BIRMINGHAM CITY University

A new framework for assessing the sans serif in nineteenth-century printed ephemera: Birmingham and Bridgnorth case-studies

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Date: August 2021

Thesis submitted for the degree of Doctor of Philosophy

Birmingham Institute of Creative Arts

Declaration

I confirm that the ideas, research work, analyses and conclusions reported in my PhD thesis the sans serif in nineteenth-century printed ephemera: a Birmingham and the Midlands case-study are entirely my effort, except where otherwise acknowledged. I certify that this thesis contains no material that has been submitted previously, in whole or in part, for the award of any other academic degree or diploma. Except where otherwise indicated, this thesis is my own work.

David Joseph Osbaldestin

To Mam, Dad, Richard, Lynne and Finley Lucas Xavier. And to Andrew for his grounded support throughout. This research was stimulated by the late Gerard Unger and underpinned my old school motto of 'sapere aude'.

Acknowledgments

Abstract

The contemporary revival of Grotesque typefaces highlights the prevailing popularity of sans serif printing types across a 200-year history. This thesis investigates the extent to which early sans serif typography was used in advertising by provincial jobbing printers; and presents a new narrative that reveals the history underpinning its cultural connotations. The literature of ephemera studies informed a new methodology that tracks the ascendancy of the sans serif both in terms of its frequency of use and its position within the typographic hierarchy of printed ephemera. To analyse its usage, the sans serif was aligned to the categories of 'Commercial Life', 'Information' and 'Instruction': to educate the emergent working and middle classes; to communicate through new forms of information design; and to measure its visual impact.

In the rapidly expanding industrial towns of the Midlands, the deployment of Grotesque sans serifs was widespread. Contrary to the negative reception the sans serif received from nineteenth-century print historians, such as Thomas Curson Hansard, between 1816 and 1851, it was embraced commercially by Birmingham's 693 jobbing printers. Surviving printed ephemera was used to build historical case studies based on the industrial towns of Birmingham and Bridgnorth. From analysis of data from the British Book Trade Index (BBTI), these independent case-studies, represented two vibrant print centres in the Midlands. These towns were diverse in their industries and were identified to represent print activity within a primary case-study of an industrial metropolis, and a secondary study of a rural market town built on its river traffic. A Typefounders handlist of sans serif types evidences the scale of production of new display faces, demonstrating the rapid economy in the supply and demand for printing types. In their use of the new display typefaces, local printers contributed to advancement of typographic composition for printed ephemera.

The new methodology presented combines three approaches for the interrogation of typography in printed ephemera. Firstly, the class of document type that sans serif printing types were used in, shows if there was a bias towards a particular class of document, and how the sans serif contributed to the development of new forms of printed information and typographic compositions. Secondly, themes and categories were identified based on the textual content of the documents, showing how it was used and what it was used for. Finally, measuring the percentage of sans serif types and their position in the visual hierarchy showed how the sans serif was used within the typographic composition, and how it increased in popularity over time. In combination these approaches form a new methodology for other historians working with typography in printed ephemera.

The rise of the sans serif reflected wider changes in society, and forms part of the identity of emergent middle and working classes. These cultural associations being transferred respectively through the progression of the late nineteenth and early twentieth centuries. The sans serif was the face of 'Commercial Life', 'Information' and 'Instruction' but most significantly it was a typeface for the people.

Contents

1.   Introduction

1.1.   Motivation

My research was prompted by what I observed to be an increase in the use of sans serif typefaces inspired by nineteenth-century Grotesques, in contemporary graphic design. While sans serif typefaces had long been used within graphical interface design, from Rudolf Hell's Digi Grotesk (1968) onwards, what I was starting to see was something very different from the customary sans serif.[1] I first noticed the use of geometric sans serifs in interface designs for small screens and mobile devices in around 2012; their use then extended into other digital platforms, followed by print media, advertising and brand design.

These sans serifs were a distinct change from the early bitmap sans serif designed to fit a pixel-based grid. They were also different in their appearance – creating a friendlier feel through their use of looser spacing – from the sans serif typefaces employed in early twentieth-first-century screen design, such as Helvetica Neue (1983) which became a popular choice for interface designers, reflecting the corporate identities and advertising of the day.[2] Although these typefaces were not originally designed for reading on screen, their popularity with designers prevailed; because of their close association with identity systems and brand communications for large corporate businesses, the application of these sans serif typefaces became ubiquitous.

The appearance of Adrian Frutiger's typeface Avenir (1988) at the launch of Apple's Maps application for iOS 6 in 2012, was, to me, both visually and psychologically significant.[3] I regarded Apple's change to Avenir as a radical typographic solution for small screens. This was in some ways a subtle shift, which moved away from the austere Neo-grotesque sans serifs

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1   Rudolf Hell designed Digi Grotesk for his innovative cathode ray typesetting machines. The screen resolution of this system was considerably higher than other screen-based displays of the 1960s.
2   Helvetica Neue was developed as a digital font by D. Stempel AG, a Linotype subsidiary in 1983. The typeface was a rationalised version of Helvetica; it had a more unified set of heights and widths and offered improved legibility through heavier punctuation marks and spacing between numerals.
3   Avenir was released by Linotype GmbH in 1988, in three weights. The typeface is a reworking of the principles explored in early geometric sans serifs of the twentieth century. Letters such as 'o' are optically adjusted and are not perfect circles. It has a two-storey 'a' and 't'. Between 2004 and 2007, Adrian Frutiger developed the type family into an expanded range of weights and features as Avenir Next.

to a geometric sans serif form; however, this sans serif had a more friendly and readable quality than its predecessors on mobile devices. Apple's decision to develop its own Maps software was, perhaps, a risky business strategy, replacing and directly competing with Google Maps and the company's typographic choice reflected its original brand message to 'think different'.

Apple continued in this typographic direction – reassessing the use of rationalist twentieth-century Neo-grotesque sans serifs in its screen designs – with the in-house development of its typeface San Francisco (2014), the first new typeface to have been designed by Apple for over twenty years., San Francisco was a contemporary Neo-grotesque sans serif designed for reading text and display typography both on screen and in print.[4] In the autumn of 2015, San Francisco was launched with watchOS (the operating system for the Apple watch). It was designed specifically for readability on interfaces for smaller screens. San Francisco subsequently replaced Helvetica Neue on all Apple's iOS devices and was applied to larger screens through tvOS for Apple TV and its desktop operating systems. Screen technology had developed, creating new opportunities for typography, resolution had improved to show more detail and at the same time screens, such as the Apple watch, had become smaller. Technological advancements in screen design, and the problems these posed, ensured the continued development of new sans serif designs.

I made similar observations on typographic developments in print advertising and brand communications, where new sans serifs were being developed that grew rapidly in popularity at the start of the twenty-first century. Important typefaces included Gotham (2000) and Verlag (2006), both of which were designed for Hoefler and Co. by Jonathan Hoefler and Tobias Frere-Jones, and Neutraface (2002), designed for House Industries by Christian Schwartz, Ken Barber and Andy Cruz. The characteristics of these twenty-first-century geometric sans serif typefaces were different from their twentieth-century predecessors, following a looser visual appearance. I felt that the origins of their design could be located in the vernacular lettering of signwriting and architectural lettering, as they retained a hand-

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4   San Francisco was a new family of typefaces designed by a team led by Antonio Cavedoni for Apple in California. It is a Neo-grotesque type face intended to 'unifies our platform with a consistent typographic voice and a reading experience'. Antonio Cavedoni, 'Introducing the New System Fonts', *Apple* (Online: Apple, 2015) <https://developer.apple.com/videos/play/wwdc2015/804/> [accessed 06 May 2018].

rendered feel and the personality of these typefaces seemed to have more in common with nineteenth-century sans serifs than their twentieth-century predecessors. When Gotham, Verlag and Neutraface appeared in print advertising, and later on screen, I noticed that they demonstrated a marked contrast to, and departure from, the formal qualities of twentieth-century type design.

I further observed the rising popularity of vernacular lettering in contemporary typography for advertising and branding, through the resurgence of other nineteenth-century display faces. Alongside the increased application of sans serifs, I noticed that slab serifs, fat faces and assorted ornamented typefaces had become important and were often used to represent small community-based businesses. The use of these typefaces reflected a change in consumers' cultural interests, moving away from the ubiquitous typefaces, particularly sans serifs, associated with corporate culture, and a return to cultural values associated with historic typefaces. Ironically, large businesses have responded to this trend, capitalising on the use of nineteenth-century-influenced typefaces to launch new ranges of artisan-themed products that communicate through a less corporate and more local visual language.

Beyond the technological changes, I believed that there had been a typographic revival in the design and use of nineteenth-century-inspired sans serifs because audiences had become over-familiar with the rationalist Neo-grotesque sans serifs of the twentieth century. These typefaces had become overused and audiences had begun to question the associations of these typefaces with homogeneous corporate businesses. In the process, audiences have challenged the values that these typefaces represent within society.

While I perceived the revival of nineteenth-century-inspired sans serifs as a radical change to the eye, my research was triggered by the irony of using typefaces from the nineteenth century (designed for printing on paper) in twenty-first-century settings such as digital interfaces. I became interested in how typographic cultural associations were formed and how they had been carried across the centuries. I started to make comparisons between Apple's use of Avenir (upper-case to indicate major towns and cities, upper- and lower-case for other locations) with early uses of the nineteenth-century sans serif on printed maps to identify Roman sites. What struck me about the use of Avenir in this context was the irregularity of the lettering, its looser spacing, and its forms not following precise geometric proportions.

Initially, I drew visual comparisons between Apple's San Francisco and the early nineteenth-century sans serifs. San Francisco appeared to follow a looser arrangement in its spacing compared with twentieth-century type designs, and in the process it communicated through a friendly visual language. There are several difficulties in reading lowercase lettering at smaller sizes on screens, but San Francisco remedied this problem through several typographical design solutions: the x-height of the lowercase characters was increased to aid legibility; and the cap height was shorter than the ascenders to make the x-height look even larger, helping the reader to scan for line breaks in the text.

It achieved a friendlier appearance than Helvetica Neue, with characteristics shared with nineteenth-century sans serif printing types. Where Helvetica Neue was tightly spaced, San Francisco was tracked more loosely; the apertures were increased on the lowercase letters of 'c' and 'e'; and the signature kick on the leg of the uppercase 'R' of Helvetica Neue was simplified and straightened. San Francisco shared a further similarity to nineteenth-century sans serifs through its spacing of numerals; these were monospaced, with equal space between each number, designed to stop lines of text jumping when used for moving displays such as time signatures.

These observations both of style and cultural associations led me to seek a historic underpinning of the development and application of the early nineteenth-century British sans serifs in order to understand their resurgence in popularity in contemporary visual culture. I was interested to try and understand the relationship between typography and the growing brand advocacy of the twenty-first century and how it appears to be following the visual styles of traditional print communications of the nineteenth century. I began by investigating the origins of the nineteenth-century sans serif but found that others had already discussed its history, origins and design. This pushed me in another direction and I began to be interested not so much in the origins and aesthetics of the nineteenth-century sans serif but to be able to capture make an assessment of the sans serif in use, I needed to create a reliable and replicable framework for capturing data and for analysis. This framework evolved into a new methodology for assessing the typefaces in use which has the potention to extend discussion on the sans serif (or any typeface) away from the aesthetic to include application and significance.

1.2. Aims and Objectives

The primary aim of this research is to develop new methodologies for interrogating printed ephemera. These methods focus on the use of typography within printed ephemera. By using sans serif typography to test the new methodologies, a new historical narrative will emerge that will enable a new understanding of the application, reception and influence of nineteenth-century sans serif printing types. The secondary aim is to produce an interpretation of the nineteenth-century sans serif based on its relative importance in use, as opposed to an evaluation based simply on its design merit.

Two towns within the Midlands will be used as separate case-studies. These were chosen to represent two different scales of economies, both towns were accomplished print centres in the Midlands (based on the ratio of printers per population), with a plethora of surviving printed ephemera for interrogation. These towns are: Birmingham in the West Midlands, a rapidly growing industrial metropolis; and Bridgnorth in Shropshire, a rural industrial market town. Using examples of nineteenth-century printed ephemera from Birmingham and Bridgnorth, this thesis aims to:

- develop new methodologies to assess the impact of the sans serif in Britain on nineteenth-century print culture and design, through its ascendancy both in terms of its frequency of use and its position within the typographic hierarchy of printed ephemera;
- establish the extent to which sans serif typefaces were commercially applied by British trade printers in the nineteenth and early twentieth century;
- show the nature of the relationship (in terms of demand and direction of causality) between the sans serif and trajectories in advertising practice.

This will present future researchers working with printed ephemera and other types other than sans serifs, with new methodologies to advance their own research. Using sans serif typography as the test subject for this new methodology will enable a new understanding of British sans serif printing types. It will contribute to the widening field of printing history, locating the importance of the British sans serif printing types and their subsequent influence on typography and communication design.

1.3.   Relevance of Study

The revival of nineteenth-century sans serif typefaces in twenty-first-century design applications was a radical departure from twentieth-century typography. Understanding what triggered this departure will inform interpretation of past sans serif typography. Although the sans serif has a history dating back over two hundred years, its progression has not been studied in depth by typographic historians. As one of the most important families of type in twenty-first-century design, understanding its development is significant to understanding typographic history and how that history is applied and reinterpreted in a twenty-first-century setting.

As an educator, my teaching has largely been concerned with brand design and communication strategy, of which typography is a central component. In brand design, typography is a visual device which represents the core values of an organisation, product, service or concept. The design of value-driven communications is developed outwards from an understanding of an organisation's beliefs, ethics and values. Type and typography are central to this process of reflecting cultural values. Type is not simply selected on its design merits; it is chosen for its tone, form and equally important cultural significance – sometimes subliminal, sometimes blatant. Throughout the history of the sans serif, individual typefaces have developed their own cultural, symbolic, and national associations: for example, Gill Sans (1928) by Eric Gill used in the brand identity of the BBC, and Johnston Sans (1916) by Edward Johnston used as the corporate fount by Transport for London.[5] Understanding those associations will help inform the theory of sans serif typography as a lens that reflects social and cultural values.

While other printing historians, such as James Mosley, have examined the origins of the sans serif, there has not been a scholarly study of the application of nineteenth-century sans serif typefaces. There is a gap therefore in our knowledge between our understanding of the roots of their design and how these types were used, and the significance of why they were used. For this research, I have developed a framework for capturing, describing and analysing the sans serif in use during the nineteenth century; this will demonstrate the impact of the

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5   Gill Sans was released by Monotype in 1928; Johnston Sans was commissioned in 1913 for the Underground Electric Railways Company of London.

sans serif on nineteenth-century print culture and design and thereby advance typographic knowledge and understanding. The sans serif needs to be re-evaluated from the perspective of how and why it was used, as opposed to an appreciation merely of its design values. This is important in order to interpret how sans serif is used today. Because of the significance of its revival in twenty-first-century typography, there is a need to understand why it was used during the nineteenth century, and to assess its successes through its application. This research will demonstrate therefore how the fashion for the nineteenth-century sans serif originated, its uptake by the printing industry, and its use in commerce and wider society.

It is important to gain an understanding of the use of sans serif typography by jobbing printers, in order to show the ascendancy of the sans serif. The thesis constructs a new narrative of the use of the sans serif by nineteenth-century printers, making connections between how the sans serif was used and by whom and for what purpose. This information is relevant equally to typographic, industrial, social and cultural historians, presenting foundational knowledge of nineteenth-century printers, evidencing the spread and growth in popularity of the sans serif, and the cultural and social milieu in which it was used.

The sans serif is probably one of the most popular and significant typographic developments in recent history. Its importance in nineteenth-century advertising, information design and print culture is reviewed in this thesis and evidence is presented to contextualise what the sans serif was used to communicate, what this signified, and how this legacy may influence today's designers. In design history, the sans serif is strongly associated with modernism, creating misconceptions that its story begins in the twentieth century. In challenging these assumptions, this work advances our understanding of the history of the sans serif.

This research demonstrates how nineteenth-century sans serif typefaces were applied to educate the emergent middle classes in their transition to commercial life, how they were used to communicate information, and how they were used to instruct. It suggests alternative ways of looking at typography in use, contextualising it against the events, people and ideas that it was designed to represent. This interpretation provides an historical narrative for both typographic and cultural historians.

This study is of relevance to a wide range of researchers and has already contributed to the work of other scholars of the sans serif.[6] It is of interest to typographic historians; social, cultural and industrial historians; Birmingham and Midlands historians; typeface designers; typographers; printing historians; graphic communicators; advertising designers and brand designers; and academics, design researchers and students within educational communities. The new methodologies developed for interrogating printed ephemera will be of relevance to the aforementioned scholars.

1.4.   Scope of Research

The origins of sans serif lettering date back to early inscriptional Etruscan Tablets (7th century BCE) and Roman architectural carving (1st century BCE).[7] Sans serif printing types are over 200 years old, and were first observed in a specimen book by William Caslon IV (1781-1869) in 1816.[8] It is not the intention of this thesis to cover the whole history of the sans serif; instead this study focuses on nineteenth-century English, Scottish and Irish sans serif printing types, issued between 1816 and 1929 and used by jobbing letterpress printers in Birmingham and Bridgnorth.

This study is primarily restricted to the usage of hand-set Grotesque sans serif printing types; it excludes sans serifs that were made for machine composition, hand-drawn, engraved, carved or produced by a signwriter. As these types originated in England, it is concerned with the application of Grotesque sans serif printing types distributed by English and Scottish typefoundries as opposed to typographic developments in Europe and America. The first sans serifs were designed as uppercase only,

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6   In 2014, Jeremy Tankard approached me to discuss the antecedents of the British sans serif and the theory that the basis of the sans serif typeface was from earlier classical (serif) printing types. His research was concerned with the idea of an English root letter to the sans serif (based on the serif types of William Caslon I (1693-1766)), when he was designing his Pembroke typeface. In 2016, I published a short essay for Grafik magazine's Letterform feature on Blake and Stephenson's Ten lines sans-surryphs ornamented; and in 2016, I was consulted by Mark Ovenden on the origins of the British sans serif for his book on Johnston and Gill's type designs. Mark Ovenden, *Johnston and Gill: Very British Types*, (United Kingdom: Lund Humphries, 2016), p. 194.

7   John Soane used sans serif lettering in his neoclassical architectural drawings based on Roman typographic designs carved into the Temple of Vesta, in Tivoli, Italy. James Mosley, *Nymph and the Grot: The Revival of the Sanserif Letter* (London: Friends of St Bride Publishing Library, 1999), pp. 1-20.

8   William Caslon IV sans serif type face Two Lines English Egyptian was produced in 1816 and shown in Blake, Garnett & Co's type specimen book of 1818.

later expanded by the typefoundries to include lowercase characters; both forms are considered within the parameters of this study.

The time frame for the study is between 1816 and 1929, covering the advent of the first Grotesque sans serif, its rise in popularity and refinements through the nineteenth century, the beginnings of its development into its modernist forms in the twentieth century. It stops with the arrival of machine composition. This is a transitional period in British history, covering a wealth of social and political changes, from the end of the wars with France to the outbreak of the First World War. The time frame also reflects a cultural shift in how business communicated through print advertising. It covers the development of advertising from small local business-led messages through to the advent of commercial advertising through advertising agents, a new occupation that emerged in the nineteenth century.

Printed ephemera of the nineteenth century record the application and deployment of the sans serif. Produced by jobbing printers for commercial clients, these documents were used to advertise products, services and events through a localised circulation and were intended for a short lifespan, as opposed to book typography that applied more traditional typographical conventions and typefaces. The scope of this study is restricted to handset documents produced by letterpress, as opposed to handwritten or photographic ephemera, and it excludes engraving and lithography.

During the nineteenth century the Midlands was a major centre for international trade and industry, contributing to the growth of the British Empire. Printed ephemera from the region provide a snapshot of time, reflecting the ideas and beliefs of the people. This is shown through their content, the type of messages they communicate, and in the stories and events that they record. However, to frame the research, Birmingham and Bridgnorth are used as two independent case-studies because they provide geographical boundaries and two contrasting centres to focus the work.

This research is focused on the Midlands, which excluded the use of case studies from outside of the region such as London or Sheffield, although both were initially considered. As the research is concerned with provincial print centres, showing the trajectory of sans serif printing types and the typographic fashions of the capital, would have skewed the results. Sheffield would make an interesting case-study alongside Birmingham, both cities had a similar industrial profile, built on metalworking and would, therefore, make an interesting comparison in a future study.

To manage the scale of the research the scope was focused on the Midlands region. Consisting of twelve counties, the Midlands presented an extremely wide field for review. Data from the BBTI and the UK census, was analysed to show the ratio of printers per population. These results were used to narrow down the research to two distinct case-studies of two towns within the Midlands, Birmingham and Bridgnorth. Birmingham was identified as the primary case-study, an example of a large rapidly growing industrial metropolis; and Bridgnorth was used as a secondary case-study, as an example of a rural industrial market town. The diverse nature, geographic location and scale of the two towns was used to help define the themes and categories for the methodology. For example, the themes of 'Commercial Life', 'Information' and 'Instruction' worked across the demographics of both the towns selected as case-studies, to show how the sans serif was used in these locations.

1.5.   Sources

Using Birmingham and Bridgnorth as case-studies, this research explores nineteenth-century printed ephemera that were either printed in Birmingham or Bridgnorth or used by the towns' businesses.[9] There are many high-quality examples, both in terms of their printing and their content, of nineteenth-century printed ephemera using the sans serif in the regional archives. Printed ephemera survive in the collections through scrap books and bound volumes, compiled either by librarians or individual collectors, that cover a wide range of different classes of printed documents. The material was selected based firstly on its application of sans serif typography and secondly on its connection to Birmingham and Bridgnorth.

The disposable nature of printed ephemera causes problems for historians as there is a such huge volume of material and content scattered across a diverse range of collections. The most significant collection of printed ephemera identified for this research was located in the local history archives of the Library of Birmingham. This material was selected for its marriage of content and typographic style. The collection contains eighteen scrap books,

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9   In 1839 the town of Birmingham was incorporated as a borough, and in 1889 the corporation successfully applied for city status. Ephemera produced by trade printers outside the region, but representing the activities and interests of its people and its manufacturers, have also been referenced.

bound together in 1930, of printed ephemera from the 1810s to the 1940s. The Birmingham scrap books are important because they bring together printed material from many sources and with different content. They reflect political ideologies recorded through the promotion of public lectures; opposition to and support for laws; and issues surrounding voting rights for women. They cover a wide range of social history: from the civic governance of Birmingham, policing, the expansion of the town's infrastructure, its transport networks, sanitation and utilities, and the health and education of the population. They include material produced by religious groups and churches. The scrap books show examples of ephemera that relate to significant cultural attractions, and they record different forms of entertainment available to the growing middle classes, from theatre posters for the Theatre Royal Birmingham and the Gaiety Theatre, through to posters promoting public sporting events. The scrap books contain material that contributed towards an understanding of trade within the town, showing products and services that were promoted by Birmingham manufacturers through printed advertising, trade catalogues, directories and trade cards. Other collections within the Library of Birmingham were used to complement this study. These included bound volumes of nineteenth-century broadsheets, which are organised into volumes under the themes of crime, political, religious, songs and miscellaneous; documents relating to the Birmingham Political Union; collections of material from the Women's Political Union (Women Workers 1892–1900); the Wingate Bett collection of transport tickets; Gaiety Theatre posters, and miscellaneous business ephemera.

Printed ephemera collections at the Cadbury Research Library (CRL), University of Birmingham, were an important source of information. Early editions of Bradshaw's General Railway Directories were referenced to understand the use of sans serif typography in the development of visual hierarchy through information design. A first edition of Timothy Watton's educational charts from 1848, showing an application of Caslon's early Grotesques, and Major James Bell's 'A View of Universal History', provided evidence of new ideas in typographic design systems in the nineteenth century. Archives in the CRL include a large selection of jobbing printing, with surviving examples of the work of George Robert Gitton of Bridgnorth, alongside 'Playbills' for the Theatre Royal Birmingham, and a collection of over 100 'Theatre Programmes', many from the Midlands. Other collections include printed ephemera of the Birmingham Political Union, material about the life of Joseph Chamberlain (1836-1914), illustrated journals such as the Edgbastonian and print advertisements in the Illustrated Midlands News and Sports and Play.

Other archives important to this research include the Birmingham Museum and Art Gallery (BM&AG) Collections Centre and the Shakespeare Memorial Trust (SMT). The former was used for its collections of printed ephemera relating to urban life, through examples of 'Handbills', 'Tickets', 'Posters' and 'Programmes' contributing to the societal life of Birmingham. The latter collection was studied for examples of 'Playbills' for the Theatre Royal, the Prince of Wales Theatre, Birmingham Town Hall and the Memorial Theatre Stratford.

Handlists by James Mosley, William Turner Berry, A. F. Johnson and Talbot Baines Reed were used to discover the location of typefounders' specimen books. Sans serif typefaces by British typefoundries were identified from the type specimen books in the archives of St Bride Library and the British Library. Type specimen books of H. W. Caslon, Figgins, Marr, Miller & Richard, Sharwood, Stephenson, Blake & Co., Thorowgood, and J. & R. M. Wood were used to compile typeface data, including publication dates, nomenclature, typographic styles, and a description of the typefaces shown with visual examples. This data was applied to show what sans serif typefaces were used by Birmingham and Bridgnorth's nineteenth-century jobbing printers.

The British Book Trade Index (BBTI), established in 1983 by Peter Isaac at the University of Newcastle, records the names, brief biographical and trade details of people working in the book trade in England and Wales up to 1851. The BBTI is compiled from many published sources, through contributions by academics, librarians, local researchers and historians. The BBTI also contains some records into the twentieth century, including Birmingham printers Hudson & Son. (1851–1988). The BBTI was used to gather historical information about Birmingham and Bridgnorth's jobbing printers (see Chapter 6, Table 6.2.) [10]

The BBTI database was used to generate a chronological timeline, including names and dates of operation, of Birmingham and Bridgnorth jobbing printers. The historical timeline has presented a challenge in highlighting

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10   Between 1816 and 1929, the British Book Trade Index (BBTI), established in 1983 by Peter Isaac at the University of Newcastle, includes approximately 887 records for printers trading in Warwickshire, with a majority of 693 records in Birmingham. Since 2005, Dr Maureen Bell and Dr John Hinks have maintained the BBTI database, which relocated from the University of Birmingham to the Bodleian Library, University of Oxford in 2015. This study aims to contribute to the BBTI. Printers from Birmingham who traded after 1851 and who are not listed in the BBTI have been identified through the Social History catalogues in the reference library of the Library of Birmingham. In particular, the Catalogue of the Birmingham Collection in the Reference Library: Section II; Books printed in Birmingham but not otherwise relating to Birmingham, records printed material held in the Wolfson Centre for Archival Research at the Library of Birmingham. The process is challenging because the catalogue is listed alphabetically by title of publication rather than by printer.

an overlap of individual printers' records. The timeline makes visible several instances where family members or individuals have worked consecutively or under different names at the same trading address.

The British Newspaper Archive and Nineteenth Century Newspaper Database were useful to this research. Articles recording typographic lectures and printers' poetry was used to gain insight into the reception and cultural perception of the sans serif; the cultural landscape of the printing trade was understood from articles reporting trade strikes; and indications of typeface mobility were obtained through sales and auction adverts for founders and printers stock.

1.6.   Chapter Overview

This thesis was organised into eight chapters with supporting information presented in the appendices. The research was structured to present the development and application of a new methodology for interrogating printed ephemera. The literature review for the thesis was separated into two chapters to help the reader to understand and navigate the material. As sans serif typography was at the centre of this research, this material was presented first, followed by literature underpinning existing methodologies for ordering printed ephemera.

In chapter two, a historical overview of display typography was discussed, giving the context surrounding the origins of sans serif typography in the nineteenth century. The literature reviewed in this chapter was used to inform the development of a new narrative of the use and impact of sans serif typography.

The third chapter examined the established methodologies of working with printed ephemera that underpinned this research. Different approaches advocated by eminent ephemera scholars were analyzed and evaluated, that led to the development and presentation of a new methodology for working with printed ephemera.

The fourth chapter discusses the rationale and design of a new methodology that was used to interpret the history of the sans serif, as used by printers in the Midlands. This included defining the three approaches used in the new methodology: analysis of document class and printers; interrogation by themes and categories by textual content; and to measure the position of the sans serif in the typographic hierarchy and percentage of usage in ephemeral documents.

The fifth chapter discusses the technical aspects of the development of a digital solution that was used facilitate the methodology, including the rational for the design of a relational database. The process of recording and analyzing data was explained, providing a critical guide on how the tool was used to advance the study of sans serif typography in printed ephemera; and how the methodology can be used independently by other researchers. The chapter concludes with a discussion of the limitations and opportunities of the new methodology.

Chapter six discusses the rationale for the use of two distinct Midlands based case-studies. Two different scales of towns were selected to test out the material, both were selected as prominent centres for printing based on the ratio of printers per average population. The towns of Birmingham and Bridgnorth were identified as a leading industrial metropolis and a rural industrial market town, these case studies underpinned the study, giving geographical boundaries to examine the context of jobbing printing in nineteenth-century. To achieve this, the study examined existing narratives from typographic, social and cultural, as well as industrial and economic historians. The chapter articulates the contemporary importance of conducting a scholarly review of sans serif typography, supported through data analysis of Midlands printers from the British Book Trade Index (BBTI). Using Birmingham and Bridgnorth as two separate case-studies, these ideas were subsequently applied to the work of printers, exploring typographic innovations in the region.

The seventh chapter presents a proof of concept of the new methodology, encompassing the main analysis of the data observed from the use of nineteenth-century sans serif typography in printed ephemera from Birmingham and Bridgnorth. The chapter was organised by the approaches that were developed in the methodology. It demonstrates the findings by analysing visual examples to present an analysis of how the sans serif was used by Midlands printers; who it was used for ;and what it was used to communicate.

Chapter eight presents a conclusion to the development and application of the new methodologies. It discusses the overall contribution to knowledge, alongside a critical evaluation of the limitations of the current study. The thesis concludes with a review of opportunities identified to advance and continue the research.

2.   Sans Serif Typography

This is the first of two chapters that analyse the existing literature and research relevant to this study. The first chapter considers sans serif typography, whilst the second chapter looks at printed ephemera. The chapters have been ordered separately to help develop the narrative structure of the thesis and to aid the reader's understanding. As sans serif printing types were the focus to test new methodologies for working with printed ephemera, this chapter, looks to establish knowledge of the context of sans serif typography, including its origins and its subsequent use within jobbing printing.

2.1.   The Origins of the Sans Serif

This section contextualises the history of the sans serif from its origins to its usage by jobbing printers in nineteenth-century printed ephemera. The antecedents of sans serif printing types have been traced by historians such as James Mosley to architecture and signwriting. It is important to understand the existing literature in this field to interpret the evolution of the sans serif found in printed documents but the focus of this thesis remains its usage. The first journey of the sans serif — from architecture to print — was through the hands of the typefounders. The supply and demand of printing types from typefounders to jobbing printers can be seen in the presentation of new sans serif founts in type specimen books through to its use in regional printed ephemera.

Typographic historian James Mosley has contributed to scholarly research on the origins of the British Grotesque sans serif.[11] His research considers the appearance of sans serif lettering in Britain, in the late eighteenth century, as opposed to alternative design histories that begin with the release of Caslon IV's Two Lines English Egyptian.[12] Except for Mosley, few historians have researched the cultural origins of the sans serif.

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11   James Mosley is also a visiting professor in the Department of Typography and Graphic Communication at the University of Reading. He joined St Bride Printing Library [1956-2000] as assistant to the librarian William Turner Berry, and continued to publish updates to his findings through his blog Typefoundry until 2014.

12   Andy Haslam and Phil Baines cite Caslon IV's sans serif as the first sans serif printing type but do not detail its origins. They describe the early Grotesque's physical attributes as 'a clumsy, unbalanced set of capitals probably intended for headings and emphasis only'. Andy Haslam and Phil Baines, *Type and Typography* (London: Laurence King Publishing, 2002), p. 73.

Mosley's approach is essential to this research as it sets typography in the broader context of social history and begins to consider the cultural associations of the sans serif outside of its design merits.

In his article on the sans serif 'The Nymph and the Grot, the Revival of the Sans serif Letter' for *Typographica*,[13] Mosley explored the historical context of the arrival of geometric, monoline sans serif lettering. His research traced the origins of British sans serif printing types to early architectural forms, sculpture, medals, Ordnance Survey maps, engravings and the work of signwriters. Mosley demonstrated a connection between the use of lettering in monumental epigraphy and neoclassical architecture associated with the British Empire, and the development of sans serif printing types by nineteenth-century typefoundries. He observed the transmission of this influence to non-monumental epigraphy, with stonemasons following the fashions of the period and incorporating sans serif lettering into carved headstones. Alongside inscriptional writing, the sans serif also featured in cartography, where it was used to mark Roman sites on Ordnance Survey maps. This principle was applied by George Bradshaw (1800-53) in his railway guides, where the sans serif was used in his etched plates, to differentiate significant townships from smaller destinations on his railway maps.

In collaboration with Justin Howes, Mosley revisited his interests in the sans serif and curated an exhibition entitled Primitive Types at Sir John Soane's Museum (1999).[14] Primitive Types was curated from architectural objects and printed documents from the Soane archive, extending Mosley's research on the cultural precursors of sans serif printing types. Through the work of the architect John Soane (1753-1837), he established a link between classical architecture and sans serif typography, presenting an insight into the broader cultural framework to which sans serif printing types belong. Soane's neoclassical designs were informed by the classical architecture he experienced on his Grand Tour of Europe, concluding in Rome in 1778. The influence of classical lettering on Soane was seen in his architectural drawings. Through the inclusion of sans serif titling on his plans and projections, he introduced

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13   James Mosley first published his research on the origins of the sans serif in Typographica. James Mosley, 'The Nymph and the Grot: the Revival of the Sanserif Letter', *Typographica 12* (London: Typographica, 1965), p. 2.

14   Justin Howes [1963-2005] was a historian and curator of the Type Museum whose research included the work of the Caslon foundries and Edward Johnston.

sans serif lettering to British audiences before the advent of Caslon IV's printing types. The cultural associations between sans serif typography and the late eighteenth-century fascination with antiquity are of relevance to this research, as it gives a contextual insight into how the sans serif was first received in print.

To accompany the exhibition, with the support of the Friends of St Bride Library, Mosley published *The Nymph and the Grot*, in which he considers the advent of the British sans serif as a typographic revival of primitive forms.[15] He demonstrates how primitive forms found in Roman inscriptional lettering impacted on nineteenth-century print culture, through the cultural influence of neoclassical architects like Soane who were responsible for the 'translation of the sans serif from an antiquarian curiosity to a usable modern idiom of letter design'.[16]

The origins of the British sans serif and their associations with antiquity are culturally significant through the adoption and subsequent adaptation of the sans serif by nineteenth-century typefoundries. In presenting the cultural associations of typography, Mosley aimed to stimulate interest in the 'value of letterforms in general, and the sanserif in particular, as an index to cultural values'.[17] In supporting these ideas, he cites his longtime correspondent, Georg Kurt Schauer (1899-1984), an adviser to the Stempel Typefoundry in Frankfurt.[18] Schauer considers the emergence of slab serif and sans serif printing types as a visual representation of the cultural values of the Industrialists and the Romantic Movement, as a 'longing for purity and strength'.[19]

In tracing the antecedents of the sans serif, typographic historians have explored its development through type design. A comparison of classical typographical proportions to sans serif types is useful in understanding the background to how sans serif types were first produced. Mosley does not attempt to connect the typographic antecedents of the sans serif to nineteenth-century printing types, limiting his critique instead to a presentation of foundry specimen types. This is an area that has been explored by other historians and type designers.

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15   The publication extended and revised Mosley's earlier article from 1965, written by Mosley and typeset by Howes.
16   James Mosley, (1999), p. 12.
17   Ibid, p. 11.
18   Ibid, p. 51.
19   Ibid, p. 51.

Howes' research on the development of Edward Johnston's typeface for the London Underground acknowledges the influence of William Caslon I's Caslon Old Face and William Caslon IV's sans serif on the design of Johnston Sans, and in the process links typefaces across the eighteenth, nineteenth and twentieth centuries. [20] In Johnston's Underground Sans, he connects the elementary forms of the sans serif typeface to earlier classical typography, quoting Harry Carter's opinion that the proportions of Johnston's sans serif were 'based on early inscriptional models', supporting the cultural associations of the sans serif and its roots from antiquity. [21]

The type designer, Martin Majoor, followed these principles in his development of typographic families that combined multiple typefaces based on a standard root letter. His typographic experiments made visible the underlying structural attributes between serif and sans serif types. In designing Scala, he developed two complementary typefaces within one type family, that were formed using the same typographic principles. The antecedents of Scala were from the 'first vertically-stressed typefaces' of Pierre Simon Fournier, with the sans serif version directly sharing the same proportions as the serif face.[22]

Jeremy Tankard explored the cultural associations of the sans serif based on its typographic antecedents, describing his research as identifying a 'route letter style that can suggest Britishness'.[23] Tankard considered Caslon IV's sans serif to be the closest printing type to the architectural sans serifs used by Sir John Soane, its square and geometric proportions being 'more early nineteenth century and perhaps more British'. His research led him towards the square proportions of British printing types associated with the Georgian and Regency period. Working from the serif typefaces of William Caslon I (1693-1766), he used Caslon Old Face as a base and applied basic geometry over the caps. The design of Tankard's Pembrokeshire typeface connects twentieth-century geometric sans serifs back to an eighteenth-century British root letter style. His designs resulted in a contemporary sans serif typeface that represents a 'concept of Britishness

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20   Mosley describes Howes' emerging doctoral research at the University of Reading as a study of the 'changing attitudes' to types that emerged in the eighteenth century. James Mosley, *Handmade Type: Thoughts on the Preservation of Typographic Materials* (Oldham: Incline Press, 2007).

21   Justin Howes, *Johnston's Underground Type* (London: Capital Transport, 2000), p. 20.

22   Martin Majoor, 'My Type Design Philosophy', *Martin Majoor Typefoundry* (Online: Martin Majoor, 2017) <http://www.martinmajoor.com/6_my_philosophy.html> [accessed 12 October 2018]

23   Email from Jeremy Tankard to David Osbaldestin, 2014.

in its DNA'.[24] These practical methodologies contribute to this thesis, in the exploration of the evolution of the sans serif designs. However, a practice-based research methodology has not been followed, as this study is focused on the application of sans serif typography by nineteenth-century printers.

Except for the 1819 type specimen by Blake, Garnett & Co., there is currently no evidence of Caslon IV's Two Lines English Egyptian used in printed ephemera of the period.[25] Such a discovery would reveal the purpose of the typeface's original use and give insight into why it was produced. Mosley cites a reference to an early presentation of sans serif lettering (in an anonymous jest-book of 1806), by Daniel Berkeley Updike (1860-1941), but this text remains unfound.[26] Finding evidence of Caslon IV's type in use around the time of its production would be highly valuable in understanding the early use of sans serif printing types but the location of this evidence is untraceable.[27]

In addition to its origins within architectural forms, Mosley connects the development of the sans serif to the work of signwriters; this may have 'remained an antiquarian curiosity if the English signwriters and typefounders had not exploited it for their own purposes'.[28] Through painted letterforms, the use of sans serif in advertising preceded the advent of metal types. Audience familiarity with this form of advertising contributed to the recognition of early sans serif typography and reinforced its cultural associations to neoclassical architecture. The term 'Block Capitals' shows the association between the sans serif and its use in advertising. Formed from block-based skeletal letters, the term was first used in instructional copy books designed to train nineteenth-century signwriters.[29] The typographer Walter Tracy (1914-95) considered the development of the sans serif by the typefoundries as a continuation of the 'makers of large-size wooden type who first imitated the sign painters' "block" letter and supplied it to the printers of posters as a strong alternative to the Egyptian'.[30]

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24   Jeremy Tankard, 'The Design of Pembroke', *Jeremy Tankard Studiotype* (Online: Jeremy Tankard Studiotype, 2014) <http://studiotype.com/originals/pembroke> [accessed 12 October 2018].
25   After the purchase of William Caslon IV's foundry, Blake and Garnett reissued his specimen from 1816.
26   Daniel Berkeley Updike, *Printing Types: Their History, Forms, and Use, Third edn* (London: Oxford University Press, 1962), p. 195.
27   Mosley comments that Howes had started researching the location of the jest-book in the British Library. Howes died before his findings were published. James Mosley, (1999), p. 12.
28   Ibid, p. 48.
29   Sue Walker, 'Letterforms for handwriting and reading', H.D.L. Vervliet et al (eds) *Typography Papers: Number 7* (London: Hyphen Press, 2007), p. 87.
30   Walter Tracy, *Letters of Credit: A View of Type Design* (United States: Godine, 1986), p. 85.

At the start of the twentieth century, sans serif printing types impacted on the development of pedagogy through educational publishing. Sue Walker's 'Letterforms for handwriting and reading' considered the history of the use of sans serif typography in early learning. Through a comparative study of educational textbooks, primers, and manuals she presents the rise in popularity of the sans serif which was used for its functionality and simplicity. During the mid-nineteenth century, sans serifs were familiar letterforms recognised by children from popular printed material and evident in classroom environments.[31] Used to differentiate headings within the typographic visual hierarchy, Macmillan progressed towards the use of stand-alone sans serif forms in its New Literary Readers series, to teach letterforms recognition in beginners' primers.[32]

The emergence of educational manuals by Nellie Dale (1865-1967) promoted the use of sans serif types, and single-storey 'a' and 'g's, for their simplicity, building connections between how teachers demonstrated letter-forming to children and how children developed their reading skills through printed texts. In *The Crystal Goblet: Sixteen Essays on Typography* (1955) Beatrice Warde (1900-69) argued against this proposition. Warde commented on potential confusion caused by the similarity between a single-storey lower case 'a' to the shape of 'o', and the unfamiliar form of a geometric 'g' to that of a 'y'.[33]

Increased production and development of sans serif printing types contributed towards experimentation and dissemination of these new ideas. The use of sans serif typography in an educational context demonstrates an acceptance of the form and a transition to how a new generation of students learned to read using the sans serif. In this thesis, Walker's approach to interpreting the use of the sans serif is applied to educational printed ephemera.

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31   Timothy Watton, *Outline Charts of General History* (Birmingham: Joesbury, 1848).

32   *Collins' School Series: The Graphic Infant Reader, Second Book* (London: William Collins, Sons & Company, 1891); *The Royal Crown Primer*, No.1, *Royal School Series* (London: T. Nelson and Sons, 1901); *Macmillan's New Literary Readers: The First Primer* (London: Macmillan and Company, 1895).

33   Beatrice Warde, *The Crystal Goblet: Sixteen Essays on Typography* (London: Sylvan Press Limited, 1955), pp. 181-2.

2.2.   The Display Faces

Nineteenth-century printed ephemera were characterised by the use of a new range of fashionable typefaces known collectively as 'display faces' that were intended for use in large sizes and for headlines, rather than for extended passages of text. The exaggerated designs of the new display faces were foregrounded by earlier changes in typographic styles. The modern types made fashionable by the French typefounder Firmin Didot (1764–1836) had superseded the transitional types such as Baskerville in popularity. This modern class of type followed more mechanical principles of design, exaggerating the contrast of the transitional form. The display faces exaggerated this contrast even further for advertising purposes.[34]

The display faces included fat faces, antiques, Egyptians and sans serifs which were specifically designed to serve the emerging needs of advertising, and were made for use in 'Posters', 'Playbills', 'Broadsides', 'Lottery Tickets' and other printed ephemera.[35] Display faces were intended to capture attention, and their popularity resulted in Britain making a unique contribution to typeface design. These typefaces were products of the Industrial Revolution and urbanisation, and contributed to the development of advertising, which competed for readers' attention not only through the smog of polluted urban areas but also through the visual pollution of mass communication.

The experimental type designs of the display faces created additional emphasis through the boldness and blackness of the letterforms. The reception of the display types when they were first employed demonstrates their visual impact, albeit sometimes through a negative commentary: they were commonly referred as the 'fancy faces of fashion' and in the case of sans serif types as 'primitive'.[36] The fashion for these printing types prevailed, creating visual systems in which readers of all levels of literacy could differentiate between information

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34   Roy Millington, *Stephenson Blake: The Last of the Old English Typefounders* (London: The British Library, 2002), p. 12.

35   Fat faces are advertising types characterised by an extreme contrast between the thick and thin strokes of the characters. Antique was a term used by British and American type-foundries for slab serif printing types; these are typefaces terminated by thick block-like ser-ifs. In France, the term Antique refers to sans serifs. Slab serif letterforms were first known in France and Germany as Egyptienne. Conversely, Thorowgood named his slab serif an Egyptian, and Caslon IV named the first sans serif Egyptian. The sans serifs are letterforms without ser-ifs; early British sans serifs were known as Grotesques and were monoline linear characters.

36   James Mosley, (1999), p. 11.

that was regarded as newsworthy, as opposed to advertising.[37] The increased production of new display types by British typefounders stimulated an economic demand for these new types within the printing trade across Britain and throughout the world.

The design of sans serif printing types has its origins in signwriting and engraving. In the eighteenth century, three-dimensional symbol-based signage was commonplace for identifying local businesses. Signwriters created the illusion of three-dimensional spaces. Their influence on lettering extended to the development of display typography. Engraved letterforms emulated book types and by exaggerating serifs the engravers produced a style of lettering that is an antecedent of the fat face printing types. Technological advancements in typefounding refined the detail and strength of ornamented types.[38]

Through jobbing printing this developed into copperplate engravings of abstract symbols for 'Trade Cards'. Jobbing printing flourished after the 1762 ban on street signs, whereby signage became two-dimensional and printed illustrations were used to create images of the proprietor's building facades, promoting and identifying the location of local business before the advent of street numbering. The inventiveness of the letterpress printer was a precursor to the creative role of the graphic designer.[39] Jobbing printers working both as compositors and pressmen experimented with the design of advertising communications for the emergent high street.[40] The new display types for letterpress printing were favoured by jobbing printers, which made the previous style of engraved lettering look outdated.

The world's first sans serif printing type, Two Lines English Egyptian, was issued by the English typefounder William Caslon IV (1780–1869) in 1816. Although released in 1816, and first advertised in Caslon's 1818 specimen book, the sans serif was slow to be manufactured by other typefounders and did not come into common

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37   Nicholas Daly explores the concept of changing needs in printed media with the growth of advertising media in the nineteenth century. Nicholas Daly, *The Demographic Imagination and the Nineteenth-Century City* (Cambridge: Cambridge University Press, 2015).

38   Pierre Simon Fournier developed early ornamented types in France [1749]. The type-founding problems setting molten lead into finer areas of the mould were solved in the nineteenth century through lead being forced into moulds under pressure.

39   David Jury, *Graphic Design Before Graphic Designers: The Printer as Designer and Craftsman 1700-1914* (London: Thames & Hudson, 2012), p. 6.

40   The growth in commerce is reflected in a growth in the printing trade, whereby there was an increased 'demand for stationery, trade cards, price lists, handbills, window-bills, forms and legal documents'. David Jury, (2012), p. 17.

usage until the mid-nineteenth century. The London typefounder Vincent Figgins (c.1799–1860) released a sans serif in 1830, followed by William Thorowgood (d.1877) in 1832.[41] By the latter half of the century the sans serif had taken hold and there were hundreds of different variants issued by the leading typefounders.

The sans serif can be regarded as one of the most important typographic developments of the nineteenth century. From its slow development at the beginning of the 1800s, it grew to become the leading display typeface used in advertising and information design. The introduction of the sans serif certainly 'changed the character of design entirely', and these bold types, originally created for use in lottery bills and poster advertising, were later applied to information design such as railway timetables and dictionaries.[42] At the same time there was a radical shift in the typographic composition of advertising material, and sans serif typefaces were linked to new ways of presenting information for the reader. As a result of an increased volume of printed material a new sort of typography emerged, enabling readers to speedily access information and differentiate between editorial and advertising. In turn, this stimulated a market for display faces. These new, bold and often condensed sans serif typefaces not only saved on space but also enabled new ways of reading at speed.

Printers' type specimens give insight into nineteenth-century typographic developments. Produced as sales catalogues, the specimen books presented the latest range of printing types. They reflect contemporary typographic fashions through the breadth of new typefaces, and show the changing economic demands through the quantity of new display types produced in a wide range of weights and sizes. The new display types advertised in typefounders' specimen books are evident in the printed ephemera of the Midlands, including some examples that pre-date the publication of foundry specimen books. The type specimen books show that regional printers were following the latest typographic fashions and were keeping pace with London.

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41   James Mosley, (1999), p. 56.

42   Michael Twyman, 'The bold idea: the use of bold-looking types in the nineteenth century', *Journal of the Printing Historical Society, 22* (United Kingdom: Printing Historical Society, 1993), p. 135.

2.3.   Typographic Classification Systems

The rapid expansion of new typeface designs in the nineteenth century led to a need to develop a classification system to order and make sense of typography. Early systems developed by John Southward (1840-1902)[43] in Britain and Theodore Low De Vinne (1828-1914)[44] in America began to classify typefaces based on their visual characteristics. Southward was a printer and editor whose writing on printing history for the Printers' Register informed development of apprentices within the printing trade.[45]

The early typographic surveys grouped typefaces together based on their history. The terminology used was followed into the twentieth century, forming the basis of the French historian Maximillian Vox's (1894-1974) classification system. Vox's system was developed in 1954-5 to facilitate international dialogue and understanding of typography.[46] His system introduced new names for categories of type based on familiar groupings and was adopted by the Association Typographique Internationale (ATypI). Known as the Vox-ATypI classification system, it ordered sans serifs under the category of 'Lineale'. Vox's system was adapted into other languages such as the British Standards (BS) system.

As the century progressed the number of different styles of display typefaces increased and in the process it became increasingly difficult to classify new typefaces under the terminology. To address this problem, both Vox-ATypI and the BS introduced subcategorisation using compound words that attempted to describe shared characteristics.

Following the BS classification system, the early British sans serifs were named Grotesques; they have some contrast between thick and thin strokes. The Neo-grotesques or Realists have less contrast and are more regular but they have many weights and sizes reflecting new printing processes. The Geometrics follow simple classical proportions through the geometric forms of the circle, square and triangle. The Humanists derive from Roman capitals and the lower case from the fifteenth-century Venetian humanist text that follows a calligraphic style.

43   Gerald Le Gyes Norgate, 'Southward, John (1840–1902), printer and writer', *Oxford Dictionary of National Biography* (Online: Oxford University Press, 2004) <https://www.oxforddnb.com/view/10.1093/ref:odnb/9780198614128.001.0001/odnb-9780198614128-e-36200> [accessed 8 September 2020].
44   Amy Tikkanen, 'Theodore L. De Vinne', *Encyclopaedia Britannica* (Online: Britanica, 2020) <https://www.britannica.com/biography/Theodore-L-De-Vinne> [accessed 8 September 2020].
45   John Southward, *Dictionary of Typography and its Accessory Arts* (London: E.W. Allen, 1872).
46   Andy Haslam and Phil Baines, (2002), p. 50.

The Vox-ATypI system was developed during the revival of Roman inscriptional square capital letters, made popular at the start of the twentieth century by the work of Edward Johnson. With a bias towards book typefaces the Vox-ATypI and BS systems were limited in their use in making sense of the growing variety of display typefaces. In her PhD thesis A Description Framework for Typeforms: An Applied Study (2003) Catherine Dixon proposed an alternative classification system. Her taxonomy was designed to classify typefaces using a descriptive taxonomy rather than catagorisation.[47] She developed her framework based on three descriptive components: 'Source' was used to describe typefaces that have a shared historical origin; 'Formal attributes' described the physical nuances of typeface designs; while 'Patterns' group together typefaces based on similar attributes.

Using Dixon's taxonomy, nineteenth-century sans serif typefaces are classified under the source of 'nineteenth-century vernacular'. Her description acknowledges the origins of the sans serif through architectural lettering and signwriting. This was described in more detail through the terms English and Continental vernacular, relating to the roots of different styles of sans serif lettering as they first appeared. Early sans serifs were described within the pattern of 'Sans serif: Grotesque', based on their shared physical attributes of shape, modeling, terminals, proportion, weight and key characters.

Twenty-first-century typefaces have experimented with historical designs, mixing and matching different physical attributes from traditional classes of typography. Dixon's taxonomy is useful in describing these contemporary typefaces. It is of value to the study of nineteenth-century sans serif to describe the vernacular root of the letterforms. Physical attributes were used in the development of the classification system used in the proposed new framework to describe the material qualities of sans serif typography.

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47   *Ibid*, p. 52.

Table 2.1 Selected type specimens identified by Mosley and by the Author.

Year	Title	Mosley	Author
1816	A Specimen of Printing Types by Wlliam Caslon IV	•	N/A
1819	A specimen of printing types, etc. by Blake, Garnett and Co., successors to Mr W. Caslon, of London	•	•
1830	Specimen of Printing Types by Vincent Figgins	•	N/A
1833	Specimen of Printing Types, Blake & Stephenson	•	•
1832	Specimen of Printing Types by Vincent Figgins		•
1832	Fan Street Letter Foundry: A Supplement to Thorowgood's Specimen of Printing Type	•	•
1834	Caslon Foundry Specimen of Printing Types		•
1834	Fan Street Letter Foundry: New Specimens of Printing Types		•
1838	Specimen of Printing Types, Blake & Stephenson		•
1838	A Specimen of Printing Types in the Fann Street Foundry		•
1839	Specimens of Printing Types Blake & Stephenson		•
1839	Specimen of Printing Types by Vincent Figgins, Letter Founder		•
1840	Caslon Foundry Specimen of Printing Types		•
1853	Specimen Book of Types cast by S. & T. Sharwood	•	•
1856	Specimen of Printing Types, Stephenson, Blake, & Co.		•
1863	Specimens of Book and Magazine Founts. Miller and Richard	•	•
1865	Selected Specimens of Printing Types, comprising Book and Newspaper founts, cast by J. & R. M. Wood	•	•
1865	Specimens of Book, Newspaper, Jobbing and Ornamental Types, Miller and Richard		•
1866	Specimen of Modern and Ancient Printing Types, &c., by James Marr & Co.	•	•
1868	Specimen of Printing Types, Stephenson, Blake, & Co.		•
1870	H. W. Caslon & Co., Specimens of Printing Types	•	•
1870	Selected Specimens of Printing Types, comprising Book and Newspaper founts, cast by J. & R. M. Wood		•
1878	Specimen of Printing Types, Borders, Ornaments, &c. by Stephenson, Blake, & Co.	•	•
1880	Specimen of Types by John A. Hodges		•
1895	Specimens of book, newspaper, jobbing and ornamental types. Miller & Richard		•
1906	Specimen of Printing Types and Illustrated Catalogue of Printing Materials. The Caslon Foundry	•	N/A
1909	Specimen of Printing Types and Illustrated Catalogue of Printing Materials. The Caslon Foundry		•
1914	Book & Display Types by Brimingham Printers		•

2.4.　**Typefounders Specimen Books**

The relationships between the typefoundries were interwoven through family succession and, in the case of the Caslon foundries, through divisions. Typefounders and punchcutters who learned their craft through the network of family businesses left to start their own foundries, and the ownership of the typefoundries passed between many hands.

As a starting point to this research, a selection of typefounders' typespecimens was identified, based on James Mosley's chart of sans serif and slab serif names. In his study, Mosley presented the first release of sans serif typefaces by foundry, date and name (Table 2.1). This selection was expanded to included type specimens around the key dates, to check for founts that may have been missed, and new sans serif types were recorded. Mosley's hand-list on British type specimens and Talbot Baines Reed's A History of the Old English Letter Foundries were used to narrow this search.[48] By looking beyond the field of sans serif names, many other founts were identified. Four rare type specimens were unavailable for study; online sources were therefore used to compare Mosley's findings with the author's research.[49]

Following the Vox-ATypI classification system, the early British sans serifs were named Grotesques; they have some contrast between thick and thin strokes. The Neo-grotesques or Realists have less contrast and are more regular but they have many weights and sizes, reflecting new printing processes. The Geometrics follow simple classical proportions through the geometric forms of the circle, square and triangle. The Humanists derive from Roman capitals and the lower case from the fifteenth-century Venetian Humanist text that follows a calligraphic style.

The first uppercase Grotesque sans serif was produced by the typefoundry of William Caslon IV in 1816. Due to his failing eyesight, Caslon sold his London foundry, in Salisbury Square – with its entire

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48　James Mosley, (1999), p. 56; James Mosley, *British Type Specimens before 1831: A Hand-List* (Oxford: Bodleian Library, 1984); Talbot Baines Reed, *A History of the Old English Letter Foundries: With Notes, Historical and Bibliographical, on the Rise and Progress of English Typography* (London: Faber & Faber, 1952), p. 57.

49　Mosley recorded a copy of the 1830 Figgins specimen in the Bodleian Library; according to his notes, pages '117-118 show sans serif types'. University of Oxford, 'Specimen of Printing Types by Vincent Figgins, 1830', *University of Oxford* (Online: University of Oxford, 2001) < https://tinyurl.com/vf1830> [accessed 1 June 2019]; the 1865 J. & R. M. Wood specimen was found as a private sale on an online auction website, Lot Search, 'Specimens of Ornamental and Coloured Wood Letters, circa 1860', *Lot Search*, (Online: Lot Search, 2019) <https://tinyurl.com/jw1865> [accessed 9 April 2020]; and Caslon IV's 1816 and the 1906 H.W. Caslon specimen were unavailable at the time of the author's visits to the St Bride Library.

Table 2.2 Cost of H.W. Caslon's Doric, No. 6 in 1909.

Printing Type	Size	Cost
48-Point Doric, No. 6	48 pt	1/- 38 lbs
60-Point Doric, No. 6	60 pt	1/- 50 lbs
30-Point Doric, No. 6	30 pt	1/1 - 24 lbs
36-Point Doric, No. 6	36 pt	1/1 - 30 lbs
42-Point Doric, No. 6	42 pt	1/1 - 30 lbs
10-Point Doric, No. 6	10 pt	1/10 - 10 lbs
18-Point Doric, No. 6	18 pt	1/2 - 20 lbs
24-Point Doric, No. 6	24 pt	1/2 - 20 lbs
14-Point Doric, No. 6	14 pt	1/4 - 15 lbs
12-Point Doric, No. 6	12 pt	1/6 - 12 lbs
8-Point Doric, No. 6	8 pt	2/2 - 8 lbs
6-Point Doric, No. 6	6 pt	3/3 - 6 lbs

contents of tools, printing types, punches and matrices – to the Sheffield-based foundry of Blake, Garnett and Co.[50] Typographic scholars have been unable to find any surviving evidence of Caslon's sans serif in printed ephemera beyond the original type specimen book, for which a full alphabet was unavailable.[51] Jeremy Tankard theorises that Caslon's sans serif was too small for printers to use as display type.[52] Other foundries were slow to cut variations of the sans serif until the 1830s. From the 1830s to the 1900s the Grotesque sans serif flourished, with typefoundries producing a large variety of typefaces in many sizes and experimental styles (Table 2.7 Sans serifs identified in Type Specimen books ordered by date, in Appendix 2, p. 13).

Typefoundries sold type in individual founts by weight. Smaller sizes of type and intricate ornamented styles cost more. It took more time and skill to cut smaller detailed punches, and they required greater care to cast. Smaller types needed to be replaced more often by the printers as the types wore down more quickly under the weight of the press, losing fine strokes from the letters. Larger sizes of type were heavier; therefore, a large- sized fount weighed more for a full set of characters and was sold in greater weights but for less than the smaller sizes of type (Table 2.2).

Type was bought and exchanged through other means than buying direct from the typefoundries. It was common practice amongst printers to buy printing type from other printers who might be closing down. This was also true for the typefoundries; for example, Sharwood's Four Line Gothic Expanded (1853) appears in the specimen book of Miller & Millard (1863). The fount was purchased in auction after the death of Samuel & Thomas Sharwood in 1856. Local printers would loan type between each other, sometimes collaborating together to buy alternative sizes of a typeface, ensuring local availability of the typeface and spreading the burden of the cost.

The presentation of printing types in specimen books changed towards the end of the nineteenth century. Price lists for founts and printing equipment were included as the typefounders diversified their business. The early type specimens presented founts using simple place names or a short line of sample text that showed how the types could be used for display work or titling. As the industry advanced, bespoke pages

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50   James Mosley, (1984), p. 30.

51   The original presentation in the type specimen showed the characters 'W CASLON JUNR LETTERFOUNDER'.

52   Mark Ovenden, (2016), p. 16.
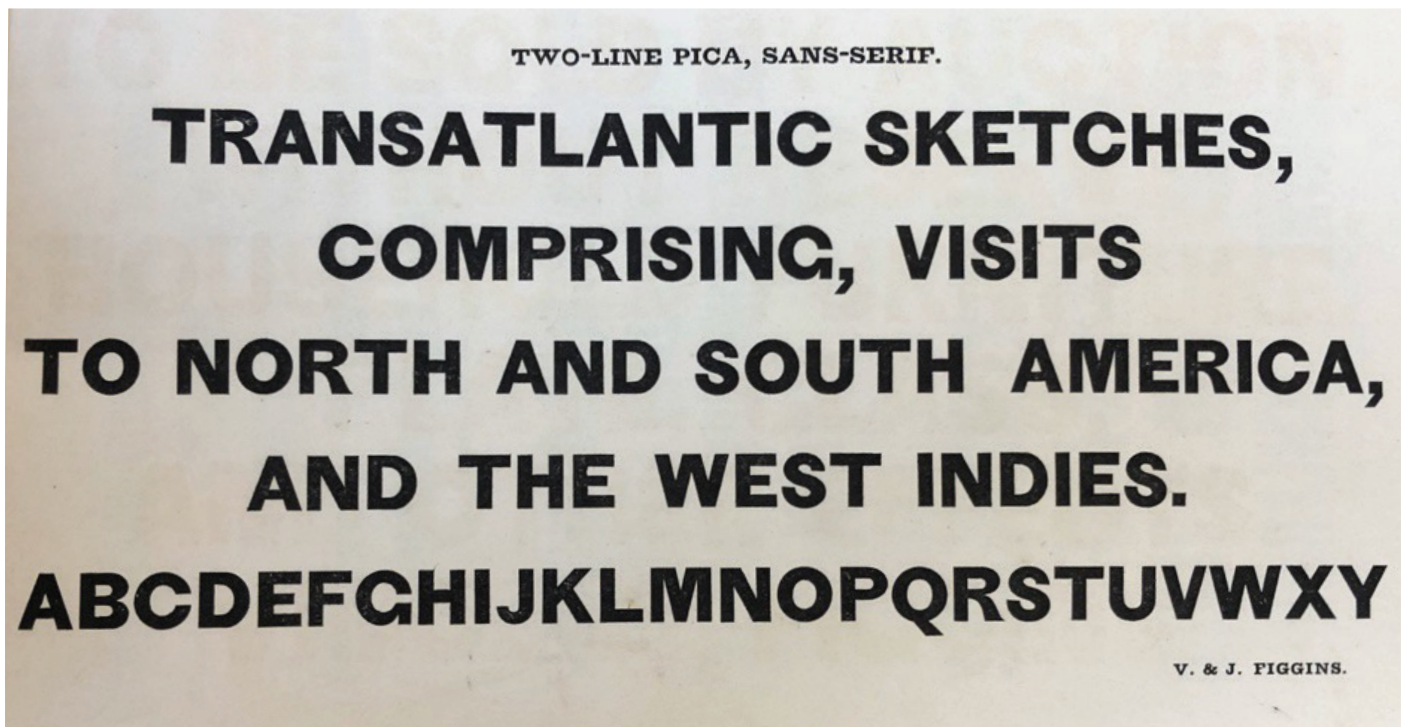
Figure 2.1 Two-Line Pica, Sans-Serif, *Specimen of Printing Types by Vincent Figgins, Letter Founder,* Figgins, 1839. St Bride Library, (SBL), London.
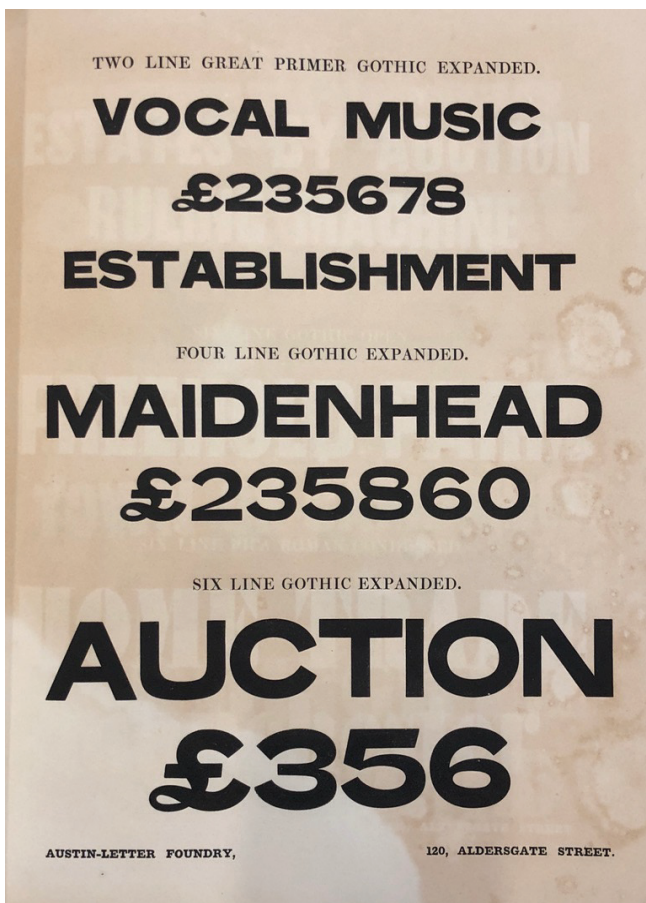
Figure 2.2 Six Line Gothic Expanded, *Specimen Book of Types Cast by S. & T. Sharwood,* Sharwood, 1853. SBL.

were typeset by the typefounders as sample advertisements, showing how their typefaces could be used together (with rules and etched plates), as a design system for printed ephemera.

Type specimen books were sales catalogues printed by the typefoundries to promote their collections of printing types. Specimen Books were classified in the *Thesaurus of Ephemera Terms* developed at the University of Reading under the broader term of 'Samples' and then the narrow term of 'Sample Books', which are described in the thesaurus as albums and volumes of ephemera that presented examples of manufacturers' products 'produced primarily for representatives and wholesalers'.[53] Typefounders' 'Sample Books' presented their printing types by showing an example of their types in use. This was often printed as a single line of text, occasionally as a full alphabet and for large type through the presentation of a single word. The founts shown in the 'Sample Books' were promoted to jobbing printers, who in turn would use the printing type in their commercial work.

The choice of text used by the typefounders initially appears arbitrary, as shown in the *Specimen of Printing Types* by Vincent Figgins, Letter Founder, 1839, in the presentation of their Two-Line Pica, Sans-Serif as 'TRANSATLANTIC SKETCHES, COMPRISING, VISITS TO NORTH AND SOUTH AMERICA, AND THE WEST INDIES' in twenty-four-point type (Figure 2.1). Specimens often related to commercial activities; the Specimen Book of Types Cast by S. & T. Sharwood, 1853, presented their Six Line Gothic Expanded using the words 'AUCTION £356' in seventy-two-point type (Figure 2.2). Both these approaches provided jobbing printers with an example of how they could use the printing types in a commercial context.

In some cases the typefounders presented examples of their printing types including the place name of an industrial town. For example, the Specimen of Printing Types, Stephenson, Blake, & Co., 1868, shows their Small Pica Two Line Condensed Sans Surryphs, No. 1 using 'BIRMINGHAM DISPENSARY' in twenty-two points (Figure 2.3). The specimens also included singular place names; for example, in Vincent Figgins the Fan Street Letter Foundry: Specimen of Printing Types, 1835, he presented 'BRIDGENORTH' in eighty-four-point type (Figure 2.4).[54]

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53   Barbara Morris, Thesaurus of Ephemera Terms, (Online: Centre for Ephemera Studies, Reading University, 2013), p. 55. <http://blogs.reading.ac.uk/typography-at-reading/files/2014/07/Ephemera-Thesaurus.pdf> [accessed 3 July 2017]

54   Vincent Figgins misspells the town of Bridgnorth in his 1839 sample book.
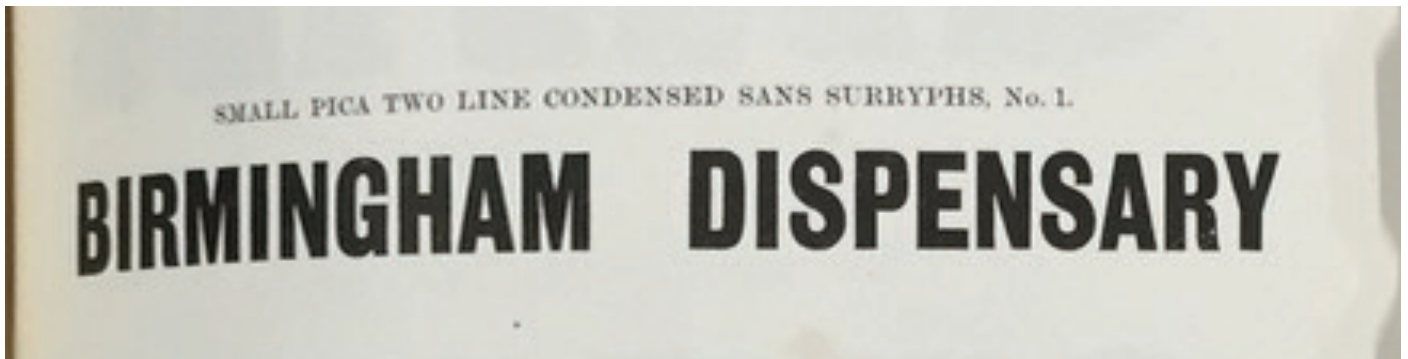
Figure 2.3 Small Pica Two Line Condensed Sans Surryphs, No. 1, *Specimen of Printing Types*, Stephenson, Blake, & Co., 1868. SBL.
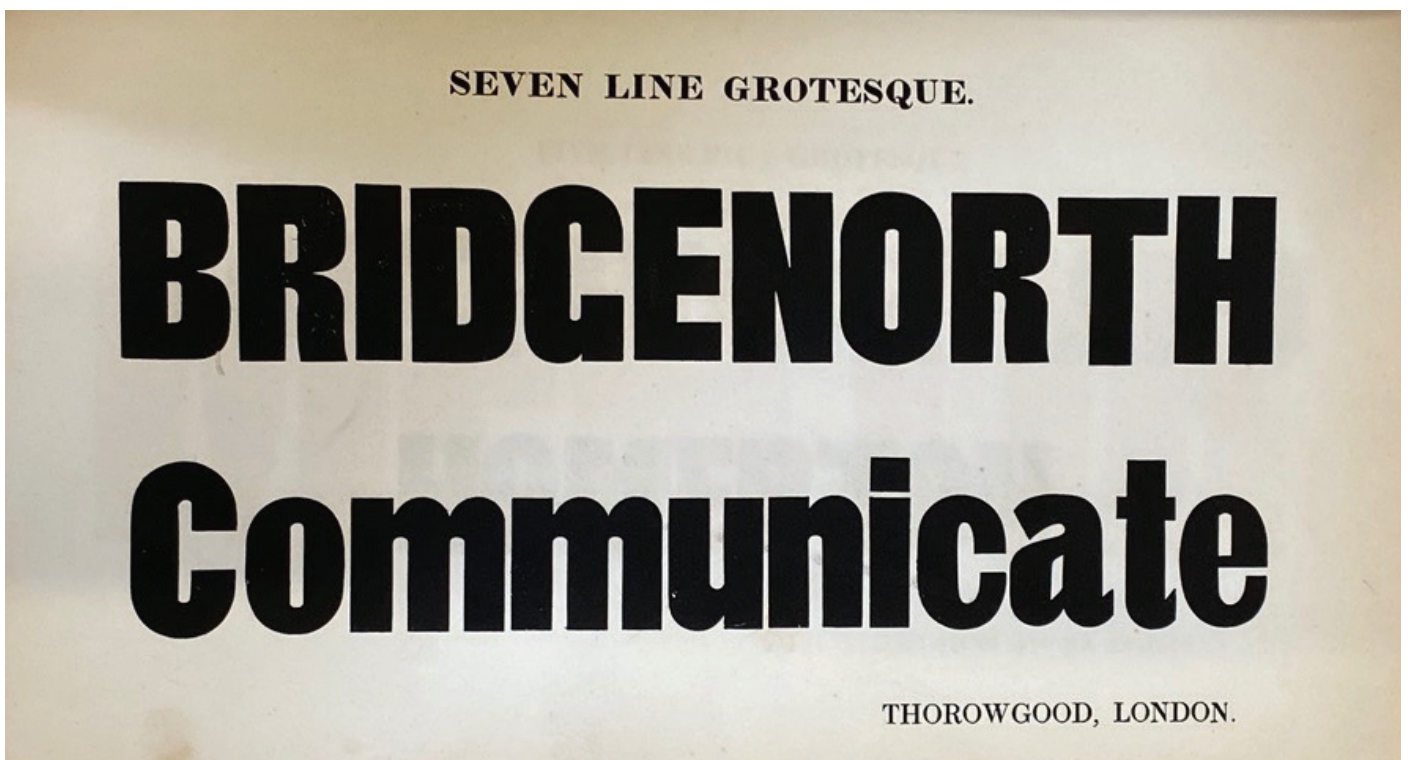

Figure 2.4 Seven Line Grotesque, *Fan Street Letter Foundry: Specimen of Printing Types*, Thorowgood, 1835. SBL.
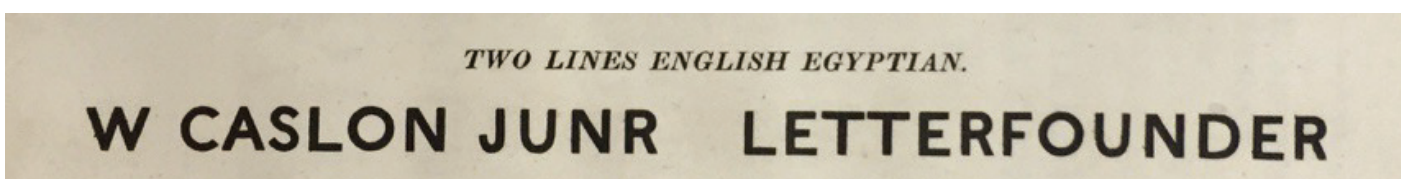

Figure 2.5 Two Lines English Egyptian, *A Specimen of Printing Types, etc.,* Blake, Garnett & Co., 1819. SBL.

Both approaches can be seen as directly appealing to printers on a local level and as examples for advertising purposes for trade across Britain and beyond. The Fan Street Foundry example also demonstrates the use of printing types for signage.

The class of 'Sample Books' was treated separately from the taxonomy used in this study's methodology, as this form of ephemera was used to sell printing types to jobbing printers by example only, rather than through the use of sans serif typography direct to a public audience. With the exception of sample pages that show complete alphabets, this class of ephemera does show all of the characters contained in a full set of printing types. In order to interpret the usage of the sans serif, ephemera produced by the printers were used as the main source material. This was cross-referenced with the 'Sample Books' to identify characters missing from the typefounders' presentations.

An example of the world's first sans serif printing types by William Caslon IV, Two Lines English Egyptian, survives through a later presentation in A Specimen of Printing Types, etc. by Blake, Garnett & Co., 1819 (Figure 2.5). The sample page shows only eleven characters through the letters 'A', 'C', 'D', 'E', 'F', 'L', 'J', 'N', 'O', 'T', 'W' in the text 'W CASLON JUNR LETTERFOUNDER' in twenty-eight-point type. The choice of text was used by Blake, Garnett & Co. to announce their recent purchase of Caslon IV's typefoundry.

Since examples of Caslon IV's original sans serif type in use have never been identified, speculation has arisen among typographic historians regarding the existence of a complete alphabet. In *Letters of Credit: A View of Type Design* (1986), Walter Tracy argued that the absence of contemporary printed evidence to validate a complete character set was an indication that 'the face had originally been cut, from a design supplied to the type founder, for a special order – for a printer of labels for some sort of merchandise'.[55]

As a counter-response to Tracy's proposition, towards the end of the twentieth century, several revivals of Caslon IV's sans serif were produced from the original matrices located in the Type Archive, London. In 1987, Ian Mortimer of I.M. Imprimit Press cast a font that was used in the printing of a limited-edition publication of Pouchée's ornamented

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55   Walter Tracy, (1986).

wood types found in the collection of the St Bride Library.[56] This was closely followed by three digital revivals. In 1998, Font Bureau released a commercial version named Caslon's Egyptian. The typeface was digitised by Miko McGinty and the designs were completed by Cyrus Highsmith and Christian Schwartz for *Red Herring* magazine, with the addition of a new lower-case design.[57] While collaborating on the catalogue for the *Primitive Types* exhibition at the Sir John Soane's Museum (1999), James Mosley and Justin Howes both independently produced digital type designs based on the matrices for Two Lines English Egyptian. These designs were never released commercially: Mosley's typeface was reserved for personal use and Howes' design was used for the signage of the Dulwich Picture Gallery, London.[58] Mosley's and Howes' designs differ slightly in appearance but give a presentation of a complete alphabet. Mosley commented that the form of the 'G' with its terminal pointing upwards and no beard (downstroke on the 'G') was a key characteristic for the identification of Caslon IV's original typeface. In 2013, Jonathan Martin, while an undergraduate student at Birmingham City University (BCU), designed a digital typeface based on the Blake, Garnett & Co. sample book and Howes' lettering used in the Dulwich signage. His revival type was used for the titles and brand design for a BCU short film, *House of Caslon*.[59]

During this study, access to the original matrices was restricted because the Type Archive did not have capacity to facilitate research visits. The author chose to focus his research on the wider usage of sans serif typography in the printed ephemera of the Midlands rather than on a singular typeface. The author has identified future avenues of scholarly research into the content of typefounders' 'Sample Books' as intentional one-way communications to jobbing printers.

The type specimen books were used to identify printing types found in examples of ephemera from Birmingham and the Midlands. This demonstrated the deployment of printing types from the London-based typefoundries to the regional printers, sometimes found in printed

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56   Ian Mortimer, *Ornamented Types Prospectus*. I.M. Imprint Press, (Online: I.M. Imprimit Press, 1994) https://web.archive.org/web/20151222083754/http://imimprimit.com/wp-content/uploads/Prospectus-all-cropped-small.pdf [accessed 5 May 2019].

57   Type Network, 'Caslons Egyptian', *Font Bureau*, (Online: Type Network, 2015), https://store.typenetwork.com/foundry/fontbureau/fonts/caslons-egyptian [accessed 16 April 2019].

58   A printed example displaying the character set of James Mosley's digital revival of Two Lines English Egyptian is in the custody of St Bride Library, London.

59   Jonathan Martin, 'Two Lines English Egyptian Digital Revival', *Behance*, (Online: Behance, 2013) https://www.behance.net/gallery/14802153/Two-Lines-English-Egyptian-Digital-Revival [accessed 21 January 2020].

ephemera before they were presented in a specimen book. Connections were also established that demonstrated where and when printing types were shared between local printers.

2.5.   Sans Serif Nomenclature

During its 200-year history the sans serif has been known by many names. British typefoundries used different naming conventions for the sans serif, such as the Grotesque and the Gothic. Initially developed as display type for advertising, the display faces began with the introduction of the 'fat faces' in the late eighteenth century. Developed as 'normal letters enlarged beyond the scale of normal book work', they were characterised by an extreme contrast between the thick and thin strokes.[60] 'Antique' was a term used by British and American typefoundries for slab serif printing types, which were uniform in width and terminated by thick block-like serifs. In France and Germany, the terminology was reversed: the term 'Antique' refers to sans serifs and slab serif letterforms were first known as 'Egyptienne'.

Two exceptions to these naming conventions exist: William Thorowgood (d.1877) named his slab serif an Egyptian; and Caslon IV named his first sans serif Egyptian. Sans serifs were letterforms without serifs, classified under the Vox-ATypI classification system (1962) as Grotesques (Chapter 4.3.4).

Nineteenth-century sans serif nomenclature has a complex history. Data identified from a selection of type specimens was analysed to present a complete timeline of sans serif naming conventions (Table 2.3). The first sans serif was named an Egyptian by Caslon IV (1816), followed by Sans-serif by Vincent Figgins (1832). Blake & Stephenson called their first sans serifs both singular and plural forms of the name Sans-Surryph (1832). The first use of Grotesque was made by Thorowgood in 1832. By contrast, Caslon & Livermore referred to the physical form and the size of the sans serif, naming them plainly as 'Condensed', for example, Twenty-Five Line Pica, Condensed. In 1853, Samuel and Thomas Sharwood of the Austin

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60   Nicolete Gray, *Nineteenth-Century Ornamented Types and Title Pages* (London: Faber and Faber Limited, 1938), p. 34.

Table 2.3 Sans serif printing type names by date and typefoundry.

Year	Type Foundry	Sans Serif Name[1]
1816	Caslon IV	**Egyptian**
1819	Blake, Garnett, & Co.	Egyptian
1830	Vincent Figgins	**Sans-serif**
1832	Blake & Stephenson	**Sans-Surryphs (4) Sans-Surryph (1)**
1832	Vincent Figgins	Sans-Serif (4)
1832	W. Thorowgood and Co.	**Grotesque**
1834	Caslon & Livermore	**Condensed**
1834	W. Thorowgood and Co.	Grotesque
1838	Blake & Stephenson	Sans-Surryphs (26) Grotesque (8)
1838	W. Thorowgood and Co.	Grotesque
1839	Blake & Stephenson	Sans-Surryphs
1839	Vincent Figgins	Condensed (10) Sans-Serif (16)
1840	Caslon, Son & Livermore	Condensed (8) **Rounded (2)**
1853	S. & T. Sharwood	**Gothic (9)** Grotesque (9**) Ornamented (1)**
1856	Stephenson, Blake, & Co.	Sans Surryphs (2) Grotesque (15)
1863	Miller and Richard	**Sanserif (5)** Gothic (3)
1865	J. & R. M. Wood	Gothic (4) **Athenian (1) Shaded (1) Sanseriff (17)**
1865	Miller and Richard	Sans-Serif (29) Grotesque (19) Shaded (2) Ornamented (4)
1866	James Marr & Co.	**Sans Serif**
1868	Stephenson, Blake, & Co.	Sans Surryphs (36) Grotesque (13)
1870	H. W. Caslon & Co.	Condensed (28) Rounded (4) Shaded (2) **Doric (11)**
1870	J. & R. M. Wood	Gothic (3) Sanseriff (17) **Lord Mayor (1)**
1878	Stephenson, Blake, & Co.	Sans Surryphs (7) Grotesque (5)
1880	John A. Hodges	Grotesque (9) **Sans (16)** Doric (1) Outline (1)
1895	Miller and Richard	Sans-Serif (44) Grotesque (58) **News Bill (4)** Shaded (3) Ornamented (1)

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1   The names in bold show the first appearance of these terms to describe sans serifs in the specimen books. The numbers in brackets indicate the number of fonts.

Letter foundry followed the American convention of Gothic.[61] The foundry was later purchased by Wood & Company who named their type without a hyphen as Sanseriff, and a distorted sans serif specimen that they named Athenian (1866). The final variant of nineteenth-century sans serif nomenclature was presented through the term Doric, introduced by Henry William Caslon in 1870.

The unhyphenated version of the name sanserif was used by some twentieth-century print historians. This was first endorsed by Harry Carter in his 1931 essay on Sanserif Types, and was also used in 1965 by James Mosley.[62] In 1999, Mosley acknowledged that his rationale for following this convention may have been misguided due to an editorial error in the production of the *Oxford English Dictionary* and that the word Sanserif 'should not have existed'.[63] In the latter twentieth century the term was superseded by the spelling 'sans serif'.

As with Caslon and Livermore's Condensed sans serifs, the sans serif was presented under other singular names that expressed their physical forms; these included Ornamented, Shaded, Rounded and Outline. These naming conventions are extended when used in combination with one of the variant spellings of Sans serif, Grotesque or Gothic, for example, J. & R.M. Wood's Two-Line Nonpareil Octagon Sanseriff of 1870.[64]

The evolution of naming conventions shows that the nomenclature adopted by the typefoundries was influenced by nineteenth-century interests in classical history and architecture. This is demonstrated by Caslon IV's 'Egyptian', Thorowgood's 'Grotesque', Sharwood's 'Gothic', Wood's 'Athenian', and W. H. Caslon's 'Doric'. As the sans serif develops the naming conventions become more practical and descriptive. This begins with Figgins 'Sans-serif' and later 'Condensed' types, Caslon, Son & Livermore's

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61   The term Gothic was first used for sans serif types in America by the Boston Type and Stereotype Foundry, who in 1837 published a set of non-serifed typefaces under the name of Gothic.

62   Harry Carter, 'Sanserif Types', in: Ruari McClean (ed.), *Typographers on Type: An Illustrated Anthology from William Morris to the Present Day*, (London: Lund Humphries Publishers, 1995); James Mosley, (1999), p. 53.

63   James Mosley, (1999), p. 53: 'The original authority for the term 'sanserif' in the *Oxford English Dictionary* (OED) appears to have been based on an error of transcription, and the word should not have existed. Except that, curiously, it did. The *OED* has some other quotations showing this spelling, used long before the 'S' volume of the dictionary was published in the 20th century. One example from an authoritative source is 'Sanserifs or grotesques, which have no serifs', from the 1888 edition of the *Encyclopaedia Britannica*. By using it myself I suppose I have added a bit of legitimacy.' James Mosley, 'The Nymph and the Grot, an update', *Typefoundry* (Online: Typefoundry, 2007) <https://typefoundry.blogspot.com/2007/01/nymph-and-grot-update.html> [accessed 20 April 2020].

64   Other terms used in conjunction included: elongated, expanded, italic, lining, open, reversed italic, sloping, thin and wide (Appendix 2: Table 2.7., p. 13).

'Rounded' and Sharwood's 'Ornamented'. Later names indicated how the type was to be used, for example Miller and Richard's 'News Bill'.

Typographic commentary from the nineteenth and early twentieth centuries is prejudiced by its time. The reception of the early sans serif and the display types by Hansard as the 'fancy faces of fashion', or typographic monstrosities is biased towards negative, often derogative criticism. Reading history through a twenty-first-century lens, we may consider the naming of printing types, in the nineteenth century, as an early form of branding, and in the process, we may reveal a set of brand values that these names represent.

With the exception of Caslon IV's Two Lines English Egyptian and the Doric, the majority of names for the sans serif are negative. From the literal translation of sans serif – to be without serifs – implies an absence of substance. Grotesque is defined in Samuel Johnson's dictionary of 1786 as 'distorted in Figure; unnatural; wildly formed'.[65] Gothic reflects contemporary architectural tastes pertaining to the medieval style and was aligned to popular culture through Romanticism.[66] Doric is a direct reference to Greek classical architecture, reflecting nineteenth-century interests in antiquity. It is a literal reiteration of ancient values, presenting a window on developing trends within nineteenth-century cultural aspirations, which were formed around the value of power from the myth of empires past.

Dr Janina Ramirez cites the reinvention of gothic architecture in the fourteenth century, through the Perpendicular Gothic, as the invention of the English nation. Founded on the notions of chivalry and Arthurian myths, this new architectural form asserted 'simplicity, that brought with it a greater sense of drama'.[67] The Romantic movement, in response to the social and political values of the age of Enlightenment, rejected the scientific ordering of nature, and challenged the social impact of urbanisation, population growth and the cultural values favoured during the Industrial Revolution. Through the quest for the sublime, Romanticism influenced politics, liberalism, radicalism,

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65   Samuel Johnson, *Dictionary of the English Language* (London: Harrison & Co., 1786).
66   Book typography of Gothic literature is not set in gothic or the grotesque typefaces. It is commonly set in serif printing types. However, the title pages and dust jackets of Gothic literature take advantage of the new modern and display types available from the late eighteenth and early nineteenth centuries, including a wide mix of decorative and ornamented faces, such as Black letter script. These types are typical of jobbing printing during the late Georgian and Victorian era.
67   'The First Gothic Age', *Architects of the Divine*, BBC2, 2014.

nationalism and indirectly the Victorian values of morality. Gothic architecture dominated the nineteenth century, beginning with the celebrated architecture of Augustus Pugin, evocative of 'a return to the faith and the social structures of the Middle Ages'. In contrast to the decorative qualities associated with the High Victorian Gothic style, the Doric and Gothic san serifs 'recalled the early gothic or black letter types', simple and uncomplicated letterforms.[68] The sans serif has been known by may names and the nomenclature used by typefounders underpins the cultural associations that were later formed.

2.6. Reception of the New Sans Serif Typography

The sans serif received a mixed critique from printer historians after it was first introduced in 1816. Reactions ranged from favourable accounts of its typographic merits to a substantial disregard for the new typefaces that continued into the mid-twentieth century. These views were recorded by printing historians from the nineteenth and twentieth centuries, revealing the context of how the sans serif was first received, and how its audiences later perceived its use. Literature from print historians is used to show the context of the impact of the sans serif and demonstrates how historians valued it for its contribution to typography. The historical critiques of print historians present a discussion of the value of sans serif typography, both negative and positive. These ideas were used to identify potential values that sans serif typography may represent and to interpret the cultural associations that were formed.

The twentieth-century concept of the 'shock of the new', popularised by the art critic Robert Hughes (1938-2012), can be applied to the reception of sans serif printing types.[69] Its arrival in the early nineteenth century caused shock and public outrage when it was first promoted in the type specimen catalogues of British typefounders. Initial reactions to sans serif typography need to be considered in the context of the display faces.

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68   Alfred Forbes Johnson, *Type Designs: Their History and Development* (United Kingdom: Grafton, 1934).

69   Robert Hughes' text is concerned with a hundred-year history of Modern Art, focusing mainly on twentieth-century movements and 'isms'. Hughes' concept of how new art forms are received and impact on popular culture can be applied to previous centuries in recent history. Robert Hughes, *The Shock of the New* (United Kingdom: Knopf Doubleday Publishing Group, 2013).

Designed for advertising and promotional purposes, the display faces were commonly in use by 1816. Precursors of the sans serifs were the slab serif typefaces, known as the Egyptians or the antiques. Slab serifs exaggerated the physical attributes of the serif typefaces, characterised by the use of heavy serifs. Through advertising, nineteenth-century audiences were already familiar with the forms of slab serif typography, including its extreme design variants – the fat faces that used extreme contrast between thick and thin strokes. This familiarity paved the way for the acceptance of the sans serif.

In *Typographia* (1825), parliamentary printer Thomas Curson Hansard (1776-1833) described the relationship between the rising popularity of the display faces and print advertising as where 'Fashion and Fancy commonly frolic from one extreme to another'.[70] Hansard's critique of the rise of the display faces highlights the disparity between rapid changes in nineteenth-century print production and typographic taste. Regarding the use of display faces in book typography, he considered the new faces as 'typographic monstrosities', commenting that the use of such letters was regarded as objectionable by eminent booksellers of the time. Hansard identifies a positive use for display types in future book work, describing that when used in works such as poetry with open and thick-leaded composition, 'an effect brilliant and ornamental is produced'.[71] He acknowledges that the use of display typography for its original intention for advertising offers 'much greater improvement in the printing of handbills than of books'.[72]

Founder's type was favoured by printers for its strength and reproduction quality. Fashions for the use of new display types saw a rapid increase in the production of new printing types. Hansard considered the success of display typography in printing, through the 'newness' of the printing types, referring to the fragility of the new designs as they were prone to breaking under the weight of the press. The design of extreme contrast between the thick and thin strokes on the fat faces created difficulties for nineteenth-century printers, with sections of the type breaking off and being destroyed in the printing process. The size of the printing types and the increased surface area required more inking, and the printers needed to exert more strength in a heavier pull of the press. To

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70   Thomas Curson Hansard, *Typographia: An Historical Sketch of the Origin and Progress of the Art of Printing; with a Description of Stereotype and Lithography* (London: Baldwin & Co., 1825), p. 618.

71   *Ibid*, p. 617.

72   Hansard's critique of the new display typography recognises its positive merits when applied to print advertising. *Ibid*, p. 355.

achieve satisfactory results of 'strength, grace, and lightness, exhibited on the same page', printing using display types required additional time and costs. Hansard comments that 'without increase of pay; and without this care, the effect produced is worse than the letter from the old matrices'.[73]

The typefounders addressed these concerns, recognising an opportunity to increase production of new typefaces in response to a growing demand for the latest printing types. Hansard comments on the introduction of new display faces and black letter founts, as an opportunity to profit by the letter-founders at the expense of the printers and publishers because the 'fashion of type is left so exclusively at the will of those who manufacture to sell it, and so little to the consideration and judgment of those who are to use and pay for it'.[74] Based on the developments of the display types and the legacy that they had for British typography, Hansard expressed his concern for the future of British typography as the 'typographic monstrosities here exhibited, which Fashion in our age has produced'.[75] These commercial interests led to new designs of lettering where 'the strokes which form letters are all of one uniform thickness', including the sans serif.[76]

The sans serif was an extreme development of typographic forms. It presented a further reduction of form, and its primitive and elemental serif-less designs reflected new typographic ideas in contemporary printed ephemera. The public reception of the sans serif was pre-empted by the Birmingham sculptor William Hollins (1763-1843)[77] who, in his 1813 study on architectural Roman capital letters, commented that the use of lettering without serifs would 'appear to a modern eye at least, naked and ungraceful'.[78] The uniform contrast of the sans serif type was later likened by the twentieth-century bibliographer Alfred Forbes Johnston (1884-1972), to an 'Egyptian with the Serifs knocked off, and it is probable that that was the manner of its creation'.[79]

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73   *Ibid*, p. 617.

74   *Ibid*, p. 404.

75   *Ibid*, p. 618.

76   *Ibid*, p. 618.

77   Michael Fisher, 'Hollins, William (1763–1843), architect and sculptor', *Oxford Dictionary of National Biography* (Online: Oxford University Press, 2013) https://www.oxforddnb.com/view/10.1093/ref:odnb/9780198614128.001.0001/odnb-9780198614128-e-13564 [accessed 11 September 2020]

78   William Hollins, *The British Standard of the Capital Letters Contained in the Roman Alphabet, Forming a Compleat Code of Systematic Rules for a Mathematical Construction and Accurate Formation of the Same, with Letters of Exemplification, Elementary and Compleat: Together with an Useful and Practical Appendix* (Birmingham: J. Taylor, 1813).

79   Alfred Forbes Johnston, (1934).

Hansard's comments signal a more extensive cultural undertone developing within contemporary society, a growing interest and cultural awareness by the developing middle classes into classical cultures. These ideas were reflected in the architectural designs of Sir John Soane and the use of sans serif lettering in his architectural drawings and later buildings. Hansard's critique foregrounds ideas that later underpin cultural associations with the display faces. He describes the design of slab serifs as an imitation of the Didot typefaces, in combination with the action of the press in blunting the typefaces so that 'the fount soon acquired the appearance of age and long service'.

Hansard presents an insight into the public demand for printed material associated with classical culture when he describes a contemporary practice by some booksellers of using antique letters (including the sans serif) in the presentation of works to be sold as 'genuine Egyptian relics'.[80] The concept of commercial gain as a motivating factor in the production of the sans serif was discussed by Walter Tracy, who criticised the presentation of Caslon IV's sans serif as an Egyptian in 1816 as to 'suggest antiquity, in the hope that the face would take the attention of someone else with a similar need'.[81] Hansard acknowledged the work of Caslon IV, lamenting his retirement from typefounding and celebrating his commercial modesty through his technical achievements. He regarded Caslon as making the 'greatest improvement in the art of type-founding that has taken place in modern times'.[82] Cultural associations between the sans serif and classical culture were developed in later educational texts of the nineteenth century. Examples include archaeological works that use sans serif typography for titles and headings. Hansard suggests that two-line letters were useful for titling, of which Caslon's sans serif was designed to the size of two lines English, approximately twenty-eight points in height.

The printer William Savage (1770-1843) reflected Hansard's suspicion of the new typography. Writing in *A Dictionary of the Art of Printing* (1841), Savage commented on the introduction of the display faces by the typefoundries as a commercial divergence from traditional lettering, as a

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80 'Unique antique typographiques imprinted in "London's City" may be sold to the best bidder as genuine Egyptian relics of antediluvian origin, and form a choice portion of the treasures in the museums of the virtuosi!!' Hansard, *Typographia*, p. 618.

81 Walter Tracy, (1986), p. 86.

82 There is a warmth of generosity in how Hansard describes the retirement of Caslon IV from typefounding as 'the loss of such a competitor for fame in this difficult business'. His praise is forthright of Caslon's contribution to typefounding invention through the design of his sans-pareil pierced matrices for large type. Hansard, Typographia, p. 355.

means to produce a greater 'variety' of printing types for commercial gain. He described a lack of legibility in the weight of the new types, and criticised the extreme variety of lettering from skeletal forms to letters drawn in perspective 'as if they were marching away'. He observed that the design of these types was biased towards creating impact through style, as opposed to improving formal typography. The greatest demand for these types was in the jobbing print house, used to produce advertising and 'such work in a style superior to that in which a book house could, with regard to producing effect, and, in general, more expeditiously'.[83]

Some Early Type Specimen Books of England, Holland, France, Italy & Germany (1875), written by the printer and bibliographer William Blades (1824-90), catalogued early type specimens from Joseph Moxon (1627-91) to Edmund Fry (1754-1835). In addition to the European countries mentioned in the title, he also included early typefoundries from the United States. Blades fixes the year 1820 as a boundary between the old and new styles of punchcutting. This date was contested by Daniel Berkeley Updike (1860-41) based on a presentation of new types in a specimen by Figgins dated 1815. The new styles of punchcutting resulted in the display faces, considered by Blades to be 'fancy founts of all degrees of grotesqueness'. He had a strong disregard for their designs but acknowledged their commercial appeal 'which offend every rule of proportion and elegance, [but] have a good sale among printers'.[84]

The debate surrounding the art of British typography was further developed in the late nineteenth century by the author and typographer Talbot Baines Reed (1852-93). In *Old English Letter Foundries* (1866) Reed expresses his distaste for the vulgarisation of typography that was 'corrupted by new fancies and fashions, demanded by the printer and conceded by the founder'.[85] His perspective is biased towards book typography, celebrating the revival of the old-style fashion of Caslon old-face in 1844. Reed praises the work of Vincent Figgins as he has 'strayed less into the folly of fat-faced preposterous disproportions, than either Thorne, Fry or Caslon'.[86]

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83   William Savage, *A Dictionary of the Art of Printing* (London: Longman, Brown, Green, and Longmans, 1841), p. 428.

84   William Blades, *Some Early Type Specimen Books of England, Holland, France, Italy, and Germany* (London: J.M. Powell, 1875), pp. 21, 22.

85   Talbot Baines Reed, (1952), p. 57.

86   *Ibid*, p. 378.

In a lecture for the Society of Arts in 1890, Reed discussed the merits of old and new typography. His presentation focused on a brief history of the art of British printing through Roman type for book work. He commended printers for following the contributions made to the art of printing by John Baskerville (1706-75) and William Caslon (1692-1766) and highlighted the importance for printers to maintain high typographic standards over commercial gain.

The influence of jobbing printing and the display types was represented in his talk, and he condemned the use of ornamental forms or 'fancy types', which he regarded as a 'delinquency', citing the influence of ornamental types as imported from France or Germany until the start of the nineteenth century. He asserts his disregard for the new types, quoting an unnamed typefounder that it was 'disgraceful to a profession that was once held "sacred"'. Reed favoured a return to the old style of English typography, a view shared earlier by Hansard, as opposed to the modern influence of Firmin Didot (1764-1836) and Giambattista Bodoni (1740-1813), whose designs were influential in the development of the display faces.[87] Reed demonstrates his concern over the impact of jobbing printing on the wider scope of typography, stating that 'it was a bad day for any art when it became a mere trade'.[88]

The late nineteenth century saw an increase in the production of sans serif types, with typefounders issuing varied designs based on the Grotesque sans serif. These founts were cut in many different sizes and variants from condensed, extended, elongated, heavy, light and open. The designs were based on Roman forms, and although they were perceived as monoline, the lowercase letters followed the neoclassical style of the Moderns with 'the vertical strokes retaining a greater thickness compared to the oblique transitions and joins'.[89] The most radical transition in these designs came in the form of the capital letters that over time became equal in width. The perspectives of later typographic historians on the early British Grotesques and later designs of the sans serif are underpinned by cultural developments of this period.

