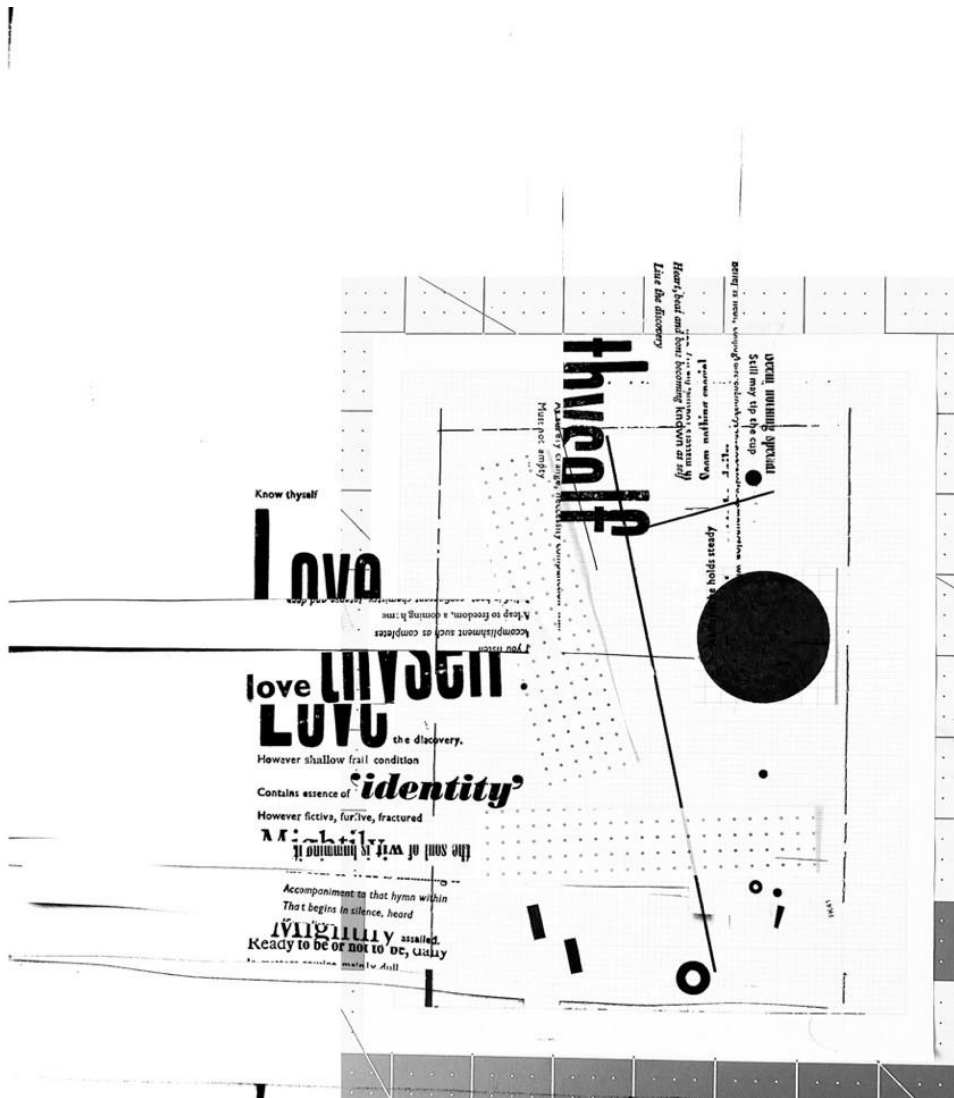


Image 48. A typographic map. The deconstruction of a letterpress print that is reconstructed with different elements to construct a revision of the original syntactic arrangements. (2021)

The printed assemblage has gone through another iteration and restructure. The letterpress print fragments are combined with the chase that was used in the composition of the forme. They have been reordered to create screen prints and the type forms are dissected and dismantled to create new forms and patterns. The original text is partially legible. Another print is added to the reconstruction, the exploration of Froshaug's work, *Typographic Norms* (1964). An experimental piece of typographic spacing material that Cleaver and I explored in collaborative activities. I developed this further in individual activities. The arranging of typographic material to explore a structure of the vertical and horizontal placing of spacing material, blocks as typeface and abstract

forms to create a new way of approaching **experimental letterpress**. This is reorganisation of the formal principles of my typographic practice through the collaborative research practice that is then developed further through my individual experimentation. A reconstruction of the historical conventions through the exploration of the deconstruction and reconstruction of systems of structures in layout and grids, new exposition of materiality and process. The reconstruction of the elements is continued in the next iteration of the study. I have extracted words from the text love, freedom and identity and reformed them with various metal and wooden letterpress blocks. The arrangements and reordering explore observing a strict layout system and then the opposite, by placing the forms on the printing press bed in an asymmetrical, to disrupt the hierarchy. I wanted to play with the introduction of chaos to the composition through white space and typographic material. An exchange of rules and a dislocation of the system. The formal design principles are explored through the craft of typesetting, the explorations embrace the traditional structures and then they depart from linguistic and literary conventions seen in images 49, 50, 51 and 52.