The reformist ideas of the Arts and Crafts movement (1880-1920) impacted on the development of British typography. In response to the damaging effects of industrialisation, the movement advocated social

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87   'That there was ample room for improvement is sufficiently manifest, but the rage unfortunately ran into the opposite extreme.' Hansard, *Typographia*, p. 616.

88   'Old and New Fashions in Typography', *The Star,* 19 April 1890.

89   Adrian Fruitiger, 'The History of Linear Sans Serif Types', *Linotype Matrix* (2005), pp. 48-55.

reform and a return to the manufacture of objects by hand, as opposed to production through the division of labour. Influenced by the decorative artist, social reformer and manufacturer William Morris (1834-86), the movement rejected the mid-Victorian fascination for ornamentation, favouring simpler decorative forms — concurrent to the Gothic revival in architecture — of medieval styles.

In 1891, Morris established the Kelmscott Press to propagate his ideals, producing sixty-six volumes in the Arts and Craft style. The Kelmscott Press rejected the use of modern Roman typographic forms and the display faces, taking inspiration from the design of illustrated medieval manuscripts. The writer and publisher Holbrook Jackson (1874-1948) commented on Morris's typography as being 'new faces grafted on to the oldest methods'.[90] Jackson perceived his types as a 'primitive' effort, but his work through the private press was influential in later book production, inspiring other printers – including Doves, Eragny, Ashendene, and Vale Presses – to carry on his aims.[91] These teachings impacted negatively on the acceptance of the sans serif, resulting in many printers abandoning their cases of sans serifs to be sold as scrap. Typographer and writer, Harry Carter (1901-82), highlights how this later led to regret 'when they saw the havoc done to their fragile book-types by rougher kinds of commercial jobs'![92]

The development of the sans serif in the nineteenth century was guided with an eye to commercial gain by the typefoundries. Working in a supply and demand economy, the sans serif became established in response to the competitive needs of advertising. It reflected the social fashions of the time, leading to the development of later typographic cultural associations. This resulted in an explosion of new forms of display types, produced for their variety rather than the quality of their typographic form. These types were competing for attention with traditional book types during a period when the nature of quality and authenticity was being challenged by printers and typographers, leading to the revival of the old-style typography and refinement of the display types.

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90   William Morris first returned to the use of Caslon's types and later designed his typeface named Golden Type, based on the old-style types of Nicolas Jenson [1420-1480]. Jackson regarded the development of nineteenth-century printing as a 'hitherto despised and rejected period of printing' characterised by 'chaos and decadence in types, composition, [and] ornaments'. Holbrook Jackson, 'The Nonage of Nineteenth-Century Printing in England', *The Fleuron* (1924), p. 87.
91   University of Glasgow, 'Kelmscott Press', *University of Glasgow* (Online: University of Glasgow, 2017), <http://special.lib.gla.ac.uk/teach/privatepress/kelmscott.html> [accessed 8 March 2019].
92   Harry Carter first published his essay in the Curwen Press Miscellany in 1931. Harry Carter, (1995), p. 70.

In the twentieth century, Harry Carter presented a new positive history of sans serif typography. In *Sanserif Types* (1931) Carter considered an alternative theory about the legacy of the sans serif. Carter identified an advantage of sans serif types in their durability in wear when printing on heavier substrates such as cartons and wrappers, a counter-argument to the idea that the sans serif originated from slab serif types that had broken under the pressure of the press.[93] He regarded the association of the sans serif with inscriptional lettering and tombstones as being responsible for an 'effect depressing on the mind'. These associations were cast off because of the type's functionality in jobbing work. Carter attributed the lasting popularity of the sans serif to its uniform block-letter style design and its maximum efficiency for legibility; in the process, however, its association with advertising had 'earned it a certain discredit amongst those who cared for printing and fine types'.[94]

In response to new opportunities in the development of formal advertising and mechanisation of the press, a new generation of printers championed the benefits of using sans serif types. This marked a turning-point in the history of the sans serif, as printers began to recognise that the block letter in its Grotesque form was inappropriate for book work and close reading. Carter believed that the sans serif needed to be used for its simplicity and that contemporary advertising was misusing the type as a novelty, 'resulting in its indiscriminate use, and this in turn leads to injudicious purchasing, so that some antiquated and bad gothics in thin disguise are being resuscitated by the founders'.[95]

It was through the expansion of the underground railways that the sans serif in Britain took its next evolutionary leap. The development of humanist typographic forms by Edward Johnston (1872-1944) in 1918 led to new cultural associations with classical culture and modernity. A juxtaposition in usage formed as the new type designs broke with 'the literary tradition, and sort[ed] well with the starkly mechanical associations of an electric railway'.[96] Incorporating calligraphic principles, Johnston's Underground sans serif was a revival of Jenson and Caslon's

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93   A 'printer having become acquainted with these types would value them for their durability, for they have no serifs or hair-lines to break or become thick in wear; which quality, no doubt, goes as far as a printer's partiality can towards accounting for their popularity'. *Ibid*, p. 69.

94   Associations with advertising created a lack of regard for the sans serif among advocates of fine printing, but the 'mechanical methods of type-making are especially well adapted for this purely logical style of letter'. *Ibid*, p. 70.

95   In the twentieth-century, the 'class as a whole is showing signs of decline through wrong use'. *Ibid*, p. 72.

96   *Ibid*, p. 71.

old-face family of types. His typographic designs followed the absence of serifs and hairlines of inscriptional Roman lettering but were directed by function. These designs were effective as large letters used for signage through isolated words to be read at a distance. Used for signage and information design, Johnston's designs were easy to distinguish from other forms of lettering used in the same environment as advertising. The reduction of ornamentation and its new-found functionality preserved the legacy of the sans serif by contrast with the other display faces.

Carter considered that, in order to achieve a successful presentation for sans serif typography, the setting of type required generous interlinear spacing and additional consideration of adjustments for kerning, a factor that was not originally designed into the functionality of the sans serif typefaces. This issue was finally addressed by the typefoundries in 1928, when Monotype released sans serif designs by the British sculptor and typographer Eric Gill (1882-1940). His designs were considered to be a lighter version of Johnston's Sans which advanced sans serif typography so that its design could be used in body text for close reading. Gill, who had worked under Johnston on the design of his sans serif, produced designs for a typeface that had a 'wider range of usefulness in typography than any other sans serif had ever had'.[97]

Johnston's Underground sans serif impacted on the designs of later European geometric sans serifs. In 1920, a delegation of German commercial artists visited London to observe the new lettering for the Underground. On their return, these 'Gebrauchsgrafiker' stimulated demand for new typographic designs in German advertising that influenced the typefoundry designs of Bauer's Futura and Klingspor's Kabel. The geometric sans serifs were closely associated with the development of modernism and Jan Tschichold's (1903-72) New Typography that later revolutionised commercial design in Europe.

In *Nineteenth-century Ornamented Types and Title Pages* (1938) calligraphic scholar and typographic historian Nicolete Gray (1911-97) presented a positive representation of the display types and the sans serif. Gray developed an interest in post-classical lettering at Oxford University and in the 1930s was associated with the British Modernists, working for

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97   'More useful for full pages and less so for a caption of a few words.' *Ibid*, p. 71.

a short time as an art critic for the publication *Life and Letters* (1928-34).[98] Gray's book was instrumental in offering an alternative critique on the display types of the nineteenth century, presenting a typographic history that was unbiased by contemporary views of the original printing types and respectful of the period when the types were initially produced.

Gray took a favourable view of the design of Caslon IV's sans serif, being a typographic invention that predated its common usage in the 1830s.[99] Gray discussed printing types by decades, giving cultural insight into the moods that influenced each period when the types were first produced. She viewed the sans serif types of the 1830s as clumsy styles of lettering, reflecting a period of bad design in letter founding. The urgency of type-founders to cut new sans serif types was influenced by a 'consciousness of all the world of poverty and effort and progress which had been living and growing under the Regency culture [and that] had suddenly become more urgent and articulate'.[100] With the exceptions of Figgins and Blake and Stephenson's sans serif designs, the typefoundries cut new condensed variants, regarded by Gray as being too 'traditional and tainted with classicism'. In 1834, a lower-case sans serif was first presented by William Thorowgood (d.1877), but this did not appear again until its introduction by German typefoundries in the 1850s.

Gray comments on a brief cultural shift in the 1840s, when the sans and slab serifs were replaced in printers' display text with new typographic forms of the Grecian and the Rounded, considered to be more 'sympathetic to the mind of the forties'.[101] In 1847, Vincent Figgins presented an expanded series of sans serifs, considered by Gray to be a precursor in typographic quality and neatness, which established the sans serif as a permanent feature in all type-founders' books by the 1860s. Gray associated the sans serif with developments in transport and technology, as a symbolic representation of the British nation; the 'architectural counterpoints of the sans serif are the railway stations and the Crystal Palace – the break with the styles of the past'.[102]

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98   Nicolete Gray specialised in Medieval History at Oxford, leading to her later interests in post-classical inscriptions in Italy. During the 1930s, she developed close friendships with the modernist artists Barbara Hepworth and Ben Nicholson. Nicolas Barker, 'Obituary: Nicolete Gray', *The Independent* (Online: The Independent, 1997) <https://www.independent.co.uk/news/people/obituary-nicolete-gray-1255651.html> [accessed 3 November 2019].

99   The sans serif does not appear again until the specimen book of Vincent Figgins in 1832. 'The sans serif is not an invention of this period, nor is it ever used normally at this date, though it is now for the first time in common use.' Nicolete Gray, (1938), p. 35.

100   *Ibid*, p. 34.

101   *Ibid*, p. 42.

102   *Ibid*, p. 51.

In 1914, Wyndham Lewis (1882-1957), modernist writer and editor of *BLAST*, used Stephenson Blake's Grot No.9 for its heavy visual impact on the page. Using mixed sizes of large condensed Grotesque sans serif types, *BLAST* presented the Vorticist manifesto through new and radical typographical compositions. Vorticism as an art movement was short-lived, with Lewis publishing two editions of *BLAST* before the outbreak of the First World War. By the 1930s, his political views were aligned with far-right politics; in his book on *Hitler* (1931) he demonstrated sympathy with Nazi ideologies that were manifesting in Europe.[103] In later life, he wrote against anti-semitism, but his work and, in the process, the sans serif continued to be associated with fascism.

In the 1930s, Stanley Morrison, Francis Meynell and Oliver Simon were leading a revival of old-style lettering in British typography. Concurrently, Morrison was working with Eric Gill at Monotype on the refinement of sans serif lettering as humanist typefaces. These ideas and principles, alongside the new European geometric styles, were rejected by John Betjeman, Robert Harling, and James Shand, who returned to the display faces of the nineteenth century for inspiration for their publication *Typography* (1936). Harling and Shand were friends with the partners of the Stephenson Blake typefoundry and had 'at their disposal a catalogue of types which was practically a museum of nineteenth-century taste'.[104]

In twentieth-century Germany, typographic developments led to the evolution of the geometric sans serif. Influenced by the type designs of Edward Johnston, these geometric types were initially viewed with suspicion in Britain due to their political associations with fascism and extreme political movements of the twentieth century. These associations included the use of sans serif lettering in fascist Italian monumental architecture and constructivist 'Posters' in Soviet Russia.

In *The Crystal Goblet: Sixteen Essays on Typography* (1955) Beatrice Warde (1900-63), the American typographic scholar and publicity manager for the Monotype Corporation, noted that in Britain, the sans serif 'was scarcely touched by the cold, bony finger of the Bauhaus'.[105] The German Nazi regime did not advocate the modernist principles and the geometric typefaces associated with the Bauhaus, but the use of DIN 1451 typefaces (1931) was standardised in 1936, for engineering, general signage and identification

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103   Wyndham Lewis, *Hitler* (United States: Gordon Press, 1972).
104   Alan M. Fern, 'Old-Fashioned Types and New-Fangled Typography, a Study in the Revival of Nineteenth-Century Exotic Type Faces', *Typographica 14* (1957), pp. 27-31.
105   Beatrice Warde, (1955).

systems in Germany.[106] James Mosley considered that the cultural association of sans serif types with modernism, manifested through its political connections via monumental architecture, delayed its acceptance by British printers into the 1950s.[107] In twentieth-century post-war printing, the sans serif increased in popularity through the growing influence of American advertising and the use of geometric Gothic (known as the Grots) sans serif typefaces.

2.7. Conclusion

In answering the aims of this research, the literature reviewed for sans serif printing types was used to consolidate existing knowledge and identify new theories for working with typography. In particular, analysis of the potential origins and the subsequent reception of sans serif printing types, was used to help assess its impact on nineteenth-century print culture. From its slow uptake at the start of the century, both in production by the type foundries and its negative associations with a 'primitive' style. The Grotesque sans serif later developed in many type styles of different weights, that proved useful to jobbing printers, for its legibility in saving space by setting dense amounts of text at small type sizes. The type specimen books were used to identify printing types in local ephemera, showing how regional printers were applying the new type styles and to what extent. Understanding the history of the sans serif and its commercial rise, informed new ideas for the classification of Grotesque sans serifs used in the new methodology.

The typefoundry specimens recorded the first presentation of sans serif types by name. It would be beneficial to record subsequent repeats of the same typefaces discovered in later publications, in order to provide greater detail of the evolution of the sans serif in terms of volume of types in circulation. Inclusion of later type

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106   In 1941, Martin Bormann outlawed the use of Fraktur black letter types as 'Judenlettern' (Jewish letters), to be superseded by the calligraphic styles of Antiqua typefaces. Alpha History, '1941: The Nazis Ban Jewish Fonts', *Alpha History* (Online: Alpha History, 2016) <https://alphahistory.com/pastpeculiar/1941-nazis-ban-jewish-fonts/> [accessed 14 March 2019].

107   Mosley considered that sans serif in Britain was associated with 'modernism as a movement characterised by extremism' ultimately manifesting its values through political movements'. James Mosley, (1999), p. 7.

specimens – for example, those of Stephenson, Blake and Caslon, Son & Livermore – would help to give a closer measurement of the leading producers of sans serif types.

Research by type historians such as James Mosley focused on the foundries that released the first named versions of sans serifs, for example, Stephenson, Blake. Emerging research from the typographer and typographic historian Daniel Reynolds indicates that Caslon, Son & Livermore have emerged as one of main foundries contributing to the development of the sans serif, based on the number of sans serif types that they released. Reynolds' research into the development of sans serif types by the German typefoundries has identified that the first sans serif sold in Germany, *Neueste Titel-Versalien, zehnte Sorte*, was imported from Caslon & Livermore in 1834.[108] The 'Type Specimens' sample used in this thesis records 173 sans serif typefaces produced by the typefoundries associated with Caslon, Son & Livermore between 1834 and 1909; followed by Miller & Richard with 172 sans serifs between 1863 and 1895; and Stephenson, Blake with 128 sans serifs between 1819 and 1878.[109] This is an area for future research by the author or a potential avenue of investigation for other researchers.

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108   Daniel Reynolds, 'Discoveries in the archives: nineteenth-century German wood types and sans-serif foundry designs', Typographic Surprises, 2 July 2021, Printing Historical Society, London. Lecture.

109   The type foundry of Caslon, Son & Livermore (1821-40), was succeeded by Caslon and Son (1840-50) and H.W. Caslon & Co (1850-74). Roy Millington, *Stephenson Blake: The Last of the Old English Typefounders* (The British Library, London, 2001), p. 245.

3. Existing methods of working with Printed Ephemera

Central to this research is the use of sans serif typography in printed ephemera from the nineteenth century. Several typographic historians, including Michael Twyman, John Lewis and Maurice Rickards have focused their study on the use of printed ephemera and its historic value in material culture. There are a multiplicity of people working with printed ephemera, from museum curators to private collectors, and yet there is no common language to enable the various parties to speak with each other.[110] Attempts to facilitate such dialogue will be discussed in the following sections. It is important to review the literature around printed ephemera, in order to establish how it has been used by earlier historians and to position the methodological approach used in this study.

John Lewis states that ephemeral printing in Europe has a longer history than book printing. The oldest dated item of European printing is the 31-line Indulgence, assumed to have been printed by Johannes Gutenberg in 1454. Indulgences were formal documents printed and sold to achieve atonement for sins (through fasting, crusades, pilgrimage, good deeds and pious donations). Classified by Lewis as printed ephemera, the Indulgence was the earliest dated piece of printing by Gutenberg, as his printing of the Bible cannot be precisely dated. This is important because ephemera supersedes books which have customarily received greater attention from printing historians.

The word ephemera is derived from the Greek word 'ephēmeros', meaning things that last through the day.[111] According to Lee Kirk's definition, ephemera include printed material, handwritten documents and photographs.[112] This research is wholly concerned with ephemeral

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110   Sutherland, D. & Hibbard, R., 'National Art Library Jobbing Printing Collection', *The Ephemerist* (2018), p. 3; Maurice Collins worked in the printing industry and became a collector of printed ephemera relating to social history. Maurice Collins, 'Moving Paper', *The Ephemerist* (2018), p. 16; Maurice Rickards, *Collecting Printed Ephemera*, (Oxford: Phaidon, 1988).

111   Rickards, M. & Twyman, M., *The Encyclopedia of Ephemera: A Guide to the Fragmentary Documents of Everyday Life for the Collector, Curator, and Historian* (London: British Library, 2000), endpaper notes.

112   Lisa Kirk, Ephemera – what and who wants it?, (Online: Biblio, 2019), <https://www.biblio.com/book-collecting/what-to-collect/ephemera/ephemera-what-is-it-and-who-wants-it/> [accessed 30 August 2019].

printed material which was intended to be disposable, short-lived and typically incidental documents. Maurice Rickards (1919-98) defines ephemera as paper-based 'minor transient documents of everyday life', which include 'Posters', 'Flyers', 'Transport Tickets', 'Trade Cards' and 'Billheads' etc.[113] With the exception of labels and packaging, Rickards excludes three-dimensional objects (uniform buttons, board games, printed tins, and other heavy weight materials) from his definition, stating 'ephemerists tend to stick to two dimensions rather than three. Uniform buttons and other heavy durables are out'.[114]

Michael Twyman (b.1934) noted that in the early nineteenth century, in line with economic growth during the second half of the Industrial Revolution, production of printed ephemera increased. He considers the 'proliferation of printed matter' by provincial jobbing printers in the late eighteenth century as 'self-generating', servicing the growing advertising needs of local businesses.[115] Developed primarily, as David Jury explains, for localised advertising, they were produced in response to commercial needs of businesses, government, political organisations, societies and religious groups which generated a large number of ephemera to communicate to their communities. Jury comments on the increase of printed ephemera responding to businesses' advertising needs, pointing out that as 'the business of commercial enterprise increased, so too did the demand for stationery, invoices, announcements, leaflets and other items that were needed to promote and record transactions'.[116]

Printed ephemera were created by jobbing printers, responding to the demand for advertising from the local economy. They used a wide range of printing types and typographic arrangements. Alongside the proliferation of printed ephemera, the visual richness of these documents was characterised by use of new typefaces. The development of these display faces grew exponentially in the nineteenth century, with typefounders increasing their stock by producing additional typefaces that would stand out and capture attention. The use of these new printing types is a key attribute of the genre.

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113   This definition of ephemera is used by the Ephemera Society for its advertising strap line on its website. Ephemera Society, Home Page, *Ephemera Society* (Online: Ephemera Society, 2015), <http://www.ephemera-society.org.uk/index.html> [accessed 3 July 2017].

114   Maurice Rickards, (1988), p. 13.

115   Michael Twyman, *Printing 1770-1970: An Illustrated History of its Development and Uses in England* (London: Eyre & Spottiswoode, 1970).

116   David Jury, (2012), p. 10.

For the purpose of this thesis printed ephemera are mostly single-sided documents that have many formats, from large-scale theatrical playbills to small bookplates. They are mostly printed in one or two colours, using a variety of display printing types. The quality of paper and the presswork varies across different forms of ephemera, from 'Trade Cards' printed on thick pasteboard to 'Handbills' on cheap coarse woven paper stock. This research focuses on documents that were produced with letterpress printing using nineteenth-century metal and wooden types, and were circulated in the public domain. It excludes personal, handwritten and official papers.

This study is concerned with the use of the sans serif in printed ephemera of the mid-nineteenth century, where evidence of the early Grotesque printing types can be found. The frequency of use of sans serif types during this later period had become an established practice within jobbing printing, and it presents the researcher with material of a higher value for historical interpretation, rather than a study of the use of the sans serif as a typographic novelty.

3.1. The History of Collecting Printed Ephemera

Ephemera studies was widely recognised by historians in the late twentieth century, but the history of the ephemerists begins in the sixteenth century. Rickards identifies the 'great ephemerists' as the legal scholar John Selden (1584-1654), the diarist Samuel Pepys (1633-1703), and the printer John de Monins Johnson (1882–1956).[117] He acknowledges their contributions to history as the forefathers of English ephemera studies.

John Selden was a seventeenth-century polymath: a jurist, a parliamentarian, a scholar of ancient English and Jewish law, and collector

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117   Paul Christianson, 'Selden, John (1584–1654), lawyer and historical and linguistic scholar.', *Oxford Dictionary of National Biography* (Online: Oxford University Press, 2008) <https://www.oxforddnb.com/view/10.1093/ref:odnb/9780198614128.001.0001/odnb-9780198614128-e-25052> [accessed 27 August 2020]; C. S. Knighton, 'Pepys, Samuel (1633–1703), naval official and diarist.', *Oxford Dictionary of National Biography* (Online: Oxford University Press, 2015) <https://www.oxforddnb.com/view/10.1093/ref:odnb/9780198614128.001.0001/odnb-9780198614128-e-21906> [accessed 17 August 2020]; Julie Anne Lambert, Batey and Charles, 'Johnson, John de Monins (1882–1956), printer, ephemerist, and classical scholar.', *Oxford Dictionary of National Biography* (Online: Oxford University Press, 2004) <https://www.oxforddnb.com/view/10.1093/ref:odnb/9780198614128.001.0001/odnb-9780198614128-e-34203> [accessed 17 August 2020].

of street literature. Selden collected ballad sheets, popular broadsides of contemporary songs sold by chapmen and balladeers, an 'unusual' practice for seventeenth-century collectors. Selden was the first ephemerist to value the social historical importance of ephemera as 'straws in the wind', everyday documents that can be used to read history.[118] His ballad collection was later acquired by Pepys, who combined it with his own collection that survives in the Pepys Library at Magdalene College, Cambridge. The ballad sheets are ordered thematically, although the distribution of material between Selden's and Pepys' ballad collections is unrecorded.

Samuel Pepys was a celebrated diarist and administrator for the British Navy, but he was also a dedicated collector of social historical evidence. In the Pepys Library, there survives a diverse range of ephemera including specimens of calligraphy, shorthand writing systems and albums of art prints. His collection included over a thousand items of everyday printed ephemera, bound into two large albums entitled London & Westminster. He was a generalist collector of seventeenth-century ephemera, including 'Trade Cards', early advertising 'Broadsides', bills of morality and 'Invitations' that he kept to 'illustrate his daily life in London'.[119] In 1980, his contribution to ephemera studies was recognised by the Ephemera Society, through the Samuel Pepys Gold Medal for outstanding contributions, and his image was used as the emblem of the society.

Johnson was an English printer, scholar and collector. His interests in ephemera began through his field research as a papyrologist in the Egyptian Civil Service, when he discovered a papyrus manuscript by Theocritus. It was in Egypt that he became concerned with the preservation of 'our immediate paper heritage'.[120] In 1914, he was appointed Assistant Secretary of Oxford University Press, and later Printer to the University (1925-46). In Oxford, Johnson developed his interests in educational publishing and the history of printing. The latter stimulated a life-long concern for the collection of printed ephemera. He named his collection the Constance Meade Collection of Ephemeral Printing, later to become the John Johnson Collection of Printed Ephemera after it was moved to the Bodleian Library in 1968.

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118   Maurice Rickards, (1988), p. 42.

119   Ephemera Society, About Page, *Ephemera Society* (Online: Ephemera Society, 2019) <http://www.ephemera-society.org.uk/about.html> [accessed 3 September 2010].

120   John Johnson Collection of Printed Ephemera, 'About the Collection', *Bodleian Libraries* (Online: University of Oxford, 2019) <http://www.bodleian.ox.ac.uk/johnson/about> [accessed 7 May 2019].

Johnson observed that printed ephemera had been disregarded by Museum curators and were destined for the wastebasket. He recognised the social and political historical relevance of ephemera, regarding his collection at the university as completing 'a gap in the world which nothing else really fills'.[121] Johnson was a collector of all forms of ephemera, including advertisements, 'Handbills', 'Playbills' and 'Programmes', 'Menus', 'Greetings Cards', 'Posters', and 'Postcards'. The John Johnson Collection contains mainly documents from the eighteenth to twentieth centuries, ordered under 700 subject headings. It is one of the largest surviving collections of printed ephemera in the world.

In the 1920s, Johnson began a long-standing correspondence with Bella Landauer (1874-1960), a collector of American advertising in New York. Landauer began collecting printed ephemera about the same time as Johnson. In 1923, she started with the acquisition of a small collection of bookplates, and that grew into what Rickards considers to be an expansive 'collection of collections'.[122] Her archive contained a diverse range of printed material, described by Lewis as a 'vivid picture of the professional and business history of America'.[123] It ranged from 'Trade Cards', advertising fans, valentines, and railway tickets to 'Posters', and other thematic-based collections, for example, of early aeronautical material. Originally housed in an old kitchen of the New York Historical Society, the Bella C. Landauer Collection gained an international reputation, moving to purpose-built accommodation that gave access for researchers and facilitated educational study visits. Her collection is now owned by the Smithsonian Institution, the Metropolitan Museum of Art, Dartmouth College Library, and the Baker Library in New Hampshire. In the early twentieth century, the dedicated work of both Johnson and Landauer, and their associated ephemera collections, advanced the field of ephemera studies, and garnered recognition from the next generation of historians.

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121   Robert Shackleton, *The John Johnson Collection: Catalogue of an Exhibition* (Oxford: Bodleian Library, 1971), p. 8.

122   Maurice Rickards, (1988), p. 42.

123   John Lewis, *Printed Ephemera: The Changing Uses of Type and Letterforms in English and American Printing* (London: Faber & Faber Limited, 1969), p. 5.

3.2.   Twentieth-Century Ephemerists

The following literature review of printed ephemera studies is structured on an author-by-author basis, focusing on the main protagonists' contributions to the advancement of this field: Michael Tywman, John Lewis and Maurice Rickards. These authors are discussed in chronological order from their publication dates, focusing on their methodologies for organising printed ephemera and identifying approaches that have influenced the development of a new methodology for working with printed ephemera, which I present in this thesis.

3.2.1.   Michael Twyman

Michael Twyman has published widely on printing history, where his four main interests are: lithography; nineteenth-century jobbing printing; printing techniques and processes; and the theory of graphic language in education.[124]

In his first publication, *John Soulby, Printer, Ulverston* (1966), Twyman examines the 'printer's file' and archive collections of the Ulverston printer, John Soulby senior (1771-1817) and his eldest son, John Soulby junior (1796-1843). In 1965, the Museum of English Rural Life at the University of Reading acquired the Soulby Collection. The collection was a 'time capsule' of ephemera, recording the everyday lives of the community of Ulverston. It contained 497 items of jobbing printing from 1821-27, ordered chronologically and collected into a blue paper guard book.[125] Twyman stated that there was 'no similar corpus of work by a family of printers in this period', and the collection was likely to have been used as a stock book by John Soulby Junior for printing repeat orders.[126]

Twyman also used two other collections of printed ephemera from the Barrow-in-Furness Public Library. These contained 600 earlier items from 1792

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124   Michael Twyman is Professor Emeritus in the Department of Typography and Graphic Communication, University of Reading, where he taught full-time between 1956 and 1998; he is Vice President of the Printing Historic Society [1964-present], the Director of the Centre for Ephemera Studies [1993-present] and President of the Ephemera Society [2016-present]. Garrett Boge, 'Interview: Professor Michael Twyman', *Lettering Tours* (Online: Letter Perfect, 2017) <http://letterspace.com/LETTERING_TOURS/twyman_interview.htm> [accessed 17 July 2017].

125   There were another twenty-one items from other regional printers of a later date.

126   Michael Twyman, *John Soulby, Printer, Ulverston: A Study of the Work Printed by John Soulby, Father and Son, Between 1796 and 1827* (Museum of English Rural Life: University of Reading, 1966), p. 16.

to 1811, pasted into two guard books.[127] Presented as records of local printing rather than of a particular press, the work is mainly by John Soulby Senior and his competitor George Ashburner (1795-1823).

Between the collections there are over 700 items ('Billheads', 'Receipts', 'Posters', 'Notices' and 'Trade Cards') spanning thirty years (1796-1827) of one family of jobbing printers, although there is a gap in the collections between 1812-20. The largest category of work in the collections comprises 'Theatre Posters'. The collections cover one of the most eventful periods in the history of printing and communication, in which a 'revolution can be said to have taken place in the design of types'.[128] For a printing historian, the collections are valuable because of the quantity of surviving material, and the high quality of its preservation, rather than the quality of the presswork, which is generally regarded as unexceptional.

In writing the book, Twyman followed the same chronological ordering of the material as implemented by the original collectors. His book opens with a contextual introduction to Ulverston community life by William Rollinson (1937-2000), an historical geographer of the Lake District.[129] Twyman discusses the origins and the importance of the collections, and presents a biographical narrative of the Soulbys based on key events, such as the death of John Soulby junior's first wife, Margaret (1826), which coincides with him starting to withdraw from printing.

He contextualises the Soulbys' work within the technological advancements in printing and typography of the period: Soulby senior's work reflecting eighteenth-century jobbing printing, where the 'idioms of elegance and common sense seem to have been the natural gifts of even the provincial printer'; and Soulby junior's presswork integrating the 'latest and most fashionable type design' of the nineteenth century, using typefaces that were unavailable to his father, where impact was required in display work.

In assessing the role of typography in printing history, Twyman makes general observations on the developments of typographic arrangements. These include: the use of brass rules of different typographic weights to separate a heading from the body of the text, to help 'people to understand the subject of the poster at a glance'; and how bold type was used to foreground two related

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127   The earlier items are in the Aldred Collection, named after its collector, Mrs Aldred, a school teacher in the 1950s; and the second guard book has items from 1804-11, bought in 1963 from T.T. Walker, who collected the items at the start of the nineteenth century.

128   Michael Twyman, (1966), p. 29.

129   Melvyn Bragg, 'William Rollinson', *The Guardian* (Online: The Guardian, 2000) <https://www.theguardian.com/news/2000/mar/29/guardianobituaries> [accessed 15 July 2017].

lines of copy from the rest of the body text, used in 'for sale' posters, 'as a visual equivalent of the spoken word merely by a hierarchy of sizes disposed on different lines'. He comments on how Soulby junior occasionally used an Italian display face as a disruptive element in his compositions, and how the measure of type was fully justified wherever possible, using the largest size types to fill a line with one word or by increasing the letter spacing, limited only by the size of the printers' chase. Soulby junior also fully justified type in smaller sizes where there was more than one line of type.

Twyman illustrates a sample of the typefaces used in Soulby junior's presswork, and he presents his findings in simple tabular form. In charting the typefaces, Twyman organises the types used by their typographic classification, recording a description of the typefaces as roman or italic, and the use of capitals, upper and lower-case type. He measures the size of the type, by the height of the caps and the x height, in centimetres. In a remarks section, he comments on the frequency of usage of the type, and records if it was wood or metal type. He then identifies the typefoundries and in some cases the foundry names. Sans serif printing types are not used in the Soulby collection, even though these typefaces were becoming available in Britain and Germany during this period.

Twyman was particularly interested in the sizes of the type as these reveal information about the mechanics of production and what equipment the printers would have used. Through his Tables he presents an overview of the typography employed in the documents. In measuring the size of the printing types used and providing a visual reproduction of the typefaces, he aids the reader in identifying the typefaces. With some of the rarer typefaces, he takes a more detailed approach, recording the number of times they were used and what text they were used to communicate.

In *Printing 1770-1970: An Illustrated History of its Development and Uses in England* (1970), Twyman considers 200 years of printing history, from the end of the eighteenth century to the twentieth century. The book was intended for people interested in printing and social history, and for typography and graphic design students. He was interested in exploring the relationship between printing and the community it serves, using printed ephemera to highlight this relationship, with examples showing events, ideas, products, and the tastes of the time. Twyman references items in the following collections: The John Johnson Collection; St Bride Library; University of Reading Library; and the Museum of English Rural Life. He uses many other sources of printed

ephemera, from private and public organisations, and private collectors. These include the Associated Newspapers Ltd., the Monotype Corporation Ltd., the Science Museum, and the collection of architect and typographer Maurice Goldring (1928-2000).[130]

Twyman addresses history using two approaches, with critical texts and thematic groupings of visual examples, and his book is divided into two sections. In Part One, his essays analyse important aspects of printing history during the period. Following on from his earlier work, Twyman sets the context of the role of printing in the 'everyday life of the community'. He discusses the impact of printing technology on communication, from limited traditional processes to a rise in experimental practice that led to rapid changes and then expansion of printing. He connects these changes to ideas of inventiveness in engineering and manufacturing, already reflected in other trades, and explores the social impact when applied to printing.

One area of particular interest to this study is how Twyman tracks significant developments in type design, such that towards the start of the nineteenth century 'types specially designed for display purposes began to be produced'. He discusses the slow emergence of new typographic design styles in printing, in relation to advances in printing technologies.[131] Twyman relates these new design approaches to social and economic changes in an industrialised society, and the growing need for clarity in communications through information design.

In Part Two, Twyman organises specific examples of printed ephemera into a thematic and illustrated narrative. His five themes are intended to 'convey the variety of printing produced during the last two hundred years, but also provide a vivid documentation of some key aspects of the history of the period'.[132] The themes he develops are Ceremony, Rural Life, Transport, Wars, and Exhibitions. These were chosen for the historical interest of their subject matter, and to provide a varied range of work, from prestige printing by metropolitan printers, to the presswork of provincial craftsmen. The examples were selected for their merits as visually exciting images, and for their qualities as documentary evidence of printed information design. Twyman subdivides his themes to make a comparative study across the material (Table 2.1 Themes and sub-groups of printed ephemera used by Michael Twyman, in Appendix 2, p. 6).

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130   Hyphen Press, 'Maurice Goldring', *Hyphen Press* (Online: Hyphen Press, 2000), <https://hyphenpress.co.uk/journal/news/goldring_obituary> [accessed 20 July 2017].
131   Michael Twyman, (1970), p. 119.
132   Michael Twyman, (1970), p. 3.

He uses printed ephemera to show the new kinds of problems faced by printers, and makes parallels through modern examples, shown side by side.

Twyman acknowledges the influence of John Lewis's book *Printed Ephemera* (1969) on the second part of his text, using a thematic approach to ordering his narrative. He also acknowledges the influence of James Mosley, Librarian of St Bride Library (1958-95), for enriching his understanding of printing history.[133] He recognises that there are gaps in his knowledge and has not covered all aspects of print history.

Twyman's approach to organising ephemera into themes and subgroups is useful in presenting a diverse range of material, both in terms of its form and its content. His groupings provide a focused structure to a complex set of data, enabling a coherent interpretation and analysis, presented through his historical narrative of typography and printing.

3.2.2. John Lewis

John Lewis (1912-96) was a collector of printed ephemera and a lecturer at the Royal College of Arts (RCA). He developed his collection with his wife Griselda (1917-2014) to illustrate the history of printing and graphic design. The collection began with an album of printed ephemera, bought from a book-seller in Suffolk, that was originally compiled by Dr Lodge, a librarian at the University Library, Cambridge.[134] The album contained pages collected from damaged books, including over a hundred engraved title pages, early printers' devices, a rare Baskerville type specimen sheet and an Indulgence printed by Thierry Martens (c. 1446-1534) for the repair of the Hospital of the Cathedral of Santiago de Compostela. The Martens indulgence is cited by Lewis as the starting point for his printed ephemera collection. Lewis described the evolution of his collection as following a 'haphazard manner into a kind of designer's scrap book'.[135]

Lewis studied printed ephemera collections in the British Museum, in particular a series of albums made by the antiquarian John Bagford (1650-1715). Bagford's collection contained fragments of books, including title pages,

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133   Bob Richardson, 'The Mosley Effect', *St Bride Foundation* (Online, St Bride, 2015) <https://stbridefoundation.wordpress.com/2015/05/05/the-mosley-effect/> [accessed 17 July 2017].

134   The album was assembled by Dr John Lodge [c.1792–1850] in c.1820. John Lodge was University Librarian, Cambridge, between 1828-45. Cambridge University, 'A Cambridge Alumni Database', *University of Cambridge* (Online: Cambridge University, 2019) <http://venn.lib.cam.ac.uk/cgi-bin/search-2018.pl?sur=Lodge&suro=w&fir=John&firo=c&cit=&cito=c&c=all&z=all&tex=&sye=&eye=&col=all&maxcount=50> [accessed 6 October 2019].

135   John Lewis, (1969), p. 4.

that earned him a reputation as a biblioclast. Bagford collected his ephemeral material for a book on the history of printing, which was never published. Lewis's search for ephemera in the British Museum extended to the Fillenham and Ames collections; and to nineteenth-century material in the Victoria and Albert Museum. Other British printed ephemera collections referenced by Lewis include: Pepys' *Vulgaria*, a volume containing early Trinity House licences and certificates in the Pepys Library, Magdalene College, Cambridge; found railway tickets and bills from the British Transport Museum; and the John Johnson Collection, Bodleian Library, University of Oxford.

Lewis demonstrates his passion for collecting printed ephemera, describing the action of collecting as a chase, finding material in antiquarian bookshops, printing works, factories, businesses and shops. He viewed ephemera collecting as 'tremendous fun', gathering together material thrown away and found in waste-paper baskets, rubbish bins and even in the gutter.[136]

His book *Printed Ephemera: The Changing Uses of Type and Letterforms in English and American Printing* was the first publication to acknowledge the value of printed ephemera to social history and design. He views the material both from a design and an historical perspective. He introduces his text with an index of typefaces used in ephemeral printing, thus aiding the reader to understand the typography of the documents, and showing the impact of different typographic styles and fashions through time. Lewis draws on a broad knowledge of ephemera collections in England and America, with particular reference to the collection of Mrs Bella C. Landauer and the New York Historical Society.

He groups typefaces as Black letter, roman and italic, Egyptian, French Antique, Italian, Sans serifs, Clarendon, Latin, Tuscan, Rounded, Stencil, Ornamented and Scripts. This is useful in understanding the development of the typography through its application in the documents. He follows a category-based approach to ordering his narrative organised by different forms of ephemera but he does not explore a thematic approach. Lewis acknowledges a wide range of printed ephemera and uses a description-based approach to ordering his material (Table 2.2 Categories of printed ephemera used by John Lewis, in Appendix 2, p. 8).

Lewis's singular approach to organising ephemera by its form is limited for historians wishing to make connections and create meaning

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136   John Lewis, (1969), p. 5.

across a wide range of material. His groupings are specific to the function of the ephemera, giving detail to a particular form of ephemera that is analysed in isolation from other categories. The large scale of his categories reflects the diverse nature of ephemera and is useful for curation of a singular form of ephemera.

3.2.3. Maurice Rickards

Maurice Rickards (1918-98) was a graphic artist, whose interests in ephemera led him to a career in authorship. The collector, librarian and government spokesman Patrick Hickman Robertson (b. 1940) credited Rickards with being the first to 'elevate the study of ephemera into an academic discipline'.[137] In 1975, Rickards founded the British Ephemera Society alongside six British ephemera collectors and one American. This is important as it gave focus to the subject and shows a critical mass of interest in the study of printed ephemera.

Original members of the British Ephemera Society included: John Lewis; Peter Jackson of the London Topographical Society; Patrick Robertson, a specialist in vintage magazines and pictorial newspapers; Amoret Tanner, collector of funeralia, material on the Duke of Wellington, and parrot ephemera; John Hall, lettering and typographic expert (including chromolithography); Graham Hudson, design and printing of British and American ephemera; and Calvin Otto, paper specialist. To attract new members the Society developed an exhibition entitled 'This is Ephemera' (Paper Point, Central London).[138] The Society organised public lectures, educational trips, ephemera trading fairs, and a newsletter that developed into the quarterly journal *The Ephemerist*.

An early offshoot of the Ephemera Society was the Foundation for Ephemera Studies; established in 1984 (as an educational charity), the foundation aimed to develop a permanent archive of printed ephemera and to facilitate research projects. In 1992 permission was granted for the Centre for Ephemera Studies, Department of Typography & Graphic Communication of the University of Reading. Formally launched by its first

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137 Patrick Hickman Robertson, 'Obituary: Maurice Rickards', *The Independent* (Online: The Independent, 1998) <http://www.independent.co.uk/news/obituaries/obituary-maurice-rickards-1145817.html> [accessed 16 May 2017].
138 Sally De Beaumont, '1975-2015 The Ephemera Society', *Celebrating 40 years* (Online: The Ephemerist, 2017) <http://www.ephemera-society.org.uk/articles/ephsoc.html> [accessed 16 May 2017].

president, the historian Asa Briggs, in May 1993, under the directorship of Michael Twyman. Rickards' personal collection of printed ephemera formed the basis of the centre; the Rickards Collection contains over 20,000 items of ephemera, used for teaching and scholarly research.

In his lifetime, Rickards authored eighteen books on printed ephemera, and contributed forewords to an additional two books. His early books focused on specific forms of ephemera such as 'Posters' and 'Notices', related to his career as a graphic designer. He later began to publish texts that developed his interests in the value of ephemera as historical and cultural documents (Table 2.3 Books authored by Maurice Rickards, in Appendix 2, p. 9).

In *This Is Ephemera* (1977) Rickards published a concise guide to the history and value of ephemera for historians and collectors. He organised ephemera into three groups that reflect an increased 'self-awareness' of graphic design: the transient (tickets); semi-durable (calendars); and the keep-it-forever (commemorative souvenirs). Within his definition of the genre of printed ephemera, Rickards includes self-contained areas of popular study, such as postcard collections and stamp collecting. He defines these areas by their 'collectability', each with their own societies, collectors and historic scholars.[139] His book presents a functional overview of the history of collecting and of using printed ephemera for historical study, including a list of books and addresses of periodicals and ephemera dealers, reflecting the growing interest in the subject of ephemera, coinciding with the advancement of the Ephemera Society.

In his later work, *Collecting Printed Ephemera* (1988), Rickards expands his ideas through a scholarly text on working with ephemera. Based on examples from his collection, he presents a method of interpreting printed ephemera that connects three approaches. He first discusses the methods of production characteristic of printed ephemera, setting a context within which to understand the nature of ephemera and how they were made. He focuses on the processes of letterpress, engraving, lithography/chromolitho, embossing and use of lace paper. He uses these attributes to support his definition of the genre, identifying businesses associated with the production of ephemera and discussing the cultural impact of these technologies. Following Lewis's approach of defining

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139   Maurice Rickards, *This is Ephemera: Collecting Printed Throwaways* (London: David & Charles, 1977), p. 12.

categories based on specific forms of ephemera, Rickards organises his material into categories based on classes of documents defined by their use and function (Table 2.4 Categories of printed ephemera used by Maurice Rickards, in Appendix 2, p. 10).

Rickards' final approach is to organise ephemera into ten themes, which are determined by the content of the material found in his collection (Table 2.5 Themes of printed ephemera used by Maurice Rickards, in Appendix 2, p. 10). Through the use of themes, he develops his historical narrative, presenting a connected social and cultural interpretation of history through the study of printed ephemera. Some of Rickards' themes build upon other scholars' methods of organisation, such as Twyman's themes of Transport and Rural Life. They also reflect areas of specialist interest amongst ephemerists, for example, Amoret Tanner's collection of funeralia.

Rickards identified many different classes of ephemeral documents based on their format and uses. Categorisation of these documents was mainly defined by the collections used, with organisational systems devised around specialist areas of interest, limited by the material to hand. In the *Encyclopedia of Ephemera* (2000), Rickards and Twyman look beyond their immediate fields of research and focus on the task of establishing a wider-ranging system for organising ephemeral documents into categories.[140] In the process, they establish a long list of documents that they considered as ephemera, forming the basis of a universal system for others to contribute towards.

In 2013, the Centre for Ephemera Studies (CfES) advanced Rickards' and Twyman's work, with the publication of a thesaurus of ephemera terms, designed for use by archivists, curators, historians and librarians to order and catalogue ephemera.[141] Barbara Morris, CfES, University of Reading, explains that the *Thesaurus* extends ideas originally presented in Rickards' and Twyman's *Encyclopedia of Ephemera*. The *Encyclopedia* developed detailed definitions for the wide range of printed ephemera but these were 'being used in ways for which it was not intended'. The *Encyclopedia* was designed as a guide to organise ephemera using examples

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140   Michael Twyman completed the Encyclopedia after Rickards' death in 1999. The Thesaurus is published on the University of Reading's Website. Barbara Morris, (2013)

141   The team was led by Barbra Morris with Amoret Tanner and Michael Twyman. Additional support was provided by Ann Copeland of the Rare Books and Manuscripts Section, Julie-Anne Lambert of the Bodleian Library's John Johnson Collection, and Woody Woodis at the Library of Congress.

from the Rickards collection. Like Lewis's system, it was organised by categories led by the form of the ephemera. Each category of ephemera was illustrated and defined in detail, with additional signposting provided between categories to assist others in the indexing of ephemeral material. These groupings were not intended as an absolute system or as a language by which to discuss ephemera. Some categories make location of items difficult, for example, categories based on printing processes such as Chromos (chromolithographic prints) rather than ordering under specific terms to group ephemera such as Advertising cards, Religious cards, Liebig cards and Collecting cards.

The *Thesaurus* presents a structured framework, grouping the definitions, with scope to cross-reference and make relationships between documents that span several classes. Rickards' approach to ephemera was inclusive of many forms of documents, including the admission of manuscripts.[142] The *Thesaurus* set standards in how ephemera can be catalogued and indexed. It is structured by a set of broad terms that had a bias towards contemporary nomenclature, relevant to present and future audiences.

In the *Thesaurus*, individual terms are first developed with a *Scope note* (SN) that gives an outline description of the material to help identify the ephemera. Recommendations for alternative terms are given if the material does not match these criteria or if it has specialist characteristics. The *Thesaurus* recognises that terminology changes over time, and signposts outdated terminology to contemporary forms. Under the recommended terms the older terminology is acknowledged with a tag of Use for (UF). Through the use of Broader terms (BT), Narrower terms (NT) and Related terms (RT), the *Thesaurus* presents connections between different forms of interrelated ephemera. For example, book labels are organised as follows: firstly, under the broader term of labels; then the narrower terms of Binders' labels, Bookplates, Booksellers' labels, Library labels, Prize labels, and Stationers' labels; and finally there is a connection to the related term of Books. The *Thesaurus* is relevant through its use of contemporary terminology to order historical documents: 'Playbills' are ordered under 'Posters'; and 'Handbills' are categorised as 'Flyers'. This terminology was followed in the classification system developed for this thesis.

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142   The Thesaurus includes documents that were not intended to be ephemeral, including manuscripts, wills and accounts.

3.3. Alternative Approaches to Working with Ephemera

The field of ephemera studies is extremely valuable in the interpretation of printing and social history. The methodologies for organising and cataloguing ephemera, developed by Lewis, Rickards and Twyman, have enabled historical dialogues.

Graham Hudson, a founder member and the secretary of the Ephemera Society, used printed ephemera to discuss design history. In his *Design and Printing of Ephemera in Britain and America 1720-1920* (2008), he identified three factors — function, process and period — that together have affected the design and appearance of ephemera over a period of 200 years. Hudson defined these factors as follows: the purpose the ephemera were produced to serve; the printing processes used to make ephemera; and the historical period that the content of ephemera reflects.[143]

Hudson acknowledged Rickards' and Twyman's *Encyclopedia* for its contribution to the categorisation of ephemera, and he used their terminology to describe his ephemera. Where Rickards and Twyman presented detailed descriptions for over 500 subjects of ephemera, Hudson's focus was on design history. He considered Rickards' and Twyman's approach to evaluating the design of individual categories to be 'scarcely feasible' and repetitive. Instead, he structured his narrative using themes rather than by categories of document class, focusing on printing technology, processes, artistic movements and techniques. Hudson considered the cultural influences on the production of printed ephemera both in commercial terms and their popularity.

Hudson's research was led by the history of the press. His critique was advanced through an historical interpretation that considered the value of ephemera as 'expressions of commerce and culture'. He demonstrated that display typefaces were used to increase the visual prominence of advertising, leading to an increase in sales; and he explored the influence of cultural trends and fashions on jobbing typography.

William Fenton (b.1957) began collecting printed ephemera with a bias towards graphic design. As an artist and typographer, he collected ephemeral material that included nineteenth-century typefaces and ornaments which he used as visual references for his work. As a historian,

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143   Graham Hudson, *The Design and Printing of Ephemera in Britain and America, 1720-1920* (London: British Library, 2008), p. 8.

Fenton used printed ephemera to interpret social history. In *Railway Printed Ephemera* (1992), he developed a thematic approach to communicate an historical narrative of the railways, using examples of printed ephemera from his personal collection.

Fenton chose not to interpret his ephemera by categories; instead he grouped ephemera loosely into chapters that visually progress the story of rail transport through printed documents. His themes were explored through a diverse range of printed ephemera, in chronological order. Themes explored by Fenton and used in my research include travel & transport, charity, advertising and promotion. Fenton's emphasis on themes was useful in presenting a focused historical dialogue, based on the content of printed ephemera alongside their form.

David Jury explored the histories of typography, printing and graphic design from the perspective of contemporary design in the digital age. In *Graphic Design Before Graphic Designers* (2012) he examined the history of graphic design through printed ephemera. He structured his narrative through the themes of print technology and production, audience consumption, printers' education, and design. Each theme was explored through visual examples of ephemera, followed by an expanded selection that was organised by category, presenting a deeper perspective of each field.

The study of printed ephemera is integral to understanding material culture. It can be approached as an independent field with its own history, or used in conjunction with other disciplines. These minor transient documents of everyday life do indeed represent yesterday's news but they can also reveal a new understanding for the future.

3.4. Conclusion

The literature review on existing methods of working with printed ephemera, was used to inform the development of the new methodologies proposed in this thesis. Two key methods for ordering and classifying printed ephemera were identified in the work of Twyman, Lewis and Rickards. The first was a taxonomy-based approach that indexes ephemera based on the document type or class. The structure of the *Thesaurus of Ephemera Terms*, was used to inform the description and order of document classes, as part of the first approach used in the new methodology. The second method used themes, this approach was favoured by Lewis and Rickards to categorise documents by themes that were grouped based on the content of the documents. This approach was developed in the new methodology to define three themes that enabled an analysis of how the sans serif types were used in the printed ephemera.

The review highlighted a limitation of the existing methodologies, in the measurement and use of typography itself within the documents. In 1966, Twyman had identified a paste-up specimen of the range of display faces used by the printer John Soulby, demonstrating what printing types were in Soulby's collection. From this, an opportunity was identified, to consider the application of sans serif typography in the printed ephemera by the percentage of type used in the composition of the document; and its position in the typographic hierarchy. These ideas informed the third approach that was used in the new methodology, to examine the extent to which sans serif typefaces were used by jobbing printers.

Figure 4.1 'Trams to Harborne', handbill, J. Goodman & Sons, Birmingham, c. 1903. Library of Birmingham, (LOB).

4. Methodology

This chapter discusses a new methodological approach, developed by the author, for classifying printed ephemera and analysing sans serif typography within ephemera categories. It explains the rationale for adapting existing methods of document classification and thematic approaches in the ordering of ephemera. These approaches led to the presentation of a new methodology which, in addition to these classification and thematic approaches, also uses both typographic hierarchy and a system for measuring the use and prevalence of type within a document. A digital platform was developed as a tool to bring these approaches together for analysis. The system is discussed through its different design iterations and demonstrates how other researchers can use this methodology. The chapter concludes with a discussion of the limitations of the system and a critique of methodological improvements.

Originally, 1,267 examples of printed ephemera using sans serif typography were catalogued for this research. This selection was subsequently streamlined to omit duplicate copies found in different collections, and the inclusion of multiple-page documents, for example, trade directory pages, was edited so as not to skew the data. A final sample of 729 items was selected to help focus the discussion. The reduced sample presented ephemera that used founts closest to the design of Caslon IV's printing types, with a bias towards tracing the descendants of the first style of sans serif.

The earliest piece of ephemera, dated 1832, was a playbill for the New Theatre, Bridgnorth by the Shropshire printer George Robert Gitton (1800-85) found in the collections of the Cadbury Research Library, University of Birmingham. The sample concluded in 1928, coinciding with the Representation of the People (Equal Franchise) Act, that gave women the right to vote at the age of twenty-one. This date was determined in order to allow the author to consider the role of the sans serif in the printed material of the women's suffrage movement, in which the sans serif was frequently used.

Table 4.1 Ephemera dated by collection information.

Archive	Collection	Accession Number	Date	No. of Undated Ephemera
LoB	Birmingham Scrap Book Vol 9	LS 12/Vol.9	1920-1	7
LoB	Trade Cards	L/./62/65; 462445	1800-1900s	2
LoB	Broadsides, Political	LF 05.2	1800-40	6
LoB	Broadsides, Crimes	LF 05.2	1806-35	2
LoB	Broadsides, Songs	L/./05/2; 256712	1806-92	13
LoB	Broadsides, Religious	LF 05.2	1806-92	1
LoB	Broadsides, Misc.	LF 05.2	1806-92	2
LoB	Birmingham Scrap Book Vol 3 Part 1	LS 12/Vol.3, pt.1	1834-1847	9
LoB	Birmingham Scrap Book Vol 2 Part 2	LS 12/Vol.2, pt.2	1837-1923	9
LoB	Birmingham Scrap Book Vol 15	LFF 71.061	1839-1926	7
LoB	Birmingham Scrap Book Vol 8	LS 12/Vol.8	1862-1920	6
LoB	Birmingham Scrap Book Vol 13	LS 12/Vol.13	1862-1929	13
LoB	Birmingham Scrap Book Vol 1 Part 1	LS 12/Vol 1	1872-1903	2
LoB	Parliamentary Elections 1874, 1880, 1884 and 1885	LFF 76.8	1874-85	6
LoB	Food & Drink	-	1881-97	1
LoB	Parliamentary Elections 1892-1906	LFF 76.8	1892-1906	27
LoB	Birmingham Scrap Book Vol. 14 Part Two	LS 12/Vol.14 pt.2	1900s	2
LoB	Birmingham Scrap Book Vol 10	LS 12/Vol.10	1902-25	6
LoB	Birmingham Scrap Book Vol 5	LS 12/Vol.5	1905-14	54
LoB	Birmingham Scrap Book Vol. 7	LS 12/Vol.7	1916-24	1

The ephemera were dated using the following criteria: 480 documents carried a date; seventy-three items were dated by identifying the events publicised in the ephemera or by the trading dates of the printer. If the ephemera could not be associated with a printer, the documents were dated by comparison of sans serif typefaces used in other ephemera that had already been dated. These examples were recorded in the database by the estimated date followed by circa; for example, J. Goodman & Sons' handbill was recorded as 1903 c. in the database to allow the data to be searched by year, as opposed to c. 1903, as this would interrupt the numerical sequence when searched in descending and ascending order. This example does not directly show the year it was printed. The estimated date of c. 1903 was used based on another piece of printing in the sample by J. Goodman and Sons (1906) and by comparing the dates with other documents relating to the proposed development of trams in Harborne (Figure 4.1).

There were 176 items that could not be dated by these methods. These documents were ordered by the collection dates in which they were archived (Table 4.1). The undated items are from the collections of the Library of Birmingham, in particular the Birmingham Scrap Book Vol. 15, (1905-14), that had the largest amount of undated ephemera in the sample – a total of fifty-four items. These later scrap books presented an increased amount of printed ephemera using sans serifs as the typefaces grew in popularity, as shown in Chapter Six. These were compiled at the start of the First World War, which changed the recording process. The scrap book contains significantly fewer hand-written notes and the ephemera are often overlaid in multiples on individual pages; however, it does contain an undated index that remains a work in progress. The lack of time-stamped information necessitated an approximated date range based on the assembly dates of the volumes.

The sample was supported by a selection of twenty-eight type specimen books that presented 625 new sans serif founts from 1819 to 1909, and six trade directories of Birmingham from 1834 to 1847. These examples were treated separately from the main sample of printed ephemera and were used to identify the typefaces in the documents.

There are two established methods of classifying and arranging printed ephemera. The first is a taxonomy-based approach that indexes ephemera based on the document type or class; for example, a broadside or a poster. This approach led to the development, by Barbara Morris,

of the *Thesaurus of Ephemera Terms* (University of Reading). The second method uses themes. John Lewis and Maurice Rickards favoured this approach to categorise documents by themes that were identified by the content of the documents. This method lends itself to the creation of the themes of 'Commercial Life', 'Information' and 'Instruction', a similar approach that was used by Lewis and Rickards to group printed ephemera together for interrogation. To measure the impact of sans serif typography on nineteenth-century British print culture, these two methods were combined, adapted and developed into a new methodology that enables a more detailed and flexible analysis of ephemera and which can also include a very specific and focused study of sans serif typography.

This new methodology takes three distinct but inter-related approaches: firstly, it organises sans serif typography by the class of document and by printer; secondly, it analyses how the sans serif was used in printed ephemera; and thirdly, it describes its purpose based on the printed content that it communicated.

Firstly, the new methodology adapted the taxonomy-based system present in the *Thesaurus* in order to index the documents under consideration in this study. This approach to classifying ephemera by document type or class allowed the documents to be considered based on their physical attributes. This enabled a study of form and function based both on the document type and how it was used; for example, printed political flyers circulated by hand or public announcements communicated through posters pasted to walls. Secondly, it tracked the ascendancy of the sans serif both in terms of its frequency in use (how often it appears in the documents as a percentage of the overall typography) and its ranking within the visual hierarchy of printed ephemera (where it appears in the documents and how it is used in relation to other typography). Thirdly, the methodology grouped ephemera by content, thereby revealing the context in which sans serif typography was used by jobbing printers.

In combination, these approaches enabled an examination of the sans serif, based on how it was used and what it was used for, and also facilitated an investigation of patterns of usage through time. The three approaches generated quantitative data for measuring the relative importance of sans serif typography based on its position in the visual hierarchy and its percentage of the overall typographic layout, thereby identifying the rise of sans serif typography. The combined approach also supported qualitative methods for the interpretation of the use of sans

serif typography, by grouping documents, based on their content, into themes and categories. By combining the three approaches with additional details, such as the names and locations of the printers who produced the ephemera, it was also possible to show the interactions between printers, where types were shared, and the geographical location of printing activity.

To facilitate bringing together the different methods of analysing the data, a digital platform was developed using a Filemaker Pro database. This was used as a tool to catalogue and enable cross-relational analysis of the data recorded from the ephemera, as discussed in Chapter Five. The database presents information in several formats that can be interrogated for correlation and macro- analysis of relational data. This section of the thesis describes the design process in the development of a digital platform; how other researchers can use this methodology; and the restrictions of using a digital solution. The chapter concludes with a critique of methodological improvements for consideration in the future development and application of this research.

Table 4.2 Nomenclature used for document classes..

Broader Term	Narrower Term	Broader Term	Narrower Term
D1. Advertisements	D1.a. Advertising Booklets D1.b. Advertising Novelties D1.c. Advertising Supplements D1.d. Almanacs D1.e. Brochures D1.f. Circulars D1.g. Magazine Advertisements D1.h. Newspaper Advertisements D1.i. Programme Advertisements	D.15. Programmes	D.15.a. Cinema programmes D.15.b. Concert programmes D.15.c. Dance programmes D.15.d. Festival programmes D.15.e. Order of Service D.15.f. Theatre programmes
D2. Booklets	-	D.16. Stationery	D.16.a. Business stationery D.16.b. Envelopes D.16.c. Funeral stationery D.16.d. Letters
D3. Broadsides	D3.a. Ballad Sheets D3.b. Execution Broadsides D3.c. Notices	D.17. Tickets	D.17.a. Admission tickets D.17.b. Charity tickets D.17.c. Travel tickets
D4. Charts	D4.a. Lists D4.b. Poll Lists D5.c. Wallcharts	D.18. Time Tables	D.18.a. Travel Time Tables
D5. Forms	D5.a. Application Forms D5.b. Ballot papers D5.c. Claim forms D5.d. Donation forms D5.e. Order forms D5.f. Timesheets	D.19. Trade Cards	D.19.a. Advertising Trade Cards D.19.b. Business Cards D.19.c. Showcards
		D.20. Trade Catalogues	D.20.a. Printers' Specimens
D6. Handbills	D6.a. Hand Cards D6.b. State-of-the Poll-notices	D.21. Trade Directory Pages	-
D.7. Invitations	D.7.a. Private View Cards	D.22. Other	D.22.a. Bookmarks D.22.b. Dance Cards D.22.c. Fixtures Cards D.22.d. Labels D.22.e. Membership Cards D.22.f. Menus D.22.g. Post Cards
D.8. Leaflets	D.8.a. Campaign leaflets D.8.b. Election leaflets		
D.9. Magazines	D.9.a. Magazine covers D.9.b. Magazine inserts		
D.10. Maps/Plans	D.10.a. Cemetery plans D.10.b. Cycle maps D.10.c. Floor plans D.10.d. Railway Maps D.10.e. Road maps D.10.f. Seating plans D.10.g. Street maps D.10.h. Tourist maps		
D.11. Newspapers	-		
D.12. Pamphlets	-		
D.13. Playbills	-		
D.14. Posters	D.14.a. Announcement Notices D.14.b. Campaign Posters D.14.c. Decorative posters D.14.d. Election Posters D.14.e. Educational Posters D.14.f. Exhibition posters D.14.g. Political posters D.14.h. Proclamations D.14.i. Product posters D.14.j. Protest Posters D.14.k. Sports posters D.14.l. Stock posters D.14.m. Travel and transport posters D.14.n. Warning Posters		

4.1. Approach One: Ordering Printed Ephemera by Document Class

This research examined a wide range of printed matter (posters, booklets, leaflets, forms); disposable material (tickets, handbills); and souvenirs or mementoes (invitations, programmes). The first approach developed a method for ordering printed ephemera into groups based on the type of document in which sans serif typography was used. Ordering printed ephemera by document class enabled the researcher to analyse how sans serif typography was used within different groups of printed documents based on the function and characteristics associated with each format of document. This approach was used to reveal common groupings across document classes, which led to organising groups of ephemera, based on usage, into themes and categories. For example, the use of sans serif typography observed in educational charts and railway timetables followed similar functions to communicate data through information design, ordered under the theme of 'Information' and the respective categories of 'Education' and 'Transport'.

The category structure presented in the *Thesaurus of Ephemera Terms* was initially followed as it covered all the document classes of printed ephemera observed within the scope of this study. This was streamlined, based on the classes of documents that were observed in the sample of sans serif ephemera from the Birmingham and Bridgnorth case-studies. The nomenclature was adapted to reflect the breadth of documents within the sample and the application of traditional names, (Table 4.2). The *Thesaurus* introduced contemporary terms for naming ephemera, with a view to establishing a common terminology for contemporary commentators; for example, it was recommended to name 'Handbills' as 'Flyers'. An exception to this rule was observed with established historical conventions, such as the term 'Broadsides' which was used historically up to the mid-nineteenth century and was later replaced by the term 'Posters'. Traditional names such as 'Handbills' were used in this thesis to make it easier to understand for historians of the nineteenth century, who are familiar with the terminology used at that time.

The nomenclature was adapted to reflect the breadth of documents within the sample and the application of traditional names (Table 4.2). In future research an alternative system may be developed that acknowledges the different sub-sets of ephemeral documents as opposed to separating

out different categories. The proposed method separates out 'Broadsides', 'Posters' and 'Playbills' as separate document classes. This approach can be problematic in tracking changes over time as these categories are all examples for advertising. An alternative approach would be to develop a series of narrower subsets, for example the use of 'Broadside' and 'Playbill' within the container class of 'Posters'.

In applying the *Thesaurus* terminology to the material used in the current study, two additional classes of document were identified that are ordered outside the main ephemera sample: 'Type Specimen Books' and 'Trade Directories'. Both belong to the broader category of 'Books', which are not 'usually regarded as ephemera', as they 'present ephemera in book form'.[144]

Type specimen books were sales catalogues produced by the typefoundries to promote their collections of printing types. 'Type Specimen Books' were indexed in the *Thesaurus* under the broad term of 'Samples' and then the narrower term of 'Sample Books', which were described as albums or volumes of ephemera that presented examples of manufacturers' products 'produced primarily for representatives and wholesalers'.[145] In this study, 'Type Specimen Books' were treated separately because they were used to sell printing types specifically to jobbing printers, rather than directly to a public audience. This necessitated a different treatment as the 'Sample Books' were not printed in Birmingham or Bridgnorth. This class of ephemera was the first presentation of the typefaces by the typefounders as wholesalers rather than depicting them in use in the work of regional jobbing printers. Two printers' specimen books printed in Birmingham were included in the main ephemera sample. 'Printers' Specimens' presented the printing types of other typefounders that were owned and used by the printers.[146]

The methodology used in this research examines 'Sample Books' independently from other examples of ephemera and was used to identify the origin points of when specific typefaces found in the ephemera were first presented, enabling an analysis of the uptake of sans serif printing types from the typefounders to the printers of Birmingham and Bridgnorth. Examples of 'Printers' Specimens' were included in the wider ephemera sample as these demonstrate the uptake of printing types from

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144   Barbara Morris, (2013), p. 13.

145   *Ibid*, p. 55.

146   John Hodges, *John A. Hodges' Specimen Types* (Birmingham: Hodges, 1880); and Birmingham Printers Ltd, *Book & Display Types* (Birmingham: Birmingham Printers, 1914).

the typefoundries. These were indexed under the broad term of 'Trade Catalogues' and the narrower term of 'Printers' Specimens'.

Trade directories were produced as commercial indexes of local businesses listed by trade and name. Directories also included advertising and, in some cases such as Wrightson & Webb's *Directory of Birmingham*, 1847, street directories. These were organised by the *Thesaurus* under the broad term of 'Directories', described as publications of ephemera that presented lists of 'residents, professions and businesses, some classified by trade, with addresses'.[147] This study uses the term 'Trade Directories' as recommended by the *Thesaurus* in place of the term 'Commercial Directories', and 'Trade Directory Pages' is used as a narrower term to describe individual sheets of advertising that have been removed from 'Trade Directories'. The *Thesaurus* uses the narrower term for this same class of ephemera under the broader term of 'Directory Advertisements'. The narrower term of 'Trade Directory Pages' was favoured to streamline this approach because 'Directory Advertisements' was indexed in the *Thesaurus* as a parent term alongside 'Trade Directories' under 'Directories', and separately under the term 'Advertising'. In the context of this study 'Directory Advertisements' was used the same way as the narrower term of 'Trade Directory Pages'.

To avoid the data becoming skewed by the inclusion of a large number of trade directories – as each directory contained several hundred pages of directory advertisements – a selection of forty trade directory pages was included in the ephemera sample, representing the trade directories published during the scope of this study. An unedited sample of 'Trade Directories' was treated separately in its own section of the database, as were type specimens that were ordered as 'Sample Books'

The document classes describe what the documents are, as defined by their format and function. The categories presented in the *Thesaurus of Ephemera Terms* were adapted for this study. This was based on the ratio of different documents types observed in the sample, with broader terms used to group ephemera together while narrower terms were used to help search for specific classes of documents; for example, the broader term of 'Broadsides' was used to order 'Ballad Sheets' that were printed before the mid-nineteenth century. If they were printed later, they were ordered under 'Posters' or 'Handbills', depending on their size and mode of distribution. The terminology was streamlined to simplify the ordering

147   Morris, (2013), p. 63.

Table 4.3 Number of document classes in the ephemera sample, including narrower terms.

	Advertisements	Booklets	Broadsides	Charts	Forms	Handbills	Invitations	Leaflets	Magazines	Maps/Plans	Newspapers	Pamphlets	Playbills	Posters	Programmes	Stationery	Tickets	Timetables	Trade Cards	Trade Catalogues	Trade Directory Pages	Other
Advertisements	10	8				6	1	5	6		8	2			2							
Booklets	8	5							2	1					1			1		1		
Broadsides			25										1									
Charts				10	1	3								2				2				
Forms				1	14	3	5	3								38			1			1
Handbills	6			3	3	149	2						2	5		3	1					
Invitations	1				5	2	13			1							3					1
Leaflets	5				3			44							2							1
Magazines	6	2							2													
Maps/Plans		1					1			30												
Newspapers	8										6											
Pamphlets	2											6			1							
Playbills		1				2							36						1			
Posters				2		5								77					4			
Programmes	2	1						2				1			20							
Stationery					38	3										31						
Tickets						1	3										19					
Timetables		1		2														3				
Trade Cards					1								1	4					20			
Trade Catalogues		1																		10		
Trade Directory Pages																					40	
Other					1		1	1														8
Ads_Bklts_Pgms	5	5													5							
Ads_Bklt_TCat	6	6																		6		
Ads_ Char_Post	2			2										2								
Ads_Forms_Hand	1				1	1																
Forms_Hand_Stat					4	4										4						
Forms_Inv_Stat					1		1									1						
Forms_Stat_Tcard					1											1			1			
	62	30	26	20	73	179	27	55	10	32	14	9	40	90	31	78	23	6	27	17	40	11

process and was specific to this sample. Narrower terms were employed where possible, even if there was only one item that was ordered under a particular subgroup (Table 4.3).

4.1.1.   Advertisements, Trade Directory Pages and Trade Catalogues

The largest class of documents identified in the sample was described under the broader term of 'Advertisements'. This document class included items of ephemera that announced the availability of goods or services. The term was adapted from the *Thesaurus* to include advertisements from 'Magazines' and 'Newspapers'. 'Handbills' and 'Posters' were treated as separate broader terms with their own narrower terminology. As the same typefaces were used throughout individual 'Trade Directories', a sample of advertising from 'Trade Directory Pages' was ordered in the main ephemera records, to avoid skewing the data when measuring the usage of specific sans serif typefaces in an individual class of document.

The class of 'Trade Catalogues' was used to order multipage documents that were issued by manufacturers, retailers, and wholesalers to sell their products. They usually have illustrations and textual descriptions of items for sale, and were sometimes accompanied by separate price lists. 'Printers' Specimens' were included in this class of document ordered under their own narrower term.

4.1.2. Booklets, Pamphlets, Leaflets, Handbills

Closely related document classes included 'Booklets', 'Pamphlets', 'Leaflets' and 'Handbills'. The term 'Booklet' was used to describe books consisting of a few sheets that were glued, stitched or stapled together between thin card, cloth or paper covers. These were distinguished from 'Pamphlets' by having a thicker cover. 'Pamphlets' were identified as short publications, with or without a paper cover. These were usually sixteen pages or fewer, often presenting a brief treatise on a particular subject. 'Pamphlets' that were used as advertising publications were ordered under 'Advertisements' as 'Circulars'. 'Leaflets' were ordered as freely distributed items, unbound, not stapled or sewn and without a cover. These were often formatted as a single sheet which was folded or unfolded. Advertising leaflets were categorised separately as 'Handbills' under the broader term of
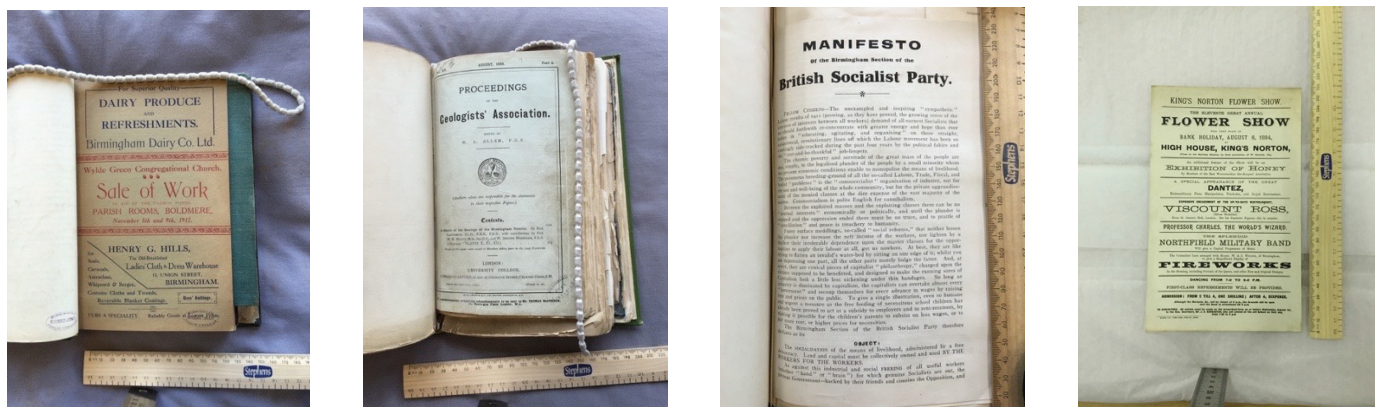
Figure 4.2 Document formats to be circulated by hand. (Far left) 'Wylde Green Congregational Church Sale of Work', booklet, printer unknown, 1912. LOB.; (left centre) 'Proceedings of the Geologists' Association', Hayman, pamphlet , Christy & Lilly, Birmingham, 1898. LOB.; (right centre) 'Manifesto Leaflet for the British Socialist Party', leaflet, printer unknown, 1911. LOB.; and (far right) 'Kings Norton Flower Show', handbill, Myers, Birmingham 1894. Birmingham Museums, (BM), Museum Collection Centre.

'Advertising'. The term 'Handbills' was used to describe documents that were printed on one side as a single unfolded sheet, such as notices or advertisements intended for distribution to the public by hand or by mail (Figure 4.2).

4.1.3.Broadsides and Posters

The term 'Broadsides' was used for posters that were produced up to the mid-nineteenth century. These were characterised by being printed on single sheets of paper that were unfolded, and always printed on one side only. They were usually intended to be posted on the wall, publicly distributed, or sold. They included the narrower terms of 'Proclamations', 'Notices' and 'Ballad Sheets'. The term 'Posters' was used for documents that were produced after the mid-nineteenth century; these were often larger formats than 'Broadsides', produced as single or multiple-sheet advertisements to promote events, activities, causes, goods or services. Like 'Broadsides' these were intended to be displayed in a public place, to make an immediate impression from a distance. The broader term 'Posters' included the sub-categories 'Exhibition', 'Political' and 'Sports Posters'.

4.1.4.Charts

The document class 'Charts' was used to describe documents that presented information in a graphical form, including pictorial, diagrammatic and tabular devices that were used for easy assimilation of information. This broader term was used to include 'Almanacs'. 'Wallcharts' was included within this category as a narrower term to describe poster-like items that displayed information for educational use within the classroom, designed for distance viewing.

In this study the term 'Travel Timetables' was included as a narrower term, as the use of sans serif typography followed similar forms of composition in the presentation of information. The term 'Travel Timetables' was also included under a separate class of 'Timetables' for analysis alongside other similar document types.

The *Thesaurus* classed 'Lists' as a parent category on the same level as 'Charts'. In this research 'Lists' were included as a narrower term under the class of 'Charts', as they were related through their use to aid the recall of information or for simplification of complex data.

Figure 4.3 A blank form that was used as a poll list to record data for forecasting the 1906 Election, poll list, printer unknown, 1906. LOB: Parliamentary Elections 1892-1906.

'Poll Lists' was used as a narrower term to order documents to record how people voted in elections; for example, a poll list for the Unionist candidates in the 1906 elections used a blank form format to compile data for forecasting election results (Figure 4.3).

4.1.5. Forms

The term 'Forms' was used to describe printed documents soliciting information or responses from a user. These documents often included blank spaces within the composition for insertion of requested information or boxes for ticking. Narrower terms used within this document class included 'Application Forms', 'Ballot Papers', 'Claim Forms' and 'Timesheets'.

4.1.6. Invitations and Tickets

The document class 'Invitations' was used to describe cards or letters inviting one or more persons to attend or participate in an event or occasion. These were often individually addressed and included the narrower term of 'Private View Cards' that were sent out by artists or galleries inviting the recipient to attend the private view of an exhibition and acting as advertisements for the exhibition. 'Tickets' were treated as a separate category distinct from 'Invitations'. Often printed as slips of paper or cardboard, tickets were used as evidence that the holder had paid a fare or admission fee or was entitled to some service.

4.1.7. Magazines and Newspapers

'Magazines' and 'Newspapers' were treated separately from advertisements which appeared in magazines and newspapers because the typography was used for a different purpose and featured different typefaces. 'Magazines' were periodicals that contained articles, essays, poems, or other writings by different authors, usually on a variety of topics and intended for a general reading public or treating a particular area of interest for a popular audience. These publications were often illustrated and issued in a numbered series. Within this document class the narrower terms of 'Magazine Covers' and 'Magazine Inserts' were used to analyse different

Figure 4.4 'Mr Usher's Golden Farmer Pantomime', circus poster, Peirce & Seymour, Birmingham, c. 1839. LOB.

applications of typography for different purposes. 'Newspapers' were serial publications produced at regular and frequent intervals, such as daily or weekly, and contained news, editorials, features, advertisements, and other items of current interest.

4.1.8. Maps and Plans

The terms 'Maps' and 'Plans' are treated as two separate classes of document by the *Thesaurus*. In this study, however, they were combined into one category based on their common characteristics, following the narrower terminology used in the *Thesaurus*. 'Maps' are not normally classed as ephemera; however, their use of sans serif typography in Ordnance Survey Maps and other major national series warranted their inclusion in this research. 'Plans' were identified as two-dimensional visualisations of the layout or arrangement of things such as 'Seating Plans' and 'Site Plans'.

4.1.9. Playbills

The term 'Playbills' was used for items that were produced up to the mid-nineteenth century and which advertised plays, including the cast. These were intended for public display in a large format and sometimes as multi-sheet documents. The *Thesaurus* orders 'Theatre Posters' as 'Playbills' for documents produced up to the mid-nineteenth century; for later work it classifies them independently under the term 'Performing Arts Posters' as a subcategory within 'Posters'. 'Theatre Posters' was used alongside a series of narrower terms for 'Circus Posters', 'Music Hall Posters' and 'Concert Posters'. For simplicity, the term 'Playbills' was used in this method to order all documents that fall within the latter categories; for example, a circus poster printed by Peirce & Seymour, *c*. 1839 was ordered under 'Playbills' (Figure 4.4).

A supporting class of document used included 'Theatre Programmes'. These presented outlines of the order of events to be followed, promoting the cast and a list of the features that were included in the performances. These were produced as keepsakes intended to be given or sold to patrons. Other forms of programmes included 'Festival Programmes' and 'Procession Diagrams'; these were used to communicate the names of the people participating in a public event, performance or entertainment.

4.1.10.   Trade Cards and Business Stationery

Nineteenth-century 'Trade Cards', often printed on pasteboard, were used by tradesmen to promote their services. Originally intended as multi-purpose documents, 'Trade Cards' developed into more specialised business stationery such as 'Billheads', 'Price Lists', 'Letterheads', etc. The narrower term of 'Business Cards' was used for cards that were primarily designed to share contact information rather than for advertising purposes. These cards were intended to be given by hand and included the names of the tradesmen or a blank space for the cards to be individually signed.

The narrower term of 'Advertising Trade Cards' was used for colour lithographed cards that were produced in the mid-nineteenth century. The document class of 'Stationery' was used to order 'Business Stationery'; this included items that had multiple uses such as 'Billheads', 'Invoices', 'Receipts', 'Compliments Slips' and 'Letterheads', for which the same composition was used across the printing of multiple formats.

4.1.11.   Other

Within the sample of ephemera used in this study there were a number of other types of printed items that presented sans serif typography. As these were too limited in number to warrant using the original broader terms recommended in the *Thesaurus*, they were ordered under the generic category of 'Other', using the original narrower terms. These included 'Bookmarks', 'Labels' and 'Vouchers'.

4.2.   Approach Two: Themes and Categories

The ephemera were organised into themes and categories, to facilitate both vertical and horizontal exploration of the data, so as to identify connections between ephemera using sans serif typography, their purpose, and finally the printers who produced them. Three themes of 'Commercial Life', 'Information' and 'Instruction' were identified from analysis of the textual content of the ephemera. These were used to group ephemera together based on how sans serif typography was being used to communicate. These overarching themes contained a series of sub-categories that were used to order the ephemera into smaller groups based on what the sans serif typography was intended to communicate.

The themes and categories were not designed as singular containers. As their use was considered to be relative to each other, it was possible to order ephemera from one category across several themes and vice versa. For example, a pre-election broadside campaigning for support on behalf of the reformists Thomas Attwood and Joshua Scholefield (1834) was classified under the themes of 'Information' and 'Instruction' (Figure 4.5). This document, printed by Fredrick Turner, included the use of two large sans serif typefaces. The first sans serif in the typographic hierarchy was used to capture attention and placed importance within the document hierarchy on the forthcoming Borough election of 1835, instructing the non-electors to engage in the election. The second application of sans serif type was used as a call to action within the document, informing the reader of the date and time of the meeting for a political procession. The item was ordered within two categories: 'Politics' and 'Governance'. A wider data matrix of themes, categories, printers and physical attributes, shows interconnections between how sans serif types were being used and what they were being used to communicate (this will be demonstrated in Chapter Seven). The themes and categories enabled the author to focus on specific uses of sans serif typography.

The ephemera were investigated primarily through vertical themes that imposed a classification upon the ephemera, enabling a method of control. This was intended to provide a means by which to interpret the material based on how sans serif typography was employed in the ephemera. Ephemera were then further ordered through the application of categories that were identified from the content of the documents. These horizontal categories spanned the vertical themes, thereby organising

Figure 4.5 'Borough Election', broadside, Fredrick Turner, Birmingham, 1834. LOB.

the ephemera according to both the context in which they were used and the content that they were communicating. This methodology helped to organise the data and provided a means for interpretation. As it was not restricted to singular categories, it enabled the exploration of movement between the themes and categories.

The themes consider the type of actions that were required by the community. Readers were required to respond through a set of actions that were either obligatory, voluntary or a combination of the two. The intentions of the documents were client-focused (positioned by the person or organisation paying for the print), directed towards the active response the client wished to elicit from the audience (the receiver of the communication). In the transmission of information, the printers acted as the interface between the clients and the public, the latter reflecting their position as receivers within the community, as customers and citizens in an urban society.

The themes of 'Commercial Life', 'Information' and 'Instruction' provided a vertical method of looking at the data to discuss the use of the sans serif: how it functions, the tone of voice, and the target audiences. These themes were formed through consideration of the direction and complexity of the transmission of information. Documents classified under the themes of 'Commercial Life' and 'Information' used a two-way transmission of information, inviting the reader to respond to a call to action. Documents ordered under 'Instruction' used a one-way transmission of information, in the form of an instruction or command, telling the reader to do something or advising on how to behave.

Typographer and historian Professor Paul Luna comments on a subdivision of these forms of information transmission – one with its focus on persuasion through advertising and the other on communicating information.[148] He describes the differences between the way typography is used to communicate in these contexts based on readers' needs and the call to action:

> The action from an advertisement usually involves the suspension of rational thinking and an acceptance of the advertiser's claims, whereas in information design the action, however persuasively presented, should be a rational choice on the part of the reader. (Paul Luna, 2018, p. 97)

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148   Paul Luna, *Typography: A Very Short Introduction*, (Oxford University Press, Oxford, 2018), p. 97.

Table 4.4 Relationships between categories and sub-categories.

Category	Specialist sub-category	Generic sub-category
C.1. Education	C1.1. Classes	G.1. Exhibitions G.2. Festivals G.3. Fundraising G.4. Lectures G.5. Libraries G.6. Meetings G.7. News G.8. Social
C.2. Entertainment	C2.1. Fine Art C2.2. Cinema C2.3. Circus C2.4. Craft C2.5. Recreation C2.6. Sports C2.7. Theatre	G.9. Concerts G.1. Exhibitions G.2. Festivals G.3. Fundraising G.10. Food & Drink G.11. Literature G.6. Meetings G.7. News G.12. Royal G.8. Social
C.3. Governance	C.3.1. Charity C.3.2. Civic C.3.3. Housing C.3.4. Licencing C.3.5. Military C.3.6. News C.3.7. Policing C.3.8. Utilities	G.1. Exhibitions G.2. Festivals G.13. Commerce G.3. Fundraising G.14. Health G.5. Libraries G.6. Meetings G.15. Property & Land G.12. Royal G.8. Social
C.4. Politics	C.4.1. Elections C.4.2. Fundraising C.4.3. Political Organisations C.4.4. Protest C.4.5. Propaganda C.4.6. Unions	G.13. Commerce G.4. Lectures G.6. Meetings G.7. News G.12. Royal G.8. Social
C.5. Religion	C.5.1. Denominations	G.9. Concerts G.2. Festivals G.3. Fundraising G.4. Lectures G.11. Literature G.6. Meetings G.7. News G.8. Social
C.6. Trade	C.6.1. Applied Trades C.6.2. Auctions C.6.3. Commerce C.6.4. Goods C.6.5. Manufacturing C.6.6. Shopping	G.1. Exhibitions G.2. Festivals G.10. Food & Drink G.14. Health G.11. Literature G.7. News G.15. Property & Land
C.7. Transport	C.7.1. Bicycles C.7.2. Buses C.7.3. Cars C.7.4. Railways C.7.5. Trams	G.13. Commerce G.1. Exhibitions G.11. Literature G.7. News G.8. Social

'Commercial Life' was the largest theme. This theme was used to order ephemera that used sans serif typography to convey information to the public through a two-way transmission, inviting a voluntary response from the information presented. The categories of 'Entertainment', 'Religion', and 'Trade' were closely aligned to this theme. These categories engaged with a public audience through freedom of choice and free will. Ephemera belonging to 'Entertainment' included social and cultural activities such as theatrical and musical performances, exhibitions, literary readings, philosophical lectures, and philanthropic and charitable events. 'Entertainment' was also used to order documents relating to 'Sports and Recreation'. This included documents representing sporting societies, the activities of participating in and spectating at sporting events, information promoting new physical public spaces and services to facilitate recreation.

The category of 'Religion' recorded the use of the sans serif in the spiritual lives of the community. 'Trade' encompassed the manufacturers and goods advertised and sold to a growing customer society. 'Programmes' invited new audiences to engage in an evening of cultural benefit; 'Posters' publicised sporting entertainments and charity events; 'Pamphlets' offered guidance on spiritual well-being; and 'Catalogues' advertised a wealth of consumer goods and services. They invited and promoted events, products and services to help the community transition towards the new opportunities made accessible through urban living.

The theme of 'Instruction' was used to order those documents that communicated through a one-way transmission, an obligatory action informing the audience on how to behave or function within society. The categories of 'Politics' and 'Governance' are closely aligned to this theme. 'Politics' encompasses documents printed for political parties and their causes, including the emergent political unions and workers' organisations of the nineteenth century. 'Governance' contains ephemera relating to the functioning of a town's infrastructure: information from local government, through the corporation; the municipal services of gas and electrical power, sanitation, water and waste; and the education and health of the town. 'Handbills' were used to influence the political orientation of the population; and 'Broadsides' and 'Posters' informed voters that it was compulsory to register their interests.

The theme of 'Information' was used to order ephemera that communicated through both one- and two-way transmissions. Material

within this theme demonstrated characteristics of obligatory and voluntary sets of actions. The category of 'Transport' is located within 'Information'. The ascendancy of the sans serif was connected to the development of information design for transport, reflecting the impact of the tram, railway and motor vehicle networks in a changing, more mobile and geographically connected society. 'Timetables' presented complex information to the public; and 'Tickets' validated local and national journeys. Documents under the theme of 'Information' assist the public to function through their daily lives within society.

A category-based approach was adapted to work in conjunction with the themes of 'Commercial Life', 'Information' and 'Instruction'. This was employed to order and analyse the context of what sans serif typography was being used to communicate and those whom it was representing. Seven parent categories were used to order printed ephemera: 'Education', 'Entertainment', 'Governance', 'Politics', 'Religion', 'Trade' and 'Transport'. These were identified specifically from the textual content of the samples from Birmingham and Bridgnorth (Table 4.4).

These categories were based on what the printed information aimed to communicate; for example, the content of an 'Election Broadside' was aimed at encouraging non-electors to participate in a political procession and engage in a day of social drinking, to solicit additional political support by public house licensees for Attwood and Scholefield (Figure 4.5). This document was categorised under 'Politics' and 'Governance' because the content indicated political activity and management of the franchise of Birmingham. Horizontal groupings of ephemera through categories enabled interpretation of the use of sans serif typography, revealing those it was representing, what ideas it was associated with and who it was communicating with.

The themes and categories used in this study were developed to analyse and interpret the of use of sans serif typography in printed ephemera. This approach is flexible and can be adapted by other researchers to satisfy their own research needs. For example, scholars involved in the study of typography in religious printed ephemera may choose to develop additional sub-categories to order documents by faith or religious organisations.

Each category contained a series of specialist sub-categories to enable analysis of closely linked topics and groups. In addition, generic sub-categories were used that span across these main categories. These

occur in several categories rather than in isolation. This enables the user to search based on specific sub-categories and identify areas where these examples cross over. These can be searched specifically within a category, to present examples that relate directly to that field. The use of sub-categories reveals additional connections in how the sans serif is used and for what purpose.

4.2.1. Education

The category of 'Education' included documents whose primary content related to the education of the people of Birmingham and Bridgnorth. The documents included formal classes and educational literature used in schools plus printed material intended to promote vocational training by technical and secretarial institutions.

To enable closer analysis of individual areas within the category of 'Education', a series of specialist and generic sub-categories were developed. This included a range of specialist categories such as 'Libraries', for documents that related to public and private lending libraries, and 'Classes' for information promoting specific subjects.

Generic categories that crossed over into other categories included 'Lectures', for talks aimed at the public on educational themes, 'Exhibitions' and 'Festivals', with a bias to educational content, and 'News'. A broadside promoting the Christ Church New Schools, printed by G. A. Hudson (1862), was ordered under the general category of 'Education' and the sub-categories of 'Fundraising' and 'Social', as the document promoted a series of public events aimed at bringing together the local community (Figure 4.6).

This document was also indexed under the category of 'Religion' as it was printed for a religious school and contained Hymns to be sung at the foundation stone ceremony, and under the category of 'Entertainment', as the event included a musical procession led by the Band of the 20th Staffordshire Rifle Volunteers.

4.2.2. Entertainment

The category of 'Entertainment' included documents whose content related to activities, events, and services for the public to engage with during their leisure and recreation time. This category considered both low- and highbrow forms of

Figure 4.6 'Christ Church New Schools', broadside, G.A. Hudson, Birmingham, 1862. LOB.

Figure 4.7 'Northfield Military Band Annual Picnic', handbill, printer unknown, Birmingham, 1894. BM.

popular culture: for example, performances of variety theatre, including popular comedic acts, circus performances and pantomimes, alongside classical music concerts that were aimed at elevating the social and intellectual status of the inhabitants, and the reputation of the town.

The largest proportion of documents ordered under 'Entertainment' considered material whose content related to the 'Arts'. This included specialised sub-categories, such as 'Fine Art', 'Cinema', 'Concerts', 'Literature' and 'Theatre'. Other specialist sub-categories were used to order documents whose content related to 'Sports' and 'Recreation' activities.

Generic sub-categories related to the category of 'Entertainment' included 'Meetings', 'Food and Drink', 'Exhibitions' and 'Festivals'; for example, a handbill promoting a day trip to Bridgnorth, for a picnic by the Northfield Military Band (1894), was ordered under the category of 'Entertainment' and the specialist sub-category of 'Recreation' and the generic sub-category of 'Social' (Figure 4.7). This document was also ordered under the category of 'Transport' as it promoted discounted rail travel to Bridgnorth.

4.2.3. Governance

The category of 'Governance' included documents whose content related to the organisation of society. This included specialist sub-categories that contained material about the management and development of social structures under 'Civic', 'Licensing', 'Military', 'Policing' and 'Utilities'.

Documents with content related to the improvement of society and its individuals were ordered under the specialist sub-categories 'Charity', 'Health' and 'Housing'. Generic sub-categories related to the category of 'Governance' included 'Commerce', 'Fundraising', 'Libraries', 'Meetings' (including annual general meetings), and 'Royal' activities such as proclamations, visits and funerals. A 'Ticket' for a memorial service at St. Martin's Church (1901) for the people in Birmingham to commemorate the funeral of Queen Victoria was ordered under 'Governance' and the generic sub-categories of 'Royal' (Figure 4.8). This item was also ordered under the category of 'Religion'.
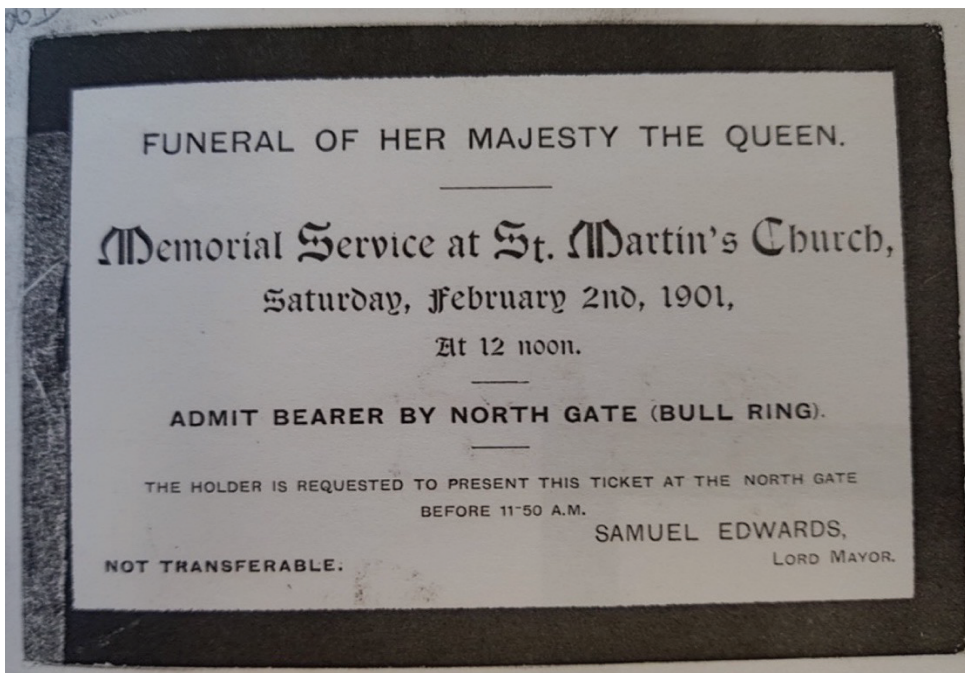
FIGURE 4.8 'Memorial Service at St. Martin's Church', ticket, printer unknown, Birmingham, 1901. LOB.

Figure 4.9 'Women's Social and Political Union', handbill, Templar Printing Works, Birmingham, 1911. LOB.

4.2.4. Politics

The category of 'Politics' was separate from 'Governance', in order to facilitate closer analysis of printed material that was related – within Birmingham and Bridgnorth – to the wider national political landscape. This included the specialist sub-categories of 'Elections', 'Protest', 'Political Organisations' and 'Unions'.

Generic sub-categories related to the category of 'Politics' included 'Commerce', 'Fundraising' and 'News'. A handbill advertising weekly talks for the Birmingham branch of the Women's Social and Political Union was ordered as follows: firstly, under the category of 'Politics'; then within the specialist sub-categories of 'Protest' and 'Unions'; and finally, within the generic sub-categories of 'Meetings', 'Lectures' and 'Social' (Figure 4.9).

4.2.5. Religion

The category of 'Religion' included documents whose content related to systems of faith or worship. This included a specialist sub-category for 'Denominations', ordering material based on its associated religious sub-division or sect, for example, under the groupings of 'Catholic', 'Methodist', 'Anglican', 'Orthodox' and 'Evangelistic' church groups.

Generic sub-categories ordered within the category of 'Religion' included: 'Concerts', 'Lectures', 'Fundraising' and 'Festivals'. A religious ballad entitled 'Popish Confessions. The Boy & The Priest', printed by Thomas Ragg, Birmingham (*c.* 1841-59) was ordered under the category of 'Religion' and the sub-division of 'Protestant Evangelistic'. The sheet was also ordered under the category of 'Politics' and the sub-category of 'Propaganda', as the text presented anti-Catholic sentiment. Ragg's ballad used the same text as the ballad 'The March of Intellect in Ireland' with the addition of a direct quotation from Jeremiah XVII. 5 (Figure 4.10).[149]

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149   The March of Intellect in Ireland, Ballad Sheet, printer and date unknown. John Johnson Collection, Bodleian Library, Oxford. Roud number: V4342; Shelfmark: Johnson Ballads: 2665.
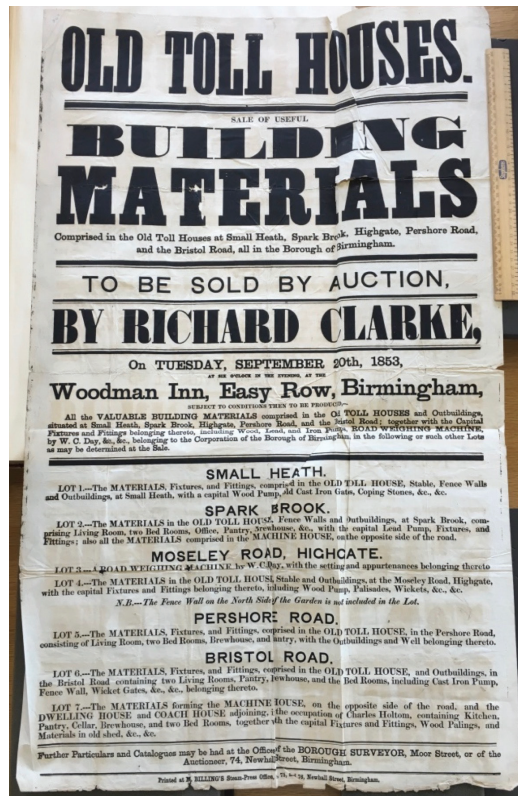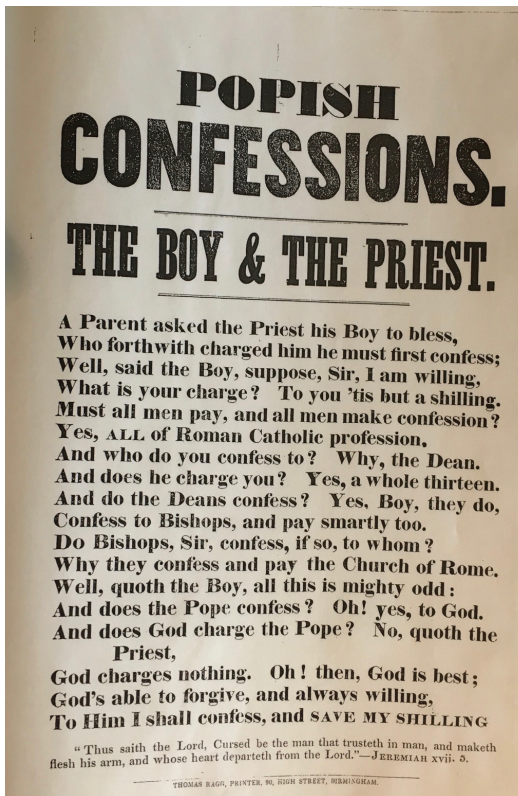
Figure 4.10 Examples of ephemera categorised as 'Religion' and Trade. (Left) 'Popish Confessions', ballad sheet, Thomas Ragg, Birmingham, C. 1941-53. LOB; and (right) 'Old Toll Houses Building Materials Auction', poster, M. Billing, Birmingham, 1853. LOB.
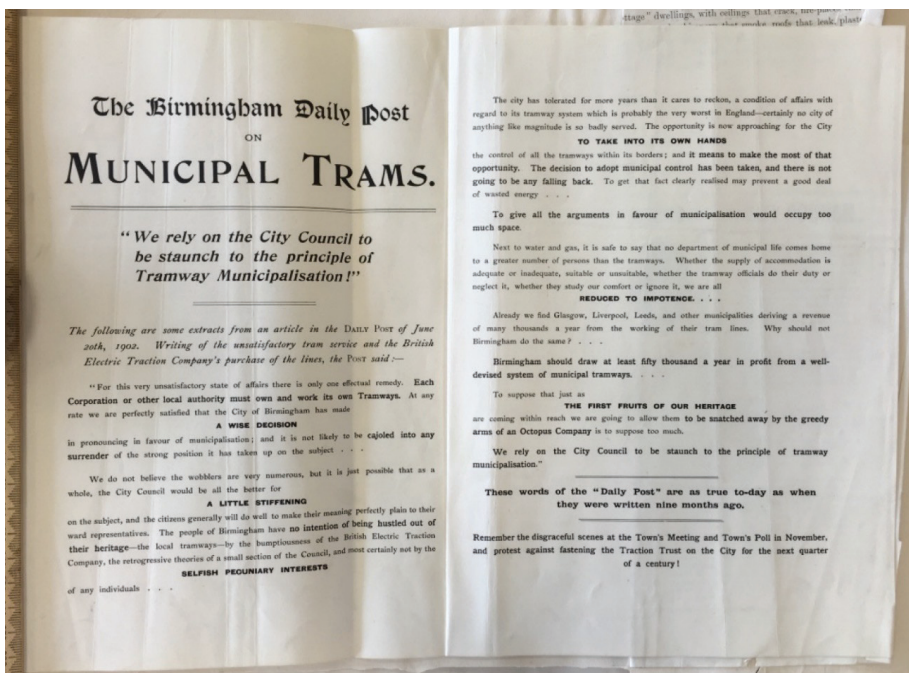
Figure 4.11 'Municipal Trams', leaflet, Birmingham Daily Post, Birmingham, 1903. LOB.

4.2.6. Trade

The category of 'Trade' included documents whose content related to the production and sale of goods and services from the perspective of both the manufacturers and the customers. This included the specialist sub-categories of 'Applied Trades', 'Auctions', 'Goods', 'Manufacturing' and 'Shopping'.

Generic sub-categories ordered within the category of 'Trade' included: 'Commerce', 'Health' and 'Exhibitions'. An advertising poster for an auction of construction materials from the Old Toll Houses of Birmingham, printed by M. Billing in 1853, was ordered under the category of 'Trade' (Figure 4.10). This document was recorded within the specialist sub-categories of 'Auctions' and 'Goods'; and within the generic sub-categories of 'Applied Trades', 'Property and Land'. It was also indexed under the category of 'Governance' and the sub-category of 'Civic', as the sale of goods was on behalf of the Corporation of the Borough of Birmingham.

4.2.7. Transport

The category of 'Transport' included documents such as 'Maps', 'Tickets' and 'Timetables' and other associated material whose content related to transport systems. This included specialist sub-categories based on forms of transport: 'Bicycles', 'Buses', 'Cars', 'Railways' and 'Trams'. 'News' was the only generic sub-category associated with transport, and was included in all seven overarching categories.

A news supplement leaflet, canvassing support for municipalisation of Birmingham's tram systems, was printed by the *Birmingham Daily Post* in 1903 (Figure 4.11). This document was recorded under the category of 'Transport' and the specialist sub-category of 'Trams'. It was also ordered under 'Governance', within the sub-category of 'Civic', and under the generic sub-category of 'News'.

Figure 4.12 An example of how the percentage of sans serif typography was measured in the documents. 'Police Notice', poster, Lawrence & Co., Birmingham, 1924. LOB.
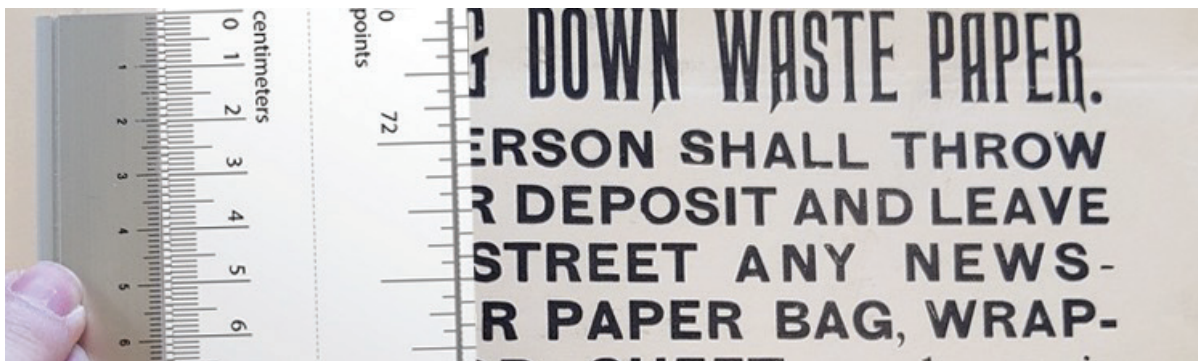
Figure 4.13 Aligning the typographic scale to the original ruler in Adobe Photoshop. Osbaldestin, (Osb).

Figure 4.14 Measuring the height of the typography and the surrounding white space in the documents. Osb.

4.3.   Approach Three: Frequency of Use, Typographic Hierarchy, and Speed of Uptake

The third approach was developed in order to analyse the ascendancy of sans serif typography. It does this firstly, by measuring the percentage of sans serif types used in a document; secondly, by recording its position within the visual hierarchy; and thirdly, by dating the ephemera, and therefore the use of the sans serif, and comparing this with the date when the typeface first appeared in the specimen books, and therefore the speed of uptake by the printers

4.3.1.   Percentage of Sans Serif Typography

The first step was to determine what percentage of the overall typefaces used in a single document was sans serif. The percentage was measured by ascertaining how much of the text employed sans serif typefaces in each document and the number of typefaces used. The majority of typography in the ephemera recorded was intended to be read from right to left. There are some exceptions in advertising literature that run typography around the margins of the documents. The height of the vertical space occupied by the text was first measured line by line, including the surrounding use of white space that became an expanded design feature in later typographic layouts.

A warning notice poster printed by Lawrence & Co., 1924, used six sans serif typefaces in the composition, with the sans serif text accounting for approximately 30% of the typographic text (Figure 4.12). The photographs of the ephemera were measured in Adobe Photoshop using a typographic rule scale. The scale was laid over the image and rotated into position to align with the ruler that was documented in the original photograph. The scale was then resized to match the scale on the original ruler to measure the document and text (Figure 4.13).

The poster measured 295mm in height by 220mm in width. The height of the text in the document was then measured by line, including the surrounding white space; for example, the first line of sans serif type used a printing type that was 12mm in height and measured 20mm in total, including the white space (Figure 4.14). The total height of sans serif text in the poster was 95mm while the other typography spanned 200mm.

The document was composed using a percentage of 32.2% sans serifs and 67.8% other classes of typography. These measurements were rounded to the nearest increment of 5% and recorded in the database as 30% sans serif type.

Most of the examples in the sample use a different typeface per horizontal line, a feature that is associated with the aesthetic of jobbing printing. The width of the horizontal text area was measured for horizontal lines that used mixed typographic styles. The individual typefaces are not counted at this stage, only the use of sans serif typography as opposed to other classifications of printing type.

Calculation of the percentage shows what proportion of the typographic content was made up of sans serifs. A higher percentage in a document demonstrated a more pronounced bias towards the use of sans serif in a particular theme and category. Comparisons of the publication dates of the documents and the release date of the sans serifs by the typefoundries were used to identify patterns of usage by document type and to analyse when these printing types were increasing in popularity and becoming more widely used and accepted by jobbing printers. The tipping point of the rising status of the sans serif was towards the end of the nineteenth century, as will be discussed in Chapter Seven.

It is acknowledged that there is a lack of precision in the proposed method for measuring the percentage of sans serif. The measurements includes the surrounding white space with the height of the typography. As a compositional device white space can be used to give additional emphasis and can influence the overall visual design. Further research for a future project would consider advancing the current method to consider the use of white space as a separate element. An alternative method could use the implementation of image recognition software and machine learning to scan and measure all the elements including images such as illustrations or photography within the composition.

4.3.2.   Hierarchy of Sans Serif Typography

The second step considered the position of sans serif typography in the visual hierarchy in order to reveal patterns in typographic usage. A rising scale was used to indicate the typographic hierarchy (Figure 4.15). This was dependent on the typographic composition of each document. Individual documents used different levels of hierarchy in relation to composition and the amount of content presented.

The measurement of hierarchy was not based simply on the size of the typefaces; it was measured on the visual impact of the typography. This aspect considered how the sans serif typography was used to attract the eye based on its weight, and recorded the primary position where the eye first lands when reading the documents. It was not restricted to the largest printing types used (Figure 4.16).

There are some problems with this approach. The proposed method is subjective, as individual users are making independent visual judgments to measure the position of the typography in the visual hierarchy that relates to the combination of size, weight, and position on the page. Users may interpret the visual information differently and return contradictory results based on their individual judgments. While it is acknowledged that the current method is restricted by subjectivity, the analysis of the data in this research has been followed consistently. As an alternative solution to this problem, the aforementioned use of image recognition and machine learning software could be followed. The current proposed method could be supported by developing a user guide to orientate users towards a shared criteria for making visual judgments. This guide could be incorporated into the database tool for live testing in the future.

The first six sans serifs used in the top levels of typographic hierarchy were analysed to explore whether usage was biased towards a particular theme and category of printed content. The relationship between the position of sans serif in the documents corresponded to the themes. For example, documents ordered under the theme of 'Commercial Life' revealed that the sans serif was used mainly in the primary and secondary positions, to advertise goods or services. Conversely, ephemera that were ordered under theme of 'Information' occupied the lower levels in the hierarchy, communicating using smaller printing types.
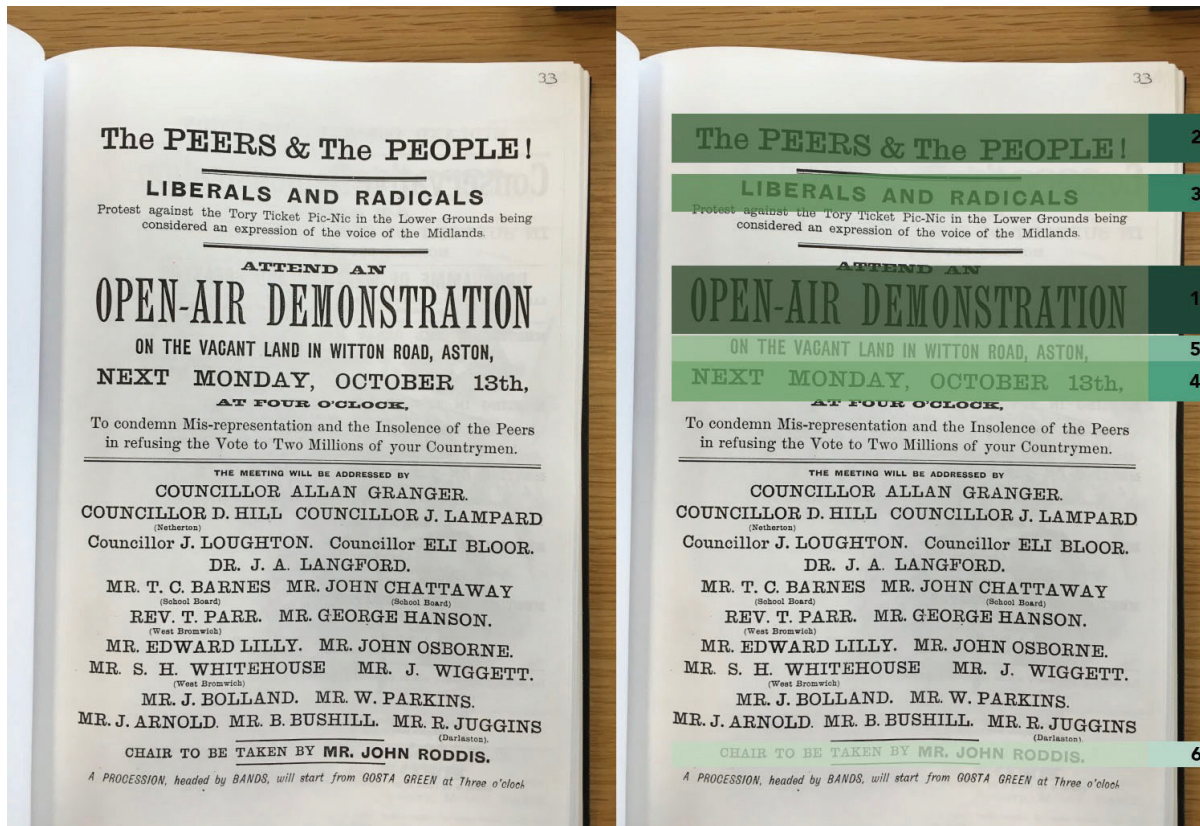
Figure 4.15 Example of the use of a scale to measure typographic hierarchy. Osb.
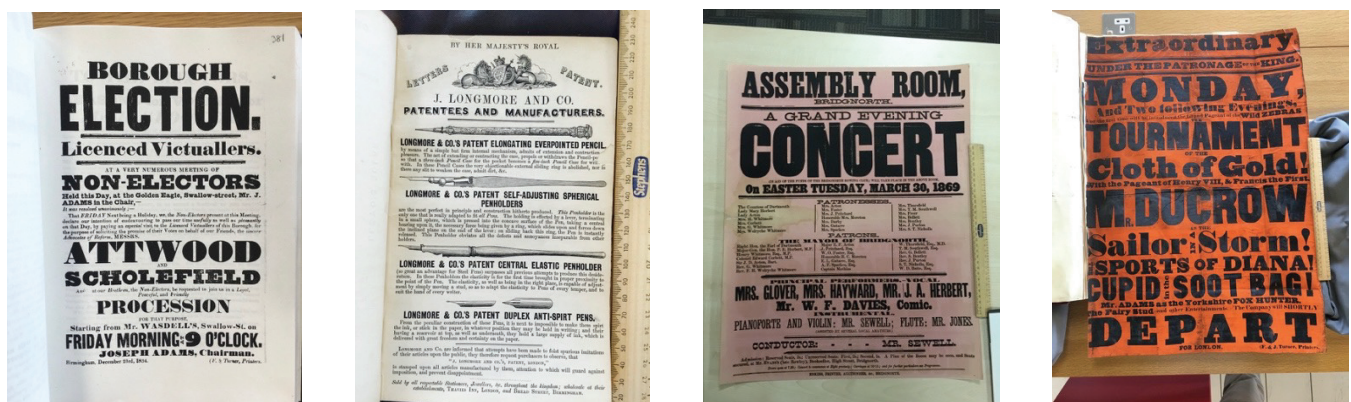
Figure 4.16 Examples of the use of a sans serif in the primary position of the typographic hierarchy based on weight. (Far left) 'Borough Election', broadside, Fredrick Turner, Birmingham, 1834. LOB; (left centre) 'J. Longmore and Co.', *Birmingham Directory*, (Birmingham, Wrightson and Webb, 1847); (right centre) 'A grand evening concert', playbill, Clement Edkins, Bridgnorth, 1869. Cadbury Research Library, (CRL): Special Collections, University of Birmingham; and (far right) 'Tournament of the Cloth of Gold', playbill, F. & J., Turner, Birmingham, c.1839. LOB.

4.3.3.   Speed of Uptake

The number of different sans serif typefaces used in each document was recorded and identified by name and foundry. These details were then cross-referenced against the type specimen catalogues to show the speed at which new typefaces were used and by whom. In addition, where ephemera included the printers' names, the addresses of the printers were compared to identify whether printing clusters were centered around the production of specific classes of documents. For example, a pattern emerged around the production of ballad sheets by a group of printers in Deritend, Birmingham. This analysis can be employed to identify how collaboration between printers existed in the nineteenth century by tracking the use of the printing types shared between nearby printers.

4.3.4.   Classification of Grotesque Sans Serif Typefaces

Classification systems designed to help order sans serif typefaces are limited in the subdivisions used to define the different styles and attributes of sans serif typography of the nineteenth century because they simply use the term Grotesque to describe all sans serif typefaces, however the variety of styles suggest that the Grotesque should be further sub-divided in order to reflect the differences. Maximillian Vox's (1894-1974) classification system, developed in 1954-5, ordered sans serifs under the singular heading of 'Linéale'. The term 'lineal' is defined in the *Oxford English Dictionary* (OED) as an adjective that relates firstly to the use of lines (for example, a lineal alphabet 'in which the symbols consist of lines'), and secondly to lineage through inheritance or succession as in a 'direct line'.[150]

In 1962, Vox's system was adopted by the Association Typographique Internationale (ATypI) and it became known as the Vox-ATypI classification system.[151] It ordered sans serifs in sub-categories under the term Linéale. These included the Grotesques, Neo-grotesques, Geometric and Humanist (Chapter 2.3). The sub-category of Grotesques was the only term used for nineteenth-century sans serifs; the other sub-

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150   Oxford English Dictionary. 'Lineal, adj. and n.', *OED Online* (Oxford:Oxford University Press, 2021). <www.oed.com/view/Entry/108612>. [accessed 12 August 2021].

151   Association Typographique Internationale. 'Atypi de-Adopts Vox-Atypi typeface classification system', *AtypI News* <California: Association Typographique Internationale, 2021). <https://atypi. org/2021/04/27/atypi-de-adopted-the-vox-atypi-typeface-classification-system/>. [accessed 10 July 2023].
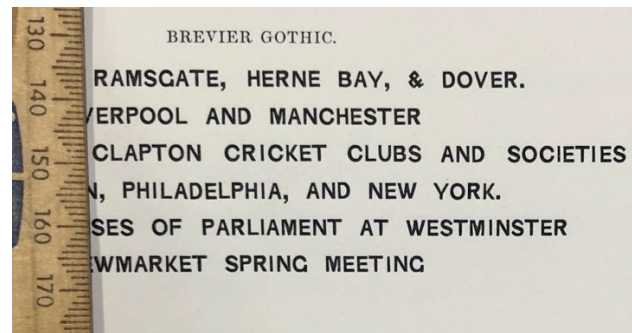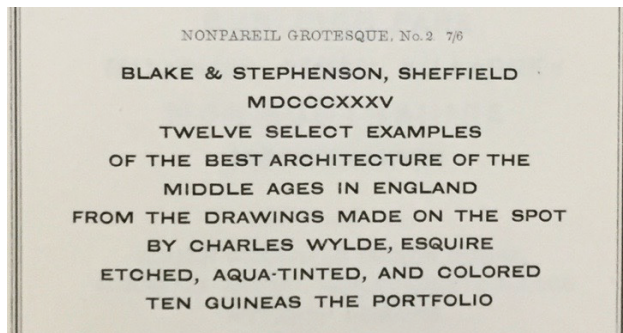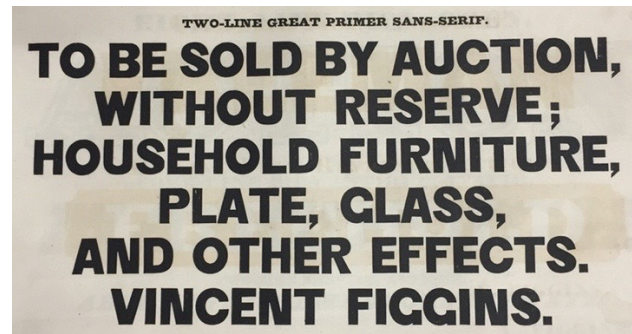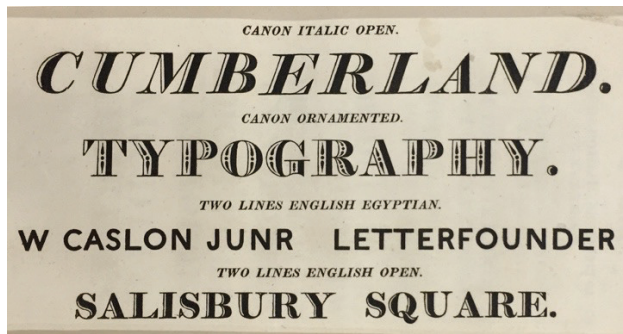
Figure 4.17 Early sans serif types classed as Grotesques that have straight legs on the capital 'R'. (Top left) Two Lines English Egyptian, Blake, Garnett, & Co., Sheffield, 1819. SBL; (top right) Two-line Great Primer Sans-serif, *Specimen of Printing Types by Vincent Figgins*, Figgins, 1832. SBL; (bottom left) Nonpareil Grotesque, No. 2, *Specimen of Printing Types*, Blake & Stephenson, 1838. SBL; and (bottom right) Brevier Gothic, *Specimen of Book Types cast by S. & T. Sharwood*, Sharwood, 1859. SBL.
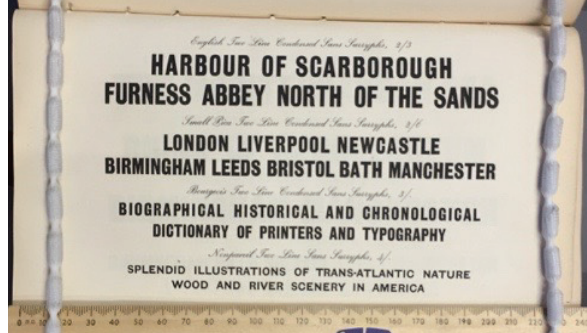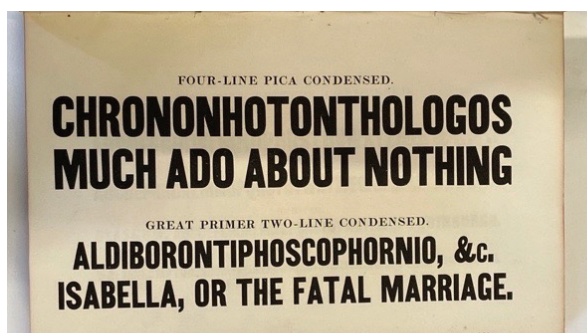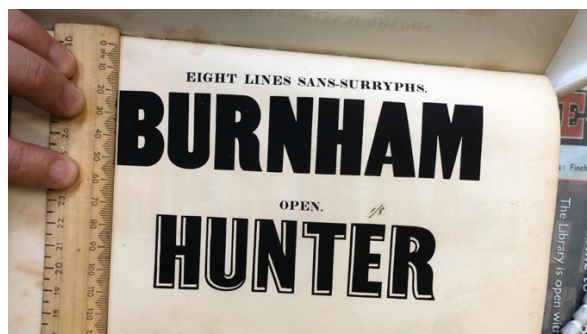
Figure 4.18 Early sans serif types with high 'X' heights and condensed forms classed as Grotesques. (Top left) Fourteen Lines Grotesque, *Fan Street Letter Foundry: A Supplement to Thorowood's Specimen of Printing Type*, W. Thorowgood & Co., 1832. SBL; (top right) Eight Lines Sans-surryphs, *Specimen of Printing Types*, Blake & Stephenson, 1832. SBL; (bottom left) Four-line Pica Condensed, *Caslon Foundry Specimen of Printing Types*, Caslon & Livermore, 1834. SBL; and (bottom right) English Two Line Condensed Sans Surryphs, Blake & Stephenson, 1838 (bottom right).

categories relate to sans serif typefaces from the twentieth century. This system was applied by Alfred Forbes Johnson *et al.* in the fourth edition of the *Encyclopaedia of Typefaces* (1970) to alphabetically list typefaces under the categories of Roman, Lineale and Scripts. Johnson defines the term Grotesques as 'typefaces with nineteenth-century origins', suggesting that the term was used to describe typefaces from the twentieth century that shared the same characteristics of nineteenth-century sans serifs, without giving due consideration to the different styles of the latter typefaces.[152]

The nineteenth century was an experimental time for typeface design, and many different variants of sans serif were simply categorised together under the generic term Grotesque. This was used for all styles of sans serif jobbing types. These early types often had unusual characteristics, some of which were used to identify the later sub-categories of sans serifs. Whilst this system is of merit to twentieth-century historians, and is used to differentiate between the subsequent sub-categories of sans serif type, it is less useful for scholars of the nineteenth century. There are exceptional forms of early sans serif that do not sit easily within the definitions of a Grotesque. For example, William Caslon IV's *Two Line English Egyptian* (1816) that followed a typographic model based of the classical proportions of Roman Square Capitals. Caslon's 'R' has a straight as opposed to a curved leg, which was regarded by Johnson as a defining characteristic of Grotesque types.[153] A similar model was used by Vincent Figgins for *Two-Line Great Primer Sans-Serif* (1832), and for Blake and Stephenson's *Nonpareil Grotesque, No. 2* (1838), and S. & T. Sharwood's *Brevier Gothic* (1853), (Figure 4.17).

The criteria that Johnson uses to classify the Grotesques describe the early condensed forms. The condensed forms have a high 'X' height and the curves of the 'O' are squared, rather than based on the geometric form of a circle. These printing types have curled legs on the 'R', chiseled beards or spurs on the 'G', close-set jaws on the 'C', and horizontal strokes on the ends of curved letters (Figure 4.18). William Thorowgood's first sans serif *Fourteen Lines Grotesque*, 1832, shows the curled leg on the 'R'; Blake & Stephenson's *Eight Lines Sans-Surryphs*, 1832, has an irregular stroke contrast on the 'U'; and Caslon & Livermore's *Four Line Pica Condensed* demonstrates the squareness on the curves associated with the Grotesques.

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152   Alfred Forbes Johnson, et al. *The Encyclopaedia of Typefaces [by] W. Pincus Jaspert, W. Turner Berry [and] A.F. Johnson* (United Kingdom, Blandford Press, 1970), p. xv.

153   *Ibid*, p. xv.
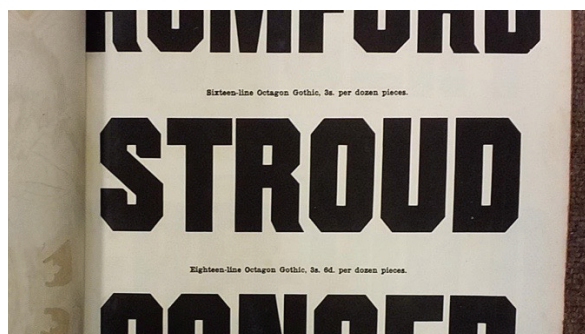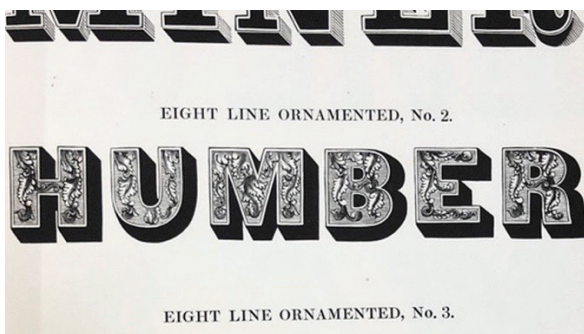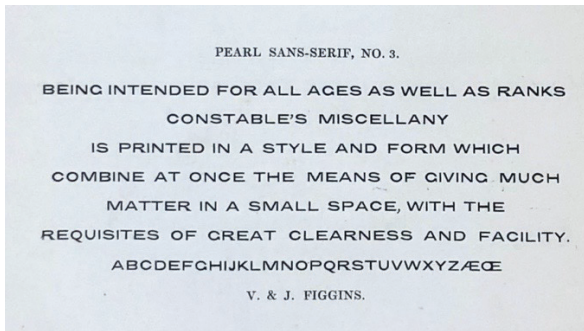
Figure 4.19 Experimental type styles of the Grotesques, showing 'Wide', 'Sloping', 'Ornamented' and 'Octagonal' sans serifs. (Top left) Pearl Sans-serif, No. 3, Vincent Figgins, 1839. SBL; (top right) Fourteen-line Pica, Condensed, S. & T. Sharwood, 1853. SBL; (bottom left) Eight Line Ornamented, No. 2, Caslon & Livermore, 1834. SBL; and (bottom right) Sixteen-line Octagon Gothic, *Selected Specimens of Printing Types, comprising Book and Newspaper*, J. & R.M. Wood, 1865. Private Collection.
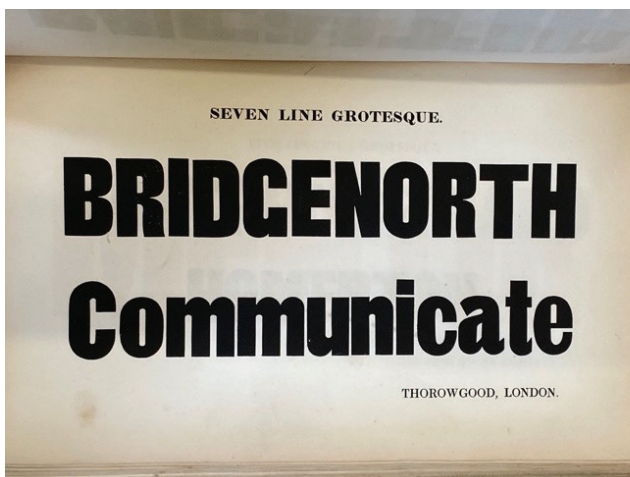
Figure 4.20 Examples of British lower-case sans serifs with a double- and single-storey 'a'. (Left) Seven Line Grotesque, *Fan Street Letter Foundry: New Specimens of Printing Types*, Thorowgood & Co., 1834. SBL; and (right) Eight Line Pica Grotesque, *Specimens of book, newspaper, jobbing and ornamental types*, No. 4 Italic, Miller & Richard, 1895. SBL.

The different typographical styles that use characteristics of the classical forms and condensed sans serifs co-exist throughout the history of the Grotesques. Most nineteenth-century sans serifs are bold printing types used to give emphasis and highlight text, although they also include other variants: slim light versions, wide sans serifs with low 'X' heights, sloping types designed to be used for italics, open and outlined types, shadowed types that created a three- dimensional quality, rounded forms, ornamented and decorative styles, and octagonal geometric forms closely related to the Tuscan display types (Figure 4.19). The divergence of these different type styles calls for its own criterion to classify these types and enable independent analysis by historians of the nineteenth century.

Whilst the original sans serifs display experimental qualities as demonstrated by the Grotesques, they also share more formal attributes with the latter sub-classes of Neo-grotesque and Geometric. Caslon's *Two Line English Egyptian* has a low stroke contrast and is more regular in its design, these being formal attributes associated with the later Neo-grotesques. Its proportions are geometric with its capitals following simple geometric shapes of the circle and rectangle. The main differences in the designs of these early Grotesques and the Geometrics are in the lower-case letters. The Geometrics were classed as having a single-storey 'a' whereas the Grotesques and Neo-grotesques have a double-storey 'a'. The first presentation of a lower-case sans serif in Britain was Thorowgood's *Seven Line Grotesque* (1834) in which the lower-case letters follow the same principles as the upper-case with squared curves on the 'o' and a double-storey 'a'. An example of a nineteenth-century Grotesque with a single-storey 'a' is Miller and Richard's *Eight Line Pica Grotesque, No.4 Italic* (1895); the regular versions of this Grotesque still have a double-storey 'a' (Figure 4.20).

A well known example of a Neo-grotesque is *Helvetica* (1957) designed by the Swiss type designer Max Miedinger.[154] Helvetica was based on the earlier German model of *Akzidenz-Grotesk* (1898) by Berthold, that became known by the name 'Standard' in Britain and the United States.[155] There are examples of type design in Britain that followed the formal attributes of the Neo-grotesques and predated these European examples. The Scottish typefoundry Miller & Richard, presented a Grotesque in 1895

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154   Linotype, 'Helvetica', *Linotype*, (Online: Linotype, 2019) <https://www.fonts.com/font/linotype/helvetica/story> [accessed 1 June 2021].

155   Bertholdtypes, 'Akzidenz-Grotesk', *Berthold*, (Online: Bertholdtypes, 2018) <https://www.bertholdtypes.com/blog/2010-12-08/akzidenz-grotesk/> [accessed 16 May 2021].

Figure 4.21 Comparison of 'Neo-grotesque' styles. (Left) Two Line Double Pica Grotesque, No. 5, Miller and Richard, 1895. SBL; and (right) Specimen sheet of Max Miedinger's Helvetica semi-bold. Cees W. De Jong, *Sans Serif: The Ultimate Sourcebook of Classic and Contemporary Sans Serif Typography,* (London: Thames & Hudson, 2006).

Table 4.5 Criteria used to order Grotesque sans serif typefaces.

Grotesque Sub-Categories	Special Attributes	Proportions	Stroke Contrast	Jaw Aperture	Terminals	'R' Leg	'G' Spur	Lower-case 'a'
Classical	N/A	Geometric	Low	Variable	Variable	Straight	Spurred	N/A
Bold	N/A	Squared Curves	Variable	Close-set	Horizontal	Curved	Spurred	Two-storey
Condensed	High X-Height	Squared Curves	Variable	Close-set	Horizontal	Curved	Spurred	Two-storey
Sloping	Faux Italics	Variable	Variable	Close-set	Horizontal	Curved	Spurred	Two-storey
Light	Slim	Squared Curves	Variable	Close-set	Horizontal	Curved	Spurred	Two-storey
Wide	Short X-Height	Squared Curves	Variable	Close-set	Variable	Curved	Spurred	Two-storey
Mixed	Variable	Variable	Variable	Variable	Variable	Variable	Variable	Variable
Neo-grotesque	Many Sizes	Open Curves	Low	Open	Oblique	Curved	Spurred	Two-storey
Humanist	Inscriptional Model	Squared Curves	Variable	Open	Variable	Variable	No Spur	Two-storey
Geometric	Monoline	Geometric	Low	Open	Variable	Straight	No Spur	Single- storey
Octagonal	Oblique curves	Geometric	Variable	Close-set	Horizontal	Oblique	Variable	Two-storey
Open	Outlined	Variable	Variable	Close-set	Variable	Variable	Spurred	Two-storey
Ornamented	Decorative	Variable	Variable	Close-set	Variable	Variable	Variable	Two-storey
Rounded	Rounded	Squared Curves	Variable	Close-set	Rounded	Curved	Spurred	Two-storey
Shadowed	3D Effect	Variable	Variable	Close-set	Variable	Curved	Spurred	Two-storey
Special	Unusual	Variable	Variable	Variable	Variable	Variable	Variable	Variable

that followed a uniform stroke contrast and a regulated design that was used across many weights of the same typeface. The model used by Miller and Richard for *Two Line Double Pica Grotesque, No. 5* (1895) is comparable to the designs for *Helvetica* (Figure 4.21). There are many similarities between the design of these typefaces such as the 'R', 'D', 'G' and 'N', but with the exception of the letter 'C' which has tighter jaws (similar to *Akzidenz-Grotesk*), whereas *Helvetica* has a more open 'C' and a longer bar on the 'E'. A category of 'Pre-neo' was initially considered to enable other researchers to investigate the origins of the twentieth-century Neo-grotesques. This was considered confusing for the user, and the term 'Neo-grotesque' was adopted, alongside 'Humanist' and 'Geometric', (Appendix 2.3, Classification of Grotesque sans serif types, p. 42)

For historians studying sans serif typography of the nineteenth century and for those interested in researching the origins of twentieth-century types, there is a need for a deeper level of classification of the Grotesques. In the methodology presented here, sub-categories were introduced to identify the different groupings of sans serif styles (Table 4.5). These included the use of the term 'Classical' that was used to order sans serif types that had formal attributes of low stroke contrast and geometric proportions. This system will be applied in Chapter Seven to analyse the use of typefaces that shared similar attributes to Caslon IV's first sans serif of 1816. The development of sub-categories to classify the Grotesques enables researchers to focus on the development of individual type styles that emerged during this experimental period of British typefounding.

The Grotesque classification system was used to separate out the diverse range of typographic attributes identified in the typefounders 'Sample Books' produced between 1816 and 1909. Sixteen different categories of sans serif typefaces were identified based on stylistic features. These included three groups that were proposed by Vox in 1954-5. The sample of early sans serif types showed features that were later used to define the 'Neo-grotesque', 'Humanist' and 'Geometric'.

'Neo-grotesques', 'Humanist' and 'Geometric' types of the twentieth century were produced as families of type, cast in many weights and sizes that offered jobbing printers a new system for setting documents. These proved extremely useful to printers in the presentation of information and the development of typographic hierarchies. The concept of working with a system of interchangeable sizes of type with the same or a similar

design style was observed in the grotesques from the later nineteenth century. For the purpose of this study, these terms have been taken back and applied to the earlier typefaces. As an area for future research the classification system could be advanced to consider primary and secondary labels that separate out different types of stylistic features, for example a primary label of 'Classical' and a secondary of 'Light'.

4.4.   Methodology Conclusion

The initial scope of this research was extremely wide, both in terms of the geographical area of the Midlands and its survey of Midlands ephemera. The first issue was addressed by focusing on the printed ephemera of Birmingham with a quantitative survey of Midlands printers taken from data in the BBTI. This approach was followed for a secondary case-study of printers from Bridgnorth. The second issue was addressed by concentrating the majority of evidence on printed material from the Birmingham Scrap Books from the Library of Birmingham archives. Supporting examples from other archive collections were used for comparison with the Birmingham items. The final sample was filtered down from 1,267 pieces of printed ephemera to 729 items, providing the evidence required to discuss the use of the sans serif across the three main aims of this research. These being, to show the relationship between the sans serif and trajectories in advertising; to assess the impact of the sans serif through its frequency of use; and to establish the extent to which sans serif typefaces were commercially applied by British trade printers in the nineteenth and early twentieth century. The selected sample presented ephemera that used founts closest to the design of Caslon IV's printing types, with a bias towards tracing the descendants of the first style of sans serif.

Recording the class of document revealed those categories where sans serif printing types were used. The sample was analysed to explore whether there was a bias towards a particular class of document and whether the sans serif led to the development of new

forms of printed information and typographic compositions. The themes and categories were used to order the printed ephemera based on the content of the documents, showing how they were used and what they were used for. Measuring the percentage of sans serif types and their position in the visual hierarchy showed how the sans serif was used within the typographic composition and demonstrated how it increased in popularity over time. Correlating the sans serifs used in the documents with the names of printers using the sans serifs showed the speed of uptake by provincial printers as these new typefaces were released by the typefoundries. These approaches were used together to form a matrix of data, enabling the author to identify patterns that revealed how the sans serif was used, how it was deployed by the typefoundries and jobbing printers, and how it was received by the public.

There are limitations in the proposed methodology that warrants future research to advance the system for other users. In particular, the precision of how the percentage of sans serif is measured and the use of white space within the composition; and the subjectivity of making judgments in the combination of size, weight, and position in measuring the visual hierarchy.

5.   A Digital Platform for Typographic Classification

A database was developed using FileMaker Pro Advanced software to manage the collection of data for analysis and interpretation. The database was used to track the usage of the sans serif in terms of its frequency of use, typographic hierarchy and context. The following criteria were used to measure the frequency of sans serif type usage in printed ephemera: the number of sans serif types used in each document; the percentage of text printed using sans serif types; and the styles of the different sans serif founts used. The sans serif's position in the visual hierarchy was measured by recording its location in the typographic order of the composition. To define this sequence the documents were read as a whole image, noting which section the eye was attracted to first and last. The general context of the content of the documents was recorded, including the following criteria:

- the class of document;
- the printer and their business address;
- the client;
- the objectives of the communication

The database was used to cross-reference many classes of documents. Sections on type specimens were designed as separate data Tables, to avoid a bias towards those individual classes of document that might otherwise dominate the overall analysis of the ephemera data.

The database was designed to implement the new typographic methodology, and was intended to set a new standard for other researchers to follow. The database was created as a tool to address the description and categorisation of printed ephemera in new ways that are not covered by existing systems. It was designed as a companion tool for use in the archives, with information observed and uploaded while reviewing the printed ephemera *in situ*. FileMaker Pro software was selected for its ease of use. The platform supports functionality for future development of mobile app and Tablet formats, offering researchers greater flexibility in their field work. While working in the archives it was important to have access to the database in order to compare new items

with previously recorded material. Online access to the database enabled live recording of data directly while viewing ephemera; this improves time management enabling researchers to capture data while at work in the archives, as opposed to filing material in the database at a later date.

Additional functionality was developed through the design of look-up Tables. These were used to automatically calculate the point size of printing types from traditional size names – for example, Two-Lines English converts to 28 points. In addition, data extracted from the British Book Trade Index (BBTI) was organised in Excel spreadsheets and then imported into the database. This generated a list of Midlands printers and their corresponding business addresses that was automatically updated when inputting a new record. The database was fully searchable across fields with multiple search criteria, allowing researchers of printed ephemera to slice the data according to their individual needs. The resultant analysis of the material was later exported as individual Microsoft Excel spreadsheets for consideration in support of this thesis.

5.1. Using the Database to Implement the New Methodology

The database was designed to be used from a visual perspective, starting with a photographic record of printed ephemera. The author began by capturing photographic images in the archives using a Nikon D90 digital SLR camera, to record high-resolution images for subsequent analysis. These images were backed up and ordered into folders based on archives and collections in Apple's Photos application, and saved for later analysis, selection and input into the database.

Two rulers were used in the photography to provide a measuring scale against the documents: one ruler was laid flat alongside the ephemera and included in the photograph, while the second ruler was used vertically to scale the distance from the camera to the ephemera. While this approach was successful in recording smaller formats such as 'Handbills', it became problematic when recording large-format documents such as folded advertising 'Posters' that needed to be photographed in sections and later joined together in photo editing software. To gain more
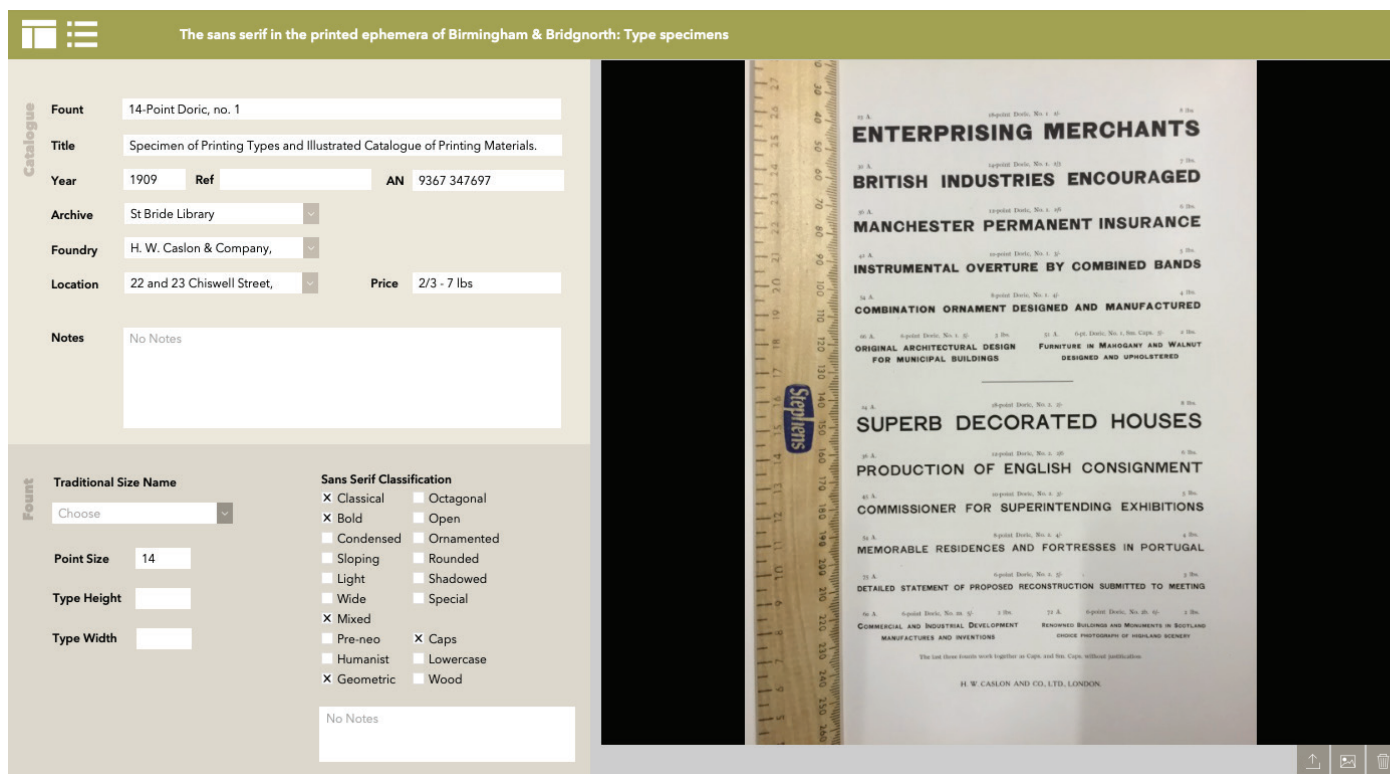
Figure 5.1 Example record in the typefounders' specimen books database table. Osbaldestin, (Osb), 2021.
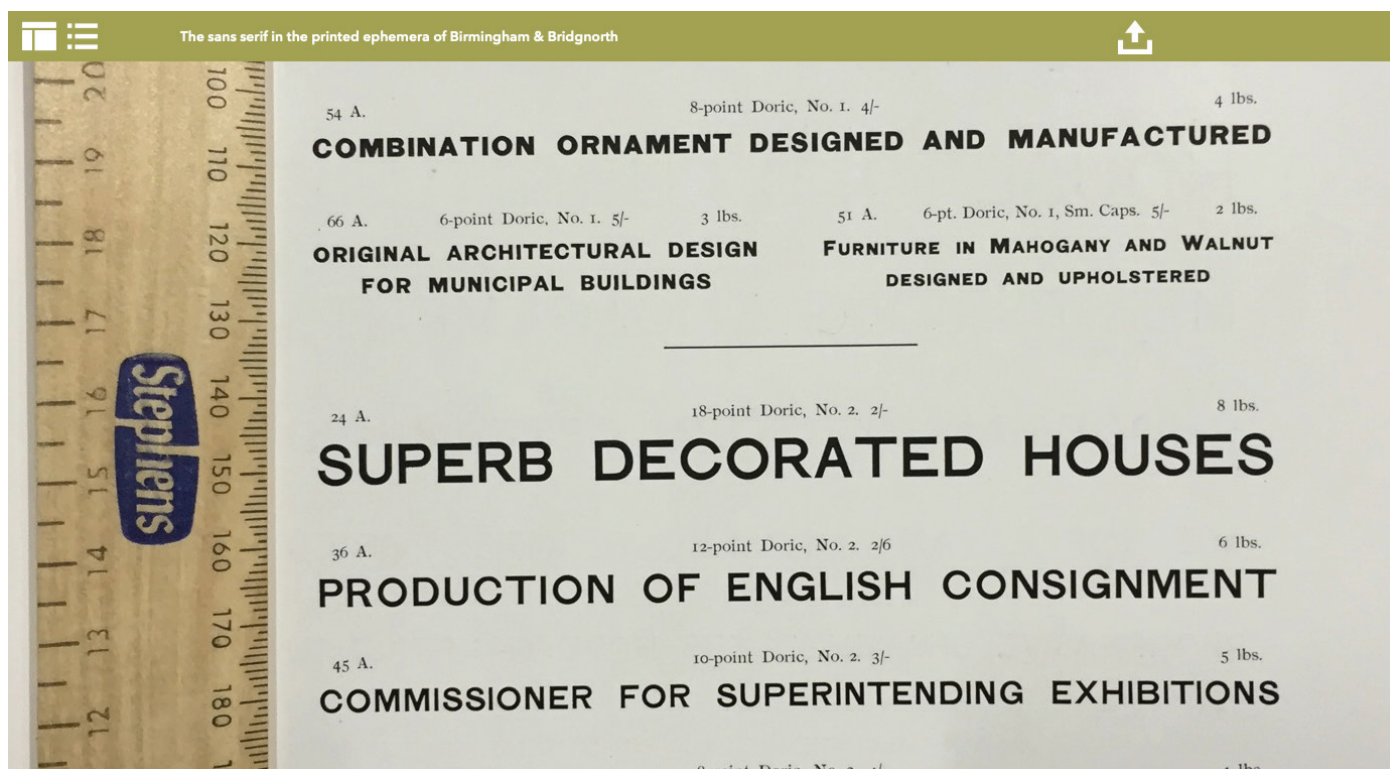
Figure 5.2 Magnified view of selected record for closer inspection of printing types. Osb, 2021.

precise measurements (such as the height and width of small typefaces), the two-ruler process was replaced by employing a simple plastic card, which was digitally measured against typographic measuring scales using Adobe Photoshop. Measurement with a standard-sized card enhanced flexibility in handling material in the archives and increased the speed of documentation, enabling a larger quantity of ephemera to be captured in a shorter period of time.

As mobile phone technology progressed in the field of digital photography on Apple's iPhone, digital SLR photography was replaced by the smart phone. This provided a more portable solution, avoiding shutter noise disturbance to other scholars in the archives and enabling images to be uploaded to the FileMaker Pro database directly from the same device.

The FileMaker Pro database was developed in two sections: one for recording the printed ephemera used in the study; and the other for recording the typefaces from the typefounders' specimen books (Figure 5.1 and 5.2). Each of these sections has its own data Tables which were used as look-up Tables between each section; for example, when a sans serif typeface was identified in the ephemera section, the corresponding fields of typefounder and specimen date were automatically populated from data in the type specimen's data Table. List views were developed for both sections to facilitate a comparative overview of the selected samples based on individual search criteria. A third data Table was designed to hold information relating to printers and their business addresses, populated from data imported from the BBTI. This Table was used as a look-up Table in the ephemera section, automatically populating the address field by selecting a printer. The most important section of the database in implementing the new methodology is the printed ephemera section. The type specimen section was pre-populated as a supporting reference tool for identifying the typefaces. Both sections can be navigated using icons in the top left navigation bar. Each section has its own independent search criteria for finding material and can be consulted without resetting the search results.
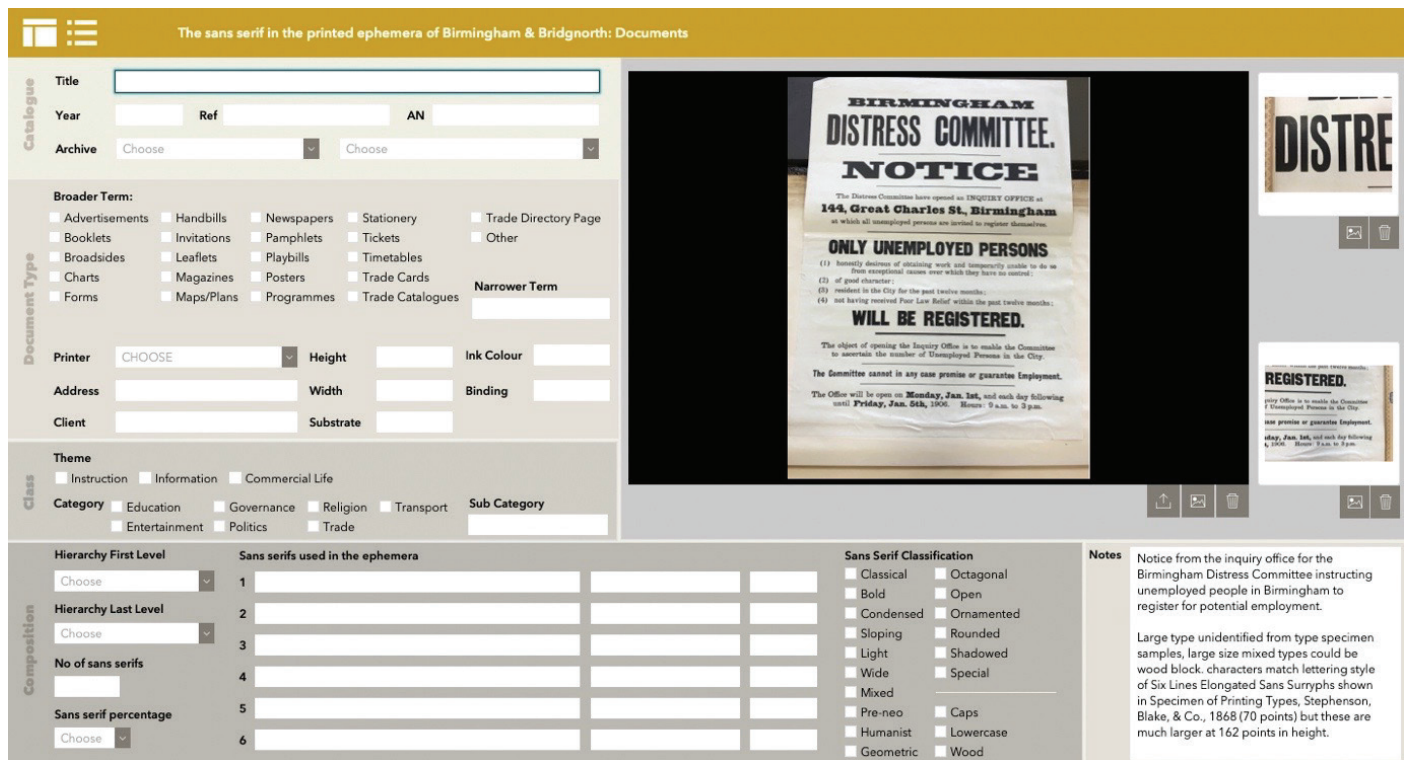
Figure 5.3 Inputting photographic documentation of printed ephemera to the database. The printed ephemera used was 'Birmingham Distress Committee', notice, printer unknown, 1906. LOB.
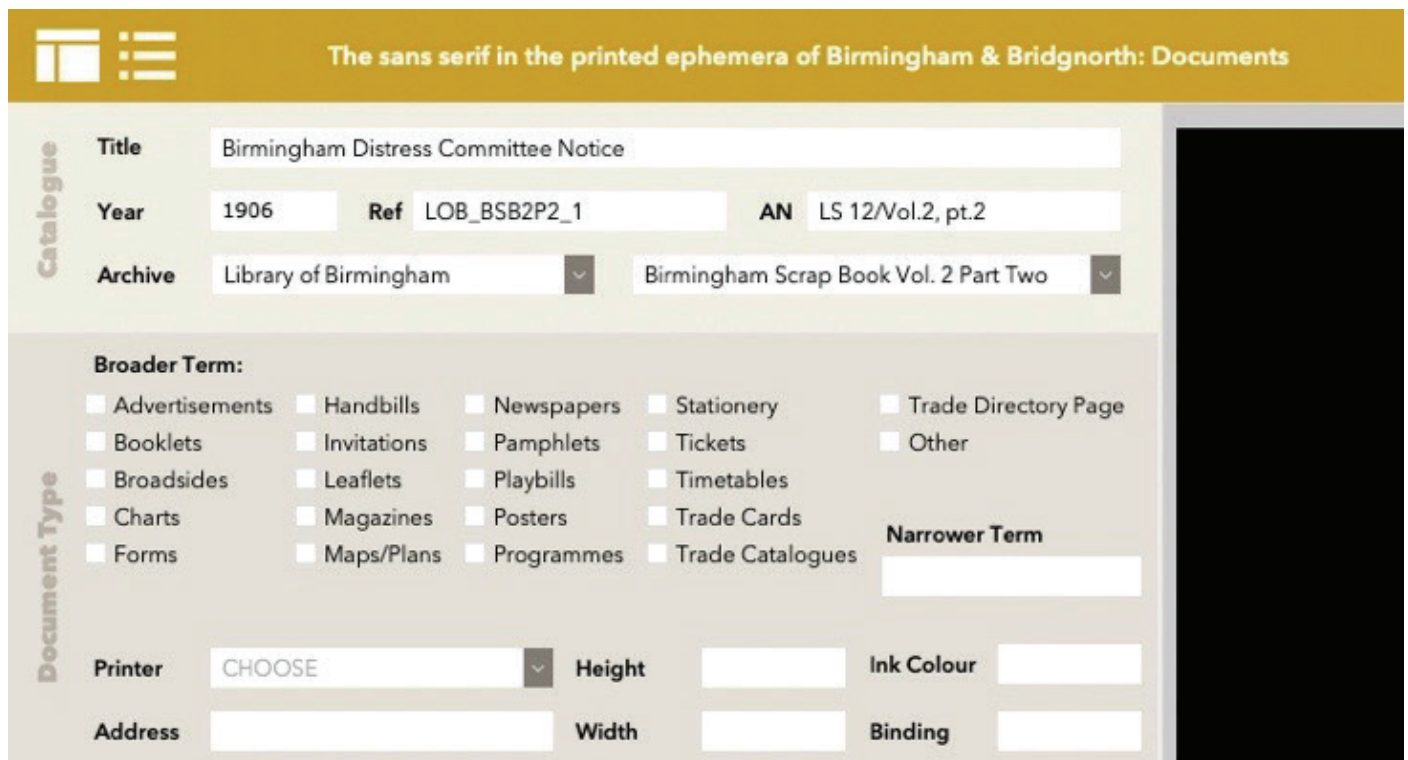
Figure 5.4 Cataloguing printed ephemera in the database. Osb, 2021.

5.2.   Input and Recording of Data in the Database.

As the author followed a visual approach to recording ephemera, the first stage of inputting data was to upload the photographic evidence of the ephemera captured in the archives. To begin the process a new record was made using the FileMaker Pro software, and then a pre-selected image was dragged into the main image field. The images were automatically stored locally and filed by archive field. Function buttons were coded into the database to allow the user to download the image, to view full-size in a separate window for closer inspection or to delete the image (Figure 5.3). This process was repeated for two additional supporting images, used for close-up photography highlighting printing details, and for internal pages of leaflets and booklets.

The second stage was to record the catalogue details of the ephemera while using the image as a visual aid. This included the following fields:

1) The title as presented in the ephemera;

2) The year in which the item was produced, indicated by dates printed in the document or identified from the name of the printer or individuals/businesses referenced in the document;

3) The name of the archive, collection and the document's original accession number, to enable other researchers to directly locate or reference items;

4) A reference code unique to the document held in the database was assigned, based on the name of the archive/collection where it was located, with the addition of a number relating to the sequence in which documents from the same collection were added to the database; for example, ARC_COL_1. A public notice printed for the Birmingham Distress Committee in 1906 was given the reference code of LOB_BSB2P@_1 to indicate that it was located in the Library of Birmingham, in Volume Two, Part Two of the Birmingham Scrapbooks (Figure 5.4).

To facilitate closer examination of the photographic records, each image was enlarged and presented in a separate screen. This feature was included for the supporting images and was used throughout the process of data collection and analysis. A thumbnail button was included to return to the data input screen. This same method was used to review
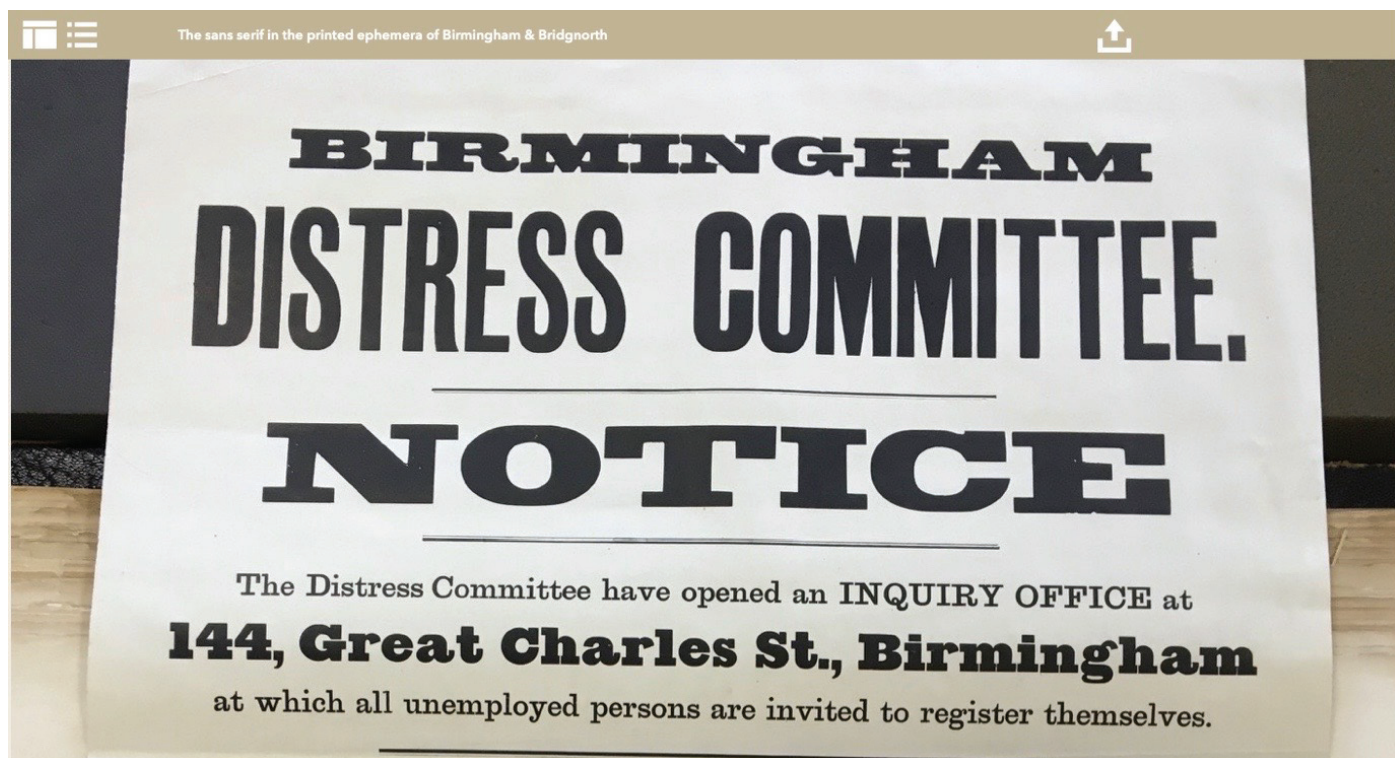
Figure 5.5 Example of image magnification to review the details of the ephemera and type specimens. Osb, 2021.

Figure 5.6 Indexing by document type in the database. Osb, 2021.

examples from the type specimens sample, with their associated image magnifications (Figure 5.5).

The document type was then identified based on the set of broader and narrower terms. These were designed as check boxes to allow the user to select and search for more than one document type, and for ephemera that spanned several document classes. The Distress Committee notice was indexed under the broader term 'Posters' and not under 'Broadsides' as it was printed after the mid-nineteenth century. The narrower term 'Political Posters' was used because the document was designed to engage unemployed people to register in a survey to 'ascertain the number of Unemployed Persons in the City' (Figure 5.6).

The production details were then recorded; where possible the printers were identified from the document itself or from documents printed at the time using the same typefaces or for the same clients. The example shown was recorded as Unknown Printer, as these details could not be identified from the sample. The size of the document was recorded along with details of the substrate it was printed on, the colours of ink used and the document binding (Figure 5.7).

The item was then classified using the themes and categories defined in this methodology. The 'Poster' in this example was ordered under the themes of 'Information' and 'Instruction' as the sans serif typefaces were used to instruct and inform unemployed people to register their employment status with the Inquiry Office. An authoritative typographic tone was conveyed through the composition of key information in bold uppercase condensed sans serif typefaces. The document was classified under the category 'Governance' since the 'Poster' was printed for the Birmingham Distress Committee. It was also ordered under the categories 'Politics' and 'Trade' because the content indicated that the survey was to be used to gauge the number of unemployed people in Birmingham, with a view to finding employment for people who registered. A 36-point mixed-case Grotesque sans serif was used as a disclaimer to this statement, declaring that the 'Committee cannot in any case promise or guarantee Employment'. Notes were added to an expandable field, recording a brief description of the content of the document and a discussion of the typefaces used (Figure 5.8).

The composition of the document was then considered, including the typographic hierarchy and the percentage of sans serif typefaces used. This example was recorded as using slab serif typefaces in the first and last

Figure 5.7 Recording production information of printed ephemera in the database. Osb, 2021.

Figure 5.8 Classification using themes and categories in the database. Osb, 2021.
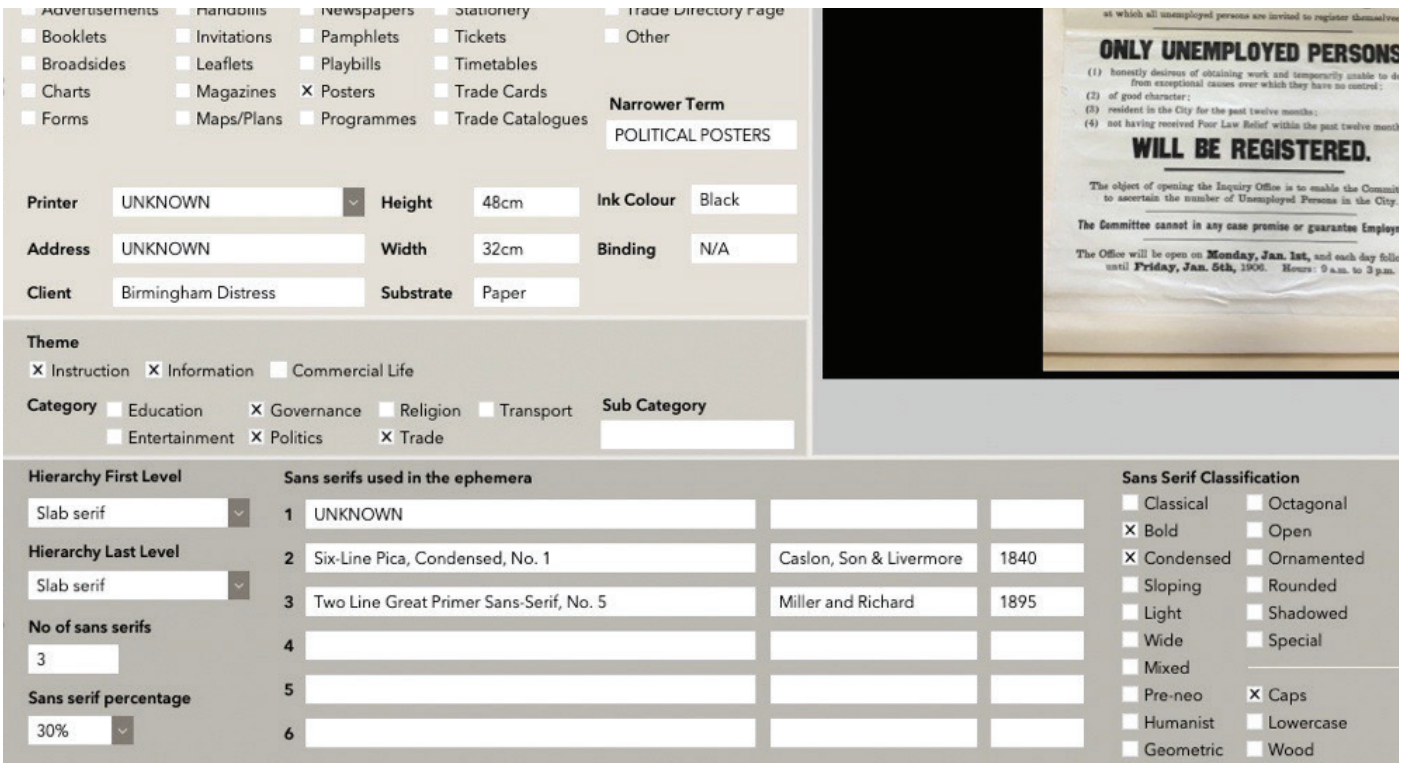
Figure 5.9 Recording the compositional data, identification and classification of the sans serif types used. Osb, 2021.

Figure 5.10 Use of a digital typographic scale in Adobe Photoshop to measure the point size of typefaces in printed ephemera. Osb, 2021.
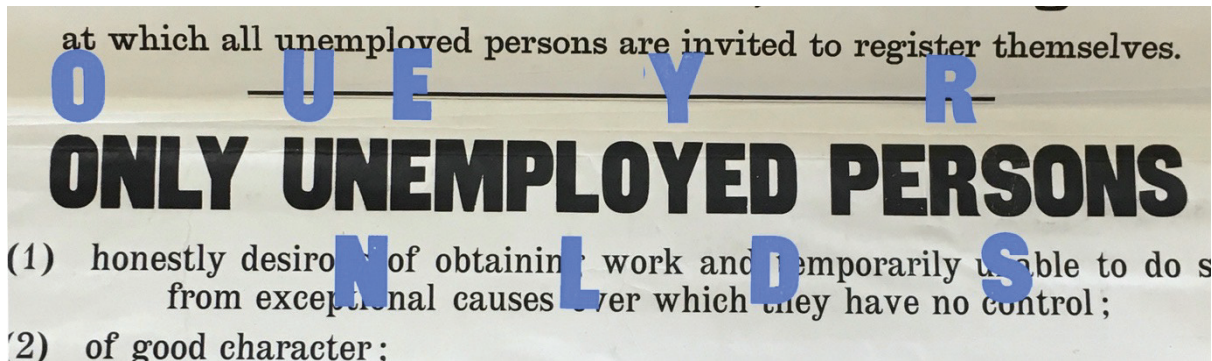
Figure 5.11 Comparison of typefaces in Adobe Photoshop, measured using the same typographic scale. The typeface shown in blue is Six-Line Pica, Condensed, No. 1, *Caslon Foundry Specimen of Printing Types*, Caslon, Son & Livermore, 1840. SBL.
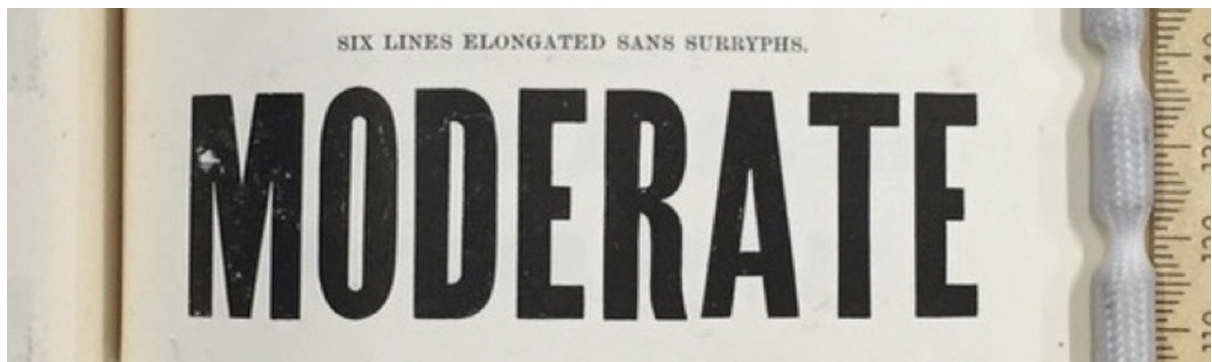
Figure 5.12 Six Lines Elongated Sans Surryphs, Stephenson, Blake, & Co., 1868. SBL.
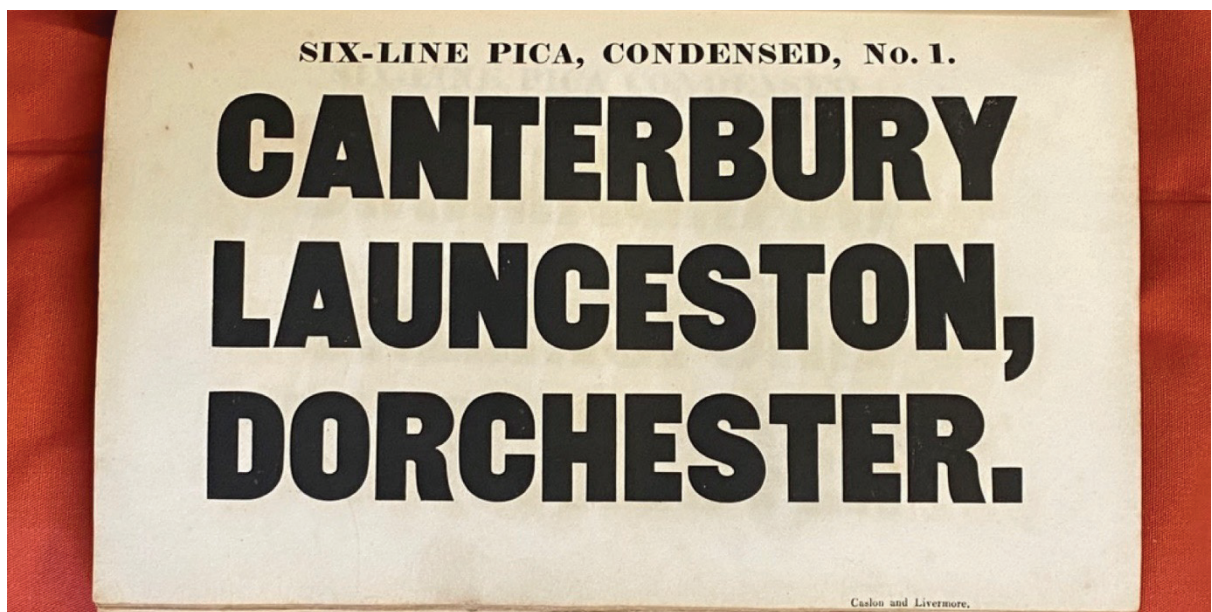
Figure 5.13 Six-Line Pica, Condensed, No. 1, Caslon, Son & Livermore, 1840. SBL.

level of the typographic hierarchy, with three sans serif typefaces measured as 30% of the overall typographic composition (Figure 5.9). The sans serifs used in the item of ephemera were then identified from the type specimen section of the database. A typographic scale was digitally sized in Adobe Photoshop against the ruler documented in the photograph; this was then used to measure the point size of the typefaces (Figure 5.10). Once the size of the typefaces in the document were measured, the database of specimens was searched based on point size. The classification of Grotesque sans serifs was then considered, based on typographic design criteria associated with the different styles of Grotesques; for example, Bold, Condensed and Caps were selected to narrow the search further.

Letters from the typefaces identified were then overlaid on the photograph of the ephemera and resized to the same point scale as the typefaces in the document, using the same digital typographic scale. This enabled comparisons between the design of the typefaces in the document and those presented in the type specimens (Figure 5.11).

The first sans serif used in the second level of the typographic hierarchy was recorded as unknown. This large condensed typeface was not identified from the type specimen recorded in this sample. Characters from this typeface matched the lettering style of *Six Lines Elongated Sans Surryphs*, a 70-point typeface presented in Stephenson, Blake, & Co. Specimen of Printing Types (1868) (Figure 5.12). No direct match could be established because the typeface used in the document measured 162 points in height.

The second sans serif that occupied the third and fourth levels of typographic hierarchy was identified as *Six-Line Pica, Condensed, No. 1*, 72 points in size; it was first shown in the *Caslon Foundry Specimen of Printing Types* (1840) (Figure 5.13). The uppercase 'G' was not shown in the type specimen page for this typeface; instead, it was identified by making a comparison with Caslon's presentation of the smaller typeface *Four-Line Pica, Condensed, No. 1*, which was 48 points tall (Figure 5.14). These characters show small differences: the bar of *Four-Line Pica Condensed* is taller; the spur on the 'G' is thinner; and the terminal is horizontal, whereas it slopes inwards in the ephemera example. There are a great number of similarities between these two sizes of type by Caslon that outweigh the differences which can be accounted for in the different sizes of type as they were cut as separate typefaces. They both have spurs on the 'G', horizontal bars with straight vertical strokes and follow a similar root letter style.
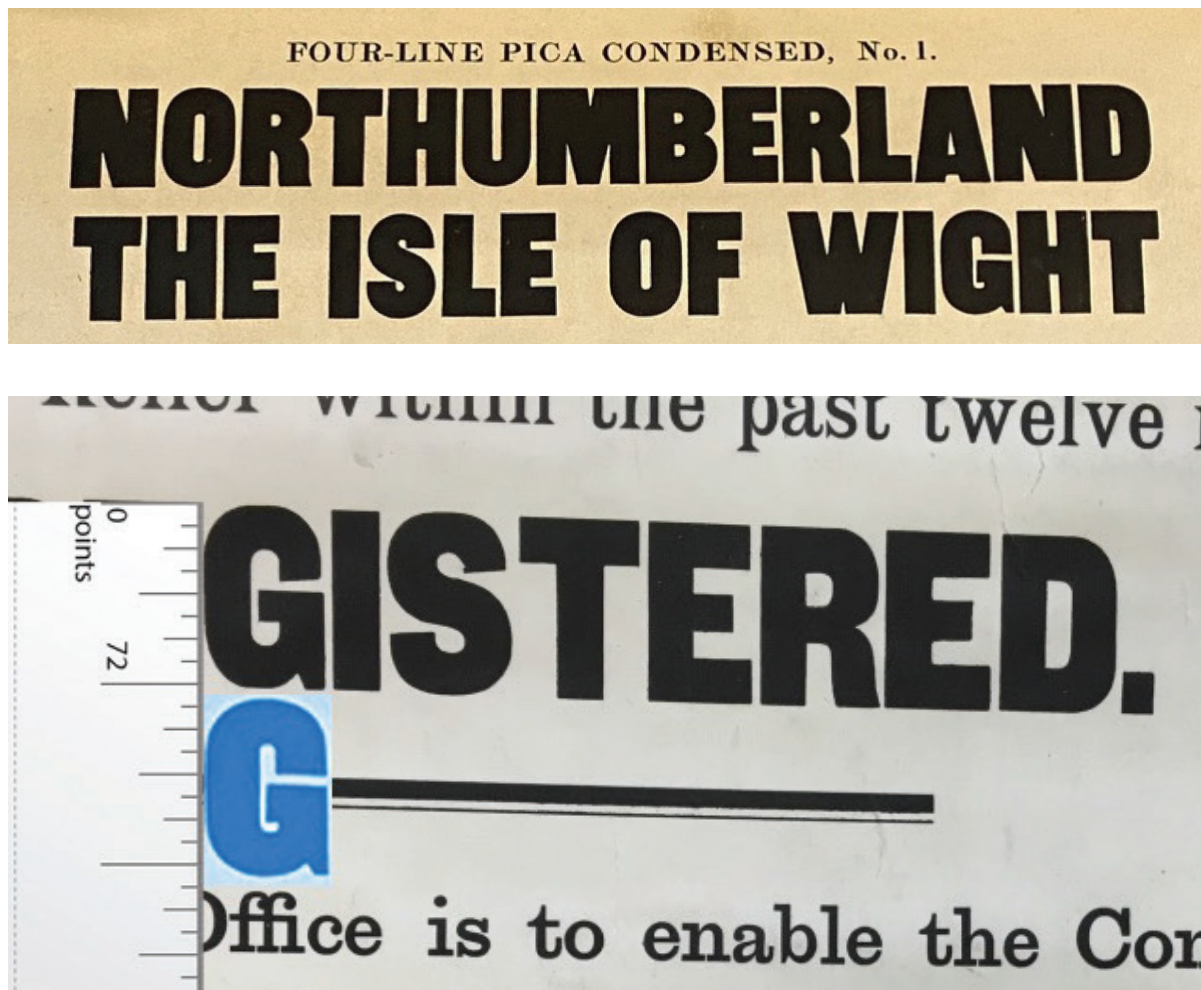
Figure 5.14.: Identification of printing types. (Above) Condensed, No. 1, Caslon, Son & Livermore, 1840. SBL; and (below) compared with the 'G' in the ephemera sample. LOB.

Figure 5.15 Two Line Great Primer Sans-Serif, No. 5, Miller and Richard, 1895. SBL.

The third sans serif typeface used in the document in the seventh level of typographic hierarchy was recorded as Miller and Richard's *Two Line Great Primer Sans-Serif, No. 5*. This mixed-case sans serif typeface measured 36 points in height and was presented in their *Specimens of book, newspaper, jobbing and ornamental types*, (1895) (Figure 5.15).

Once the ephemera have been recorded in the database, the search tools can be applied in multiple ways to identify patterns in the use of sans serif printing types. Any of the data fields can be used in isolation or in combination to refine the search criteria. For example, the hierarchy and percentage of sans serifs in the documents can be ordered in a list view to identify any increase in usage by ascending date. This search can be narrowed further by conducting another enquiry based on the class of document or theme, to study how sans serifs were used for different purposes. Individual typefaces can be searched to identify those categories of textual content presented by the sans serifs, or to identify patterns existing between printers and the sans serifs they used and shared.

5.3.   Limitations of a Digital Solution

The development of a digital solution to order printed ephemera was complicated by a number of limiting factors, the nature of which changed over time. Several design interactions and digital tools were considered in order to facilitate the research. Moving between digital solutions proved time-consuming but was necessary to refine the research as the methodology evolved. A range of solutions were considered and initially data was compiled into Microsoft Excel spreadsheets. As the research developed and the sample of ephemera grew in size, this solution became limited in its functionality for cross-referencing the data in a meaningful way. The methodology employed needed to cater for a number of variables and approaches including: ordering by document classes; classification by themes and categories; and measuring of typographic hierarchy. The opportunity to identify correlational patterns in the data was too complex a process to manage through a spreadsheet-based solution and a bespoke digital solution was advanced through the development of a FileMaker Pro database.

This solution was chosen because the software provides the tools to develop a database from a user perspective without any pre-requisite for knowledge of advanced programming languages. The software is user-friendly and well supported by the developers and associated online communities. FileMaker Pro is a cross-platform application that was developed for Apple users. It is built on a database engine that uses a graphical interface with drag and drop tools to assist the user, with integrated security features and online management tools. The first iteration of the database was limited in its design because it included both type specimens and trade directories alongside printed ephemera. The structure was reviewed to include separate database Tables for these elements, allowing the research to concentrate on the ephemeral documents but retaining the ability to cross-reference with the other material. A second phase of structural development was implemented in response to an opportunity to differentiate between document classes and the physical attributes that describe how the documents were used. When the changes were tested, it was apparent that the data for every item would require re-entry because the original document classes were input using check boxes that retained the original names of the data without overwriting the new information. While these developments

typified the constraints of working with a relational database and necessitated minor changes to its structure, they nevertheless highlight the problems of investing in a digital platform – in terms of allowing sufficient time for testing – before committing to a final solution.

5.4.   Possible Opportunities and Methodological Improvements

The new methodology and database tool presents other researchers with the opportunity interrogate ephemera using the three approaches: document classes; themes and categories; and typographic hierarchy and percentage. The current sample of ephemera from Birmingham and Bridgnorth may be of interest to typographic and printing historians, and can be shared in its present form to identify new patterns based on individual research interests.

The database tool can be searched in multiple ways to recall a diverse range of combinations, for example a historian focusing their research on 'Education' could use the database tool to search for printers producing educational ephemeral literature, or to identify what classes of documents were in use for educational purposes. Subsequently, the textual content can be studied to identify the client who commissioned the printed document or for evidence of historical events. An alternative application could be through the use of themes and categories to identify the style of typefaces that were in popular use for religious printed material. The sample can be interrogated to return findings on the use of individual typefaces or typefoundries, likewise it can be used for individual printers or addresses.

The tool can be populated with a new sample or extended to include ephemera identified by individual researchers. As an open access model sharing content under a creative commons license, the tool can be developed as a web based resource for contributers global to add to the ephemera resources. The database presents a potential alternative to the BBTI, presenting researchers with visual evidence and sample materials.

It is my ambition to advance the methodology with researchers from other disciplines – for example, scholars of literature, social and cultural history – to explore how it can be used outside the field of typography.

Economic factors were identified that limited the distribution of the FileMaker Pro database for other researchers to test online and advance this methodology. For other users to participate in extending the records, the database requires bespoke online hosting on dedicated FileMaker Pro servers, as the software was limited to two separate installations.

Presently, records from the database can be exported and shared in XML and Excel file formats. The database will be refined in the future in collaboration with a database developer and programmer. Improvements identified will include: identification of a range of preset search parameters and programming scripts to increase accessibility of the search tools for public users; and UX/UI testing of the database and interface.

The digital platform was a bespoke design to serve the purpose of exploring sans serif typography in printed ephemera but this can be adapted in the future to support the needs of other researchers. The relational database can be used without adaptation to explore other classes of typography in printed ephemera - for example, slab serif typefaces. With minor changes to the structure of the database, the digital platform can be used for other associated research. For example, a scholar researching material under the category of religious ephemera could create further subdivisions to order ephemera based on faith or religious movements, or could use the narrower terms for document types as these are editable text fields.

The current digital platform is limited to the study of printed ephemera through a FileMaker Pro database. In the future it will be developed to analyse typography used in other forms of ephemera, including digital ephemera by developing the platform as a nonrelational database (NoSQL).

Opportunities have been identified to develop this digital platform as a NoSQL format in conjunction with the Faculty of Computing, Engineering and the Built Environment at Birmingham City University, UK.[156] Moving away from the relational database format will enable greater flexibility in how the data are organised and used by other

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156   A scoping exercise within BCU has begun to identify resources for the development of a NoSQL database. This includes consultation with Dr Ian Williams, Head of the Centre of Digital Media Technology (DMT), whose research interests include Computer Vision and Human Computer Interaction (HCI), and Dr Shereen Fouad, who specialises in the fields of Machine Learning, Medical Imaging Analysis and Data Analytics for Cybersecurity applications.

researchers. A nonrelational database utilises a flexible schema that is not reliant on separate data Tables. The current database build relies on the use of several look-up Tables to validate information. For example, in the main ephemera sample, data from the type specimens Table were used to show the date when the sans serifs in the documents were first presented and the name of the foundries that produced them. If another researcher is interested in ordering the data using new themes and categories or including additional document types, this relational model requires a redesign and inputting of data each time a new category structure is required. A NoSQL-based platform facilitates handling of a large volume of data that is optimised for 'intuitive development and horizontal scalability'.[157]

A short-term aim to enable other users to test the methodology is to develop the platform by migrating the data to a searchable smart phone and Tablet prototype. Using the existing relational database with the FileMaker Pro software, a prototype could be run on Apple devices through free software from the developers, accompanied by a supporting guide developed to aid users in exploring the database.

A focus group could be developed with a group of researchers from different historical interests, including typographic, cultural, design and economic historians. This group would include an expert in User Experience (UX) and User Interface (UI) design from the School of Computing, BCU, to test the prototype and identify opportunities and limitations of the existing methodology for other researchers.

The second phase would be to develop the methodology through the design of a nonrelational database with a web interface, allowing users to interrogate and add to the data online. Such a data model presents opportunities for incorporating machine learning. Machine learning is a form of Artificial Intelligence (AI) that uses a method of automating data analysis, a common feature in visual analysis and image classification. This would be of benefit for automating how researchers can identify typefaces used in ephemera, and for measuring the percentage and typographic hierarchy of ephemeral documents.

There are examples of web-based solutions that use machine learning for typography. The consumer smartphone app *WhatTheFont* by the MyFonts digital foundry uses deep learning to identify typefaces

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157   AWS, 'What is NoSQL?', *Amazon Web Services*, (Online: Amazon, 2021) <https://aws.amazon.com/nosql/> [accessed 1 June 2021].

from the Monotype library. Users upload a photograph of the typography that they are trying to identify and the database uses an image classification model to map the typeface against other examples that it has learned from user uploads. It then presents results based on the closest alignments to the typefaces recorded in the Monotype libraries. *WhatTheFont* is a useful tool in making comparisons with contemporary typefaces but it does not consider founders' type as presented in historical Type Specimens. As a commercial tool, the workings for the *WhatTheFont* code are undocumented in the public realm.

Alternative learning models using machine learning for font classification have been publicly documented within the open source community.[158] In developing an image classification model for typography, the existing data from 729 ephemera records and 850 records of sans serif typefaces from Type Specimens can be used to teach the platform how to identify historical typefaces and measure typography usage within an ephemeral document.

Using machine learning there are opportunities to deploy this new methodology within design and creative software applications. Through integration of a deep learning database into other graphic design software tools, the data can be used to educate designers about the historical context in which different typography was originally used. Expanding on this concept through an automated design solution, the data could be used to provide designers with recommendations for different layouts and typographic compositions, including alternative document formats to best utilise their design ideas based on their choices of typography.

Several opportunities exist for making improvements towards the implementation of these new research methods. These include developing focus groups to advance the use of this method by other researchers; prototyping and testing; and technical development of the platform through a NoSQL database incorporating machine learning. In its present form as a relational database model, the digital platform presents researchers with different ways to explore the methodology – for example, with the addition of new sub-categories as text fields – and opens up new areas for scholarly investigation.

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158 Alina Zhang, 'How to Build Deep Learning Models for Font Classification with TensorFlow: CNN, Deeper CNN, Hidden Layers Models', *Data Driven Investor* (Online: Medium, 2021) <https://medium.datadriveninvestor.com/how-to-build-deep-learning-models-for-font-classification-with-tensorflow-cnn-deeper-cnn-hidden-e5a4ef716308> [accessed 1 August 2021].

Table 6.1 Ratio of Printers in the Midlands to the Average Population 1821-51.

County	1821	1831	1841	1851	Average Population	Printers	Ratio
Warwickshire	284,097	346,297	409,138	479,979	379,878	889	1:427
Herefordshire	87,643	94,452	96,515	99,112	94,431	103	1:917
Leicestershire	178,384	200,610	220,304	234,938	208,559	193	1:1081
Lincolnshire	233,628	311,903	256,226	400,266	300,506	272	1:1105
Worcestershire	174,708	203,476	230,387	258,762	216,833	195	1:1112
Staffordshire	361,859	425,140	528,867	630,506	486,593	405	1:1201
Derbyshire	186,449	208,841	239,791	260,707	223,947	175	1:1280
Shropshire	215,058	230,990	241,685	245,019	233,188	181	1:1288
Rutlandshire	20,435	21,363	23,151	24,272	22,305	9	1:2478
Nottinghamshire	203,939	243,875	270,731	294,438	253,246	86	1:2945
Northamptonshire	160,933	177,946	199,208	213,784	187,968	41	1:4585
Total	**2,107,133**	**2,464,893**	**2,716,003**	**3,141,783**	**2,607,454**	**2,549**	**13**

6.   Birmingham and Bridgnorth as Case-Studies

Nineteenth-century jobbing printers played an important role in the progress of British printing. In the skilled hands of the provincial printer, new display types were composed into new forms of advertising, contributing to the education and societal orientation of the emergent middle classes. Midland jobbing printers contributed to the advancement of British typography, working with new foundry types – sometimes before their appearance in foundry specimen books – and making significant innovations in the composition of printed ephemera.

To understand the development of jobbing printing within the region, it is important first to consider the context of printing within the Midlands. Evolving from the ancient region of Mercia, the English Midlands extends west to the Welsh borders, east to Lincolnshire, north to Derbyshire, and south to Bedfordshire. It included eleven counties with 164 townships, each with their own community of printers and corresponding trade networks.[159] To address the issue of scale, a quantitative survey was undertaken to establish how many printers were operating in the region. Analysis of the data showed that there were over 2,549 printers in the Midlands between 1816 and 1851 (Table 6.1). In order to make a meaningful study of the sans serif in printed ephemera, this research focused on two towns. The town of Birmingham in Warwickshire was identified as a leading centre of printing activity, based on the number of recorded jobbing printers in relation to the total population. A selection of the town's ephemera was subsequently made to test out a new methodological tool for exploring typographic hierarchy. Bridgnorth in Shropshire was selected as a secondary case-study as a small rural industrial market town with a thriving print culture.

The Bridgnorth case study was interrogated to test out the methodology using a smaller town and represented an alternative

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159   Data from the BBTI and census records were analysed to show the number of printers to inhabitants of the Midlands townships between 1816 and 1851. (Table 6.1).

location in the Midlands. It is acknowledged that as a secondary case-study, the sample of ephemera collected was smaller than that of Birmingham, the latter being the primary concern for this research. The Bridgnorth case-study was used to test the development of themes and categories, to see if these labels could work across both a industrial metropolis and a rural town.

Before focusing on the analysis of the selected printed material, it was important to consider the roles of Birmingham and Bridgnorth within the wider context of printing in the Midlands. Birmingham was an example of a large industrial town and Bridgnorth in Shropshire was an inland trading port. These towns were first selected as case-studies based on the volume of typographic activity, the numbers of printers, and their contrasting social, economic and industrial profiles. To show the volume of printing activity in Birmingham and Bridgnorth, survey data including gender, family and business partnerships, were measured against the recorded populations for each town in Warwickshire and Shropshire.

6.1.   Midland Printers Recorded in the BBTI

Nineteenth-century trade flourished in the Midlands through the exchange of goods that were transported across the region's canals, turnpikes and rail networks. Increasingly commerce and industry needed to connect with suppliers, customers and competitors, and this stimulated a revolution in the way businesses communicated through print. Printed products also contributed to the region's social, cultural, political, and economic life through advertising material and other forms of printed communication which were produced by a rising number of 'jobbing printers' who increasingly issued commercial and display work rather than books or newspapers.[160] The nineteenth-century Midlands printing trade comprised a large network of small-scale jobbing print shops which coexisted economically, sometimes collaborating on work

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160   Jobbing printers focused on commercial work such as advertising as opposed to printing books and newspapers.

and sharing their resources.[161] The nature of what they produced, and the design of what they printed, transformed how information and ideas were exchanged: the ephemera that have survived record these changes.

This research is concerned with the deployment of sans serif typefaces by jobbing printers in the Midlands. The scope of this study is between 1816 and 1929. The British Book Trade Index (BBTI) is a valuable resource that records the book trade across the British provinces. Unfortunately, when the BBTI was first developed, its scope stopped in 1851. Subsequent additions to the BBTI include sources that continue into the late twentieth century. For this study, the BBTI was used to show the growth of jobbing printing between 1816 and 1851, alongside population data from the 1821-51 censuses, giving an indication of how many printers were operating in relation to the size of the communities for which they printed. The scope accommodates the key dates in the development of the British sans serif from its introduction by William Caslon IV in 1816, to its later evolution by British typefounders. The selected printers Joesbury (Birmingham) and G. R. Gitton (Bridgnorth) were operating during that time frame.

The BBTI was established in 1983 by Peter Isaac at the University of Newcastle. Between 2002 and 2005, it was developed as a web-based resource by Dr Maureen Bell and Dr John Hinks, at the University of Birmingham.[162] The BBTI records the names, brief biographical and trade details of people working in the book trade of England and Wales up to 1851. It also contains records of printers trading into the twentieth century, whose business activity began before 1851.[163] The BBTI is compiled from many published sources produced by academics, librarians and local historians, and reveals that between 1816 and 1856 there were 695 printers trading in the Parish of Birmingham alone. The BBTI catalogues printers across England and Wales by their trading addresses, both by county and township.

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161 Caroline Archer, 'Printing and the printed word', in: Malcolm Dick & Carl Chinn (eds.), *Birmingham: Workshop of the World* (Liverpool: Liverpool University Press, 2016), pp. 261–82; Caroline Archer-Parré, 'Places, spaces and the printing press: trade interactions in Birmingham', *Midland History* 45 (2020), 144-159; J. Hill, *Bookmakers of Old Birmingham: Authors, Printers and Book Sellers* (Birmingham, 1907).

162 The BBTI was hosted at the University of Birmingham until 2014 and is now hosted by the Bodleian Libraries in Oxford.

163 Records after 1851 are limited; for example, the Birmingham-based printers Hudson & Co. began trading in 1851 and concluded in 1988. There is added value for future research in extending the range of the BBTI. University of Oxford, 'Hudson & Son', *Bodleian Libraries* (Online: University of Oxford, 2016) <http://bbti.bodleian.ox.ac.uk/details/?traderid=35715> [accessed 12 September 2019].

The BBTI contains many duplicate entries. Additionally, search results using the web portal can return several links to the same record. To eliminate duplicate search results, individual records needed to analysed before the data could be interrogated. To preserve the integrity of the original data, separate counts were taken for printers who were recorded with different trading dates, for records relating to individual printers and business partnerships (commercial and family interests), and for printers with different spellings of their surnames. A sample count was taken over a decade, with the census year as the centre point; for example, the 1821 census was matched against BBTI trade dates from 1816-25. An average was calculated from the population data of the censuses for 1821-51. This was compared to the total number of printers recorded in the BBTI between 1816 and 1856, to show the ratio of printers per population for the eleven Midlands counties.

Using datasets from the BBTI, Maureen Bell and John Hinks examined the relationships between booksellers and printers in industrial and non-industrial towns between 1700 and 1848. Their work on the English provincial book trade highlighted the rising numbers of printers and evidenced a decline in the number of booksellers, identifying a surge in the number of provincial printers in industrial towns after 1775, and later in non-industrial towns after 1800.[164] This coincides with the growth of populations in industrial towns and the rise of commercial printing through jobbing work, as reflected in the printed ephemera of Birmingham and Bridgnorth. The ratio of printers to the average population between 1821 and 1851 shows which counties in the Midlands had the highest number of printers operating (Table 6.1).

The BBTI data support the choice of Birmingham as a case-study for this thesis. Warwickshire had the highest average ratio of printers per population, with one printer to 427 people, and between 1821 and 1851, it showed the second largest increase in population (by 195,882). Northamptonshire had the lowest average ratio of printers per population, with one printer to 4,585 people, with the fourth lowest population increase of 52,851 people, and the third lowest average population of 187,968.[165] On a county level, the rise in population does not always reflect

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164 Maureen Bell & John Hinks, 'The English Provincial Book Trade: evidence from the British Book Trade Index', in: *The Cambridge History of the Book in Britain, Volume. V, 1695-1830* (Cambridge: CUP, 2009), pp. 335-351.

165 The average population of Hereford in 1821-51 is just above Rutland, which was the smallest county in the UK.

a higher proportion of printers in the community. Staffordshire had the largest population increase of 268,647, but it presented the sixth lowest average ratio of one printer to 1,201 people. Shropshire had the fourth lowest ratio of one printer to 1,288 people and showed the third lowest population increase of 29,961.

6.2. Nineteenth-century Birmingham

By the nineteenth century, Birmingham had made outstanding contributions both to the Enlightenment and the Industrial Revolution. Its geographical connection to the Black Country and surrounding towns positioned Birmingham at the economic heart of the West Midlands, making it an important centre in the global economy. Its reputation was built on manufacturing, politics, religion, social reform and cultural activity. The town saw rapid expansion during the early nineteenth century and both its economic success and growing reputation attracted migrant workers. Between 1801 and 1851, its population grew from 75,000 to 247,000 and in the second half of that century it doubled in size to 522,000 inhabitants to become the second largest urban centre outside London.[166] Known locally as the 'Midland metropolis' and celebrated as the 'city of a thousand trades', its industry was built on metalworking, including the trades of gunsmiths and jewellers, and other specialist craftsmen involved in the production of small-wares such as nails, screws, buttons, pins and nibs.[167] Birmingham wares were famous around the world, they contributed towards the town's economic expansion, causing it to be celebrated as the 'workshop of the world'.[168]

Birmingham's industry depended on small-scale workshops and the ingenuity and enterprise of skilled artisans. With a diverse workforce and over five-hundred classes of trade, the town had a unique economic advantage which fostered an elasticity between trades to diversify their

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166   Simon Gunn, *The Public Culture of the Victorian Middle Class: Ritual and Authority in the English Industrial City: 1840–1914* (Manchester: Manchester University Press, 2008), p. 11.

167   Catherine Hall, *Civilising Subjects: Metropole and Colony in the English Imagination 1830-1867* (Cambridge: Polity Press, 2002), p. 21; Maxine Berg, 'Commerce and creativity in eighteenth-century Birmingham', in: M. Berg (ed.) *Markets and Manufacturers in Early Industrial Europe* (London: Routledge, 1991), p. 181.

168   Asa Briggs, *Victorian Cities* (London: Penguin Books, 1968), p. 184.

Table 6.2. Number of Printers in Birmingham and Bridgnorth by Census Year.

Place	Census	Male	Female	Family Businesses	Non-family Businesses	Total	Population	Ratio
Birmingham	1821	131	4	7	14	156	85,416	1:548
	1831	264	4	10	31	309	110,914	1:359
	1841	318	6	16	32	372	138,215	1:372
	1851	299	2	20	26	347	173,878	1:501
Average Total		**568**	**11**	**33**	**83**	**695**	**127,106**	**1:183**
Bridgnorth	1821	3				3	4,201	1:1400
	1831	3	2			5	4,952	1:990
	1841	2		1	1	4	5,974	1:1494
	1851	3			1	4	5,972	1:1493
Average Total		**6**	**2**	**1**	**1**	**10**	**5,275**	**1:527**

output in collaboration with other small manufacturers, and to respond to and initiate new business opportunities, contributing to the town's spirit for innovation.[169]

Through its small workshops, Birmingham expanded as a centre for regional trade and artisan enterprise, facilitating the manufacture of 'Brummagem' wares and small-ware industries. In contrast to other industrial towns such as Manchester, Birmingham's small workshop culture engendered a closer link between men and masters, bringing together a shared philosophical cohesion. Birmingham's small workshops were populated by a small group of workers who used hand rather than steam power to operate presses, stamps and lathes.[170] Smaller workshops also led to opportunities for social mobility, with self-employed journeymen becoming their own masters.[171]

Social mobility was encouraged in the city, with an emphasis on education, and the printing trade was no exception. The development of apprentices was supported through educational events, including the lectures at the Birmingham & Midland Institute to members of the Birmingham Typographical Association. Initially drawing comparison with the work of blacksmiths, Walter Phelps demonstrates a commitment to and investment in young printers, to 'teach them to execute their work in an artistic manner'.[172] Women and children were employed in the printing industry during this period, often engaged in work considered unsuited for men, such as folding.[173] Outside of menial work, there were eleven female printers recorded as being in business in Birmingham between 1821 and 1851 (Table 6.2).