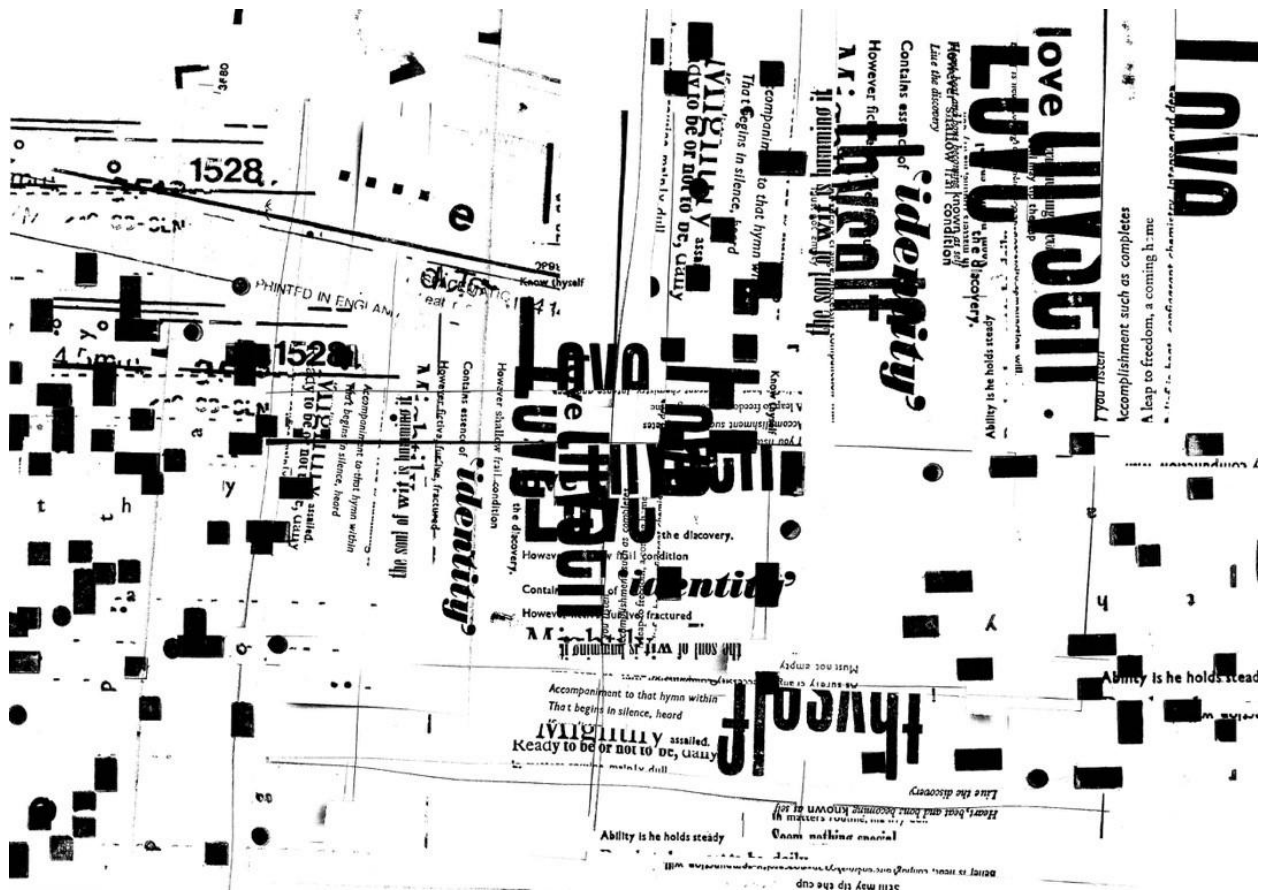


Image 49. An assemblage of deconstructed printed text completed at Winterbourne Press, UoB with Cleaver. This is combined with letterpress printed spacing material that was printed individually at Parkside print room, BCU. (2021). This presents a construct (letterpress print), a deconstruct (cut and paste) and a reconstruction (overprinting) with a different letterpress print using typographic spacing material alongside the typographic form

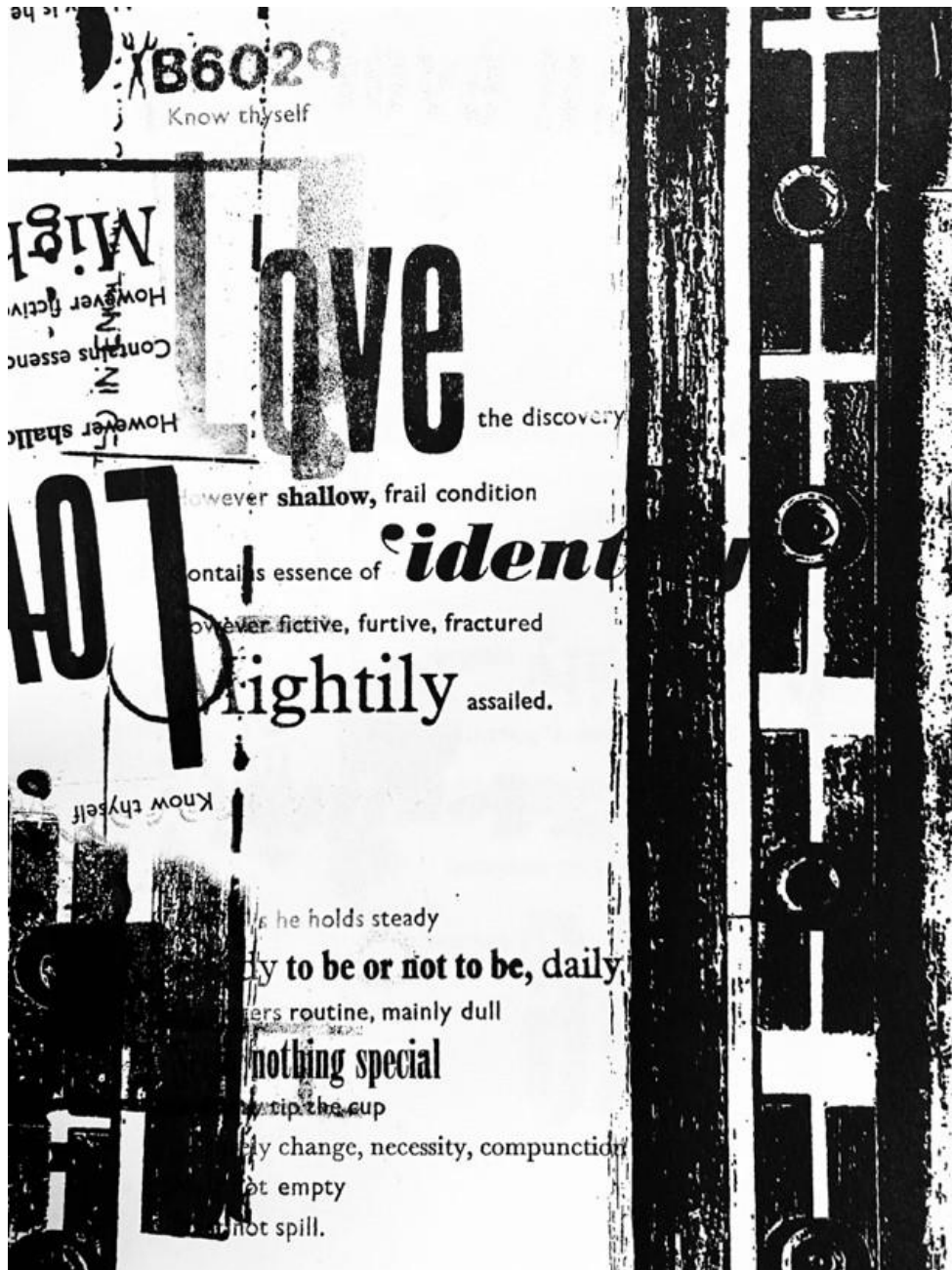


Image 50. Individual letterpress practice combined with transfer type and screen printing elements. The back of the chase is used, partially alongside fragments of other experimental elements (2022)