The array of associated trades and the small scale of production created a demand for – and attracted – a skilled artisan labour force. The specialist knowledge of Birmingham's workers generated higher wages for its people, in contrast with the factory workers of Manchester. The cost of labour was relative to that of capital (raw materials); the cheaper the capital (as in the industrial cities built on coal fields), the higher the

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169   *Ibid*, p. 186.
170   Paul Leslie Line, *Birmingham: A History in Maps* (Cheltenham: History Press Limited, 2011).
171   Edward Palmer Thompson, *The Making of the English Working Class* (London: Penguin Books Limited, 2002). In Birmingham 'every kind of variant is to be found, from the large work-shop through innumerable mazes of small shops and self-employed journeymen'.
172   'Art Education for Printers', *Birmingham Daily Post*, 2 December 1889.
173   'Printers and the Factory Acts', *Birmingham Daily Post*, 21 January 1888.

wages.[174] Birmingham was one of those towns, applying its cheaper coal to industrialised processes. The economy of the town expanded through metal-refining and fabricating industries, resulting in high-paid labour for a skilled workforce.

An economy of higher wages determined the social priorities of the industrialised town's workers. In Birmingham, this is reflected in the development of friendly societies, as opposed to trade unions, with an emphasis on education and better living accommodation. At the start of the nineteenth century, Birmingham's families lived and often worked independently in separate houses, with political representation by like-minded liberal politicians leading to the Civic Gospel of Birmingham under the administration of Joseph Chamberlain [1836-1914]. In 1866, in his opening speech for Birmingham's Free Reference Library, the Reverend George Dawson commented that a 'town like this exists for moral and intellectual purposes'.[175] By the end of the century Birmingham's reputation meant that it was regarded as the 'best-governed city in the world'.[176] These factors contributed to the attractive possibilities for social mobility in the town, where men could become masters.

A large proportion of the town's ephemera was political. The political landscape of Birmingham, transforming it from a Midlands town to a metropolitan city, was shaped by the unique voices of its inhabitants.[177] The town gained political representation under the Great Reform Act [1832] with the later creation of a municipal borough [1838]. Edward Palmer Thompson discusses the political unease in the early nineteenth century between London and the industrial metropolises of Birmingham, Manchester and Leeds, whose Dissenters included some of the largest employers whose 'attachment to civil and religious liberty went hand in hand with their attachment to the dogmas of free trade'.[178] Lack of political representation of the industrial centres (in London), culminated in the Reform Act of 1832 and the Chartist Movement [1836-48].

Thomas Attwood [1783-1856] was a principal player in lobbying Parliament for the rights of the working classes. A local man (born in

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174   Robert Allen, *The British Industrial Revolution in Global Perspective* (Cambridge: Cambridge University Press, 2009).

175   Tristram Hunt, *Building Jerusalem: The Rise and Fall of the Victorian City* (London: Orion, 2010), p. 313.

176   Julian Ralph, 'The Best-Governed City in the World', *Harpers Monthly* (London: Harpers Monthly, 1890), pp. 99-110.

177   Birmingham gained city status in 1889.

178   Edward Palmer Thompson, (2002), p. 57.

Halesowen), son to industrialist Matthias Attwood [d.1836], he followed his father's secondary interest into banking.[179] A leading radical economist, he founded the Birmingham Political Union (BPU) in 1830, and as a follower of non-violent methods, steered the BPU at the forefront of the reform campaign. Attwood amplified the voices of the people of Birmingham, successfully gaining parliamentary seats for the new industrialised centres, redressing the inequalities between the large under-represented populations of the metropolises and boroughs controlled by landed gentry.

The Quaker industrialist John Bright [1811-71] continued the work of Attwood. He was welcomed, without opposition, as the MP for Birmingham in 1858. Previously, as an MP for Manchester, Bright, in partnership with Richard Cobden [1804-65], had founded the Anti-Corn Law League, which succeeded in opposition to Robert Peel's conservative administration in finally repealing the Corn Laws in 1846. Bright represented Manchester in Parliament until 1857, when his radical views towards the Crimean War set him in opposition to the local electorate. He went on to serve the people of Birmingham for thirty years, advancing political reform for the working classes.

Catherine Hall has argued that the idea of empire was at the heart of nineteenth-century Englishness, exploring nineteenth-century Birmingham and its non-conformists as a case study. Hall's research focuses on colonial, racial, gender, political and social history, concluding that Birmingham was 'not an imperial city in any conventional sense, yet the town was imbricated with empire'.[180] Radicalism is central to the narrative of Birmingham in the nineteenth century, manifesting itself through causes progressing the common good and changing social structures.[181]

These radical ideas and new political doctrines contributed to the rise of Birmingham from town to city status. The political landscape was well recorded in surviving examples of printed ephemera, revealing a first-hand insight into how these messages were communicated and the typography used to present these new ideals.

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179   'A fortune from steel converting, the manufacture of nails, and the sale of Swedish iron'. Thomas Southcliffe Ashton, *Iron and Steel in the Industrial Revolution* (Manchester: Manchester University Press, 1968), p.230.

180   Catherine Hall, (2002), p. 21.

181   The town is associated with the work of religious men and political mavericks: the Quaker missionary and abolitionist Joseph Sturge; the evangelist minister and writer John Angell James; the theologian, non-conformist and liberal Robert William Dale; the preacher and lecturer George Dawson; Liberal politician John Bright; and the Liberal Imperialist Joseph Chamberlain. Radicalism in Birmingham contributed to the abolition of apprenticeship, and well as giving impetus to the anti-slavery movement and the Civic Gospel.

6.2.1. Birmingham Printers

There is no singular typeface that is representative of Birmingham in the nineteenth century. In the city of a thousand trades, jobbing printers used many new display types to represent its businesses, products and ideas to the world. The BBTI lists printers with various secondary book-trade occupations, such as auctioneer, bookbinder, bookseller, engraver/etcher, librarian, printer (apprentice and journeyman, copperplate and lithography, newspaper, law, music), publisher, paper merchant, and newsagent. This diversity of occupation is identified by Asa Briggs as one of four key traits that made Birmingham important during the second half of the nineteenth century, alongside its small workshops (as opposed to large factories), its skilled labour force, and the social mobility within the city.[182]

The town's traders needed to exchange information with each other, and goods and ideas had to be promoted both at home and abroad; in addition, the town needed to communicate not only with an expanding domestic population but also with the world beyond its boundaries.[183] This increase in industrial productivity and social activity stimulated a demand for printing and a commensurate growth in the number of jobbing printers.

As recorded in the BBTI, between 1816 and 1851 there were 693 printers operating in Birmingham. This included 388 intaglio printers, indicated by the terminology in the BBTI as copperplate printers. Some of the printers were also engravers, whilst others were offering lithographic printing. For example, the printer Anthony Johnson is recorded as trading between 1832-50, as an engraver/etcher of maps, a copperplate printer, a lithographer, and as a letterpress printer. The majority were probably letterpress printers as this was the predominant printing technology of the period.[184] The town had a particularly high proportion of engravers, who applied their skills to promote the town's wares and manufactories particularly through the production of 'Trade Cards' and 'Trade Directories' (Table 3.11 Warwickshire Printers 1816-1916 from BBTI, in Appendix 3, p. 65).

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182   Asa Briggs, (1968), p. 186.
183   Erik Hobsbawm, *The Age of Capital 1848–75* (London: Abacus, 2010), p. 67.
184   'Letter', in: *Birmingham Printers* (Oxford: Bodleian Library) <http://bbti.bodleian.ox.ac.uk> [accessed 20 March 2020].

6.2.1.1. Wrightson & Webb

Wrightson and Webb, publishers of the *Directory of Birmingham*, were located in the 'Athenaeum' works on New Street in the centre of the town, where they traded as bookbinders, booksellers, stationers, printers, account-book manufacturers, copperplate printers, letterpress printers, wholesale paper merchants and publishers. The trade directories of Wrightson & Webb are typographically notable, but their 1847 *Directory* was a typographic departure from previous editions.[185] The printing is well-executed and its application of new display faces demonstrates the printer's awareness of new trends. The full-page advertisements explore new approaches in the use of visual hierarchy, and the traditional linear method of reading is disrupted by bold sans serif types emphasising the manufacturers' trade names and directing the reader's attention to the message. Other directories of this period are typographically more arbitrary – a characteristic of jobbing printing – selecting founts based on availability rather than suitability. In their full-page advertisements Wrightson & Webb used sans serif typefaces to reinforce key information, thereby enabling a quick reading of the text.

This new use of visual hierarchy and information design was employed to great effect by the Birmingham printer William Joesbury, in his printing of William Watton's educational 'Charts'. Joesbury and Watton are both listed in the directory as Printer (Letterpress) and Schoolmaster respectively.

6.2.1.2. Watton and Joesbury

This new use of visual hierarchy and information design was also deployed to great effect by the Birmingham printer William Joesbury (1815–92), in his printing of Timothy Watton's educational 'Charts'. William Joesbury was the son of local engraver Joseph Joesbury (1795–1858). William was a wholesale stationer, bookbinder, copperplate printer, engraver/etcher, librarian, circulating library owner, bookseller, and letterpress printer. He also acted as a commercial agent, printing and selling tickets and bills for travel excursions. Joesbury traded variously from Vauxhall Street and

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185   Cadbusy Research Library, DA690.B6. Wrightson & Webb, *The Directory of Birmingham; including an alphabetical list of the principal inhabitants of the town* (Birmingham: Wrightson & Webb, 1847).

Aston Street and operated under several business names, including the Styled Eagle Press (1850–59), Joesbury's Steam Press (1859–89) and finally in partnership with his son, Franklin, as Joesbury & Son (1889–1919).[186] The business was finally taken over by Robert Aldred Marshall in 1881.[187]

Timothy Worsey Watton (1811–99) was master of King Edward's School, Gem Street. A gentleman of note, Watton was recorded in several local directories of the period, including Wrightson & Webb's *Birmingham Directory* (1847) and Francis White & Co.'s *History, Gazetteer, and Directory* (1850). Watton was the author of ten historical 'Charts' which were printed by Joesbury in Birmingham and circulated by Whittaker and Co., London, and Oliver and Boyd, Edinburgh. A review in the *Liverpool Mercury* of October 1849 claimed 'no Library should be without one, as at a trifling expense, it supplies an important work of ready reference, giving data from the Creation to the present time'.[188] The sheets were folio size, sold for 4*s* per set in stiff covers, or 6*d* per chart, and they were advertised in 'large type' adapted for class teaching and private use.

A precursor to Watton's educational 'Charts', was the publication of Major James Bell's fifth edition of *A View of Universal History*, printed in 1842 by T. C. Hansard, London. In twenty-five large-scale coloured chronological Tables, Bell attempted to map out the major achievements of all human history, literature and art across the continents. Bell's use of bold types for emphasis replaced the earlier tradition of using Old English characters. To present this complex data, Bell designed new ways of organising tabular information, by grouping information both vertically and horizontally, and using contemporary display types for non-linear reading and quick reference. Intended for use in his own lectures and for educational purposes, Bell introduced a variety of typographic styles to 'afford greatly increased Advantages of Attraction to Vision, and consequent Impression on Memory'.[189] Bell's complex system for connecting chronological and historical information is easy to read through its use of sans serif types for emphasis. The text follows a logical structure, using a consistent weight of sans serif type for key information, enabling the eye to move across the page at speed, travelling between points of interest and returning to make connections between the information found. Bell's use of 'variegated forms

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186   'Joesbury', in: *Birmingham Printers* (Oxford: Bodleian Library), <http://bbti.bodleian.ox.ac.uk> [accessed 27 March 2020].

187   'Notices', *London Gazette*, 21 June 1881.

188   Timothy Watton, (1848), caption from bookplate.

189   Major James Bell, *A View of Universal History, fifth edition* (London: Hansard, 1842), p. 9.

of types' was sculptural and the contrasting styles and weights of display faces created a three-dimensional effect on the page. Hand-colouring was introduced in his fourth edition, in order to improve the 'Faculties to Memory, Rapidity of Reference, and Study'.[190] Bell's Tables were a key innovation in the development of information design and the use of bold types facilitated speed of reading and reference.

Watton's educational 'Posters' take cues from Bell's Tables. Produced for use as teaching aids in the classroom, Watton's *Outline Charts of General History* (1848) featured the early sans serif printing types from the London foundries of Blake & Stephenson and Vincent Figgins. Watton's 'Charts' were inspired by the visual hierarchy found in printed advertising with its bias for sans serif headings. The 'Charts' were forerunners of the educational publishing experiments at the end of the century when display types were used to enable children, when learning to read and write, to make stronger visual connections through simple letterforms.[191] The generous use of white space employed in the 'Charts' was a departure from the density of information presented in Bell's educational Tables. The 'Charts', intended to be used as 'Posters' in the classroom, reflect the open visual hierarchy used in advertising 'Posters', in a streamlined presentation of key dates and events which were regarded as foundational knowledge by Watton. By transferring the compositional structures of advertising into the classroom, Watton and Joesbury contributed to the advance of the field of educational publishing.

Amongst the sans serif typefaces that Joesbury deployed in Watton's educational 'Charts', was English Two Line Sans-Surryphs, a second variant of the first-ever sans serif Two Lines English Egyptian produced by William Caslon IV in 1816. (Figure 6.1).[192] Here 'English' refers to the size of the type, which is equivalent to twenty-eight points. English Two Line Sans-Surryphs was used by Joesbury to differentiate between sub-headings and historical categories. This is a scarce and early example of sans serif types being used as part of an integrated and considered design across a complete set of educational material, as opposed to being used in isolation as a typographic novelty. It is also rare evidence of Caslon's sans serif types in use. The 'Charts' are, therefore, of great significance.

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190   *Ibid*, (1842), p. 9.

191   Sue Walker, (2007), p. 84.

192   St Bride Library (SBL), Accession no. 6027, Blake, Garnett and Company, *A specimen of printing types, etc. by Blake, Garnett and Co.*, successors to Mr W. Caslon, of London, 1819.

ENGLISH TWO LINE SANS-SURRYPHS.

FLOWERS DRAWN FROM NATURE.
BEAUTIFUL VARIETIES.
DIAMOND POCKET DICTIONARY.
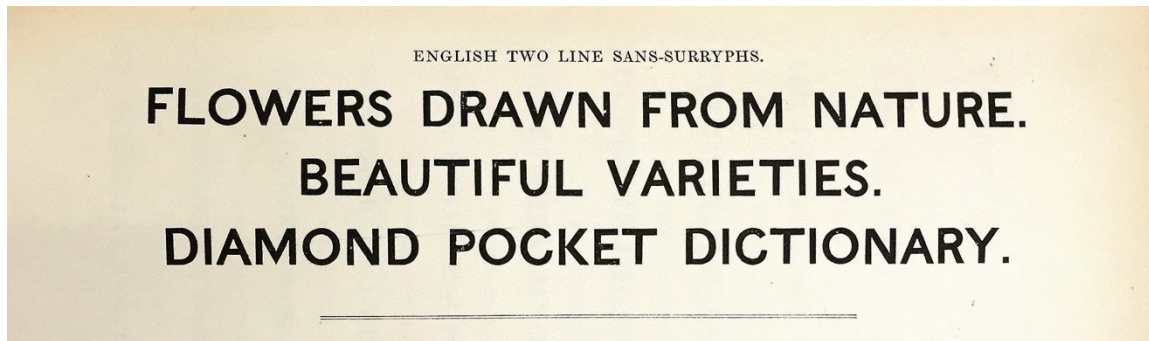
Figure 6.1 English Two Line Sans-Surryphs, Blake, Garnett & Company, 1819. SBL.

Figure 6.2 'A Geographical Outline of England and Wales', *Outline Charts of General History*, Timothy Watton, 1848. CRL.

In Watton's chart for a 'Geographical Outline of England and Wales' the main headings were set in Blake & Stephenson's Double Pica, no.2, a two-line fat face, with extreme contrast between the thicks and thins of the vertical strokes.[193] For the subheadings Joesbury complements the heavy weight of the fat face types with Figgins's Two-Line Great Primer of 1832.[194] This bold and geometric uppercase sans serif was applied to descending levels of headings, and used to great effect to guide the reader through the different levels of information. Blake & Stephenson's Nonpareil Two Line Sans-Surryphs (12 point) and the larger sized English Two Line Sans-Surryphs (28 point) were also used to great effect to draw attention to important information and were balanced by a condensed sans serif Bourgeois Two Line Condensed Sans-Surryphs (9 point) that added weight to the composition and guided the eye across the chart (Figure 6.2).[195]

In 1854, John Tonks of New Street followed Joesbury's use of space in a programme of musical entertainment at the Town Hall. Promoting two grand concerts performed by the celebrated French conductor Louis Jullien, Tonks used uppercase sans serif types and white space to give emphasis to the leading artists. These techniques were refined and advanced by other local printers. Frederick Turner, printer, bookseller and cheap music warehouse at 3 Snow Hill, used Blake & Stephenson's Ten Lines Sans-Surryphs Ornamented (1839), in his 'Playbills' for the Theatre Royal.[196] Turner's use of this sans serif dominates the composition of the playbill. An uppercase wooden type, 120 points in size (approximately four centimetres), drew the viewers' attention to the names of the leading actors. Unlike other sans serifs, Ten Lines Sans-Surryphs Ornamented was decorated with a series of concentric lines that created the illusion and weight of a three-dimensional form.

Watton and Joesbury continued their interests in education. Watton enrolled Gem Street School as a member of the College of Preceptors. The college was founded in 1846, dedicated to raising the standards of secondary education and regulation of pupils' examinations. Aged fifty-nine, Watton was listed in the 1871 census as a retired schoolmaster, and in 1881 as a school publisher. Living in Handsworth, Joesbury became a respected member of the community and one of financial means, making regular donations to several educational charities and participating in school boards.

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193   SBL, Accession no. 20268, Stephenson, Blake and Company, *Specimen of printing types*, 1832.
194   SBL, Accession no. 22224, Vincent Figgins, *Specimen of printing types*, 1832.
195   SBL, Accession no. 20262, Stephenson, Blake and Company, *Specimen of printing types*, 1838.
196   British Library (BL), General Reference Collection DRT Digital Store Playbills 193, *A collection of playbills from Theatre Royal, Birmingham*, 1845.
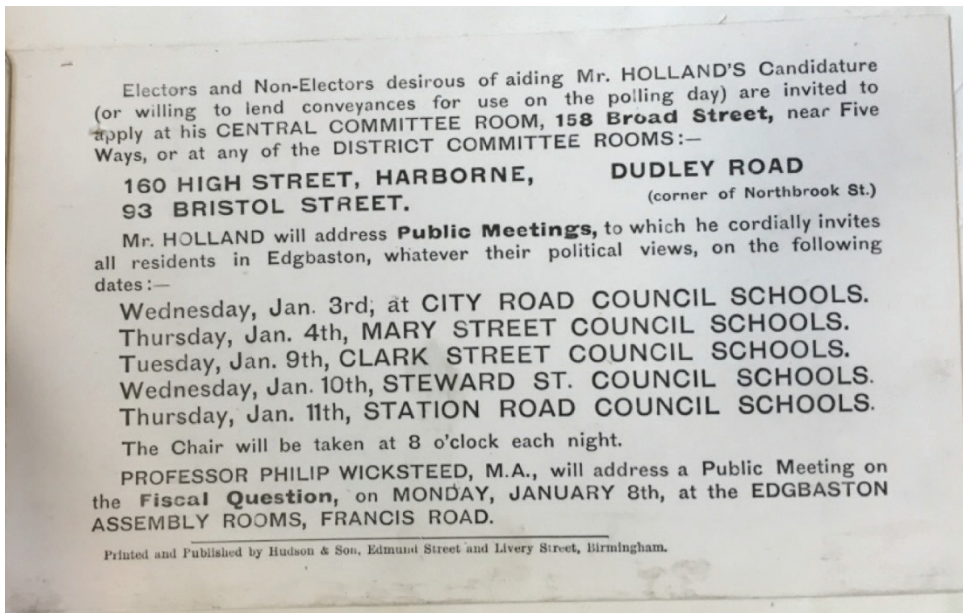
Figure 6.3 'Lionel Holland', invitation card, Hudson & Son, Birmingham, 1906. LOB.

6.2.1.3.   Hudson and Son

Hudson & Son (1851-1988) used sans serif typography across a broad variety
of printed ephemera, including a wide collection of political ephemera,
newspapers, booklets and maps. They are a rare example of early
nineteenth-century printers and booksellers whose business interests
continued into the late twentieth century.

In 1821, Benjamin Hudson (1797-1875) set up his printing press and
bookstore in Bull Street, Birmingham, regarded as a prime retail location
in the town.[197] A supporter of Birmingham's political dissenters, Hudson
published the *Philanthropist* (1837-41) newspaper for the Liberal Party.
An advertisement in E. Edwards' *Personal Recollections of Birmingham and
Birmingham Men* (1877) presented Hudson & Son as the 'oldest bookshop
in Birmingham', from which it was also operating as a steam printing
office.[198] Hudson & Son later printed from Edmund and Livery Street,
publishing *Spurrier's Cyclist's Handbook* (1881) and *Sport and Play* (1887). Both
publications used a wide variety of sans serif typefaces for headings and
advertisements.

Hudson & Son's political allegiances to the Liberal Party continued
into the early twentieth century, printing campaign literature for the
Liberal and Labour candidate Eli Bloor in 1892, Walter Priestman in 1895,
and Hirst Howell in 1904. The sans serif was heavily used by Hudson &
Son's in the production of political ephemera. Later examples show the
ascendancy of the sans serif; for example, an invitation card for Lionel
Holland of 1906, was entirely printed using sans serifs, with the exception
of the printer's name (Figure 6.3).

By the mid-twentieth century, Hudson & Co. had furthered their
interests as booksellers, managing shops across Birmingham, including
their main store on New Street that connected through its basement to
their shop on Stephenson Street.[199] With a dedicated map shop in their
New Street premises, they extended their publishing interests into
maps and guidebooks. The cover of *Hudson's Motoring and Cycling Map*
(1960) was printed by Hudson & Son and the folding map it protected

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197   Edwards described the location of Hudson's bookshop as being on the 'principle street in
Birmingham for retail business'. E. Edwards, *Personal Recollections of Birmingham and Birmingham
Men* (Birmingham: Midland Educational Trading Company Limited, 1877), p.3.

198   E. Edwards, (1877), p. 75

199   David Grain, 'Hudson's book shops', *Birmingham History Forum* (Online: Birmingham History
Forum, 2017) <https://birminghamhistory.co.uk/forum/index.php?threads/hudsons-book-
shops.45893/page-2> [accessed 9 November 2019]

was by Bacon & Co., London. By 1962, there was a Hudson's bookshop on campus at the University of Birmingham. The company ceased trading in 1988, leaving a legacy of printed ephemera.

6.3.   Nineteenth-century Bridgnorth

Bridgnorth was an inland river port located to the east of South Shropshire. A small town with a long history, it formed around a nearby bridge at Quatford over the River Severn, and dates back to early Viking occupation in 895.[200] In 1101, under Norman rule, Bridgnorth was chosen as a military base by Robert de Belleme, Earl of Shrewsbury, who built a castle there.[201] In 1664, it became a royalist stronghold during the English Civil War.

The wealth of the town was built on its trade around the River Severn and its markets. During the mid-nineteenth century it was a middle-sized market and commercial town with an average population of 5,275 people. It was divided by the River Severn into the wealthy parish of St Leonard's in the high town with its market place and St Mary's on the river in the low town.

As a major inland port for the transport of goods between Pool Quay in mid-Wales and the sea port of Bristol,[202] Bridgnorth was the largest inland port in Europe.[203] It was a centre for boat building, supplying trow boats that plied to Ironbridge and Shrewsbury in the north, transporting coal from East Shropshire, and pottery and cheese from the Trent valley.[204] Both Bridgnorth and Shrewsbury were well connected to feeder road networks, facilitating the outbound trade of wine, cloth, groceries, tobacco and non-ferrous metals from Bristol to the north-west Midlands, and raw materials such as white

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200   About Bridgnorth, 'Bridgnorth : A Brief History', *About Bridgnorth* (Online: About Bridgnorth, 2012) <https://www.aboutbridgnorth.com/history-of-bridgnorth-2> [accessed 2 February 2020].

201   Sarah Anne Lewis, 'An historical and geographical study of the small towns of Shropshire, 1600-1830' *unpublished PhD thesis* (Leicester: University of Leicester, 1990), p. 164.

202   Malcolm Wanklyn (1988), 'The Severn navigation in the seventeenth century: long-distance trade of Shrewsbury boats' *Midland History,* 13:1 (1988), pp. 34-58.

203   BBC, 'History of the River Severn', *Severn* (Online: BBC, 2008) <http://www.bbc.co.uk/shropshire/content/articles/2008/09/26/river_severn_feature.shtml> [accessed 26 March 2020].

204   Malcolm Wanklyn, 'River Trade On The Severn 1565-1765', *The Tewkesbury Historical Society*, (Online: The Tewkesbury Historical Society, 1995) <https://tewkesburyhistory.org/River-Trade-On-The-Severn-1565-1765> [accessed 4 September 2019].

clay from Devonshire to the Potteries.[205] As the river trade began to decline with the building of the Staffordshire & Worcestershire canal in the early 1770s, the local economy developed through iron founding for the Black Country. This was superseded by carpet manufacture that continued into the twentieth century. Bridgnorth's river trade ended with the opening of the railway in 1862, and in 1895 the last barge came down the river.[206] Despite its modest size, Bridgnorth was represented in Parliament by two MPs, and the economy of the town provided sufficient work for fourteen printers during this period.[207]

In the nineteenth century Bridgnorth was a destination for leisure tourism, and the twin entertainments of the theatre and horse-racing were interconnected, with two different plays performed each day during the races.[208] Horse-racing began at Morfe Common (1690–1811), later moving to Innage (1812–39), where the last race meeting was held in June 1839.[209]

Theatre manager and comedic actor Charles Stanton (1768–1838) had a longstanding relationship with the town. George Gitton and his son George Robert Gitton both printed 'Playbills' for Stanton's performances. He opened the Cockpit Theatre in 1811, performing an average of three shows a week; admission cost a shilling in the gallery and two shillings in the pit.[210] The theatre was used for cockfighting between productions. In 1824, the theatre moved to a new building on West Castle Street and re-named New Theatre. Stanton continued to entertain the people of Bridgnorth until 1838, when his 'worldly' form of theatre fell out of fashion in favour of Music Hall style entertainment.[211] The theatre continued without Stanton until it was demolished in 1850, to make way for the Newmarket buildings. The Cockpit building was later preserved in 1958, as a Grade II listed building, and reconstructed at Avoncroft Museum of Historic Buildings in 1979.[212]

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205   Malcolm Wanklyn (ed.), *The Diary of George Gitton of Bridgnorth for 1866* (Keele: Centre for Local History: University of Keele, 1998), p. xii.

206   About Bridgnorth, (2012).

207   Diana R. Mackarill, 'George and George Robert Gitton, Printers, Bridgnorth' *Journal of the Printing Historical Society*, NS, No. 4 (London: PHS, 2002), pp. 31-62. Here p. 56.

208   CRL, PN 2596.B65, Bridgnorth Playbills Collection, *New Theatre, Bridgnorth*, 1832.

209   'Gazetteer of Racecourses', in *Shropshire History* (Online: Shropshire History, 2016) <http://shropshirehistory.com/other/racing.htm> [accessed 27 March 2020].

210   Bodleian Libraries, Bridgnorth Collection III.C. (7), The John Johnson Collection, *Playbill printed by G.R. Gitton for The Stranger*, 1819.

211   Clive F. Gwilt, *A History of the Theatres of Bridgnorth* (Bridgnorth: Self-published, n.d).

212   'The Cockpit Theatre', in *About Bridgnorth* (Online: About Bridgnorth, 2012) <https://www.aboutbridgnorth.com/the-cockpit-theatre/> [accessed 11 December 2019].

6.3.1.   Bridgnorth Printers

The printed ephemera of the Bridgnorth case-study records a large volume of documents relating to entertainment. These take the form of theatre 'Playbills' and advertising 'Handbills' for the Bridgnorth races.

George Gitton (1750–1825) was the first printer in Bridgnorth; prior to setting up his press, printing work was carried out in Wolverhampton or Ironbridge. Gitton was apprenticed to Benjamin Haslewood in 1762. As a letterpress printer, bookseller, stationer, newsagent and postmaster he apprenticed five boys between 1792 and 1802.[213] His scrapbooks signal that he was an enlightened man, recording and commenting on daily news, poetry and religious texts. His printer's file (1820–25) contains a large collection of ephemera documenting everyday life in Bridgnorth. The documents each have handwritten notes on the quantity produced, and all have a hole in the centre from the spike on which they were originally kept. The ephemera were largely produced by the G. Gitton Printing Office but the file also contains ephemera attributed to his son G. R. Gitton, specifically for the Bridgnorth Theatre and Races. The G. Gitton Printing Office produced a variety of work for the town, including auction notices, certificates for the Providence Society for Sickness, verses for Sunday Schools, advertising bills, invoices and tickets for the bridges, alongside public notices that were printed to stop gossip or for public apologies, for example, William Gouth, declaring that he had not had an affair with Isabella, the wife of the local bricklayer John Rogers.

In his will, G. Gitton shared his inheritance between his adult children but the business passed to his son G. R. Gitton, who relocated the business to a more prominent dwelling.[214] A family feud between G. R. Gitton and his sister Catherine, documented in a series of public notices in the local and national newspapers, saw each sibling stating their claim to continue their father's business.[215] Catherine set up as a rival printer but, due to ill health, was forced to take on William Smith as her business partner, who succeeded her in 1837.[216]

Although never formally apprenticed to his father, G. R. Gitton

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213   The National Archives of the UK (TNA), Series IR 1, Board of Stamps: Apprenticeship Books, *UK, Register of Duties Paid for Apprentices*, Indentures, 1710–1811.

214   Diana R. Mackaril, p. 45.

215   'Public announcement by Thomas Gitton, solicitor to the George Gitton estate', *Aris's Birmingham Gazette*, 25 September 1826; 'Catherine Gitton's announcement of continuing her father's printing work', *Aris's Birmingham Gazette*, 13 November 1826.

216   Diana R. Mackaril, p. 46–7.

developed his printing skills in the family business and from an early age was responsible for printing 'Playbills' for the New Theatre. The relationship between the printer and the client is demonstrated in an 1821 letter from Stanton to G. R. Gitton.[217] Here Stanton relays his instructions to Gitton for an advance order to advertise his forthcoming performances in Bridgnorth. The informal tone shows the close friendship and professional trust between the two men. Stanton provides minimal information for details of the performance, leaving the typographical and compositional decisions to the skills of the printer, as was usual at the time.

G. R. Gitton was twice made bankrupt, and had a weakness for drink, but he was an excellent printer and a well-respected member of Bridgnorth society. His printing made great use of the newly available typefaces from London typefounders.

The Gittons did not have a monopoly on the printing of Stanton's advertising: Benjamin Partridge printed 'Playbills' for performances in the Cockpit Theatre in 1821; as did Gitton and Smith in 1837, (Table 6.3).[218] In 1867, the Agricultural Hall opened, which included the Theatre Royal, with 'Playbills' printed by Clement Edkins (trading in Bridgnorth between 1849 and the 1880s) who succeeded to his father's business of Edkins and Son (1839–50).[219]

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217   Victoria and Albert Museum (V&A), S.333-2016, Gabrielle Enthoven Collection, *Annotated playbill 'The Theatre, Oswestry'*, 1821.

218   Bodleian Libraries, Bridgnorth Collection III.C. (14), The John Johnson Collection, *Playbill printed by Partridge for Macbeth, King of Scotland*, 1821; Bodleian Libraries, Bridgnorth Collection III.C. (469), The John Johnson Collection, *Playbill printed by Gitton and Smith for Romeo & Juliet*, 1837.

219   Bodleian Libraries, Bridgnorth Collection III.C. (485), The John Johnson Collection, *Playbill printed by C. Edkins for Pizarro!*, 1869.

Table 6.3 Bridgnorth Printers as listed in the BBTI.

PRINTER	TRADE DATES
GITTON, George	1771 - 1825
PARTRIDGE, Benjamin	c.1806 - 1828
GITTON, Robert (George Robert)	1821 - 1851
GITTON, Catherine	1827 - 1834
PARTRIDGE, Charlotte	1834 - 1851
GITTON & SMITH	1834 (before) - 1834
GITTAN, George Robert	1838 (before) - 1838
SMITH, William	1839 - 1844
EDKINS & SON	1839 - 1850
GITTON, George Robert	1844 - 1851
ROWLEY, William J	1850 - 1851

6.4. Advancing Typographic Fashions

Jobbing printers who dared to embrace the early sans serif printing types did not simply follow new typographic fashions: they also led the way. Joesbury and G. R. Gitton both experimented with the new types in order to create a new visual language and typographic solutions. As a result, they helped refine and elevate jobbing printing within Birmingham and Bridgnorth.

Wrightson & Webb applied the typographic conventions familiar in 'Handbills' and 'Playbills' to the advertisements in their directories. By developing a formal design system for the compositions of the adverts, Wrightson & Webb were early exponents of the creation of visual identities or 'brands' for their clients. Watton and Joesbury's historical 'Charts' helped to progress educational publishing through the application of advertising typography to information design. By using large types and white space, key information was presented in a way that assisted in information recall and enhanced the reading of young scholars. By embracing the latest display faces, G. R. Gitton departed from the typography used by earlier printers and produced an array of original advertising for Bridgnorth.

Within the two case-studies, W. Joesbury's and G. R. Gitton's work in particular stands out from that of their contemporaries in the Midlands. By creating a new typographic language for their clients and customers they introduced local audiences to the emergent visual culture of modern advertising. As pioneers of new display typography, Gitton's refined the art of jobbing printing and explored new possibilities in the way in which typography could be used to represent trade and society. The work of W. Joesbury and G. R. Gitton is testimony to the contemporary approach of these printers, whose contributions to jobbing printing positioned their creations amongst the forefront of typographical developments of the nineteenth century. In their experimental use of composition and through the application of the latest foundry typefaces, their work influenced not only their contemporaries but also future generations of printers.

7.   Proof of Concept

This chapter firstly demonstrates the proof of concept, and the feasibility of the methodology for anaylsing sans serif typography in printed ephemera, and its practical potential. Secondly, it shows how this concept enabled an investigation of the impact of sans serif typography on jobbing printing through the advent of display types, first used by printers from Birmingham and Bridgnorth; it explores how typography contributed to the regional voice of the Midlands; and it analyses the uptake by Midlands printers of sans serif typography.

The methodology was applied to the sample of ephemera from Birmingham and Bridgnorth in order to produce an historical narrative that presents a new understanding of the application, reception and influence of nineteenth-century sans serif printing types viewed not through the eyes of the manufacturers but from the perspective of the users and the audience. In doing so the author has produced an interpretation of the nineteenth-century sans serif based on its relative importance in use, as opposed to an evaluation based simply on its design merit.

The proof of concept presents an analysis of the findings, showing the application of the three approaches used in the methodology. The first approach of ordering printed ephemera by document class was used to show the nature of the relationship, in terms of demand and direction of causality, between the sans serif and trajectories in advertising practice. The range of document formats observed in the sample of printed ephemera from Birmingham and Bridgnorth was measured to interpret the use of sans serif typography in relation to the development of new document classes. Each document class that used sans serif types were analysed in order to establish which class of document used sans serif types the most. Physical attributes in the production of the documents, for example the document size and its function, were considered in order to reveal the impact of sans serif typography on the development of new document types.

The second approach applied themes and categories to analyse how sans serif typography was used, what it was used to say, and who it represented. This approach to ordering printed ephemera by its use showed the functionality of sans serif typography and revealed the audiences for whom the documents were produced. This led to a new understanding of the popularity of sans serif printing types, in terms of how it was used to communicate information to middle- and working-class audiences. A historical narrative was then produced that contextualized the use of sans serif typography in Birmingham and Bridgnorth, contributing new insights into both typographic and local history by the interpretation of the ephemeral documents. The themes and categories were interpreted to show the formation of cultural associations that later became synonymous with the sans serif typography of 'Commercial Life', 'Information' and 'Instruction'.

The third approach measured the frequency of use of sans serif typography by the overall percentage of sans serif typefaces used in a single document. Percentage analysis was used to prove the extent to which sans serif typefaces were commercially applied by jobbing printers in the nineteenth and early-twentieth century. The ascendancy both in terms of its frequency of use and its position within the typographic hierarchy of printed ephemera was used to assess the impact of the sans serif in Britain on nineteenth-century print culture and design. In the process, this was used to show the extent to which sans serif typefaces were commercially applied by jobbing printers in the nineteenth and early-twentieth century, presenting the uptake of sans serif printing types from the typefoundries to provincial printers.

The findings presented through this work considers a data set that contains a wide variety of document classes. This data is limited by its size and scale in accommodating a range of all document classes discussed. It is acknowledged that the nature of working with a large range of ephemeral material rather than focusing on a closely related set of printed documents can skew the data. There is a possibility that if the same criteria were applied to interrogate a sample collected by one type of document or alternatively a self-contained archive in the form of a printers file, that the methodology could reveal different findings. The emphasis on this work is about testing the methodology and showing how it can be applied, as opposed to focusing on the results of the findings.
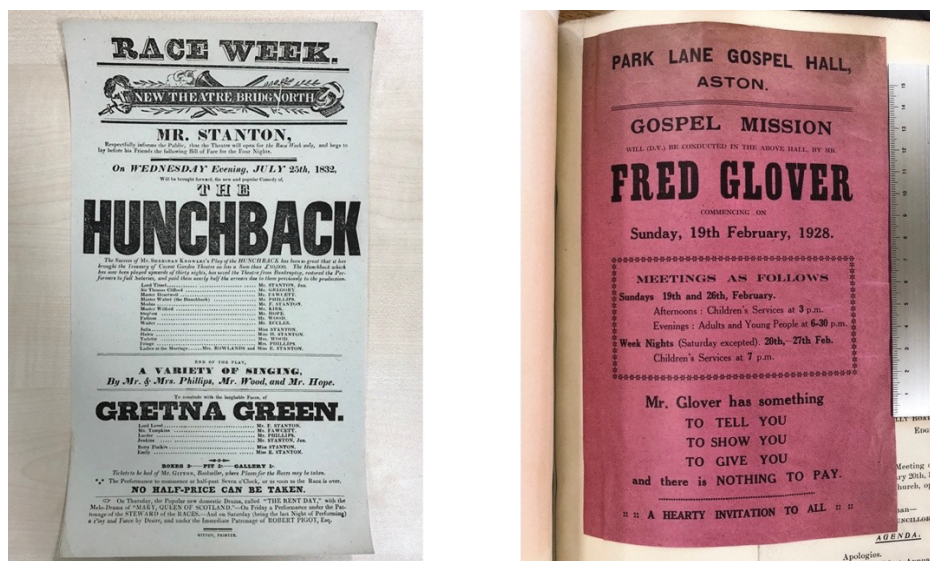
Figure 7.1.1 Earliest and latest examples of 'Handbills' in the sample. (Left) 'Hunchback', handbill, G.R. Gitton, Bridgnorth, 1832. CRL; and (right) 'Fred Glover', handbill, printer unknown, 1928. LOB.

Table 7.1 Document classes in ephemera sample ordered by date.

Class of Document	No. in Sample	Dates
Playbills	40	1832-1920
Maps	32	1832-1921
Handbills	179	1832-1928
Advertising	62	1833-1921
Broadsides	26	1833-63
Trade Directory Pages	40	1834-47
Forms	73	1836-1923
Stationary	78	1836-1928
Timetables	6	1839-1908
Trade Cards	27	1840-1921
Charts	20	1842-1926
Programmes	31	1849-1926
Posters	90	1852-1927
Pamphlets	9	1856-1926
Tickets	23	1862-1928
Leaflets	55	1866-1929
Newspapers	14	1869-1911
Other	11	1869-1920
Invitations	27	1872-1925
Trade catalogues	17	1880-1914
Booklets	30	1881-1921
Magazines	10	1881-91

7.1.   The Results of Ordering Ephemera
by Document Class

The final sample of printed ephemera used in this research contained 729 items. The selection of material was inclusive of all document classes and sub-classes, (as described in Table 4.3., in Chapter 4.), showing examples of sans serif typography across a full range of different formats of printed documents. The approach of using document classes was examined to understand how the sans serif was used in different forms of printed ephemera between 1816-1929. The use of document classes was the primary stage in this methodology, as it located sans serif typography within specific categories of printed products. The largest class of documents in the sample were 'Handbills', including 179 examples that covered the scope of this research. The sample started with a playbill in the format of a 'Handbill' by G. R. Gitton of 1832 for the New Theatre Bridgnorth and concluded in 1928 with a 'Handbill' promoting a Gospel Mission sermon by Mr Fred Glover, at the Park Lane Gospel Hall, Aston (Figure 7.1.1). The second largest selection included ninety Posters spanning 1852-1927 and the smallest section contained six timetables including samples from Bradshaw's Railway Guides (Table 7.1).

The first uses of sans serifs in the ephemera sample were ordered under the document classes of 'Playbills', 'Handbills' and 'Maps', (1832). The sizes of type used corresponded to the size of the documents and the document content, for example larger sizes of type were used to create impact for 'Theatrical Posters' and smaller types were used to indicate place names on ordinance survey sheets of the Midlands. This was closely followed with its use in 'Advertisements', 'Broadsides' and 'Trade Directory Pages', (1833-4). In 1836, the san serif was first used for its potential to present and order information in documents classed as 'Forms' and 'Business Stationery'. These documents used smaller sizes of type to give a bold emphasis to key information. The sans serif's value in presenting tabular information was later developed through its use in educational charts and travel timetables. By the end of the nineteenth century, sans serif types were widely used across a varied range of different document classes.

The sample of 729 ephemera documents contained 578 examples which were unique to one individual document class, for example there were forty 'Trade Directory Pages' that were not ordered under any

Table 7.2 Items in the ephemera sample ordered under more than one document class.

	In one class	In two classes	In three classes	Total
Advertisements	10	38	14	62
Booklets	5	14	11	30
Broadsides	25	1	0	26
Charts	10	8	2	20
Forms	14	52	7	73
Handbills	149	25	5	179
Invitations	13	13	1	27
Leaflets	44	11	0	55
Magazines	2	8	0	10
Maps/Plans	30	2	0	32
Newspapers	6	8	0	14
Pamphlets	6	3	0	9
Playbills	36	4	0	40
Posters	77	11	2	90
Programmes	20	6	5	31
Stationery	31	41	6	78
Tickets	19	4	0	23
Timetables	3	3	0	6
Trade Cards	20	6	1	27
Trade Catalogues	10	1	6	17
Trade Directory Pages	40	0	0	40
Other	8	3	0	11
Total	**578**	**262**	**60**	**900**

other terms. There were 262 documents that were ordered within two different classes, and sixty documents that ranged between three different document classes. The class of 'Forms' included the largest number of documents that spanned more than one category. There were seventy-three forms recorded in the ephemera sample, of which fourteen were unique to the class of 'Forms', and fifty-two were included in 'Forms' and another document class. Thirty-eight 'Forms' were included within 'Stationary', as forms were often used in 'Business Stationary' to record financial transactions in receipts and invoices (Table 7.2).

The database revealed some curious pairings between documents classes, for example there were five items that were ordered as both 'Trade Cards' and 'Posters'. These items were recorded using a sub-category of 'Showcards'. They were printed in a larger format than traditional 'Trade Cards', closer in size to a 'Broadside' or 'Poster', on thick card for increased durability and extended use. 'Showcards' were often hung within shop windows, as seen from the two puncture holes in the top of the document for attaching string for hanging. They were used to advertise goods or to show public endorsement and political solidarity with election candidates (Figure 7.1.2).

A large format 'Showcard' for pastoral plays at the Edgbaston Botanical Gardens, 1893, measured 580 mm in height and 460 mm in width. In proportion to the width of the document, a large condensed Grotesque sans serif with a cap height measuring 171 points, was used for the title of the play—unusually positioned towards the bottom of the document—as the first resting place within the typographic hierarchy. The typeface was not directly identified from the Type Specimen books as there were a limited number of large metal sans serifs presented by the typefounders. The sans serif was close in comparison to Six Lines Elongated Sans Surryphs, Stephenson, Blake, & Co., (1868), with similarities in the design of 'R' and discrepancies with 'E' that has a shorter bar. The main difference between these types was their size. The latter sans serif measured short of the example in the ephemera, at 70 points cap height (Figure 7.1.3). The absence of matching large typefaces in the type specimens was accounted for as being wood type as opposed to metal. As this research was concerned with the use of nineteenth-century metal types, there is future opportunity to record wood types to identify these larger typographic forms.
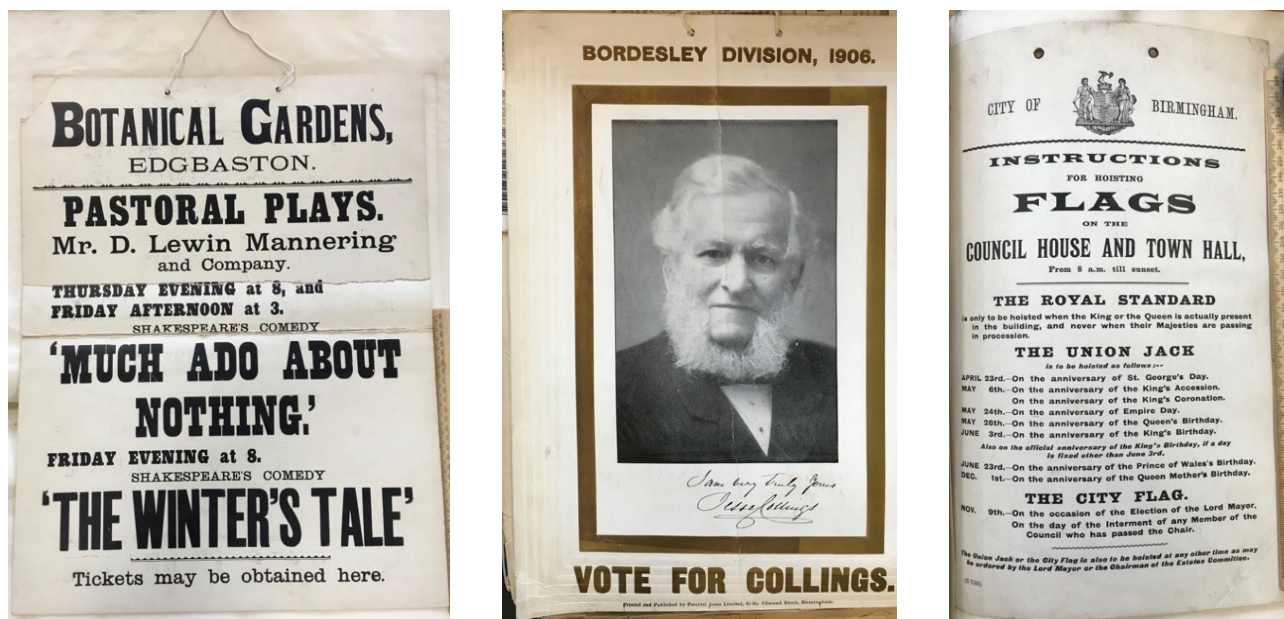
Figure 7.1.2 Examples of 'Showcards' ordered under 'Trade Cards' and 'Posters'. (Left) 'The Winter's Tale', show-card, printer unknown, 1893. LOB; (centre), 'Vote for Collins', showcard, Pervival Jones Limited, Birmingham, 1906. LOB; and (right) 'Instructions for Flags', showcard, printer unknown, c. 1905-14. LOB.
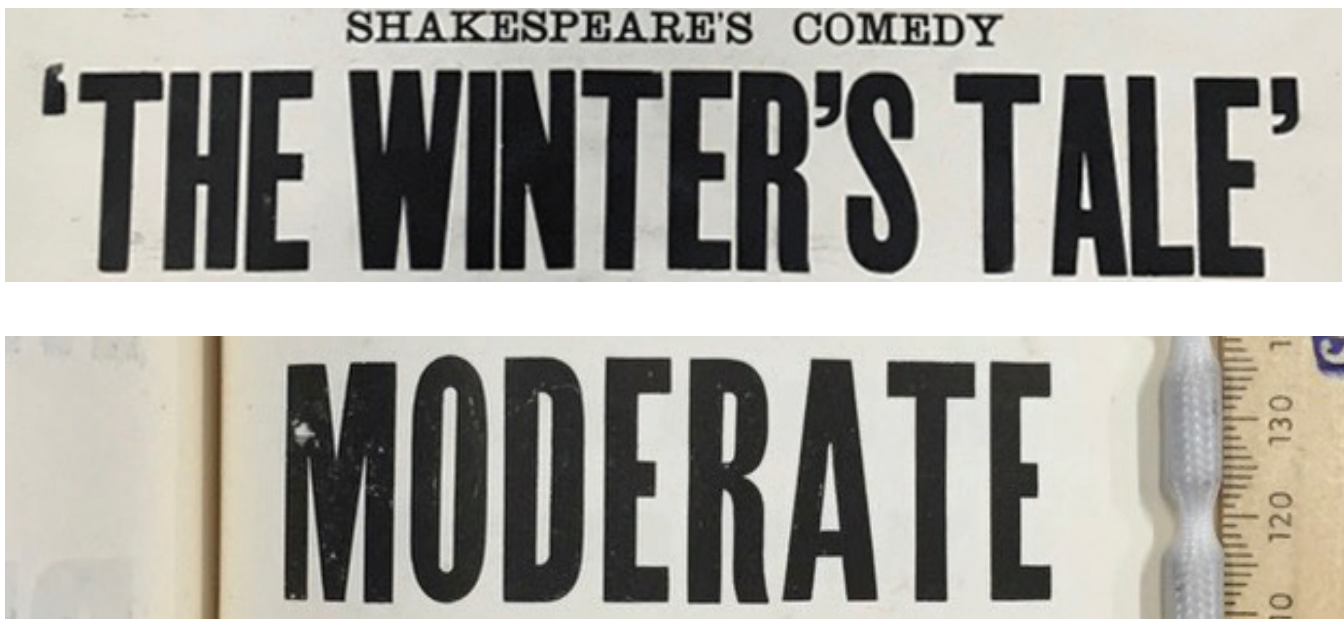
Figure 7.1.3 Identifying the printing type of a 'Showcard' for Edgbaston Botanical Gardens, showing an elongated wood type of 171 points in height. (above) 'The Winter's Tale', showcard, printer unknown, 1893. LOB; and (bottom) Six Lines Elongated Sans Surryphs, Stephenson, Blake, & Co., Sheffield, 1868. SBL.
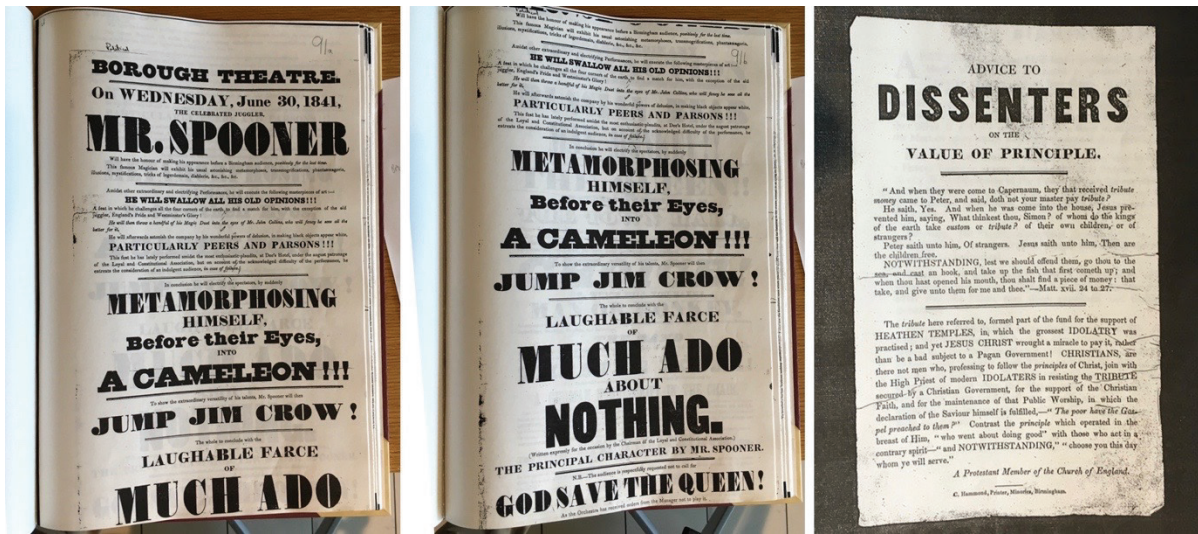
Figure 7.1.4 (Left and centre) Example of a 'Broadside' as a 'Playbill' format, parodying Tory Candidate Richard Spooner. 'Mr Spooner', facsimile of broadside, printer unknown, 1841. LOB; and (right) 'Advice to dissenters', facsimile of handbill, Charles Hammond, Birmingham, c. 1840s. LOB.
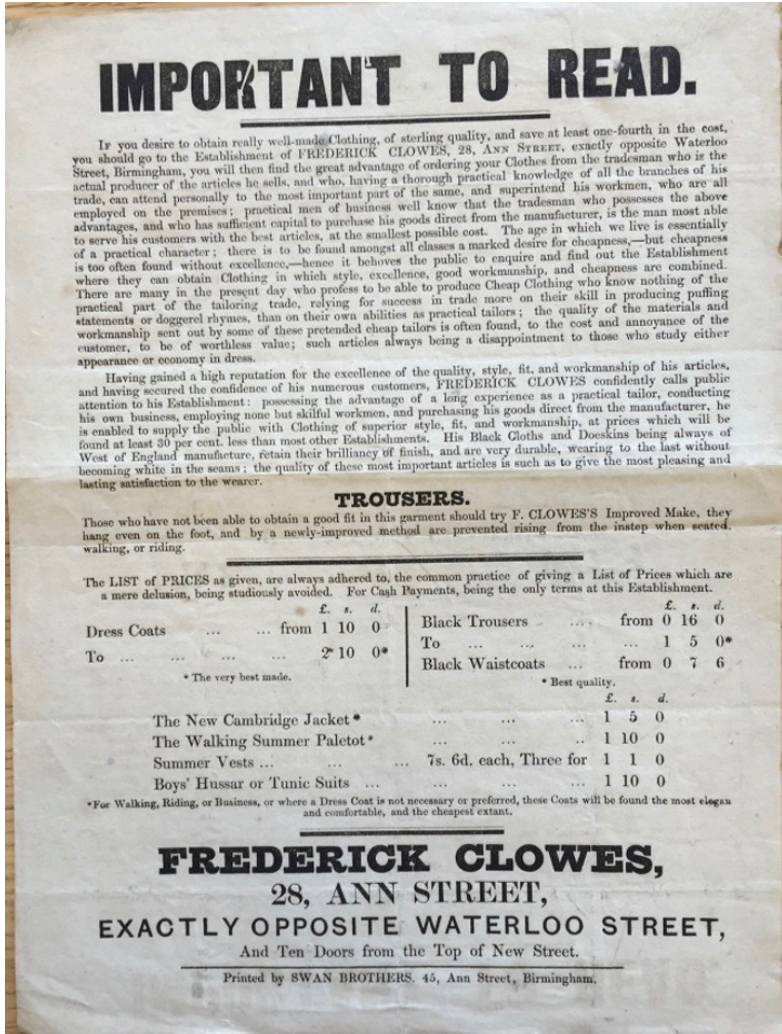
Figure 7.1.5 Example of a large format 'Handbill' following a Letter format. 'Important to read', handbill, Swan Brothers, Birmingham, c. 1849. LOB.

7.1.1. The Development of Document Formats

The sample shows that there are crossover points between the function and the format of document classes that are sometimes interchangeable in their purposes. A 'Handbill' circulated by hand can also function as a 'Playbill'; and a 'Letter' printed with a generic title to the addressee could be distributed as a 'Handbill'. There follows a synopsis of the developments of the functionality of document classes shown in the sample.

The criteria of scale and the mode of distribution were used to distinguish between 'Broadsides' and 'Handbills'. A political 'Broadside' by an unknown printer (1841) satirized the Conservative party candidate Richard Spooner (1783-1864) by mimicking the content of a playbill for the 'Borough Theatre', (Figure 7.1.4). This example measured 370 mm in height by 207 mm in width and was intended to be pasted on walls. In contrast to a 'Handbill' printed by Charles Hammond (c. 1840s) offering advice to religious dissenters measured 180 mm in height by 110 mm in width. These examples follow both criteria, with a larger scale of document used for broadsides and a smaller intimate format for handbills. By the mid-nineteenth century, the size of documents increased leading to the use of the term 'Posters' for 'Broadsides'.

'Handbills' also increased in size, an advertising bill printed by Swan Brothers, (c.1849), measured 260 mm in height by 185 mm in width, a size of printed document comparable to a printed 'Letter' format (Figure 7.1.5). The bill advertising clothing by the tailor Frederick Clowes, uses two sans serif types from Blake and Stephenson, a large bold condensed sans serif, Great Primer Two Line Sans Surryphs for the title of 'IMPORTANT TO READ' and Nonpareil Two-Line Condensed Sans-Surryphs to give instructions to how to find Clowes' shop.[220] The Swan Brothers printing works and Clowes business were both located in close proximity of each other on Ann Street, Birmingham. The advertising in Clowes' handbill takes the form of long copy, with densely packed paragraphs set in a small serif typeface. The size of the bill is comparable to earlier broadside documents, but the scale of the text and the density of information would make it difficult to read on a wall.

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220   Stephenson, Blake and Company, *Specimen of printing types* (Sheffield: Stephenson, Blake and Company, 1838).

Figure 7.1.6 Example of a large format advertising 'Leaflet'. 'The "Stott"', leaflet, printed unknown, 1882. LOB.

Figure 7.1.7 (Left and right) An example of a small format political 'Handcard'. 'Bordesley Division Parliamentary Election', handcard, Moody Brothers, Birmingham, 1895. LOB.

'Leaflets' were similar to 'Handbills' in their mode of distribution, which was largely by hand but as double-sided documents they often contained a denser quantity of information using typography in smaller sizes. This class of document needed the reader to engage with the text for a longer time in order to convey more information or present a deeper persuasive argument. The earliest leaflet in the sample was an advertisement for the 'STOTT' gas value by the Patents Improvement Company, Birmingham, 1882 (Figure 7.1.6). This document measured 360 mm in height by 210 mm in width and used three sans serif types. Two italic typefaces, including lowercase characters, were used to present a conversational tone, through headers printed in red, and a wide skeletal sans serif was used to promote the 'SELF-ACTING' qualities of the valves. The leaflets found held political literature from 1884-1911. The 'Leaflet' format was composed with more detailed textual information than 'Handbills', often setting out a political manifesto or argument.

Thicker paper substrates for printing ephemera were used to indicate a higher quality of printed document and in the process show more consideration for the customer by the client. Towards the end of the nineteenth century, it was observed that 'Handbills' and 'Leaflets' developed as an alternative format as 'Handcards'. These smaller 'Postcard' and 'Trade Card' sized documents used a thicker paper substrate, sometimes folded, that functioned as reminders and identification to events such as political literature to be presented at polling stations. A handcard printed by Moody Brothers, Birmingham, was a multifunctional document promoting the 1895 election campaign of Jessie Collins (Figure 7.1.7). Printed on two sides the card measured 84 mm in height by 115 mm in width, this size was a convenient format to be kept in a wallet or a pocket for the receiver to take to the event. The card doubled up as a form to hold personal information written by hand and the reverse acted as an advertisement for Collins that instructed the receiver on how to mark their ballot paper. The use of card as a printing substrate gives these documents more permanence, as the thicker card was stronger and more durable. As cards, these documents became keepsakes.

The use of tinted substrates in printed ephemera was observed across the sample, with 701 items printed on a white or cream tinted unbleached substrate. Depending on the preservation of the documents, the signs of aging was seen in the brown foxing. Thinner and cheaper
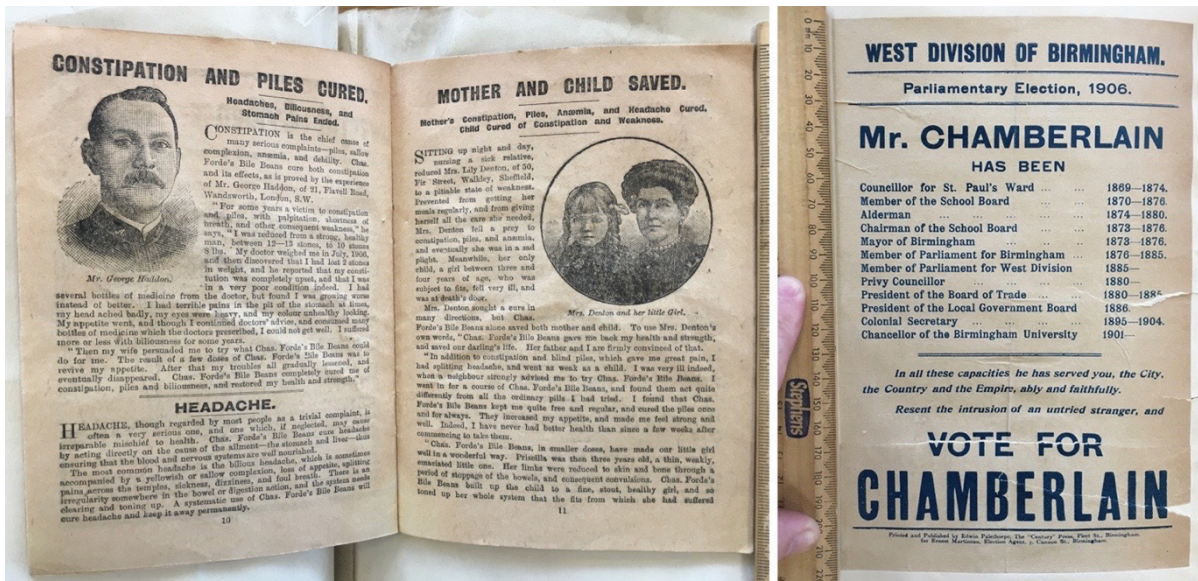
Figure 7.1.8 Untinted paper stock showing signs of aging. (Left) 'Constipation and Piles cured', trade catalogue, printer unkown, 1906. LOB; and (right) a political 'Handbill' for the Liberal Unionists. 'Mr Chamberlain', handbill, Edwin Palethorpe, Birmingham, 1906. LOB.
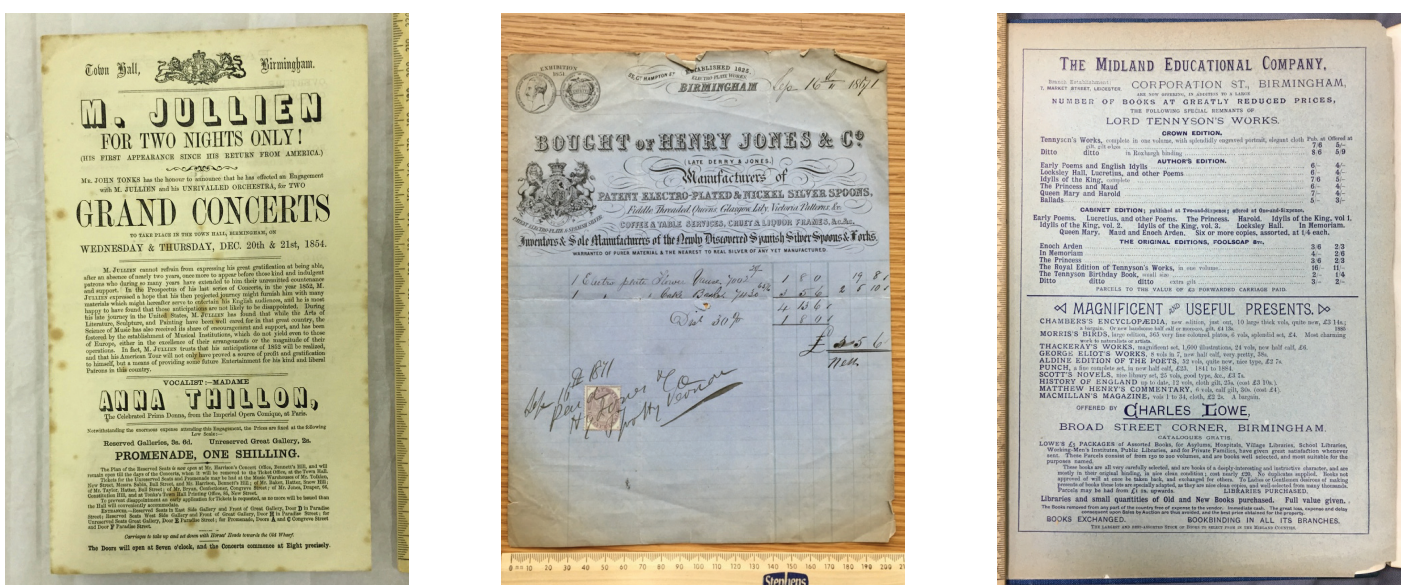
Figure 7.1.9 Examples of tinted substrates shown in lighter shades of coloured substrate. (Left) 'Grand concerts', programme, John Tonks, Birmingham, 1854. BM; (centre) 'Bought of Henry Jones & Co.', receipt, printer unknown, 1871. LOB; and (right) 'The Midland Educational Company', *The Art Student,* magazine, Frederick Grew, Birmingham, 1885. Birmingham Institute of Art and Design Archives, (BIAD), Birmingham City University, Birmingham.

unbleached paper showed the greatest signs of aging. This substrate was of a lower quality, seen in a trade catalogue advertising Charles Fordes Bile Beans, 1906 and in a political handbill for Joseph Chamberlain (Figure 7.1.8).

There were a variety of tinted stock used in the printing of 129 documents, from subtle light-blue tinted paper to vivid cerise card stock (Figure 7.1.9 and 7.1.10). Documents printed using tinted card substrate included 'Booklet' and 'Timetable' covers, 'Invitations' and 'Tickets'. Tinted papers were used for 'Receipts' for 'Business Stationary', 'Handbills', 'Leaflets', 'Pamphlets', 'Playbills', 'Magazine Covers' and 'Programmes'. Coloured cloth was used in the printing of covers for 'Maps' to give extra strength and protection.

As the methodology allows the user to track documents over time, it can be used to show changes in the use of substrate thickness, weight, texture and colour. Searching the data set by coloured substrate, reveals potential associations with the target audiences. It is acknowledged that the data-set of the sample is limited and can skew the results, however the following insight was observed in the sample and may possibly show a link to the use of colour and different audiences.

The use of light-tinted papers in blue, green and grey presents the ephemera as being of higher quality. These papers were used in 'Business Stationary' for 'Receipts' and by G. R. Gitton for his 'Playbills' in soft hues of blue, (Figure 7.1.1). A light tint of yellow paper was used for cultural activities such as musical concerts, dances and flower shows. The bolder deeper tints of paper were used to capture attention in 'Playbills', 'Posters' and 'Invitations'. When used in 'Posters' for Victorian popular culture such as circus performances, the use of these strong tints show a bias towards working class audiences. A 'Playbill', printed by Frederick and Julius Turner (c. 1839), used a vivid vermilion substrate to promote Ducrow's Touring Circus, that measured 710 mm in height and 480 mm in width. Turner's 'Playbill' used an extremely high contrast between the brilliant red paper and the blackness of the display typography, of which a large bold condensed sans serif was used to present Ducrow's name (Figure 7.1.11).
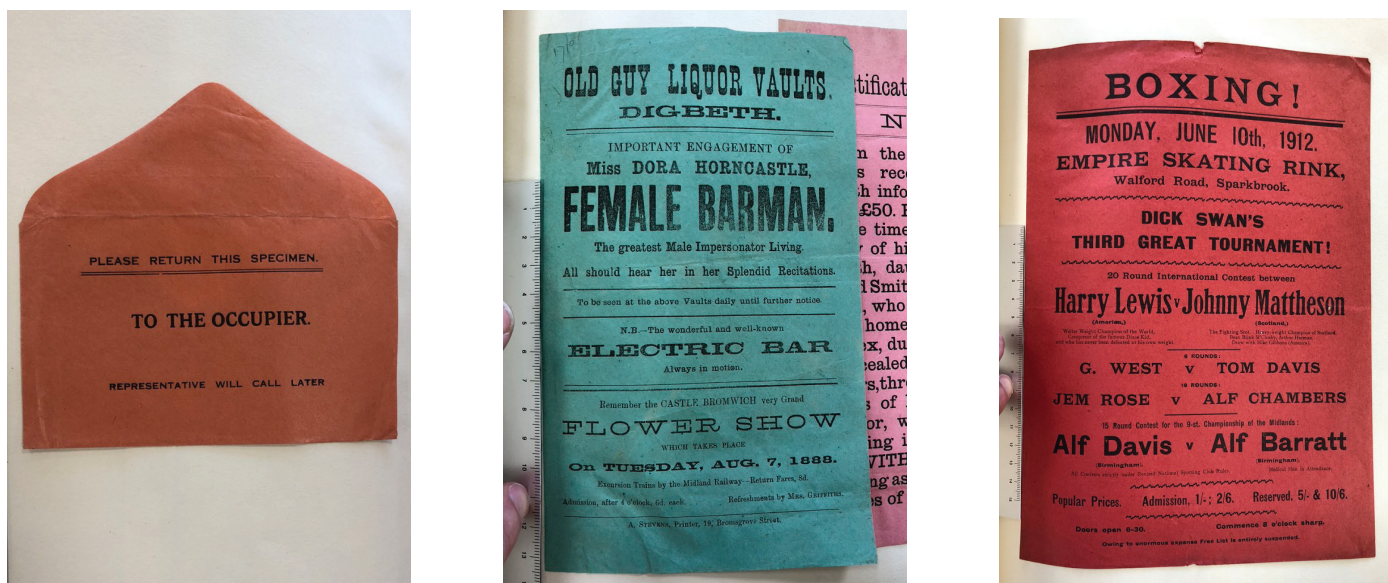
Figure 7.1.10 Examples of tinted substrates shown in deeper shades of coloured substrate. (Left) 'To the occupier', envelope, printer unknown, 1928. LOB; (centre) 'Female Barman', handbill, A. Stevens, Birmingham, 1888. LOB; (right) 'Boxing!', handbill, printer unknown, 1912. LOB.
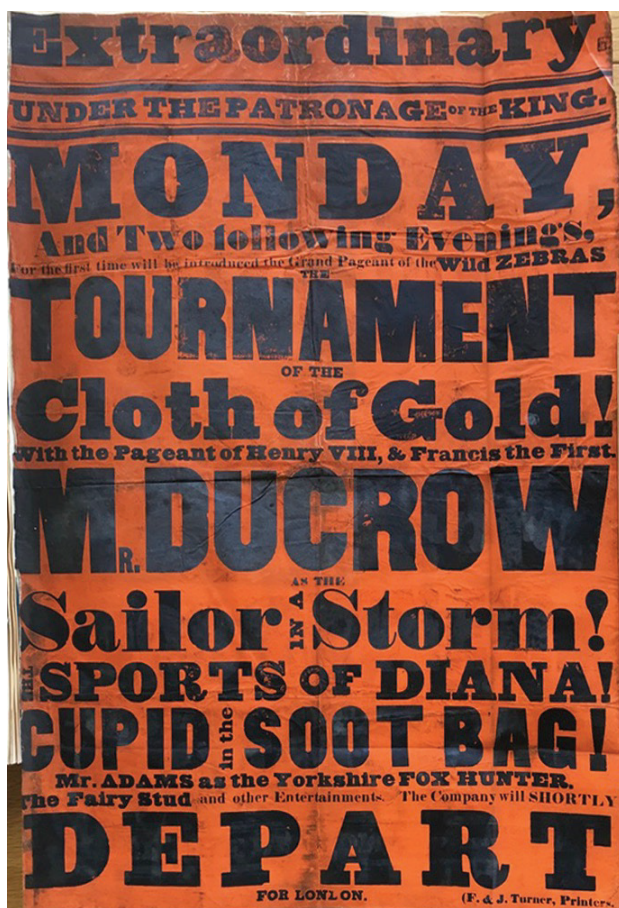
Figure 7.1.11 'Tournament of the Cloth of Gold', playbill, F. & J., Turner, Birmingham, c.1839. LOB.

7.1.2. The Functions of Sans Serif Typography by Document Class.

This section discusses the use and functions of sans serif types across a range of different document classes. A selection of documents was identified based on the use of sans serif in relation to the size, function and modes of distribution. This included documents that were printed to present news: 'Street Literature' in the form of 'Broadsides', 'Handbills' and 'Ballad Sheets'; and multipage documents such as 'Newspapers' and 'Magazines'. A second grouping of documents was discussed for printed ephemera that became keep-sakes after an event, this included 'Theatre Programmes', 'Invitations' and 'Commemorative Booklets'. The final group of documents discussed were used for ephemera that was produced to inform and gather information, this included 'Charts', 'Stationary' and 'Forms'.

7.1.2.1. Street Literature: Broadsides, Handbills and Ballad Sheets

One of the first uses of sans serif typography identified in the ephemera sample, was the production of news-based street literature. This type of ephemera was aimed at informing public audiences within the expanding scope of the urban environment. These documents were designed to have a short lifespan, distributed onto external and internal public surfaces, or circulated by hand: street literature presented a growing urban population with current affairs and popular news information directly to where they lived and worked. Using the formats of 'Broadsides', 'Posters', 'Handbills' and 'Ballad Sheets', street literature was used to present information of local and national relevance, that connected the urban population to the current interests and issues of the day.

      The sans serif was heavily used by jobbing printers for titles and headings to attract attention. A political 'Broadside' printed by Frederick Turner, 3 Snowhill, Birmingham, 1834, informed Birmingham residents of a political procession in support of the Birmingham Political Union (Figure 7.1.12). The 'Broadside' canvased support for the political reformers Thomas Attwood (1783-1856) and Joshua Schofield (1775-1844).

      The document was aimed at the non-electors of the borough to invite them to participate in a procession of public houses, for the 'purpose of soliciting the promise of their votes' from the licensed
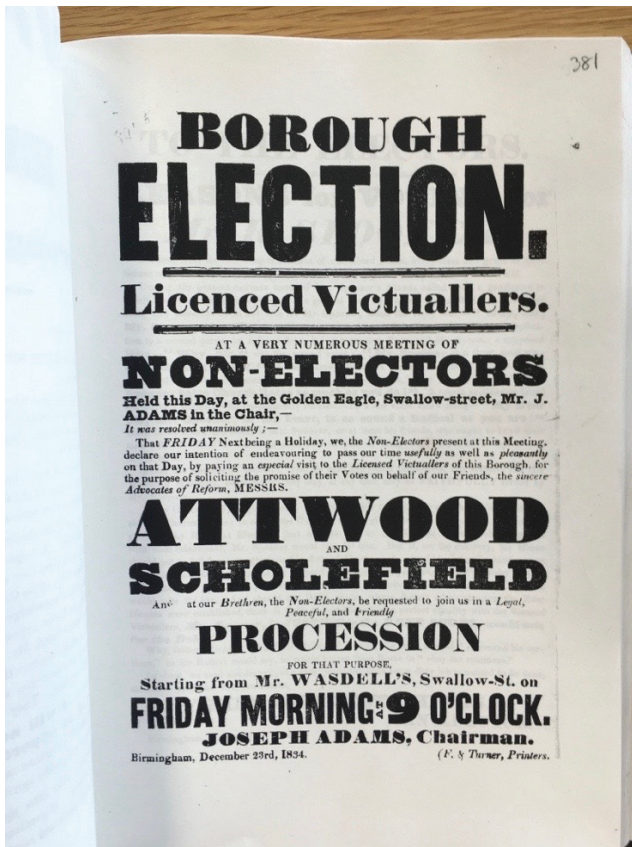
Figure 7.1.12 'Borough Election', facsimile of broadside, Fredrick Turner, Birmingham, 1834. LOB
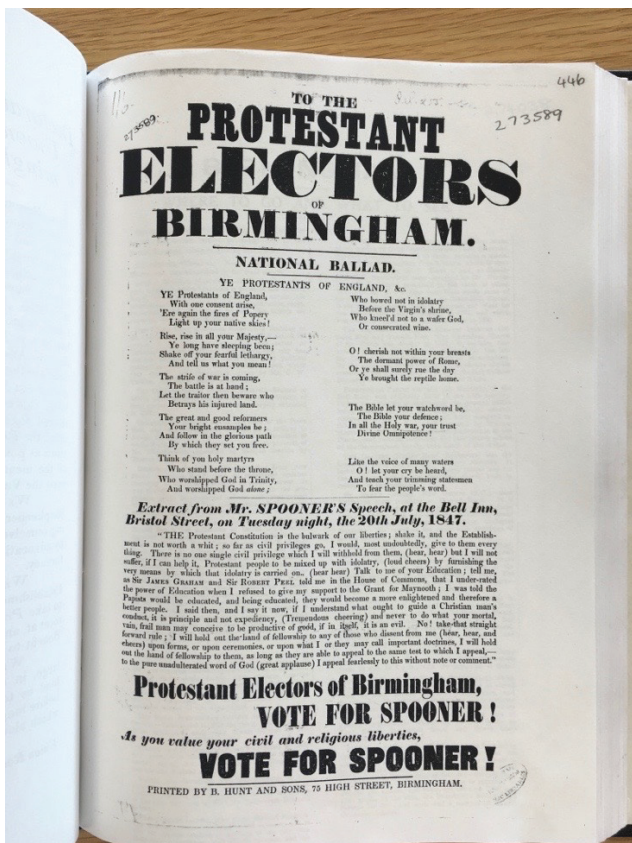
Figure 7.1.13 'To the Protestant Electors of Birmingham', facsimile of broadside, B. Hunt & Sons, Moor Street, Birmingham, 1847. LOB.

victuallers of Birmingham. Commencing at nine in the morning, participation in the march was promoted as being a 'Legal, Peaceful and Friendly' activity. The campaign strategy employed by the reformers was quite sophisticated, recruiting the patrons of the public houses convert support from the publicans, who held the voting rights for the forthcoming borough elections.

Printed in black ink on untinted paper, the 'Broadside' measured 240 mm by 165 mm, a similar size to a tabloid newspaper. Turner used two bold condensed sans serif types, the largest of which was set in the primary position of the document's typographic hierarchy, and sans serif types occupied 30% of the overall text. A large condensed sans serif in uppercase was used at the top of the document to announce the purpose of the meeting—the forthcoming election—balanced against the use of a small condensed sans serif that presented the key information of the date and time of the meeting.

This document was ordered under the themes of 'Information' and 'Commercial Life' as it used sans serif types to inform working-class audiences through the format of an openly displayed document. It was categorised under the terms of 'Politics' and 'Trade' based on its textual content and the campaign strategy that it adopted to canvas votes.

A later political 'Broadside' printed by Benjamin Hunt & Sons, 75 High Street, Birmingham, 1847, used a sans serif type to command votes for the standing Tory candidate Richard Spooner (1783-1864), (Figure 7.1.13). The election 'Broadside' was printed in black ink on un-tinted paper, measuring 285 mm in height by 165 mm in width, a slightly taller format to the 'Broadside' previously discussed. The size of 'Broadsides' was dictated by the amount of words the customer wanted to communicate, considered against the cost for printing that they were willing to pay, and the range of printing types that the printer had in stock and access to use. This 'Broadside' used a denser quantity of text, alongside the inclusion of a political ballad entitled the *National Ballad, Ye Protestants of England, &c.*

Spooner began his political career as a radical, standing alongside Thomas Attwood. After several election defeats, he shifted his political views towards Tory ideals.[221] His failure to secure a seat for Birmingham continued until the death of the liberal M.P. Joshua Schofield. He won the 1844 bi-election in Birmingham —running against Schofield's son— after

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221 Birmingham Daily Post, 'Death of Mr. Spooner, M.P.', *Birmingham Daily Post, 25 November 1864. p. 2.* Retrieved 17 June 2015 – *via* British Newspaper Archive.

Figure 7.1.14 'Yellow Member', facsimile of broadside, printer unknown, Birmingham, 1847. LOB.

the liberal votes were split between two internal candidates, William Schofield and Joseph Sturge. The atmosphere and excitement in the build-up to the election was described in a political ballad written by John Yold, entitled *A NEW SONG ON The Birmingham Election*:

> There is flags a flying every were,
> Unto the pole they do repair,
> To give their vots I do declare,
> At Birmingham Elecion,
> Some thousand pound there will be spend,
> To gain a seat in parliament,
> No doubt but many will repent,
> That ever they attempted.[222]

Hunt & Sons only used one bold condensed sans serif type, in the election 'Broadside' of 1847. Measuring 5% of the whole text, it was used to present the call to action of 'VOTE FOR SPOONER'. The sans serif's bold weight held a strong visual impact set against serif types used in the composition of the ballad song and the density of the political rhetoric of the manifesto text. Spooner lost the 1847 election in Birmingham to William Schofield, continuing as an MP for the Northern Division of Warwickshire as a Conservative candidate. This piece of ephemera was ordered under the theme of 'Instruction' as the sans serif was used to command Birmingham electors to vote for Spooner, and in the category of 'Politics' based on the political context that the document was intended to be used.

Spooner's defeat in attempting to retain his seat in the Birmingham 1847 election, was lampooned in a satirical parody that presented Schofield's victory in the format of a 'Playbill'. The name of the printer did not appear on the 'Playbill', instead it was signed off with the Latin phrase 'Vivet Regina et Princeps', long live the Queen and the first of the empire.[223] The anonymity of the printer and author gives rise to a highly litigious and humorous piece of ephemera (Figure 7.1.14). The text

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222   John Yold, 'A NEW SONG ON The Birmingham Election', *English Ballads*, (Online: National Library of Scotland, 2021) <https://digital.nls.uk/english-ballads/archive/74895259?mode=full-size> [accessed 3 August 2021].

223   Where the printers name would be on a printed document, this playbill has the last line of text in Latin of 'Vivet Regina et Princeps'. It is unclear to the meaning of the latter, if this relates to William Schofield as the winning 'first' candidate, or to Prince Albert, or a general reference to empire.
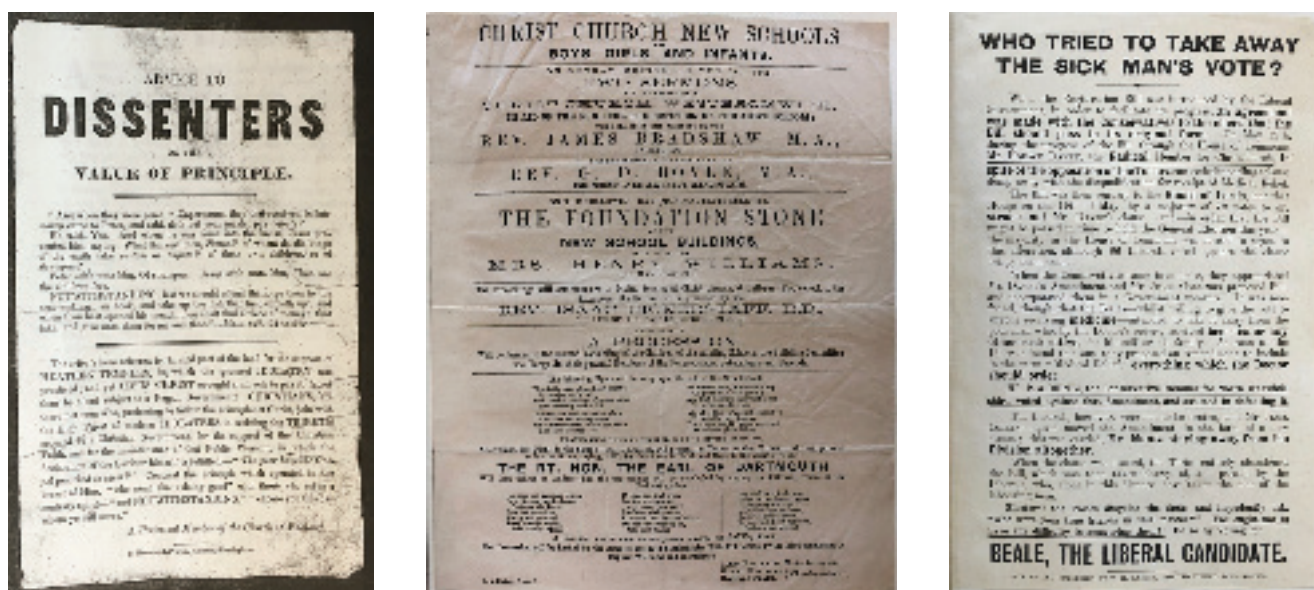
Figure 7.1.15 Examples of 'Handbills' using sans serifs for headings and subheadings. (Left) 'Advice to Dissenters', facsimile of handbill, Charles Hammond, Birmingham, c. 1840. LOB; (centre) 'Christ Church New Schools', handbill, G.A. Hudson, Birmingham, 1862.LOB; and (right) 'Who tried to take the sick man's vote?', handbill, T.H. Lakins, Birmingham, 1885. LOB.

Figure 7.1.16 Examples of 'Ballad Sheets' using sans serifs for headings and a two-column grid for the verses. (Left) 'Happy Man', facsimile of ballad sheet, W. Pratt, Birmingham, c. 1833-92. LOB.; (centre) 'Captain Mulligan', facsimile of ballad sheet, printer unknown, Birmingham, c. 1833-92. LOB; and (right) 'Death of General Moore', facsimile of ballad sheet, William Jackson & Son, Birmingham, c. 1833-92. LOB.

portrays Richard Spooner or 'Spooney' as the 'Yellow Member, or Crocus-Skinned Dick', listed in the cast as a character played by 'Mr Banker'. Schofield was represented as 'Mr Merchant', who was described in the closing lines as an advocate of an 'Extension to the Elective Franchise. No Poor Laws. No Corn Laws, and No Flinching'!

The printer used an extended size of document, mirroring a 'Playbill' format, that measured 360 mm in height by 180 mm in width. It was printed using a mix of four different bold condensed sans serif types, that were used as secondary level headers in the hierarchy. The document uses an open sans serif type with an inline stroke on the right to announce 'BOROUGHBRIDGE IN THE DISTANCE', this is an unusual typeface that was not identified in any other ephemera studied or found in the sample of type specimens recorded. If every typeface was identified in each document, it may be possible in the future to identify anonymous printers from the printing types that they used in other documents. This 'Playbill' was ordered under the theme of 'Commercial Life' as it used the sans serif to attract attention and impact knowledge relating to news and popular culture, it was categorised as 'Governance' and 'Politics' based on the content of the text.

In other forms of 'Street Literature', printers followed similar compositional rules used in 'Broadsides' for 'Handbills' and 'Ballad Sheets'. Sans serif types were used alongside other display faces to give emphasis to headings and key information. Bold condensed printing types were used for longer words or phrases, this allowed for more characters per line, and the larger x-height helped improve legibility and therefore impact. 'Classical' style sans serifs, with wider and open characters were used in smaller sizes, to attract the eye to lower areas of the typographic hierarchy. The mode of distribution directly affected the size of these documents, intended to be circulated by hand, were often produced in smaller formats that were easier to exchange. They were designed to be read close up, as opposed to 'Broadsides' that were pasted to fixed sites and read at speed from a distance. As a result, they had longer texts, that enabled a deeper exchange of information or presentation of a persuasive argument (Figure 7.1.15).

In 'Ballad Sheets' printers' used sans serifs for song titles and serif faces for the composition of the verses. These single-sided documents often used a two-column grid for the composition of the verses, with a sans serif title spanning the width of the document (Figure 7.1.16).

Figure 7.1.17 Cover of the Midland Athlete, *The Midland Athlete*, sporting newspaper, Fredrick Grew, Birmingham, 1879. CRL.

'Ballad Sheets' that contained more than one song would use a sans serif header across the width of a single column. The sans serif was used as an alternative to other display types, including the use of decorative, rounded, and open sans serif types that helped to develop an individual personality for the ballads, that were sung and sold by balladeers and chapmen on the streets of Birmingham.

7.1.2.2.   News: Newspapers and Magazines

In the nineteenth century 'Newspaper' and 'Magazines' followed similar document formats and printed substrates. An area where these two formats crossed over was seen in the weekly sporting newspapers of the *Midland Athlete* and *Sports & Play*. These titles both used a tabloid newspaper format, focusing on specialist sporting content for the Midland's region.

The *Midland Athlete* was first published in January 1879 by Frederick Grew of the Albert Steam Press, Moor Street and Albert Street, Birmingham. It was a multipage document, published as a weekly sporting newspaper costing two pence. The *Midland Athlete* was printed using black ink on newsprint paper, measuring 270 mm in height and 200 mm in width (Figure 6.1.17). Based on the content and heavy use of advertising, the *Midland Athlete* was ordered under the theme of 'Commercial Life' and the categories of 'Education', 'Entertainment' and 'Trade'.

The text was presented using a busy composition, with the body text set in a small serif font, followed by a mix of bold display faces —including Blackletter typefaces— for headings. The document used a three-column grid with a bias towards advertising, as opposed to news, on the front page. The reader was first presented with a full page of advertising for sports goods and products, such as boots manufactured by William Griffiths' of Spiceal Street, Bull Ring, and 'Football Costumes' from Hyam & Co., Limited of New Street, Birmingham.

In the typographic hierarchy, the sans serif was positioned in the primary position, using a 'Classical' design style of sans serif derived from William Caslon IV's first sans serif, Two Lines English Egyptian (1816). This sans serif was used for advertising Bown's 'Aeolus bicycle bearings', in advertising that spills out around the outside of the main composition, that announced that their bearings were 'by far the best', positioned above the illustrated title piece for the newspaper.

Figure 7.1.18 'Cover of Sports and Play', *Sport and Play*, sporting newspaper, Hudson & Son, Birmingham, 1887. CRL.
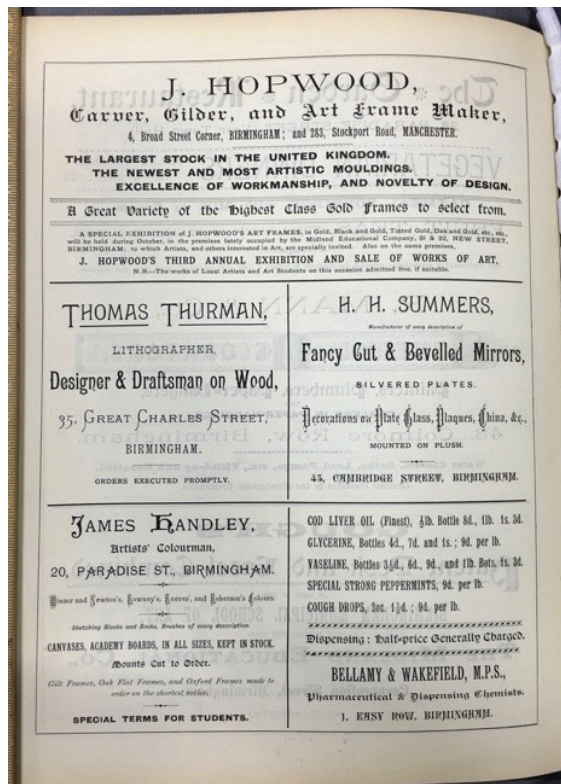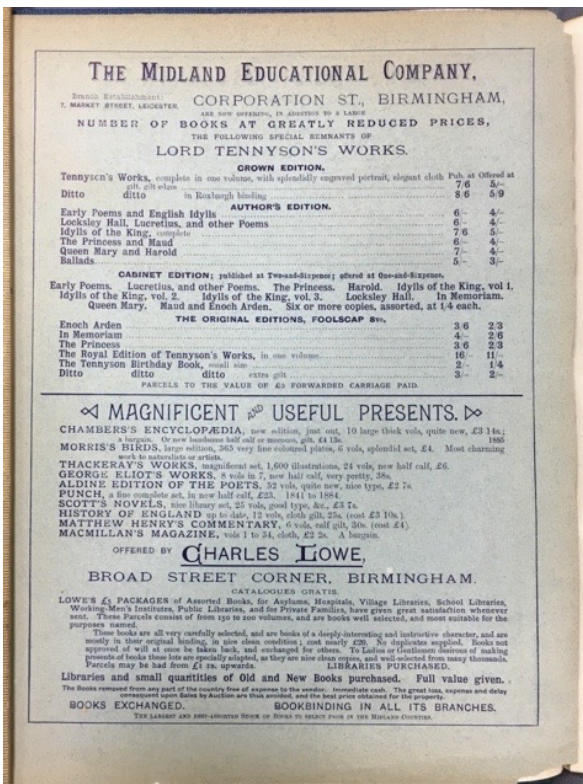
Figure 7.1.19 Examples of advertising in the Art Student magazine of the Birmingham School of Art. Advertising, *The Art Student*, magazine, Fredrick Grew, Birmingham, 1885. BIAD.

The 'Newspaper' cover used a range of ten sans serifs including condensed, sloping, and rounded sans serifs in both upper- and lower-case alphabets. The sans serifs measured 10% of the overall document text. The sans serif was used as an alternative design to Blackletter types, used primarily for its boldness. The sans serifs have a clean appearance and are easier to read within the complex visual mix of typographic styles, as opposed to the slab serifs and ornamented faces. The use of illustrations to show products such as bicycles were balanced against the boldness of the sans serif, enabling a higher contrast that made it is easier to read within short copy used in the advertisements.

Sports & Play followed a similar format to the *Midland Athlete*, of which several comparisons can be made to the use of sans serif typography. Printed by Hudson & Son, Edmund & Livery Street, Birmingham in 1887, the 'Newspaper' measured 265 mm by 210 mm, slightly smaller and wider than the *Midland Athlete.* Using black ink on untinted newsprint, the sans serif was not found in the primary or final positions of the typographic hierarchy. There were five sans serifs used in the composition of the cover shown, including the use of mixed 'Classical' and early 'Neo-grotesque' design styles of bold and light upper-case types (Figure 7.1.18). There were no lower-case sans serif types used on the cover and the sans serifs occupied 10% of the total typographic hierarchy of the text.

Sports & Play also used a three-column grid in its composition, with a greater use of white space and a balance between larger sizes of sans serif types and illustrations. The masthead was twice the size of the one used for the *Midland Athlete*, and the design did not include secondary advertising in the head and foot of the document, creating a simpler composition.

Sports & Play was ordered under the theme of 'Commercial Life' as it was sold primarily as a lifestyle publication encouraging public interest in engagement with sporting events as entertainment and encouraging participation in organised physical sports. It was ordered under the categories of 'Entertainment' and 'Education'. They were also organised under the heading of 'Trade', as they presented manufacturers and businesses with a communication channel through advertising, to promote their products and services direct to their customers. These publications demonstrate the development of leisure time for the middle and working classes in the latter part of the nineteenth century. The increase in this

activity was shown through the production of multiple weekly titles competing for market share of these emerging consumer audiences.

The *Midland Athlete* and *Sports & Play* shared the same marketplace, with advertisers promoting their goods across both newspapers. An advertisement for Bown's 'Aeolus bearings and pedals' uses two thirds of the front cover of *Sport & Play*. The sans serif was used alongside bold types to create a single advertisement as opposed to their earlier use in the *Midland Athelete* as news style headings for advertising. A 'Classical' style of sans serif type as used in one size by Hudson & Son to communicate the edition number, publication date and price of 'ONE PENNY'. *Sports & Play* shows a development of advertising as its own format, rather than emulating the composition of news-based content. Through its use of white space and less text, it presented a no-nonsense customer focused tone of voice for the publication.

The *Art Student* is an example of a 'Magazine' format published during the same period as the weekly sporting newspapers. Printed by Frederick Grew of the Albert Steam Press, Moor and Albert Street, Birmingham, (1885), the publication caters directly to the students and emergent audiences interested in arts & culture within the Midlands region and beyond. The *Art Student* was printed for the Birmingham School of Art, which opened as the first municipal arts school in 1885.[224] The 'Magazine' was a quarterly publication that was sold by the printers Cornish Brothers, New Street and the Midland Educational Co., Corporation Street, Birmingham. It was available for sale on an annual subscription basis, costing two shillings and six pence or nine pennies for a single copy. The magazine had a wider audience than Birmingham, offering a postal service for an extra two pence per year.

The *Art Student* was functioned as both a memento and a manifesto for the new school of art. It presented scholarly texts by the members and students of the school on subjects close to its roots in the development of the Arts and Crafts movement, such as decorative arts and architecture. The 'Magazine' included many pages of advertising, presenting a platform of the sale of books from the Midland Educational Co., and for artistic services such as framing by J. Hopwood, New Street Corner, Birmingham, who laid claim to having the 'largest stock' of artistic mouldings 'in the United Kingdom' (Figure 7.1.19). The magazine was ordered under the

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224   Birmingham City University, 'Our History', *About Us* (Online: Birmingham City University, 2021) <https://www.bcu.ac.uk/art/about-us/our-history> [accessed 2 August 2021].

theme of 'Commercial Life' for its contribution to arts and culture, and in the categories of 'Education' and 'Trade' based on what the sans serif was used to communicate.

The *Art Student* measured 270 mm in height by 200 mm in width and was bound within a light blue paper cover printed in dark blue ink. Frederick Grew used a wide range of sans serif types, that had a bias toward decorative elements. In the composition of a page of advertising (inside front cover), working towards contemporary typographic fashions, Grew used four sans serifs including 'Classical' and 'Neo-grotesque' designs of bold and upper-case types. The sans serif types measured 5% of the typographic hierarchy of the text and it was used subtly, giving contrast as small headings in-line with the height of the serif body copy. Lighter weights of sans serif type were used at larger sizes to give emphasis to slogans, as shown in a call to action directing readers to 'BOOKS EXCHANGED' by the bookseller Charles Lowe, Broad Street Corner, Birmingham. Grew combined two fonts, using a decorative 'B' with a curled open bowl, with a 'Classical' style of sans serif at the same height, to add typographic detail to the beginning of each slogan, a closed bowled 'B' of the same 'Classical' design was used elsewhere.

In a full-page example of advertising, Grew used six sans serifs including a balance of 'Classical' and 'Humanist' designs. The composition of the advertising pages was organised using a two-column grid separated by solid brass rules, this created a visual matrix that presented each advertiser within their own space, with the option of paying for larger sized advertisements. In the example shown, Grew used bold and sloping types in both upper- and lower-case types, printed in black ink on un-coloured paper. Within these compositions Grew introduced subtle decorative elements through his choice of sans serif typography. He used the same design of decorative sans serif type, described in the earlier document, in a larger type size without combining with other types. The unusual design had extended curved legs on 'A' and 'R', and the same design of an open curled bowl on 'B', to give an artistic flourish to the address of the arts supplier James Handley, 20 Paradise Street, Birmingham. The sans serif measured 10% of the text in this page of advertisements. Grew's consideration of the stylistic nuances between the different styles of sans serif designs was used to create an elegant and subtle balance that presented the artisan trades of Birmingham to a wider public.