Image 51. Individual letterpress practice combined with transfer type and screen printing elements. The back of the chase is used, partially alongside fragments of other experimental elements (2022)



Image 52. Experimental letterpress prints with screen-printing elements. Words are selected from the poem by E'ste to extract parts of the texts that were typeset with Cleaver. In this individual practice, the typesetting conventions are disrupted and reassembled to explore different syntactic formations (2022)

The research is continuing the lineages through pedagogical situations demonstrated at points through the study when I was completing experimental practice in the print room as undergraduate and postgraduate students were completing their activities. This initiated conversation about the approaches I was employing in the creative and research practices. These interactions enabled the identification of further conversations and developments in the curriculum. Students studying on the MA Visual Communication in the Birmingham Institute of Creative Arts at Birmingham City University students have approached me to complete interviews and discussions about progression to PhD studies. The most exciting interactions are in the print room where students ask how they can develop their own experimental practice and this is a clear demonstration of the impact the research has in my pedagogical practice.

Summary

This chapter has reviewed the practice-based research I completed in several print rooms. This created many opportunities for a critical examination through conventional typesetting and experimental letterpress printing. Using the convergence of histories of, and contemporary practice in typographic work, I created a programme to organise and trace the lineage of geographic, educational and design connections. Through collaborations with designers deeply rooted in histories of letterpress, I developed a framework to visualise the intersections with the historical material and my collaborative practice interactions with Cleaver and Thomas in a range of print workshops. As I have shown, the interventions have created disruptions and deconstructions through our examinations, explorations, and experimentations in a way that develops a new form, ornaments and typographic language through graphical letterpress and an abstraction of type form.

This involved a juxtaposition and layering of formal elements in an exploratory, playful process. I used the platform of experimental letterpress practice to form and test ideas rooted in reclassifying the traditions of this practice. The printed artefacts are a way to capture a design process and also the emerging visual language that documents the distinctive encounters. They ‘represent actions’ (Triggs, 2022) in graphic language. It is a formation of a visual typology indicative of the praxical interventions created in collective practice and the idiosyncratic elements through strict structures. The disrupting of conventions as the explorations step aside from the rules that evoke local details adding to the new classifications.

The printed artefacts that are produced through these tacit interactions hold many layers of research practice. A place where the forms contain many layers of meaning. Lupton defines this as ‘narrative typography’ (Triggs, 2003). The layers of meaning are a way to separate the disparate parts of the practices and they create a typographic map throughout the project. We can consider the thoughts of Ian Robson when he suggests he tacit the ‘doing’ visual research is not enough, so methodologists and educators ask that we develop the thinking and process behind methods and techniques’ and that ‘learning itself is messy’ (2022: np)⁶⁹.

The map also connects, overlaps and creates new networks. The reinsertion of the set of principles drawn from the archives into this experimental work has been shaped. A deconstruction of the relationship between the old and the new, not to replace formal structures but to construct new systems. Some parts of the print room practice follow a restrained use of typographic devices and

⁶⁹ From Learning through mess: Sensemaking visual communication practices in a UK multidisciplinary applied health study by Ian Robson (2022). Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9373063/>. No page numbers in the article.

sees a reduction of textual elements with the introduction of symbols and abstract components. An emphasis on a type form next to a block or line that may be placed on a vertical, horizontal or diagonal axis. Arrangements of typographic gestures that are devoid of legibility and follow the graphic structures gained through the praxical encounters. This presents a tension between design history and contemporary visual practice. Drawing out what has previously been held as a legacy of printing and typography pedagogical excellence in archival repositories and back into printing rooms and the fields creative and pedagogical practice. The output of this practice contributes to my commentary on the literature on best practice; the extraction of historical and theoretical aspects can now be explored through the continuation of new directions, to host possible canons that the crossovers create.

Conclusion

Introduction

The chapters in this written component of my thesis have detailed and revealed the implications and the significance of the research conducted in an emergent field through an exploration of traditional conventions to find new connections in contemporary letterpress research practice.

In the Introduction I described my conceptual and philosophical positions in this area. I also set out my intentions of how the project would be structured through the development of research methods, presented in chapters one and two, looking at experimental letterpress practice as research and collaborative practice as research respectively. I did this through an experimental mode of discovery and the building of research approaches to create a space where process becomes part of a critical investigation.

In *Left I Right: The Cultural Shift from Words to Pictures* (2006), David Crow discusses 'reprocessing' as part of the design cycle. He reflects on 'new wave' approaches to design where 'the mood was at odds with traditional values' (102) and designers would 'photocopy from old typography books' and 'photographic technology was employed as a creative tool for reprocessing type' (102). It is this re-appropriation of traditional artefacts and the repositioning of analogue processes that can provoke new ideas. In this way I have reprocessed the conventions and exposed new 'theoretical directions' (Triggs and Atzman, 2019: 864). In doing this, bridging the gap in this inquiry through the literature review, as seen in chapter three, which examined my approach to exposing critical patterns through a historical overview of letterpress and typographic design practices.

This revealed a research opportunity to explore traditional knowledge when applied in the context of contemporary creative practice. Therefore, the questions and aims are positioned at the intersection of this hybrid research approach and are immersed in the historical and design practice to further research in this intersectional field. Secondly, the significance of individual and collective experimental practice provides an opportunity to make a further contribution to the field. The practice methodologies, along with the systems I have devised to frame, test and reflect on the design and making processes, have become tools of research to explore critical knowledge in my area. Thirdly, the incorporation of the practice-based activities and outcomes; the printing processes and the printed artefacts are themselves contributions in the methods of this hybrid research.

This research project began by pointing to an opportunity to look through the lens of historical conventions in creative and pedagogical typographic practices. This created a dialogue in contemporary experimental letterpress. I undertook an investigation of historical knowledge to ascertain if it could be a mode of discovery in contemporary design practice. As outlined in chapters four and five, I explore a non-traditional approach in the consideration of experimental methods as well as aesthetics in design and pedagogical practices.

There are three main findings and contributions in experimental practice as follows:

The defining of the field of formal research and experimental practice

Defining the scope for this research saw developments through the historical study through to creative practice outcomes. I offer diagrammatical and graphical interventions, contributing to the definition of the research and how the historical, the experimental, the individual and collective practice aspects of the research are formed and interact with one another through the drawing out and implementation of conventional design principles in these unconventional and disruptive ways. My iterative design processes were applied throughout the duration of the project and it was not limited to the creative practice aspects. The processes were applied in the application of research method approaches.

Developing research practice methods in a hybrid research project

The designs of systems reflect the formal structures and the expressive nature of the practice. The methods encompass the individual and collective activities and the nature of the technical processes as well as the conceptual and theoretical aspects. These methods are undertaken in print rooms with students sharing the space. This creates a contribution in my pedagogical practice.

The written PhD thesis with a supporting portfolio of practical work, the writing and the presentation of papers in academic situations

This provides a critical and detailed examination of the traditional perspectives of printing and typography practices. I have presented several papers at conferences and for publications thus contributing to the sharing of knowledge. During this time, the methods of production and consumption letterpress practice have become an area of significant interest.

In positioning the research question, my study also explored three subsidiary research questions set out in the Introduction and seen below. The subsidiary questions were followed by research aims. The questions and aims are addressed as follows:

- To what extent can the traditional creative and pedagogical methods of J.H. Mason, Leonard Jay, Anthony Froshaug and Alan Kitching be integrated into research practice methodology?

The integration of the methods of Mason, Jay, Froshaug and Kitching into research practice methods can be seen in the interventions of the historical and practical elements of this thesis. The design principles that were identified and selected through the research methods, seen in Mapping historically located practice and the development of research lineages and were applied in the experimental practice through individual and collaborative situations as discussed in 5. Findings: Experimental Practice.

- How can methods be part of a reordering of design principles in contemporary design practice?

The design methods that were developed from the historical study, through the research methodologies and applied in the practical areas are located through the disruptive experimental areas of the thesis. These are found in the space I created by applying the principles and then dismantling the conventions through new ways of positioning graphical forms and typographic elements.

- How to situate the understanding of historical conventions and apply them in contemporary design and pedagogical practices?

The traditional conventions identified in the historical aspects of this study were explored and applied in individual and collaborative practice. They are situated through the experimental processes and methods, found in every print, forme, exploration, discussion, the written element, the graphical interpolations and print rooms encompassed in this thesis.

- To critically analyse the processes of contemporary typographic and printing practices in relation to the design principles developed in the lineages of Mason, Jay, Froshaug and Kitching.

The critical analysis developed through the literature review and my prior knowledge of current practice as a practitioner and educator. The interrogation of primary and secondary objects, as discussed in Chapter 3. Exposing Critical Patterns. A historical Overview of Letterpress and Typographic Design Practice enabled the connections made through several research lineages. In turn, the identification of how the design principles can be applied through processes in practice.

- To explore historical methods and approaches as a frame to classify knowledge in experimental letterpress printing.

The development of systems to structure knowledge is discussed in the section, Experimental letterpress practice as a research method to explore emerging methods in creative practice. Here, the interrogation of historical objects and revealed ways in which to situate the experimental practice in new approaches in the adaptation of design conventions.

- To engage with relationships of master and pupil in lineages of design as a stimulus for experiment and the creation of new forms.

The lineages of design were formed through the historical and practical aspects of the thesis. As seen in *Assembling the Line: A System to Unify the Research Field*. Here, there were several interactions within the lineages that enabled the engagement of relationships to inform the experimental processes. In *Collective Practice with Cleaver and Froshaug* there is a discussion around the initial relationship in the collaborative process as one where Cleaver imparted the knowledge he had received from Froshaug. One of instruction, Cleaver the master and I was the pupil. As the collective practice developed the roles changed and we worked as collaborators. This shift in dynamic saw the disruption of conventions. The experimental processes revealed a new typographic language as seen on the capsules of work. In *A Reordering with Patrick Thomas and Leonard Jay*, Thomas and I referred to Jay's approaches in letterpress practice. We observed the typographic devices that Jay instilled in his creative and pedagogical practices. We then drew out conceptual, philosophical and visual elements and developed strategies through reordering the way on which we explored graphical ornamentation as seen in *A New Ornament: Graphical Letterpress*.

I will conclude this study by reflecting on the landscape of letterpress since the research began, the limitations of the topography, the findings, the contributions of this project and the implications of the research in experimental letterpress and future research in the next section.

In *The Ghost of a Practice*, Matthew Galloway (2020) discusses the role played by both formal and informal studio-based conversations. He describes a 'circling' the idea of 'informal dialectical conversations' compared to that in formal settings (148). With this in mind, I turn to the invaluable, spontaneous discussions in print shops and studios and how these support more academic discourses. I reflect on my experiences as a design student and now a design educator, as discussed in the *Introduction*, when I look at the pedagogical principles of the University of Reading, a renowned formal educational setting. In *Typography as a university study*, delivered in London in 1970, Michael Twyman reflected on pedagogies being 'firmly based in the English Private Press tradition' (231). Where the practical work was undertaken 'through the usual kind of studio work, through projects designed to explore particular problems (233). It is here, at the intersection of ways of learning; the print room, the seminar, the archive, the workshop, the studio, the exhibition, the library and the print shop can form a combined platform. This can foster developments in figuring things out through explorations, drawing out new perspectives through a critical inquiry and making sense of

how to reframe the past in the 'process of discovery' (Grocott, 2020: 143). This highlights territory where the processes and objects of printing can be located. In *Acts of Address* (2022), Joanna Drucker, examines the collection of essays and photographs by various authors in *Graphic Events: A Realist Account of Graphic Design* edited by James Dyer and Nick Deakin (2022). Drucker observes how the 'graphic objects' presented in the contributions to the publication are a 'critical move' that sees the authors as 'critics and practitioners, educators and working designers, historians and documentors', demonstrating 'a crucial synthesis of what, in an early generation, might have been a divide between theory and practice' (198). In this way, Dyer and Deakin enabled a frame to collate networks in discussions. Such as, this research is a synthesis of the collective experimental practice. The printed explorations can be viewed as documentors in the interventions of theory and practice.