Smaller formats of magazines were printed as 'Booklets'. *Spurrier's Cyclist's Handbook, No.1* was printed in London by H. Etherington, and regionally
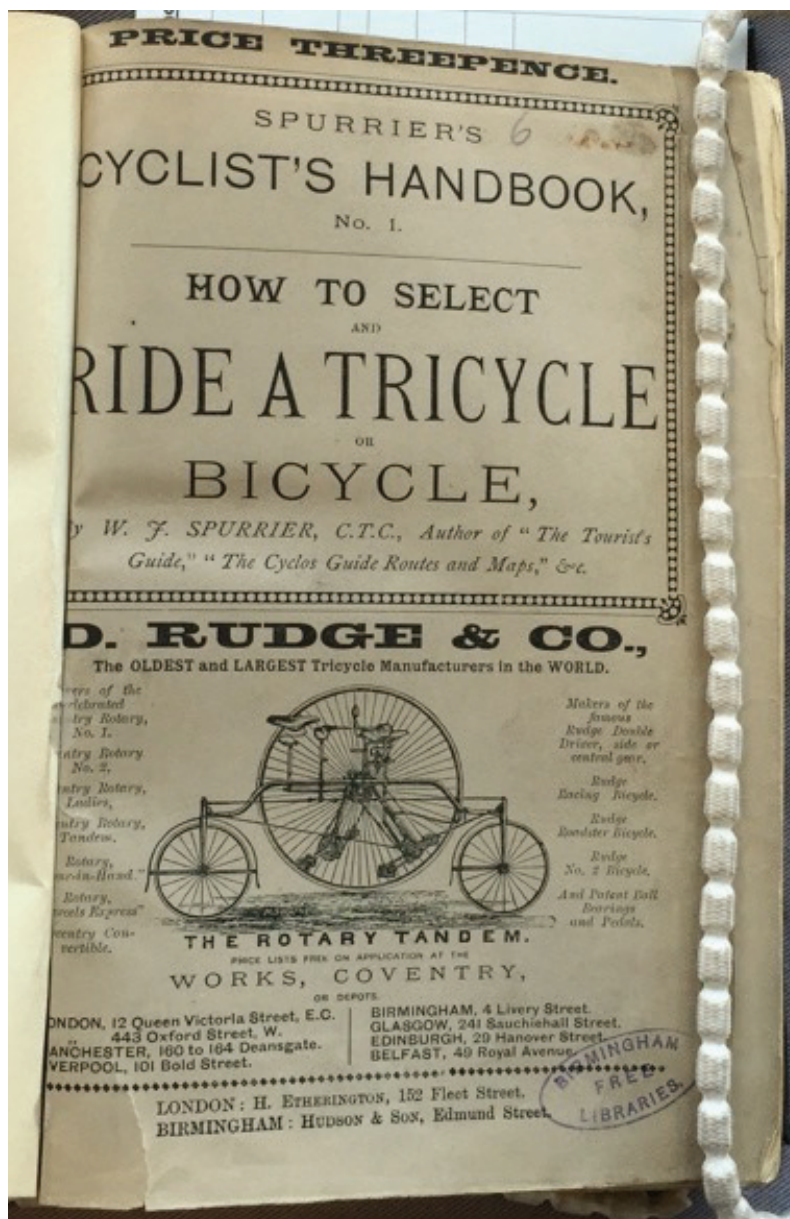
Figure 7.1.20 Example of a 'Magazine' that followed a 'Booklet' format. 'Magazine cover', *Spurrier's Cyclist's Handbook, No. 1*, magazine, Hudson & Son, Edmund & Livery Street, Birmingham, c. 1881. LOB.

by Hudson & Co, Edmund & Livery Street, Birmingham, *c.* 1881. The magazine used a pocket format, that measured 200 mm by 140 mm, perfectly sized for cyclists and urban commuters interested in investing in this new form of transport (Figure 7.1.20). Printed in black ink on un-tinted paper, that was protected by a brown card cover, it was presented as a specialist handbook that sold for three pence.

On the cover, Hudson & Son's used three sans serifs including a 'Classical' design style for the title, and two bold types in an advertisement for tricycles by D. Rudge & Co., including a lower-case sans serif for the street names of the national depots. The sans serif measured 10% of the total text area of the magazine cover. This document was ordered under the themes of 'Information' and 'Commercial Life' as the sans serif was used to present information-based content for addresses, and used for bold emphasis within trade advertising. *Supurrier's Handbook* was categorized within 'Trade' and 'Transport'.

7.1.2.3. Keepsakes: Programmes, Invitations and Commemorative Booklets.

The ephemera sample included a range of documents that were intended to have a longer lifespan than street literature and news-based publications. This included 'Programmes', 'Booklets' and 'Invitations' that became keepsakes, recording the cultural events and social experiences of the inhabitants of the Midlands.

'Theatre Programmes' were produced as multipage documents and sold to enhance the experience of theatre audiences, giving an expanded narrative of the performance and more detailed information about the production. James Upton, Great Charles Street, Birmingham, printed weekly 'Programmes' for performances at the Prince of Wales Theatre, Birmingham (Figure 7.1.21). The 'Programmes' were sold for one penny, with the cost of production being subsidised through advertising revenue from local businesses. There was a large quantity of advertising in these 'Programmes'. The low price of these documents enabled a wider distribution of 'Programme' sales to theatre patrons of different classes.

Upton composed pages of advertising using a two-column structure, with small advertisements separated by horizontal and vertical rules. The individual pages measured 250 mm in height by 175 mm in width, printed in black ink on lightly tinted papers, without card covers.

Figure 7.1.21 Examples of 'Theatre Programmes' for the Prince of Wales Theatre. (Left) 'Venus', Prince of Wales Theatre, programme cover, James Upton, Birmingham, 1890. CRL; (right) Advertising and internal page, Prince of Wales Theatre, programme, J. Upton, Birmingham, 1891. CRL

There was evidence of repeat advertising with businesses such as Wright Dyer & Cleaner (to the Prince of Wales Theatre), and the Wigan Coal & Iron Company Limited, whose advertisements were reprinted across multiple 'Programmes'.

The typography of the advertising pages was visually dense and heavy, using a wide mix of display faces that were tightly set. In an example from 1890, Upton used a wide variety of thirteen different sans serif types. This included 'Classical', early 'Neo-grotesque' and 'Humanist' style designs in condensed, sloping, bold and light types, that used both upper- and lower-case alphabets. In this page of advertising, the sans serif measured 30% of the text. The use of a bold condensed sans serif was used to give emphasis within the typographic hierarchy, for example, in the name of 'Wigan Coal'. This sans serif attracted the eye to the advertisement, but it was lighter in its appearance than other display faces used such as a slab serif that promoted Wright's Cleaning Services. A 'Classical' design style of sans serif was used to give a lighter appearance within the composition, that was easier to read in comparison to the condensed types used in the advertisements.

Lower-case sans serifs were used to a greater extent in 'Theatre Programmes' than were seen in 'Street Literature'. Condensed sans serifs were used in the advertisements for secondary information, for example, 'Gents' Suits Cleaned, Repaired, and Pressed equal to new by First-class Workmen', allowing a longer line length whilst keeping a clarity and ease of reading. In contrast, a bold condensed lower-case sans serif was used in the header, and repeated in the footer, of an 1890 cover, instructing the audience—whilst offering safety assurance—in the event of a fire, 'NOTICE – Each Evening the Double Fireproofed Curtain will be lowered between the Acts, when convenient'. The play *Venus*, by William Yardley, Edward Rose and Augustus Harris returned to the theatre as a morning performance in 1891. On an internal un-tinted stock, a wide lower-case sans serif was used to present an expanded commentary on the improvements and additions to the play. This bold san serif presented a densely packed paragraph of information, that was balanced with the bold weight of a early 'Neo-grotesque' style sans serif used to inform of the 'MORNING PERFORMANCE' and the heavy weight of a slab serif used to present the title of the play. This internal page used a total of three sans serif types that measured 15% of the overall text.
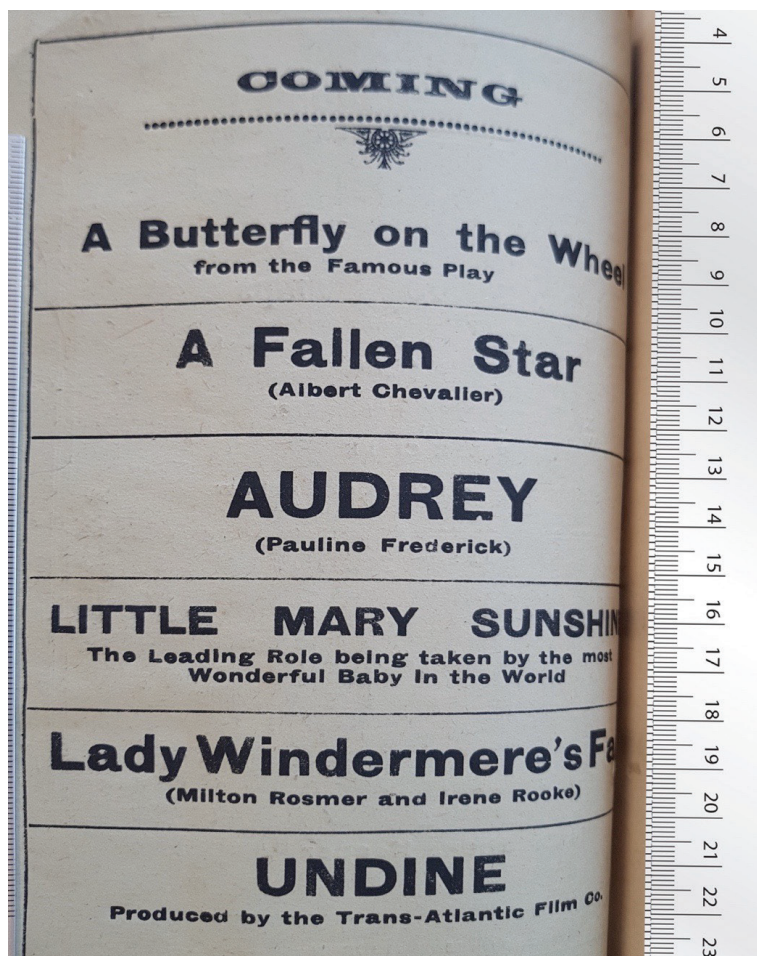
Figure 7.1.22 Coming attractions at the Imperial Picture Palace. Inside cover, Imperial Picture Palace, cinema programme, Manwarings Ltd., Birmingham, 1916. LOB.

The Prince of Wales Theatre 'Programmes' were ordered under all of the themes, as the sans serif was used: to instruct audiences on how to behave; to inform on the times of performances; and to promote participation in cultural activities. These documents were categorized as 'Entertainment' and 'Trade' based on the nature of the events and the supporting advertising content.

'Theatre Programmes' developed into free publications with the advent of cinema in the early-twentieth century. Early showings of silent films were promoted in 'Cinema Programmes'. These documents were subsidised by advertising, often using simpler forms of multipage documents, that were sometimes printed as a single folded sheet in a leaflet format. 'Cinema Programmes' carried less information about the individual performances or films. Cinema screenings followed a continuous rolling presentation of films, of which cinema audiences could attend a programme at multiple points throughout the day. There were even additional screenings of films at matinee presentations. As a new medium and cultural experience, 'Cinema Programmes' had a greater amount of text instructing the public on how to behave, for example, new information on when to be seated and how to leave during a screening.

'Programmes' for the Imperial Cinema, Moseley Road (Clifton Road Corner), Birmingham, were printed by Manwarings Ltd., John Bright Street, Birmingham. In a page promoting forthcoming attractions in 1916, Manwarings Ltd. used four sans serif types, that promoted the now lost silent movie by Paramount Pictures of *Audrey*, staring Pauline Frederick (Figure 7.1.22).

The 'Coming' attractions page measured 225 mm in height by 165 mm in width and was printed in black ink on grey paper. The sans serifs used followed an early 'Neo-grotesque' design style in upper-case and lower-case bold types. This example shows an increased use in sans serifs at the start of the twentieth century. In this page the sans serif was positioned in the first and last levels of the typographic hierarchy. With the exception of a slab serif used for the page title of 'COMING', the sans serif measured 90% of the total text area. 'Programmes' for the Imperial Cinema were ordered under the theme of 'Commercial Life' as the sans serif was used for advertising and promotion of this new form of entertainment, and the documents were categorized as 'Entertainment' and 'Trade'.
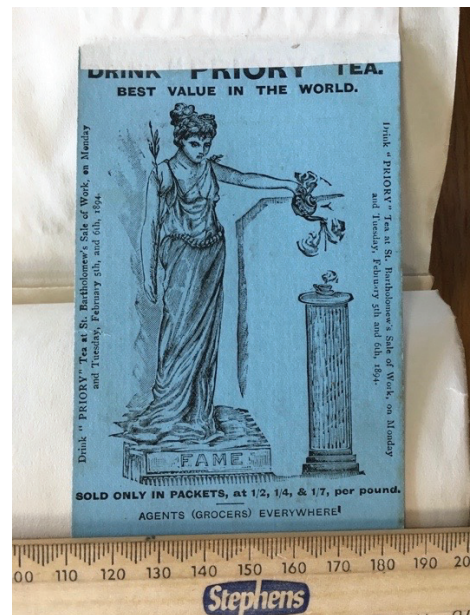
Figure 7.1.23 (Left and right) 'Sale of Work at St. Bartholomew's Church', invitation card, printer unknown, 1894. LOB.

'Invitations' were another form of document that had a longer lifespan than news-based content, becoming a keepsake or memento after the event has taken place. Using a smaller format than 'Handbills', 'Invitations' were pocket sized, for ease of presentation when entering an event. Printed on a card substrate for increased quality and greater permanence, 'Invitations' could be single or double-sided documents.

An 'Invitation' to a sale of work at the Church of England parish church of *St Bartholomew's* in Masshouse Lane, Digbeth, 1904, was produced by an unknown printer using black ink on a vivid blue card stock (Figure 7.1.23). The document measured 78 mm in height by 116 mm in width, used four early 'Neo-grotesque' style designs of sans serifs founts, in four different sizes of upper and lower-case types. The sans serif was the first typeface in the typographic hierarchy that measured 50% of the overall text. The sans serifs were used in the 'Invitation' to give emphasis to help the reader find key information on the 'where', 'when' and 'how' to attend the event. Sans serif types were widely used in the accompanying advertisements for Priory Tea, the trade sponsor for this fundraising event. Money raised from the event was used to contribute towards the church restoration fund, of which works began in 1893 at a cost of £800.[225] The invitation was ordered under the theme of 'Information' and 'Instruction', and the category of 'Religion'.

In 1906, Fred Jones & Son's, 55 Temple Row, Birmingham, printed an official commemorative 'Programme' for the 'Chamberlain Celebrations', a two-day celebration of the life and achievements of Joseph Chamberlain (1836-1914), (Figure 7.1.24) The 'Programme' was produced to mark Chamberlain's seventieth birthday and to acknowledge his thirty years of parliamentary service, in standing for the people of Birmingham. The official 'Programme' was a multipage document that followed a booklet format, measuring 180 mm in height by 115 mm in width, and bound by metal staples. Printed in black ink on untinted paper stock, the 'Programme' was protected by a light grey card cover that sold for one penny.

The content of the 'Programme' was an equal mix between trade advertising and a listed presentation of Chamberlain's itinerary, detailing all his public appearances, estimated to the nearest minute of his arrival and departure times, on the 7 and 9 July, 1906. Jones & Son's used two bold sans serif types for the schedule pages: One for the times and the place

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225   Birmingham Daily Post, 'Reopening of St Bartholomew's Church' *Birmingham Daily Post*, 1893.
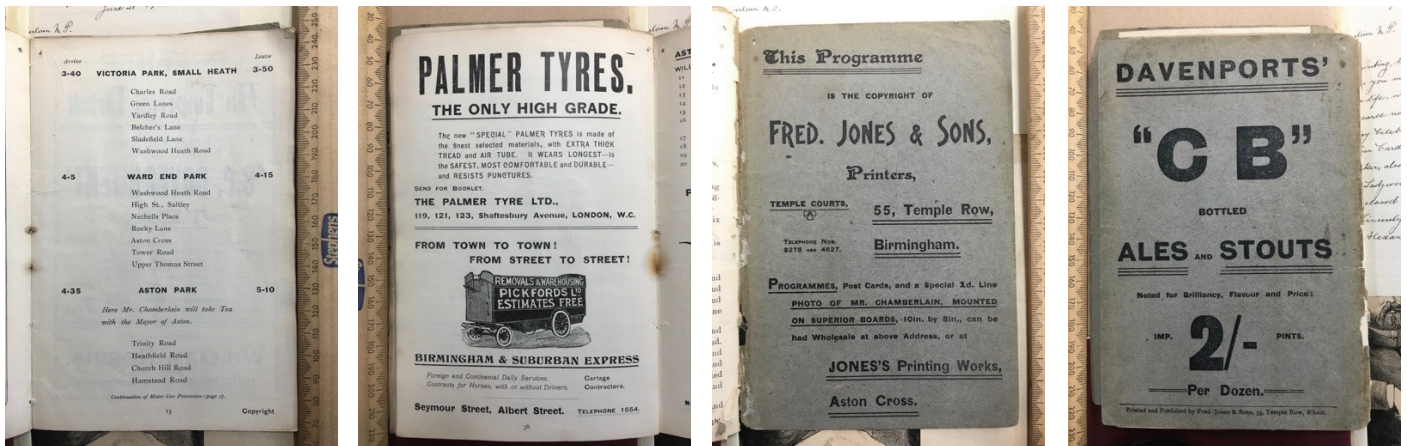
Figure 7.1.24.: (Left to right) Examples of a commemorative 'Programme' in a 'Booklet' format. 'Chamberlain Celebrations', programme, Jones & Sons, Birmingham, 1907. CRL.

headings; and an early 'Humanist' design style, in upper- and lower-case, that informs the reader that the content is 'Copyright(ed)'. The sans serif appears in the primary and last positions of the typographic hierarchy and measured 10% of the overall text.

In a full-page advertisement for Palmer Tyres, Jones & Son's used a variety of ten bold and condensed sans serifs, including two early 'Humanist' designs (in upper- and lower-case), and an early Neo-grotesque' design style. An unusual decorative style of sans serif was used for the main advertising text, this typeface was light in appearance with decorative elements to the terminals of 'e' and the uppercase 'B', 'C', D', 'E', 'P', 'R' and 'U'. In this example, the sans serif occupied the primary and final positions in the typographic hierarchy, and it measured 90% of the text area.

An advertisement for the sale of additional printed merchandise from Jones & Son's, including a 'superior mounted' photograph of Chamberlain for one penny, used seven sans serifs. This included other early 'Humanist' design styles in upper-case and lower-case, and 'Neo-grotesque' styles. Jones & Son's used a special decorative condensed sans serif for their company name. This sans serif had oblique terminals, with extended arms and feet on the 'D', 'J', 'R' and 'S' that appeared in two sizes. In this advertisement the sans serif occupied the first and last positions of the typographic hierarchy and measured 80% of the text area.

The back cover of the 'Programme' was used for a full-page advertisement for Davenports' CB Ale and Stouts. The typographic composition used a large amount of white space, contrasted with large sizes of sans serif types to create a modern design. Jones & Son's used seven bold sans serifs types, including early 'Humanist' and 'Neo-grotesque' design styles, in upper-case and lower-case alphabets. The sans serif was in the primary position of the typographic hierarchy and it measured 95% of the text area. The remaining 5% of the text was set in a serif typeface for the printers' credit at the base of the page.

Six pages from the 'Chamberlain Celebrations' 'Programme' were ordered under the themes of 'Information' and 'Commercial Life', as the sans serif was used for headers within the itinerary lists and for trade advertising. They were categorised as 'Entertainment', 'Governance' and 'Trade' based on the content being dedicated to the celebration of a popular political Figure, and for associated promotional advertisements, such as the sale of a commemorative Chamberlain medal by the manufacturer Joseph Frey, 35 Albion Street, Birmingham.
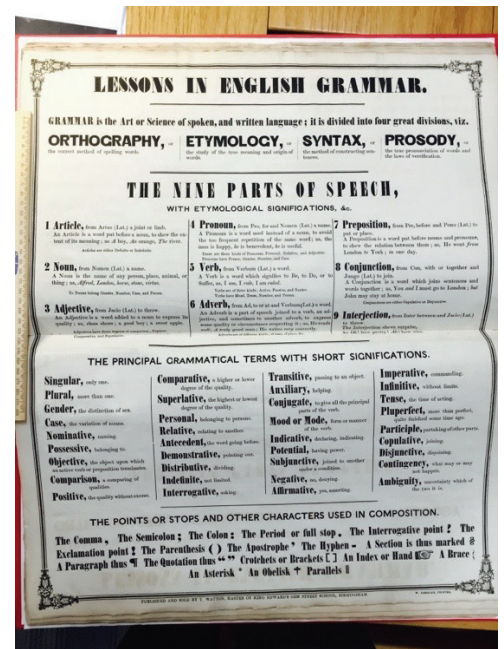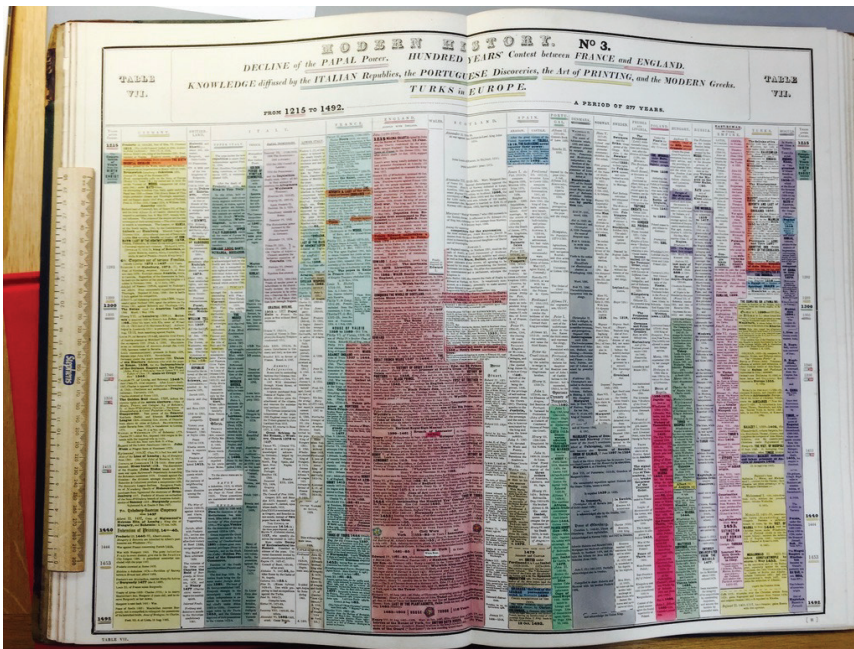
Figure 7.1.25 (Left) Modern History, No. 3, *A View of Universal History by Major James Bell*, (London: Hansard, 1842). CRL; (right) Lessons in English Grammar, *Outline Charts of General History*, (Birmingham: William Joesbury, 1848). CRL.

Figure 7.1.26 'South Birmingham Parliamentary Bye-election', election list, Hudson & Son, Birmingham, 1904. LOB.

7.1.2.4. Charts and Forms.

A development in the use of sans serif typography was seen in documents that were designed to share and gather information such as 'Charts' and 'Forms'. 'Charts' including 'Lists' were used to present complex information for readers to understand at ease. In *A View of Universal History*, Major James Bell used one small sized upper-case sans serif to give emphasis to his Charts' (Figure 7.1.25).

An early pioneer of information design, Bell used a condensed sans serif for small sub headings within the multi-column documents, to highlight topic names. The sans serif was balanced with a similar sized slab serif that performed a complementary function in the text to identify dates. Bell's charts were printed by Hansard, London, 1842, measuring 500 mm in height by 640 mm in width, across a double-page span. Bell's created a densely packed matrix of interconnected texts, that could be navigated through at speed using these bold display faces. In total the sans serif measured under 5% of the total text, yet it contributed to the success of the functionality of browsing the text, signposting the reader to each key stage. 'Charts' from Bell's *A View of Universal History* were ordered under the theme of 'Information' and the category of 'Education'.

In 1848, William Joesbury, of the Eagle Press, 1 Aston Street, Birmingham, printed a series of educational 'Charts' that were published and sold by school-master Timothy Watton. Joesbury used a range of sans serif types from Stephenson Blake and Vincent Figgins, to present Watton's *Outline Charts of General History* (Figure 6.1.23). He composed the 'Charts' using three bold upper-case sans serif types in large sizes to give emphasis to secondary and tertiary headings. The documents were designed as a portrait format from display on classroom walls, each chart measured 600 mm in height by 450 mm in width. The sans serifs he used were of a 'Classical' design style, that measured 10% of the text area. As with Bell, Watton's 'Charts' were ordered under the theme of 'Information' and the category of 'Education'.

In an 'Election List', for the South Birmingham by-election, 1904, Hudson & Sons presented the election results through a simple 'Chart' structure with information separated into a five-column composition divided by brass rules (Figure 7.1.26). Hudson & Son used one bold sans serif of an early 'Humanist' style design, in upper- and lower-case type to highlight the district number in the first column. This was balanced using the same fount and type size to give emphasis to the names of the clerks
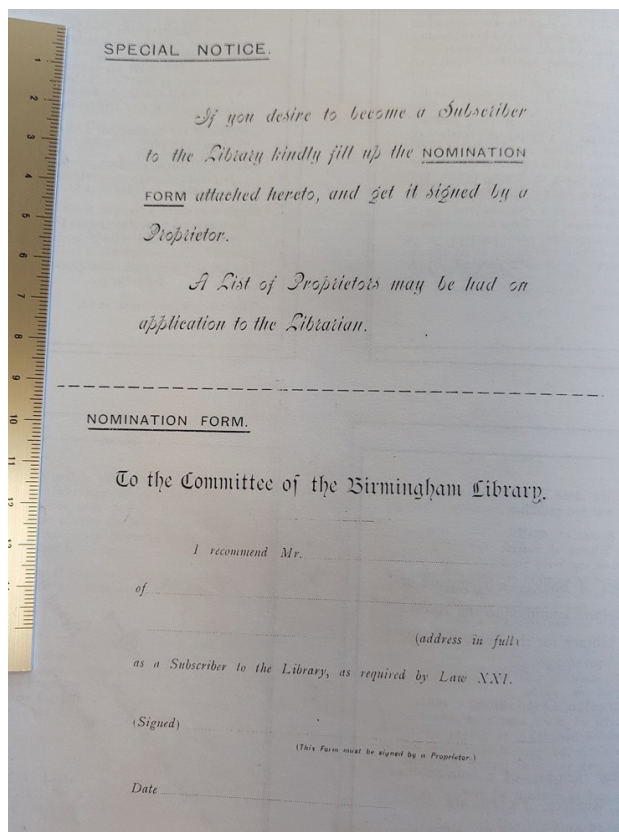
Figure 7.1.27 Example of a 'Letter' format including a nomination form. 'Special Notice', facsimile of letter, printer unknown, 1872. LOB.
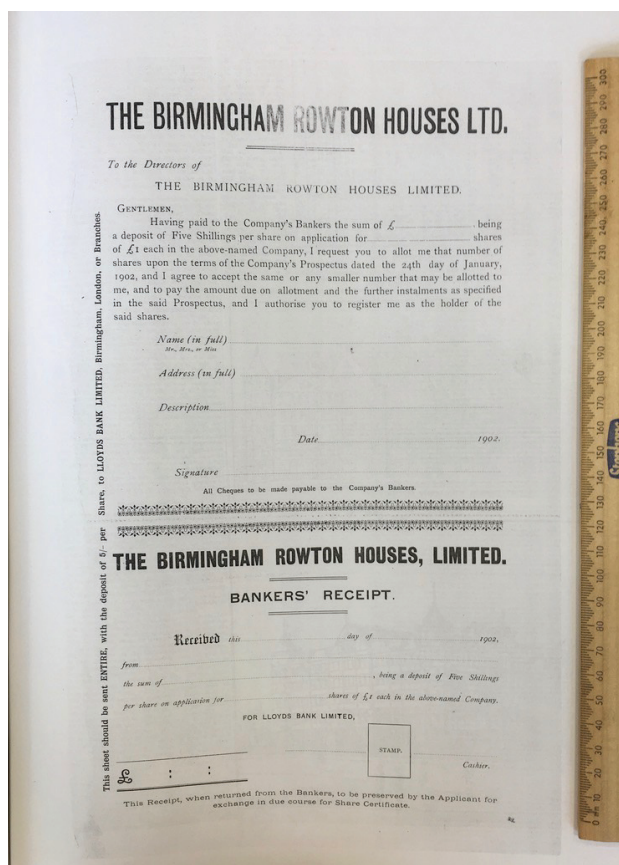
Figure 7.1.28 Example of a business 'Letter' and share application 'Form'. 'The Birmingham Rowton Houses Ltd.', facsimile of letter, printer unknown, 1902. LOB.

responsible for overseeing the voting count in the fifth column. Hudson & Son, printed the 'Election List' in black ink on un-tinted paper, on a document that measured 205 mm in height by 125 mm in width, allowing the chart to be circulated by hand as a 'Handbill'. His use of one sans serif measured 30% of the text area. The document was ordered under the theme of information and the categories of 'Governance' and 'Politics'.

The sans serif was an integral element in the design of printed documents that were used to gather and record information, such as 'Stationery' and 'Forms'. Printers experimented with additional functionality for 'Business Stationery', for example 'Trade Cards' evolved into 'Business Cards', 'Letterheads', 'Complement Slips', 'Receipts' and 'Invoices'. 'Letters' incorporated reply-back forms, 'Tickets' included tear-off slips for vouchers, and 'Business Cards' were printed with spaces for tradesmen to add their personal signatures by hand.

The sans serif was used to instruct and guide readers using headings in printed letters and in letterheads. In 1872, the Birmingham Library, used a 'Letter' format for a special notice for subscribers that had the dual functionality of being a nomination form using a tear-off slip. A wide, light, upper-case sans serif with a brass rule was used to indicate that the 'Letter' was a 'SPECIAL NOTICE', and a smaller size of the typeface was used in the body of the tear-off slip to indicate that this section of the document was to be used as a 'NOMINATION FORM'. The document measured 297 mm in height by 210 mm in width, the same size as a 'Letter' today. The unknown printer used three sans serifs, two sizes of bold sans serif and one early 'Humanist' style design in upper- and lower-case alphabets. The sans serif occupied the primary position in the visual hierarchy and measured 5% of text area. This document was ordered under the themes of 'Information' and 'Instruction' as the sans serif was used to inform and gather information from the reader using a two-way exchange of information. It was categorised as 'Education', Entertainment' and 'Governance' as it related to becoming a member of the newly formed municipal library (Figure 7.1.27).

The 'Letter' format was developed as an early form of direct mail, with advertising and political literature being sent direct to residents' home addresses. There are some examples in the ephemera sample that used envelopes with a generic address to the 'occupier' that would have been distributed by hand. A business letter from the Birmingham Rowton Houses Ltd., 1902, promoted shares in the newly formed Birmingham
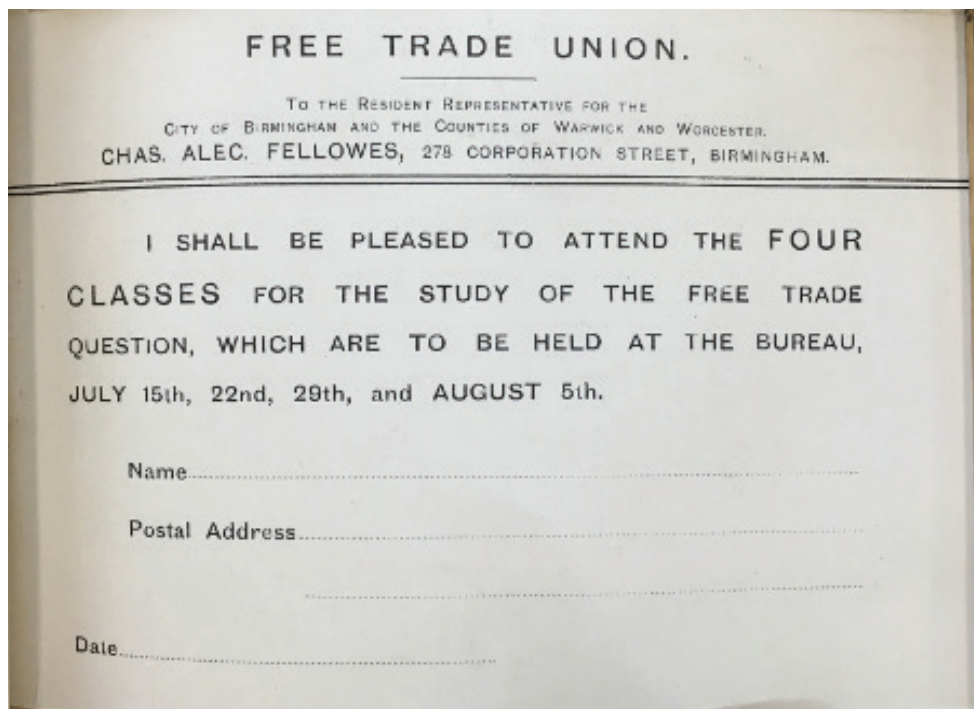
Figure 7.1.29 An example of a reply-back 'Postcard'. 'Free Trade Union', postcard, unknown printer, c. 1905-14. LOB.

Figure 7.1.30 Example of the sans serif used in a receipt. 'Bought of William Hulse', receipt, printer unknown, 1873. LOB.

workhouse. An unknown printer used three sans serifs, including a large condensed sans serif for the company name as a header for the correspondence and a bolder condensed sans serif in a smaller size to differentiate between the lower section of the 'Letter'. A 'Classical' style design of sans serif was used for the title of the 'Bankers' Receipt', which was to be completed by the shareholders bank and then later exchanged for the share certificates (Figure 7.1.28).

The sans serif was used in the primary position of the typographic hierarchy, and collectively the sans serifs measured 10% of the text area. This document was ordered under the themes of 'Information' and 'Instruction' and categorized as 'Trade'.

Printers' adapted and added new functionality to other document classes. 'Postcards' were adapted and as reply-back cards. A booking card to attend classes organised by the Free Trade Union, *c*. 1905-14, was completely set in sans serifs, using four different sizes of type in both upper- and lower-case designs. The smaller sized types used for the address information were lighter in appearance when compared to the larger sizes that were used to give emphasis through headings. The text was composed with a generous amount of white space that enabled greater legibility and clarity in the typographic presentation. The 'Postcard' measured 90 mm in height by 125 mm in width, the unknown printer, used five light sans serif typefaces, including 'Neo-grotesque' style designs, that measured 100% of the text area. The document was ordered under the theme of 'Information' and categorized as 'Education', 'Politics' and 'Trade' as the document was intended to recruit participants in the study of the 'Free Trade Question' (Figure 7.1.29).

The sans serif was used as part of the general typographic composition for names and addresses within 'Trade Cards' and 'Billheads'. An early development of these documents as business stationery was as 'Forms' used in hand written 'Receipts' and 'Invoices'. In these types of document, the sans serif types are often bold and condensed, used at small sizes that were balanced with the size of other display typefaces in the documents.

A 'Receipt' from William Hulse, Brass and Iron Bedstead manufacturers, 1873, used a wide upper-case sans serif fount, that was printed in red to present a colour contrast with the other information (Figure 7.1.30). The sans serif was used to highlight that the cost of 'carriage allowed for on settlement of account'. The document measured
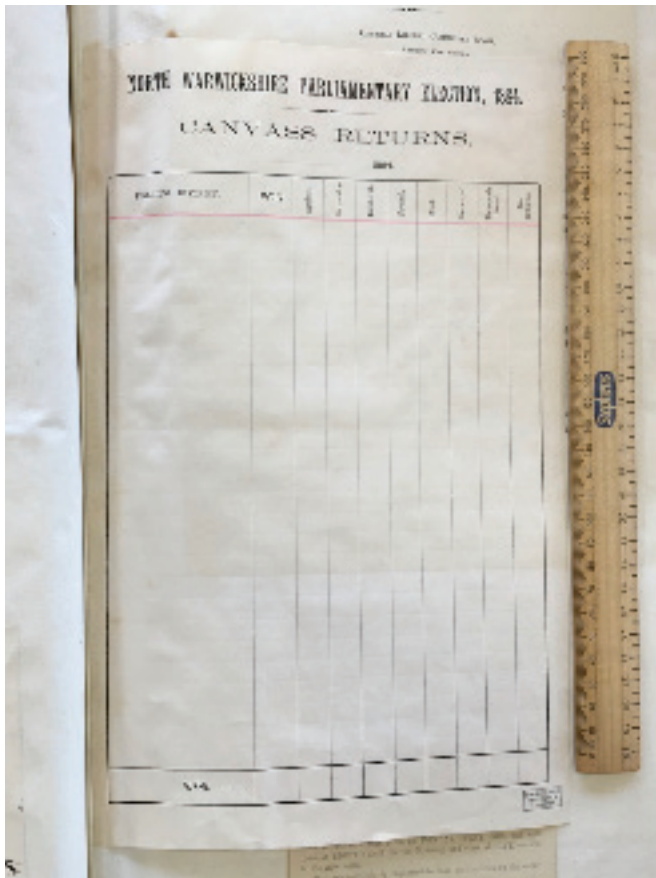
Figure 7.1.31 Example of the use of sans serif in 'Forms'. 'North Warwickshire Parliamentary Election', form, printer unknown, Birmingham, 1884. LOB.
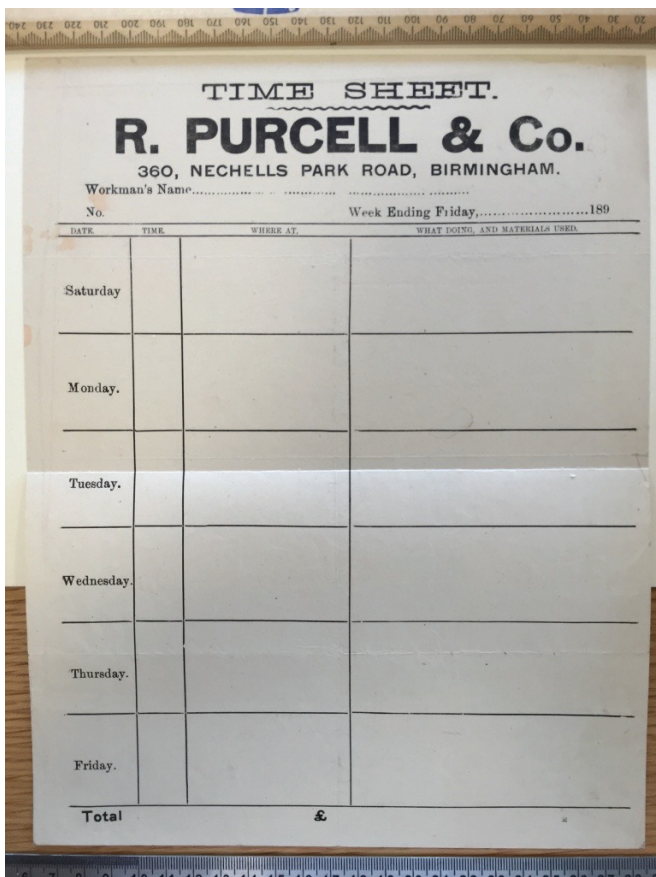
Figure 7.1.32 Example of the use of bold sans serif in a 'Timesheet' format. 'R. Purcell & Co.', timesheet, printer unknown, Birmingham, c. 1890. LOB.

170 mm by 200 mm, using one sans serif that measured 10% of the text area. It was ordered under the theme of 'Instruction' and categorized as 'Trade'.

Printed 'Forms' were produced to serve a diverse range of purposes. An example of an 'Election Form' for the North Warwickshire Parliamentary Election, 1884, was used to record canvas returns in forecasting of election results. An unknown printer, used two sans serifs in moderation within the typographic hierarchy (Figure 6.1.31). A wide san serif fount was used in upper-case to count the projected votes 'FOR'. The use of the sans serif placed greater emphasis on this positive column, differentiating it from the other columns that were all set in a serif face. The name of the political party canvasing returns was not identified from the information presented on the form. A condensed sloping sans serif was used to highlight the column for the total number of potential votes. This was a large document measuring 320 mm in height by 206 mm in width. The sloping sans serif occupied the last position in the typographic hierarchy, and the sans serifs measured 5% of the total text area. This document was ordered under the theme of 'Information' and categorized as 'Politics'.

A 'Time Sheet' was used to record workmen's hours for the general decorating contractors R. Purcell & Co., 360 Nechells Park Road, Birmingham, *c*. 1890.[226] The document included three bold sans serifs, using one large fount to give emphasis to the business, one wide type in a smaller size for the address, and a 'Humanist' style design to indicate the total wages at the bottom of the form (Figure 6.1.32). The document measured 280 mm in height by 220 mm in width, of which the sans serifs occupied the primary and final positions in the typographic hierarchy, measuring 50% of the text area. The 'Form' was ordered under the theme of 'Information' and categorized as 'Trade'.

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226   R. Purcell were listed in the Birmingham and Aston Chronical as 'Plumbers, Glaziers, House Sign, Decorative Painters and Paperhangers'. 'Advertisement', *Birmingham & Aston Chronicle*, 20 October 1888.

7.1.2.5. Functions Conclusion

This section focused on the findings of the use and functions of sans serif typography in relation to the document class. While it is acknowledged that the data set used in the sample is limited and may skew the data, it presented several findings for future research. These included: the use of sans serifs for headlines in street literature to draw attention; the use of sans serif in news based document for boldness as an alternative design to Blackletter types; an increased use of lowercase sans serif typography in keepsake documents such as programmes; and through the information design of charts and forms to guide and instruct readers. These areas of inquiry can be further developed by working with a different samples of ephemera that has been specifically collected by its document class.

7.2.   Themes and Categories

The themes of 'Commercial Life', 'Information' and 'Instruction' were used to group together documents based on the context in which the sans serif was used. Analysis of the ephemera revealed that the jobbing printers of the nineteenth century used sans serifs for three functions: firstly, to attract attention; secondly, to inform; and finally to instruct. This functionality formed the basis of how the themes were applied, to order the ephemera and structure the discussion on how sans serif typography was used.

The demographic of these audiences expands over the course of the nineteenth century, reflecting the opportunities for social mobility within the industrialised centres of Birmingham and Bridgnorth. The themes were subdivided into categories that was led by the textual content of the documents. Through interpretation of these short-form texts, it became apparent that by grouping ephemera into categories, it was possible to show what the sans serif was used to communicate, when it was used and by who. The categories of 'Education', 'Entertainment', 'Governance', 'Politics', 'Religion', 'Trade' and 'Transport' were identified for this study. There is flexibility in this approach for other scholars to expand the categories, and apply this methodology to other areas

The theme of 'Commercial Life' was mapped against 471 pieces of ephemera, of which 193 documents was unique to this category. 'Commercial Life' showed how sans serifs were used for their bold impact and novelty value, later becoming one of the leading typographic styles used to represent industry and commerce. The 'newness' of the sans serif's appearance was also used to reflect the identity of the growing populations of the Midlands. Following the latest fashions in typography, the sans serif was used to help orientate the emergent middle and working classes in their everyday lives.

The theme of 'Commercial Life' contained the most documents, as its primary function was to attract attention. The first sans serif types fulfilled this role through large type sizes, appearing first as Two-lines English. Its simplified serifless designs gave emphasis to the boldness of the sans serif types, its minimal form contrasting with the visual appearance of other display types in use at the time. It attracted attention through its shocking primitive design, creating impact, that later formed a visual language for the people of Birmingham and Bridgnorth to follow.

Table 7.3 Overview of the ephemera organised by singular and multiple themes.

	Across All Themes	Commercial Life Only	Commercial Life and Information	Commercial Life and Instruction	Information Only	Information and Instruction	Instruction Only	Total
Ephemera	59	193	161	58	136	95	27	**729**
Commercial Life	59	193	161	58				**471**
Information	59		161		136	95		**451**
Instruction	59			58		95	27	**239**

Table 7.4 Overview of the categories organised by singular and multiple themes.

	Across All Themes	Commercial Life Only	Commercial Life and Information	Commercial Life and Instruction	Information Only	Information and Instruction	Instruction Only	Total
Education	4	32	43	3	51	24	2	**159**
Entertainment	19	65	49	2	20	19	5	**179**
Governance	19	19	35	11	36	35	8	**163**
Politics	26	35	29	38	33	45	17	**223**
Religion	4	4	16	6	10	7	2	**49**
Trade	16	109	65	13	36	24	8	**271**
Transport	3	11	14	0	28	2	1	**59**
	91	**275**	**251**	**73**	**214**	**156**	**43**	**1103**

To enable a wider understanding of the relationship between how sans serifs were used and what they were used for, several themes were applied to individual documents. These were compared to the document classes to analyse the functions of sans serif typography. From the sample, 161 items were ordered under the theme of 'Commercial Life' and 'Information'. This combination of approaches, where sans serifs were both used for impact and to inform, occurred highest across singular document categories of 'Posters', 'Playbills', 'Handbills' and 'Trade Cards'. These documents demonstrated how the relationship between contrasting sizes of type was used within advertising.

The sans serif was frequently applied in this combination in documents that were ordered both as 'Forms' and 'Stationery'. In this context it was anticipated that the function typography would be led by smaller text sizes to present information, however the data revealed that its first purpose was simply to capture attention, followed by its application to present information.

Fifty-eight documents spanned across 'Commercial Life' and 'Instruction', and a further fifty-nine were indexed under all themes (Table 7.3). The combinations of themes were analyzed separately, enabling the data to be filtered into smaller containers, that were used to focus on specific document types, and categories. The ephemera that was organised into singular themes was used as a control, through comparison of the data to interpret how sans serifs types functioned when used together. For example, there were four examples of 'Tickets' that were grouped together as 'Commercial Life' and 'Information', through comparison of the percentage across 'Tickets' in these themes, it was discovered that the prevalent function of the sans serif was to give information. The methodology presents flexibility for researchers to organise, filter and analyse data from multiple perspectives.

Alongside the themes, categories were designed to order the data from the perspective of the clients and show insight into the audiences that sans serif types were used to communicate to. These were used to organise documents by their content, grouping together ephemera that was filtered to communicate similar activities, beliefs, and objectives (Table 7.4). The category of 'Trade' contained the largest grouping of 271 documents, of which 109 items were within the singular theme of 'Commercial Life'. When filtered by theme, the data showed that the highest proportion of seventy-nine documents, were contained in a

singular use of the 'Trade' category (Table 4.7 The ephemera sample by Themes and the category of Trade, in Appendix 4, p. 118). Comparison with other documents organised jointly in 'Trade' and other categories, politicians and individuals for the primary function of advertising. The second highest grouping of seventeen documents for 'Trade' was in combination with 'Education', where the sans serif was used to promote evening classes and public lectures.

The second biggest category was 'Politics' that contained 233 items across all themes and in combination with other categories. As a singular category there were 138 documents, of which the data revealed twenty-eight within the shared themes of 'Commercial Life' and 'Instruction', used in political ephemera for election campaigns (Table 4.5 The ephemera sample by Themes and the category of Politics., in Appendix 4, p. 116).

7.2.1.   Sans Serif in the theme of Commercial Life

As the Midland's population grew, so did the economic and social prosperity of its inhabitants. A product of the regions commercial success was leisure time. Through street literature and printed advertising, people were introduced to new ways of spending their time and money, and in the process were educated in how to adapt to 'Commercial Life'. Within the theme of 'Commercial Life', documents were recorded where the sans serif was used to advertise products, services and cultural activities. Leading categories in this area included 'Entertainment', 'Politics' and 'Trade'.

In 'Commercial Life' the sans serif typography was developed as a tool to enable visual recognition between competing goods and social activities. It was used primarily in large sizes in printed advertising to create impact, cascading down to other forms of documents, such as advertising supplements and promotional material. Advertising presented customers with products and activities that represented their lifestyle aspirations. It guided them towards cultural and social spaces where they could experience 'Commercial Life', and it encouraged them to develop civic, spiritual, and political responsibilities.

In the nineteenth century, the transition to 'Commercial Life' of the emergent middle and labouring classes was particularly encouraged through engagement in cultural activities. Jonathan Rose describes the attainment of knowledge through cultural engagement as a paradoxical

relationship between the institutional elite and the emergent classes.[227] In presenting competing goods and social activities, sans serif typography was used by jobbing printers in the Midlands as a tool to enable visual recognition by the middle and working classes. Funded by the newly formed wealth of the industrialists, art galleries were founded, libraries expanded, and art and technical education flourished. In attracting investment, the regional towns competed to develop their cultural reputations. Alongside the existing assembly rooms, new theatres and concert venues were established, introducing the regional public to performances that were intended to enlighten its people to equivalent cultural levels as experienced in London. Popular entertainment for the masses flourished through the music hall, touring circus performances and sporting events.

'Playbills' are one such form of leisure-time advertising, and the sans serif was an integral part of the typographical composition of promotional material produced for theatres in the Midlands. The use of typography in the documents was indicative of the different target audiences that the theatres aimed to attract, and in the process these documents contributed to the development of arts and popular entertainment.

By the mid-nineteenth century, Music Hall entertainment was one of the Birmingham's most popular forms of entertainment.[228] Holders Hotel and Concert Hall, opened its doors in 1846, under the management of the innkeeper Henry Holder. As the music hall grew in popularity, its changed proprietors several times before being rebuilt at the end of the century. Holding crowds of up to 4,000 people, the Gaiety Theatre of Varieties launched in 1897, later becoming a cinema in 1920.

A large collection of 'Playbills' for the Gaiety Theatre, have survived in the archives of the Library of Birmingham. The collection includes "Playbills" from 1906-18, that were later folded into three large bound

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227   Jonathan Rose, *The Intellectual Life of the British Working Classes* (New Haven: Yale University Press, 2001), p. 24.

228   The Gaiety Theatre demonstrates a link between music hall entertainment and cinema as a development within popular culture. The theatre closed in 1920 and reopened as a cinema. Matthew Lloyd, 'Holder's Grand Concert Rooms, 88, 89, 90, Coleshill Street', *Arthur Lloyd* (Online: Arthur Lloyd, 2018) <http://www.arthurlloyd.co.uk/Birmingham/HoldersGrandConcertRoomsBirmingham.htm> [accessed 17 July 2019]. The ABC Gaiety Cinema finally closed 29th November 1969 and was demolished under a compulsory purchase order by Aston University in 1970. Mike Blakemore, 'ABC Coleshill Street', *Cinema Treasures* (Online: Cinema Treasures, 2017) <http://cinematreasures.org/theaters/37046> [accessed 3 May 2019].

Figure 7.2.1.'Dogs of all Nations', playbill, Parkes and Groves, Birmingham, 1911. Gaiety Theatre Playbills 1911-1913, LOB.
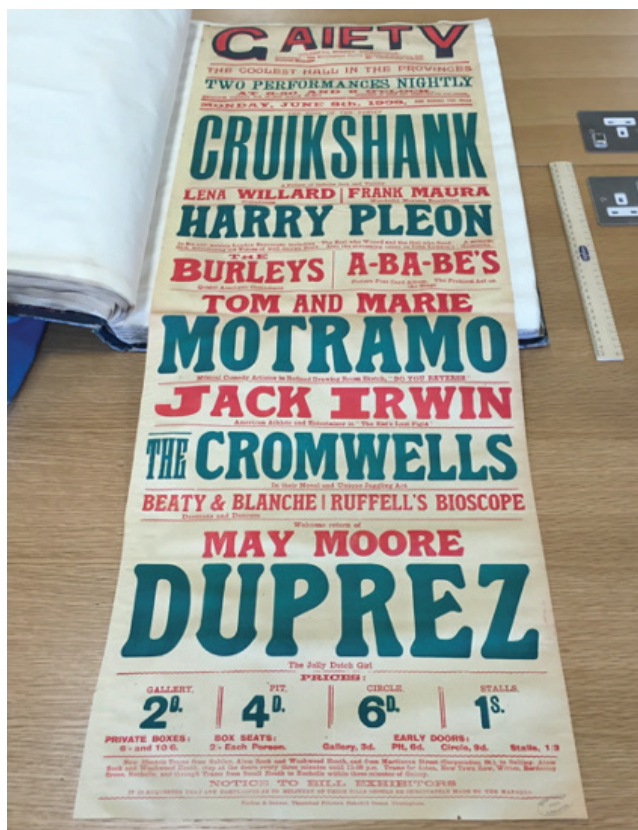
Figure 7.2.2 'Duprez', playbill, Parkes and Groves, 1908. Gaiety Theatre Playbills 1907-1909, LOB.

volumes.[229] The bills presented a mixed application of display types, following the same composition rules as early jobbing printing, with the selection of printing types being based on size and appearance as to what will fit across the width of the documents. Posters for the Gaiety Theatre explored the use of nostalgia through a return to an earlier style of composition for music hall audiences at the turn of the twentieth century.

The use of new typeface designs and two colours of ink differentiated these 'Playbills' from the typographic arrangements of the early-nineteenth century. The style of their layout was outdated compared to contemporary printed designs, yet it was subtly refined. The choice of composition was intentional, used as an advertising device that evoked a stylised nostalgia. This was aimed to resonate with previous generations of music hall patrons and the design's cultural associations were used to attract new audiences to a night of light entertainment.

For example, a 'Playbill' from 28 June 1911, presented a cautionary, authoritative warning in a small bold sans serif at the foot of the 'Posters', that the 'RIGHT OF REFUSING ADMISSION IS RESERVED', an indication that a night at the Gaiety was more of a social event than a cultural experience (Figure 7.2.1).

The 'Poster' presented sixteen different styles of sans serif typefaces, including lower case printing types. The sans serif was given top billing for Zertho's 'Dogs of all Nations' as the primary typestyle in the document hierarchy. The theatre had recently changed its name to the Coliseum, shortly before reverting to the Gaiety Theatre in October of the same year. Typical of this genre of entertainment, the programme presented a packed listing of variety acts, including 'Bioscope, the very latest' and it featured an overture of the 'Coronation Grand March' by Williams, conducted by the in-house musical director Fred Leake. The programme ran consecutively each week night from 6.50pm to 9pm.

The typography of a Gaiety Theatre playbill from 8 June 1908, used sans serif printing types in large condensed forms to advertise the headline act of the musical comedian and clown Alfred Cruikshank (1875-1956), (Figure 7.2.2). Using a condensed sans serif to fit to the text width, Cruikshank's name fills the entire measure. Appearing in Birmingham under his persona - the 'fool of the family' Cruikshank was a celebrated

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229   The volumes include material from 1907-8, 1911-13, 1916-18. In June 1911, the variety theatre rebrands temporarily as Birmingham Coliseum and Gaiety theatre, returning to the original name of the Gaiety Theatre in October 1911.

performer across the British variety theatre circuit and a regular attraction at the Gaiety Theatre, appearing in several playbills of the time.

Cruikshank's name appears second in the typographic hierarchy due to the printer's choice to present dancer Mae Moore Duprez in a larger Art Nouveau inspired sans serif at the foot of the 'Playbill'. The Art Nouveau style of printing types make a visual connection to the style of designs presented in the early programmes for the Gaiety Theatre of Varieties.[230] The link to Art Nouveau was used as a visual reference to show that an evening at the Gaiety Theatre presented its audiences with the opportunity of pleasure and hedonism associated with Parisian culture. Duprez's performance on the evening was in her character of the 'Jolly Dutch Girl'. Her costume is in the collections at the V&A museum of which they describe her risqué performance and movements as 'she moved the skirt, Duprez's legs would have been revealed surrounded by a froth of underskirts in the finest chiffon'.

'Playbills' differ from other forms of commercial advertising as there was no specific 'call to action', the reputations of the performers are the main attraction and the typography was used to communicate the sensational quality of the entertainment. In small sizes, sans serif types were used to communicate 'the how', an approach shown in the theme of 'Information', such as ticket pricing and recommendations of transport links to the theatre. The Gaiety Theatre hosted many celebrity performers of note from the national variety stage, drawing large crowds into Birmingham on a nightly basis.

7.2.2. Sans Serif in the theme of Information

In addition to their political printing, jobbing printers in the Midlands also used sans serif typography to inform their audiences. The rapid growth of populations in industrial cities was reflected in increased levels of literacy. Rob Banham discusses an increase in literacy represented through the scale of advertisements circulated, and improvements in education that 'a good number of households had at least one member who was

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230   Matthew Lloyd, 'Holder's Grand Concert Rooms', *Pinterest* (Online, Pinterest, 2018) <https://www.pinterest.co.uk/pin/328059154084904723/> [accessed 4 May 2019].

able to read and understand them'.[231] Focusing on the presentation of key information such as dates and times, jobbing printers incorporated sans serifs to add emphasis to important information. The use of sans serif in architectural lettering and signwriting clearly influenced jobbing printers' experimentation with various applications of sans serif in typography. Both forms of lettering were used to help the audience in identifying their location and destination.

Printers explored new ways of ordering typographic information to help readers to navigate through printed documents. In the process, they presented audiences with new ways to read information at speed, and new ways of learning how to interpret information. The evolution of these forms of typographic composition was later developed as information design, mapping, and contemporary wayfinding systems.

The use of sans serif to relay key information extended from the practice of using blackletter or early display types to add emphasis to text. Initially the sans serif provided an alternative visual style for printers to work with and add, especially, definition to areas within the typographic hierarchy of the document. In response to market demand from jobbing printers, typefoundries designed an expanded range of sans serif types in many sizes and weights. With an expansion of new printing types becoming readily available in the 1840s, including small type sizes and a wide variety of weights, jobbing printers used sans serif for basic information such as names, dates, location and prices. This soon became common practice as the newer types were more durable in their construction and lasted longer without breaking under the weight of the press. As more variants of sans serif printing type designs became available from the typefoundries, other opportunities were explored within business printing and educational charts. With an extended range of sizes and condensed forms available, the functionality of sans serif lettering was extended to compose new document types for business stationery. Moreover, as the simple visual form of the sans serif was easy to recognise, in the late nineteenth century it was used to teach children letter formation in writing primers and copy books. Its simple serifless structure made for increased legibility, enabling new ways of presenting complex information for easy recall.

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231   Rob Banham, '"The largest type in England": wood lettering for jobbing printing, 1800–1830', in J. Blume et al (eds) *Vom buch auf die straße: große schrift im öffentlichen Raum* (Leipzig: Institut für Buchkunst, 2014).
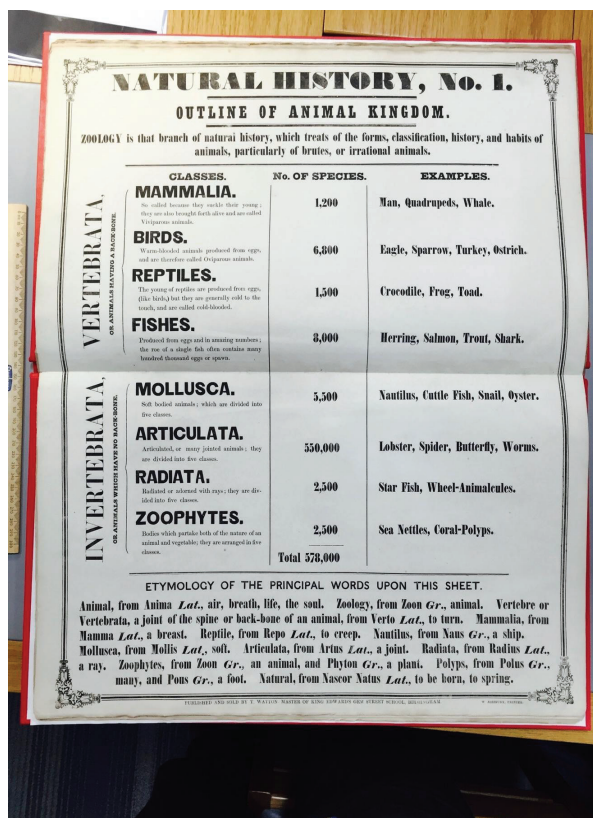
Figure 7.2.3 Example of Joesbury's use of sans serif typography. Natural History No.1, *Outline of the Animal Kingdom No. I,* (Birmingham: Timothy Watton, 1848). CRL.

The use of sans serif typography to aid with legibility was developed in the field of educational printing. The Birmingham-based printer, William Joesbury, demonstrated typographic innovations in his printing of Timothy Worsley Watton's (1811-99) *Outline Charts of General History* (1848). Watton's educational charts were composed as teaching aids for classroom walls. These charts are of great significance in the presentation of the English Two Line Sans-Surryphs, a direct descendant of William Caslon IV's first sans serif typeface. Printed by Joesbury, the charts include early sans serif printing types from the London foundries of Blake & Stephenson and Vincent Figgins. Joesbury uses large sans serif typefaces designed for advertising purposes, to convey historical information in short sections of text. In his work aimed at the field of education, Joesbury applies the use of compositional devices commonly found in commercial advertising, particularly deploying sans serif types to attract the eye, allowing the reader to scan key information at speed (Figure 7.2.3).

Joesbury's typography complements Watton's approach, which distils complex historical data into concentrated short form texts – a precursor of later developments in information design. Watton's chart of 'Natural History, No.1' uses Blake & Stephenson's Double Pica, no.2, for the header.[232] This bold two-line fat face is followed in the typographic hierarchy by a series of subheadings presenting the different classes of the taxonomy, set in Figgins' Two-Line Great Primer.[233] Joesbury uses Figgin's early Grotesque sans serif in a non-linear arrangement, breaking the second column of information with bold resting points for the eye. The sans serif contributes to the functionality of the document as a teaching aid for transferring key information to memory. Although there are only two sans serif fonts used in this chart, they command the eye through their heavy weight and give structure to the overall composition. The second sans serif used in the document is Blake & Stephenson's Nonpareil Two Line Sans-Surryphs. This is a 12 point font that was developed from the original root letters of Caslon's first sans serif printing types. Its wide open characters are used by Joesbury to form the third resting point in the typographic hierarchy, creating a lightness in its appearance that frames the final section of information. Joesbury's composition is experimental

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232   Stephenson, Blake and Company, *Specimen of printing types* (Sheffield: Stephenson, Blake and Company, 1832).

233   Vincent, Figgins, *Specimen of Printing Types* (London: Figgins, 1832).
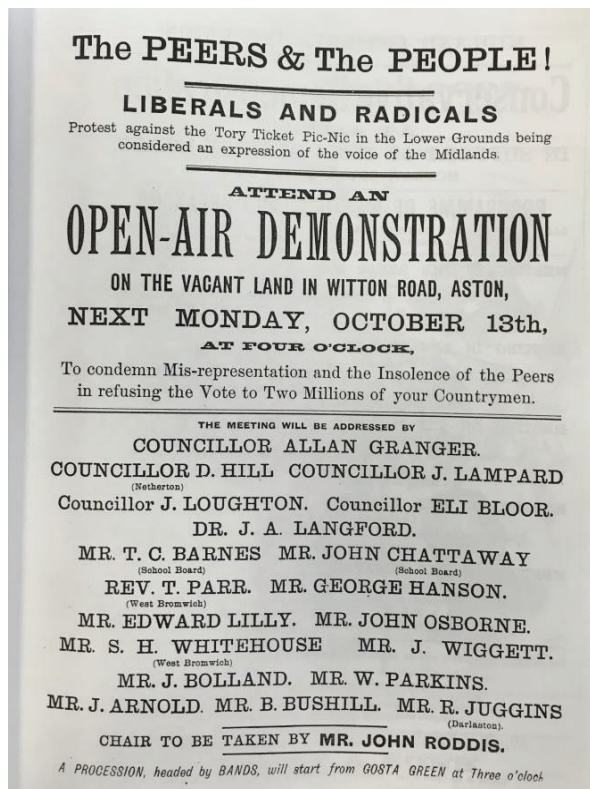
Figure 7.2.4 The use of sans serif typography to order information. 'Open-air demonstration', protest poster, unknown printer, 1884. LOB.

in his generosity of white space used to balance the document; these typographical ideas are a forerunner of modernist design principles that became popular a century later.

Comparable to Joesbury's educational printing, within political advertising Midlands printers used display faces to order information into accessible sections based on the 'who', 'what', 'when', 'where', 'why' and 'how'.[234] In a political poster by an unknown printer for the Liberal party from 1884, the sans serif is used in a refined manner that communicated respect to the 'Liberals and Radicals' of Birmingham (Figure 7.2.4). The poster was produced to attract working men to participate in a demonstration in opposition to an event organised by the Conservative party at the Great Hall, Aston. The Conservatives were rallying against Joseph Chamberlain's proposed third reform bill, known as the Representation of the People Act. Five sans serif types are used in the document to present the name of the audience (the 'who') with which it was communicating. The 'who' appears third in the typographic hierarchy of the document, preceding information about what the event was and what it was for, which is set in condensed sans serif and slab serif types. These condensed display faces were designed with narrower widths enabling jobbing printers to include more characters per line, or in this case as an alternative means of adding emphasis to a section of the text. The location of the event 'on the vacant land in Witton Road' (the 'where') appears fifth in the hierarchy, set in a condensed sans serif, that reads after the date of the meeting. The name of the meeting's Chair, John Roddis, appears next in the hierarchy. His name is set in a bolder sans serif that contrasts with the function of the first, giving an authoritative tone to the design. The final level of the document's visual hierarchy is set in a sloping sans serif in upper and lower case type. This presents the 'when' communicating the time of the procession. Rather than being presented as a command or a warning, it communicates as an advisory note for those planning to participate in the event. The composition of the typographic hierarchy guides the reader around the document, and forms a more conversational reading of the information, as opposed to reading from top to bottom. In this context the poster informs the reader first what the meeting is about, whom it is for, when it will take place, and where it will be.

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234   The 'Five Ws and How' is an interrogative technique used in information gathering and problem solving. Originating from the works of Aristotle, this approach is widely used in Journalism and Information Design. The author adapts this approach to the deconstruction of typographic information.

The composition of the typographic hierarchy guided the reader around the document, forming a more conversational reading of the information, as opposed to reading from top to bottom. In this context the poster informs first what the meeting was about, who it was for, when it took place and where it would be. The 'one man, one vote' bill was approved giving all men who paid £10 in rent, including labourers' the right to vote.[235]

The final function explored by jobbing printers adopting an informative approach to text is the 'how', which informs the reader what actions to take. In a commercial context this might be an instruction or a recommendation rather than a warning, for example the terms of sale presented on an invoice. Another function of 'the how' in presenting information was comparable to a 'call to action' as used in advertising. Rather than informing the audience on what to do next, it provided an answer as to how they can achieve this, for example offering the price of a train ticket or a telephone number to request further information.

7.2.3. Sans Serif in the theme of Instruction

The sans serif was an extreme development of typographic forms. It presented a further reduction of form in comparison to other display faces, and its primitive and elemental serif-less designs were embraced by jobbing printers of the Midlands to explore new typographic compositions. The public reception of the sans serif was pre-empted by the Birmingham sculptor William Hollins (1763-1843) who, in his 1813 study on architectural Roman capital letters, commented that the use of lettering without serifs would 'appear to a modern eye at least, naked and ungraceful'.[236] The uniform contrast of the sans serif type was later likened by the twentieth-century bibliographer Alfred Forbes Johnston (1884-1972), to an 'Egyptian with the Serifs knocked off, and it is probable that was the manner of its creation'.[237]

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235   UK Parliament, 'The Third Reform Act 1884', *UK Parliament* (Online: UK Parliament, 2021) <https://www.parliament.uk/about/living-heritage/evolutionofparliament/houseofcommons/ reformacts/overview/one-man-one-vote/> [accessed 8 June 2019].

236   Michael Fisher, 'Hollins, William (1763–1843), architect and sculptor' *Oxford Diction-ary of National Biography* (Online: Oxford University Press, 2013) <https://www.oxforddnb.com/ view/10.1093/ref:odnb/9780198614128.001.0001/odnb-9780198614128-e-13564> [accessed 11 September 2020]; William Hollins, (1813).

237   Alfred Forbes Johnston, (1934).

As the nineteenth century progressed sans serif typography became popular for its neutral qualities, used for captioning illustrations in 'Magazines' such as the Dart, Fun and the Illustrated Midlands News. Printers recognised the potential versatility of the sans serif for its simplicity and formal qualities, and it became commonplace within 'Magazine Advertisements'. Typefounders were quick to exploit the demand for new designs and experimented in the production of increased weights and sizes of sans serif types and in the process increased its reach and subsequent familiarity.

The simple typographic form of the sans serif attracted the attention of political groups who were looking to create an impact. Using its bold eye-catching design, its confrontational appeal featured across political broadsides and handbills, later becoming associated with protest groups such as the Suffragette movement, as seen in their use of sans serif types on placards, banners and political literature.[238] The association of sans serif typography with politics was not limited to the representation of a singular organisation. From the Birmingham Political Union to the Conservatives, the sans serif was highly visible in the literature of all political parties. Its regular usage in campaign 'Handbills', 'Posters' and 'Manifestos' provides insight into how the sans serif was developing in popularity with its audiences.

A development of the use of large sized type for impact as the main function of 'Commercial Life', in the theme of 'Instruction', the sans serif was used in combination with a wide range of smaller sizes, to highlight instructional messages in the documents. Through this function the sans serif was used to tell people how to behave or to help them adapt to urban life. Hudson & Son, Birmingham, (1851 to 1988), produced a wide variety of political ephemera for the Liberal and Unionist Parties. This included 'Street Literature' for the 1892 parliamentary elections, of which Hudson & Son, used the sans serif for extreme contrast with serif founts the main body of the text.

These documents were produced during the political debates surrounding Home Rule and workers rights, subjects that was highly contested in Birmingham. As a leading national political Figure representing the town, Joseph Chamberlain had led the first opposition to William Gladstone's Home Rule Bill of 1885, causing a political

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238   Examples of the use of sans serif typography by the British Women's Suffrage movement can be viewed in the archive collections of the Women's Library, London School of Economics.
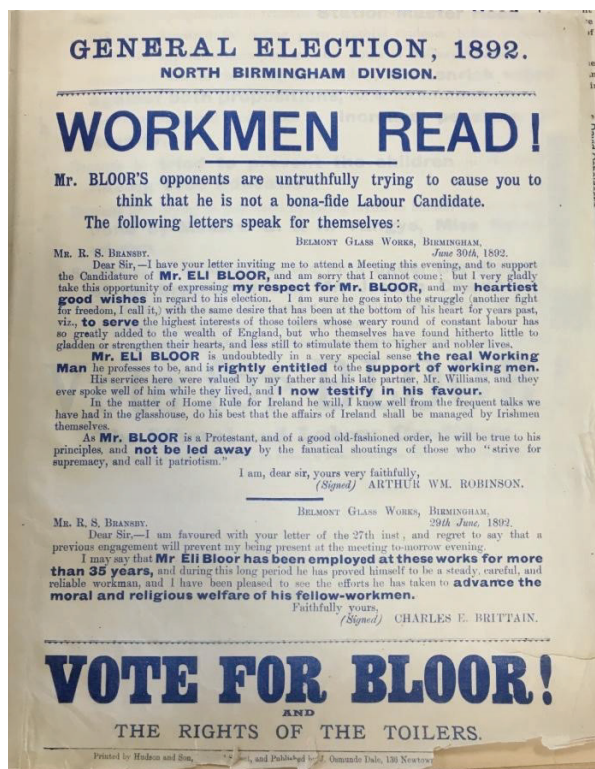
Figure 7.2.5 Example of the use of sans serif typography for working class audiences. 'Workmen Read!', election poster, Hudson and Son, Birmingham, 1892. LOB.

divide within the Liberal party that resulted in the formation of the Liberal Unionists.[239] Towards the end of the century, the population of Birmingham included a large proportion of inhabitants of Irish descent. There were five Liberal Unionist candidates representing the town's six districts, including William Kenrick for Birmingham North, and his opponent the Liberal Labour candidate Eli Bloor.[240] Printed by Hudson & Son, Bloor's campaign literature presented him as a champion of the working man and through the campaign messages, his credentials were supported by his actions.

Kenrick was an active campaigner in workers' unions; in 1889, he had assisted in the formation of the Amalgamated Society of Gas Workers, Brick Makers and General Labourers; and he was the secretary of the National Flint Glass Makers.[241] It was these groups of working men that Hudson & Son directly addressed through instructional messages set in sans serif types and through its use it began developing specific visual associations.

By 1892, the people of the Midlands were familiar with the use of sans serif typography. It was used to great effect by Hudson & Son, to instruct in a pro-Bloor election 'Poster' directed at the working men of North Birmingham (Figure 7.2.5). In this 'Poster', Bloor's employer, Charles Brittain of the Belmont Glass Works, refers to Bloor's working class values; as he will 'advance the moral and religious welfare of his fellow-workmen', The quote is presented in a bold lower-case sans serif type, that is used to highlight textural soundbites, in contrast with the lighter serif typography that was below the sans serif in the typographic hierarchy.

As in 'Commercial Life' the san serif was used to create impact for the header, commanding an audience of 'working men' to read. Positioned in the second level of the document hierarchy, it was superseded by a slab serif face that carried the call to action of 'vote for Bloor!'. In combination with smaller type sizes, Hudson and Son, developed a bold visual connection, that enabled the document to be read at speed.

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239   Lewis Perry Curtis, *Coercion and Conciliation in Ireland 1880-1892,* (United States: Princeton University Press, 2015), p. 358.

240   There were five Liberal Unionist candidates representing the towns six districts. Chamberlain campaigned for Birmingham West, William Kenrick for North, Joseph Williams for South, John Albert Bright for Central, Jessie Collins for Bordsley, and George Dixon for Edgbaston.

241   Arthur Marsh, John B. Smethurst, *Historical Directory of Trade Unions. Vol. 5.,* (Aldershot: Routledge, 2006) p. 425.
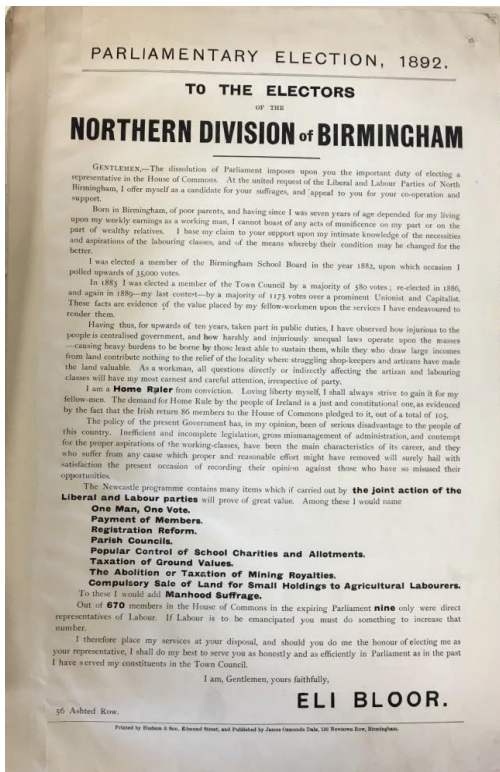
Figure 7.2.6 Example of the use of sans serif typography for middle class audiences. 'To the electors', election poster, Hudson and Son, Birmingham, 1892. LOB.
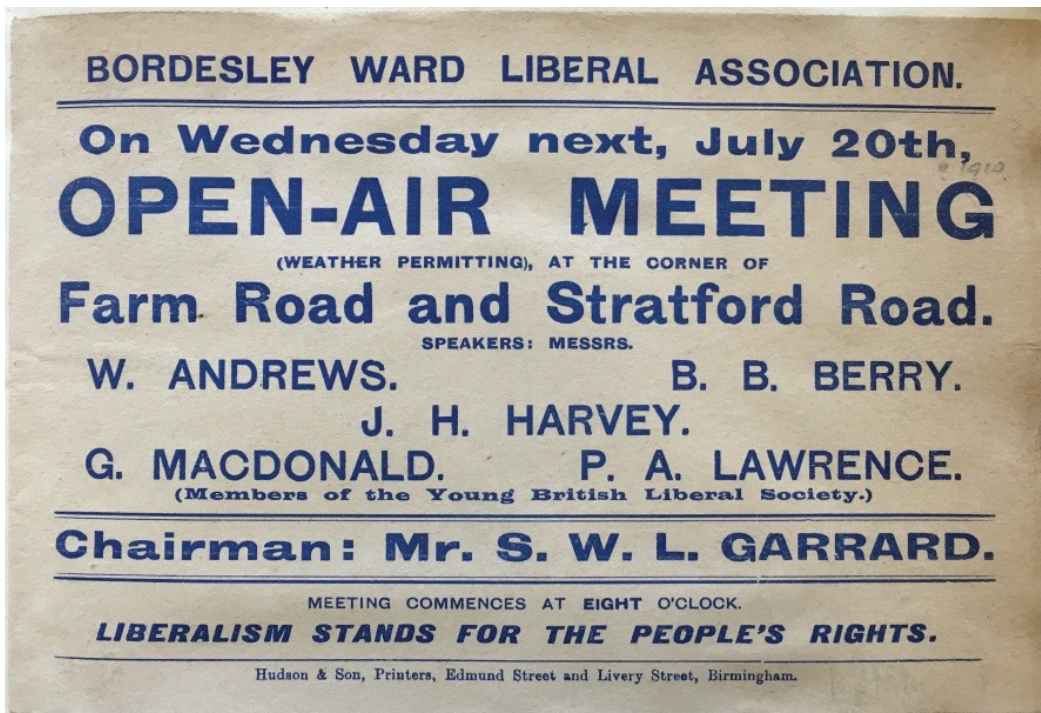

Figure 7.2.7 'Bordesley Ward Liberal Association', handbill, Hudson and Son, Birmingham, 1910. LOB.

Its use to foreground the instructional text functions in the same manner as the heading, disrupting the flow of the body text through a staggered series of instructional messages. There were three sans serif typefaces used in the 'Poster' contributing to only twenty percent of text in the document, however, the instructional messages in 'support for working men' was clear. These documents targeted at working men were all printed in a blue ink by Hudson & Son, making them easy to recognize and to recall, an early form of brand design. Visual parity was achieved through a continuation of the typographic style and composition across a range of campaign literature.

To attract middle class voters, by contrast, Hudson & Son printed an alternative style of promotional document (Figure 7.2.6). The Birmingham North district included Handsworth, which was an affluent area in the nineteenth century. The 'Poster' aimed at this audience follows a similar design system in its typographic composition, such as the use of bold types for headings and lower-case sans serifs to highlight key messages. The main difference was that Hudson and Son used a longer line length for the text, reducing the staggered messaging to a 'List' format. Printed in black ink on a higher quality, thicker paper, the use of sans serifs is more considered.

The document was printed using a wider variety of sans serif types and the typography was restrained. The 'Classical' style of sans serif in two-line English was used to great effect, to convey a formal and visually sophisticated sense of authority. While the overall design communicates a softer visual impact than on the 'Posters' targeted at working men, the document was printed using a total of five sans serif typefaces, for forty percent of the overall text. Hudson's use of sans serif typography is bolder for working class audiences and stylistically refined for the middle classes.

Beyond the 1892 parliamentary election, Hudson & Son continued to print campaign literature for the Liberal and Labour party, including promotional material for the candidates of Priestman in 1895, and Hirst Howell in 1904. Later examples show the ascendancy of the sans serif; for example, a 'Handbill' for a meeting of the Bordesley Liberal Association, 1910, was entirely printed using sans serifs, with the exception of the printer's credit (Figure 7.2.7).
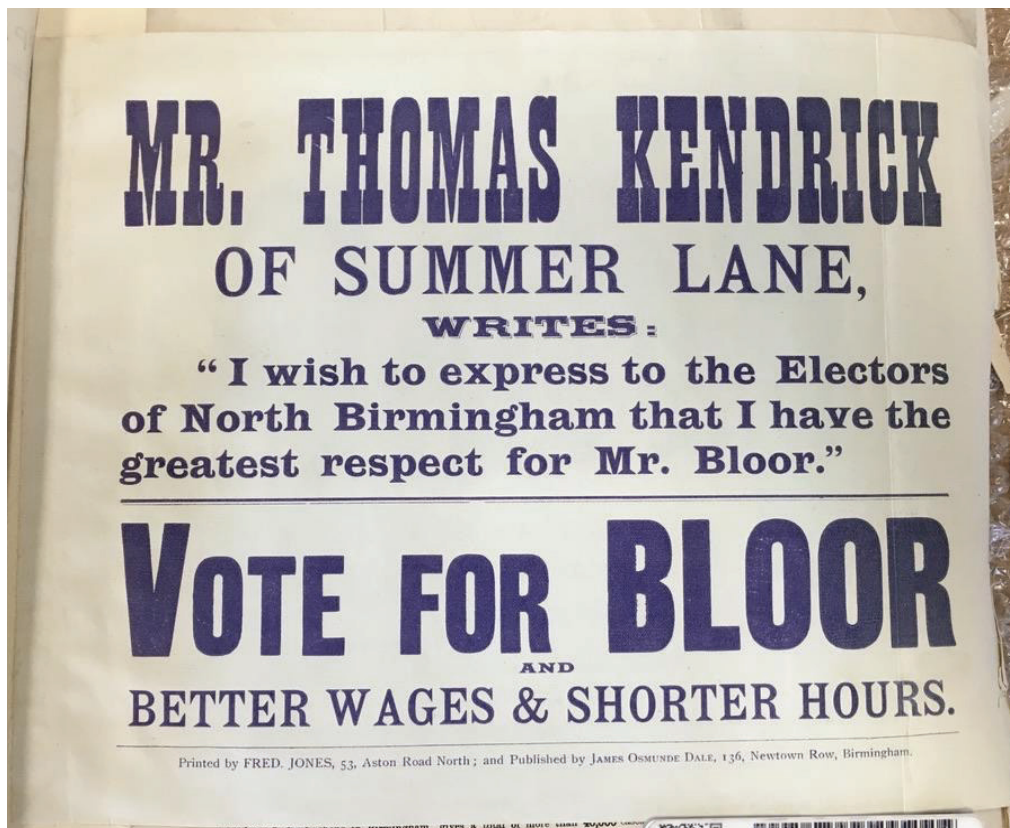
Figure 7.2.8 Example of the use of sans serif for the call to action. 'Vote for Bloor', election poster, Hudson and Son, Birmingham, 1892. LOB.

A large quantity of surviving election literature demonstrated the scale and speed of production by jobbing printers. Hudson & Son were participants in a widespread activity of political printing in Birmingham and the Midlands. Alongside the prominent technique of balancing and contrasting sans serif types in the composition of the their documents, there was a conversational quality in the messaging of campaign posters between opposing candidates and their printers.

Through the ephemera, Bloor and his opponent William Kenrick both exchange direct critiques. The former challenges Kenrick's reputation being founded on his familial relationship with Chamberlain, and Kenrick challenges Bloor's lack of political experience. Bloor's campaign used a quote from his opponent to validate itself, and at the same time slights Kenrick with a misspelling of his name (Figure 7.2.8). The call to action to 'vote for Bloor' was presented in an instructional typographic voice using mixed sizes of upper-case sans serif types, that were composed to accommodate the line length of the text using large types. Hudson and Sons use of sans serifs within the theme of 'Instruction' and their experimentation with contrasting text sizes, contributed to the prominence of the sans serif as a means of instructing the reader.

Table 7.6 Overview of the uptake of sans serifs by position in hierarchy and percentage of text used across singular and multiple themes.

	No. Sans Serif in Primary Hierarchy	No. Sans Serif Last in Hierarchy	Average No. of Sans Serifs	Sans Serif Percentage	Classical Sans Serif
Across All Themes	36	19	7	50%	23
Commercial Life Only	100	29	3	31%	36
Commercial Life and Information	82	41	4	32%	48
Commercial Life and Instruction	38	13	4	42%	15
Information Only	49	34	3	22%	21
Information and Instruction	49	31	4	37%	23
Instruction Only	12	6	1	13%	7
Total in Themes	**366**	**173**	**26**	**32%**	**173**

7.3.   Uptake of the Sans Serif

The approaches analysed for working with ephemera by document class and printer, alongside the integration of themes and categories to sub-divide and interpret the data, underpinned the investigation of the development of the sans serif in use. For this discussion, the results of the findings refer to uptake of the sans serif by Midlands printers, firstly through analysis of the frequency of use across the themes and categories; and secondly by the development of a new classification system for the early Grotesque sans serifs.

The position of printing types in the primary and final position of the typographic hierarchy were recorded with the percentage and number of sans serifs used in the composition of the text, to show the ascendancy of sans serif types from the typefounders to their use by Midlands printers. The position in the first level of the visual hierarchy presented insights into the growing popularity and acceptance of sans serifs.

The singular theme of 'Commercial Life' showed the highest use of sans serifs as the first typographic element that was used to direct the reader's attention (Table 7.6). This was supported by the nature of the documents produced in this theme, with 'Broadsides', 'Handbills', 'Playbills' and 'Posters' used to advertise and communicate information regarding 'Trade', 'Politics', 'Entertainment' and 'Education'. The average number of individual sans serif types used in these documents was significantly lower than those found in ephemera that spanned all the themes. In the singular theme it was used for one purpose, however, the combination of all occurrences of ephemera in 'Commercial Life' used the highest number of sans serif types with a total of eighteen founts, compared to seventeen for 'Information' and sixteen for 'Instruction'.

With documents that spanned both 'Commercial Life' and 'Information', the sans serif was used the most often in the final position of the typographic hierarchy. In this context it was identified in the same class of documents and categories discussed above - used for the call to action that informed readers on 'how' to participate in events or 'where' to buy products and services. The proliferation of sans serifs in 'Commercial Life' demonstrated how the sans serif was first used within 'Street Literature' before printers found other uses for these type designs.

The highest percentage of sans serif types used in the text was also highest in the combined themes of 'Commercial Life'. To interpret the speed of uptake for sans serifs, the average percentage of the composition

Table 7.8 Average percentage of sans serif used in the text by date.

	Ephemera Dates	1832-1864[1]	1865-1897	1898-1929	Average Percentage across all dates by Theme
Across All Themes	1832-1929	-	34.00%	55.00%	45%
Commercial Life Only	1832-1925	14.00%	18.00%	15.00%	16%
Commercial Life and Information	1837-1929	27.00%	24.00%	39.00%	30%
Commercial Life and Instruction	1832-27	28.00%	29.00%	39.00%	32%
Information Only	1832-1928	11.00%	22.00%	25.00%	19%
Information and Instruction	1849-1929	13.00%	31.00%	40.00%	28%
Instruction Only	1834-1928	12.00%	10.00%	14.00%	12%
Percentage Sans Serif	-	**15%**	**24%**	**32%**	**24%**

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1   There were no examples found of ephemera that used sans serif types across all themes between 1832-1864.

of text was measured against the dates of the ephemera (Table 7.8). As the methodology was designed for the analysis of mass data, the ephemera sample contained 729 documents, it was necessary to calculate the percentages across three date increments. Periods of thirty-two years were considered to give insight into the beginning, middle and end, of the sans serif in use during the scope of this research.

The first investigation begins in 1832-64, including the earliest dated document in the sample, and it concluded in 1929. The data in Table 7.8 shows an incremental shift in the usage of the sans serif across time. This begins in 1832-64, where an average measurement of 15% was recorded for the use of sans serif types. This increased to 24% between 1865-97, and rose to 32% in 1890-1929. The highest percentage of sans serifs used across all dates was 45% with documents that were classified as spanning all three themes. The highest percentage of sans serif used in documents classified under a single theme was 19%, in the theme of 'Information'. This increased from 11% in 1832-64 to 25% in 1890-1929, demonstrating the uptake of sans serif types to communicate information. In a future comparative study the percentage of other classes of type can be measured against the sans serif.

The overall use of sans serif types within the text of the documents, increases into the twentieth-century, reaching its highest average of 55% when used across all themes. Documents in the combined theme of 'Information' averaged a total of 53%, supporting the expansion of document classes through 'Stationery' and 'Forms'. As a single theme 'Commercial Life' was slightly lower in the twentieth century, and as a combined theme it averaged 37% overall. While the sans serif was embraced by printers for its functionality in presenting information, in the production of advertising the printers still favoured a mixed type approach.

A comparison study was made between the use of all typefaces that appeared in the primary and final positions of the typographic hierarchy (Table 7.9). Of the different classes of typefaces used across the sample, the sans serif was used the most in the first position of the typographic hierarchy. This was recorded in 366 documents, used for titles and headlines. Serif typefaces were the second highest class of type used in 153 documents, followed by slab serifs in 100 documents. There were no Clarendon types recorded in the first level of hierarchy, four documents with decorated types and twelve documents with engraved types.

Table 7.9 Occurrences of first and final positions in the typographic hierarchy of all classes of type.

Hierarchy	Across All Themes[1]		Commercial Life Only		Commercial Life and Information		Commercial Life and Instruction		Information Only		Information and Instruction		Instruction Only		Total	
	First	Final	First	Final	First	Final	First	Final	First	Final	First	Final	First	Final	First	Final
Blackletter	1		5	2	6		1		10	2	1		4		28	4
Clarendon		1		3		1								2	0	7
Decorated			1		2				1						4	0
Engraved	1		3		4				2	1	1				11	1
Fat Face			7	1	1				7				1		16	1
Ornamented	2		11	3	12	1		1	7		4				36	5
Sans Serif	36	19	100	29	82	41	38	13	49	34	49	31	12	6	366	173
Script			4		4		1	1	3	3	3			1	15	5
Serif	9	37	26	143	32	111	10	43	40	91	29	63	7	18	153	506
Slab Serif	10	2	36	12	18	7	8		17	5	8	1	3		100	27

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1   The label of 'Across All Themes' recorded examples of ephemera that used sans serif types for all three themes in one document. There were fewer examples in the sample that were ordered using all themes than a singular theme or documents using sans serifs in a combination of two themes.

Serif typefaces were used the most in 506 documents for the final level in the typographic hierarchy, followed by the sans serif in 173 documents. There were no documents that used decorated types in the final position, and only two documents that used an engraved or a fat face typeface respectively. The ratio of a higher number of sans serifs used in the first position and of serif types in the final position was reflected in the data when measured by individual themes and combinations of themes. Whilst this investigation was limited in its conclusions, as the data was skewed due to all the documents in sample using sans serifs, it shows how the methodology can be used to analyse different typefaces.

A new classification system for sans serif types was applied to measure the frequency that different styles of sans serif types were used. This provided scope to describe sans serif types that have different characteristics to the generic form of Grotesques. Included in this classification was the first form of Grotesque identified as 'Classical', precursors of the 'Neo-grotesques' were labeled by the same term, the inclusion of type styles that had unusual defining features ordered as 'Special', and sans serifs that combined a range of design features later associated with the Humanist and Geometric classes. This system was used to identify the use of type designs that directly followed the design proportions of Caslon IV's first sans serif.

The sample included 173 items of ephemera that used the 'Classical' styles of sans serif founts, in the composition of documents in the Midlands, between *c.*1832-1921. This corresponded to the typefounders specimen books, that recorded ninety-nine different 'Classical' style founts that were released between 1819-1909. The 'Classical' styles were issued by ten type foundries, in sizes ranging from four-point-five to seventy-two points. (Table 2.11 'Classical' sans serif founts recorded in the Type Specimens sample ordered by date, in Appendix 2, p. 48). Across the ephemera sample these types had an average usage of twenty-four percent, occurring the most in forty-eight documents ordered under the joint themes of 'Commercial Life' and 'Information'.

The 'Bold' Grotesques were used in the highest number of documents, measuring 689 occurrences in the sample. This was followed by 365 'Condensed' types and forty-four 'Light' styles that were used most in documents for 'Information', to give a subtle emphasis to texts. The 'Wide' faces appeared most in the singular theme of 'Commercial Life', and 'Sloping' styles were used predominantly across the combined themes of 'Information'.

Table 7.10 Classes of sans serif types used in documents by theme.

	Classical	Geometric	Humanist	Neo-grotesque	Mixed	Bold	Condensed	Light	Wide	Sloping	Ornamented	Shadowed	Rounded	Open	Octagonal	Special
Across All Themes	23	1	5	27	1	58	41	10	5	13	1	0	1	0	0	8
Commercial Life Only	36	2	4	40	5	182	97	1	15	14	11	8	2	22	1	15
Commercial Life and Information	48	2	6	23	1	152	92	15	6	18	5	0	0	0	0	24
Commercial Life and Instruction	15	1	5	16	1	55	35	2	7	9	0	0	0	0	0	6
Information Only	21	0	5	11	1	126	43	9	8	18	1	0	0	0	0	11
Information and Instruction	23	2	4	15	2	91	50	7	6	19	0	0	0	0	0	13
Instruction Only	7	1	0	1	2	25	7	0	6	1	0	0	0	0	0	0
Total documents using sans serifs	173	9	29	133	13	689	365	44	53	92	18	8	3	22	1	77
Total percentage of documents using sans serifs	24%	1%	4%	18%	2%	95%	50%	6%	7%	13%	2%	1%	0%	3%	0%	11%

Whilst the 'Bold' sans serifs were used the most for their practical appearance, often as headlines in advertising ephemera and to give emphasis in smaller sizes for information. The 'Condensed' types were used to accommodate more words per line length, and 'Sloping' types were used as italics, giving emphasis to the text. The 'Ornamented' sans serifs were used for decoration, mainly under the theme of 'Commercial Life' for titles on 'Ballad Sheets', and there was only one 'Octagonal' sans serif recorded, used for its novelty appearance, in the theme of 'Commercial Life'. There were more 'Classical' sans serifs used in the sample than 'Neo-grotesques'. This supports the opportunity for future research to evaluate the development of an extended classification system for early sans serif printing types.

The wide variety of typographic Grotesque styles that have been evidenced under this new classification system, supports the conclusion that the generic term of Grotesque was limited in its scope for defining early sans serif types. For sans serif scholars researching the development of the sans serif in the nineteen century, this has been identified as a future area of academic inquiry (Table 7.10). The proposed method is problematic as it uses design elements that describe emphasis, for example "Bold" as a category on the same primary level of classification with terms such as "Classical". In future research, the use of secondary labels can be introduced to focus on five main classes of Grotesque:

- **Primary labels** - for the main classes including 'Classical', 'Neo-Grotesque', 'Humanist', 'Geometric', and 'Mixed'.
- **Secondary labels** - to describe emphasis, 'Bold', 'Condensed', 'Light', 'Wide', and 'Sloping'
- **Tertiary labels** - for decorative attributes, 'Ornamented', 'Shadowed', 'Rounded', 'Open', 'Octagonal', and 'Special'.

The same approaches that have been applied to analyse the uptake of the sans serif through themes can be applied to a study focusing on the frequency of use by class of document, printers, categories, and sans serif classifications. The methodology presents other researchers with wide range of ways in which they can interrogate the data.
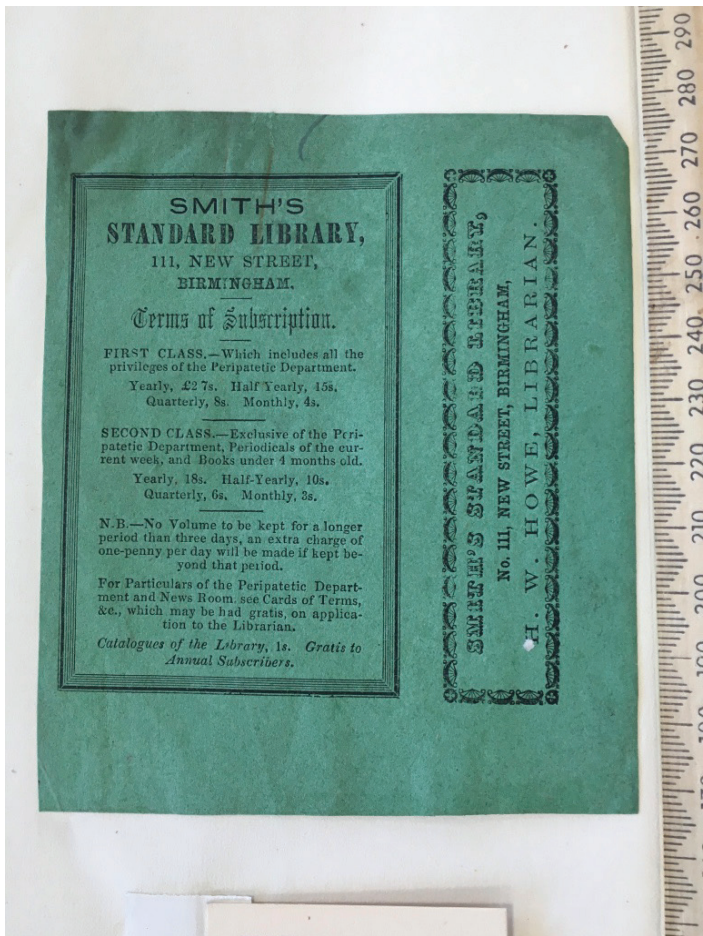
Figure 7.4.1 Book plate for Smith's Standard Library. 'Terms of Subscription', bookplate, printer unknown, c.1920. LOB.

7.4. The Ephemera produced by Printers in the Midlands by Case-studies.

There were 141 printers identified from the material included in the ephemera sample. The majority of printers could be identified as they credited themselves on the documents they printed. In those items of ephemera without printed credits, the style of composition and text-based content was compared to match documents to those produced by known printers. The printers of 337 items of ephemera were unidentified, as there were either no printers' credits to reference nor an absolute comparison of visual evidence to connect the documents (Table 3.12 Printers identified in the ephemera sample, in Appendix 3, p. 97). Within the sample, fifty-five known printers produced two or more pieces of ephemera, excluding the unknown printers (Figure 7.4.1).

To demonstrate which printers were producing the highest volume of ephemera found in the sample, printers who produced 'Trade Directory Pages', 'Maps', and 'Printers Specimens' were discounted, for example the printers Wrightson and Webb, and J. Pigot and Co. were not considered in this part of the analysis, as they were included in the sample multiple times under the document class of 'Trade Directory Pages' (Table 3.13 Printers in the ephemera sample excluded from the analysis of document classes, in Appendix 3, p. 101).

7.4.1. The Birmingham Case-study

The following section presents an example of how the new methodology was used to interrogate the sample. The primary case-study of Birmingham was used to examine the classes of documents produced; to identify the printers and their typefaces; and concludes with analysis of how the methodology can be used in future research to identify clusters of printing activity.

Hudson & Son, (1851-1988), produced the largest volume of ephemera recorded in the sample. This was due to the longevity of the business that survived into the late-twentieth century. Trading from the corner of Edmund and Livery Street, they were based in central Birmingham and the edge of the Jewellery Quarter. The business was well positioned opposite the main entrance to Great Western Railway's Snow Hill Station, ideal for the distribution of street literature and other printed documents, to destinations including London, Wolverhampton, and Wales.

Table 7.11 'Handbills' recorded by date, ordered using narrower terms.

Year	Narrower_term	No.
1832-1928	No narrower term used	124
c. 1892-1912	Handcards, Ballot Papers	12
c. 1833-1921	Circulars	7
1892-1904	Letters	6
1892-1906	Election Posters	5
1905-14	Handcards	5
1892-14	Ballad Sheet	3
1904-25	Lists	3
c. 1890-6	Business Stationery	2
1905-14	Admission Tickets	1
1906	State-of-the-poll-notices	1
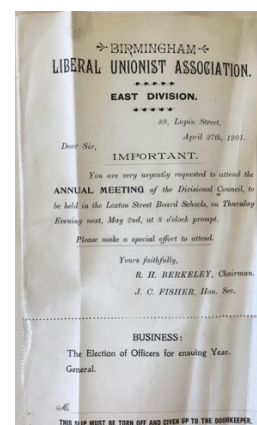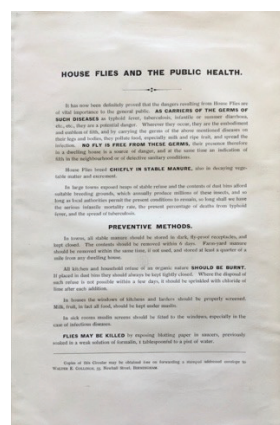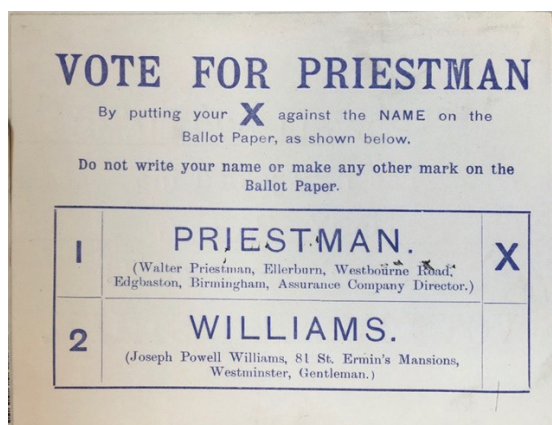
Figure 7.4.2 Examples of ephemera ordered as 'Handbills' and using narrower terms. (Left) 'King's Norton Flower Show', handbill, Myers, Birmingham, 1894. BM; (second left) 'Vote for Priestman', handcard, Hudson & Son, Birmingham, 1895. LOB; (first right) 'House Flies and the Public Health', circular, printer unknown, c. 1905-14. LOB; (second right) 'Liberal Unionist Association', letter, printer unknown, 1901. LOB.

Table 7.12 'Broadsides' recorded by date, ordered using narrower terms.

Year	Narrower_term	No.
1833-92	Ballad Sheets	14
1834-1847	Notices	7
1833	No narrower term used	4
1863	Execution Broadsides	1

There were forty-four pieces of ephemera that were attributed to Hudson & Son, between *c*. 1851-1923. During this period, they printed a wide range of documents including *Spurrier's Cyclist Handbook*, (1881), and the sporting 'Newspaper' *Sport & Play*, (1887). From the late nineteenth century Hudson & Son printed a large quantity of political literature for the Liberal party. Thirty-six political documents were recorded in the sample that were printed between 1892-1910. This including "Street Literature' of election 'Posters', 'Handbills' and 'Lists', 'Handcards' and 'Ballot Sheets', and 'Business Stationery' as 'Letterheads' for the South Birmingham Bye-election, 1904. It was concluded that Hudson & Son were open supporters of Liberal (and later Labour) politics, as there was no evidence found in the collections to show that they produced political literature for any other political party running for election in Birmingham.