The trajectory of the research has reflected the richness of the enthusiasm amongst practitioners, educators and students. Over the course of the research, the scope of the project was updated to ensure the developments in collective practice, that were not in the original project plan, were included, reflecting the the developments in the growth in interest and possibilities in the research.

However, the research through the historical and practice aspects identified that the obsolete nature of materials and equipment in print rooms was likely to be rather haphazard as collections are all different and have been through several iterations before this practice was completed. Therefore, the contribution of this research is presented through research methods that reflect the nature of these print repositories and typographic laboratories, as set out in chapters one and two. The development of the methods form perspectives that are critically and conceptually led, underlying the principles and conventions to explore the experimental approaches in letterpress practice.

The question provided a space for the examination of histories and the acknowledgment that both traditional and modern approaches are interrelated through the processes in scholarly research and experimental practice. In developing a hypothesis to reformulate the historical, I addressed the redefining of traditional methods in design practice and pedagogy and creating new knowledge. In addressing the formulation of design principles from historical aspects the research develops new perspectives. The individual and collaborative nature of the letterpress activities show the research methods are part of a reordering of design principles in contemporary creative practice that can be applied in design and pedagogical practices. This research is now situated in contemporary design practice as well as an academic contribution. Furthermore, it has triggered further questioning in which the detachment between the traditional and current pedagogies and contemporary practices reveals how this can be unified as presented in *Implications for Future Research*.

Implications for Experimental Letterpress Practice

As discussed in chapters four and five, the traditional conventions of letterpress practice are employed and dismantled to challenge traditional perspectives in order to recognise a need in contemporary experimental and design practices. It is these approaches that are being adapted in the application of process to practise. These adaptations are based on new knowledge in experimental letterpress practice. The main contribution of this part of the research is the findings that informed the design of several research lineages that became a mode and methods to frame the lines of enquiry, the disparate historical aspects, the research approaches to make connections to creative practice.

The development of typographs as diagrammatical and abstract graphical forms to present both the historical aspects and the experimental research in visual interpretations. However, it doesn't stop, it continues through my design practice. A repositioning, a reinvention of experimental material that has a focus of typographic form as a construct to present the engagement between visual, conceptual, theoretical elements and the doing, whether that is individually and/ or collectively, the making, the creating, the reconstructing. John Lewis stated, 'rules are made to be broken,' however, 'before you start breaking rules, you should know what they are,' (135). In this way, the design principles are the rules that are not forgotten, they are embedded in all aspects of the experimental methodologies through the design process. Richard Taylor observes the approaches to the design cycle at *The Hochschule fur Gestaltung* the design school at Ulm that started in 1950 and directed by Bill. Taylor describes the methods at Ulm were 'concerned with analysis, methodology and enquiry' (1971: 26). He expresses 'the design process, a refinement of design methodology, produced by Ulm in the mid-sixties, had existed throughout design centres in different parts of the world, its direct parentage being the methodology used in the natural sciences – a human way of working that will increasingly change many aspects of the look of graphics' (27). This brings attention to the implications of the visual thought (28) alongside the importance of how the printed objects have been accumulated through the associations of the lineages. The interactions with histories, the processes establish an emergent aesthetic that could only be achieved through the research process.

In this thesis, the meaning of experimental letterpress practice, the artefacts produced and the way of working in the explorations of practice are an essential part of the research project made within the field of a hybrid model of a historical study and of practice – based research. These interactions between fields created a dialogue that enabled the development of the research process. This is

discussed by Maarit Anna Makela when she positions her research into 'knowing through making'⁷⁰ when, 'the dialogue between the practice of art and research commenced after the artistic process, whereby the creative process and the artefacts created during it were set in a theoretical framework for interpretation. This action, as I see it, can be understood as one of the possible methods for carrying out practice-led re- search. I regard this conception as one of the central results of my research' (2003: 23–28). Through Makela's orientation, I see the research and practice explorations as a series of actions that stimulate knowledge in typographic communication through the printing process.

The printed material that was created during the research process through individual and collective practice, can be presented as part of the answers to the research question. As the printed artefacts were created by me and in collaborative research practice, the printed material can be viewed as a method for collecting data and understanding of emerging knowledge. The typographic material made during the research processes requires an interpretation and explanation through the written and graphical interpolations in this thesis. Michael Biggs suggests that the 'principal feature of practice-led research is the desire or need to create artefacts' (2002: 20-23) as 'a way to answer the research question' (20-23). The creative practice facilitates the creation of printed artefacts to become part of the approach in answering the question and to present the outcomes in the consolidation of knowledge (23). However, it is not just the artefacts that form the contribution. The research sees a complexity and duality between the fields of the histories and experimental practice. This required a variety of systems to work within to ensure the development of knowledge was underpinned by critical procedures. These methods of actions are contributors in the knowledge situated between histories and contemporary experimental practice. It is here, embedded in the lines of praxical interpretations that the printing reveals ways of seeing and doing.

⁷⁰ In *Knowing Through Making: The Role of the Artefact in Practice- led Research*. Available at: https://www.researchgate.net/publication/227320305_Knowing_Through_Making_The_Role_of_the_Artefact_in_Practice-led_Research [Accessed June 2020].

Implications for Experimental Letterpress Pedagogy

There are ongoing issues that began through the development of research approaches and experimental creative processes. These are reflected through the interchangeable parts of research and creative practices, through the positions of the historical study and the experimental practice and therefore, the roles I have assumed in the research. To that end, these are ongoing actions, the design practice is being conducted in parallel to academic research and in design education. This is a cyclic knowledge model that expands and contracts depending on the task in hand. The knowledge is disseminated in print rooms, workshops and studios.