Despite their political allegiance to nonconformist and radical politics, Hudson & Son printed 'Street Literature' for the City of Birmingham, through a series of large format educational 'Posters' promoting evening classes for the Municipal School of Commerce, produced between 1907-13. They also printed police warning 'Notices' for the city and supplemental valuation list 'Posters' for the Birmingham Union.

The largest singular class of documents printed by jobbing printers from Birmingham and Bridgnorth in the ephemera sample was 'Street Literature' in the form of 'Handbills'. During 1832-1928, there were 179 'Handbills' printed by fifty-seven known printers. These documents were produced for a short lifespan to communicate items relating to news and current events, for the promotion of local events and for trade advertising (Table 7.11).

The biggest number of 'Handbills' identified using a narrower term were printed between c. 1892-1912 and were used as 'Handcards', including items that were described as 'Ballot Papers', a form of campaign literature that included information that advised non-electors on how to register their votes. The narrower term of 'Circulars' contained 'Handbills' that were used for campaign literature and for trade advertising, for example a 'Circular' printed for Walter E. Collinge, 55 Newhall Street Birmingham, that was used to educate audiences on the dangers to public health by House Flies (Figure 7.4.2). The narrower term of 'Letters' was used for advertising 'Handbills' that copied a letter format using a direct address to an individual, and the term 'Election Posters' was used to order campaign
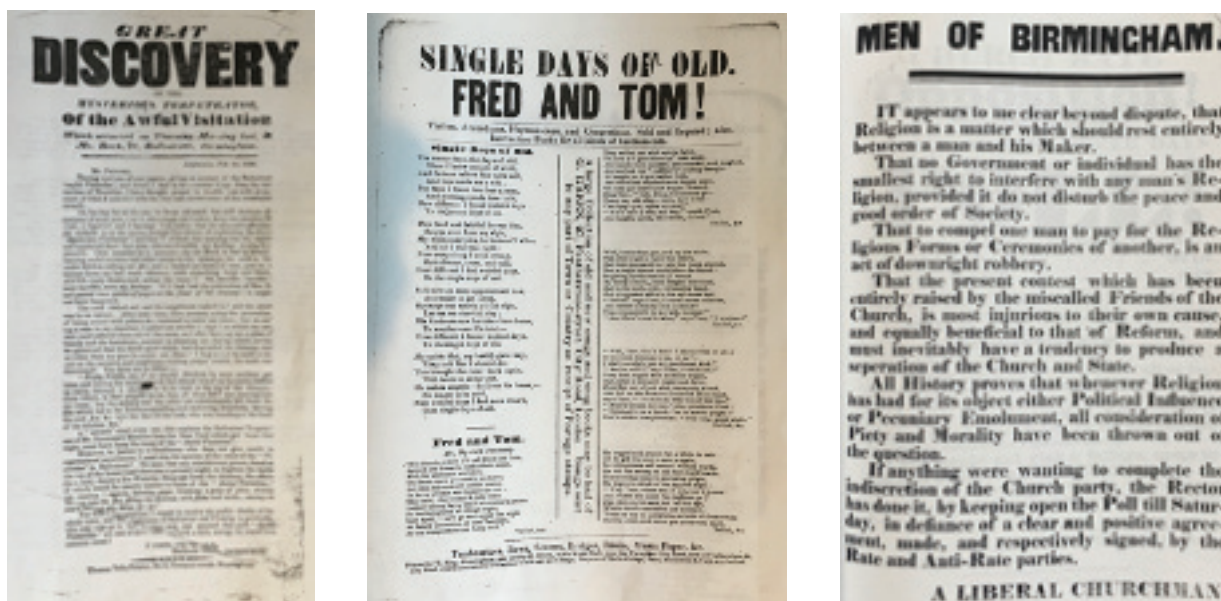
Figure 7.4.3 (Left) 'Great Discovery', facsimile of broadside, Thomas James Vale, Birmingham, 1836. LOB; (centre) 'Single Days of Old', facsimile of ballad sheet, T. King, Birmingham, c. 1833-92. LOB; (right) 'Men of Birmingham', facsimile of broadside, printer unknown, Birmingham, c. 1834-1847. LOB.

Table 7.13 'Posters' recorded by date, ordered using narrower terms.

Year	Narrower_term	No.
1873-1906	Election Posters	16
1852-1921	Political Posters	12
1839-1926 c.	Campaign Posters	10
1872	No narrower term used	9
1907-13	Educational Posters	6
1837-1923 c.	Exhibition Posters	6
1837-1923 c.	Product Posters	5
1837-1923 c.	Protest Posters	5
1902-25	Sports Posters	4
1837-1923 c.	Warning Notices	4
1904-20	Announcement Notices	3
1837-1926 c.	Almanac	2
1906	Showcards, Election Posters	2
1839-1926	Decorative Posters, Exhibition Posters, Stock Posters	1
1919	Political Posters, Lists	1
1901	Proclamations	1
1920-1	Showcards, Campaign Posters	1
1905-14	Showcards, Political Posters	1
1908	Travel and Transport Posters	1

literature that used a smaller sized format of a 'Handbill' as opposed to a larger 'Poster' format. There were 124 'Handbills' that were not ordered under any narrower terms.

The second largest group of documents in the sample combined the street literature of 'Broadsides', 'Posters' and 'Playbills'. There were twenty-six items ordered as 'Broadsides', that were produced by ten known printers between 1832-63 (Table 3.17, Printers who produced 'Broadsides' in the ephemera sample, in Appendix 3, p. 106). These were used to communicate news with items ordered under the narrower term of 'Notices' and 'Execution Notices', and for popular entertainment in the form of song sheets categorized under the narrower term of 'Ballad Sheets' (Table 7.12).

The author acknowledges that the number of 'Broadsides' included in the sample was lower than anticipated, as 'Broadsides' were widely produced during the first-half of the nineteenth century. This anomaly was caused by restricted access to original material in the Library of Birmingham. An edited selection of 'Broadside' documents was available for viewing as photocopied facsimiles, these have been included in the sample. During this research, the original documents remained in storage, awaiting restoration due to their fragile condition. When the items become available for public viewing, the author intends to revisit this class of document for future research, as 'Broadsides' present opportunities to identify the use of early Grotesque sans serif types. Within the sample there were two news-based 'Broadsides' printed by Thomas James Vale, (c. 1836) and three 'Ballad Sheets' by T. King (c. 1806-92), (Figure 4.4.3).

There were ninety 'Posters' in the sample, that were printed by thirty-six known printers between 1852-1927 (Table 3.15 Printers who produced 'Posters' in the ephemera sample, in Appendix 3, p. 105). The largest grouping of 'Posters' that were ordered using a series of narrower terms, included forty-five pieces of political street literature, categorized under 'Political', 'Election' and 'Campaign Posters' (Table 7.13). Hudson & Son printed thirteen 'Posters' recorded in the sample, followed by Birmingham Printers Ltd. who produced six items.

As previously concluded, Hudson & Son's liberal politics did not obstruct them from securing work from the City of Birmingham. Although an exception was noted of a political bias in the distribution of work for internal communications. The ephemera sample included five 'Posters' that were printed by Birmingham Printers Ltd., (1920), advertising
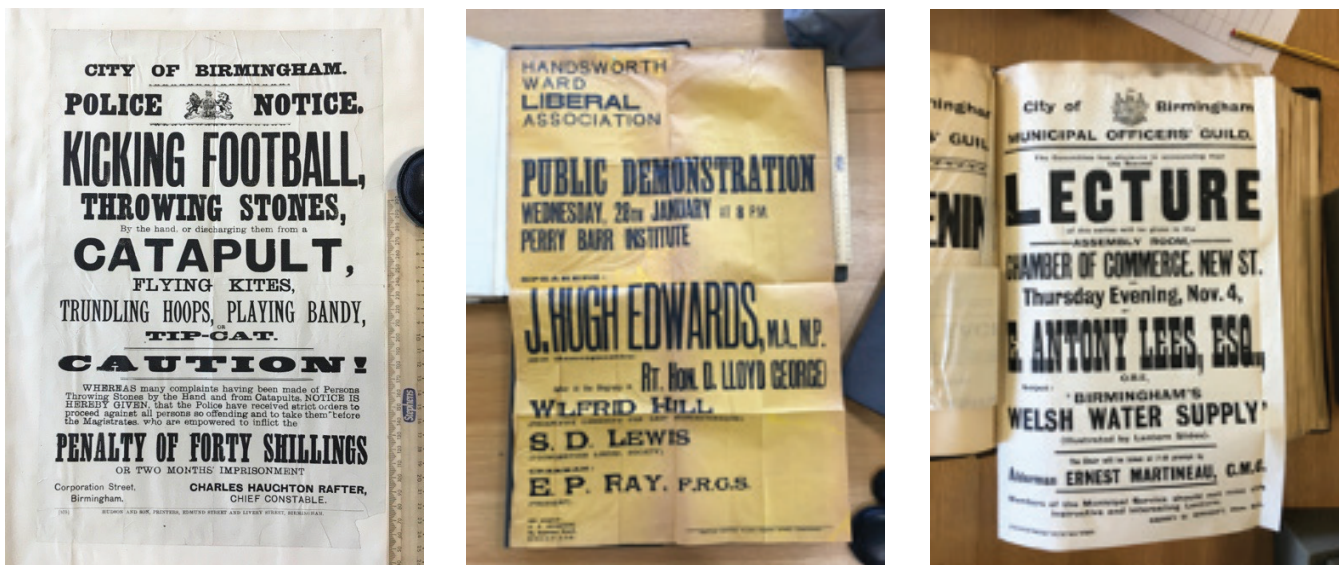
Figure 7.4.4 Examples of 'Posters'. (Left) 'Kicking football, throwing stones', notice, Hudson & Son, Birmingham, c. 1837-1923. LOB; (centre) 'Liberal Association Public Demonstration', poster, Templar Printing Works, Birmingham, c. 1905-14. LOB; (right) 'Municipal Officers' Guild Lecture', poster, Birmingham Printers Ltd., Birmingham, c. 1905-14. LOB.

Table 7.14 'Playbills' recorded by date, ordered using narrower terms.

Year	Narrower_term	No.
1847	Notices	1
1893	Showcards	1
1832-1920	No narrower term used	38
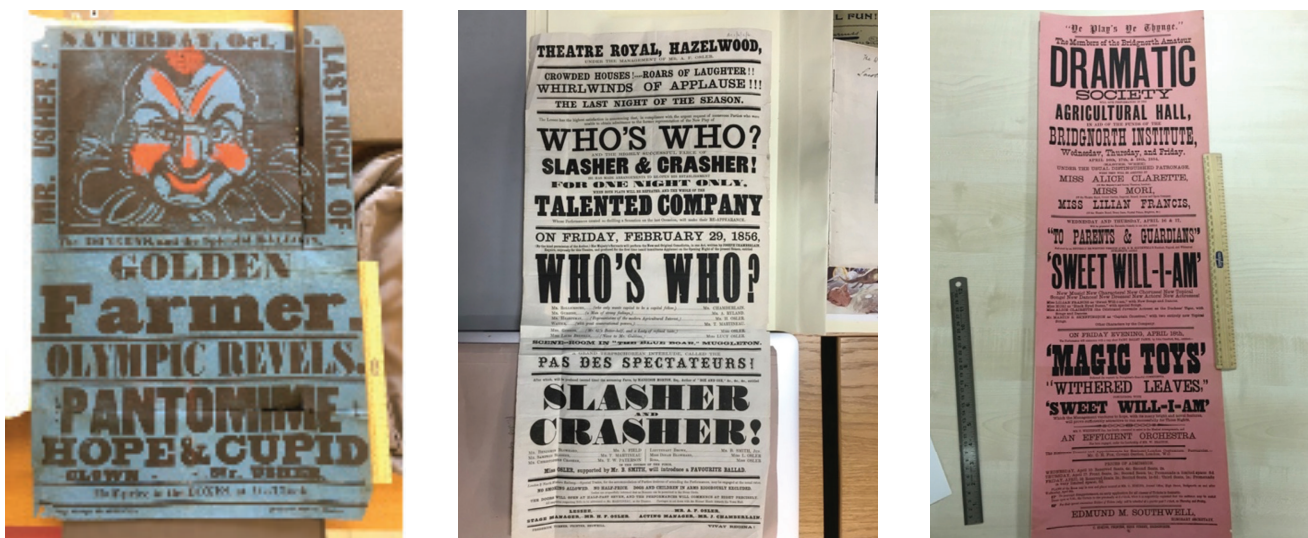
Figure 7.4.5 Examples of 'Playbills'. (Left) 'Golden Farmer', playbill, Peirce & Seymore, Birmingham, c. 1839. LOB; (centre) 'Who's Who?', playbill, Frederick Turner, 1856. CRL; (right) 'Sweet Will-I-Am', playbill, Clement Edkins, Bridgnorth, 1884. CRL.

specialist lectures and social activities such as 'Whist Drives' for the members of the Municipal Officers Guild (Figure 4.4.4). In 1921, coinciding with the election of Sir David Davis, (1859-1938), Birmingham's first Jewish mayor, Hudson & Son printed a 'Poster' promoting a lantern lecture for the guild. Davis succeeded William Adlington Barrow Cadbury, (1867-1957), as lord mayor of Birmingham.[242] As a practicing Quaker, Cadbury's values of social responsibility and charity were more aligned with Birmingham Printers Ltd. than with the Liberal politics of Hudson & Son. This was demonstrated through Birmingham Printers Ltd. work for their other clients, for example the printing 'Handbills' for the Church Socialist League, *c*. 1905-14, and advertising for charitable causes such as the 'Pound Day' that raised funds for the Cripples' Union, *c*. 1920.

There were forty 'Playbills' recorded in the sample, that were produced by fifteen known printers between 1832-1920 (Table 3.17 Printers who produced 'Playbills' in the ephemera sample, in Appendix 3, p. 106). Only two of these documents were ordered using narrower terms (Table 7.14). These 'Playbills included a political parody 'Broadside' document, presenting the *Yellow Member*, printer unknown, 1847, that was ordered using the narrower term of 'Notices' (Figure 7.1.14); and a 'Show Card' promoting a performance of *The Winter's Tale*, Botanical Gardens, Edgbaston, printer unknown, 1893 (Figure 7.1.2).

Fredrick James Turner, 3 Snowhill, Birmingham, (trading 1828-60), printed 'Playbills' for popular entertainment events with Julius Turner, c. 1839. There are five of Turner's 'Playbills' in the sample, these show the refinement of his printing through a series of elegant typographic compositions for the Theatre Royal, Birmingham, (1851-56). For the Theatre Royal, Hazelwood, (1856), Turner printed a 'Playbill' for a new one act comedy of *Who's Who?,* written and performed by the Birmingham politician Joseph Chamberlain, who starred in the lead role of Mr Rollicksome (Figure 4.4.5).

Parkes and Groves (1908-18) were operating at the beginning of the twentieth century and they produced the largest selection of 'Playbills' that were considered in this study. This was influenced by what surviving ephemera was available. In the collections of the Library of Birmingham, there were three bound volumes of well preserved 'Playbills' for the

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242   Fiona Tait, 'A visit to Ireland by William Adlington Cadbury', *The Iron Room* (Online: Library of Birmingham, 2018) <https://theironroom.wordpress.com/2018/03/14/a-visit-to-ire-land-by-william-adlington-cadbury/> [accessed 1 August 2021].

Table 7.15 'Stationery' and 'Forms' recorded by date, ordered using narrower terms.

Year	Narrower_term	No.
1836-1923	Business Stationery	64
c. 1850-90	Order Forms	2
1862-1928	Letters	40
1864-1908	Donation Forms	2
1869	Labels	1
1872-1902	Letters, Business Stationery	4
1872-1903	Letters, Application Forms	4
1883-1901	Funeral Stationery	3
1884-1906	Poll Lists	2
1885	Ballot Papers	1
1890	Time Sheets	2
1892-1906	Handcards, Ballot Papers	1
1902-25	Letters, Donation Forms	2
c 1905	Claim Forms	1
c 1905	Handcards, Donation Forms	1
1905-14	Circulars	1
1905-20	Handcards, Application Form	2
1905-21	Application Forms	7
1906	No narrower term used	5
1907-21	Handcards	2
1910-28	Envelopes, Business Stationery	2
1920-1	Letters, Donation Forms, Application Form	2

Gaiety Theatre, Birmingham.[243] Printed between 1907-18, the content of the documents spans the progression towards and during the First World War, presenting valuable data for social and cultural historians, for example on November 11, 1918, the theatre presented a musical burlesque performance of William De Lacey's *Down on the Farm*, that coincided with the end of World War 1. Parkes & Groves specialised as theatrical printers, trading from 33 Coleshill Street, Birmingham, on the same street as the Gaiety Theatre. This demonstrates a connection between the location and specialised trade in jobbing printing.

The Gaiety Theatre 'Playbills' used a long and thin portrait format, the largest measuring 1080 mm in height by 380 mm in width, and were mostly printed in two-colours. Parkes and Groves later merged with the printers Manwarings Ltd., John Bright Street, Birmingham. As Parkes & Manwarings Ltd., they responded to developments in popular culture and began producing cinema 'Programmes' for the Imperial Cinema, Moseley Road, Birmingham, c.1918.

The third highest grouping of documents recorded in the sample were 151 items of 'Stationery' and 'Forms'. There was a total of seventy-eight documents ordered under 'Stationery' and seventy-three items as 'Forms'. Seven known printers who produced fourteen items that were ordered as 'Stationery' and 'Forms'. These classes of documents often did not include a printers' credit, as compared to street literature such as 'Handbills' and 'Posters'. There were 137 items that could not be identified by the printers. These were functional documents that were designed to impart and gather information, sometimes as internal communications, whereby it was not an appropriate opportunity to promote the individual printers' business in this context.

Ephemera within 'Stationery' and 'Forms' demonstrated how jobbing printing was developing into more specialised forms of documents. This class of document were ordered under the highest number of narrower terms that were used to categorise documents in the ephemera sample (Table 7.15).

T. H. Lakins, Edmund Street, Birmingham, printed the most documents recorded by a single printer in this class. He produced five items that included 'Handbills' that were composed to mimic a formal 'Letter' style, aimed at present a personalised tone, for the Liberal candidate W. Phipson Beale, Tamworth Division of the North Warwickshire

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243   The 'Playbills' were ordered in together in three volumes of 1907-9, 1911-12, and 1916-18.
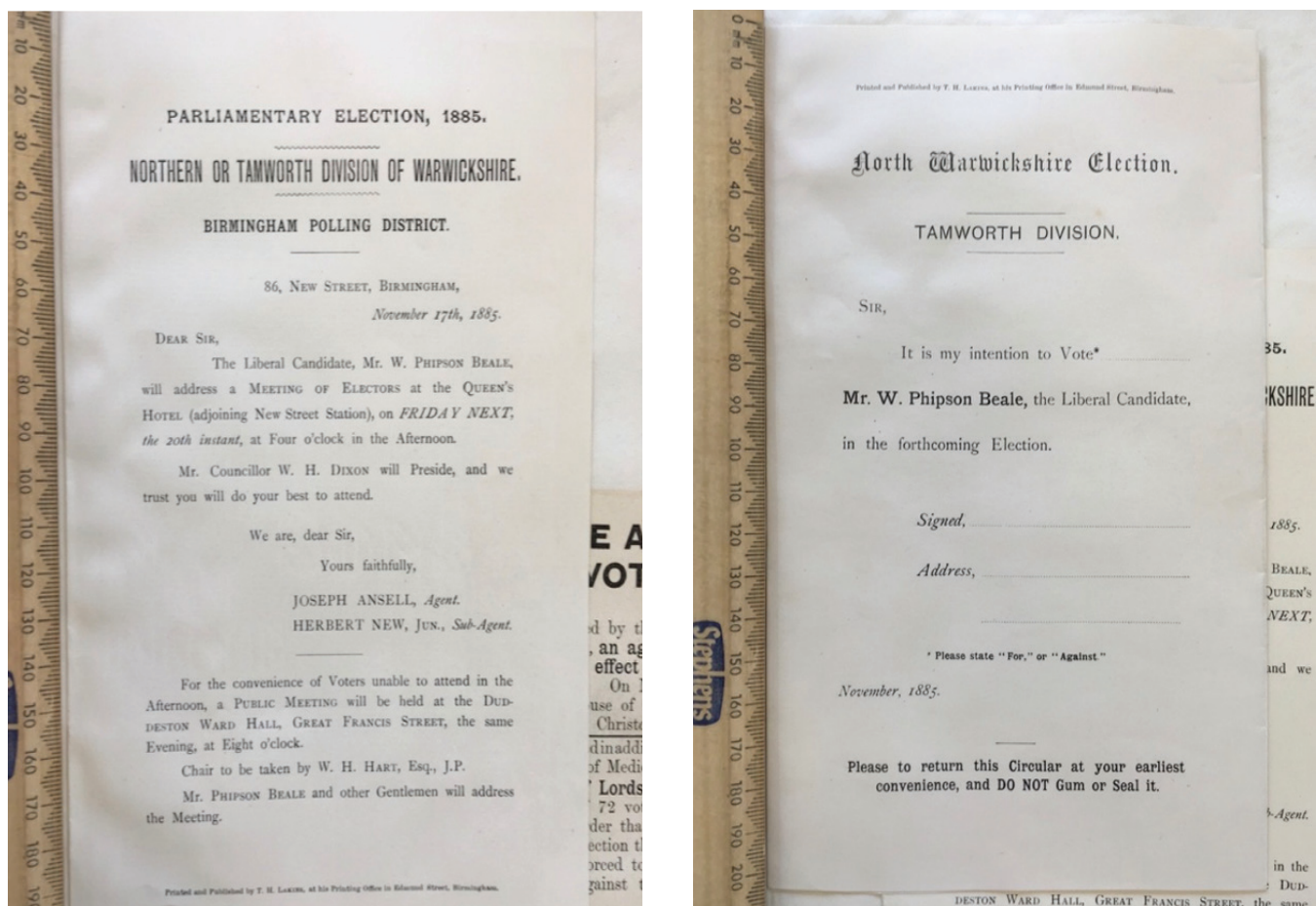
Figure 7.4.6 Examples of ephemera ordered as 'Stationary' and 'Forms'. (Left) A 'Handbill' using a 'Letter' format. 'Pariamentary Election', handbill, T.H. Lakin, Birmingham, 1885. LOB; (right) a 'Handbill' incorporating a 'Form'. 'Tamworth Division', handbill, T.H. Lakin, 1885. LOB.

Table 7.16. Birmingham printers of 'Playbills', ordered by street from North to South.

Printer	Trading Dates	Address
Packman, O.J.	*c.* 1905-14	146 Hockley Hill, Birmingham
BILLING, M	1841-1883	75 Newhall St (<1843), 75-76 Newhall Street (1845-50), Livery Street, Birmingham (1864)
TURNER, Frederick	1928-1860	3 Snowhill, Birmingham
UPTON, J.	*c.* 1880	Great Charles Street, Birmingham
ALLDAY LTD.	1832-93	ALLDAY, Joseph 38 Upper Temple St (1832). Union St (1837-61). ALLDAY Ltd. 128/30 Edmond Street, Birmingham (1893)
Smith, S.	1880	2 Broad Street corner, Birmingham
WHITE & Co., J.R.	1876	Newton Street, Birmingham
Parkes and Groves Theatrical Printers	1907	33 Coleshill Street, Birmingham
Pierce & Seymore	*c.* 1834-39	74 High Street, Birmingham
HARRIS, William	1819-64	179 High St, Deritend
Bradshaw Printing Co.	1920	Harborne, Birmingham

Election, 1885 (Figure 4.4.6). As part of the same election campaign, Lakin used a simple 'For' and 'Against' form that was integrated into a 'Ballot Paper' format, designed to persuade voters to offer their pledge for Beale.

A future area of scholarly inquiry has been identified that uses the dataset to find geographical areas of similar printing activity. For example, using 'Playbills' and 'Ballad Sheets', the database was used to find areas of activity that were based on specific classes of documents produced. Of the fifteen known printers who produced 'Playbills' recorded in the sample, eleven printers were trading in Birmingham between 1832-1920. Trading dates and addresses of these printers were compared to data in the British Book Trade Index (BBTI). Once the addresses were successfully matched, this information was used to extend the known trading dates and addresses of the printers in the ephemera sample.

As many of Birmingham's nineteenth-century streets have now disappeared or become amalgamated into the street plans of contemporary town planning, historic maps of central Birmingham were used to plot the printers addresses and to look for areas of printing activity. This included a reproduction of an Ordinance Survey, *Warwickshire Sheet 14.05*, 1888, and an original hand-coloured map, printer unknown, 1890.

Analysis of the 'Playbills' data revealed a cluster of eight printers, that were trading outwards from the city centre, towards the Jewellery Quarter in the north of the city. The *Central Birmingham* map of 1890 divided into half-mile squares, of which eight printers were found within half-mile to the north and a mile from west to east. The production of 'Playbills' was mapped from Peirce & Seymore on 74 High Street, (c. 1834-39), extending east to Parkes and Groves on 33 Coleshill Street, (1907), and west to S. Smith on Broad Street Corner, (1880). The grouping spanned out north to M. Billing at 75 Livery Street, running parallel to Fredrick Turner at 3 Snow Hill, and intersected by J. Upton on Great Charles Street (Table 7.16).

The location of these printers was within close proximity of each other, with the exceptions of William Harris, (1819-64), Bradshaw's Printing Co., (1920) and O. J. Packman, (c. 1905-14). Harris operated in the south of Birmingham from 179 High St, Deritend, and was known for his printing of 'Ballad Sheets', which corresponds with other printers in the Digbeth area.[244] Bradshaw's Printing Co., (1920) were located to the west in Harborne.

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244   William Harris is recorded in the BBTI as a printer of Ballad Sheets. BBTI, 'Details for: HARRIS, William', *BBTI* (Online: BBTI, 2014) <http://bbti.bodleian.ox.ac.uk/details/?trade-rid=31163> [accessed August 2021].

Figure 7.4.7 Map with the streets of 'Playbill' Printers in Birmingham plotted between 1832-1920. Osb.

Table 7.17 Printers of Birmingham 'Ballad Sheets', ordered by street from North to South.

Printer	Printers Address	Year	No.
Brueton, J	Stafford Street, Birmingham	1905-14 c.	1
JACKSON & SON, William	Moor Street, Birmingham	1833-92 c.	1
KETTLE, Samuel	84 Digbeth, Birmingham	1833-92 c.	1
PRATT, William	82 Digbeth, Birmingham	1833-92 c.	2
KING, T	City Road, Birmingham	1833-92 c.	3

They were included in the sample for a 'Playbill' of the *Mikado*, a charity performance for the Post Office Local Relief Fund, that connects with their title of being 'Trade Union Printers' as used in their printers' credit for a Labour party 'Handbill', printed in 1862. O. J. Packman was based at 146 Hockley Hill, that was located towards the far north of the Jewellery Quarter (Figure 4.4.7). Hockley Hill extended out from Livery Street via Great Hampton Street and was over a mile in a northerly direction from Peirce & Seymore located on High Street. The 'Playbill' printed by Packman was for a production of *Iolanthe* at the Perry Barr Institute further north of the Jewellery Quarter. The eight printers were within walking distance from each other, the streets that they traded from were marked on the central Birmingham map in green, and William Harris of High Street, Deritend, was marked in orange.

The same approach was tested using the dataset to identify the location of 'Ballad Sheet' printers in Birmingham. There were eighteen 'Ballad Sheets' recorded in the ephemera sample, of which nine items were printed by six known printers, that were identified by printers' credits on the ballads. The unknown printers and E. Hodges, Seven Dials, London (*c*. 1833-92) were excluded from this selection (Table 7.17).[245]

Five of the 'Ballad Sheets' were printed in the Digbeth area, starting with William Jackson & Son, (*c*. 1833-92), who were trading from Moor Street to the south of Central Birmingham. Samuel Kettle and William Pratt printed from Digbeth, that extended to the south of the city, joining Moor Street at the Bull Ring. J. Brueton was trading close to Moor Street, on Stafford Street, that was located off Dale End and Coleshill Street in the east of Birmingham (Figure 7.4.8).

T. King was excluded from the selection as he was identified as trading from Edgbaston, Birmingham. His three 'Ballad Sheets' presented advertising for G. Green, who sold King's ballads at his Music Stall on City Road, Edgbaston, Birmingham. City Road does not appear on the 1890 map as it was developed later. From his business relationship with Green, it was concluded that King was trading from Edgbaston area, located two miles west of the cluster of printers in Digbeth, Birmingham (Figure 7.4.9).

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245   The example by Hodges was included in the ephemera sample for comparison of an 'Ballad Sheet' that was printed outside of Birmingham and sold in the town.
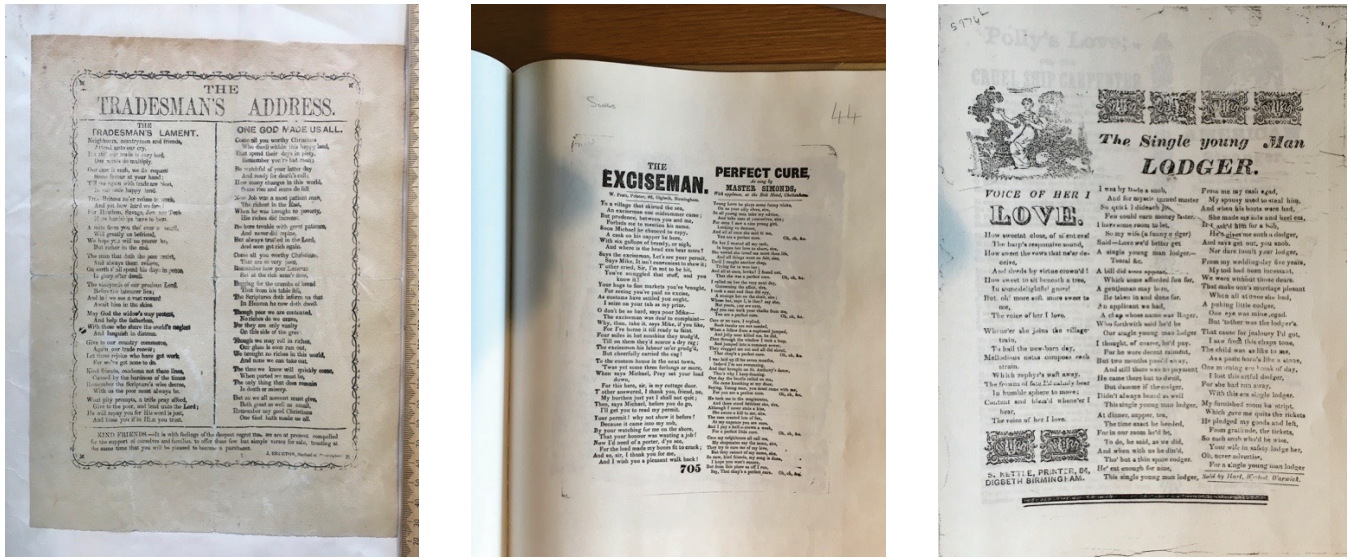
Figure 7.4.8 Examples of 'Ballad Sheets', printed in Birmingham around the Digbeth area. (Left) 'The Tradesman's Address', ballad sheet, J. Brueton, Stafford Street, Birmingham, c. 1833-92. LOB; (centre) 'The Exciseman and Perfect Cure', facsmile of ballad sheet, William Pratt, 82 Digbeth, Birmingham, c. 1833-92. LOB; (right) 'Voice of Her I Love and The Single young Man Lodger', facsmile of ballad sheet, Samuel Kettle, 84 Digbeth, Birmingham, c. 1833-92. LOB.


Figure 7.4.9 Map with the streets of 'Ballad Sheet' Printers in Birmingham plotted between c. 1833-92. Osb.

In conclusion, printing activity in the production of 'Ballad Sheets' was concentrated within a half-mile of the Digbeth area. Kettle and Pratt traded on the same street, with only one address separating them. The examples above were provided to demonstrate a potential future use of the methodology. As the limited nature of the current sample could possibly skew the data, in a future study, a larger data set of 'Playbills' and 'Ballad Sheets' would be used to investigate the evidence that 'Playbills' were printed in an area to the north of Central Birmingham, and that 'Ballad Sheets' were printed in the south towards Digbeth and Deritend.

7.4.2. The Bridgnorth Case-study

The following section presents an example of how the secondary case-study of Bridgnorth was used to test the new methodology. Bridgnorth presented a different scale of town to demonstrate how the framework can be applied to other locations in future research. The example focuses on the document class of playbills, as these were the largest category of documents identified in the Bridgnorth case-study. The ephemera dataset was analysed against the typefounders specimen sample to highlight the trajectory of printing types from the London typefoundries, to the provinces.

During the mid-nineteenth century, the small Shropshire market town of Bridgnorth had an average population of 5,275, with fourteen printers including the Gitton family. In Bridgnorth, Edkins and Son (1839-50) were printing alongside G. R. Gitton (1800-85), competing for business from the corporation and local trade. Clement Edkins (trading 1849-84), later developed the business from his father, during his tenure he produced a wide range of 'Playbills' for 'grand' concerts at the Assembly Rooms, Bridgnorth, (1869), and theatrical performances and operas at the Agricultural Hall, Bridgnorth, (1869-84). In contrast to G. R. Gitton's 'Handbill' sized 'Playbills', c.1832, Edkins followed the fashion for large portrait 'Playbills' (Figure 4.4.4). The sample included five items printed by Edkins, that show the development of popular entertainment in Bridgnorth and an increase in size of the 'Playbill' format. G. R. Gitton's diaries reveal mutual exchanges between the two printers, for example Gitton loaned Edkins printing types, and vice versa, when Gitton's press was destroyed, (1865), he used Edkins Albion Press in exchange for carrying out printing work for Edkins.[246] This relationship continued into the 1880s.

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246   Diana R. Mackarill, (2002), p. 57.

Figure 7.4.10 Eight-Line Pica Condensed, Caslon & Livermore, 1834. SBL.
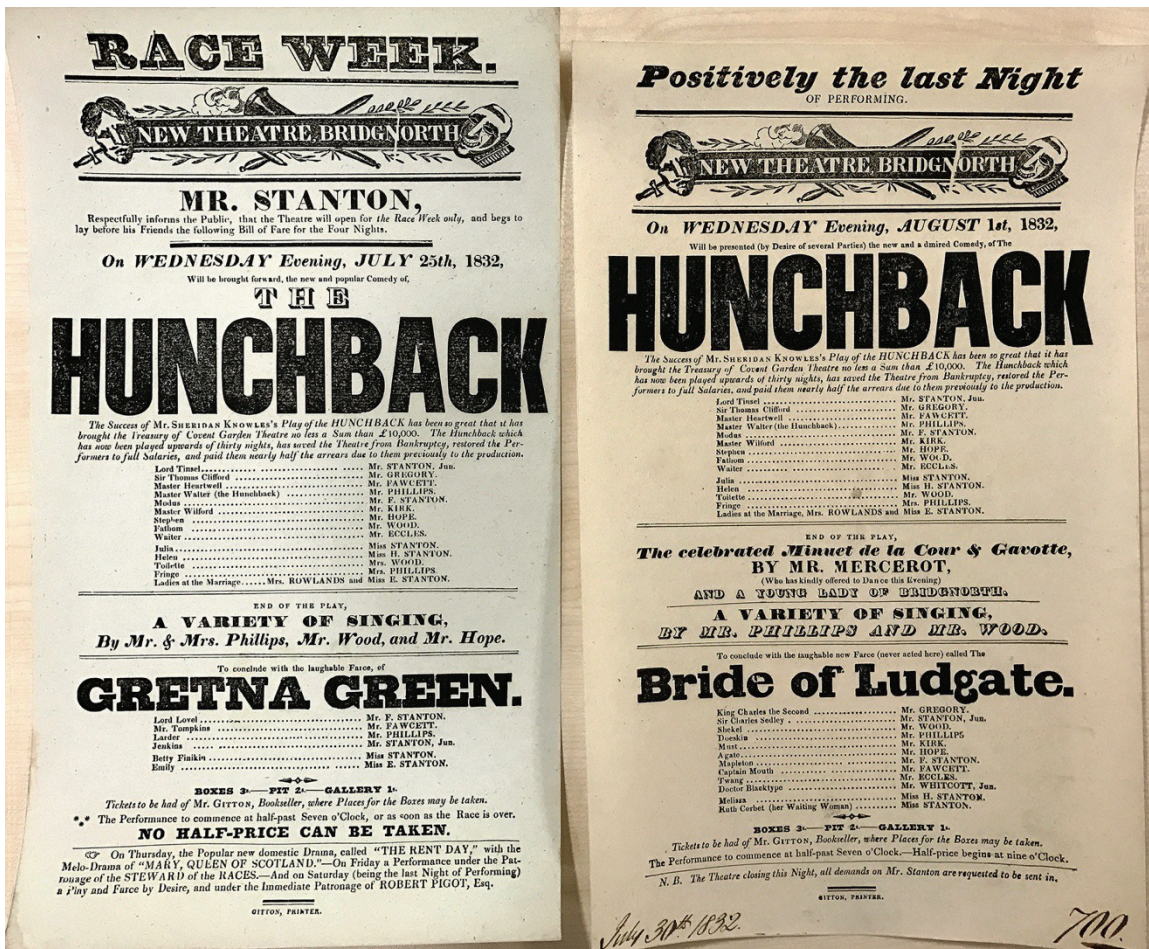
Figure 7.4.11 Two playbill for performances across the week of the Bridgnorth races. 'The Hunchback', playbills, G. R. Gitton, 1832. CRL.

In a playbill of 1832 for a production of Sheridan Knowles's *The Hunchback* at the New Theatre, Bridgnorth, G. R. Gitton used Caslon & Livermore's Eight-Line Pica Condensed, an extremely bold sans serif employed for dramatic effect, (Figure 7.4.10).[247] The comedy was billed as a headline attraction, promoted following its recent success in transforming the financial security of the Covent Garden Theatre in London. Coinciding with the Bridgnorth Races, Stanton's troupe performed a total of eleven different plays across the course of a week, with two plays presented each evening connected by an interval of musical entertainment. *The Hunchback* launched on the first race night of 1832 and concluded the following Wednesday, (Figure 7.4.11).[248]

G. R. Gitton's deployment of Caslon & Livermore's sans serif was significant on several levels. Firstly, he was experimental in his use of a heavyweight condensed sans serif as the primary level of visual hierarchy in the playbill. Secondly, his 'Playbills' had dual functionality, being also used as 'Handbills', for which the choice of large display faces of this size was more familiar set within the composition of larger sizes of 'Playbills' and 'Poster' advertising. Thirdly, and it is of national significance that this is the first known use of Caslon & Livermore's Eight-Line Pica Condensed: the typeface was not promoted in their specimen book until two years later in 1834. The use of this typeface demonstrates that G. R. Gitton was in direct communication with the London typefounders, and illustrates his readiness to take advantage of their latest designs.

His use of Caslon & Livermore's bold condensed sans serif is striking in the context of the size of the document. Eight-Line Pica Condensed is the equivalent size of a 96 point typeface. Gitton used this type as the first resting place of the eye in the typographic hierarchy, spanning the entire width of the 'Handbill'. The use of 'Handbill' sized 'Playbills' for the New Theatre Bridgnorth, reflected the mixed social activity of the town, as a centre for leisure and pleasure. Gitton also printed large format advertising posters for the Bridgnorth races, using the same printing types. By using the same typefaces to advertise two different leisure activities, Gitten begins to develop a visual language that presented Bridgnorth as a visitor attraction.

G. R. Gitton's use of Caslon & Livermore's typeface is evidence that Bridgnorth printers were buying the latest types as they were

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247   SBL, Accession no. 438, Caslon & Livermore, *Specimen of printing types*, 1834.

248   CRL, PN 2596.B65, Bridgnorth Playbills Collection, *New Theatre, Bridgnorth*, 1832.

released, and pre-ordering from London typefoundries. In 1834, when *The Hunchback* was performed at the Theatre Royal, Birmingham, the printer Fredrick Turner also used the same typeface on his playbill. Through visual association Turner's use of sans serif typography presented an aide-mémoire for local audiences familiar with the earlier Bridgnorth performances.[249]

The printing work produced by George Robert Gitton for the New Theatre, Bridgnorth is significant as it demonstrates experimentation of new display type before they were presented in the typefounders' specimen books. Gitton's 'Playbills' stand out from other theatrical bills due to their size. As 'Playbills' were generally printed as large format documents to be pasted onto walls, Gitton's playbills were printed as 'Handbills', creating a dual use document to be circulated by hand or as posters.

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249   BL, General Reference Collection DRT Digital Store Playbills 193, *A Collection of Playbills from the Theatre Royal, Birmingham*, 1834.

7.5.   Proof of Concept Conclusion

This chapter showed how the new methodology was implemented to test the workings of the proposed framework. It demonstrates to other researchers different approaches through working examples, providing alternative approaches to how the method can be used. As printed ephemera was originally produced as throwaways, the random nature in which it has survived or is accessible impacts the accuracy of these findings. The limited data set in the sample could possibly skew the results that an alternative collection of ephemera may return, the main purpose of this thesis was to demonstrate the opportunities for future research. For the purpose of demonstration, the current sample facilitated the combination of three different approaches. These were first presented individually and later shown together with examples by case-studies.

The limited nature of the dataset is problematic in asserting patterns and trends in changes and developments of the use of sans serif typography. The finding for document classes of a sample set of 729 items, showed that the sans serif was used most in 179 'Handbills'. Followed by its use in ninety posters. It was used least in 'Timetables'. The latter is an example of how the data set can be skewed, as access to documents in the category of 'Transport' were limited in during the pandemic. The use of the sans serif in this category and the associated document classes is an area for future research.

Through the analysis of document classes included in the ephemera sample, the evolution of new formats and functions of printed documents were identified, this included the development of advertising through the 'Letter' format, and the increase in size of 'Posters' and 'Handbills'. The methodology revealed unusual pairings of document classes such as 'Trade cards' and 'Posters' through the sub-category of 'Showcards', demonstrating new ways of working with printed documents for different purposes. General observations of the development of document types, showed an interchangeability of new advertising formats, for example the 'Letter' format, showed a duel functionality, in its use as as a reply back slip.

An area of future research is in the use of tinted substrates was also considered a contributing factor to how nineteenth-century printers chose to communicate to different audiences, for example vibrant tinted papers were used to promote events to the working classes and subtle tinted papers were used for the middle classes. The quality of substrates

increased with the use of card for 'Invites' that became surviving examples of keepsakes. The increased use of sans serif typography in these document classes arguably contributed to the acceptance of these typefaces and a shift in the perception of their value. Insights were concluded into the type work individual jobbing printers produced, and future research was identified into clusters of print activity in the nineteenth century.

Themes and categories were implemented to order the documents, facilitating an understanding of how the sans serif functioned in documents that were grouped as 'Commercial Life', 'Information' and 'Instruction'. Grouping ephemera by categories based on their content, enabled a focused analysis of the seven areas in which the sans serif was used. It revealed who was using sans serif typography, and what it was used to say. Through the case-studies, it contributed new knowledge to printing and local history of Birmingham and Bridgnorth.

The theme of 'Commercial Life' was mapped against 471 pieces of ephemera, of which 193 documents were unique to this category. This was the largest theme as it was to capture attention and evidenced the advancing fashions of typography. This was further supported by the category of 'Trade' contained the biggest grouping of 271 documents, of which 109 items were within the singular theme of 'Commercial Life'. The second largest category in the sample was 'Politics'. The singular theme of 'Commercial Life' showed the highest use of sans serifs as the first typographic element that was used to direct the reader's attention.

The use of sans serif in street literature to attract attention and for emphasis in headers. It was used for key words in adverting in 'Programmes', 'Newspapers' and in the process is an early form of branding, bringing attention to business names and creating visual recognition. For the theme of 'Instruction' is was used for disruption to draw attention to how to behave. There was an increased use of sans serif across time, that coincided with the increase in literacy and expanding populations. This is an area for future research, to interrogate how the sans serif contributed to the development of reading.

The uptake of the sans serif was measured against three metrics: where sans serif types appeared in the document hierarchy; how many different sans serifs were used in each document; and the percentage of text that was occupied by these new style of printing types. The overall use of sans serif types within the text of the documents, increases into the twentieth-

century, reaching its highest average of 55% when used across all themes.

Documents in the combined theme of 'Information' averaged a total percentage of use of 53%. This was contributed to by the development of lowercase sans serifs and early type-families at small sizes, increased the functionality and uptake of sans serifs. Sans serif types were more legible at small sizes, contributing to experimentation by jobbing printers with the scale and use of documents. A trend was shown in the use of the sans serif in business stationary. In the theme of 'Information', the sans serif was used most in the final position of the typographic hierarchy.

The singular theme of 'Commercial Life' showed the highest use of sans serifs as the first typographic element that was used to direct the reader's attention. Bold serif types were the second highest recorded in the first level of the hierarchy, followed by slab serifs and ornamented types. With documents that spanned both 'Commercial Life' and 'Information', the sans serif was used the most often in the final position of the typographic hierarchy as a call to action. The combination of all occurrences of ephemera in 'Commercial Life' used the highest number of sans serif types with a total of eighteen founts, compared to seventeen for 'Information' and sixteen for 'Instruction'.

A future area of research was identified through the exploration of an independent classification system for Grotesque sans serif founts. This system was used to consider the uptake of a 'Classical' style design of sans serif lettering, as used by the printers of Birmingham and Bridgnorth. The development of type-families in the late nineteenth century, was shown to be in an earlier period than formally acknowledged by current classification systems. Evidence was shown of the antecedents of the 'Neo-grotesques', 'Humanist' and 'Geometric' types. These coincided with the beginnings of practical type families.

8. Thesis Conclusion

8.1. Introduction

This research has established a new methodology for other typographic scholars to follow. Through the process of analyzing the different classes of documents that were produced using sans serif typography, and analysis of the text based content that was being communicated through the ephemera; the author developed a framework of themes and categories, adapted from the methodologies of established ephemera scholars. It set out to show the ascendancy of the sans serif through its frequency in use. This was measured through the sans serif's position in the typographic hierarchy; the number of sans serif founts used in a single document; and the overall percentage of text presented using sans serif types.

These themes and categories enabled a new historical interpretation of the sans serif in use. It showed how and when printers from Birmingham and Bridgnorth used sans serif types. It identified relationships between the development of new classes of document and the functionality of sans serif typography.

This research considered 703 printers from Birmingham and Bridgnorth, who used sans serif typography in the production of printed ephemera. In a sample of 729 pieces of ephemera, the sans serif was used across all classes of documents. Its highest use was observed in 179 'Handbills' and ninety 'Posters'. This included William Joesbury of Birmingham's use of a 'Classical' sans serif, in the production of educational school 'Charts'; and Robert George Gitton of Bridgnorth's use of a 'Bold' sans serif, for headings in small format 'Playbills'. Its main function was to attract attention through headings, for example through 'Posters' ordered under the theme of 'Commercial Life'; and it evolved into families of smaller type sizes used in the development of new hybrid forms of documents, such as the combined formats of 'Forms' and 'Letters', recorded under the theme of 'Information'.

The percentage of sans serif types in the composition of ephemera grew exponentially between 1832 to 1929, reaching 32% at the start of the twentieth century. In the first position of the typographic hierarchy, it was shown to have the greatest usage of all classes of typefaces, in a total of 366 documents. Using the new classification system for sans serif typefaces, 'Bold' types were observed the most across 95% documents,

followed by 'Condensed' forms in 50% of the sample. Finally, there was a higher number of 'Classical' sans serifs recorded in comparison to 'Neo-grotesques'.

From a local history perspective, the sans serif was used as a lens to develop new insights into who were the clients and audiences for printed ephemera. In the process, it developed an historical narrative around what the sans serif was used to say.

These approaches were fundamental in gaining insights into the contributions that sans serif typography has made towards the development of cultural associations. It is possible that through its bold styles, the sans serif was used to communicate to middle- and working-class audiences of the nineteenth century but this is something that requires future study.

This research was stimulated by the revival of Grotesque sans serif designs through contemporary advertising, this included the popular typefaces Gotham, Verlag and Neutraface. These sans serifs quickly grew in popularity, representing products and services marketed to a new generation of socially responsible consumers. In the process these typefaces contributed to the development of new cultural associations, for example, Shepard Fairey's campaign of 'Hope' for the American democratic president Barack Obama. The impact of this typographic revival paralleled the succession of the first sans serif types, produced at the beginning of the nineteenth century. It soon became apparent that this was an area of scholarly research that required a new investigation into the use of these early sans serif types.

When this research began, there were only a handful of scholars working on the history of the sans serif. A new field was identified for the study of sans serifs in use by provincial jobbing printers. In 2016, the author organised a conference the 'Song of the Sans Serif', to celebrate the 200th anniversary of the first presentation of William Caslon IV's 'Two Lines English Egyptian'.[250] The conference was a springboard in developing dialogues around the study of sans serif typography. Through the work of emergent researchers such as Sebastien Morlighem, Daniel Reynolds and Pierre Pané-Farré, the field of sans serif typography has begun to develop a new found interest and recognition.[251]

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250   David Osbaldestin, 'The Song of the Sans Serif', *Centre for Printing History and Culture* (Online: Centre for Printing History and Culture, 2016) <https://www.cphc.org.uk/events/2015/11/20/the-song-of-the-sanserif> [accessed 3 July 2021].

251   Daniel Reynolds, 'The distribution of sanserif types across Germantypefoundries during the nineteenth century', *Journal of the Printing Historical Society*, Third Series, No. 1 (London: PHS, 2020), pp. 123-145.

A case-study approach was followed to demonstrate the new methodology. A primary case-study of Birmingham as an industrial metropolis; and a secondary study of Bridgnorth, as a rural industrial town, were used to set the scope of the research. These case-studies were used as a platform to interrogate the use of sans serif typography through the printed ephemera of the Midlands.

The random nature of working with printed ephemera is problematic, both in terms of the variety of surviving material, its location and access. Printed ephemera collections are somewhat arbitrary in how they were assembled, often originating from private collections, based on individual interests ranging from personal scrapbooks to printers files. Printed ephemera was initially overlooked for its historical value by museums and libraries, with unarchived material still awaiting discovery. These factors contribute to the possible skewing of data when analysing the current sample. The aim of this research was the development and testing of the new methodological framework for interrogating printed ephemera. The findings presented in this thesis give examples of how this methodology can be implemented by other researchers and are intended as signposts for areas of interest that will be advanced through future research.

8.2.   Contribution to Knowledge

The design of a new methodology for the analysis of typography through ephemeral documents, presents many opportunities for other historians to benefit from its implementation. In consideration of the use of typography across a large volume of ephemeral documents, the methodology enables researchers to interrogate the ephemera from many different perspectives. This included the organization of sans serif typography by document class and by printer; the study of cultural associations by grouping ephemera into themes and categories; and the investigation of the uptake of sans serif types measured by its frequency in use. These different approaches were used in combination to present a historical narrative of the sans serif in use by nineteenth-century jobbing printers from Birmingham and Bridgnorth. Expansion of the ephemera sample by other researchers will strengthen the possibilities for cross-referencing the data and finding new connections within the fields of print history and culture.

This thesis has contributed to the study of sans serif typography, producing a new historical narrative, from its origins to its function in use, as seen through the work of printers from Birmingham and Bridgnorth. The negative reception of sans serif types, through analysis of critiques by several generations of print historians, has informed an interpretation of the of the succession of the sans serif: first by value as a curiosity and novelty, contributing to the development of advertising; then for its functionality, impacting the development of new document classes; and its cultural influence by association, in the development of a visual language for middle and working classes. The research has demonstrated the uptake of these new type designs by provisional printers and in the process it has identified previously overlooked typefoundries, such as Caslon and Livermore, a typefoundry that requires further investigation for its contribution of taking sans serif types to market.

This PhD research has advanced our understanding and knowledge of nineteenth century jobbing printers in Birmingham and Bridgnorth. This is an area that has been under-researched, partly due to the explosion of jobbing printers in the nineteenth century, and the British Book Trade Index only recording book trades up to 1851. The scope of this research was between 1816-1929, this period covers the advent of the world's first sans serif printing types up to the use of modern sans serif typefaces. The printers identified through the ephemera sample were operating between

1832-1927, this gives new insight and evidence of printing activity and opportunities for further investigation of print centres in Birmingham.

Through interpretation of the content of these ephemeral documents, connections were made between the clients and the printers political motivations, for example Hudson and Son's production of political literature for the Birmingham Liberals, Unionists and Labour Parties. The trajectory of the sans serif from the London-based typefoundries to Birmingham printers, revealed innovations in the use of sans serif typography: from Joesbury's composition of educational information through Watton's *Outline Charts of General History*; and evidence that provincial printers were ahead of current typographic fashions, through G.R. Gitton's use of Caslon & Livermore's Eight-Line Pica Condensed, two years before it first appeared in their specimen book of 1834.

The analysis of Grotesque sans serif printing types in use, has directed the author to challenge the usefulness of the classification of these nineteenth-century founts, that was based on a twentieth-century model. There was evidence found in the wide variety of experimental typographic forms, that supports the development of an alternative classification system, one that organises Grotesque typefaces both on their practicality for analysis by nineteenth-century typographic scholars, and by the opportunities to gain new insights into the evolution of subsequent classes of sans serif.

8.3.   Limitations of the Study

The dataset used to test the proposed methodology was problematic in its scope. Material was collected from a diverse range of sources, of which each collection warrants individual focus in future research. To give deeper analysis of the material, consideration of the intentions and motivations of the individuals who assembled the collections would inform an understanding of the groupings of surviving ephemera. The sample used in this research focused primarily on material from Birmingham as the main case-study. There are opportunities to extend the Bridgnorth case-study or to apply the methodology to other locations. The edited sample presented in the findings was representational of all the classes of documents. The process of selecting material to make a meaningful analysis across all document classes has resulted in a generic series of findings. In future research specific collections and document classes have been identified to focus the results. The aforementioned factors lead to the possibility that the findings could be skewed. This does not detract from the aim of this study, in the presentation and testing of a new methodological framework.

The digital solution used in this research was designed for working with big data. The author's intention was to study a large collection of printed ephemera, that spanned many classes of documents, to test out the methodology and answer the aims of the research. The tool was successful in enabling the author to gather and order a diverse range of ephemera, and to test out three different approaches in the analysis of data.

The same tool and methodology can be used for a detailed analysis of a specific aspect of typographic or historic enquiry. By focusing on a singular area of sans serif typography in use, such as the work of an individual printer, or a theme or category of printed work, researchers can shape the individual direction of their enquiry. This can be filtered through the analysis of a single collection, for example George Gitton senior's printers file in the Shropshire archives (1820-25), that focuses the scope of the research within a short date range, enabling a detailed investigation of an individual printer and the community that they serve. Alternatively, scholars can develop this methodology to focus on a group of closely related classes of documents such as 'Handbills', 'Posters', "Broadsides', and 'Playbills'.

This study has contributed to our knowledge of typefoundry specimens, for example, in highlighting the potential of future research into the types of Caslon & Livermore. It has been identified that there is additional scope to survey a wider range of typefounders' specimen books, including all classes of type. The development and digitization of this data will enhance the work of other researchers and preserve surviving copies of 'Sample Books' that are now in poor condition and awaiting restoration. The typefoundry database would also be expanded to consider wood type. This research was wholly concerned with documents that were produced using metal printing types, however, the inclusion of wood types would help scholars when identifying larger sizes of founts used in the ephemera

The development of a digital platform as a relational database has many limitations in implementing a tool for public use. The software that the data was recorded in, provided the author with an accessible platform and user-friendly solution for database design. This enabled the realization of the thesis aims and testing of the new methodology. In moving forward, discussions have begun with the School of Computing, BCU, in the development of a NoSQL based solution. This will advance the flexibility of how researchers interact with the data and the propagation of ephemeral content. Opportunities has been identified in the use of machine learning, to implement typeface recognition and to automate metrics such as the measurement of typographic hierarchy and percentage of text used in a document.

It is acknowledged that restrictions to archives during the Covid-19 pandemic, has impacted on the development of data in the category of 'Transport'. This is an area of particular interest to the author, as it demonstrates the use of sans serif typography in the theme of 'Information' and presents opportunities to analyse how the sans serif developed cultural associations with Railway Transport systems in Britain in the nineteenth century.

8.4.   Opportunities to Advance the Research

In developing this work, the author has defined a research strategy that has identified several short- and mid-term project goals. Opportunities are being explored to develop the digital platform for public use by other typographic scholars. The first stage of this project, is to test out the current platform with a focus group of researchers and UX/UI experts, leading to the design of a web-based NoSQL prototype. Future ambitions include the use of machine learning and image analysis, to improve the functionality of the platform; and explore commercial opportunities in educational publishing.

It is the ambition of the author to develop as an early career researcher within Birmingham City University, contributing to the research strategy of the Centre for Print and Culture, and other affiliate organisations, including the Printing Historical Society, Print Networks and the British Museum of Printing. As part of the authors post-doc career, several areas of interest have been identified for future development, conference presentations and potential publication of research findings. This includes a history of the Birmingham Printers Hudson and Son; a study of print centres in nineteenth-century Birmingham; analysis of the impact of Caslon & Livermore's production of sans serif types in circulation; and a new rational for the classification of Grotesque sans serifs, with particular reference to the "Classical' and 'Neo-grotesque' design styles in use in the nineteenth century. The tool will be developed and used to focus on specific collections such as the printers file of William Davison (1781–1858) of Alnwick, that evidences early examples of the use of William Caslon's 'Two Lines English Egyptian' in Britain.

Through publication of this thesis, it is hoped that the new methodology may be use to other researchers from a wide field of interests. In the future, the database will be developed and refined for public use through an online platform. The next stage in the progression of this research, includes the development of a monograph on sans serif types in the printed ephemera of Birmingham and Bridgnorth, and a Hand-list of sans serif founts.

Bibliography

About Bridgnorth, 'Bridgnorth : A Brief History', *About Bridgnorth*, (2012) <https://www.aboutbridgnorth.com/history-of-bridgnorth-2> [accessed 2 February 2020].

About Bridgnorth, 'The Cockpit Theatre', *About Bridgnorth* (2019) <https://www.aboutbridgnorth.com/the-cockpit-theatre/> [accessed 11 December 2019].

Allen, Robert, *The British Industrial Revolution in Global Perspective*, (Cambridge: Cambridge University Press, 2009).

Alpha History, '1941: The Nazis Ban Jewish Fonts', *Alpha History*, (2016) <https://alphahistory.com/pastpeculiar/1941-nazis-ban-jewish-fonts/> [accessed 14 March 2019].

Archer-Parré, Caroline, 'Places, spaces and the printing press: trade interactions in Birmingham', *Midland History 45* (2020).

Archer, Caroline, 'Printing and the printed word', in: Malcolm Dick & Carl Chinn (eds.), *Birmingham: Workshop of the World*, (Liverpool: Liverpool University Press, 2016).

Aris's Birmingham Gazette, 'Catherine Gitton's announcement of continuing her father's printing work', *Aris's Birmingham Gazette*, 13 November 1826.

Aris's Birmingham Gazette, 'Public announcement by Thomas Gitton, solicitor to the George Gitton estate', *Aris's Birmingham Gazette*, 25 September 1826.

Ashton, Thomas Southcliffe, *Iron and Steel in the Industrial Revolution*, (Manchester: Manchester University Press, 1968).

Association Typographique Internationale, 'Atypi de-Adopts Vox-Atypi type-face classification system', *AtypI News*, (2021) <https://atypi.org/2021/04/27/aty-pi-de-adopted-the-vox-atypi-typeface-classification-system/> [accessed 10 July 2023].

Amazon Web Services, 'What is NoSQL?', *Amazon Web Services*, (2021) <https://aws.amazon.com/nosql/> [Accessed 1 June 2021].

Anderson, Benedict, *Imagined Communities*, (London: Verson, 2006).

Anderson, Janice and Swinglehurst, Edmund, *Ephemera of Travel & Transport*, (Great Britain: New Cavendish Books, 1981).

Banham, Robert, 'Nineteenth-century jobbing: the printing methods of Gye and Balne', *Journal of the Printing Historical Society ns.11* (2006).

Banham, Robert, '"The largest type in England": wood lettering for jobbing printing, 1800–1830', in J. Blume et al (eds) *Vom buch auf die straße: große schrift im öffentlichen Raum* (Leipzig: Institut für Buchkunst, 2014).

Barker, Nicolas, 'Obituary: Nicolete Gray', *The Independent* (1997) <https://www.independent.co.uk/news/people/obituary-nicolete-gray-1255651.html> [accessed 3 November 2019].

BBC, 'History of the River Severn', *Severn*, (2008) <http://www.bbc.co.uk/shropshire/content/articles/2008/09/26/river_severn_feature.shtml> [accessed 26 March 2020].

BBTI, 'Details for: HARRIS, William', *British Book Trade Index*, (2014) <http://bbti.bodleian.ox.ac.uk/details/?traderid=31163> [accessed August 2021].

Bell, Major James, *A View of Universal History, fifth edition*, (London: Hansard, 1842).

Bell, Maureen & Hinks, John, 'The English Provincial Book Trade: evidence from the British Book Trade Index', *The Cambridge History of the Book in Britain, Volume. V*, 1695-1830, (Cambridge: Cambridge University Press, 2009).

Berg, Maxine, 'Commerce and creativity in eighteenth-century Birmingham', in: M. Berg (ed.), *Markets and Manufacturers in Early Industrial Europe* (London: Routledge, 1991).

Berry, John D., and Randle, John, *Type & Typography: Highlights from Matrix, the Review for Printers and Bibliophiles*, (United Kingdom:Mark Batty Publisher, 2003).

Berthold Types, 'Akzidenz-Grotesk', *Berthold*, (2018) <https://www.berthold-types.com/blog/2010-12-08/akzidenz-grotesk/> [accessed 16 May 2021].

Birmingham & Aston Chronicle, 'J. Purcell Advertisement', *Birmingham & Aston Chronicle*, (20 October 1888).

Birmingham City University, 'Our History', *About Us*, (2021) <https://www.bcu.ac.uk/art/about-us/our-history> [accessed 2 August 2021].

Birmingham Daily Post, 'Art Education for Printers', *Birmingham Daily Post*, (2 December 1889).

Birmingham Daily Post, 'Death of Mr. Spooner, M.P.', *Birmingham Daily Post, (25 November 1864).*

Birmingham Daily Post, 'Printers and the Factory Acts', *Birmingham Daily Post*, (21 January 1888).

Birmingham Daily Post, 'Reopening of St Bartholomew's Church', *Birmingham Daily Post*, (1893).

Blades, William, *Some Early Type Specimen Books of England, Holland, France, Italy, and Germany*, (London: J.M. Powell, 1875).

Blakemore, Mike, 'ABC Coleshill Street', *Cinema Treasures*, (2017) <http://cinematreasures.org/theaters/37046> [accessed 3 May 2019].

Boge, Garrett, 'Interview: Professor Michael Twyman', *Lettering Tours*, (2017) <http://letterspace.com/LETTERING_TOURS/twyman_interview.htm> [accessed 17 July 2017].

Bragg, Melvyn, 'William Rollinson', *The Guardian*, (2000) <https://www.theguardian.com/news/2000/mar/29/guardianobituaries> [accessed 15 July 2017].

Briggs, Asa, *The Power of Steam*, (Bristol: Book Promotions Limited, 1982).

Briggs, Asa, *Victorian Cities*, (London: Penguin Books, 1990).

Briggs, Asa, *Victorian People*, (London: Penguin Books, 1990).

Briggs, Asa, *The Age of Improvement*, (Essex: Pearson Education Limited, 2000).

Briggs, Asa and Burke, Peter, *A Social History of the Media, From Gutenberg to the Internet*, (Cambridge: Polity Press, 2014).

British Library (BL), General Reference Collection DRT Digital Store Playbills 193, A collection of playbills from Theatre Royal, Birmingham, 1834

BL, General Reference Collection DRT Digital Store Playbills 193, A Collection of Playbills from the Theatre Royal, Birmingham, 1845

Cadbury Research Library, PN 2596.B65, Bridgnorth Playbills Collection, New Theatre, Bridgnorth, 1832

Cambridge University, 'A Cambridge Alumni Database', *Cambridge University*, (2019) <http://venn.lib.cam.ac.uk/cgi-bin/search-2018.pl?sur=Lodge&suro=w&fir=John&firo=c&cit=&cito=c&c=all&z=all&tex=&sye=&eye=&col=all&maxcount=50> [accessed 6 October 2019].

Carter, Harry, 'Sanserif Types', in: Ruari McClean (ed.), *Typographers on Type: An Illustrated Anthology from William Morris to the Present Day*, (London: Lund Humphries Publishers, 1995).

Cavedoni, Antonio, 'Introducing the New System Fonts', *Apple*, (2015) <https://developer.apple.com/videos/play/wwdc2015/804/> [Accessed 06 May 2018].

Christianson, Paul, 'Selden, John (1584–1654), lawyer and historical and linguistic scholar', Oxford Dictionary of National Biography, (2008) <https://www.oxforddnb.com/view/10.1093/ref:odnb/9780198614128.001.0001/odnb-9780198614128-e-25052> [accessed 27 August 2020].

Coles, Stephen, *The Geometry of Type*, (London: Thames & Hudson Limited, 2013).

Collins, Maurice, 'Moving Paper', *The Ephemerist*, (2018).

Collins, William, *Collins' School Series: The Graphic Infant Reader, Second Book*, (London: William Collins, Sons & Company, 1891).

Crouzet, François, *The First Industrialists, The problem of origins*, (Cambridge: Cambridge University Press, 2008).

Curtis, Lewis Perry, *Coercion and Conciliation in Ireland 1880-1892*, (United States: Princeton University Press, 2015).

Daly, Nicholas, *The Demographic Imagination and the Nineteenth-Century City*, (Cambridge: Cambridge University Press, 2015).

Danesi, Marcel, *Of Cigarettes, High Heels, and Other Intersting Things, An Introduction to Semiotics*, (Hampshire: Palgrave Macmillan Limited, 2008).

David, Stuart, *By the Gains of Industry, Birmingham Museums and Art Gallery 1885-1995*, (Birmingham: Birmingham Museums and Art Gallery, 1985).

Davidoff, Leonore and Hall, Catherine, *Family Fortunes, Men and Women of the English Middle Class, 1780-1850*, (London: Routledge, 2007).

De Beaumont, Sally, '1975-2015 The Ephemera Society, Celebrating 40 years', *The Ephemerist*, (2017) <http://www.ephemera-society.org.uk/articles/eph-soc.html> [accessed 16 May 2017].

Driver, Felix and Gilbert, David, *Imperial cities*, (Manchester: Manchester University Press, 2007).

Edelstein, Teri, J., *Art for All, British Posters for Transport*, (New Haven: Yale University Press, 2010).

Edwards, E., *Personal Recollections of Birmingham and Birmingham Men*, (Birmingham: Midland Educational Trading Company Limited, 1877).

Ephemera Society, 'About Page', *Ephemera Society*, (2019) <http://www. ephemera-society.org.uk/about.html> [accessed 3 September 2010].

Ephemera Society, 'Home Page', *Ephemera Society*, (2015), <http://www. ephemera-society.org.uk/index.html> [accessed 3 July 2017].

Evans, Eric, *The Forging of the Modern State, Early Industrial Britain, 1783-1870*, (Oxon: Routledge, 2013).

Feather, John, *A History of British Printing*, (London: Routledge, 2006).

Fenton, William, *Railway Printed Ephemera*, (Suffolk: Antique Collectors' Club Ltd, 1992).

Fern, Alan M., 'Old-Fashioned Types and New-Fangled Typography, a Study in the Revival of Nineteenth-Century Exotic Type Faces', *Typographica 14* (1957).

Fisher, Michael, 'Hollins, William (1763–1843), architect and sculptor', *Oxford Dictionary of National Biography*, (2013) https://www.ox-forddnb.com/view/10.1093/ref:odnb/9780198614128.001.0001/od-nb-9780198614128-e-13564 [accessed 11 September 2020].

Flanders, Judith, *The Victorian City, Everyday Life in Dickens' London*, (London: Atlantic Books, 2013).

Fruitiger, Adrian, 'The History of Linear Sans Serif Types', *Linotype Matrix*, (2005).

Gibbons, Joan, *Art and Advertising*, (London: I.B.Tauris & Co Ltd, 2005).

Gill, Conrad and Robertson, Charles, *A Short History of Birmingham from its origin to the present day* (Birmingham: City of Birmingham Information Bureau, 1938).

Grain, David, 'Hudson's book shops', *Birmingham History Forum*, (2017)
<https://birminghamhistory.co.uk/forum/index.php?threads/hudsons-
book-shops.45893/page-2> [accessed 9 November 2019].

Gray, Nicolete, *Nineteenth-Century Ornamented Types and Title Pages*,
(London: Faber and Faber Limited, 1938).

Griffin, Emma, *Liberty's Dawn: A People's History of the Industrial Revolution,*
(United Kingdom, Yale University Press, 2013).

Gunn, Simon, *The Public Culture of the Victorian Middle Class: Ritual and
Authority in the English Industrial City: 1840–1914*, (Manchester: Manchester
University Press, 2008).

Gwilt, Clive F., *A History of the Theatres of Bridgnorth*, (Bridgnorth:
Self-published, n.d).

Hall, Catherine, *Civilising Subjects: Metropole and Colony in the English
Imagination 1830-1867*, (Cambridge: Polity Press, 2002).

Hansard, Thomas Curson, *Typographia: An Historical Sketch of the Origin and
Progress of the Art of Printing; with a Description of Stereotype and Lithography*,
(London: Baldwin & Co., 1825).

Handover, P.M., 'Grotesque Letters, a history of unidentified typefaces 1816
to the present day', *Monotype Newsletter 69* (1963).

Handover, P.M., 'Letters without Serifs', *Motif 6* (1980–81).

Harling, Robert, *The Letter Forms and Type Designs of Eric Gill*, (United
Kingdom, Eva Svensson, 1979).

Haslam, Andy and Baines, Phil, *Type and Typography*, (London: Laurence
King Publishing, 2002).

Hicks, Gary, *The First Adman, Thomas Bish and the Birth of Modern Advertising*,
(Brighton: Victorian Secrets Limited, 2012).

Hill, J., *Bookmakers of Old Birmingham: Authors, Printers and Book Sellers*,
(Birmingham: Printer Unknown, 1907).

Hinks, John and Feely, Catherine, *Historical Networks in the Book Trade*, (London: Routledge, 2017).

Hobsbawm, Erik, *Industry and Empire*, (London: Penguin Books Limited, 1999).

Hobsbawm, Erik, *Nations and Nationalism since 1780*, (Cambridge: Cambridge University Press, 2012).

Hobsbawm, Erik, *On History*, (London: Abacus, 1998).

Hobsbawm, Erik, *The Age of Capital 1848–75*, (London: Abacus, 2013).

Hobsbawm, Erik, *The Age of Empire 1875–1914*, (London: Abacus, 2013).

Hobsbawm, Erik, *The Age of Revolution 1789–1848*, (London: Abacus, 2013).

Hobsbawm, Erik, *The Age of Extremes 1914–1991*, (London: Abacus, 2013).

Hobsbawm, Erik and Ranger, Terence, *The Invention of Tradition*, (Cambridge: Cambridge University Press, 2012).

Hollins, William, *The British Standard of the Capital Letters Contained in the Roman Alphabet, Forming a Compleat Code of Systematic Rules for a Mathematical Construction and Accurate Formation of the Same, with Letters of Exemplification, Elementary and Compleat: Together with an Useful and Practical Appendix*, (Birmingham: J. Taylor, 1813).

Howes, Justin, *Johnston's Underground Type*, (London: Capital Transport, 2000).

Hudson, Graham, *The Design and Printing of Ephemera in Britain and America, 1720-1920*, (London: British Library, 2008).

Hughes, Robert, *The Shock of the New*, (United Kingdom: Knopf Doubleday Publishing Group, 2013).

Hunt, Tristram, *Building Jerusalem: The Rise and Fall of the Victorian City*, (London: Orion, 2010).

Hyphen Press, 'Maurice Goldring', *Hyphen Press*, (2000), <https://hyphen-press.co.uk/journal/news/goldring_obituary> [accessed 20 July 2017].

Jackson, Ashley and Tomkins, David, *Illustrating Empire, A Visual History of British Imperialism*, (Oxford: Bodleian Library, 2011).

Jackson, Holbrook, 'The Nonage of Nineteenth-Century Printing in England', *The Fleuron*, (1924).

John Johnson Collection of Printed Ephemera, 'About the Collection', *Bodleian Libraries* (2019) <http://www.bodleian.ox.ac.uk/johnson/about> [accessed 7 May 2019].

John Yold, 'A NEW SONG ON The Birmingham Election', *English Ballads*, (2021) <https://digital.nls.uk/english-ballads/archive/74895259?mode=full-size> [accessed 3 August 2021].

Johnson, Alfred Forbes, *Type Designs: Their History and Development*, (London: Grafton, 1934).

Johnson, Alfred Forbes et al., *The Encyclopaedia of Typefaces [by] W. Pincus Jaspert, W. Turner Berry [and] A.F. Johnson*, (United Kingdom, Blandford Press, 1970).

Johnson, Samuel, *Dictionary of the English Language*, (London: Harrison & Co., 1786).

Johnston, Edward, *Lessons in Formal Writing*, (London: Lund Humphries Publishers Limited, 1986).

Jury, David, *Graphic Design Before Graphic Designers: The Printer as Designer and Craftsman 1700-1914*, (London: Thames & Hudson, 2012).

Kinross, Robin, *Modern typography: an essay in critical history*, (London, Hyphen Press, 2004).

Kinross, Robin, *Unjustified Texts: Perspectives on Typography*, (London, Hyphen Press, 2011).

Kirk, Lisa, 'Ephemera – what and who wants it?', *Biblio*, (2019) <https://www.biblio.com/book-collecting/what-to-collect/ephemera/ephemera-what-is-it-and-who-wants-it/> [accessed 30 August 2019].

Knighton, C. S., 'Pepys, Samuel (1633–1703), naval official and diarist', *Oxford Dictionary of National Biography*, (2015) <https://www.oxforddnb.com/view/10.1093/ref:odnb/9780198614128.001.0001/odnb-9780198614128-e-21906> [accessed 17 August 2020].

Lambert, Julie Anne, Batey and Charles, 'Johnson, John de Monins (1882–1956), printer, ephemerist, and classical scholar', *Oxford Dictionary of National Biography*, (2004) <https://www.oxforddnb.com/view/10.1093/ref:odnb/9780198614128.001.0001/odnb-9780198614128-e-34203> [accessed 17 August 2020].

Lewis, John, *Typography: basic principles, Influences and trends since the 19th century*, (London: Studio Books, 1963).

Lewis, John, *Printed Ephemera: The Changing Uses of Type and Letterforms in English and American Printing*, (London: Faber & Faber Limited, 1969).

Lewis, Sarah Anne, 'An historical and geographical study of the small towns of Shropshire, 1600-1830', PhD thesis, (Leicester, 1990).

Lewis, Wyndham, *Hitler*, (United States: Gordon Press, 1972).

Line, Paul Leslie, *Birmingham: A History in Maps*, (Cheltenham: History Press Limited, 2011).

Linotype, 'Helvetica', *Linotype*, (2019) <https://www.fonts.com/font/linotype/helvetica/story> [accessed 1 June 2021].

Lloyd, Matthew, 'Holder's Grand Concert Rooms, 88, 89, 90, Coleshill Street', *Arthur Lloyd*, (2018) <http://www.arthurlloyd.co.uk/Birmingham/HoldersGrandConcertRoomsBirmingham.htm> [accessed 17 July 2019].

Lloyd, Matthew, 'Holder's Grand Concert Rooms', *Pinterest*, (2018) <https://www.pinterest.co.uk/pin/328059154084904723/> [accessed 4 May 2019]. London Gazette, 'Notices', *London Gazette*, (21 June 1881).

Lot Search, 'Type Specimen. Specimens of Ornamental and Coloured Wood Letters, circa 1860', *Lot Search*, (2019) <https://tinyurl.com/jw1865> [accessed 9 April 2020].

Luna, Paul, *Typography: A Very Short Introduction*, (Oxford: Oxford University Press, 2018).

Lupton, Ellen and Miller, Abbott, J., *The ABC's: The Bauhaus and Design Theory*, (London: Thames & Hudson Ltd, 1993).

MacCarthy, Fiona, *Eric Gill*, (London: Faber and Faber Limited, 1989).

Mackarill, Diana. R., 'George and George Robert Gitton, Printers, Bridgnorth', *Journal of the Printing Historical Society*, NS, No. 4 (2002).

Macmillan, Neil, *An A-Z of Type Designers*, (New Haven, Yale University Press, 2006).

Macmillian and Company, *Macmillan's New Literary Readers: The First Primer*, (London: Macmillan and Company, 1895).

Majoor, Martin, 'My Type Design Philosophy', *Martin Majoor Typefoundry*, (2017) <http://www.martinmajoor.com/6_my_philosophy.html> [accessed 12 October 2018].

Marsh, Arthur and Smethurst, John B., Historical Directory of Trade Unions. Vol. 5., (Aldershot: Routledge, 2006).

Martin, Jonathan, 'Two Lines English Egyptian Digital Revival', Behance, (2013) https://www.behance.net/gallery/14802153/Two-Lines-English-Egyptian-Digital-Revival [accessed 21 January 2020].

Mason, Nicholas, *Literary Advertising and the shaping of British Romanticism*, (Baltimore: The John Hopkins University Press, 2013).ink

McLean, Ruari, *The Thames and Hudson Manual of Typography*,
(London: Thames and Hudson Ltd, 1980).

Millington, Roy, *Stephenson Blake: The Last of the Old English Typefounders*,
(London: The British Library, 2002).

Morris, Barbara, 'Thesaurus of Ephemera Terms', *Reading University*, (2013)
<http://blogs.reading.ac.uk/typography-at-reading/files/2014/07/Ephemera-Thesaurus.pdf> [accessed 3 July 2017].

Mortimer, Ian, 'Ornamented Types Prospectus', *I.M. Imprint Press*, (1994)
<https://web.archive.org/web/20151222083754/http://imimprimit.com/wp-content/uploads/Prospectus-all-cropped-small.pdf> [accessed 5 May 2019].

Mosley, James, 'The Nymph and the Grot: the Revival of the Sanserif Letter',
Typographica 12, (1965).

Mosley, James, *British Type Specimens before 1831: A Hand-List*,
(Oxford: Bodleian Library, 1984).

Mosely, James, Introduction to Ornamented Types: twenty-three alphabets
from the foundry of Louis John Pouchée (London: I. M. Imprimit, 1993).

Mosley, James, *Handmade Type: Thoughts on the Preservation of Typographic Materials*, (Oldham: Incline Press, 2007).

Mosley, James, *Nymph and the Grot: The Revival of the Sanserif Letter* (London:
Friends of St Bride Publishing Library, 1999).

Mosley, James, 'The Nymph and the Grot, an update', *Typefoundry*, (2007)
<https://typefoundry.blogspot.com/2007/01/nymph-and-grot-update.html> [accessed 20 April 2020].

Murphy, Kevin and O'Driscoll, Sally, *Studies in Ephemera: Text and Image in Eighteenth-Century Print*, (Maryland: Bucknell University Press, 2013).

Nelson and Sons, *The Royal Crown Primer, No.1, Royal School Series*, (London:
T. Nelson and Sons, 1901).

Norgate, Gerald Le Gyes, 'Southward, John (1840–1902), printer and writer', *Oxford Dictionary of National Biography*, (2004) <https://www.oxforddnb.com/view/10.1093/ref:odnb/9780198614128.001.0001/odnb-9780198614128-e-36200> [accessed 8 September 2020].

Osbaldestin, David, 'The Song of the Sans Serif', *Centre for Printing History and Culture*, (2016) <https://www.cphc.org.uk/events/2015/11/20/the-song-of-the-sanserif> [accessed 3 July 2021].

Ovenden, Mark, *Johnston and Gill: Very British Types* (United Kingdom: Lund Humphries, 2016).

Ralph, Julian, 'The Best-Governed City in the World', *Harpers Monthly*, (1890).

Raven, James, *Publishing Business in Eighteenth-century England* (United Kingdom: Boydell Press, 2014).

Reed, Talbot Baines, *A History of the Old English Letter Foundries: With Notes, Historical and Bibliographical, on the Rise and Progress of English Typography*, (London: Faber and Faber Limited, 1952).

Reekes, Andrew, *Speeches that Changed Britain, Oratory in Birmingham*, (Warwickshire: West Midlands History Limited, 2015).

Reynolds, Daniel, 'The distribution of sanserif types across German typefoundries during the nineteenth century', *Journal of the Printing Historical Society, Third Series, No. 1* (2020).

Reynolds, Daniel, 'Discoveries in the archives: nineteenth-century German wood types and sans-serif foundry designs', *Typographic Surprises 3*, Printing Historical Society, Zoom Conference, 2021.

Richardson, Bob, 'The Mosley Effect', *St Bride Foundation*, (2015) <https://st-bridefoundation.wordpress.com/2015/05/05/the-mosley-effect/> [accessed 17 July 2017].

Rickards, Maurice, *This is Ephemera: Collecting Printed Throwaways*, (London: David & Charles, 1977).

Rickards, Maurice, *Collecting Printed Ephemera*, (London: Phaidon, 1988).

Rickards, Maurice and Twyman, Michael, *The Encyclopedia of Ephemera: A Guide to the Fragmentary Documents of Everyday Life for the Collector, Curator, and Historian*, (London: British Library, 2000).

Robertson, Patrick Hickman, 'Obituary: Maurice Rickards', *The Independent*, (1998) <http://www.independent.co.uk/news/obituaries/obituary-maurice-rickards-1145817.html> [accessed 16 May 2017].

Rose, Jonathan, *The Intellectual Life of the British Working Classes*, (New Haven: Yale University Press, 2001).

Savage, William, *A Dictionary of the Art of Printing*, (London: Longman, Brown, Green, and Longmans, 1841).

Shackleton, Robert, *The John Johnson Collection: Catalogue of an Exhibition*, (Oxford: Bodleian Library, 1971).

Shank, Barry, *A Token of My Affection, Greeting Cards and American Business Culture*, (New York: Columbia University Press, 2004).

Shaw, Paul, *Revival Type, Digital Typefaces, Inspired by the Past*, (London: Thames & Hudson Ltd, 2017).

Shropshire History, 'Gazetteer of Racecourses', *Shropshire History*, (2016) <http://shropshirehistory.com/other/racing.htm> [accessed 27 March 2020].

Skipp, Victor, *A History of Greater Birmingham - down to 1830*, (Studley: Brewin Books, 1997).

Smith, Donald, J., *New Street Remembered, The Story of Birmingham's New Street Station, 1854-1967*, (Birmingham: Barbryn Press Ltd, 1984).

Soskolne, Sara, 'Sans Serif: The Early Years. Its Evolution as a Bicameral Style', MA thesis (Reading, 2003).

Southward, John, *Dictionary of Typography and its Accessory Arts*, (London: E.W. Allen, 1872).

St Bride Library (SBL), Accession no. 6027, Blake, Garnett and Company, A specimen of printing types, etc. by Blake, Garnett and Co., successors to Mr W. Caslon, of London, 1819.

SBL, Accession no. 20268, Stephenson, Blake and Company, Specimen of printing types, 1832.

SBL, Accession no. 22224, Vincent Figgins, Specimen of printing types, 1832.

SBL, Accession no. 438, Caslon & Livermore, Specimen of printing types, 1834.

SBL, Accession no. 20262, Stephenson, Blake and Company, Specimen of printing types, 1838.

Star, 'Old and New Fashions in Typography', *The Star*, (1890).

Sutherland, D. & Hibbard, R., 'National Art Library Jobbing Printing Collection', *The Ephemerist*, (2018).

Sutton, James and Bartram, Alan, *An Atlas of Typefaces*, (Hertfordshire: Wordsworth Editions Ltd, 1988).

Sweet, Matthew, *Inventing the Victorians: What We Think We Know About Them and Why We're Wrong*, (London: Faber and Faber Limited, 2002).

Tait, Fiona, 'A visit to Ireland by William Adlington Cadbury', *The Iron Room*, (2018) <https://theironroom.wordpress.com/2018/03/14/a-visit-to-ireland-by-william-adlington-cadbury/> [accessed 1 August 2021].

Tankard, Jeremy, 'The Design of Pembroke', *Jeremy Tankard Studiotype*, (2014) <http://studiotype.com/originals/pembroke> [accessed 12 October 2018].

'The First Gothic Age', *Architects of the Divine*, BBC2, 2014.

The National Archives of the UK (TNA), *Series IR 1, Board of Stamps: Apprenticeship Books, UK, Register of Duties Paid for Apprentices, Indentures*, 1710–1811.

Thompson, Edward Palmer, *Customs in Common*, (Wales: Merlin Press, 1991).

Thompson, Edward Palmer, *The Making of the English Working Class*, (London: Penguin Books Limited, 2002).

Tikkanen, Amy, 'Theodore L. De Vinne', *Encyclopaedia Britannica*, (2020) <https://www.britannica.com/biography/Theodore-L-De-Vinne> [accessed 8 September 2020].

Tracy, Walter, *Letters of Credit: A View of Type Design*, (United States: Godine, 1986).

Tschichold, Jan, *The New Typography*, (Berkeley, University of California Press, 2006).

Twyman, Michael, *John Soulby, Printer, Ulverston: A Study of the Work Printed by John Soulby, Father and Son, Between 1796 and 1827*, (Museum of English Rural Life: University of Reading, 1966).

Twyman, Michael, *Printing 1770-1970: An Illustrated History of its Development and Uses in England*, (London: Eyre & Spottiswoode, 1970).

Twyman, Michael, 'The bold idea: the use of bold-looking types in the nineteenth century', *Journal of the Printing Historical Society*, 22 (1993).

Twyman, Michael, 'The Letterpress Poster in the 19th Century: a note on the characteristics of the genre', *Printing Historical Society Bulletin 45* (1998).

Twyman, Michael, 'The Long-Term Significance of Printed Ephemera', *RBM: A Journal of Rare Books, Manuscripts, and Cultural Heritage*, Vol 9, No 1 (2008).

Type Network, 'Caslons Egyptian', *Font Bureau*, (2015), https://store.typenetwork.com/foundry/fontbureau/fonts/caslons-egyptian [accessed 16 April 2019].

UK Parliament, 'The Third Reform Act 1884', *UK Parliament*, (2021) <https://www.parliament.uk/about/living-heritage/evolutionofparliament/houseof-commons/reformacts/overview/one-man-one-vote/> [accessed 8 June 2019].

University of Glasgow, 'Kelmscott Press', *University of Glasgow*, (2017), <http://special.lib.gla.ac.uk/teach/privatepress/kelmscott.html> [accessed 8 March 2019].

University of Oxford, 'Hudson & Son', *Bodleian Libraries*, (2016) <http://bbti.bodleian.ox.ac.uk/details/?traderid=35715> [accessed 12 September 2019].

Updike, Daniel Berkeley, *Printing Types: Their History, Forms, and Use*, Third edn, (London: Oxford University Press, 1962).

University of Oxford, 'Specimen of Printing Types by Vincent Figgins, 1830', *University of Oxford* (2001) <https://tinyurl.com/vf1830> [accessed 1 June 2019].

Walker, Sue, 'Letterforms for handwriting and reading', *Typography Papers: Number 7*, Vervliet, H.D.L., Howes, J., Kindel, E., Walker, S. and Reynolds, L. eds, (London: Hyphen Press, 2007).

Wanklyn, Malcolm, 'The Severn navigation in the seventeenth century: long-distance trade of Shrewsbury boats', *Midland History*, (1988).

Wanklyn, Malcolm, 'River Trade On The Severn 1565-1765', *Tewkesbury Historical Society*, (1995) <https://tewkesburyhistory.org/River-Trade-On-The-Severn-1565-1765> [accessed 4 September 2019]

Wanklyn, Malcolm (ed.), *The Diary of George Gitton of Bridgnorth for 1866*, (Keele: Centre for Local History: University of Keele, 1998).

Warde, Beatrice, *The Crystal Goblet: Sixteen Essays on Typography*, (London: Sylvan Press Limited, 1955).

Watton, Timothy, *Outline Charts of General History*, (Birmingham: Joesbury, 1848).

Wilson, Charles, *First With The News, The History of W.H.Smith, 1792-1972*, (London: Guild Publishing, 1985).

Upton, Chris, *A History of Birmingham*, (Gloucestershire: Phillimore & Co. Ltd, 2012).

Zhang, Alina, 'How to Build Deep Learning Models for Font Classification with TensorFlow: CNN, Deeper CNN, Hidden Layers Models', *Data Driven Investor*, (Online: Medium, 2021) <https://medium.datadriveninvestor.com/how-to-build-deep-learning-models-for-font-classification-with-tensorflow-cnn-deeper-cnn-hidden-e5a4ef716308> [accessed 1 August 2021].

Appendicies

David Joseph Osbaldestin

Date: August 2021
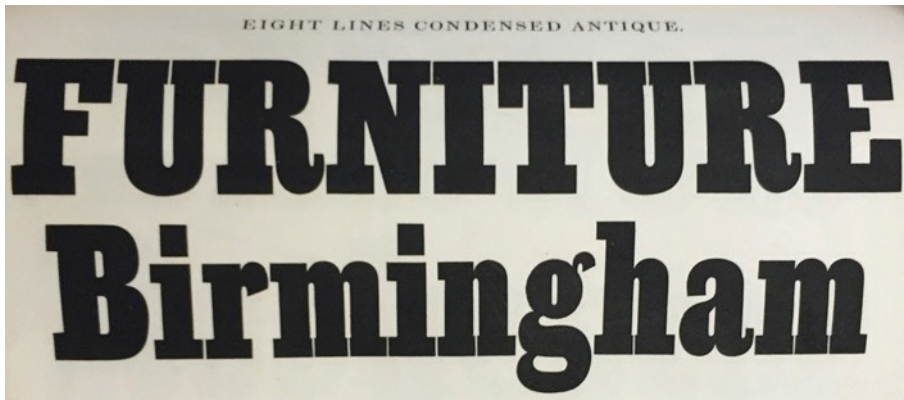
Figure 1.1 Eight Lines Condensed Antique, *Specimen of Printing Types, Blake & Stephenson, Letter-founders*, Sheffield, Blake & Stephenson, 1839. SBL.
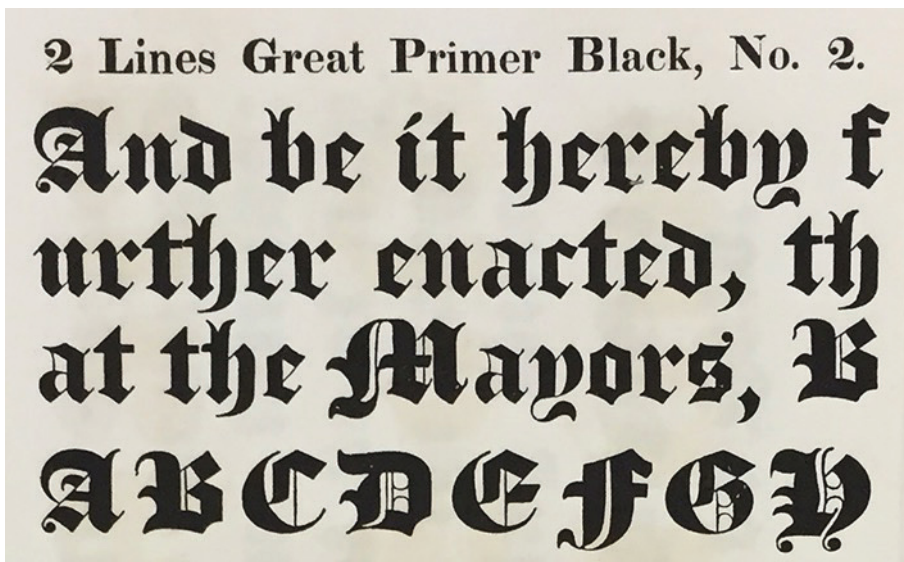
Figure 1.2 2 Lines Great Primer Black, No. 2, *Supplement to Blake & Stephenson's Specimen of Printing Types*, Blake & Stephenson, Sheffield. c. 1836. SBL.
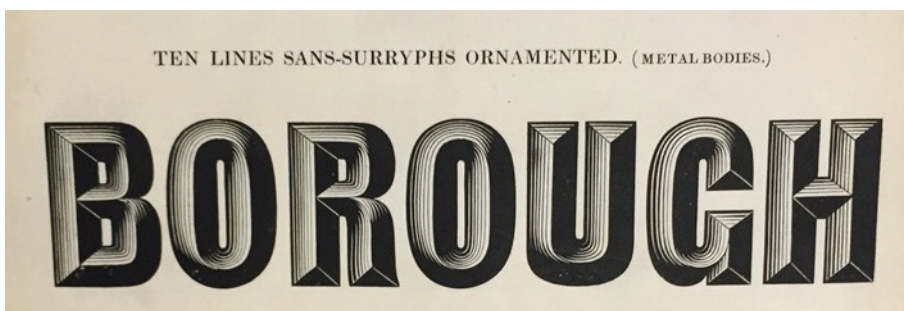
Figure 1.3 Ten Lines Sans-surryphs Ornamented (Metal Bodies), *Specimen of Printing Types, Blake & Stephenson, Letter-founders*, Blake & Stephenson , Sheffield, 1839. SBL.

Appendix 1: Glossary

Definitions of typefaces – including their names – have changed between the nineteenth and twenty-first centuries and there are regional variations between countries. Therefore, it is necessary to set out my own typographic definitions for this thesis.

Antique – term used by British and American nineteenth-century typefounders for slab-serif printing types (Figure 1.1). In France, the term refers to the sanserif. See also *Egyptian*,

Blackletter – a script based letterform that was revived in the nineteenth century as part of the display faces. Gutenberg's printing types were based on a Blackletter character, commonly used by scribes in Western Europe from the twelfth to seventeenth century. Blackletter type is also known as Gothic Script, Gothic minuscule and Textura, with different countries having their own typographic nuances for example the development of a form of blackletter type known as Old English. The British Standard of type face classification, identifies Blackletter as a script, that of printing types (and later typefaces) which 'imitate cursive writing' (Figure 1.2).

Display type – a family of typefaces that developed for use in advertising from the late eighteenth century. These include the fat faces, sans serifs, scripts, slab serifs and ornamented letter forms (Figure 1.3).

Egyptian –Slab serif letterforms were first known in France and Germany as *Egyptienne*. William Thorowgood named his slab-serif an Egyptian, and Caslon IV named the first sanserif Egyptian.

Fat Face – the first display type. The fat faces are characterised by the extreme contrast between the thick and thin strokes of the characters (Figure 1.4). The origins of these letterforms can be traced back to the Modern family (e.g. Bodoni).

Geometric – classification of sans serif typefaces constructed from monolinear lines, based on the geometry of circles and squares. Geometric sans serifs originated in Germany during the 1920s. These twentieth-century geometrics are characterised by a circular capital 'O' and a single-story lowercase letter 'a'. Due to their wider proportions, they are mainly used in display typography and for headings (Figure 1.5).

Grotesque – The first sans serif printing types were known as grotesques. In 1816, William Caslon IV named his printing type *Two Lines English Egyptian*, this was a grotesque sans serif. The term was used by

Figure 1.4 Six Lines Pica, No. 3, Blake & Stephenson, Sheffield, 1839. SBL.
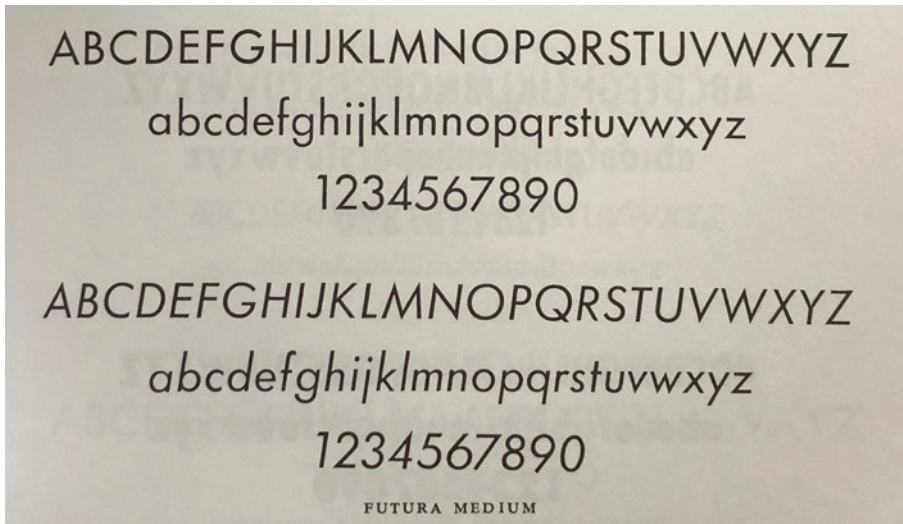
Figure 1.5 Futura Medium, Bauer, 1927-30. Alfred Forbes Johnson, et al. *The Encyclopaedia of Typefaces [by] W. Pincus Jaspert, W. Turner Berry [and] A.F. Johnson*, (United Kingdom, Blandford Press, 1970).
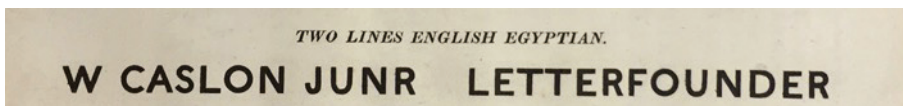
Figure 1.6 Two Lines English Egyptian, Blake & Stephenson, Letter-founders, Sheffield, 1838. CRL.
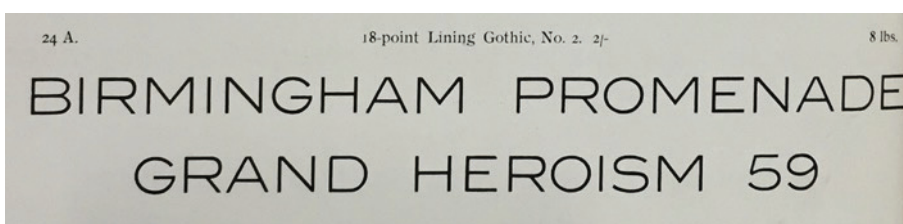
Figure 1.7 18-point Lining Gothic, No. 2, *Specimens. Book and Jobbing Types, Borders, Ornaments, etc. and Material Catalogue*, H.W.Caslon & Co. Ltd., London, 1906. SBL.

British and German typefoundrys (Figure 1.6).

Grots – Shorthand for grotesque printing types. The term grot was widely used in America and became popular in British advertising in the 1950s.

Gothic – The term Gothic is widely used to identify the early sans serif printing types in America (Figure 1.7).

Humanist – a classification of sans serif, designed first in the twentieth century, based on traditional serif typefaces and calligraphic strokes (Figure 1.8).

Lineales – sans serifs are classified as Lineales, typefaces without serifs, a literal translation to be without serifs (the short cross-lines finishing off unconnected strokes within a letterform).

Neo-grotesque – twentieth century designs of the nineteenth-century grotesques. These were designed in large families using rational principles that followed ideas of the International Typographic Style of graphic design, later known as Swiss Design (Figure 1.9).

Primitive – a term used to describe early examples of sans serif lettering that predate sans serif printing types.

Sans serif – contemporary name for letter forms without serifs. Also spelled *Sanserif.*

Slab Serif – a family of display faces with square often block based serifs. See also *Antiques* and *Egyptians.*

Figure 1.8 Johnson's Railway Type for London Transport, 1918. Alfred Forbes Johnson, et al., 1970.
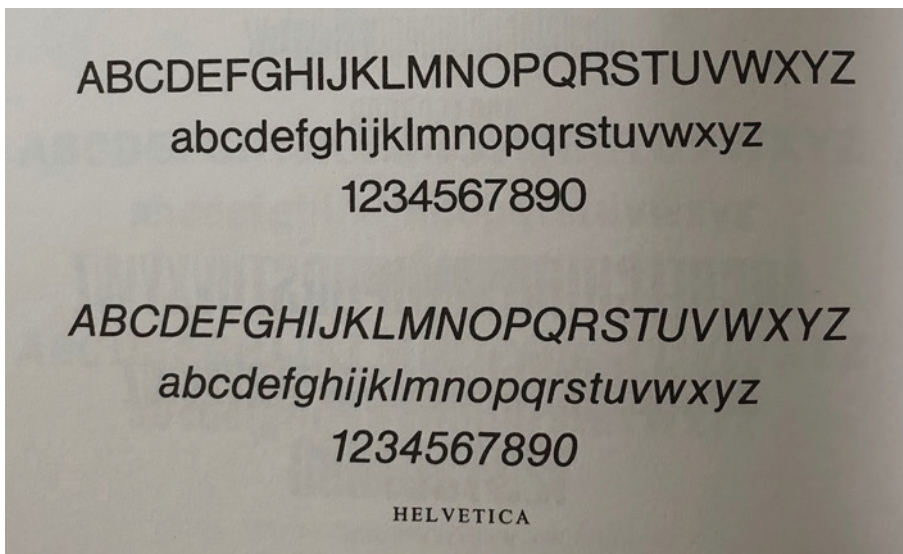
Figure 1.9 Helvetica, Haas 1957. Alfred Forbes Johnson, et al., 1970.

Appendix 2: Ephemera and Type Specimens

2.1. Ephemera Themes and Categories

Table 2.1 Themes and sub-groups of printed ephemera used by Michael Twyman.

Theme	Subgroup
Ceremony:	Coronation tickets and invitations;
	George IV's coronation
	Queen Victoria's coronation
	Public celebration of royal occasions
	Nelson's funeral
	Wellington's funeral
	Announcements of royal deaths
	Queen Victoria's death and funeral
	Special issues of newspapers
	Royal openings; and Banquets, balls, and special performances
Rural Life:	Associations for the prevention of crime
	Reward notices
	Game and poaching
	Public notices
	Friendly societies
	Poor relief
	The country labourer
	Horticultural shows
	Agricultural shows and fairs
	Livestock sales
	Farms and produce
	Cultural activities
Transport:	Railway guides
	Openings of railways
	Railway timetables
	Railway novelties
	Coaching
	Roads
	Canals

	Steam-boat notices	
	Disasters at sea	
	Steam-boat excursion guides	
	Tickets	
	Motor buses	
	The petrol engine	
	London's transport	
	Motor licences and certificates	
	The Highway code	
	Automobile Association	
	Imperial Airways	
Wars	Propaganda	
	Anti-war bills	
	Recruiting	
	Militia notices	
	Anti-militia notices	
	Conscription and anti-conscription	
	Representations of battles	
	Service certificates, record books, and forms	
	Notice of casualties	
	News of war and peace	
	Glorification of war	
	The home effort	
	Second World War information leaflets	
	Air raids	
	Celebration of peace	
Exhibitions	Dioramas and panoramas	
	Models and curiosities	
	Waxworks	
	Madame Tussard's exhibition	
	Great Exhibition, official printing	
	Views of the Great Exhibition	
	Great Exhibition novelties	
	Trade advertising at the Great Exhibition	
	International Exhibition, 1862	
	Empire exhibitions	
	Festival of Britain, 1951	
	Trade exhibitions	
	Art exhibition notices and posters	
	Art exhibition tickets and private view cards	
	Art exhibition catalogues.	

Table 2.2 Categories of printed ephemera used by John Lewis.

Indulgences, proclamations and official printing
Proclamations, decrees and petitions
Proclamations and decrees; certificates
Official notices and election printing
Police notices
Election notices
Rewards and wanted notices
Booksellers' lists and leaflets
For sale notices
Travel notices
Entertainment notices
Playbills
Sporting posters
Programmes, menus and wine lists
Tickets for travel (tollgate tickets, and railway tickets)
Tickets for functions and exhibitions (admission tickets to various functions, cloakroom tickets)
Invitation and announcement cards (funeral invitations, functions, dinners, balls etc., and exhibitions)
Exhibition cards
Trade cards
Stationers' and ex-libris labels
Invoices and billheads (engraved, and letterpress)
Tobacco labels (wood engraved, copper engraved, letterpress)
Tea, coffee and grocery labels (grocery and sauce labels, and grocers' bags and labels)
Pharmaceutical and perfumery labels
Hardware labels and wrappers
Watch papers
Gunpowder and Ink labels
Cutlers' and Toolmakers labels
Crockery and glass labels
Sail needle labels.

Table 2.3 Books authored by Maurice Rickards

Title	Publisher	Date
The Lovely Awful Thing	Blond	1959
Off-Beat Photography	Studio	1959
The Pye book of science	Longacre	1963
Posters of the Nineteen-twenties	Adams & Dart	1968
Posters at the Turn of the Century	Adams & Mackay	1968
Posters of the First World War	Evelyn Adams & MacKay	1968
Brews and potions: A hand book of remedies, spells, elixirs, cordials and aphrodisiacs	Hugh Evelyn	1968
New Inventions. A Comprehensive Survey of Scientific and Technical Progress in the Arts, Sciences and Manufactures as Published During the Reign of Her Majesty	Hugh Evelyn	1969
Posters of Protest and Revolution	Walker	1970
The rise and fall of the poster	David & Charles	1971
Banned posters, Hardcover	Evelyn, Adams & Mackay	1972
The World Communicates, Hardcover	Longman	1972
World Saves Lives	Prentice Hall Press	1972
The public notice: an illustrated history	David & Charles	1973
Where They Lived in London, Paperback	David & Charles	1974
The First World War: Ephemera, Mementoes, Documents. Maurice Rickards, Michael Moody	Jupiter Books	1975
This is Ephemera: Collecting Printed Throwaways*	David & Charles	1977
Ephemera of Travel and Transport; Janice Anderson and Edmund Swinglehurst with an Introduction by Maurice Rickards**	New Cavendish Books	1981
The ephemera of crime and punishment	The Ephemera Society in association with The Solicitors' Law Stationery Office	1983
Happiest days of your life: The ephemera of education	Times Educational Supplement	1986
Collecting Printed Ephemera*	Phaidon Press	1988
The Encyclopaedia of Ephemera: A Guide to the Fragmentary Documents*	Routledge	2001
Wake Up, America: World War I and the American Poster - forward by Rickards**	Artabras	2001
*Books by Rickards discussed in this paper **Introductions or forwards presented by Rickards		

Table 2.4 Categories of printed ephemera used by Maurice Rickards.

Tradecards
Billheads/letterheads
Labels
Admission tickets
Flagday emblems
Toll/turnpike tickets
Handbills
Poster stamps
Sale notices
Playing-card stationary
Watchpapers
Dance programmes
Scraps/diecuts
Book labels
Valentines
Rewards of merit

Table 2.5 Themes of printed ephemera used by Maurice Rickards.

Travel and transport
Funeralia
Crime and punishment
Charity
Rural Life
Cigar packaging
Education
Entertainment
Security printing
Today's ephemera

2.2. Typefounder Specimen Books and Printing Types

The following tables show the date and number of sans serif printing types as presented in Type Foundry specimen books.

Table 2.6 Selected type specimen books ordered by date.

Year	Type Foundry	Title
1819	Blake, Garnett, & Co.	A specimen of printing types, etc. by Blake, Garnett and Co., successors to Mr W. Caslon, of London
1830	Vincent Figgins	Specimen of Printing Types by Vincent Figgins
1832	W. Thorowgood and Co.	Fan Street Letter Foundry: A Supplement to Thorowgood's Specimen of Printing Type
1832	Blake & Stephenson	Specimen of Printing Types, Blake & Stephenson
1834	W. Thorowgood and Co.	Fan Street Letter Foundry: New Specimens of Printing Types
1834	Caslon & Livermore	Caslon Foundry Specimen of Printing Types
1838	Blake & Stephenson	Specimen of Printing Types, Blake & Stephenson
1838	W. Thorowgood and Co.	A Specimen of Printing Types in the Fann Street Foundry
1839	Blake & Stephenson	Specimens of Printing Types Blake & Stephenson
1839	Vincent Figgins	Specimen of Printing Types by Vincent Figgins, Letter Founder
1840	Caslon, Son & Livermore	Caslon Foundry Specimen of Printing Types
1853	S. & T. Sharwood (Austin Letter Foundry)	Specimen Book of Types cast by S. & T. Sharwood
1856	Stephenson, Blake, & Co.	Specimen of Printing Types, Stephenson, Blake, & Co.
1863	Miller and Richard	Specimens of Book and Magazine Founts. Miller and Richard
1865	Miller and Richard	Specimens of Book, Newspaper, Jobbing and Ornamental Types, Miller and Richard
1866	James Marr & Co.	Specimen of Modern and Ancient Printing Types, &c., by James Marr & Co.
1866	Wood & Company	Selected Specimens of Printing Types, comprising Book and Newspaper founts, cast by J. & R. M. Wood
1866	J. & R. M. Wood (Austin Letter Foundry)	Selected Specimens of Printing Types, comprising Book and Newspaper founts, cast by J. & R. M. Wood
1868	Stephenson, Blake, & Co.	Specimen of Printing Types, Stephenson, Blake, & Co.
1870	H. W. Caslon & Co.	H. W. Caslon & Co., Specimens of Printing Types
1870	J. & R. M. Wood (Austin Letter Foundry)	Selected Specimens of Printing Types, comprising Book and Newspaper founts, cast by J. & R. M. Wood
1870	H. W. Caslon & Co.	H. W. Caslon & Co., Specimens of Printing Types
1870	J. & R. M. Wood (Austin Letter Foundry)	Selected Specimens of Printing Types, comprising Book and Newspaper founts, cast by J. & R. M. Wood
1878	Stephenson, Blake, & Co.	Specimen of Printing Types, Borders, Ornaments, &c.
1880	John A. Hodges	Specimen of Types by John A. Hodges
1895	Miller and Richard	Specimens of book, newspaper, jobbing and ornamental types. Miller & Richard
1909	H. W. Caslon & Company, Limited	Specimen of Printing Types and Illustrated Catalogue of Printing Materials. The Caslon Foundry
1914	Birmingham Printers Ltd.	Book & Display Types

Table 2.7 Sans serifs identified in Type Specimen books ordered by date.

Year	Type Foundry	Place	Sans Serif Name	No. Sans Serifs	Emphasis
1819	Blake, Garnett, & Co.	Sheffield & London	Egyptian	1	
1830	Vincent Figgins	London	Sans-serif	1	
1832	Blake & Stephenson	Sheffield & London	Sans-Surryphs (4) Sans-Surryph (1)	5	
1832	Vincent Figgins	London	Sans-Serif	4	
1832	W. Thorowgood and Co.	London	Grotesque	2	
1834	Caslon & Livermore	London	Condensed	12	C
1834	W. Thorowgood and Co.	London	Grotesque	6	
1838	Blake & Stephenson	Sheffield & London	Sans-Surryphs (26) Grotesque (8)	34	C/OL/O
1838	W. Thorowgood and Co.	London	Grotesque	2	O
1839	Blake & Stephenson	Sheffield & London	Sans-Surryphs	10	C/OM/O/SH
1839	Vincent Figgins	London	Condensed (10) Sans-Serif (16)	26	C
1840	Caslon, Son & Livermore	London	Condensed (8) Rounded (2)	10	C/R
1853	S. & T. Sharwood (Austin Letter Foundry)	London	Gothic (9) Grotesque (9) Ornamented (1)	19	EX/O/OR
1856	Stephenson, Blake, & Co.	Sheffield & London	Sans Surryphs (2) Grotesque (15)	17	C/O
1863	Miller and Richard	Edinburgh	Sanserif (5) Gothic (3)	8	EL/EX
1865	J. & R. M. Wood (Austin Letter Foundry)	London	Gothic(4) Sanseriff (1) Athenian (1) Shaded (1)	7	O/C
1865	Miller and Richard	Edinburgh	Sans-Serif (29) Grotesque (19) Shaded (2) Ornamented (4)	54	EL/OR/SH
1866	James Marr & Co.	Edinburgh & Dublin	Sans Serif	19	C/EX
1868	Stephenson, Blake, & Co.	Sheffield & London	Sans Surryphs (36) Grotesque (13)	49	C/EL/I/SH
1870	H. W. Caslon & Co.	London	Condensed (28) Rounded (4) Shaded (2) Doric (11)	45	C/O/R/SH
1870	J. & R. M. Wood (Austin Letter Foundry)	London	Gothic (3) Sanseriff (17) Lord Mayor (1)	21	C/OC/SL/T
1878	Stephenson, Blake, & Co.	Sheffield & London	Sans Surryphs (7) Grotesque (5)	12	C/EL/I/O
1880	John A. Hodges	Birmingham	Grotesque (9) Sans (16) Doric (1) Outline (1)	27	C/I/OL/W
1895	Miller and Richard	Edinburgh	Sans-Serif (44) Grotesque (58) News Bill (4) Shaded (3) Ornamented (1)	110	I/OL/RI
1909	H. W. Caslon & Company, Limited	London	Doric (94) Gothic (12)	106	I/L
1914	Birmingham Printers Ltd.	Birmingham	Grotesque	20	C

KEY

	Blake, Garnett, & Co./ Blake & Stephenson/ Stephenson, Blake, & Co.
	Vincent Figgins
	W. Thorowgood and Co.
	Caslon & Livermore/ Caslon, Son & Livermore/ H. W. Caslon & Co./ H. W. Caslon & Company, Limited
	S. & T. Sharwood/ Wood & Company/ J. & R. M. Wood
	Miller and Richard
	James Marr & Co.
	John A. Hodges
	Birmingham Printers Ltd.

C	Condensed
EL	Elongated
EX	Expanded
I	Italic
L	Lining
OC	Octogan
OL	Outline
OM	Ornamented
O	Open
RI	Rounded
RI	Reversed Italic
SH	Shaded
SL	Sloping
T	Thin
W	Wide

Table 2.8 Total number of typefoundry sans serifs ordered by date.

Dates	Foundry Group	Place	No. Sans Serif
1819-78	Stephenson, Blake, & Co.	Sheffield & London	128
1830-39	Vincent Figgins	London	31
1832-34	W. Thorowgood and Co.	London	8
1834-1909	H. W. Caslon & Co.	London	173
1853-70	Austin Letter Foundry	London	47
1863-95	Miller and Richard	Edinburgh	172
1866	James Marr & Co.	Edinburgh & Dublin	19
1880	John A. Hodges	Birmingham	27
1914	Birmingham Printers Ltd.	Birmingham	20
		Total	**625**

Table 2.9 Total number of typefoundry sans serifs presented in sample.

Year	Type Foundry	Place	No. Sans Serif
1834-1909	H. W. Caslon & Co.	London	173
1863-95	Miller and Richard	Edinburgh	172
1819-78	Stephenson, Blake, & Co.	Sheffield & London	128
1853-70	Austin Letter Foundry	London	47
1830-39	Vincent Figgins	London	31
1880	John A. Hodges	Birmingham	27
1914	Birmingham Printers Ltd.	Birmingham	20
1866	James Marr & Co.	Edinburgh & Dublin	19
1832-34	W. Thorowgood and Co.	London	8
		Total	**625**

Table 2.10 Sans serif founts recorded in the Type Specimens sample ordered by date.

Year	Printing Types	Type Foundry	Type Style	Old Size	Point Size	Price
1819	Two Lines English Egyptian	Blake, Garnett, & Co.		Two-Lines English	28 pt	N/A
1830	Sans-serif	Vincent Figgins				N/A
1832	Two Line Pearl, Sans-Serif	Vincent Figgins		Two-Lines Pearl	10 pt	N/A
1832	8 Line Pica, Sans-Serif	Vincent Figgins		Eight-Lines	96 pt	N/A
1832	Five-Line Pica, Sans-Serif	Vincent Figgins		Five-Lines	60 pt	N/A
1832	Two-Line Great Primer Sans-Serif	Vincent Figgins		Two-Lines Great Primer	36 pt	N/A
1832	Fourteen Lines Grotesque	W. Thorowgood and Co.		Fourteen-Lines	168 pt	N/A
1832	Fourteen Lines Grotesque, No. 2	W. Thorowgood and Co.	Open/Outline/Ornamented	Fourteen-Lines	168 pt	N/A
1832	Eight Lines Sans-Surryphs	Blake & Stephenson		Eight-Lines	96 pt	N/A
1832	Ten Lines Sans-Surryphs, Open, No. 1	Blake & Stephenson	Open/Outline	Ten-Lines	120 pt	1/6
1832	Two Lines Nonpareil Sans-Surryph	Blake & Stephenson	Open/Outline	Two-Lines Nonpareil	12 pt	N/A
1832	Ten Lines Sans-Surryphs	Blake & Stephenson		Ten-Lines	120 pt	N/A
1832	Eight Lines Sans-Surryphs Open	Blake & Stephenson		Eight-Lines	96 pt	1/8
1834	Five Line Pica Grotesque	W. Thorowgood and Co.		Five-Lines	60 pt	N/A
1834	Two Lines Great Primer Grotesque	W. Thorowgood and Co.		Two-Lines Great Primer	36 pt	N/A
1834	Two Lines Nonpareil Grotesque	W. Thorowgood and Co.		Two-Lines Nonpareil	12 pt	N/A
1834	Brevier Grotesque Shaded	W. Thorowgood and Co.	Shaded	Brevier	8 pt	N/A
1834	Two Lines Nonpareil Grotesque Outline	W. Thorowgood and Co.	Open/Outline	Two-Lines Nonpareil	12 pt	N/A
1834	Seven Line Grotesque	W. Thorowgood and Co.		Seven-Lines	84 pt	N/A
1834	Twenty-Five Line Pica, Condensed	Caslon & Livermore	Condensed/Elongated	Twenty-Five-Lines	300 pt	N/A
1834	Twenty-Line Pica, Condensed	Caslon & Livermore	Condensed/Elongated	Twenty-Lines	240 pt	N/A
1834	Twelve-Line Pica, Condensed	Caslon & Livermore	Condensed/Elongated	Twelve-Lines	144 pt	N/A
1834	Ten-Line Pica, Condensed	Caslon & Livermore	Condensed/Elongated	Ten-Lines	120 pt	N/A
1834	Eight-Line Pica Condensed	Caslon & Livermore	Condensed/Elongated	Eight-Lines	96 pt	N/A
1834	Six-Line Pica, Condensed	Caslon & Livermore	Condensed/Elongated	Six-Lines	72 pt	N/A
1834	Four-Line Pica, Condensed	Caslon & Livermore	Condensed/Elongated	Four-Lines	48 pt	N/A
1834	Great Primer Two-Line Condensed	Caslon & Livermore	Condensed/Elongated	Two-Lines Great Primer	36 pt	N/A
1834	Pica Two-Line Condensed	Caslon & Livermore	Condensed/Elongated	Two-Lines Pica	24 pt	N/A

Year	Printing Types	Type Foundry	Type Style	Old Size	Point Size	Price
1834	Long Primer Two-Line Condensed	Caslon & Livermore	Condensed/Elongated	Two-Lines Long Primer	20 pt	N/A
1834	Brevier Two-Line Condensed	Caslon & Livermore	Condensed/Elongated	Two-Lines Brevier	16 pt	N/A
1834	Nonpareil Two-Line Condensed	Caslon & Livermore	Condensed/Elongated	Two-Lines Nonpareil	12 pt	N/A
1838	English Two Line Sans-Surryphs	Blake & Stephenson		Two-Lines English	28 pt	N/A
1838	Nonpareil Open Sans-Surryphs	Blake & Stephenson	Open	Nonpareil	6 pt	N/A
1838	Six Lines Sans-Surryphs, Open, No. 1	Blake & Stephenson	Open	Six-Lines	70 pt	2/.
1838	Ten Lines Sans-Surryphs, Open, No. 2	Blake & Stephenson		Ten-Lines	113 pt	1/9
1838	Pearl Nonpareil Grotesque, No. 2	Blake & Stephenson		Pearl Nonpareil	5 pt	8/6
1838	Six Lines Sans-Surryphs	Blake & Stephenson		Six-Lines	70 pt	N/A
1838	Great Primer Two-Line Sans Surryphs, Open, No. 1	Blake & Stephenson	Open	Two-Lines Great Primer	36 pt	3/.
1838	Six Lines Sans-Surryphs, Open, No. 2	Blake & Stephenson	Open	Six-Lines	70 pt	2/6
1838	English Two Line Condensed Sans Surryphs	Blake & Stephenson	Condensed	Two-Lines English	28 pt	2/3
1838	Pearl Two-Line Grotesque	Blake & Stephenson		Two-Lines Pearl	10 pt	N/A
1838	Nonpareil Two-Line Open Sans-Surryphs	Blake & Stephenson	Open	Two-Lines Nonpareil	12 pt	N/A
1838	Brevier Open Sans-Surryphs	Blake & Stephenson	Open	Brevier	8 pt	N/A
1838	Pearl Two-Line Open Sans-Surryphs	Blake & Stephenson	Open	Two-Lines Pearl	10 pt	N/A
1838	Four Lines Sans-Surryphs, Open, No. 1	Blake & Stephenson	Open	Four-Lines	48 pt	2/6
1838	Five Lines Sans-Surryphs, Open, No. 1	Blake & Stephenson	Open	Five-Lines	58 pt	2/3
1838	Eight Lines Sans-Surryphs	Blake & Stephenson		Eight-Lines	90 pt	N/A
1838	Eight Lines Sans-Surryphs, Open, No. 2	Blake & Stephenson	Open	Eight-Lines	90 pt	2/.
1838	Eight Lines Sans-Surryphs, Open, No. 1	Blake & Stephenson	Open	Eight-Lines	90 pt	1/8
1838	Five Lines Sans-Surryphs	Blake & Stephenson		Five-Lines	58 pt	N/A
1838	Four Lines Sans-Surryphs	Blake & Stephenson		Four-Lines	48 pt	N/A
1838	Great Primer Two-Line Sans Surryphs, Open, No. 2	Blake & Stephenson	Open	Two-Lines Great Primer	36 pt	3/6
1838	Great Primer Two-Line Sans Surryphs	Blake & Stephenson		Two-Lines Great Primer	36 pt	2/.
1838	Small Pica Two-Line Sans-Surryphs	Blake & Stephenson		Two-Lines Small Pica	22 pt	2/.
1838	Five Lines Sans-Surryphs, Open, No. 2	Blake & Stephenson	Open	Five-Lines	58 pt	2/9
1838	Four Lines Sans-Surryphs, Open, No. 2	Blake & Stephenson	Open	Four-Lines	48 pt	3/.
1838	Small Pica Two Line Condensed Sans Surryphs	Blake & Stephenson	Condensed	Two-Lines Small Pica	22 pt	2/6

Year	Printing Types	Type Foundry	Type Style	Old Size	Point Size	Price
1838	Bourgeois Two Line Condensed Sans Surryphs	Blake & Stephenson	Condensed	Two-Lines Bourgeois	18 pt	3/.
1838	Nonpareil Two-Line Condensed Sans-Surryphs	Blake & Stephenson	Condensed	Two-Lines Nonpareil	12 pt	4/.
1838	Nonpareil Two-Line Grotesque	Blake & Stephenson		Two-Lines Nonpareil	12 pt	N/A
1838	Brevier Grotesque	Blake & Stephenson		Brevier	8 pt	N/A
1838	Nonpareil Grotesque, No. 1	Blake & Stephenson		Nonpareil	6 pt	N/A
1838	Diamond Nonpareil Grotesque, No. 2	Blake & Stephenson		Diamond Nonpareil	4.5 pt	9/6
1838	Seven Lines Grotesque Open	W. Thorowgood and Co.	Open/Outline	Seven-Lines	84 pt	N/A
1838	Two Lines Small Pica Grotesque Outline	W. Thorowgood and Co.	Open/Outline	Two-Lines Small Pica	22 pt	N/A
1839	Ten Lines Sans-Surryphs Ornamented	Blake & Stephenson	Ornamented	Ten-Lines	113 pt	N/A
1839	Pearl Two-Line Condensed Sans-Surryphs	Blake & Stephenson	Condensed	Two-Lines Pearl	10 pt	N/A
1839	English Sans-Surryphs Shaded	Blake & Stephenson	Shaded	English	14 pt	5/6
1839	Great Primer Two Line Sans Surryphs, Open, No. 1	Blake & Stephenson	Open	Two-Lines Great Primer	36 pt	3/.
1839	English Two Line Sans Surryphs	Blake & Stephenson		Two-Lines English	28 pt	2/.
1839	Pica Two-Line Open Sans-Surryphs	Blake & Stephenson	Open	Two-Lines Pica	24 pt	4/. P lb.
1839	Brevier Condensed Sans-Surryphs	Blake & Stephenson	Condensed	Brevier	Brevier	N/A
1839	Great Primer Two Line Sans Surryphs, Open, No. 2	Blake & Stephenson	Open	Two-Lines Great Primer	36 pt	3/6
1839	Great Primer Two Line Sans Surryphs	Blake & Stephenson	Open	Two-Lines Great Primer	36 pt	2/.
1839	Nonpareil Two Line Sans Surryphs	Blake & Stephenson		Two-Lines Nonpareil	12 pt	3
1839	Eight-Line Pica, Condensed	Vincent Figgins	Condensed/Elongated	Eight-Lines	96 pt	N/A
1839	Two-Line Brevier, Condensed	Vincent Figgins	Condensed/Elongated	Two-Lines Brevier	16 pt	N/A
1839	Nonpareil Sans-Serif, No. 1	Vincent Figgins		Nonpareil	6 pt	N/A
1839	Two-Line Pica, Sans-Serif	Vincent Figgins		Two-Lines Pica	24 pt	N/A
1839	Two-Line Nonpareil, Sans-Serif	Vincent Figgins		Two-Lines Nonpareil	12 pt	N/A
1839	Twenty Line Pica, Sans-Serif	Vincent Figgins		Twenty-Lines	240	N/A
1839	Ten Line Pica, Sans-Serif	Vincent Figgins		Ten-Lines	120 pt	N/A
1839	Two-Line Great Primer, Condensed	Vincent Figgins	Condensed/Elongated	Two-Lines Great Primer	36 pt	N/A
1839	Five- Line pica, Condensed	Vincent Figgins	Condensed/Elongated	Five-Lines	60 pt	N/A
1839	Two-Line Nonpareil, Condensed	Vincent Figgins	Condensed/Elongated	Two-Lines Nonpareil	12 pt	N/A
1839	Two-Line Pearl, Condensed	Vincent Figgins	Condensed/Elongated	Pearl	5 pt	N/A

Year	Printing Types	Type Foundry	Type Style	Old Size	Point Size	Price
1839	Nonpareil Sans-Serif, No. 2	Vincent Figgins		Nonpareil	6 pt	N/A
1839	Nonpareil Condensed	Vincent Figgins		Nonpareil	6 pt	N/A
1839	Two-Line Pearl, Sans-Serif	Vincent Figgins		Two-Lines Pearl	10 pt	N/A
1839	Brevier Sans-Serif	Vincent Figgins		Brevier	8 pt	N/A
1839	Pearl, Sans-Serif	Vincent Figgins		Pearl	5 pt	N/A
1839	Six Line Pica, Sans-Serif	Vincent Figgins		Six-Lines	72 pt	N/A
1839	Brevier, Condensed	Vincent Figgins	Condensed/Elongated	Brevier	8 pt	N/A
1839	Two-Line Pica, Condensed	Vincent Figgins	Condensed/Elongated	Two-Lines Pica	24 pt	N/A
1839	Two-Line Long Primer, Condensed	Vincent Figgins	Condensed/Elongated	Two-Lines Long Primer	20 pt	N/A
1839	Brevier Sans-Serif, No. 3	Vincent Figgins	Wide/Expanded/Light/Thin	Brevier	8 pt	N/A
1839	Nonpareil Sans-Serif Open	Vincent Figgins	Open/Outline	Nonpareil	6 pt	N/A
1839	Two-Line Nonpareil, Sans-Serif, Open	Vincent Figgins	Open/Outline	Two-Lines Nonpareil	12 pt	N/A
1839	Nonpareil Sans-Serif, No. 3	Vincent Figgins	Wide/Expanded/Light/Thin	Nonpareil	6 pt	N/A
1839	Pearl Sans-Serif, No. 3	Vincent Figgins	Wide/Expanded/Light/Thin	Pearl	5 pt	N/A
1839	Brevier Sans-Serif, Open	Vincent Figgins	Open/Outline	Brevier	8 pt	N/A
1840	Fourteen-Line Pica, Condensed	Caslon, Son & Livermore	Condensed/Elongated/Italic/Sloping	Fourteen-Lines	168 pt	N/A
1840	Six-Line Pica, Condensed, No. 1	Caslon, Son & Livermore	Condensed/Elongated	Six-Lines	72 pt	N/A
1840	Four-Line Pica, Condensed, No. 1	Caslon, Son & Livermore	Condensed/Elongated	Four-Lines	48 pt	N/A
1840	Great Primer Two-Line, Condensed, No. 1	Caslon, Son & Livermore	Condensed/Elongated	Two-Lines Great Primer	36 pt	N/A
1840	Two-Line Pearl Condensed	Caslon, Son & Livermore	Condensed/Elongated	Two-Lines Pearl	10 pt	N/A
1840	Pearl Condensed	Caslon, Son & Livermore	Condensed/Elongated	Pearl	5 pt	N/A
1840	Brevier Condensed	Caslon, Son & Livermore	Condensed/Elongated	Brevier	8 pt	N/A
1840	Nonpareil Condensed	Caslon, Son & Livermore	Condensed/Elongated	Nonpareil	6 pt	N/A
1840	Great Primer Two-Line Rounded	Caslon, Son & Livermore	Rounded	Two-Lines Great Primer	36 pt	N/A
1840	Four-Line Pica Rounded	Caslon, Son & Livermore	Rounded	Four-Lines	48 pt	N/A
1853	Four Line Gothic Open	S. & T. Sharwood	Open/Outline	Four-Lines	48 pt	N/A
1853	Six Line Gothic Open	S. & T. Sharwood	Open/Outline	Six-Lines	72 pt	N/A
1853	Two Line Great Primer Gothic Expanded	S. & T. Sharwood	Wide/Expanded	Two-Lines Great Primer	36 pt	N/A
1853	Four Line Gothic Expanded	S. & T. Sharwood	Wide/Expanded	Four-Lines	48 pt	N/A

Year	Printing Types	Type Foundry	Type Style	Old Size	Point Size	Price
1853	Six Line Gothic Expanded	S. & T. Sharwood	Wide/Expanded	Six-Lines	72 pt	N/A
1853	Six Line Grotesque	S. & T. Sharwood		Six-Lines	72 pt	N/A
1853	Eight Line Grotesque	S. & T. Sharwood		Eight-Lines	96 pt	N/A
1853	Ten Line Grotesque	S. & T. Sharwood		Ten-Lines	120 pt	N/A
1853	Two Line Small Pica Grotesque	S. & T. Sharwood		Two-Lines Small Pica	22 pt	N/A
1853	Great Primer Grotesque	S. & T. Sharwood		Great Primer	18 pt	N/A
1853	Two Line Nonpareil Grotesque	S. & T. Sharwood		Two-Lines Nonpareil	12 pt	N/A
1853	Two Line Pearl Grotesque	S. & T. Sharwood		Two-Lines Pearl	10 pt	N/A
1853	Two Line Nonpareil Grotesque Outline	S. & T. Sharwood	Open/Outline	Two-Lines Nonpareil	12 pt	N/A
1853	Nonpareil Grotesque Outline	S. & T. Sharwood	Open/Outline	Nonpareil	6 pt	N/A
1853	Brevier Gothic	S. & T. Sharwood		Brevier	8 pt	N/A
1853	Nonpareil Gothic	S. & T. Sharwood		Nonpareil	6 pt	N/A
1853	Two Line Nonpareil Gothic Open	S. & T. Sharwood	Open/Outline	Two-Lines Nonpareil	12 pt	N/A
1853	Minion Gothic Open	S. & T. Sharwood	Open/Outline	Minion	7 pt	N/A
1853	Eight Line Ornamented, No. 2	S. & T. Sharwood	Ornamented	Eight-Lines	96 pt	N/A
1856	Pica Two-Line Sans Surryphs, Open No. 2	Stephenson, Blake, & Co.	Open/Outline	Two-Lines Pica	24 pt	N/A
1856	Pearl Two-Line Grotesque, No. 2	Stephenson, Blake, & Co.		Two-Lines Pearl	10 pt	N/A
1856	Nonpareil Two-Line Grotesque, No. 3	Stephenson, Blake, & Co.		Two-Lines Nonpareil	12 pt	N/A
1856	Nonpareil Grotesque, No. 3	Stephenson, Blake, & Co.		Nonpareil	6 pt	N/A
1856	Pearl-Nonpareil Grotesque, No. 2	Stephenson, Blake, & Co.	Wide/Expanded	Pearl	5 pt	N/A
1856	Nonpareil Condensed Sans-Surryphs	Stephenson, Blake, & Co.	Condensed	Nonpareil	6 pt	N/A
1856	Nonpareil Two-Line Grotesque, No. 1	Stephenson, Blake, & Co.		Two-Lines Nonpareil	12 pt	N/A
1856	Pearl Two-Line Grotesque, No. 1	Stephenson, Blake, & Co.		Two-Lines Pearl	10 pt	N/A
1856	Brevier Grotesque, No. 1	Stephenson, Blake, & Co.		Brevier	8 pt	N/A
1856	Pearl Grotesque, No. 1, on Nonpareil Body	Stephenson, Blake, & Co.		Pearl	5 pt	N/A
1856	Great Primer Grotesque, No. 3	Stephenson, Blake, & Co.		Great Primer	18 pt	N/A
1856	Pearl Two-Line Grotesque, No. 3	Stephenson, Blake, & Co.		Two-Lines Pearl	10 pt	N/A
1856	Brevier Grotesque, No. 3	Stephenson, Blake, & Co.		Brevier	8 pt	N/A
1856	Pearl Grotesque, No. 3, on Nonpareil Body	Stephenson, Blake, & Co.		Pearl	5 pt	N/A

Year	Printing Types	Type Foundry	Type Style	Old Size	Point Size	Price
1856	Diamond Grotesque, No. 3, on Nonpareil Body	Stephenson, Blake, & Co.		Diamond Nonpareil	4.5 pt	N/A
1856	Nonpareil Grotesque, No. 2	Stephenson, Blake, & Co.	Wide/Expanded	Nonpareil	6 pt	N/A
1856	Diamond-Nonpareil Grotesque, No. 2	Stephenson, Blake, & Co.	Wide/Expanded	Diamond Nonpareil	4.5 pt	N/A
1863	Two Line Nonpareil Elongated Sanserif	Miller and Richard	Light/Thin/Condensed/Elongated	Two-Lines Nonpareil	12 pt	N/A
1863	Two Line Pearl Elongated Sanserif	Miller and Richard	Light/Thin/Condensed/Elongated	Two-Lines Pearl	10 pt	N/A
1863	One Line Brevier Elongated Sanserif	Miller and Richard	Light/Thin/Condensed/Elongated	Brevier	8 pt	N/A
1863	One Line Nonpareil Elongated Sanserif	Miller and Richard	Light/Thin/Condensed/Elongated	Nonpareil	6 pt	N/A
1863	One Line Pearl Elongated Sanserif	Miller and Richard	Light/Thin/Condensed/Elongated	Pearl	5 pt	N/A
1863	Four Line Gothic Expanded	Miller and Richard	Wide/Expanded	Four-Lines	48 pt	N/A
1863	Six Line Gothic Expanded	Miller and Richard	Wide/Expanded	Six-Lines	72 pt	N/A
1863	Eight Line Gothic Expanded	Miller and Richard	Wide/Expanded	Eight-Lines	96 pt	N/A
1865	Two Line Bourgeois Sans-Serif, No. 2	Miller and Richard		Two-Lines Bourgeois	18 pt	N/A
1865	Two Line Bourgeois Sans-Serif, No. 6	Miller and Richard		Two-Lines Bourgeois	18 pt	N/A
1865	Two Line Nonpareil Extra Elongated Sans-Serif, No. 1	Miller and Richard	Light/Condensed/Elongated	Two-Lines Nonpareil	12 pt	N/A
1865	Two Line Bourgeois Grotesque, No. 3	Miller and Richard	Wide/Expanded	Two-Lines Bourgeois	18 pt	N/A
1865	Two Line Bourgeois Grotesque, No. 7	Miller and Richard		Two-Lines Bourgeois	18 pt	N/A
1865	Two Line Double Pica Shaded, No. 9	Miller and Richard	Shaded/Open/Outline	Two-Lines Double Pica	48 pt	N/A
1865	Two Line Minion Ornamented, No. 9	Miller and Richard	Ornamented/Open/Outline/Shadowed	Two-Lines Minion	14 pt	N/A
1865	Two Line Diamond Shaded, No. 2	Miller and Richard	Shaded/Open/Outline	Two-Lines Diamond	9 pt	N/A
1865	Two Line Nonpareil Sans-Serif, No. 2	Miller and Richard		Two-Lines Nonpareil	12 pt	N/A
1865	Two Line Pearl Sans-Serif, No. 2	Miller and Richard		Two-Lines Pearl	10 pt	N/A
1865	Brevier Sans-Serif, No. 2	Miller and Richard		Brevier	8 pt	N/A
1865	Nonpareil Sans-Serif, No. 2	Miller and Richard		Nonpareil	6 pt	N/A
1865	Pearl Sans-Serif, No. 2	Miller and Richard		Pearl	5 pt	N/A
1865	Two Line Bourgeois Sans-Serif, No. 4	Miller and Richard		Two-Lines Bourgeois	18 pt	N/A
1865	Two Line Nonpareil Sans-Serif, No. 4	Miller and Richard		Two-Lines Nonpareil	12 pt	N/A
1865	Two Line Pearl Sans-Serif, No. 4	Miller and Richard		Two-Lines Pearl	10 pt	N/A
1865	Brevier Sans-Serif, No. 4	Miller and Richard		Brevier	8 pt	N/A
1865	Nonpareil Sans-Serif, No. 4	Miller and Richard		Nonpareil	6 pt	N/A

Year	Printing Types	Type Foundry	Type Style	Old Size	Point Size	Price
1865	Pearl Sans-Serif, No. 4, on Nonpareil Body	Miller and Richard		Pearl Nonpareil	5 pt	N/A
1865	Brevier Sans-Serif, No. 6	Miller and Richard		Brevier	8 pt	N/A
1865	Nonpareil Sans-Serif, No. 6	Miller and Richard		Nonpareil	6 pt	N/A
1865	Pearl Sans-Serif, No. 6, on Nonpareil Body	Miller and Richard		Pearl Nonpareil	5 pt	N/A
1865	Two Line Bourgeois Sans-Serif, No. 8	Miller and Richard		Two-Lines Bourgeois	18 pt	N/A
1865	Brevier Sans-Serif, No. 8	Miller and Richard		Brevier	8 pt	N/A
1865	Pearl Sans-Serif, No. 8, on Nonpareil Body	Miller and Richard		Pearl Nonpareil	5 pt	N/A
1865	Nonpareil Sans-Serif, No. 8	Miller and Richard		Nonpareil	6 pt	N/A
1865	Two Line Nonpareil Sans-Serif, No. 6	Miller and Richard		Two-Lines Nonpareil	12 pt	N/A
1865	Two Line Pearl Sans-Serif, No. 8	Miller and Richard		Two-Lines Pearl	10 pt	N/A
1865	Two Line Pearl Sans-Serif, No. 6	Miller and Richard		Two-Lines Pearl	10 pt	N/A
1865	Two Line Nonpareil Sans-Serif, No. 8	Miller and Richard		Two-Lines Nonpareil	12 pt	N/A
1865	Two Line Pearl Extra Elongated Sans-Serif, No. 1	Miller and Richard	Light/Condensed/Elongated	Two-Lines Pearl	10 pt	N/A
1865	Brevier Extra Elongated Sans-Serif, No. 1	Miller and Richard	Light/Condensed/Elongated	Brevier	8 pt	N/A
1865	Nonpareil Extra Elongated Sans-Serif, No. 1	Miller and Richard	Light/Condensed/Elongated	Nonpareil	6 pt	N/A
1865	Pearl Extra Elongated Sans-Serif, No. 1	Miller and Richard	Light/Condensed/Elongated	Pearl	5 pt	N/A
1865	Two Line Bourgeois Grotesque, No. 5	Miller and Richard	Wide/Expanded	Two-Lines Bourgeois	18 pt	N/A
1865	Two Line Nonpareil Grotesque, No. 5	Miller and Richard	Wide/Expanded	Two-Lines Nonpareil	12 pt	N/A
1865	Two Line Nonpareil Grotesque, No. 3	Miller and Richard	Wide/Expanded	Two-Lines Nonpareil	12 pt	N/A
1865	Two Line Pearl Grotesque, No. 3	Miller and Richard	Wide/Expanded	Two-Lines Pearl	10 pt	N/A
1865	Two Line Pearl Grotesque, No. 5	Miller and Richard	Wide/Expanded	Two-Lines Pearl	10 pt	N/A
1865	Brevier Grotesque, No. 5	Miller and Richard	Wide/Expanded	Brevier	8 pt	N/A
1865	Nonpareil Grotesque, No. 3	Miller and Richard	Wide/Expanded	Nonpareil	6 pt	N/A
1865	Nonpareil Grotesque, No. 5	Miller and Richard	Wide/Expanded	Nonpareil	6 pt	N/A
1865	Pearl Grotesque, No. 3	Miller and Richard	Wide/Expanded	Pearl	5 pt	N/A
1865	Pearl Grotesque, No. 5, on Nonpareil Body	Miller and Richard	Wide/Expanded	Pearl Nonpareil	5 pt	N/A
1865	Two Line Nonpareil Grotesque, No. 7	Miller and Richard		Two-Lines Nonpareil	12 pt	N/A
1865	Two Line Pearl Grotesque, No. 7	Miller and Richard		Two-Lines Pearl	10 pt	N/A
1865	Brevier Grotesque, No. 7	Miller and Richard		Brevier	8 pt	N/A

Year	Printing Types	Type Foundry	Type Style	Old Size	Point Size	Price
1865	Nonpareil Grotesque, No. 7	Miller and Richard		Nonpareil	6 pt	N/A
1865	Pearl Grotesque, No. 7, on Nonpareil Body	Miller and Richard		Pearl Nonpareil	5 pt	N/A
1865	Diamond Grotesque, No. 7, on Nonpareil Body	Miller and Richard		Diamond Nonpareil	4.5 pt	N/A
1865	Gem Grotesque, No. 7, on Nonpareil Body	Miller and Richard		Gem	4.25 pt	N/A
1865	Two Line Nonpareil Ornamented, No. 8	Miller and Richard	Ornamented/Open/Outline/Shadowed	Two-Lines Nonpareil	12 pt	N/A
1865	Two Line Nonpareil Ornamented, No. 10	Miller and Richard	Ornamented/Open/Outline/Shadowed	Two-Lines Nonpareil	12 pt	N/A
1865	One Line Brevier Ornamented, No. 1	Miller and Richard	Ornamented/Open/Outline	Brevier	8 pt	N/A
1866	Two Line Nonpareil Sans Serif, No. 2	James Marr & Co.	Wide/Expanded	Two-Lines Nonpareil	12 pt	N/A
1866	Great Primer Sans Serif	James Marr & Co.	Wide/Expanded	Great Primer	18 pt	N/A
1866	Two Line Great Primer Sans Serif, Condensed	James Marr & Co.	Condensed/Elongated	Two-Lines Great Primer	36 pt	N/A
1866	Four-Line Sans Serif	James Marr & Co.		Four-Lines	48 pt	N/A
1866	Ten Line Pica Sans Serif	James Marr & Co.		Ten-Lines	120 pt	N/A
1866	Two Line Pearl Sans Serif, No. 2	James Marr & Co.	Wide/Expanded	Two-Lines Pearl	10 pt	N/A
1866	Brevier Sans Serif, No. 2	James Marr & Co.	Wide/Expanded	Brevier	8 pt	N/A
1866	Nonpareil Sans Serif Extended	James Marr & Co.	Wide/Expanded/Light/Thin	Nonpareil	6 pt	N/A
1866	Nonpareil Sans Serif, No. 2	James Marr & Co.	Wide/Expanded	Nonpareil	6 pt	N/A
1866	Two Line Minion Sans Serif	James Marr & Co.	Condensed/Elongated	Two-Lines Minion	14 pt	N/A
1866	Two Line Pearl Sans Serif, No. 3	James Marr & Co.	Condensed/Elongated	Two-Lines Pearl	10 pt	N/A
1866	Nonpareil Sans Serif, No. 3	James Marr & Co.	Condensed/Elongated	Nonpareil	6 pt	N/A
1866	Two Line Pica Sans Serif, Condensed	James Marr & Co.	Condensed/Elongated	Two-Lines Pica	24 pt	N/A
1866	Two Line Long Primer Sans Serif, Condensed	James Marr & Co.	Condensed/Elongated	Two-Lines Long Primer	20 pt	N/A
1866	Two-Line Nonpareil Sans Serif Condensed	James Marr & Co.	Condensed/Elongated	Two-Lines Nonpareil	12 pt	N/A
1866	Two-Line Pearl Sans Serif, Condensed	James Marr & Co.	Condensed/Elongated	Two-Lines Pearl	10 pt	N/A
1866	Brevier Sans Serif Condensed	James Marr & Co.	Condensed/Elongated	Brevier	8 pt	N/A
1866	Nonpareil Sans Serif Condensed	James Marr & Co.	Condensed/Elongated	Nonpareil	6 pt	N/A
1866	Pearl-Nonpareil Sans Serif Condensed	James Marr & Co.	Condensed/Elongated	Pearl Nonpareil	5 pt	N/A
1866	Thirty-Line Sanseriff Elongated	Wood & Company	Condensed/Elongated	Thirty-Lines	360 pt	5s. 9d - 1 doz.
1866	Fourteen-Line Athenian	J. & R. M. Wood	Other	Fourteen-Lines	168 pt	3s - 1 doz.
1866	Fourteen-Line Regal Shaded	J. & R. M. Wood	Shaded	Fourteen-Lines	168 pt	3s - 1 doz.

Year	Printing Types	Type Foundry	Type Style	Old Size	Point Size	Price
1866	Fourteen-Line Octogon Gothic	Wood & Company		Fourteen-Lines	168 pt	2s 6d. - 1 doz.
1866	Sixteen-Line Octogon Gothic	Wood & Company		Sixteen-Lines	192 pt	3s. - 1 doz.
1866	Eighteen-Line Octogon Gothic	Wood & Company		Eighteen-Lines	216 pt	2s 6d. - 1 doz.
1866	Twenty-Line Octogon Gothic	Wood & Company		Twenty-Lines	240 pt	3s. - 1 doz.
1868	Six Lines Elongated Italic, with Italic Sans Surryphs	Stephenson, Blake, & Co.	Condensed/Elongated	Six-Lines	70 pt	N/A
1868	Eight Lines Condensed Sans Surryphs, No. 4	Stephenson, Blake, & Co.	Condensed/Elongated	Eight-Lines	90 pt	N/A
1868	Great Primer Two Line Condensed Sans Surryphs, No. 4	Stephenson, Blake, & Co.	Condensed/Elongated	Two-Lines Great Primer	36 pt	N/A
1868	Small Pica Two Line Grotesque, No. 4	Stephenson, Blake, & Co.		Two-Lines Small Pica	22 pt	N/A
1868	Great Primer Two Line Grotesque, No. 3	Stephenson, Blake, & Co.		Two-Lines Great Primer	36 pt	N/A
1868	Great Primer Two Line Sans Surryphs Shaded	Stephenson, Blake, & Co.	Shaded	Two-Lines Great Primer	36 pt	N/A
1868	Great Primer Two Line Condensed Sans Surryphs, No. 1	Stephenson, Blake, & Co.	Condensed/Elongated	Two-Lines Great Primer	36 pt	N/A
1868	Eight Lines Sans Surryphs, No. 1	Stephenson, Blake, & Co.		Eight-Lines	90 pt	N/A
1868	Six Lines Elongated Sans Surryphs	Stephenson, Blake, & Co.	Condensed/Elongated	Six-Lines	70 pt	N/A
1868	Four Lines Elongated Italic, with Italic Sans Surryphs	Stephenson, Blake, & Co.	Condensed/Elongated	Four-Lines	48 pt	N/A
1868	Six Lines Condensed Sans Surryphs, No. 4	Stephenson, Blake, & Co.	Condensed/Elongated	Six-Lines	70 pt	N/A
1868	Five Lines Condensed Sans Surryphs, No. 4	Stephenson, Blake, & Co.	Condensed/Elongated	Five-Lines	56 pt	N/A
1868	Four Lines Condensed Sans Surryphs, No. 4	Stephenson, Blake, & Co.	Condensed/Elongated	Four-Lines	48 pt	N/A
1868	English Two Line Condensed Sans Surryphs, No. 4	Stephenson, Blake, & Co.	Condensed/Elongated	Two-Lines English	28 pt	N/A
1868	Small Pica Two Line Condensed Sans Surryphs, No. 4	Stephenson, Blake, & Co.	Condensed/Elongated	Two-Lines Small Pica	22 pt	N/A
1868	Bourgeois Two Line Condensed Sans Surryphs, No. 4	Stephenson, Blake, & Co.	Condensed/Elongated	Two-Lines Bourgeois	18 pt	N/A
1868	Nonpareil Two Line Condensed Sans Surryphs, No. 4	Stephenson, Blake, & Co.	Condensed/Elongated	Two-Lines Nonpareil	12 pt	N/A
1868	Pearl Two Line Condensed Sans Surryphs, No. 4	Stephenson, Blake, & Co.	Condensed/Elongated	Two-Lines Pearl	10 pt	N/A
1868	Brevier Condensed Sans Surryphs, No. 4	Stephenson, Blake, & Co.	Condensed/Elongated	Brevier	8 pt	N/A
1868	Nonpareil Condensed Sans Surryphs, No. 4	Stephenson, Blake, & Co.	Condensed/Elongated	Nonpareil	6 pt	N/A
1868	Pearl Condensed Sans Surryphs, No. 4, on Nonpareil Body	Stephenson, Blake, & Co.	Condensed/Elongated	Pearl Nonpareil	5 pt	N/A
1868	Great Primer Two Line Grotesque, No. 4	Stephenson, Blake, & Co.		Two-Lines Great Primer	36 pt	N/A
1868	Bourgeois Two Line Grotesque, No. 4	Stephenson, Blake, & Co.		Two-Lines Bourgeois	18 pt	N/A
1868	English Two Line Grotesque, No. 4	Stephenson, Blake, & Co.		Two-Lines English	28 pt	N/A
1868	English Two Line Grotesque, No. 3	Stephenson, Blake, & Co.		Two-Lines English	28 pt	N/A

Year	Printing Types	Type Foundry	Type Style	Old Size	Point Size	Price
1868	Small Pica Two Line Grotesque, No. 3	Stephenson, Blake, & Co.		Two-Lines Small Pica	22 pt	N/A
1868	Bougeois Two Line Grotesque, No. 3	Stephenson, Blake, & Co.		Two-Lines Bourgeois	18 pt	N/A
1868	Minion Two Line Grotesque, No. 3, on Great Primer Body	Stephenson, Blake, & Co.		Two-Lines Minion	14 pt	N/A
1868	Nonpareil Two Line Grotesque, No. 3	Stephenson, Blake, & Co.		Two-Lines Nonpareil	12 pt	N/A
1868	Pearl Two Line Grotesque, No. 3	Stephenson, Blake, & Co.		Two-Lines Pearl	10 pt	N/A
1868	Pearl Grotesque, No. 2, on Nonpareil Body	Stephenson, Blake, & Co.	Wide/Expanded	Pearl Nonpareil	5 pt	N/A
1868	Diamond Grotesque, No. 2, on Nonpareil Body	Stephenson, Blake, & Co.	Wide/Expanded	Diamond Nonpareil	4.5 pt	N/A
1868	Nonpareil Open Sans Surryphs	Stephenson, Blake, & Co.	Open/Outline	Nonpareil	6 pt	N/A
1868	English Two Line Sans Surryphs Shaded	Stephenson, Blake, & Co.	Shaded	Two-Lines English	28 pt	N/A
1868	Pica Two Line Open Sans Surryphs, No. 1	Stephenson, Blake, & Co.	Open/Outline	Two-Lines Pica	24 pt	N/A
1868	English Two Line Condensed Sans Surryphs, No. 1	Stephenson, Blake, & Co.	Condensed/Elongated	Two-Lines English	28 pt	N/A
1868	Small Pica Two Line Condensed Sans Surryphs, No. 1	Stephenson, Blake, & Co.	Condensed/Elongated	Two-Lines Small Pica	22 pt	N/A
1868	Bourgeois Two Line Condensed Sans Surryphs, No. 1	Stephenson, Blake, & Co.	Condensed/Elongated	Two-Lines Bourgeois	18 pt	N/A
1868	Nonpareil Two Line Condensed Sans Surryphs, No. 1	Stephenson, Blake, & Co.	Condensed/Elongated	Two-Lines Nonpareil	12 pt	N/A
1868	Nonpareil Two Line Condensed Sans Surryphs, No. 3	Stephenson, Blake, & Co.	Condensed/Elongated	Two-Lines Nonpareil	12 pt	N/A
1868	Pearl Two Line Condensed Sans Surryphs, No. 1	Stephenson, Blake, & Co.	Condensed/Elongated	Two-Lines Pearl	10 pt	N/A
1868	Brevier Condensed Sans Surryphs, No. 1	Stephenson, Blake, & Co.	Condensed/Elongated	Brevier	8 pt	N/A
1868	Nonpareil Condensed Sans Surryphs, No. 1	Stephenson, Blake, & Co.	Condensed/Elongated	Nonpareil	6 pt	N/A
1868	Six Lines Sans Surryphs, No. 1	Stephenson, Blake, & Co.		Six-Lines	72 pt	N/A
1868	Five Lines Sans Surryphs, No. 1	Stephenson, Blake, & Co.		Five-Lines	60 pt	N/A
1868	Four Lines Sans Surryphs, No. 1	Stephenson, Blake, & Co.		Four-Lines	48 pt	N/A
1868	Four Lines Elongated Sans Surryphs	Stephenson, Blake, & Co.	Condensed/Elongated	Four-Lines	48 pt	N/A
1868	Great Primer Two Line Elongated Sans Surryphs	Stephenson, Blake, & Co.	Condensed/Elongated	Two-Lines Great Primer	36 pt	N/A
1868	Minion Two-Line Sans Surryphs Shaded, No. 1	Stephenson, Blake, & Co.	Shaded	Two-Lines Minion	14 pt	N/A
1870	Six Line Condensed, No. 4	H. W. Caslon & Co.	Light/Thin/Condensed/Elongated	Six-Lines	72 pt	N/A
1870	English 2 -line Condensed, No. 4	H. W. Caslon & Co.	Light/Thin/Condensed/Elongated	Two-Lines English	28 pt	N/A
1870	Two-Line English Condensed Italic	H. W. Caslon & Co.	Light/Thin/Condensed/Elongated/Italic	Two-Lines English	28 pt	N/A
1870	Four-LIne Rounded Open	H. W. Caslon & Co.	Rounded	Four-Lines	48 pt	N/A
1870	Six-Line Doric, No. 2	H. W. Caslon & Co.		Six-Lines	72 pt	N/A

Year	Printing Types	Type Foundry	Type Style	Old Size	Point Size	Price
1870	Pica 2-Line Doric, No. 2	H. W. Caslon & Co.		Two-Lines Pica	24 pt	N/A
1870	English 2-Line Condensed	H. W. Caslon & Co.	Condensed/Elongated	Two-Lines English	28 pt	N/A
1870	Two-Line English New Style Gothic	J. & R. M. Wood		Two-Lines English	28 pt	N/A
1870	"The Oxford" Two-Line Great Primer New Style Gothic	J. & R. M. Wood		Two-Lines Great Primer	36 pt	N/A
1870	Two-Line Bourgeois Octagon Sanseriff	J. & R. M. Wood		Two-Lines Bourgeois	18 pt	N/A
1870	Two-Line Great Primer Octagon Sanseriff	J. & R. M. Wood		Two-Lines Great Primer	36 pt	N/A
1870	Pearl Condensed Sanseriff, No. 2	J. & R. M. Wood	Light/Thin/Condensed/Elongated	Pearl	5 pt	N/A
1870	Double Pica Condensed Sanseriff, No. 2	J. & R. M. Wood	Light/Thin/Condensed/Elongated	Double Pica	24 pt	N/A
1870	Five Line Condensed, No. 4	H. W. Caslon & Co.	Light/Thin/Condensed/Elongated	Five-Lines	60 pt	N/A
1870	Four Line Condensed, No. 4	H. W. Caslon & Co.	Light/Thin/Condensed/Elongated	Four-Lines	48 pt	N/A
1870	Great Primer 2-Line Condensed, No. 4	H. W. Caslon & Co.	Light/Thin/Condensed/Elongated	Two-Lines Great Primer	36 pt	N/A
1870	Small Pica 2-line Condensed, No. 4	H. W. Caslon & Co.	Light/Thin/Condensed/Elongated	Two-Lines Small Pica	22 pt	N/A
1870	Bourgeois 2-line Condensed, No. 4	H. W. Caslon & Co.	Light/Thin/Condensed/Elongated	Two-Lines Bourgeois	18 pt	N/A
1870	Nonpareil 2-line Condensed, No. 4	H. W. Caslon & Co.	Light/Thin/Condensed/Elongated	Two-Lines Nonpareil	12 pt	N/A
1870	Pearl 2-line Condensed, No. 4	H. W. Caslon & Co.	Light/Thin/Condensed/Elongated	Two-Lines Pearl	10 pt	N/A
1870	Brevier Condensed, No. 4	H. W. Caslon & Co.	Light/Thin/Condensed/Elongated	Brevier	8 pt	N/A
1870	Nonpareil Condensed, No. 4	H. W. Caslon & Co.	Light/Thin/Condensed/Elongated	Nonpareil	6 pt	N/A
1870	Pearl Condensed, No. 4	H. W. Caslon & Co.	Light/Thin/Condensed/Elongated	Pearl	5 pt	N/A
1870	Double Pica Condensed Italic	H. W. Caslon & Co.	Light/Thin/Condensed/Elongated/Italic	Double Pica	24 pt	N/A
1870	Great Primer Condensed Italic	H. W. Caslon & Co.	Light/Thin/Condensed/Elongated/Italic	Great Primer	18 pt	N/A
1870	Pica Condensed Italic	H. W. Caslon & Co.	Light/Thin/Condensed/Elongated/Italic	Pica	12 pt	N/A
1870	Long Primer Condensed Italic	H. W. Caslon & Co.	Light/Thin/Condensed/Elongated/Italic	Long Primer	10 pt	N/A
1870	Brevier Condensed Italic	H. W. Caslon & Co.	Light/Thin/Condensed/Elongated/Italic	Brevier	8 pt	N/A
1870	Nonpareil Condensed Italic	H. W. Caslon & Co.	Light/Thin/Condensed/Elongated/Italic	Nonpareil	6 pt	N/A
1870	Pearl Condensed Italic on Nonpareil Body	H. W. Caslon & Co.	Light/Thin/Condensed/Elongated/Italic	Pearl Nonpareil	5 pt	N/A
1870	Great Primer 2-Line Rounded Open	H. W. Caslon & Co.	Rounded	Two-Lines Great Primer	36 pt	N/A
1870	English 2-Line Rounded Open	H. W. Caslon & Co.	Rounded	Two-Lines English	28 pt	N/A
1870	Small Pica 2-Line Rounded Open	H. W. Caslon & Co.	Rounded	Two-Lines Small Pica	22 pt	N/A
1870	Brevier 2-Line Condensed Shaded	H. W. Caslon & Co.	Condensed/Elongated/Shaded	Two-Lines Brevier	16 pt	N/A

Year	Printing Types	Type Foundry	Type Style	Old Size	Point Size	Price
1870	Minion 2-Line Shaded	H. W. Caslon & Co.	Shaded/Wide/Expanded	Two-Lines Minion	14 pt	N/A
1870	Bourgeois Shaded	H. W. Caslon & Co.	Shaded/Wide/Expanded	Bourgeois	9 pt	N/A
1870	Five-Line Doric, No. 2	H. W. Caslon & Co.		Five-Lines	60 pt	N/A
1870	Four-Line Doric, No. 2	H. W. Caslon & Co.		Five-Lines	60 pt	N/A
1870	Two-Line Great Primer Doric, No. 2	H. W. Caslon & Co.		Two-Lines Great Primer	36 pt	N/A
1870	Bourgeois 2-Line Doric, No. 2	H. W. Caslon & Co.		Two-Lines Bourgeois	18 pt	N/A
1870	Pearl 2-Line Doric, No. 2	H. W. Caslon & Co.		Two-Lines Pearl	10 pt	N/A
1870	Brevier Doric, No. 2	H. W. Caslon & Co.		Brevier	8 pt	N/A
1870	Nonpareil Doric, No. 2	H. W. Caslon & Co.		Nonpareil	6 pt	N/A
1870	Pearl Doric, No. 2	H. W. Caslon & Co.		Pearl	5 pt	N/A
1870	Pearl Doric, No. 3	H. W. Caslon & Co.		Pearl	5 pt	N/A
1870	Pica 2-Line Condensed	H. W. Caslon & Co.	Condensed/Elongated	Two-Lines Pica	24 pt	N/A
1870	Small Pica 2-Line Condensed	H. W. Caslon & Co.	Condensed/Elongated	Two-Lines Small Pica	22 pt	N/A
1870	Long Primer 2-Line Condensed	H. W. Caslon & Co.	Condensed/Elongated	Two-Lines Long Primer	20 pt	N/A
1870	Brevier 2-Line Condensed	H. W. Caslon & Co.	Condensed/Elongated	Two-Lines Brevier	16 pt	N/A
1870	Nonpareil 2-Line Condensed	H. W. Caslon & Co.	Condensed/Elongated	Two-Lines Nonpareil	12 pt	N/A
1870	Pearl 2-Line Condensed	H. W. Caslon & Co.	Condensed/Elongated	Two-Lines Pearl	10 pt	N/A
1870	Two-Line English Sloping Gothic	J. & R. M. Wood	Italic	Two-Lines English	28 pt	N/A
1870	Two-Line Pica Octagon Sanseriff	J. & R. M. Wood		Two-Lines Pica	24 pt	N/A
1870	Two-Line English Octagon Sanseriff	J. & R. M. Wood		Two-Lines English	28 pt	N/A
1870	Four-Line Pica Octagon Sanseriff	J. & R. M. Wood		Four-Lines	48 pt	N/A
1870	Brevier Condensed Sanseriff, No. 2	J. & R. M. Wood	Light/Thin/Condensed/Elongated	Brevier	8 pt	N/A
1870	Two-Line Pearl Condensed Sanseriff, No. 2	J. & R. M. Wood	Light/Thin/Condensed/Elongated	Two-Lines Pearl	10 pt	N/A
1870	Two-Line Nonpareil Condensed Sanseriff, No. 2	J. & R. M. Wood	Light/Thin/Condensed/Elongated	Two-Lines Nonpareil	12 pt	N/A
1870	Two-Line Bourgeois Condensed Sanseriff, No. 2	J. & R. M. Wood	Light/Thin/Condensed/Elongated	Two-Lines Bourgeois	18 pt	N/A
1870	Two-Line English Condensed Sanseriff, No. 2	J. & R. M. Wood	Light/Thin/Condensed/Elongated	Two-Lines English	28 pt	N/A
1870	Two-Line Great Primer Condensed Sanseriff, No. 2	J. & R. M. Wood	Light/Thin/Condensed/Elongated	Two-Lines Great Primer	36 pt	N/A
1870	Brevier Thin Sanseriff	J. & R. M. Wood	Light/Thin/Condensed/Elongated	Brevier	8 pt	N/A
1870	Three-Line Pica Lord Mayor	J. & R. M. Wood	Ornamented/Light/Thin	Three-Lines Pica	36	N/A

Year	Printing Types	Type Foundry	Type Style	Old Size	Point Size	Price
1870	Two-Line Pearl Octagon Sanseriff	J. & R. M. Wood	Light/Thin/Condensed/Elongated	Two-Lines Pearl	10 pt	N/A
1870	Two-Line Nonpareil Octagon Sanseriff	J. & R. M. Wood	Light/Thin/Condensed/Elongated	Two-Lines Nonpareil	12 pt	N/A
1870	Two-Line Brevier Octagon Sanseriff	J. & R. M. Wood	Light/Thin/Condensed/Elongated	Two-Lines Brevier	16 pt	N/A
1878	Great Primer Two Line Condensed Sans Surryphs Italic	Stephenson, Blake, & Co.	Light/Thin/Condensed/Elongated	Two-Lines Great Primer	36 pt	N/A
1878	Pica Two Line Open Sans Surryphs, No. 2	Stephenson, Blake, & Co.	Open/Outline	Two-Lines Pica	24 pt	N/A
1878	Bourgeois Two Line Grotesque, No. 3	Stephenson, Blake, & Co.		Two-Lines Small Pica	22 pt	N/A
1878	Pica Two Line Condensed Sans Surryphs Italic	Stephenson, Blake, & Co.	Light/Thin/Condensed/Elongated	Two-Lines Pica	24 pt	N/A
1878	Bourgeois Two Line Condensed Sans Surryphs Italic	Stephenson, Blake, & Co.	Light/Thin/Condensed/Elongated	Two-Lines Bourgeois	18 pt	N/A
1878	Pearl Two Line Condensed Sans Surryphs Italic	Stephenson, Blake, & Co.	Light/Thin/Condensed/Elongated	Two-Lines Pearl	10 pt	N/A
1878	Bourgeois Condensed Sans Surryphs Italic	Stephenson, Blake, & Co.	Light/Thin/Condensed/Elongated	Bourgeois	9 pt	N/A
1878	Brevier Two Line Grotesque, No. 4	Stephenson, Blake, & Co.		Two-Lines Brevier	16 pt	N/A
1878	Pearl Two Line Grotesque, No. 4	Stephenson, Blake, & Co.		Two-Lines Pearl	10 pt	N/A
1878	Brevier Grotesque, No. 4	Stephenson, Blake, & Co.		Brevier	8 pt	N/A
1878	Minikin Grotesque, No. 4, on Nonpareil Body	Stephenson, Blake, & Co.		Pearl Nonpareil	5 pt	N/A
1878	Great Primer Elongated Sans Surryphs	Stephenson, Blake, & Co.	Condensed/Elongated	Great Primer	18 pt	N/A
1880	Four-Line Smal Pica Condensed Grotesque	John A. Hodges	Condensed	Four-Lines Small Pica	44 pt	N/A
1880	Great Primer Condensed Grotesque	John A. Hodges	Condensed	Great Primer	18 pt	N/A
1880	Pica Condensed Grotesque	John A. Hodges	Condensed	Pica	12 pt	N/A
1880	Long Primer Condensed Grotesque	John A. Hodges	Condensed	Long Primer	10 pt	N/A
1880	Pica Wide Sans Italic	John A. Hodges	Wide/Italic	Pica	12 pt	N/A
1880	Long Primer Wide Sans Italic	John A. Hodges	Wide/Italic	Long Primer	10 pt	N/A
1880	Great Primer Sans Italic	John A. Hodges	Italic	Great Primer	18 pt	N/A
1880	Pica Sans Italic	John A. Hodges	Italic	Pica	12 pt	N/A
1880	Long Primer Sans Italic	John A. Hodges	Italic	Long Primer	10 pt	N/A
1880	Brevier Sans Italic	John A. Hodges	Italic	Brevier	8 pt	N/A
1880	Two-Line English Sans	John A. Hodges		Two-Lines English	28 pt	N/A
1880	Two-Line Small Pica Sans	John A. Hodges		Two-Lines Small Pica	22 pt	N/A
1880	Double Pica Sans	John A. Hodges		Double Pica	24 pt	N/A
1880	Pica Sans	John A. Hodges		Pica	12 pt	N/A

Year	Printing Types	Type Foundry	Type Style	Old Size	Point Size	Price
1880	Brevier Sans	John A. Hodges		Brevier	8 pt	N/A
1880	Nonpareil Sans	John A. Hodges		Nonpareil	6 pt	N/A
1880	Nonpareil Doric	John A. Hodges		Nonpareil	6 pt	N/A
1880	Great Primer Condensed Sans	John A. Hodges	Condensed	Great Primer	18 pt	N/A
1880	Nonpareil Sans Expanded	John A. Hodges	Expanded	Nonpareil	6 pt	N/A
1880	Pica Condensed Sans	John A. Hodges	Condensed	Pica	12 pt	N/A
1880	Long Primer Condensed Sans	John A. Hodges	Condensed	Long Primer	10 pt	N/A
1880	Two -Line Great Primer Grotesque	John A. Hodges		Two-Lines Great Primer	36 pt	N/A
1880	Pica Grotesque	John A. Hodges		Pica	12 pt	N/A
1880	Long Primer Grotesque	John A. Hodges		Long Primer	10 pt	N/A
1880	Brevier Grotesque	John A. Hodges		Brevier	8 pt	N/A
1880	Nonpareil Grotesque	John A. Hodges		Nonpareil	6 pt	N/A
1880	Two-Line Nonpareil Outline	John A. Hodges	Open/Outline	Two-Lines Nonpareil	12 pt	N/A
1895	Four Line Pica Sans-Serif, No. 6	Miller and Richard		Four-Lines	48 pt	N/A
1895	Four Line Pica Sans-Serif, No. 8	Miller and Richard		Four-Lines	48 pt	N/A
1895	Five Line Sans-Serif, No. 4	Miller and Richard		Five-Lines	60 pt	N/A
1895	Two Line Double Pica Sans-Serif, No. 4	Miller and Richard		Two-Lines Double Pica	48 pt	N/A
1895	Two Line Great Primer Sans-Serif, No. 4	Miller and Richard		Two-Lines Great Primer	36 pt	N/A
1895	Two Line Pica Sans-Serif, No. 4	Miller and Richard		Two-Lines Pica	24 pt	N/A
1895	Two Line English Sans-Serif, No. 4	Miller and Richard		Two-Lines English	28 pt	N/A
1895	Eight Line Sans-Serif, No. 6	Miller and Richard		Eight-Lines	96 pt	N/A
1895	Six Line Sans-Serif, No. 6	Miller and Richard		Six-Lines	72 pt	N/A
1895	Five Line Sans-Serif, No. 6	Miller and Richard		Five-Lines	60 pt	N/A
1895	Two Line Double Pica Sans-Serif, No. 6	Miller and Richard		Two-Lines Double Pica	48 pt	N/A
1895	Four Line Sans-Serif, No. 6	Miller and Richard		Four-Lines	48 pt	N/A
1895	Two Line Great Primer Sans-Serif, No. 6	Miller and Richard		Two-Lines Great Primer	36 pt	N/A
1895	Two Line English Sans-Serif, No. 6	Miller and Richard		Two-Lines English	28 pt	N/A
1895	Two Line Pica Sans-Serif, No. 6	Miller and Richard		Two-Lines Pica	24 pt	N/A
1895	Two Line Small Pica Sans-Serif, No. 6	Miller and Richard		Two-Lines Small Pica	22 pt	N/A

Year	Printing Types	Type Foundry	Type Style	Old Size	Point Size	Price
1895	Two Line Brevier Sans-Serif, No. 6	Miller and Richard		Two-Lines Brevier	16 pt	N/A
1895	Eight Line Sans-Serif, No. 8	Miller and Richard		Eight-Lines	96 pt	N/A
1895	Six Line Sans-Serif, No. 8	Miller and Richard		Six-Lines	72 pt	N/A
1895	Five Line Sans-Serif, No. 8	Miller and Richard		Five-Lines	60 pt	N/A
1895	Four Line Sans-Serif, No. 8	Miller and Richard		Four-Lines	48 pt	N/A
1895	Two Line Double Pica Sans-Serif, No. 8	Miller and Richard		Two-Lines Double Pica	48 pt	N/A
1895	Two Line Great Primer Sans-Serif, No. 8	Miller and Richard		Two-Lines Great Primer	36 pt	N/A
1895	Two Line English Sans-Serif, No. 8	Miller and Richard		Two-Lines English	28 pt	N/A
1895	Two Line Pica Sans-Serif, No. 8	Miller and Richard		Two-Lines Pica	24 pt	N/A
1895	Two Line Small Pica Sans-Serif, No. 8	Miller and Richard		Two-Lines Small Pica	22 pt	N/A
1895	Two Line Brevier Sans-Serif, No. 8	Miller and Richard		Two-Lines Brevier	16 pt	N/A
1895	Five Line Grotesque, No. 3	Miller and Richard		Five-Lines	60 pt	N/A
1895	Four Line Grotesque, No. 3	Miller and Richard		Four-Lines	48 pt	N/A
1895	Two Line Double Pica Grotesque, No. 3	Miller and Richard		Two-Lines Double Pica	48 pt	N/A
1895	Two Line English Grotesque, No. 3	Miller and Richard		Two-Lines English	28 pt	N/A
1895	Two Line Pica Grotesque, No. 3	Miller and Richard		Two-Lines Pica	24 pt	N/A
1895	Two Line Brevier Grotesque, No. 3	Miller and Richard		Two-Lines Brevier	16 pt	N/A
1895	Six Line Grotesque, No. 5	Miller and Richard		Six-Lines	72 pt	N/A
1895	Five Line Grotesque, No. 5	Miller and Richard		Five-Lines	60 pt	N/A
1895	Four Line Grotesque, No. 5	Miller and Richard		Four-Lines	48 pt	N/A
1895	Two Line Double Pica Grotesque, No. 5	Miller and Richard		Two-Lines Double Pica	48 pt	N/A
1895	Two Line Great Primer Grotesque, No. 5	Miller and Richard		Two-Lines Great Primer	36 pt	N/A
1895	Two Line English Grotesque, No. 5	Miller and Richard		Two-Lines English	28 pt	N/A
1895	Two Line Pica Grotesque, No. 5	Miller and Richard		Two-Lines Pica	24 pt	N/A
1895	Two Line Small Pica Grotesque, No. 5	Miller and Richard		Two-Lines Small Pica	22 pt	N/A
1895	Two Line Brevier Grotesque, No. 5	Miller and Richard		Two-Lines Brevier	16 pt	N/A
1895	Six Line Grotesque, No. 7	Miller and Richard		Six-Lines	72 pt	N/A
1895	Five Line Grotesque, No. 7	Miller and Richard		Five-Lines	60 pt	N/A
1895	Four Line Grotesque, No. 7	Miller and Richard		Four-Lines	48 pt	N/A

Year	Printing Types	Type Foundry	Type Style	Old Size	Point Size	Price
1895	Eight Line Sans-Serif, No. 3	Miller and Richard		Eight-Lines	96 pt	N/A
1895	Six Line Sans-Serif, No. 3	Miller and Richard		Six-Lines	72 pt	N/A
1895	Five Line Sans-Serif, No. 3	Miller and Richard		Five-Lines	60 pt	N/A
1895	Five Line Sans-Serif, No. 5	Miller and Richard		Five-Lines	60 pt	N/A
1895	Six Line Sans-Serif, No. 5	Miller and Richard		Six-Lines	72 pt	N/A
1895	Eight Line Sans-Serif, No. 5	Miller and Richard		Eight-Lines	96 pt	N/A
1895	Eight Line Grotesque, No. 4	Miller and Richard		Eight-Lines	96 pt	N/A
1895	Six Line Grotesque, No. 4	Miller and Richard		Six-Lines	72 pt	N/A
1895	Five Line Grotesque, No. 4	Miller and Richard		Five-Lines	60 pt	N/A
1895	Canon Grotesque, No. 4	Miller and Richard		Canon	48 pt	N/A
1895	Eight Line Pica Grotesque, No. 4, Italic	Miller and Richard	Italic/Sloping	Eight-Lines	96 pt	N/A
1895	Canon News Bill Italic	Miller and Richard		Canon	48 pt	N/A
1895	Canon Sans-Serif, No. 3	Miller and Richard		Canon	48 pt	N/A
1895	Two Line Double Pica Sans-Serif, No. 3	Miller and Richard		Two-Lines Double Pica	48 pt	N/A
1895	Two Line Great Primer Sans-Serif, No. 3	Miller and Richard		Two-Lines Great Primer	36 pt	N/A
1895	Two Line English Sans-Serif, No. 3	Miller and Richard		Two-Lines English	28 pt	N/A
1895	Canon Sans-Serif, No. 5	Miller and Richard		Canon	48 pt	N/A
1895	Two Line Double Pica Sans-Serif, No. 5	Miller and Richard		Two-Lines Double Pica	48 pt	N/A
1895	Two Line Great Primer Sans-Serif, No. 5	Miller and Richard		Two-Lines Great Primer	36 pt	N/A
1895	Two Line English Sans-Serif, No. 5	Miller and Richard		Two-Lines English	28 pt	N/A
1895	Six Line Pica Grotesque, No. 4, Italic	Miller and Richard	Italic/Sloping	Six-Lines	72 pt	N/A
1895	Five Line Pica Grotesque, No. 4, Italic	Miller and Richard	Italic/Sloping	Five-Lines	60 pt	N/A
1895	Canon Line Pica Grotesque, No. 4, Italic	Miller and Richard	Italic/Sloping	Canon	48 pt	N/A
1895	Two Line Double Pica Grotesque, No. 7	Miller and Richard		Two-Lines Double Pica	48 pt	N/A
1895	Two Line Pica Grotesque, No. 7	Miller and Richard		Two-Lines Pica	24 pt	N/A
1895	Two Line Small Pica Grotesque, No. 7	Miller and Richard		Two-Lines Small Pica	22 pt	N/A
1895	Two Line Great Primer Grotesque, No. 7	Miller and Richard		Two-Lines Great Primer	36 pt	N/A
1895	Two Line English Grotesque, No. 7	Miller and Richard		Two-Lines English	28 pt	N/A
1895	Two Line Brevier Grotesque, No. 7	Miller and Richard		Two-Lines Brevier	16 pt	N/A

Year	Printing Types	Type Foundry	Type Style	Old Size	Point Size	Price
1895	Two Line Double Pica Grotesque, No. 4	Miller and Richard		Two-Lines Double Pica	48 pt	N/A
1895	Double Pica Grotesque, No. 4	Miller and Richard		Double Pica	24 pt	N/A
1895	Two Line English Grotesque, No. 4	Miller and Richard		Two-Lines English	28 pt	N/A
1895	Great Primer Grotesque, No. 4	Miller and Richard		Great Primer	18 pt	N/A
1895	Pica Grotesque, No. 4	Miller and Richard		Pica	12 pt	N/A
1895	Long Primer Grotesque, No. 4	Miller and Richard		Long Primer	10 pt	N/A
1895	Brevier Grotesque, No. 4	Miller and Richard		Brevier	8 pt	N/A
1895	Nonpareil Grotesque, No. 4	Miller and Richard		Nonpareil	6 pt	N/A
1895	Pearl Grotesque, No. 4, on Nonpareil Body	Miller and Richard		Pearl Nonpareil	5 pt	N/A
1895	Two Line English Grotesque, No. 4, Italic	Miller and Richard	Italic/Sloping	Two-Lines English	28 pt	N/A
1895	Two Line Double Pica Grotesque, No. 4, Italic	Miller and Richard	Italic/Sloping	Two-Lines Double Pica	48 pt	N/A
1895	Two Line Great Primer Grotesque, No. 4, Italic	Miller and Richard	Italic/Sloping	Two-Lines Great Primer	36 pt	N/A
1895	Double Pica Grotesque, No. 4, Italic	Miller and Richard	Italic/Sloping	Double Pica	24 pt	N/A
1895	Pica Grotesque, No. 4, Italic	Miller and Richard	Italic/Sloping	Pica	12 pt	N/A
1895	Great Primer Grotesque, No. 4, Italic	Miller and Richard	Italic/Sloping	Great Primer	18 pt	N/A
1895	Long Primer Grotesque, No. 4, Italic	Miller and Richard	Italic/Sloping	Long Primer	10 pt	N/A
1895	Brevier Grotesque, No. 4, Italic	Miller and Richard	Italic/Sloping	Brevier	8 pt	N/A
1895	Nonpareil Grotesque, No. 4, Italic	Miller and Richard	Italic/Sloping	Nonpareil	6 pt	N/A
1895	Brevier Grotesque, No. 6	Miller and Richard	Wide/Expanded	Brevier	8 pt	N/A
1895	Great Primer Grotesque, No. 6	Miller and Richard	Wide/Expanded	Great Primer	18 pt	N/A
1895	Long Primer Grotesque, No. 6	Miller and Richard	Wide/Expanded	Long Primer	10 pt	N/A
1895	Pica Grotesque, No. 6	Miller and Richard	Wide/Expanded	Pica	12 pt	N/A
1895	Nonpareil Grotesque, No. 6	Miller and Richard	Wide/Expanded	Nonpareil	6 pt	N/A
1895	Nonpareil Grotesque, No. 9	Miller and Richard	Light/Thin	Nonpareil	6 pt	N/A
1895	Nonpareil Sans-Serif Reversed Italic	Miller and Richard	Italic/Sloping/Light/Thin	Nonpareil	6 pt	N/A
1895	Diamond Grotesque, No. 9, on Nonpareil Body	Miller and Richard	Light/Thin	Diamond Nonpareil	4.5 pt	N/A
1895	Pearl Grotesque, No. 9, on Nonpareil Body	Miller and Richard	Light/Thin	Pearl Nonpareil	5 pt	N/A
1895	Diamond Sans-Serif Reversed Italic, on Nonpareil Body	Miller and Richard	Light/Thin/Italic/Sloping	Diamond Nonpareil	4.5 pt	N/A

Year	Printing Types	Type Foundry	Type Style	Old Size	Point Size	Price
1895	Pearl Sans-Serif Reversed Italic, on Nonpareil Body	Miller and Richard	Light/Thin/Italic/Sloping	Pearl Nonpareil	5 pt	N/A
1895	Two Line Pica Shaded, No. 8	Miller and Richard	Shaded	Two-Lines Pica	24 pt	N/A
1895	Two Line Bourgeois Shaded, No. 8	Miller and Richard	Shaded	Two-Lines Bourgeois	18 pt	N/A
1895	Two Line Nonpareil Shaded, No. 13	Miller and Richard	Shaded	Two-Lines Nonpareil	12 pt	N/A
1895	Two Line Brevier Ornamented, No. 1	Miller and Richard	Shaded	Brevier	8 pt	N/A
1895	Five Line News Bill Italic, No. 1	Miller and Richard		Five-Lines	60 pt	N/A
1895	Five Line News Bill Italic	Miller and Richard		Five-Lines	60 pt	N/A
1895	Six Line News Bill Italic	Miller and Richard		Six-Lines	72 pt	N/A
1909	42-Point Doric, No. 4	H. W. Caslon & Company, Limited			42	1/2 - 28 lbs
1909	24-Point Doric, No. 6	H. W. Caslon & Company, Limited			24 pt	1/2 - 20 lbs
1909	18-Point Doric, No. 4	H. W. Caslon & Company, Limited			18	1/2 - 20 lbs
1909	60-Point Doric Italic, No. 1	H. W. Caslon & Company, Limited	Italic/Sloping		60 pt	? - 50 lbs
1909	24-Point Doric Italic, No. 1	H. W. Caslon & Company, Limited	Italic/Sloping		24 pt	? 20 lbs
1909	12-Point Lining Doric Italic (a)	H. W. Caslon & Company, Limited			12 pt	2/6 - 7 lbs
1909	18-Point Doric, no. 1	H. W. Caslon & Company, Limited			18 pt	2/- 8 lbs
1909	60-Point Doric, No. 2	H. W. Caslon & Company, Limited			60 pt	? - 23 lbs
1909	Lining Doric	H. W. Caslon & Company, Limited				
1909	30-Point Doric Italic, No. 2	H. W. Caslon & Company, Limited	Italic/Sloping		30 pt	1/9 - 21 lbs
1909	48-Point Doric, No. 3	H. W. Caslon & Company, Limited			48 pt	1/6 - 19 lbs
1909	6-Point Lining Gothic, No.4	H. W. Caslon & Company, Limited			6 pt	? - 2 lbs
1909	24-Point Lining Gothic, no. 1	H. W. Caslon & Company, Limited	Light/Thin		24 pt	2/- 10 lbs
1909	6-Point Lining Doric (a)	H. W. Caslon & Company, Limited			6 pt	5/- 2 lbs
1909	30-Point Doric, No. 5	H. W. Caslon & Company, Limited			30 pt	1/1 - 25 lbs
1909	48-Point Doric, No. 7	H. W. Caslon & Company, Limited			48 pt	1/6 - 21 lbs
1909	60-Point Doric, No. 6	H. W. Caslon & Company, Limited			60 pt	1/- 50 lbs
1909	36-Point Doric, no. 4	H. W. Caslon & Company, Limited			36	1/1 - 25 lbs
1909	30-Point Doric, no. 4	H. W. Caslon & Company, Limited			30	1/1 - 25 lbs
1909	24-Point Doric, no. 4	H. W. Caslon & Company, Limited			30	1/2 - 20 lbs
1909	18-Point Doric, No. 6	H. W. Caslon & Company, Limited			18 pt	1/2 - 20 lbs

Year	Printing Types	Type Foundry	Type Style	Old Size	Point Size	Price
1895	Eight Line Sans-Serif, No. 3	Miller and Richard		Eight-Lines	96 pt	N/A
1895	Six Line Sans-Serif, No. 3	Miller and Richard		Six-Lines	72 pt	N/A
1895	Five Line Sans-Serif, No. 3	Miller and Richard		Five-Lines	60 pt	N/A
1895	Five Line Sans-Serif, No. 5	Miller and Richard		Five-Lines	60 pt	N/A
1895	Six Line Sans-Serif, No. 5	Miller and Richard		Six-Lines	72 pt	N/A
1895	Eight Line Sans-Serif, No. 5	Miller and Richard		Eight-Lines	96 pt	N/A
1895	Eight Line Grotesque, No. 4	Miller and Richard		Eight-Lines	96 pt	N/A
1895	Six Line Grotesque, No. 4	Miller and Richard		Six-Lines	72 pt	N/A
1895	Five Line Grotesque, No. 4	Miller and Richard		Five-Lines	60 pt	N/A
1895	Canon Grotesque, No. 4	Miller and Richard		Canon	48 pt	N/A
1895	Eight Line Pica Grotesque, No. 4, Italic	Miller and Richard	Italic/Sloping	Eight-Lines	96 pt	N/A
1895	Canon News Bill Italic	Miller and Richard		Canon	48 pt	N/A
1895	Canon Sans-Serif, No. 3	Miller and Richard		Canon	48 pt	N/A
1895	Two Line Double Pica Sans-Serif, No. 3	Miller and Richard		Two-Lines Double Pica	48 pt	N/A
1895	Two Line Great Primer Sans-Serif, No. 3	Miller and Richard		Two-Lines Great Primer	36 pt	N/A
1895	Two Line English Sans-Serif, No. 3	Miller and Richard		Two-Lines English	28 pt	N/A
1895	Canon Sans-Serif, No. 5	Miller and Richard		Canon	48 pt	N/A
1895	Two Line Double Pica Sans-Serif, No. 5	Miller and Richard		Two-Lines Double Pica	48 pt	N/A
1895	Two Line Great Primer Sans-Serif, No. 5	Miller and Richard		Two-Lines Great Primer	36 pt	N/A
1895	Two Line English Sans-Serif, No. 5	Miller and Richard		Two-Lines English	28 pt	N/A
1895	Six Line Pica Grotesque, No. 4, Italic	Miller and Richard	Italic/Sloping	Six-Lines	72 pt	N/A
1895	Five Line Pica Grotesque, No. 4, Italic	Miller and Richard	Italic/Sloping	Five-Lines	60 pt	N/A
1895	Canon Line Pica Grotesque, No. 4, Italic	Miller and Richard	Italic/Sloping	Canon	48 pt	N/A
1895	Two Line Double Pica Grotesque, No. 7	Miller and Richard		Two-Lines Double Pica	48 pt	N/A
1895	Two Line Pica Grotesque, No. 7	Miller and Richard		Two-Lines Pica	24 pt	N/A
1895	Two Line Small Pica Grotesque, No. 7	Miller and Richard		Two-Lines Small Pica	22 pt	N/A
1895	Two Line Great Primer Grotesque, No. 7	Miller and Richard		Two-Lines Great Primer	36 pt	N/A
1895	Two Line English Grotesque, No. 7	Miller and Richard		Two-Lines English	28 pt	N/A
1895	Two Line Brevier Grotesque, No. 7	Miller and Richard		Two-Lines Brevier	16 pt	N/A

Year	Printing Types	Type Foundry	Type Style	Old Size	Point Size	Price
1895	Two Line Double Pica Grotesque, No. 4	Miller and Richard		Two-Lines Double Pica	48 pt	N/A
1895	Double Pica Grotesque, No. 4	Miller and Richard		Double Pica	24 pt	N/A
1895	Two Line English Grotesque, No. 4	Miller and Richard		Two-Lines English	28 pt	N/A
1895	Great Primer Grotesque, No. 4	Miller and Richard		Great Primer	18 pt	N/A
1895	Pica Grotesque, No. 4	Miller and Richard		Pica	12 pt	N/A
1895	Long Primer Grotesque, No. 4	Miller and Richard		Long Primer	10 pt	N/A
1895	Brevier Grotesque, No. 4	Miller and Richard		Brevier	8 pt	N/A
1895	Nonpareil Grotesque, No. 4	Miller and Richard		Nonpareil	6 pt	N/A
1895	Pearl Grotesque, No. 4, on Nonpareil Body	Miller and Richard		Pearl Nonpareil	5 pt	N/A
1895	Two Line English Grotesque, No. 4, Italic	Miller and Richard	Italic/Sloping	Two-Lines English	28 pt	N/A
1895	Two Line Double Pica Grotesque, No. 4, Italic	Miller and Richard	Italic/Sloping	Two-Lines Double Pica	48 pt	N/A
1895	Two Line Great Primer Grotesque, No. 4, Italic	Miller and Richard	Italic/Sloping	Two-Lines Great Primer	36 pt	N/A
1895	Double Pica Grotesque, No. 4, Italic	Miller and Richard	Italic/Sloping	Double Pica	24 pt	N/A
1895	Pica Grotesque, No. 4, Italic	Miller and Richard	Italic/Sloping	Pica	12 pt	N/A
1895	Great Primer Grotesque, No. 4, Italic	Miller and Richard	Italic/Sloping	Great Primer	18 pt	N/A
1895	Long Primer Grotesque, No. 4, Italic	Miller and Richard	Italic/Sloping	Long Primer	10 pt	N/A
1895	Brevier Grotesque, No. 4, Italic	Miller and Richard	Italic/Sloping	Brevier	8 pt	N/A
1895	Nonpareil Grotesque, No. 4, Italic	Miller and Richard	Italic/Sloping	Nonpareil	6 pt	N/A
1895	Brevier Grotesque, No. 6	Miller and Richard	Wide/Expanded	Brevier	8 pt	N/A
1895	Great Primer Grotesque, No. 6	Miller and Richard	Wide/Expanded	Great Primer	18 pt	N/A
1895	Long Primer Grotesque, No. 6	Miller and Richard	Wide/Expanded	Long Primer	10 pt	N/A
1895	Pica Grotesque, No. 6	Miller and Richard	Wide/Expanded	Pica	12 pt	N/A
1895	Nonpareil Grotesque, No. 6	Miller and Richard	Wide/Expanded	Nonpareil	6 pt	N/A
1895	Nonpareil Grotesque, No. 9	Miller and Richard	Light/Thin	Nonpareil	6 pt	N/A
1895	Nonpareil Sans-Serif Reversed Italic	Miller and Richard	Italic/Sloping/Light/Thin	Nonpareil	6 pt	N/A
1895	Diamond Grotesque, No. 9, on Nonpareil Body	Miller and Richard	Light/Thin	Diamond Nonpareil	4.5 pt	N/A
1895	Pearl Grotesque, No. 9, on Nonpareil Body	Miller and Richard	Light/Thin	Pearl Nonpareil	5 pt	N/A
1895	Diamond Sans-Serif Reversed Italic, on Nonpareil Body	Miller and Richard	Light/Thin/Italic/Sloping	Diamond Nonpareil	4.5 pt	N/A

Year	Printing Types	Type Foundry	Type Style	Old Size	Point Size	Price
1895	Pearl Sans-Serif Reversed Italic, on Nonpareil Body	Miller and Richard	Light/Thin/Italic/Sloping	Pearl Nonpareil	5 pt	N/A
1895	Two Line Pica Shaded, No. 8	Miller and Richard	Shaded	Two-Lines Pica	24 pt	N/A
1895	Two Line Bourgeois Shaded, No. 8	Miller and Richard	Shaded	Two-Lines Bourgeois	18 pt	N/A
1895	Two Line Nonpareil Shaded, No. 13	Miller and Richard	Shaded	Two-Lines Nonpareil	12 pt	N/A
1895	Two Line Brevier Ornamented, No. 1	Miller and Richard	Shaded	Brevier	8 pt	N/A
1895	Five Line News Bill Italic, No. 1	Miller and Richard		Five-Lines	60 pt	N/A
1895	Five Line News Bill Italic	Miller and Richard		Five-Lines	60 pt	N/A
1895	Six Line News Bill Italic	Miller and Richard		Six-Lines	72 pt	N/A
1909	42-Point Doric, No. 4	H. W. Caslon & Company, Limited			42	1/2 - 28 lbs
1909	24-Point Doric, No. 6	H. W. Caslon & Company, Limited			24 pt	1/2 - 20 lbs
1909	18-Point Doric, No. 4	H. W. Caslon & Company, Limited			18	1/2 - 20 lbs
1909	60-Point Doric Italic, No. 1	H. W. Caslon & Company, Limited	Italic/Sloping		60 pt	? - 50 lbs
1909	24-Point Doric Italic, No. 1	H. W. Caslon & Company, Limited	Italic/Sloping		24 pt	? 20 lbs
1909	12-Point Lining Doric Italic (a)	H. W. Caslon & Company, Limited			12 pt	2/6 - 7 lbs
1909	18-Point Doric, no. 1	H. W. Caslon & Company, Limited			18 pt	2/- 8 lbs
1909	60-Point Doric, No. 2	H. W. Caslon & Company, Limited			60 pt	? - 23 lbs
1909	Lining Doric	H. W. Caslon & Company, Limited				
1909	30-Point Doric Italic, No. 2	H. W. Caslon & Company, Limited	Italic/Sloping		30 pt	1/9 - 21 lbs
1909	48-Point Doric, No. 3	H. W. Caslon & Company, Limited			48 pt	1/6 - 19 lbs
1909	6-Point Lining Gothic, No.4	H. W. Caslon & Company, Limited			6 pt	? - 2 lbs
1909	24-Point Lining Gothic, no. 1	H. W. Caslon & Company, Limited	Light/Thin		24 pt	2/- 10 lbs
1909	6-Point Lining Doric (a)	H. W. Caslon & Company, Limited			6 pt	5/- 2 lbs
1909	30-Point Doric, No. 5	H. W. Caslon & Company, Limited			30 pt	1/1 - 25 lbs
1909	48-Point Doric, No. 7	H. W. Caslon & Company, Limited			48 pt	1/6 - 21 lbs
1909	60-Point Doric, No. 6	H. W. Caslon & Company, Limited			60 pt	1/- 50 lbs
1909	36-Point Doric, no. 4	H. W. Caslon & Company, Limited			36	1/1 - 25 lbs
1909	30-Point Doric, no. 4	H. W. Caslon & Company, Limited			30	1/1 - 25 lbs
1909	24-Point Doric, no. 4	H. W. Caslon & Company, Limited			30	1/2 - 20 lbs
1909	18-Point Doric, No. 6	H. W. Caslon & Company, Limited			18 pt	1/2 - 20 lbs

Year	Printing Types	Type Foundry	Type Style	Old Size	Point Size	Price
1909	14-Point Doric, No. 6	H. W. Caslon & Company, Limited			14 pt	1/4 - 15 lbs
1909	12-Point Doric, No. 6	H. W. Caslon & Company, Limited			12 pt	1/6 - 12 lbs
1909	10-Point Doric, No. 6	H. W. Caslon & Company, Limited			10 pt	1/10 - 10 lbs
1909	8-Point Doric, No. 6	H. W. Caslon & Company, Limited			8 pt	2/2 - 8 lbs
1909	6-Point Doric, No. 6	H. W. Caslon & Company, Limited			6 pt	3/3 - 6 lbs
1909	12-Point Doric, No. 4	H. W. Caslon & Company, Limited			12	1/6 - 12 lbs
1909	10-Point Doric, No. 4	H. W. Caslon & Company, Limited			10	1/10 - 10 lbs
1909	8-Point Doric, No. 4	H. W. Caslon & Company, Limited			8	2/2 - 8 lbs
1909	6-Point Doric, No. 4	H. W. Caslon & Company, Limited			6	3/3 - 6 lbs
1909	36-Point Doric Italic, No. 1	H. W. Caslon & Company, Limited	Italic/Sloping		36 pt	? - 31 lbs
1909	30-Point Doric Italic, No. 1	H. W. Caslon & Company, Limited	Italic/Sloping		30 pt	? - 25 lbs
1909	18-Point Doric Italic, No. 1	H. W. Caslon & Company, Limited	Italic/Sloping		18 pt	? 20 lbs
1909	12-Point Doric Italic, No. 1	H. W. Caslon & Company, Limited	Italic/Sloping		12 pt	? 12 lbs
1909	10-Point Doric Italic, No. 1	H. W. Caslon & Company, Limited	Italic/Sloping		10 pt	? 10 lbs
1909	8-Point Doric Italic, No. 1	H. W. Caslon & Company, Limited	Italic/Sloping		8 pt	? 8 lbs
1909	6-Point Doric Italic, No. 1	H. W. Caslon & Company, Limited	Italic/Sloping		6 pt	? 6 lbs
1909	12-Point Lining Doric Italic (b)	H. W. Caslon & Company, Limited			12 pt	2/6 - 6 lbs
1909	12-Point Lining Doric Italic (c)	H. W. Caslon & Company, Limited			12 pt	3/- 5 lbs
1909	12-Point Lining Doric Italic (d)	H. W. Caslon & Company, Limited			12 pt	3/- 4 lbs
1909	12-Point Lining Doric Italic (e)	H. W. Caslon & Company, Limited			12 pt	4/- 3 lbs
1909	14-Point Doric, no. 1	H. W. Caslon & Company, Limited			14 pt	2/3 - 7 lbs
1909	12-Point Doric, no. 1	H. W. Caslon & Company, Limited			12 pt	2/6 - 6 lbs
1909	10-Point Doric, no. 1	H. W. Caslon & Company, Limited			10 pt	3/- 5 lbs
1909	8-Point Doric, no. 1	H. W. Caslon & Company, Limited			8 pt	4/- 4 lbs
1909	6-Point Doric, no. 1, Sm. Caps	H. W. Caslon & Company, Limited			6 pt	5/- 2 lbs
1909	18-Point Doric, no. 2	H. W. Caslon & Company, Limited			18 pt	2/- 8 lbs
1909	12-Point Doric, no. 2	H. W. Caslon & Company, Limited			12 pt	2/6 - 6 lbs
1909	10-Point Doric, no. 2	H. W. Caslon & Company, Limited			10 pt	3/- 5 lbs
1909	8-Point Doric, no. 2	H. W. Caslon & Company, Limited			8 pt	4/- 4 lbs

Year	Printing Types	Type Foundry	Type Style	Old Size	Point Size	Price
1909	6-Point Doric, no. 2	H. W. Caslon & Company, Limited			6 pt	5/- 3 lbs
1909	6-Point Doric, no. 2a	H. W. Caslon & Company, Limited			6 pt	5/- 2 lbs
1909	6-Point Doric, no. 2b	H. W. Caslon & Company, Limited			6 pt	6/- 2 lbs
1909	48-Point Doric, No. 2	H. W. Caslon & Company, Limited			48 pt	? - 20 lbs
1909	36-Point Doric, No. 2	H. W. Caslon & Company, Limited			36 pt	? - 15 lbs
1909	24-Point Doric, No. 2	H. W. Caslon & Company, Limited			24 pt	? - 10 lbs
1909	24-Point Doric Italic, No. 2	H. W. Caslon & Company, Limited	Italic/Sloping		24 pt	2/- 15 lbs
1909	18-Point Doric Italic, No. 2	H. W. Caslon & Company, Limited	Italic/Sloping		18 pt	2/- 12 lbs
1909	12-Point Doric Italic, No. 2	H. W. Caslon & Company, Limited	Italic/Sloping		12 pt	2/6 - 10 lbs
1909	10-Point Doric Italic, No. 2	H. W. Caslon & Company, Limited	Italic/Sloping		10 pt	3/- 8 lbs
1909	6-Point Doric Italic, No. 2	H. W. Caslon & Company, Limited	Italic/Sloping		6 pt	5/- 4 lbs
1909	36-Point Doric, No. 3	H. W. Caslon & Company, Limited			36 pt	1/9 - 15 lbs
1909	30-Point Doric, No. 3	H. W. Caslon & Company, Limited			30 pt	1/9 - 12 lbs
1909	24-Point Doric, No. 3	H. W. Caslon & Company, Limited			24 pt	2/- 10 lbs
1909	18-Point Doric, No. 3	H. W. Caslon & Company, Limited			18 pt	2/- 8 lbs
1909	14-Point Doric, No. 3	H. W. Caslon & Company, Limited			14 pt	2/3 - 7 lbs
1909	12-Point Doric, No. 3	H. W. Caslon & Company, Limited			12 pt	2/6 - 6 lbs
1909	10-Point Doric, No. 3	H. W. Caslon & Company, Limited			10 pt	3/- 5 lbs
1909	8-Point Doric, No. 3	H. W. Caslon & Company, Limited			8 pt	4/- 4 lbs
1909	6-Point Doric, No. 3	H. W. Caslon & Company, Limited			6 pt	5/- 3 lbs
1909	6-Point Doric, No. 3a	H. W. Caslon & Company, Limited			6 pt	5/- 3 lbs
1909	6-Point Doric, No. 3b	H. W. Caslon & Company, Limited			6 pt	6/- 2 lbs
1909	6-Point Doric, No. 3c	H. W. Caslon & Company, Limited			6 pt	8/- 2 lbs
1909	6-Point Lining Gothic, No.3	H. W. Caslon & Company, Limited			6 pt	? - 2 lbs
1909	6-Point Lining Gothic, No.2	H. W. Caslon & Company, Limited			6 pt	? - 2 lbs
1909	6-Point Lining Gothic, No.1	H. W. Caslon & Company, Limited			6 pt	? - 2 lbs
1909	12-Point Lining Gothic, No.4	H. W. Caslon & Company, Limited			12 pt	? - 5 lbs
1909	12-Point Lining Gothic, No.3	H. W. Caslon & Company, Limited			12 pt	? - 5 lbs
1909	12-Point Lining Gothic, No.2	H. W. Caslon & Company, Limited			12 pt	? - 6 lbs

Year	Printing Types	Type Foundry	Type Style	Old Size	Point Size	Price
1909	12-Point Lining Gothic, No.1	H. W. Caslon & Company, Limited			12 pt	? - 6 lbs
1909	24-Point Lining Gothic, no. 2	H. W. Caslon & Company, Limited	Light/Thin		24 pt	2/- 10 lbs
1909	18-Point Lining Gothic, no. 1	H. W. Caslon & Company, Limited	Light/Thin		18 pt	2/- 8 lbs
1909	18-Point Lining Gothic, no. 2	H. W. Caslon & Company, Limited	Light/Thin		18 pt	2/- 8 lbs
1909	6-Point Lining Doric (c)	H. W. Caslon & Company, Limited			6 pt	6/- 1.5 lbs
1909	6-Point Lining Doric (b)	H. W. Caslon & Company, Limited			6 pt	5/- 2 lbs
1909	6-Point Lining Doric (d)	H. W. Caslon & Company, Limited			6 pt	8/- 1.5 lbs
1909	24-Point Doric, No. 5	H. W. Caslon & Company, Limited			24 pt	1/2 - 20 lbs
1909	18-Point Doric, No. 5	H. W. Caslon & Company, Limited			18 pt	1/2 - 20 lbs
1909	12-Point Doric, No. 5	H. W. Caslon & Company, Limited			12 pt	1/6 - 12 lbs
1909	10-Point Doric, No. 5	H. W. Caslon & Company, Limited			10 pt	1/10 - 10 lbs
1909	8-Point Doric, No. 5	H. W. Caslon & Company, Limited			8 pt	2/2 - 8 lbs
1909	42-Point Doric, No. 7	H. W. Caslon & Company, Limited			42 pt	1/6 - 16 lbs
1909	36-Point Doric, No. 7	H. W. Caslon & Company, Limited			36 pt	1/9 - 15 lbs
1909	30-Point Doric, No. 7	H. W. Caslon & Company, Limited			30 pt	1/9 - 12 lbs
1909	24-Point Doric, No. 7	H. W. Caslon & Company, Limited			24 pt	2/- 10 lbs
1909	18-Point Doric, No. 7	H. W. Caslon & Company, Limited			18 pt	2/- 8 lbs
1909	14-Point Doric, No. 7	H. W. Caslon & Company, Limited			14 pt	2/3 - 7 lbs
1909	12-Point Doric, No. 7	H. W. Caslon & Company, Limited			12 pt	2/6 - 6 lbs
1909	10-Point Doric, No. 7	H. W. Caslon & Company, Limited			10 pt	3/- 5 lbs
1909	8-Point Doric, No. 7	H. W. Caslon & Company, Limited			8 pt	4/- 4 lbs
1909	6-Point Doric, No. 7	H. W. Caslon & Company, Limited			6 pt	5/- 3 lbs
1909	6-Point Doric, No. 7, Sm. Caps	H. W. Caslon & Company, Limited			6 pt	5/- 2 lbs
1909	48-Point Doric, No. 6	H. W. Caslon & Company, Limited			48 pt	1/- 38 lbs
1909	42-Point Doric, No. 6	H. W. Caslon & Company, Limited			42 pt	1/1 - 30 lbs
1909	36-Point Doric, No. 6	H. W. Caslon & Company, Limited			36 pt	1/1 - 30 lbs
1909	30-Point Doric, No. 6	H. W. Caslon & Company, Limited			30 pt	1/1 - 24 lbs
1914	Condensed Grotesque (No. 5) 60-Point	Birmingham Printers Ltd.	Condensed		60 pt	N/A
1914	Condensed Grotesque (No. 5) 48-Point	Birmingham Printers Ltd.	Condensed		48 pt	N/A

Year	Printing Types	Type Foundry	Type Style	Old Size	Point Size	Price
1914	Condensed Grotesque (No. 5) 42-Point	Birmingham Printers Ltd.	Condensed		42 pt	N/A
1914	Condensed Grotesque (No. 5) 36-Point	Birmingham Printers Ltd.	Condensed		36 pt	N/A
1914	Condensed Grotesque (No. 5) 30-Point	Birmingham Printers Ltd.	Condensed		30 pt	N/A
1914	Grotesque 72-Point	Birmingham Printers Ltd.			72 pt	N/A
1914	Grotesque 60-Point	Birmingham Printers Ltd.			60 pt	N/A
1914	Condensed Grotesque 18-Point	Birmingham Printers Ltd.	Condensed		18 pt	N/A
1914	Condensed Grotesque 12-Point	Birmingham Printers Ltd.	Condensed		12 pt	N/A
1914	Condensed Grotesque 10-Point	Birmingham Printers Ltd.	Condensed		10 pt	N/A
1914	Condensed Grotesque 8-Point	Birmingham Printers Ltd.	Condensed		8 pt	N/A
1914	Condensed Grotesque 6-Point	Birmingham Printers Ltd.	Condensed		6 pt	N/A
1914	Condensed Grotesque (No. 5) 24-Point (Caps)	Birmingham Printers Ltd.	Condensed/Caps		24 pt	N/A
1914	Condensed Grotesque (No. 5) 24-Point	Birmingham Printers Ltd.	Condensed		24 pt	N/A
1914	Condensed Grotesque (No. 5) 18-Point (Caps)	Birmingham Printers Ltd.	Condensed/Caps		18 pt	N/A
1914	Condensed Grotesque (No. 5) 14-Point (Caps)	Birmingham Printers Ltd.	Condensed/Caps		14 pt	N/A
1914	Condensed Grotesque (No. 5) 12-Point (Caps)	Birmingham Printers Ltd.	Condensed/Caps		12 pt	N/A
1914	Condensed Grotesque (No. 5) 18-Point	Birmingham Printers Ltd.	Condensed		18 pt	N/A
1914	Condensed Grotesque (No. 5) 14-Point	Birmingham Printers Ltd.	Condensed		14 pt	N/A
1914	Condensed Grotesque (No. 5) 12-Point	Birmingham Printers Ltd.	Condensed		12 pt	N/A

24 A. 18-point Doric, No. 2. 2/- 8 lbs.

SUPERB DECORATED HOUSES
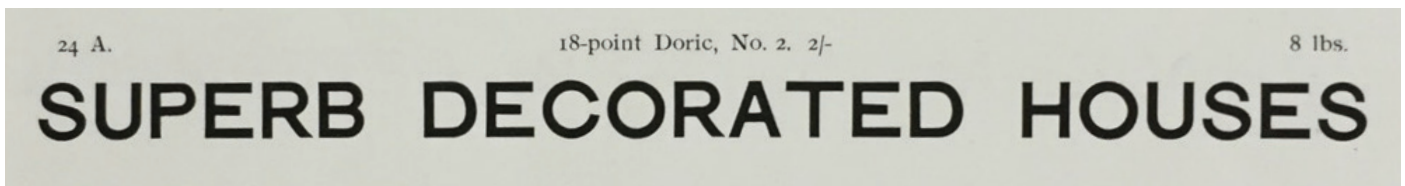
Figure 2.1 Example of a 'Classical' sans serif. 18-Point Doric, no. 2, H. W. Caslon & Company, Limited, 1909. SBL.