A key issue in the ongoing discussion in practice -based research is the dialogue between design practice and formal research. I have been building a correlation between these two fields. The setting of the context for implementing the activities has great importance as it demonstrates three main propositions. Firstly, I propose a well-structured research process that can be implemented, questioned and argued by practitioners and students in future research projects. Secondly, completing research in this context can increase the significance of research projects in experimental letterpress and finally, it emphasises ways in which print rooms with obsolete equipment can be used in the accumulation and testing of new knowledge. Steven Heller calls ‘practical history’ as ‘one of the best ways to learn practice, pragmatics and history’, and ‘to assign students to create a new idea based on vintage principles’ (21). It is this intersection of history and practice where a new mode can be shared, interrogated and navigated through pedagogical practice. Ken Garland (1929-2021) was part of a generation of designers who were dissatisfied with views of, ‘staunch attitudes of British business leaders and the visual communication industries’, (Jury: 51) who presented their intentions through the manifesto *First Things First* (1963)⁷¹. Part of the manifesto was a proposition to ‘share our experience and opinions, and to make them available to colleagues, students and others who may be interested’. A rationale that is echoed in the implications and dissemination of this research. This manifesto was an assertion that looked to those who pioneered the international style: Emil Ruder (1914-1970), Josef Muller-Brockman (1914-1996), Armin Hofmann (1920-2020) and Karl Gerstner (1930-2017)⁷². The conceptual and stylistic elements that were key in pedagogies at the Zurich School of Arts and the Basel School of Design. At these two institutions, ‘high standards of craftsmanship allied to a strict design rationality, a precise adherence to grids...led by logic, simplicity and functionality’, (Jury: 51-52). The strict design conventions were interrupted and reinterpreted by Wolfgang Weingart (1941-2021) at the Basel School of Design, where he, ‘set out to explore with his students the expressive potential of typography’ (53). In looking at Weingart's approaches, there is a space where typography can be a vehicle for new encounters through printing

⁷¹ *First Things First* was published in 1963 was revisited and republished in 2000 by a group of new authors and again in 2014.

⁷² The international style was also known as Swiss style.

techniques and processes. A development place where, as Weingart says, is for 'collecting of ideas, which are then set down in words and drawings, is an essential step towards further development' (1991). The locating of the extension of idea generation allows a 'way into the technical processes of the project and preparing oneself for a new encounter,' (1991)⁷³. This collection of ideas and encounters have been explored in the creative practice of the research, the associations and can be explored further by, 'celebrating the limitations of print', (Jury: 153). The manipulation of a material form of a printed form can be explored through 'the sheer diversity of physical surfaces and containers' (Jury: 53), in the interpretation of historical design principles in harnessing new ways of applying conventional wisdom. The testing and disruption of the limitations of the printing press and its obsolete artefacts is what brings the new to the old. This poses in a shared point of contact between the press, the knowledge and the unorthodox shifting of traditional letterpress methods in a post-digital landscape as a in flux mode of expression⁷⁴.

⁷³ As part of an interview with Yvonne Schwemer-Scheddin, for Eye Magazine. Eye no.4, 1991.

⁷⁴ Discussed by David Jury in *Reinventing Print – Technology and Craft in Typography* (2018). Members of the Fluxus movement aimed to demonstrate their belief that everyone was an artist by utilising the most elemental modes of expression including printed material (75).

Implications for Future Research

I contend a need for academic dissemination about experimental letterpress practice and critical debate and analysis of design practice and methods in the field of experimental letterpress. This research notes the emerging area requires rigorous formal contributions to ensure new methods are tested and applied in practice and creating the potential for new models of research and creative practice. The collective activities completed through the duration of the research has highlighted extended opportunities in professional associations to embody the research methodologies that have connected the interrelationships between practices. It is the associations that have created an understanding through which my research is expressed in individual design practice. The organisation of collective practice has resulted in providing a lens to conduct further research. Therefore, the value in future research is found in the development of ongoing collective associations that are developed as a result of my observations in current design and pedagogical practices as discussed in the introduction. I have interrogated the existing knowledge reviewed in chapter three and through the development of methodologies, individual and collective practice. The research I have made in this study is a consideration of those offerings, however, this original contribution challenges those perspectives. The notion of an association of practitioners is discussed by David Jury as he describes *The Deutscher Werkbund*, established in 1907 as 'a group of industrialists, and commercial artists/designers', (29), who could be described as being, 'principled, independent communicators', (48). Jury highlights Hermann Muthesius (1861-1927) as part of this group who advocated, 'the purpose of design was to facilitate the communication of manufacturer with customer, free from personal emotive ornamentation' (31). The idea of ornament, 'became a focus of critical attention', (31) and this became a renewed focus in this research in 1. Experimental Letterpress Practice as Research and 2. Collaborative Practice as Research. The definition set out by Muthesius can facilitate a discussion around the purpose of design and provides a frame to align new ways, through associations in contemporary practices.

I conclude this research by outlining another proposition around the purpose of the findings in contemporary educational ordering. How is the contribution and knowledge disseminated? How does sharing be a foundation for others to critique and use as a device to disrupt current practices? This project is explored through visual and textual elements to break away from a conventional style of academic research. A way to explore and understand thematic strands and underpinning with theoretical aspects. As a design educator, I know students reflect a way of absorbing and translating visual communications with academic rigour. In this way, these interventions between the textual and the visual can address a narration of the past through the restructuring of traditional modes of experimental expression. The conceptual, philosophical and methodological dialogues that were created can now be expanded upon through collective initiatives in research and pedagogies. Mark

Gowing says 'type is an expressive art that can embody complex concepts and social meanings' (2021)⁷⁵. In this way the printed artefacts present the histories, ideas, processes and methods of typographic and experimental practice. They are the custodians of the interconnectedness of the elements of the study, ranging from conversations, residencies, live briefs, all to test the principles, through exhibitions, seminars, writing papers and the many hours spent in print rooms. The objects of the study can stimulate more interactions with colleagues and students in print rooms, hovering over or very close to a printing press, in energetic critique and/or in isolation with a sharp focus on how to explore conventions with letterpress blocks ready to be set, with the smell of printing ink filling the space.

The printed objects can then be taken in many directions, across disciplines, technologies, groups, spaces and fields.....

following the line to the dot



this is where the next iteration of this research can be found

⁷⁵ An interview with Mark Gowing by Chloe Gordon in Print magazine 202. Accessed in September 2022
<https://www.printmag.com/graphic-design/kris-sowersby-s-the-art-of-letters-is-a-study-of-typographical-details/>.

Glossary of Terms

A collection of technical terms and phrases used throughout this research project adapted from an idea by Paekakariki Press. The following two publications were used to form this glossary with some adjustments made to reflect the techniques and processes used in this study. The printer's vocabulary: a collection of some 2500 technical terms, phrases, abbreviations and other expressions mostly relating to letterpress printing, many of which have been in use since the time of Caxton, by Charles Thomas Jacobi (1888) and A Dictionary of Typography and its Accessory Arts by John Southward (originally appeared in the Printer's Register from 1870 to 1871. A second revised edition was published in 1875)⁷⁶

Arab machine. A small platen machine for jobbing purposes originally made in America.

Bed. The table or coffin of a machine or press upon which the forme lies.

Binding. In locking-up any of the furniture is longer or wider than the type and doubles, it is said to bind and the pages cannot be tightened up properly.

BSP. Birmingham School of Printing

Block. A general term for woodcuts, electros or zincos

Brass rules. Used for borders and lines in columns, etc., and cast to different thickness.

Case. The receptacle in which type is laid to compose from. When in pairs, defined as upper and lower respectively.

The Central. The Central School of Arts and Crafts, London.

Chapels. The meetings are held by the workmen to consider trade affairs, appeals and other matters.

Chase. An iron frame, cast or wrought, to hold the type for printing.

Composing stick. A tool or implement for setting type in, usually made of iron or gun-metal. Long sticks, such as are used for broadsides, are made in wood for lightness.

Compose. To set up type.

Compositor. A type-setter or composer of type.

Em rules. Rules cast on an em of any particular body.

Em quads. A quadrant cast one em to any particular body.

En rules. Rules cast on an en of any particular body.

En quads Spaces two to an em of any particular body a unit that is half as wide as an em.

⁷⁶ Idea by <https://www.paekakarikipress.com/?content=jacobi.php>.

Face of a letter. The surface of a letter that is imprinted on the paper.

Fat face. A broad or fat-faced character of type.

Fount. This term is applied to the whole number of letters constituting a complete fount of any particular class of face or body.

Forme. A collection of type when imposed in a chase.

Furniture. The wood used in making a margin for a printed sheet, the thinner kind being usually used called a Reglet. Sometimes French metal furniture is used.

Galley. These are wooden or zinc receptacles for holding type before making up into pages.

Grid. A systematic layout of a page. A guide to structuring text and image that enables compositional aspects to be set out such as text, illustrations and trim sizes.

Imposing Stone. A perfectly smooth stone or iron surface which forms are imposed and corrected.

Layout. A sketch of a page for printing showing the position of text and illustrations and giving general instructions.

LCC. London College of Communication.

Leads or Leading. Strips of lead cast to different thicknesses and cut to various sizes.

Leaders. Dots of fill points on an em of any particular body.

Letraset. A proprietary name for rub-down or dry transfer lettering used in preparing artwork.

Letterpress. A relief printing process in which a raised image is linked to produce an impression; the impression is then transferred by placing paper against the image and applying pressure.

Lithography. The art of printing from stone.

Making ready. Preparing for printing by patching up or cutting away.

Matrice (or matrix) The copper mould with a punch struck in by which type is cast.

Matrices. Plural or matrice or matrix.

Metal rule. A general term for em rules or dashes. Also applied to longer rules, such as two, three and four ems.

Modern. An art and design movement and the type styles introduced towards the end of the 19th century.

Moire pattern. The result of superimposing half-tone screens at the wrong angle thereby giving a chequered effect on the printed half-tone. Normally detected during the stage of progressive proofs.

Octavo. A sheet of paper folded into eight, shortly written thus 8vo.

Orphan. The line of type on its own at the top or bottom of a page.

Overlay. To make ready by overlaying.

Pica. A size of type one size larger than Small pica and one size smaller than English. The body is usually taken as a standard for leads, width of measures. It is equal to two Nonpareils in the body.

Press proof. The final proof passed by the author or publisher.

Press work. A general term for work executed by hand press.

Proof. A total print of any forme of type, plates or blocks.

Proof press. A hand press used exclusively for pulling proofs.

Tabular work. Three column matter, which reckons a quarter or half extra value of composition according to its nature.

Type. Stamps cast in metal for printing purposes.

Typographer. A printer of movable types.

Typographic. Relating to the art of printing by means of movable letters

Typography. The art of printing movable letters.

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Appendices

Appendix I.

The print rooms that helped to develop and capture individual and collective experimental letterpress practice through the course of this study.



Letterpress Amsterdam, The Netherlands



Ffowndri, Wales, UK



Patrick Thomas Studio, Berlin, Germany



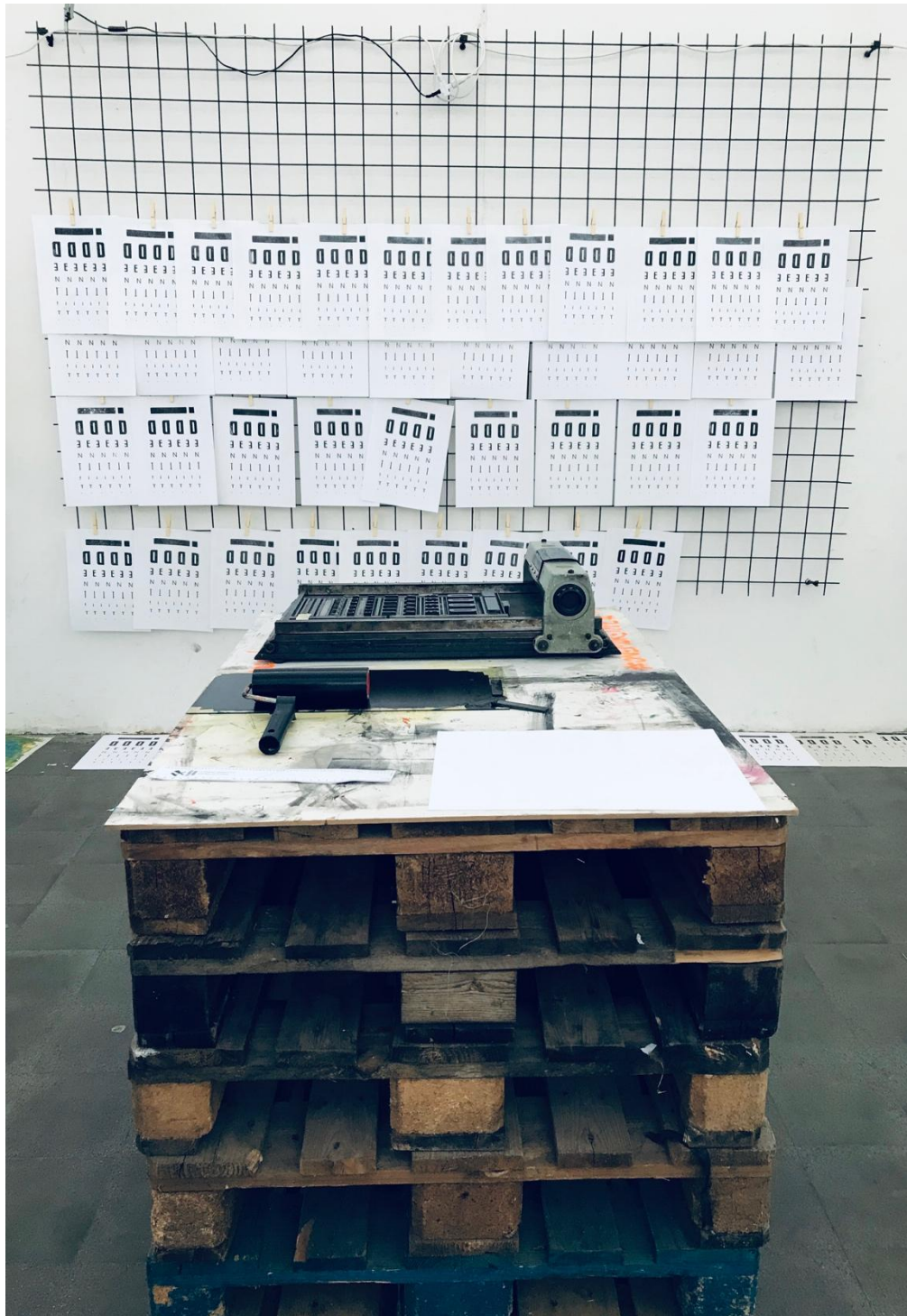
Alan Kitching's the Typography Workshop, London, UK



Parkside Print room, Birmingham City University, UK



Erik Spiekermann's Typographic Workshop, Berlin, Germany



Letterpress Workers International Summit, Milan, Italy



The Winterbourne Press, University of Birmingham, UK

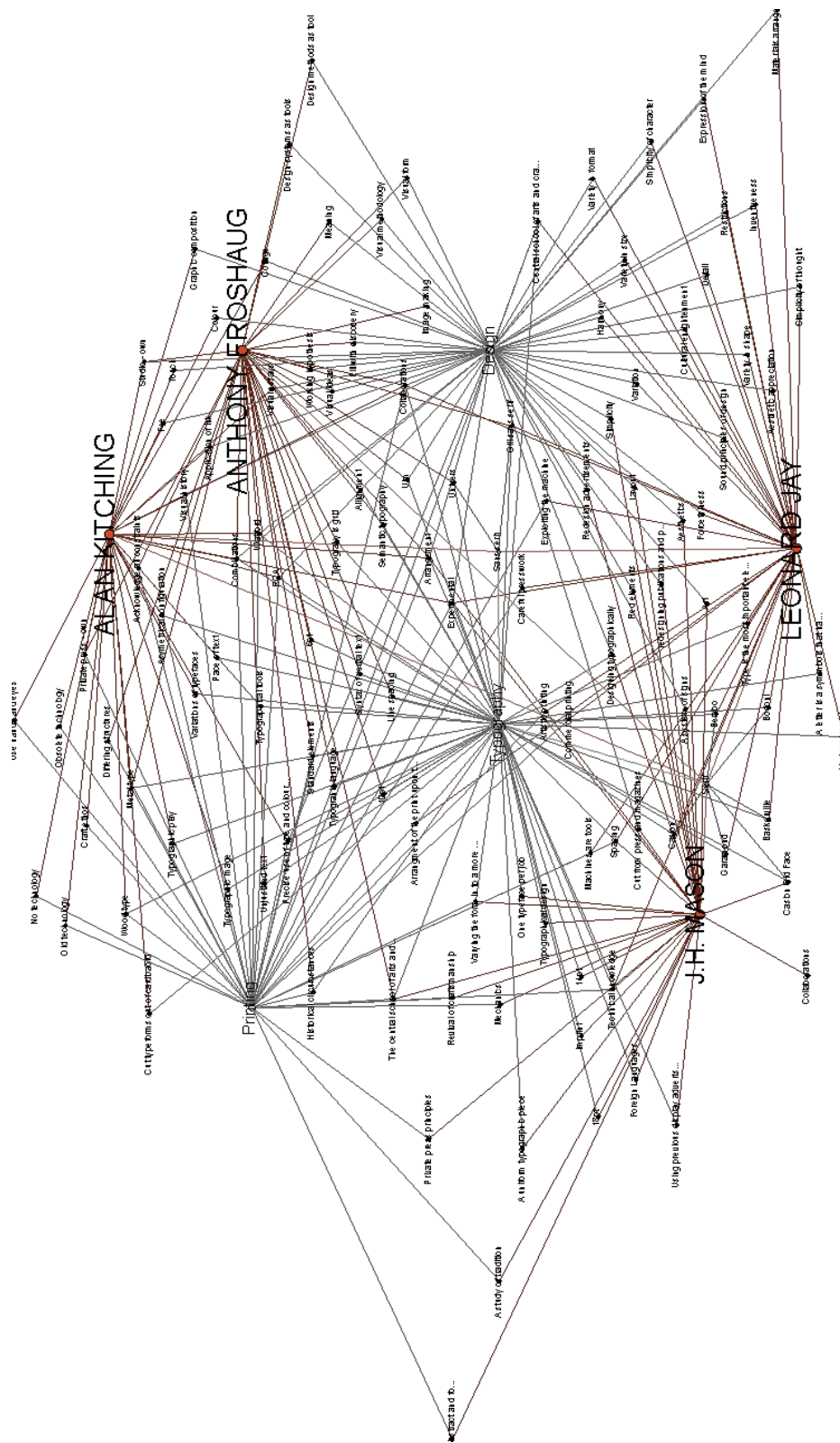


Leipzig museum of print, Leipzig, Germany



Gloucester Typesetting, Gloucestershire, UK (photograph Phil Cleaver)

Appendix 2.



Design Principles Network Diagram. An example of developmental thinking (2021)

Appendix 3.

Index.

A portfolio of experimental letterpress practice as part of the PhD thesis submission.
Access via the matrix of dots in the QR code below.