TWO LINES NONPAREIL GROTESQUE.

W. THOROWGOOD BEGS LEAVE TO CALL THE ATTENTION OF THE TRADE TO HIS NEW SERIES OF GROTESQUE, CONDENSED, OUTLINE, AND ORNAMENTED FOUNTS, SPECIMENS OF WHICH MAY BE OBTAINED ON APPLICATION.
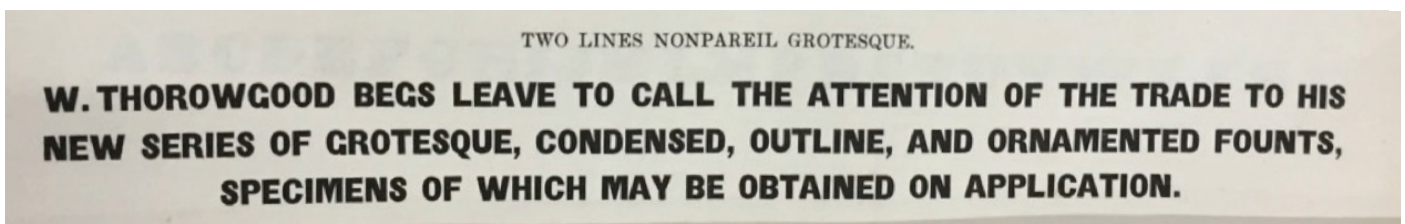
Figure 2.2 Example of a 'Bold' sans serif. Two Lines Nonpareil Grotesque, W. Thorowgood and Co., 1834. SBL.

GREAT PRIMER TWO LINE CONDENSED SANS SURRYPHS, No. 1.

MANUFACTURE
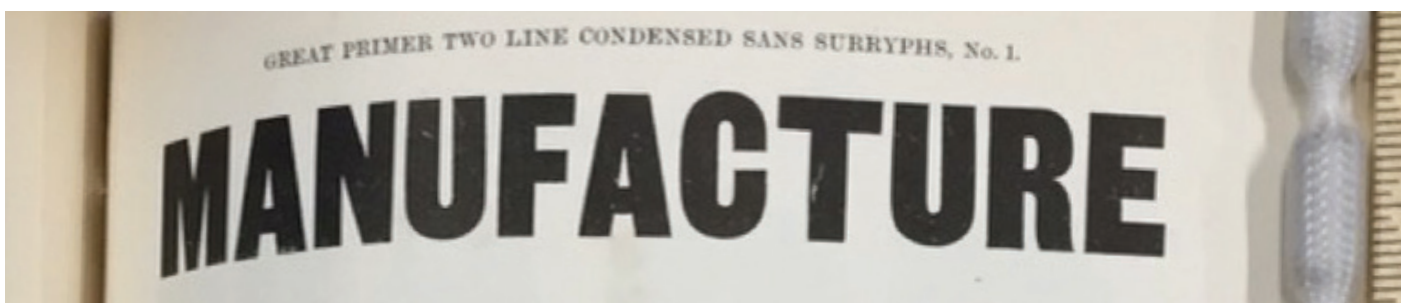
Figure 2.3 Example of a 'Condensed' sans serif. Great Primer Two Line Condensed Sans Surryphs, No. 1, Stephenson, Blake, & Co., 1868. SBL.

RECORD

Figure 2.4 Example of a 'Sloping' sans serif. Six Lines Elongated Italic, with Italic Sans Surryphs, Stephenson, Blake, & Co., 1868. SBL.

2.3. Classification of Grotesque sans serif types.

Grotesque sans serifs were classified under sixteen different categories based on stylistic features. These included antecedents of the Neo-grotesques, Humanists and Geometric sans serifs.

The term 'Classical' was used to describe sans serif types that followed geometric proportions. These types had low stroke contrast. The jaw apertures and terminals were varied in style. The leg of the 'R' was straight and the 'G' was spurred. These printing types did not have any lower-case designs, (Figure 2.1).

'Bold' sans serifs were classified by squared curves and variable stroke contract. The jaw apertures were close-set and the terminals were horizontal. The leg of the 'R' was curved and the 'G' was spurred. The lower-case 'a' was of a two-story design, (Figure 2.2). The 'Condensed' forms had a high x-height, squared curves and variable stroke contrast. The jaw apertures, terminals and other features followed the same characteristics as the 'Bold' types, (Figure 2.3).

The term 'Sloping' was used for sans serifs that were faux italics. Their proportions and stroke contrast was variable. The jaw apertures, terminals and other features showed the same characteristics as the 'Bold' and 'Condensed' types, (Figure 2.4). 'Light' sans serif types were extremely thin in their appearance, the stroke contrast was variable. The other features showed the same design features discussed above, (Figure 2.5). 'Wide' types had a short x-height and were wider that the overall height, (Figure 2.6). The term 'Mixed' was used to group Grotesque sans serifs that showed a combination of several characteristics, (Figure 2.7).

The class of 'Neo-grotesque' was observed in the early Grotesque sans serifs. These were often produced in many sizes that later developed into 'Type Families'. The proportions showed open curves and low stroke contrast. In contrast with the type styles above, these typefaces had open jaw apertures. The leg of the 'R' was curved and the 'G' spurred, (Figure 2.8). The term 'Humanist' was used to describe sans serif types that were developed from an inscriptional model. These types showed squared curves and variable stroke contrast. The jaw apertures were open with variable terminal designs. The leg of the 'R' was variable and the 'G' has no spur, (Figure 2.9).'Geometric' sans serifs showed a monoline design. Similar to the 'Classical' types, the proportions were geometric with low stroke contrast. The 'Neo-grotesque' and 'Humanist' presented a two-story lower-

TWO LINE NONPAREIL EXTRA ELONGATED SANS-SERIF, NO. 1.

MILLER & RICHARD, TYPEFOUNDERS,

BRASS RULE &c. MANUFACTURERS, WOOD

LETTER CUTTERS, £1234567890
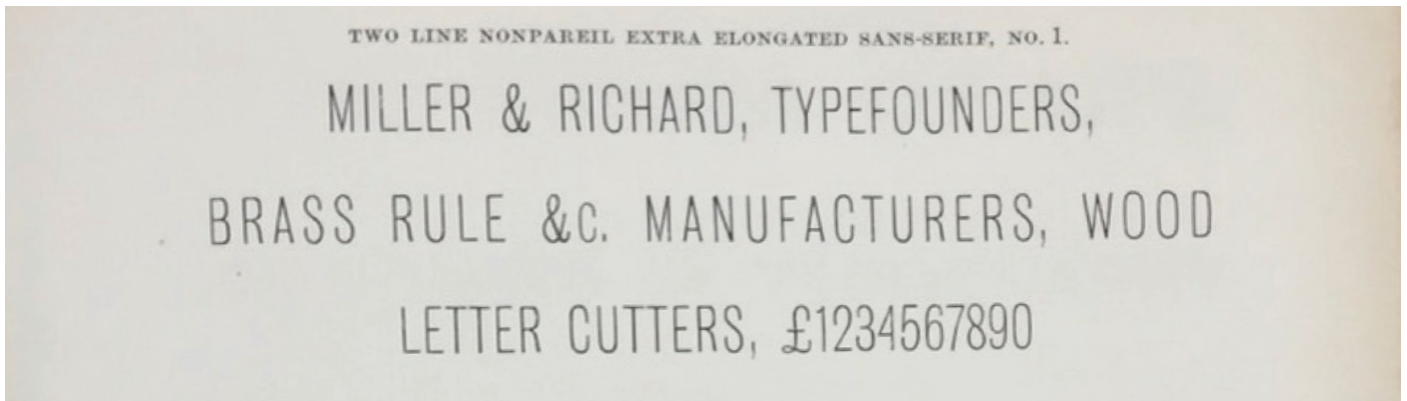
Figure 2.5 Example of a 'Light' sans serif. Two Line Nonpareil Extra Elongated Sans-Serif, No. 1, Miller and Richard, 1865. SBL.

NONPAREIL GROTESQUE, No. 2 7/6

BLAKE & STEPHENSON, SHEFFIELD

MDCCCXXXV

TWELVE SELECT EXAMPLES

OF THE BEST ARCHITECTURE OF THE

MIDDLE AGES IN ENGLAND

FROM THE DRAWINGS MADE ON THE SPOT

BY CHARLES WYLDE, ESQUIRE

ETCHED, AQUA-TINTED, AND COLORED

TEN GUINEAS THE PORTFOLIO
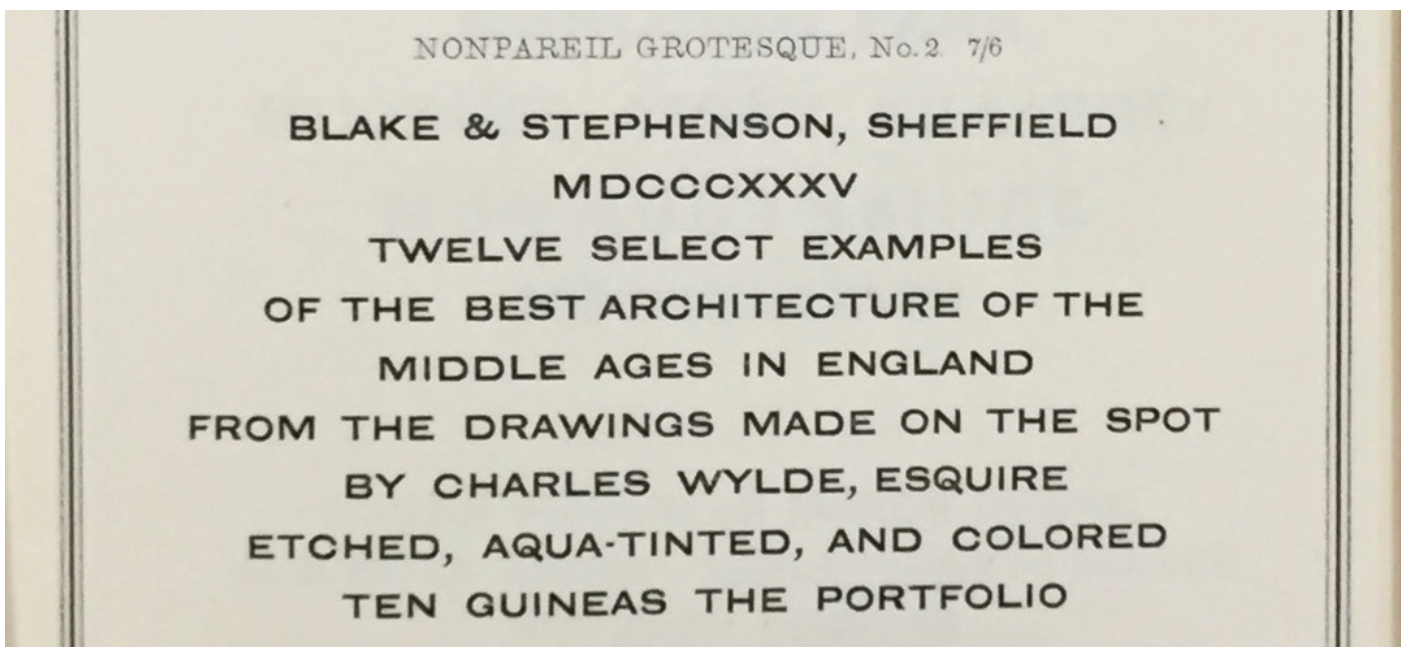
Figure 2.6 Example of a 'Wide' sans serif. Nonpareil Grotesque, No. 2, Blake & Stephenson, 1838. SBL.

PRINTING BY MACHINERY

Merry Andrew's Popular Champagne Tumblers

Special use of Henpeck'd Husbands

£ 1234567890 $\frac{1}{4}\frac{1}{2}\frac{3}{4}$
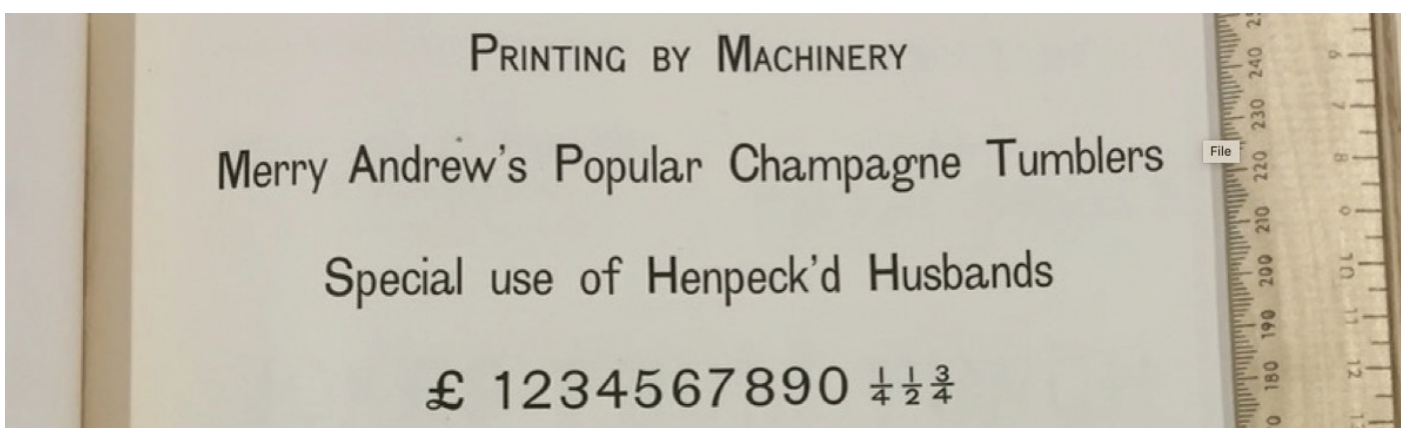
Figure 2.7 Example of a 'Mixed' sans serif. Two-Line English New Style Gothic, J. & R. M. Wood (Austin Letter Foundry), 1870. SBL.

case 'a', while the 'Geometric' used a single-story design, (Figure 2.10).

  The 'Octagonal' sans serifs showed a special attribute of oblique curves, with geometric proportions and variable stroke contrast. The jaw aperture was close-set, with horizontal terminals. The leg of the 'R' was oblique and the spur on the 'G' was variable, (Figure 2.11). 'Open' sans serifs were outlined and 'Ornamented' were decorated designs, (Figure 2.12 and 2.13). Both classes used variable designs in their proportions, stroke contrast, terminals and the leg of the 'R'. The 'Open' showed a spurred 'G' and the 'Ornamented' was variable. The proportions of the 'Rounded' Grotesques used squared curves with rounded terminals, (Figure 2.14). 'Shadowed' sans serifs had 3D designs that give the illusion of depth or perspective, (Figure 2.15). The 'Octagonal', 'Open', 'Ornamented', 'Rounded', and 'Shadowed' all showed a close set jaw aperture, and examples of a two-story lower-case 'a'. The 'Special' category presented variable designs for the jaw aperture and the lower-case 'a', (Figure 2.16).

SMALL PICA TWO LINE GROTESQUE, No. 4.

MODERN DESIGN
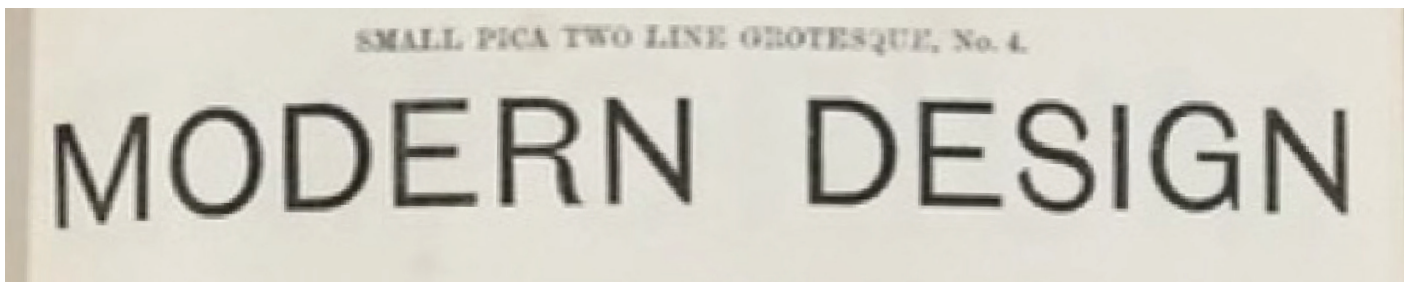
Figure 2.8 Example of an early 'Neo-grotesque' sans serif. Small Pica Two Line Grotesque, No. 4, Stephenson, Blake, & Co., 1868. SBL.

read
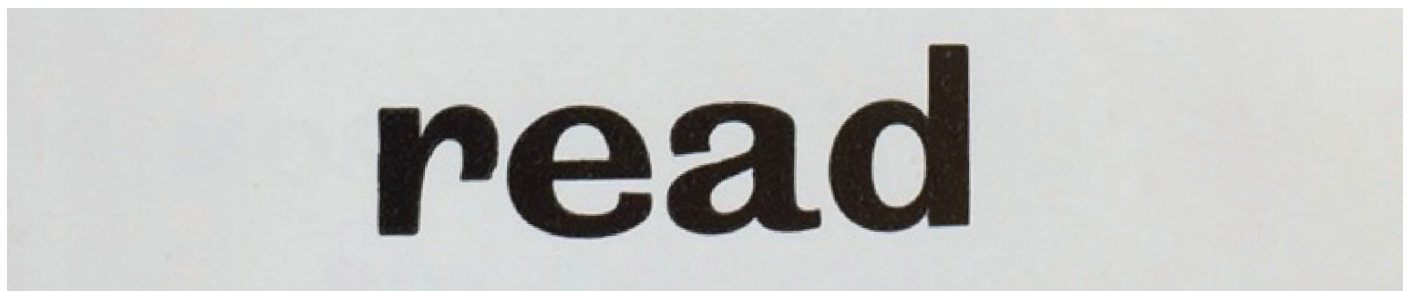
Figure 2.9 Example of an early 'Humanist' sans serif. Grotesque 60-Point, Birmingham Printers Ltd., 1914. SBL.

Bold Race

Figure 2.10 Example of an early italic 'Geometric' sans serif. Eight Line Pica Grotesque, No. 4, Italic, Miller and Richard, 1895. SBL.

ROBERSON AND CHAMPION'S

CRICKET MATCHES FOR LIGHTING PRINTERS' CIGARS

£ 1234567890 ¼ ½ ¾

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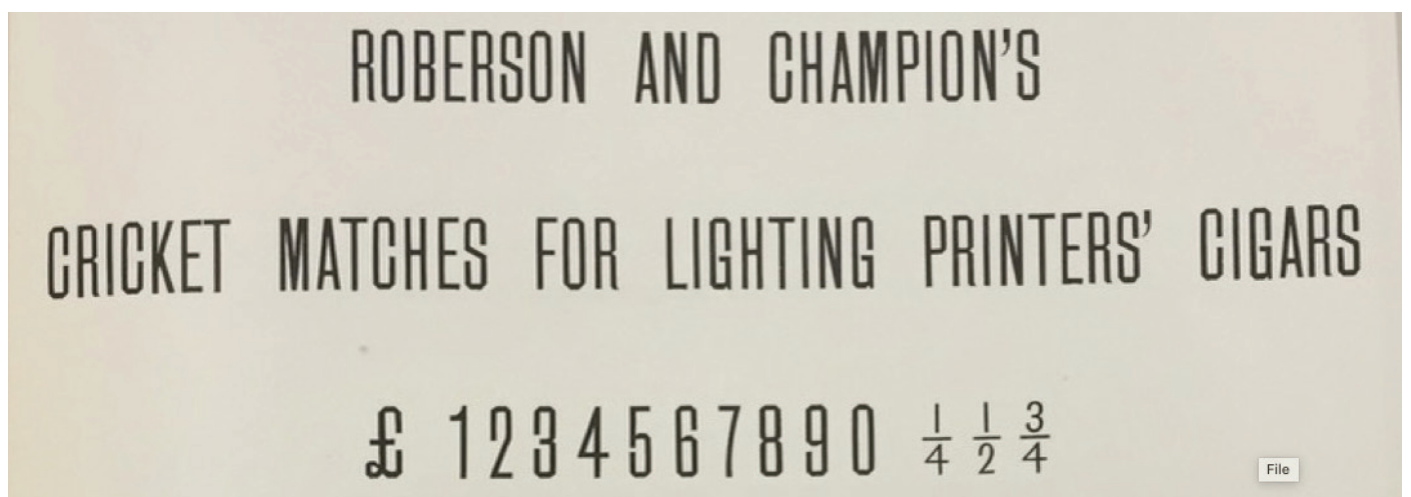
Figure 2.11 Example of an 'Octagonal' sans serif. Two-Line Great Primer Octagon Sanseriff, J. & R. M. Wood (Austin Letter Foundry), 1870. SBL.

PICA TWO-LINE OPEN SANS-SURRYPHS.

EASTERN COUNTIES RAILWAY.
METEOROLOGICAL OBSERVATIONS.
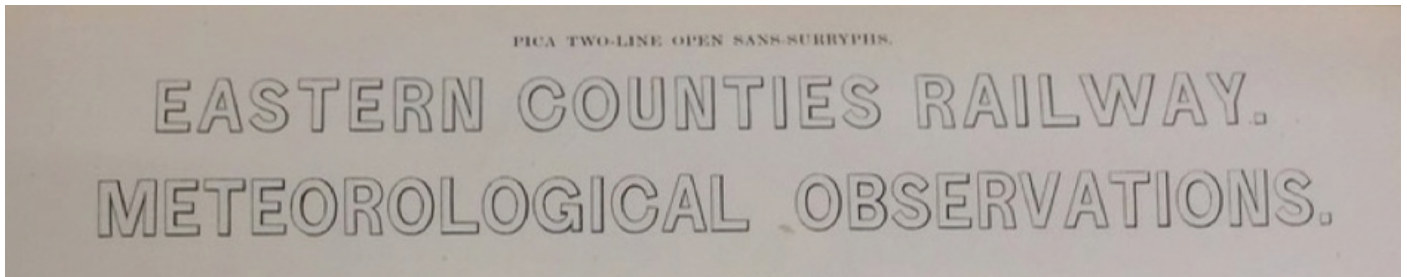
Figure 2.12 Example of an 'Open' sans serif. Pica Two-Line Open Sans-Surryphs, Stephenson, Blake, & Co., 1856. CBL.

Figure 2.13 Example of an 'Ornamented' sans serif. Ten Lines Sans-Surryphs Ornamented, Blake & Stephenson, 1839. SBL.
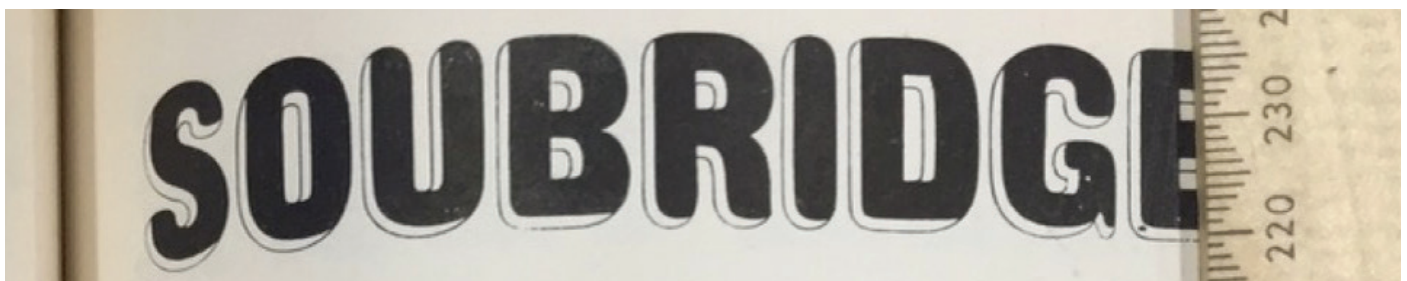
Figure 2.14 Example of a 'Rounded' sans serif. Four-LIne Rounded Open, H. W. Caslon & Co., 1870. SBL.
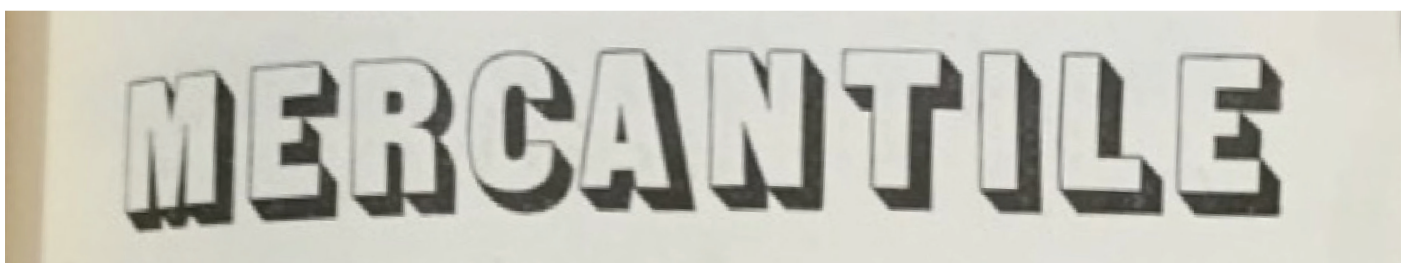
Figure 2.15 Example of a 'Shadowed' sans serif. Great Primer Two Line Sans Surryphs Shaded, Stephenson, Blake, & Co., 1868. SBL.

Figure 2.16 Example of a 'Special' sans serif. Fourteen-Line Athenian, J. & R. M. Wood (Austin Letter Foundry), 1865. Private Collection.

Table 2.11 'Classical' sans serif founts recorded in the Type Specimens sample ordered by date.

Year	Printing Types	Type Foundry	Point Size
1819	Two Lines English Egyptian	Blake, Garnett, & Co.	28
1832	Two Line Pearl, Sans-Serif	Vincent Figgins	10
1832	Two-Line Great Primer Sans-Serif	Vincent Figgins	36
1833	Two Lines Nonpareil Sans-Surryph	Blake & Stephenson	12
1834	Brevier Grotesque Shaded	W. Thorowgood and Co.	8
1836	Two Lines Nonpariel Sans-Surryph	Blake & Stephenson	12
1838	Nonpareil Grotesque, No. 1	Blake & Stephenson	6
1838	Brevier Open Sans-Surryphs	Blake & Stephenson	8
1838	Brevier Grotesque	Blake & Stephenson	8
1838	Pearl Two-Line Grotesque	Blake & Stephenson	10
1838	Pearl Two-Line Open Sans-Surryphs	Blake & Stephenson	10
1838	Nonpareil Two-Line Open Sans-Surryphs	Blake & Stephenson	12
1838	Nonpareil Two-Line Condensed Sans-Surryphs	Blake & Stephenson	12
1838	Nonpareil Two-Line Grotesque	Blake & Stephenson	12
1838	English Two Line Sans-Surryphs	Blake & Stephenson	28
1839	Pearl, Sans-Serif	Vincent Figgins	5
1839	Nonpareil Open Sans-Surryphs	Blake & Stephenson	6
1839	Nonpareil Grotesque, No. 1	Blake & Stephenson	6
1839	Nonpareil Sans-Serif, No. 1	Vincent Figgins	6
1839	Nonpareil Sans-Serif, No. 2	Vincent Figgins	6
1839	Nonpareil Sans-Serif Open	Vincent Figgins	6
1839	Brevier Open Sans-Surryphs	Blake & Stephenson	8
1839	Brevier Grotesque	Blake & Stephenson	8
1839	Brevier Sans-Serif	Vincent Figgins	8
1839	Brevier Sans-Serif, Open	Vincent Figgins	8
1839	Pearl Two-Line Grotesque	Blake & Stephenson	10
1839	Pearl Two-Line Open Sans-Surryphs	Blake & Stephenson	10
1839	Two-Line Pearl, Sans-Serif	Vincent Figgins	10
1839	Nonpareil Two-Line Open Sans-Surryphs	Blake & Stephenson	12
1839	Nonpareil Two-Line Grotesque	Blake & Stephenson	12
1839	Nonpareil Two Line Sans Surryphs	Blake & Stephenson	12
1839	Two-Line Nonpareil, Sans-Serif	Vincent Figgins	12
1839	Two-Line Nonpareil, Sans-Serif, Open	Vincent Figgins	12
1839	English Two Line Sans Surryphs	Blake & Stephenson	28
1853	Nonpareil Grotesque Outline	S. & T. Sharwood (Austin Letter Foundry)	6
1853	Brevier Gothic	S. & T. Sharwood (Austin Letter Foundry)	8
1853	Two Line Pearl Grotesque	S. & T. Sharwood (Austin Letter Foundry)	10
1856	Diamond Grotesque, No. 3, on Nonpareil Body	Stephenson, Blake, & Co.	4.5
1856	Pearl Grotesque, No. 1, on Nonpareil Body	Stephenson, Blake, & Co.	5
1856	Pearl Grotesque, No. 3, on Nonpareil Body	Stephenson, Blake, & Co.	5
1856	Nonpareil Grotesque, No. 3	Stephenson, Blake, & Co.	6

1856	Brevier Grotesque, No. 1	Stephenson, Blake, & Co.	8
1856	Brevier Grotesque, No. 3	Stephenson, Blake, & Co.	8
1856	Pearl Two-Line Grotesque, No. 2	Stephenson, Blake, & Co.	10
1856	Pearl Two-Line Grotesque, No. 1	Stephenson, Blake, & Co.	10
1856	Pearl Two-Line Grotesque, No. 3	Stephenson, Blake, & Co.	10
1856	Nonpareil Two-Line Grotesque, No. 3	Stephenson, Blake, & Co.	12
1856	Nonpareil Two-Line Grotesque, No. 1	Stephenson, Blake, & Co.	12
1856	Great Primer Grotesque, No. 3	Stephenson, Blake, & Co.	18
1866	Nonpareil Sans Serif, No. 2	James Marr & Co.	6
1866	Brevier Sans Serif, No. 2	James Marr & Co.	8
1866	Two Line Pearl Sans Serif, No. 2	James Marr & Co.	10
1866	Two Line Nonpareil Sans Serif, No. 2	James Marr & Co.	12
1866	Great Primer Sans Serif	James Marr & Co.	18
1868	Nonpareil Open Sans Surryphs	Stephenson, Blake, & Co.	6
1868	Brevier Open Sans-Surryphs	Stephenson, Blake, & Co.	8
1868	Pearl Two-Line Open Sans-Surryphs	Stephenson, Blake, & Co.	10
1868	Nonpareil Two-Line Open Sans-Surryphs	Stephenson, Blake, & Co.	12
1868	Minion Two-Line Sans Surryphs Shaded, No. 1	Stephenson, Blake, & Co.	14
1870	Pearl Doric, No. 2	H. W. Caslon & Co.	5
1870	Pearl Doric, No. 3	H. W. Caslon & Co.	5
1870	Nonpareil Doric, No. 2	H. W. Caslon & Co.	6
1870	Brevier Doric, No. 2	H. W. Caslon & Co.	8
1870	Bourgeois Shaded	H. W. Caslon & Co.	9
1870	Pearl 2-Line Doric, No. 2	H. W. Caslon & Co.	10
1870	Minion 2-Line Shaded	H. W. Caslon & Co.	14
1870	Bourgeois 2-Line Doric, No. 2	H. W. Caslon & Co.	18
1870	Pica 2-Line Doric, No. 2	H. W. Caslon & Co.	24
1870	Two-Line Great Primer Doric, No. 2	H. W. Caslon & Co.	36
1870	Five-Line Doric, No. 2	H. W. Caslon & Co.	60
1870	Four-Line Doric, No. 2	H. W. Caslon & Co.	60
1870	Six-Line Doric, No. 2	H. W. Caslon & Co.	72
1878	Brevier Open Sans-Surryphs	Stephenson, Blake, & Co.	8
1878	Pearl Two-Line Open Sans-Surryphs	Stephenson, Blake, & Co.	10
1878	Nonpareil Two-Line Open Sans-Surryphs	Stephenson, Blake, & Co.	12
1880	Long Primer Wide Sans Italic	John A. Hodges	10
1880	Pica Wide Sans Italic	John A. Hodges	12
1880	Two-Line Nonpareil Outline	John A. Hodges	12
1895	Diamond Grotesque, No. 9, on Nonpareil Body	Miller and Richard	4.5
1895	Pearl Grotesque, No. 9, on Nonpareil Body	Miller and Richard	5
1895	Nonpareil Grotesque, No. 9	Miller and Richard	6
1909	6-Point Doric, no. 1, Sm. Caps	H. W. Caslon & Company, Limited	6
1909	6-Point Doric, no. 2	H. W. Caslon & Company, Limited	6
1909	6-Point Doric, no. 2a	H. W. Caslon & Company, Limited	6
1909	6-Point Doric, no. 2b	H. W. Caslon & Company, Limited	6

1909	8-Point Doric, no. 1	H. W. Caslon & Company, Limited	8
1909	8-Point Doric, no. 2	H. W. Caslon & Company, Limited	8
1909	10-Point Doric, no. 1	H. W. Caslon & Company, Limited	10
1909	10-Point Doric, no. 2	H. W. Caslon & Company, Limited	10
1909	12-Point Doric, no. 1	H. W. Caslon & Company, Limited	12
1909	12-Point Doric, no. 2	H. W. Caslon & Company, Limited	12
1909	14-Point Doric, no. 1	H. W. Caslon & Company, Limited	14
1909	18-Point Doric, no. 1	H. W. Caslon & Company, Limited	18
1909	18-Point Doric, no. 2	H. W. Caslon & Company, Limited	18
1909	24-Point Doric, No. 6	H. W. Caslon & Company, Limited	24
1909	24-Point Doric, No. 2	H. W. Caslon & Company, Limited	24
1909	36-Point Doric, No. 2	H. W. Caslon & Company, Limited	36
1909	48-Point Doric, No. 2	H. W. Caslon & Company, Limited	48
1909	60-Point Doric, No. 2	H. W. Caslon & Company, Limited	60

Appendix 3: Jobbing Printers of the Midlands

The following Tables and Figures show supporting material concerning jobbing printers from the Midlands.

Table 3.1 Midlands Counties and Towns as catagorised in the British Book Trade Index (BBTI).

Derbyshire	Herefordshire	Leicestershire	Linconshire	Northamptonshire	Nottinghamshire
Alfreton	Bromyard	Ashby-de-la-Zouch	Alford	Brackley	East Retford
Ashbourne	Hemel Hempstead	Leicester	Bartonup on Humber	Daventry	Mansfield
Ashover	Hereford	MeltonMowbray	Boston	Kettering	Newark
Bakewell	Kington		Bourne	Northampton	Nottingham
Baslow	Ledbury		Brigg	Oundle	Retford
Belper	Leominster		Caistor	Peterborough	Worksop
Buxton	Mortimers Cross		Coningsby	Thrapston	
Chapel en le Frith	Ross		Crowland	Towcester	
Chesterfield			Donington	Wellingborough	
Cromford			Epworth		
Derby			Folkingham		
Duffield			Gainsborough		
Glossop			Grantham		
Ilkeston			Grimsby		
Makeney			Holbeach		
Matlock			Horncastle		
Melbourne			Kirton in Lindsey		
NewMills			Laceby		
Tissington			Lincoln		
Wirksworth			Long Sutton		
			Louth		
			Market Deeping		
			Market Rasen		
			Sleaford		
			Spalding		
			Spilsby		
			Stamford		
			Wainfleet		

Ruttland	Shropshire	Staffordshire	Warwickshire	Worcestershire	
Oakham	Bishops Castle	Bemersley	Alcester	Bewdley	
Uppingham	Bridgnorth	Bilston	Atherstone	Broadway	
	Broseley	Blithfield	Beaudesert	Bromsgrove	
	Dawley	BrierleyHill	Bedworth	Droitwich	
	Drayton	Burslem	Birmingham	Dudley	
	Ellesmere	Burton-up-on-Trent	Coleshill	Evesham	
	Halesowen	Cheadle	Coundon	Great Malvern	
	Ironbridge	Cobridge	Coventry	Halesowen	
	Ludlow	Compton	Henley-in-Arden	Kidderminster	
	Madeley	Darlaston	Kenilworth	Malvern Link	
	Market Drayton	Eccleshall	Kingsbury	Oldbury	
	Much Wenlock	Hanley	Leamington	Pershore	
	Newport	LaneEnd	Nuneaton	Redditch	
	Oswestry	Leek	Rugby	Shipston on Stour	
	Shifnal	Lichfield	Solihull	Stourbridge	
	Shrewsbury	Longnor	Southam	Stourport	
	Wellington	Longport	StratfordonAvon	Tenbury	
	Wem	Newcastle under Lyme	Warwick	Worcester	
	Wenlock	Rugeley	Whitnash		
	Whitchurch	Shelton			
		Stafford			
		Stoke upon Trent			
		Stone			
		Tamworth			
		Tettenhall			
		Tipton			
		Tunstall			
		Tutbury			
		Uttoxeter			
		Walsall			
		Wednesbury			
		WestBromwich			
		Willenhall			
		Wolverhampton			
		Wordesley			

Table 3.2 Ratio of Printers in the Midlands to the Average Population 1821-51.

County	1821	1831	1841	1851	Population	Printers	Ratio
Warwickshire	284,097	346,297	409,138	479,979	379,878	889	1:427
Herefordshire	87,643	94,452	96,515	99,112	94,431	103	1:917
Leicestershire	178,384	200,610	220,304	234,938	208,559	193	1:1081
Lincolnshire	233,628	311,903	256,226	400,266	300,506	272	1:1105
Worcestershire	174,708	203,476	230,387	258,762	216,833	195	1:1112
Staffordshire	361,859	425,140	528,867	630,506	486,593	405	1:1201
Derbyshire	186,449	208,841	239,791	260,707	223,947	175	1:1280
Shropshire	215,058	230,990	241,685	245,019	233,188	181	1:1288
Rutlandshire	20,435	21,363	23,151	24,272	22,305	9	1:2478
Nottinghamshire	203,939	243,875	270,731	294,438	253,246	86	1:2945
Northamptonshire	160,933	177,946	199,208	213,784	187,968	41	1:4585

Table 3.3 Bridgnorth Printers [1816-1852] as listed in the BBTI.

PRINTER	TRADE DATES
GITTON, George	1771 - 1825
PARTRIDGE, Benjamin	c.1806 - 1828
GITTON, Robert (George Robert)	1821 - 1851
GITTON, Catherine	1827 - 1834
PARTRIDGE, Charlotte	1834 - 1851
GITTON & SMITH	1834 (before) - 1834
GITTAN, George Robert	1838 (before) - 1838
SMITH, William	1839 - 1844
EDKINS & SON	1839 - 1850
GITTON, George Robert	1844 - 1851
ROWLEY, William J	1850 - 1851

Table 3.4 Warwickshire Towns [1816-1852] listed in the BBTI matched to Districts.

Town in BBTI	Parish, Township or Place	Hundred
Alcester	Parish	Barlichway Hundred (Alcester Division)
Atherstone	Township	Helmlingford Hundred (Atherstone Division)
Beaudesert	Parish	Barlichway Hundred (Henley Division)
Bedworth	Parish	Knightlow Hundred (Kirby Division)
Birmingham	Parish	Helmlingford Hundred (Birmingham Division)
Coleshill	Parish	Helmlingford Hundred (Birmingham Division)
Coundon	Hamlet	Knightlow Hundred (Kirby Division)
Coventry	City	Coventry City
Henley-in-Arden	Chapelry	Barlichway Hundred (Henley Division)
Kenilworth	Parish	Knightlow Hundred (Kenilworth Division)
Kingsbury	Parish	Hemlingford Hundred (Tamworth Division)
Leamington	Parish	Knightlow Hundred (Kenilworth Division)
Rugby	Parish	Knightlow Hundred (Rugby Division)
Solihul	Parish	Helmlingford Hundred (Solihul Division)
Southam	Parish	Knightlow Hundred (Southam Division)
Stratford-on-Avon	Township	Barlichway Hundred (Stratford Division)
Warwick	Borough	Borough of Warwick
Whitnash	Parish	Knightlow Hundred (Kenilworth Division)

Table 3.5 Warwickshire Printers [1816-1852] listed in the BBTI per population.

Towns	M	F	FP	CP	Total	Pop. 1821	Pop. 1831	Pop. 1841	Pop. 1851	Average Population	Ratio
Alcester	12	4	1	1	18	2,229	2,405	2,399	2,378	2,353	1:131
Henley-in-Arden	8				8	1,249	1,214	1,223	1,143	1,207	1:151
Birmingham	568	11	33	83	695	85,416	110,914	138,215	173,878	127,106	1:183
Coundon	1				1	213	192	181	207	198	1:198
Beaudesert	1				1	209	199	205	213	207	1:207
Rugby	15	1	1	1	18	2,300	2,501	4,008	6,866	3,919	1:218
Leamington	36			3	39	2,183	6,209	12,864	15,724	9,245	1:237
Stratford-on-Avon	11	2	1		14	3,069	3,488	3,321	3,372	3,313	1:237
Whitnash				1	1	287	260	276	346	292	1:292
Warwick	25	2	1	1	29	8,235	9,109	9,775	10,973	9,523	1:328
Atherstone	8	1			9	3,434	3,870	3,743	3,819	3,717	1:413
Kenilworth	5				5	2,577	3,097	3,149	3,532	3,089	1:618
Coleshill	3				3	1,760	1,853	2,172	1,980	1,941	1:647
Coventry	39	1	2	2	44	21,242	27,070	30,781	36,208	28,825	1:655
Kingsbury	1				1	1,345	1,314	1,322	1,416	1,349	1:1349
Southam	1				1	1,161	1,256	1,670	1,711	1,450	1:1450
Solihul	1				1	2,817	2,878	3,401	3,277	3,093	1:3093
Bedworth	1				1	3,519	3,980	4,253	5,059	4,203	1:4203

Table 3.6 Borough of Birmingham [1816-1852].

Birmingham Borough	Parish, Township or Place	1821	1831	1841	1851
Birmingham	Parish	85,416	110,914		
Ladywood	Part of the Parish of Birmingham			12,325	20,173
St. Thomas	" " " " " "			18,237	26,445
St. Martin	" " " " " "			16,858	21,586
St. Peter	" " " " " "			14,166	14,365
St. Phillip	" " " " " "			12,197	11,087
St. Paul	" " " " " "			11,641	11,783
St. Mary	" " " " " "			17,679	19,684
St.George	" " " " " "			24,974	35,240
All Saints	" " " " " "			10,138	13,588
Aston	Parish	19,189	32,118		
Deritend and Bordesley	Hamlet - part of Parish of Aston			18,019	23,173
Duddeston-cum-Nechells	" " " " " "			20,079	26,448
Edgbaston	Parish	2,117	3,954	6,609	9,269
Total		106,722	146,986	182,922	232,841

Table 3.7 Shropshire Towns [1816-1852] listed in the BBTI matched to Districts.

Town in BBTI	Parish, Township or Place	Hundred
Bishops Castle	Borough	Purslow (Bishops Castle Division)
Bridgnorth	Borough	Bridgnorth Borough
Broseley	Parish	Wenlock Borough
Dawley	Parish	South Bradford (Wellington Division)
Ellesmere	Parish	Pimhill (Ellesmere Division)
Halesowen	Parish	Upper Halfshire
Ludlow	Parish	Ludlow Borough
Madeley	Parish	Wenlock Borough
Market Drayton	Parish	North Bradford (Drayton Division)
Much Wenlock	Parish	Wenlock Borough
Newport	Parish	South Bradford (Newport Division)
Oswestry	Parish	Oswestry (Upper Division) and Oswestry Borough
Shifnal	Parish	Brimstree (Shifnal Division)
Shrewsbury	Borough	Shrewsbury Borough
Wellington	Parish	South Bradford (Wellington Division)
Wem	Parish	North Bradford (Wem Division)
Whitchurch	Parish	North Bradford (Whitchurch Division)

Table 3.8 Shropshire Towns [1816-1852] listed in the BBTI matched to Districts.

Town	M	F	FP	CP	Total	Pop. 1821	Pop. 1831	Pop. 1841	Pop. 1851	Average Population	Ratio
Ludlow	15		1	1	17	4,820	5,253	5,064	4,691	4,957	1:292
Shrewsbury	60	4	1	4	69	19,854	21,297	21,518	23,104	21,443	1:311
Newport	6			1	7	2,343	2,745	2,497	2,906	2,623	1:375
Oswestry	18	1			19	7,523	8,581	8,843	8,796	8,436	1:444
Market Drayton	7			1	8	3,700	3,882	3,930	4,163	3,919	1:490
Bridgnorth	6	2	1	1	10	4,201	4,952	5,974	5,972	5,275	1:527
Much Wenlock	4				4	2,200	2,424	2,487	2,398	2,377	1:594
Shifnal	5	2			7	4,411	4,779	5,244	5,617	5,013	1:716
Madeley	9				9	5,379	5,822	7,368	8,525	6,774	1:753
Wem	5				5	3,608	3,973	4,119	3,747	3,862	1:772
Bishops Castle	2				2	1,616	1,729	1,510	1,699	1,639	1:819
Wellington	10		1		11	8,390	9,671	11,124	11,554	10,185	1:926
Whitchurch	5				5	5,376	5,736	6,282	5,976	5,843	1:1169
Halesowen	2				2	2,681	3,187	4,988	6,297	4,288	1:2144
Broseley	3				3	4,814	4,299	4,829	4,739	4,670	1:1557
Ellesmere	2				2	6,056	6,540	6,602	6,534	6,433	1:3217
Dawley	1				1	5,147	6,877	8,641	9,201	7,467	1:7467

KEY: M Male, F Female, FP Family Partnership, CP Company Partnership

Table 3.9 Printers in Birmingham and Bridgnorth by Census Year.

Place	Census	M	F	FP	CP	Total	Population	Ratio
Birmingham	1821	131	4	7	14	156	85,416	1:548
	1831	264	4	10	31	309	110,914	1:359
	1841	318	6	16	32	372	138,215	1:372
	1851	299	2	20	26	347	173,878	1:501
	Average	**568**	**11**	**33**	**83**	**695**	**127,106**	**1:183**
Bridgnorth	1821	3				3	4,201	1:1400
	1831	3	2			5	4,952	1:990
	1841	2		1	1	4	5,974	1:1494
	1851	3			1	4	5,972	1:1493
	Average	**6**	**2**	**1**	**1**	**10**	**5,275**	**1:527**

Table 3.10 Shropshire Printers 1816–1916 from BBTI.

Printer	Trade Dates	Place	Book Trades
ANDERSON, Charles	1834 (before) - 1834	Ludlow	Bookseller, Stationer, Printer
ANDERSON, Samuel	1827 - 1834	Ludlow	Bookseller, Printer, Stationer
BAUGH, Edward	1851 - 1851	Ellesmere	Bookseller, Printer, Bookbinder, Stationer
BAUGH, William	1792 - 1850	Ellesmere	Bookseller, Printer, Stationer, Bookbinder, Music seller, Librarian/owner of circulating library (circulating)
BAYLEY, Charles George	1850 - 1851	Oswestry	Bookseller, Stationer, Printer
BEACALL, Ann & Eliza	1851 - 1851	Shrewsbury	Bookseller, Printer, Bookbinder, Stationer
BEDDOW, Barnabas Leman	1844 - 1851	Shifnal	Bookseller, Stationer, Bookbinder, Printer, Newsagent/vendor/man/news agent
BELL, James	1827 - 1827	Shrewsbury	Printer, Bookseller, Stationer, Bookbinder, Machine-ruler
BENNION, S	1850 ? - 1850	Market Drayton	Printer
BENNION, Thomas Platt	1839 - 1851	Market Drayton	Bookseller, Bookbinder, Stationer, Printer, Librarian/owner of circulating library
BLUNT, William Smith	1834 - 1834	Wem	Bookseller, Printer, Stationer
BURLEY, Samuel	1827 - 1829	Market Drayton	Bookseller, Printer, Stationer
CADWALLADER, John	1844 - 1851	Shrewsbury	Printer, Stationer, Bookseller
CATHRALL, William	1821 - 1821	Oswestry	Printer, Bookseller, Stationer
CHILD, John	1844 - 1844	Broseley	Bookseller, Bookbinder, Stationer, Printer
COOPER, Ann	1844 - 1844	Shrewsbury	Printer, Printer (newspaper)
COWDELL, John	1851 - 1851	Oswestry	Bookseller, Bookbinder, Printer, Stationer
CRUMPTON, Joseph	1839 - 1851	Shrewsbury	Bookbinder, Printer, Stationer, Publisher, Bookseller
DAVIES, John	1834 - 1839	Shrewsbury	Bookseller, Printer, Stationer
DAVIES, John	1841 (before) - 1841	Shrewsbury	Printer
DAVIES, John	1844 - 1851	Shrewsbury	Librarian/owner of circulating library, Bookseller, Bookbinder, Stationer, Printer
DAVIES, John	1850 - 1851	Shrewsbury	Bookseller, Printer, Stationer
DAVIES, John	1844 - 1844	Whitchurch	Bookseller, Printer, Stationer
DAVIES, Richard	1820 ? - 1851	Shrewsbury	Bookbinder, Bookseller, Printer, Stationer
DEAVES, George	1850 - 1851	Shrewsbury	Bookseller, Printer, Stationer
DRAYTON, George	1844 - 1844	Shrewsbury	Printer
DRAYTON, George	1850 - 1851	Shrewsbury	Bookseller, Printer, Stationer
DUBBER, William Wilkes	1844 - 1850	Bishops Castle	Bookseller, Printer, Stationer
DYAS, Edward	1784 - 1836	Madeley	Printer, Engraver/etcher (wood)
EDDOWES & LEAKE, ---	1850 - 1851	Shrewsbury	Bookseller, Printer, Stationer
EDDOWES, John	1824 (date of freedom) - 1845	Shrewsbury	Bookseller, Printer

Printer	Trade Dates	Place	Book Trades
EDDOWES, John Edward	1834 (before) - 1839	Shrewsbury	Bookseller, Printer, Publisher, Stationer, Bookbinder, Publisher (newspaper)
EDDOWES, Martha	1850 - 1850	Shrewsbury	Printer (newspaper), Publisher (newspaper)
EDDOWES, W & J	1824 - 1833	Shrewsbury	Bookbinder, Bookseller, Printer, Stationer, Printer (newspaper), Publisher (newspaper)
EDDOWES, William I	1784 - 1833	Shrewsbury	Printer, Bookseller, Bookbinder
EDDOWES, William II	1810 - 1824	Shrewsbury	Printer (newspaper), Bookseller
EDGERLEY, Henry	1834 - 1851	Shrewsbury	Bookseller, Printer, Stationer, Paper merchant
EDKINS & SON, ---	1839 - 1850	Bridgnorth	Bookseller, Printer, Stationer
EDMONDS, Amos	1834 - 1834	Shifnal	Bookseller, Printer, Stationer
EDMONDS, Ann	1839 - 1850	Shifnal	Bookseller, Printer, Bookbinder, Stationer, Librarian/owner of circulating library, Newsagent/vendor/man/news agent, Music seller
EDMONDS, Daniel	1834 (before) - 1834	Shifnal	Bookseller, Printer, Stationer
EDMUNDS, Ann	1851 - 1851	Shifnal	Bookseller, Bookbinder, Printer, Stationer
EDWARDS, Edward	1850 - 1851	Shrewsbury	Bookbinder, Bookseller, Printer, Stationer, Lithographer
EDWARDS, Edward & John	1844 - 1844	Shrewsbury	Bookbinder, Printer
EDWARDS, Ellen (Elizabeth)	1812 - 1823	Oswestry	Bookseller, Printer, Stationer
EDWARDS, John	1844 - 1844	shrewsbury	Printer, Bookbinder
EDWARDS, Thomas	1823 - 1871	Oswestry	Printer, Bookseller, Stationer, Bookbinder
EVANS, Humphrey	1795 ? - 1829	Shrewsbury	Printer
EVANS, John	1850 - 1851	Ludlow	Bookseller, Stationer, Printer, Stationer (fancy), Music seller
FELTON, William	1793 - 1851	Ludlow	Printer, Bookseller, Stationer, Bookbinder
FRANCE, John	1827 - 1851	Shrewsbury	Printer, Bookseller, Stationer, Librarian/owner of circulating library
FRANKLIN, George	1850 - 1850	Wem	Bookseller, Printer, Stationer
FRANKLIN, George Benjamin	1834 (before) - 1839	Ludlow	Bookseller, Printer, Stationer, Auctioneer
FRANKLIN, George Benjamin	1834 (before) - 1839	Newport	Bookseller, Printer, Stationer, Auctioneer
FRANKLIN, George Benjamin	1844 (before) - 1847	Shrewsbury	Printer
FRANKLIN, George Benjamin	1818 - 1846	Wem	Bookseller, Printer, Stationer, Auctioneer, Machine-ruler, Bookbinder
FRANKLIN, Josiah	1851 - 1851	Wem	Bookseller, Bookbinder, Stationer, Printer
FRANKS, John	1850 - 1850	Shrewsbury	Printer (letter)
FURNIVAL, John	1844 - 1844	Drayton	Bookseller, Printer, Stationer
GITTAN, George Robert	1838 (before) - 1838	Bridgnorth	Printer
GITTON & SMITH, ---	1834 (before) - 1834	Bridgnorth	Bookseller, Printer, Stationer

Printer	Trade Dates	Place	Book Trades
GITTON, Catherine	1827 - 1834	Bridgnorth	Bookseller, Printer, Stationer
GITTON, George	1771 - 1825	Bridgnorth	Printer, Bookseller, Stationer, Newsagent/vendor/man/news agent
GITTON, George Robert	1844 - 1851	Bridgnorth	Printer
GITTON, Robert (George Robert)	1821 - 1834	Bridgnorth	Bookseller, Printer, Stationer
GOULD, William	1844 - 1844	Shrewsbury	Engraver/etcher, Printer (copperplate)
GREGORY, T	1824 (date from imprint) - 1873	Wem	Bookseller, Printer, Publisher
GRIFFITHS, Edward	1821 - 1851	Bishops Castle	Printer, Bookseller, Stationer, Auctioneer
GRIFFITHS, Thomas	1791 - 1851	Ludlow	Bookbinder, Printer, Bookseller, Stationer, Auctioneer
GRIFFITHS, Thomas jnr	1851 - 1851	Ludlow	Bookseller, Bookbinder, Printer, Stationer
HALBERT, Charles	1778 (after) - 1857	Shrewsbury	Bookseller, Bookbinder, Printer (copperplate), Printer, Auctioneer, Stationer, Publisher, Author
HARRISON, Samuel	1851 - 1851	Shrewsbury	Printer
HOBSON, Robert	1840 - 1988	Wellington	Bookseller, Stationer, Printer
HODSON & SON, Edward	1834 (before) - 1834	Ludlow	Bookbinder, Bookseller, Printer, Stationer
HODSON, Edward	1821 - 1834	Ludlow	Printer, Stationer, Librarian/owner of circulating library, Bookbinder, Bookseller
HOULSTON & SON, F	1804 - 1839	Wellington	Bookseller, Printer, Stationer, Publisher, Music seller, Publisher
HOULSTON, Edward II	1804 - 1840	Wellington	Bookseller, Printer
HOULSTON, Edward III	1825 ? - 1833	Wellington	Bookseller, Printer
HOULSTON, F	1822 (date from imprint) - 1835	Wellington	Publisher, Printer
HOULSTON, John	1844 - 1850	Wellington	Bookbinder, Bookseller, Librarian/owner of circulating library, Printer, Publisher, Stationer, Newsagent/vendor/man/news agent
HOWELL, Thomas	1816 - 1827	Shrewsbury	Publisher, Bookseller, Printer, Stationer
HULBERT, Charles	1815 (date from imprint) - 1854	Shrewsbury	Bookseller, Bookbinder, Printer (copperplate), Printer, Auctioneer, Stationer, Publisher
HULME, William Lang	1827 (before) - 1850	Shrewsbury	Bookseller, Printer, Stationer, Bookbinder
HUMPHREYS, Joseph	1851 - 1851	Shrewsbury	Bookseller, Bookbinder, Printer, Stationer
HUMPHRIES, George	1851 - 1851	Ludlow	Bookseller, Bookbinder, Stationer, Printer
JACKSON, Frederick	1834 - 1839	Shrewsbury	Printer (copperplate), Engraver/etcher
JACKSON, Frederick Rhames	1844 - 1844	Shrewsbury	Engraver/etcher, Printer (copperplate)
JARVIS, James	1850 - 1851	Oswestry	Bookseller, Stationer, Printer
JONES, Frederick Ashford	1839 - 1851	Shrewsbury	Printer
JONES, James Frederick	1845 (before) - 1845	Shrewsbury	Printer
JONES, Jasper	1839 - 1839	Shrewsbury	Printer, Stationer

Printer	Trade Dates	Place	Book Trades
JONES, John	1796 - 1835	Shrewsbury	Printer
JONES, Richard	1821 - 1851	Ludlow	Bookseller, Printer, Stationer, Librarian/owner of circulating library
JONES, Robert Barrow	1808 ? - 1851	Whitchurch	Bookseller, Printer, Bookbinder, Stationer, Librarian/owner of circulating library (circulating)
KEAY, James	1850 - 1851	Wellington	Bookseller, Bookbinder, Printer, Stationer
LAWLEY, Thomas	1834 - 1844	Much Wenlock	Bookseller, Printer, Stationer
LAWLEY, Thomas	1850 - 1850	Wenlock	Bookseller, Printer, Stationer
LEAKE, John Hasleham	1834 - 1851	Shrewsbury	Bookseller, Printer, Bookbinder, Stationer
LETSOM, Thomas	1844 - 1844	Oswestry	Bookseller, Stationer, Printer
LEWIS, David	1844 - 1844	Shrewsbury	Printer
LEWIS, David	1850 - 1851	Shrewsbury	Printer (letter)
LINDOP, Ralph	1844 - 1844	Broseley	Bookseller, Bookbinder, Stationer, Printer
LITTLEDALE, George	1844 - 1844	Shrewsbury	Engraver/etcher, Printer (copperplate)
LITTLEHALES, George	1851 - 1851	Shrewsbury	Printer (copperplate), Engraver/etcher
MATTHEWS, John	1839 - 1839	Shrewsbury	Printer, Bookseller, Stationer
MINSHALL, Nathaniel	1809 - 1819	Oswestry	Bookseller, Printer, Stationer, Writer, Author
MINSHALL, Richard	1834 (before) - 1835	Oswestry	Printer, Bookbinder
MINSHULL, J	1827 - 1827	Oswestry	Bookbinder, Bookseller, Printer, Stationer
MORRIS, William	1789 - 1825	Shrewsbury	Bookbinder, Stationer, Stationer (law), Printer, Printer (copperplate), Bookseller, Publisher
MUNDAY, Thomas	1839 - 1851	Madeley	Bookseller, Bookbinder, Stationer, Printer
NEVETT, Enoch	1839 - 1850	Broseley	Bookseller, Bookbinder, Printer, Stationer
NEWLING, Henry	1827 - 1851	Whitchurch	Bookseller, Printer, Stationer, Bookbinder, Newsroom/readingroom, Print seller
NEWLING, Thomas	1800 - 1827	Shrewsbury	Printer, Bookseller, Stationer
OUSLEY, Thomas John	1850 - 1850	Shrewsbury	Printer (newspaper), Publisher (newspaper)
PARKER, R	1811 - 1830	Whitchurch	Printer, Stationer
PARTRIDGE, Benjamin	1806 ? - 1828	Bridgnorth	Bookseller, Printer, Stationer, Bookbinder
PARTRIDGE, Charlotte	1834 - 1851	Bridgnorth	Bookseller, Printer, Stationer
PARTRIDGE, Edward John	1839 - 1851	Ludlow	Engraver/etcher, Printer, Bookseller, Stationer, Account-book manufacturer/maker
PRICE & SHAW, ---	1844 - 1844	Newport	Bookseller, Printer, Stationer
PRICE, William	1810 - 1847	Oswestry	Bookseller, Printer, Stationer, Librarian/owner of circulating library, Print seller, Bookbinder, Publisher
PRICE, William	1850 - 1851	Oswestry	Bookseller, Stationer, Printer, Music seller, Librarian/owner of circulating library
PROCTER & JONES, ---	1821 - 1833	Ludlow	Bookseller, Printer, Stationer

Printer	Trade Dates	Place	Book Trades
PROCTER, Henry	1792 - 1833	Ludlow	Printer, Bookseller, Stationer, Publisher
PROCTER, John	1834 - 1834	Market Drayton	Bookseller, Stationer, Printer
PROCTOR, David	1813 - 1821	Market Drayton	Printer
RICHARDS, George	1821 - 1847	Shrewsbury	Printer (journeyman)
ROBERTS, John Askew	1851 - 1851	Oswestry	Bookseller, Bookbinder, Printer, Stationer, Librarian/owner of circulating library (circulating)
ROBERTS, Samuel	1821 - 1844	Oswestry	Bookseller, Printer, Stationer, Bookbinder
ROBERTS, Samuel	1850 - 1851	Oswestry	Bookseller, Stationer, Printer, Publisher
ROBINSON, Henry Peach	1844 - 1849	Ludlow	Bookseller, Stationer, Printer
RODEN, Samuel	1827 - 1827	Wellington	Bookseller, Printer, Stationer
ROWLEY, William J	1850 - 1850	Bridgnorth	Bookseller, Stationer, Printer
ROWLEY, William Jepson	1851 - 1851	Bridgnorth	Bookbinder, Bookseller, Printer, Stationer
SALT, Samuel	1845 - 1850	Halesowen	Bookbinder, Bookseller, Stationer, Printer (letter)
SALTER, Jackson	1788 - 1840	Oswestry	Printer, Bookseller, Stationer, Bookbinder, Librarian/owner of circulating library
SALTER, Jackson	1844 - 1844	Oswestry	Bookseller, Stationer, Printer
SALTER, Jackson	1850 - 1851	Oswestry	Bookseller, Printer, Stationer
SALTER, Jackson II	1838 ? - 1886	Oswestry	Printer
SANDFORD & HOWELL, ---	1839 (before) - 1850	Shrewsbury	Stationer, Printer, Bookseller, Bookbinder, Lithographer
SANDFORD, James	1806 - 1846	Shrewsbury	Bookseller, Printer, Stationer, Bookbinder
SANDFORD, James Oakes	1851 - 1851	Shrewsbury	Bookseller, Bookbinder, Printer, Stationer
SCARROT, William	1821 - 1821	Shifnal	Printer, Bookseller, Stationer
SCARROTT, ---	1805 - 1825	Shifnal	Bookseller, Printer, Stationer
SHAW, Abraham Pierpoint	1850 - 1851	Newport	Bookseller, Printer, Stationer, Newsroom/readingroom, Librarian/owner of circulating library
SHEEN, Richard	1817 (before) - 1817	Shrewsbury	Printer (journeyman)
SILVESTER & LOCKETT, ---	1850 - 1851	Market Drayton	Bookseller, Printer, Stationer, Paper-hanging maker/dealer
SILVESTER, Charles	1850 - 1850	Newport	Bookseller, Printer
SILVESTER, Henry Price	1799 - 1851	Newport	Bookbinder, Bookseller, Printer, Stationer, Publisher
SILVESTER, Henry Price & Charles	1839 - 1851	Newport	Bookseller, Printer, Stationer, Music seller, Account-book manufacturer/maker
SILVESTER, Samuel	1821 - 1831	Market Drayton	Printer, Bookseller, Stationer
SLATER, John	1851 - 1851	Madeley	Bookseller, Bookbinder, Printer, Stationer
SLATER, Joseph	1850 - 1851	Dawley	Bookseller, Printer, Stationer
SLATER, Joseph	1850 - 1851	Ironbridge	Stationer, Bookseller, Printer

Printer	Trade Dates	Place	Book Trades
SMITH, Benjamin	1821 - 1851	Wellington	Bookseller, Printer, Stationer, Bookbinder
SMITH, George Mortimer	1850 (before) - 1850	Ironbridge	Bookseller, Printer, Stationer, Paper-hanging maker/dealer
SMITH, George Mortimer	1851 - 1851	Madeley	Bookseller, Bookbinder, Printer, Stationer
SMITH, George Mortimer	1850 - 1850	Wenlock	Bookseller, Printer, Stationer
SMITH, Samuel C	1851 - 1851	Madeley	Bookseller, Bookbinder, Printer, Stationer
SMITH, William	1839 - 1844	Bridgnorth	Bookseller, Printer, Stationer
SMITH, William	1806 ? - 1840	Ironbridge	Printer, Publisher, Bookbinder, Bookseller, Stationer, Paper-hanger
SMITH, William	1834 - 1834	Wenlock	Bookseller, Printer, Stationer
THOMPSON, Thomas	1834 - 1851	Ellesmere	Bookseller, Printer, Stationer, Bookbinder, Newsagent/vendor/man/news agent
TIBMAN, William	1850 - 1850	Shrewsbury	Bookbinder, Bookseller, Stationer, Printer
TIBNAM & CO, ---	1826 - 1827	Shrewsbury	Bookbinder, Bookseller, Printer, Stationer, Machine-ruler
TIBNAM, ---	1827 - 1828	Shrewsbury	Bookbinder, Bookseller, Printer, Stationer, Machine-ruler
TIBNAM, William	1834 (before) - 1851	Shrewsbury	Bookseller, Printer, Stationer, Bookbinder
TONGE, William	1850 - 1850	Halesowen	Printer (letter)
WAIDSON, John	1839 - 1850	Shrewsbury	Printer, Publisher
WAIDSON, Mary	1821 - 1822	Shrewsbury	Printer
WALFORD, Joseph	1827 - 1844	Whitchurch	Bookseller, Printer, Stationer, Bookbinder, Music seller
WALTERS, Samuel Elliott	1815 ? - 1844	Madeley	Bookbinder, Bookseller, Printer, Stationer, Auctioneer
WALTON, John	1851 - 1851	Shrewsbury	Bookseller, Bookbinder, Printer, Stationer
WARDLE, William	1844 - 1851	Shrewsbury	Bookseller, Bookbinder, Stationer, Printer (letter)
WARWICK, William	1839 - 1839	Shrewsbury	Engraver/etcher, Printer
WATTON, John	1814 - 1821	Shrewsbury	Printer, Publisher, Bookseller, Stationer
WATTON, John	1826 - 1844	Shrewsbury	Bookseller, Printer, Stationer, Publisher (newspaper), Newsroom/readingroom, Printer (newspaper), Bookbinder
WATTON, John & Sons	1850 - 1850	Shrewsbury	Bookseller, Stationer, Printer, Newsroom/readingroom
WEBB, Henry	1827 - 1834	Wellington	Bookseller, Printer, Stationer
WHITE, Alexander Dow	1834 - 1848	Ludlow	Bookseller, Printer, Stationer
WHITNEY, James D	1851 - 1851	Shrewsbury	Bookseller, Bookbinder, Printer, Stationer
WILDE, Peter	1839 - 1851	Shrewsbury	Printer, Bookseller, Bookbinder, Stationer
WILKES, John	1821 - 1821	Wellington	Bookseller, Printer, Stationer
WILSON, George	1790 ? - 1840	Shrewsbury	Printer

Table 3.11 Warwickshire Printers 1816–1916 from BBTI.

Printer	Trade Dates	Place	Book Trades
ABRAHALL, John	1841 (before) - 1849	Birmingham	Engraver/etcher, Printer (copperplate)
AIT, William Ironside	1842 - 1887	Rugby	Bookseller, Printer, Newspaper proprietor
ALLDAY, Joseph	1832 - 1861	Birmingham	Publisher, Printer, Stationer, Bookbinder
ALLEN & BRIDGEN, ---	1827 - 1829	Birmingham	Printer, Printer (copperplate), Stationer, Lithographer, Bookseller, Papermaker, Paper merchant
ALLEN & BRIDGEN, ---	1830 - 1830	Birmingham	Printer, Bookseller, Stationer
ALLEN & BRIDGEN, ---	1830 (before) - 1830	Birmingham	Printer, Printer (copperplate), Stationer, Lithographer, Bookseller
ALLEN & LYON, ---	1838 - 1843	Birmingham	Bookseller, Printer, Stationer, Paper merchant
ALLEN & SON, ---	1850 - 1850	Birmingham	Printer, Printer (copperplate), Stationer, Lithographer, Printer (letter)
ALLEN & SON, Josiah	1848 - 1848	Birmingham	Printer
ALLEN, Alfred	1841 - 1850	Birmingham	Printer, Printer (copperplate), Stationer, Lithographer, Engraver/etcher, Account-book manufacturer/maker
ALLEN, George	1841 (before) - 1841	Birmingham	Engraver/etcher, Printer (copperplate)
ALLEN, Joseph	1828 - 1850	Birmingham	Printer, Printer (copperplate), Publisher, Bookbinder, Engraver/etcher, Stationer, Bookseller, Printer, Paper merchant, Printer (letter), Account-book manufacturer/maker
ALLEN, Joseph	1830 - 1830	Birmingham	Publisher, Printer (copperplate), Engraver/etcher
ALLEN, Joseph	1850 - 1850	Birmingham	Printer (copperplate), Engraver/etcher
ALLEN, Josiah	1815 - 1881	Birmingham	Engraver/etcher, Printer (copperplate), Publisher, Bookseller, Printer, Stationer
ALLEN, Josiah, Jr	1845 - 1849	Birmingham	Printer
ALLEN, Michael	1850 (before) - 1850	Birmingham	Engraver/etcher, Printer (copperplate)
AMOS, Edwin	1850 (before) - 1850	Birmingham	Engraver/etcher, Printer (copperplate)
ANGELL, William Henry	1834 - 1834	Birmingham	Printer
APPLEBY, Benjamin	1817 - 1817	Stratford on Avon	Printer
ARNOLD, Francis	1827 - 1830	Birmingham	Printer (copperplate), Engraver/etcher
ASHLEY, ---	1846 (before) - 1849	Leamington	Printer
ASHWIN, Francis Henry	1838 - 1849	Birmingham	Stationer, Bookseller, Printer, Bookseller (periodical)
ASKEY, Charles	1827 - 1830	Birmingham	Engraver/etcher, Printer (copperplate)
ASTILL, Robert	1839 - 1860	Coventry	Printer, Stationer, Newsagent/vendor/man/news agent
ASTON, John	1815 (before) - 1817	Coventry	Printer
ASTON, Sampson	1832 - 1835	Birmingham	Printer
ATKINS, Thomas	1845 - 1845	Birmingham	Printer
AVERILL, John	1822 - 1830	Birmingham	Engraver/etcher, Printer (copperplate)
AYTON, John	1827 - 1829	Coventry	Bookseller, Stationer, Printer, Bookbinder, Librarian/owner of circulating library

Printer	Trade Dates	Place	Book Trades
BABINGTON, John	1850 (before) - 1850	Birmingham	Engraver/etcher, Printer (copperplate)
BABINGTON, William	1845 - 1849	Birmingham	Printer, Engraver/etcher
BABINGTON, William jr	1834 - 1834	Birmingham	Engraver/etcher, Printer
BACON, John	1827 - 1830	Stratford on Avon	Printer, Librarian/owner of circulating library, Bookseller
BACON, Thomas	1828 - 1829	Birmingham	Printer (copperplate), Engraver/etcher
BAILLIE, Alexander	1810 (before) - 1818	Kingsbury	Printer
BAKER & BRIGGS, ---	1821 - 1828	Birmingham	Printer
BAKER, Charles	1848 - 1850	Kenilworth	Bookseller, Printer
BAKER, Charles Thomas	1827 - 1827	Birmingham	Printer
BAKER, William	1846 - 1849	Birmingham	Printer (copperplate), Engraver/etcher, Printer, Stationer, Printer (ornamental)
BAKER, William Wilcock	1841 - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Engraver/etcher (copperplate), Stationer
BAKER, William Wilcox	1841 - 1850	Birmingham	Engraver/etcher, Engraver/etcher (copperplate), Printer (copperplate)
BALDWIN & VALE, ---	1830 - 1830	Birmingham	Printer (copperplate), Engraver/etcher, Printer, Paper merchant
BALDWIN, Benjamin	1838 - 1847	Birmingham	Engraver/etcher, Printer, Printer (copperplate)
BALDWIN, E	1846 - 1847	Birmingham	Printer, Paper merchant (wholesale)
BALDWIN, James	1830 (before) - 1850	Birmingham	Printer, Papermaker, Paper merchant, Printer (copperplate), Engraver/etcher, Paper merchant (wholesale), Pasteboard maker/dealer
BALL, Richard	1846 (before) - 1850	Birmingham	Engraver/etcher, Printer (copperplate)
BANGHAM, Walter	1841 (before) - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Printer, Paper merchant (wholesale), Stationer, Paper merchant, Stationer (wholesale), Account-book manufacturer/maker, Papermaker, Printer (letter)
BARACLOUGH, John	1800 - 1840	Nuneaton	Printer, Printer (copperplate), Music seller, Newsagent/vendor/man/news agent, Librarian/owner of circulating library, Bookseller, Stationer
BARACLOUGH, John	1840 - 1855	Nuneaton	Printer, Printer (copperplate), Printer (music), Newsagent/vendor/man/news agent, Bookseller, Bookbinder, Librarian/owner of circulating library, Stationer
BARLOW, Henry George	1834 - 1850	Birmingham	Engraver/etcher, Printer (copperplate)
BARLOW, John Chamberlain	1824 (before) - 1845	Birmingham	Printer, Bookseller, Stationer, Publisher, Printer (newspaper), Printer (copperplate), Printer (lithographic)
BARNACLE, William	1807 - 1845	Stratford on Avon	Printer, Auctioneer, Bookbinder, Newsagent/vendor/man/news agent, Printer (copperplate)
BARNARD, Richard	1784 - 1821	Birmingham	Printer, Printer (copperplate), Engraver/etcher
BARNES, Henry	1842 - 1842	Birmingham	Printer (copperplate), Engraver/etcher
BARNES, Samuel	1828 (before) - 1830	Birmingham	Printer (copperplate), Engraver/etcher
BARR, John	1814 - 1835	Birmingham	Printer (copperplate), Engraver/etcher (wood), Printer, Typographer/Letter-cutter
BARR, Solomon Temple	1835 - 1850	Birmingham	Engraver/etcher (wood), Printer (copperplate), Typographer/Letter-cutter, Printer (letter)

Printer	Trade Dates	Place	Book Trades
BARR, Solomon Templeton	1835 - 1850	Birmingham	Engraver/etcher, Printer
BARROW, William Henry	1825 - 1826	Birmingham	Printer
BARTLEET, John	1841 (before) - 1850	Birmingham	Printer (copperplate), Engraver/etcher
BARTON, John	1841 (before) - 1841	Birmingham	Engraver/etcher (wood), Printer (copperplate)
BATE & FAULKNER, ---	1841 (before) - 1843	Birmingham	Engraver/etcher, Printer (copperplate), Printer, Paper merchant
BATE, J A	1838 - 1839	Birmingham	Engraver/etcher, Printer
BATKIN & SON, ---	1802 - 1820	Birmingham	Printer (copperplate), Bookbinder
BATKIN, William	1784 - 1820	Birmingham	Printer (copperplate)
BAUGHAM, Walter	1838 - 1838	Birmingham	Engraver/etcher, Printer
BEACH, John	1846 - 1847	Birmingham	Printer (copperplate), Engraver/etcher
BEACH, Thomas	1822 - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Bookseller, Stationer, Printer, Librarian/owner of circulating library (subscription), Librarian/owner of circulating library (circulating)
BEAMISH, SMITH & CO, Josiah	1850 (before) - 1850	Coventry	Bookseller, Music seller, Stationer, Printer, Printer (newspaper), Publisher
BEARSLEY, George jr	1849 (before) - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Printer
BECK, John	1836 - 1859	Leamington	Printer, Bookseller, Stationer, Librarian/owner of circulating library, Newspaper proprietor, Publisher, Bookbinder, Newsagent/vendor/man/news agent, Printer (copperplate), Printer (letter), Account-book manufacturer/maker, Machine-ruler
BEECH, Thomas	1822 - 1850	Birmingham	Stationer, Printer, Engraver/etcher
BEILBY, James Henry	1827 - 1865	Birmingham	Bookseller, Stationer, Map/chart seller, Printer, Printer (newspaper), Paper merchant, Papermaker, Publisher (maps), Bookbinder, Publisher, Stationer (law), Account-book manufacturer/maker
BEILBY, KNOTT & BEILBY, ---	1824 - 1834	Birmingham	Bookseller, Printer, Stationer, Bookbinder
BEILBY, Thomas	1812 - 1839	Birmingham	Printer, Printer (newspaper), Bookseller, Paper merchant, Papermaker, Bookbinder
BELCHER & SON, James	1805 ? - 1849	Birmingham	Printer, Bookseller, Librarian/owner of circulating library, Bookbinder, Stationer, Printer (copperplate)
BELCHER, James II	1805 - 1849	Birmingham	Printer, Bookseller, Librarian/owner of circulating library, Bookbinder, Stationer
BELL, James	1830 - 1855	Birmingham	Bookseller, Stationer, Printer, Printer (letter), Music seller, Account-book manufacturer/maker
BELL, Richard	1845 - 1847	Birmingham	Printer, Printer (copperplate), Engraver/etcher
BENNETT, Edward	1838 - 1839	Birmingham	Printer (copperplate), Engraver/etcher
BENNETT, George Buffham	1832 - 1850	Birmingham	Printer, Newsagent/vendor/man/news agent, Stationer, Bookseller (periodical)
BENNETT, John B	1838 - 1839	Birmingham	Printer
BENSHAW, James	1849 - 1849	Birmingham	Printer (copperplate), Engraver/etcher
BENSON & CO, ---	1820 - 1829	Birmingham	Papermaker (wholesale), Paper merchant (wholesale), Stationer (wholesale), Printer, Printer (copperplate), Engraver/etcher, Bookseller, Stationer

Printer	Trade Dates	Place	Book Trades
BENSON & STANSBIE, ---	1821 - 1827	Birmingham	Printer, Stationer, Paper merchant
BENSON, Hannah	1834 - 1834	Birmingham	Printer, Printer (copperplate), Stationer, Papermaker, Paper merchant
BENSON, John	1811 - 1850	Birmingham	Papermaker, Printer, Printer (copperplate), Bookseller, Stationer (wholesale), Engraver/etcher, Pasteboard maker/dealer, Stationer, Papermaker (coloured), Paper merchant, Papermaker (fancy), Papermaker (marbled), Paper marbler, Paper merchant (wholesale), Paper-stainer, Pasteboard maker/dealer
BENT, John Hardyman	1845 - 1847	Birmingham	
BETTISON, Samuel	1825 - 1842	Leamington	Bookseller, Stationer, Printer, Librarian/owner of circulating library, Music seller, Print seller
BETTS, James Henry	1838 - 1841	Birmingham	Engraver/etcher, Printer
BETTS, John Yeldham	1841 (before) - 1841	Coventry	Bookseller, Stationer, Printer
BEWLEY, Richard	1840 - 1840	Birmingham	Printer
BILLING, Martin	1841 (before) - 1883	Birmingham	Paper merchant (wholesale), Engraver/etcher, Printer (copperplate), Printer, Stationer, Lithographer, Account-book manufacturer/maker, Printer (ornamental), Stationer (wholesale), Printer (letter), Printer (lithographic), Paper merchant
BILLINGS, M	1851 - 1851	Birmingham	Printer (steam)
BILLINGTON, William	1836 - 1880	Rugby	Bookseller, Stationer, Printer, Librarian/owner of circulating library
BINNS, CLIFFORD & BINNS, ---	1835 - 1841	Birmingham	Lithographer, Printer (lithographic)
BISHOP, Benjamin	1832 - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Printer, Engraver/etcher (copperplate)
BISSELL, John	1837 - 1841	Stratford on Avon	Printer
BISSETT & CO, ---	1827 - 1829	Birmingham	Engraver/etcher, Printer (copperplate)
BISSETT, William	1827 - 1830	Birmingham	Engraver/etcher, Printer (copperplate)
BLACKMORE, James	1841 (before) - 1847	Birmingham	Engraver/etcher, Printer (copperplate)
BLAND & CO, ---	1821 - 1822	Birmingham	Engraver/etcher, Printer (copperplate)
BLAND, William Henry	1821 - 1823	Birmingham	Engraver/etcher, Printer (copperplate)
BLOOMER, Theophilus	1817 - 1827	Birmingham	Printer, Bookseller, Bookbinder, Stationer, Engraver/etcher, Printer (copperplate), Printer (newspaper), Bookseller (ballad)
BOCK, Thomas	1814 (date married) - 1823	Birmingham	Engraver/etcher, Engraver/etcher (copperplate), Printer (copperplate)
BOLTON, John	1831 - 1855	Birmingham	Printer, Bookbinder, Stationer, Bookseller, Engraver/etcher, Printer (copperplate), Printer (letter)
BOLTON, Thomas	1850 - 1850	Birmingham	Engraver/etcher, Printer (copperplate)
BOOTH, George	1845 - 1847	Birmingham	Engraver/etcher, Printer (copperplate)
BOOTH, George	1850 (before) - 1850	Birmingham	Engraver/etcher, Printer (copperplate)
BRADBURY, John	1828 - 1850	Birmingham	Printer, Printers' joiner, Printers' supplier, Stereotyper/stereotype founder
BRANDARD, Thomas	1807 - 1830	Birmingham	Engraver/etcher, Printer (copperplate), Printer, Printer (ballad), Paper merchant, Publisher

Printer	Trade Dates	Place	Book Trades
BRANDIS, Joseph Haynes	1820 - 1825	Birmingham	Printer, Bookseller, Stationer
BREASLEY, George, jun	1849 - 1849	Birmingham	Printer, Printer (copperplate), Engraver/etcher
BRIDGEN, Joseph	1827 - 1829	Birmingham	Bookseller, Printer, Stationer, Papermaker, Paper merchant
BRIERLEY, James Wall	1836 - 1864	Leamington	Printer
BRIERLEY, Joshua Leonard	1825 - 1850	Birmingham	Bookbinder, Bookbinder (vellum), Music seller, Printer, Printers' supplier, Stationer, Stationer (manufacturing), Machine-ruler, Account-book manufacturer/maker, Papermaker, Paper merchant, Bookseller, Printer (letter)
BRIERLY, John	1849 - 1849	Leamington	Printer
BROMFIELD, Edward	1830 - 1830	Coventry	Printer, Newspaper proprietor
BROMLEY, Charles Burke	1827 - 1839	Birmingham	Printer, Bookseller, Stationer, Engraver/etcher
BROOKES, Richard	1828 - 1834	Birmingham	Printer, Printer (copperplate), Bookseller, Stationer
BROOMFIELD, Edward	1827 - 1835	Coventry	Bookseller, Stationer, Printer, Newsagent/vendor/man/news agent
BROOMFIELD, Edward	1839 (before) - 1839	Leamington	Printer
BROOMHALL, William	1791 - 1840	Birmingham	Bookseller, Stationer, Printer, Librarian/owner of circulating library, Printer (copperplate)
BROWN & MOORE, ---	1850 - 1850	Birmingham	Printer (copperplate), Printer, Engraver/etcher
BROWN, Ann	1840 (before) - 1841	Alcester	Bookseller, Printer, Stationer
BROWN, Ann (executors of)	1841 - 1841	Alcester	Bookseller, Printer, Stationer
BROWN, James	1850 - 1868	Rugby	Printer, Bookseller, Bookbinder
BROWN, Thomas	1846 - 1847	Birmingham	Printer (copperplate), Engraver/etcher
BROWN, Thomas	1849 (before) - 1850	Birmingham	Newsagent/vendor/man/news agent, Printer, Stationer
BROWN, William	1841 - 1850	Birmingham	Printer (copperplate), Engraver/etcher, Printer (letter)
BRUMBLEY, J	1832 - 1832	Birmingham	Printer (copperplate)
BUCKLEY, William	1838 - 1839	Birmingham	Printer
BUCKTON, Charles jr	1807 - 1850	Birmingham	Bookseller, Stationer, Printer, Librarian/owner of circulating library, Newsagent/vendor/man/news agent, Bookseller (periodical), Librarian/owner of circulating library (subscription)
BULL & TURNER, ---	1832 ? - 1843	Birmingham	Printer, Stationer, Publisher, Engraver/etcher
BULL, William	1838 - 1841	Birmingham	Printer, Stationer
BUNCE, John Thackray	1842 (date of apprenticeship) - 1898	Birmingham	Printer
BUNN, Thomas	1830 - 1830	Birmingham	Bookseller, Printer (copperplate)
BUNNER, Thomas	1822 - 1835	Birmingham	Engraver/etcher, Printer (copperplate)
BURGIS, Cornelius	1845 - 1845	Birmingham	Printer (fancy)

Printer	Trade Dates	Place	Book Trades
BURTON, Frederick William	1831 - 1833	Leamington	Engraver/etcher, Printer, Stationer, Printer (copperplate), Print seller
BURTON, Henry	1828 - 1829	Birmingham	Engraver/etcher, Printer (copperplate)
BURTON, James	1850 (before) - 1850	Atherstone	Bookseller, Stationer, Printer
BURTON, James	1850 - 1860	Rugby	Bookseller, Stationer, Printer, Bookbinder
BURTON, William Frederick	1827 - 1830	Birmingham	Engraver/etcher, Printer (copperplate), Printer, Print seller, Stationer
BUTTERWORTH, John	1830 - 1830	Birmingham	Printer
BUTTERWORTH, Joseph	1810 - 1835	Birmingham	Printer, Printer (copperplate), Stationer, Stationer (law), Bookseller, Bookseller (law)
CALDICOTT, John	1840 - 1860	Birmingham	Printer, Printer (newspaper), Publisher
CAPEWELL, Samuel	1849 (before) - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Lithographer, Printer, Printer (lithographic)
CARTER, Theophilus	1822 - 1824	Birmingham	Printer, Auctioneer
CATLEY, Joseph	1838 - 1839	Birmingham	Printer, Engraver/etcher
CHALLENER, John Davies	1849 (before) - 1850	Birmingham	Printer (letter)
CHALLINER & CO, ---	1846 - 1847	Birmingham	Engraver/etcher, Printer (copperplate), Printer
CHAMBERLAIN, John	1830 - 1830	Birmingham	Printer (copperplate), Engraver/etcher
CHAMBERLAYNE, John	1827 - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Printer
CHAMBERS, Andrew	1837 - 1837	Birmingham	Engraver/etcher, Printer
CHANDLER, James	1850 - 1854	Leamington	Printer, Newsagent/vendor/man/news agent
CHAPMAN, A	1819 - 1822	Birmingham	Printer, Stationer, Librarian/owner of circulating library, Bookseller
CHAPMAN, A & M M	1819 - 1822	Birmingham	Printer, Stationer, Librarian/owner of circulating library, Bookseller
CHAPMAN, Mary Morton	1819 - 1830	Birmingham	Bookseller, Printer, Stationer, Librarian/owner of circulating library
CHAPMAN, Thomas	1774 - 1818	Birmingham	Bookbinder, Bookseller, Stationer, Auctioneer, Printer, Printer (copperplate), Librarian/owner of circulating library
CHAPMAN, Thomas	1811 - 1845	Birmingham	Printer, Printer (copperplate), Newspaper proprietor, Bookbinder
CHATWIN & CO, ---	1850 (before) - 1850	Birmingham	Printer
CHELLINGSWORTH & REILY, ---	1847 - 1847	Birmingham	Engraver/etcher, Printer
CHELLINGWORTH & REILLY, ---	1846 - 1850	Birmingham	Printer (copperplate), Engraver/etcher, Printer
CHETLAND, Thomas	1846 - 1846	Warwick	Printer
CHIDLOW, William	1828 - 1831	Birmingham	Printer
CHILLINGWORTH, John	1838 - 1850	Birmingham	Printer, Engraver/etcher, Printer (copperplate)
CLAREMONT, Claude Charles	1846 - 1855	Kenilworth	Printer, Bookseller, Stationer, Newsagent/vendor/man/news agent, Librarian/owner of circulating library
CLARKE, Samuel	1849 - 1849	Birmingham	Printer

Printer	Trade Dates	Place	Book Trades
COBURN, ---	1838 - 1838	Birmingham	Bookbinder, Bookseller, Engraver/etcher, Printer, Stationer, Account-book manufacturer/maker
COCKS, Thomas	1827 - 1850	Birmingham	Printer (copperplate), Engraver/etcher
COLEMAN, John	1827 - 1830	Birmingham	Printer (copperplate)
COLEY, ROGERS & GOUGH, ---	1849 (before) - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Paper merchant, Stationer (wholesale), Printer, Account-book manufacturer/maker
COLEY, William	1845 - 1849	Birmingham	Engraver/etcher, Printer, Stationer (wholesale), Printer (copperplate), Papermaker, Paper merchant, Paper merchant (wholesale)
COLLEDGE, Charles	1845 - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Printer
COLLEGE & HENNINGHAM, ---	1843 - 1843	Birmingham	Printer, Engraver/etcher
COMBE, Thomas I	1796 - 1848	Rugby	Bookseller, Stationer, Printer, Librarian/owner of circulating library
COMBE, Thomas jr	1836 - 1841	Rugby	Printer, Bookseller, Stationer, Librarian/owner of circulating library
COOKE, Henry Thomas	1833 - 1854	Warwick	Bookseller, Printer, Stationer, Publisher, Bookbinder, Music seller
COOMBES, John	1846 - 1846	Birmingham	Printer (copperplate), Engraver/etcher
COOMBES, John	1849 - 1850	Birmingham	Engraver/etcher, Printer (copperplate)
COOPER & SON, ---	1841 - 1850	Warwick	Printer, Bookseller, Bookbinder, Stationer
COOPER, Henry Dudley	1846 - 1852	Warwick	Printer, Bookseller, Writer
COOPER, John	1821 - 1850	Birmingham	Bookbinder, Engraver/etcher, Printer, Stationer, Machine-ruler, Stationer (manufacturing)
COOPER, John	1832 - 1841	Warwick	Bookseller, Printer
COOPER, Sophia Mrs	1841 - 1846	Warwick	Printer, Bookseller, Newsagent/vendor/man/news agent
COOPER, William	1820 - 1847	Birmingham	Bookseller, Stationer, Printer, Newsagent/vendor/man/news agent, Librarian/owner of circulating library
COPE, Thomas	1834 - 1842	Birmingham	Printer (copperplate), Engraver/etcher
CORBETT & BOOTH, ---	1841 - 1842	Birmingham	Engraver/etcher, Printer (copperplate)
CORBETT, George	1846 - 1847	Birmingham	Engraver/etcher, Printer (copperplate)
CORBETT, John	1838 - 1842	Birmingham	Engraver/etcher, Printer (copperplate)
CORBETT, Joseph	1811 - 1830	Birmingham	Engraver/etcher, Printer (copperplate)
CORNISH BROS, ---	1849 - 1963	Birmingham	Bookseller, Printer, Publisher, Stationer
CORNISH, Charles	1849 - 1963	Birmingham	Bookseller, Printer, Publisher, Stationer
CORNISH, James	1820 - 1849	Birmingham	Bookseller, Printer, Publisher, Stationer
CORNISH, William	1845 - 1863	Birmingham	Bookseller, Printer, Publisher, Stationer, Librarian/owner of circulating library, Bookseller (secondhand), Bookseller (retail), Bookseller (wholesale), Bookbinder
CORNS, George	1841 - 1850	Birmingham	Bookbinder, Printer, Stationer, Machine-ruler, Bookseller
COTTERELL & SON, ---	1847 - 1849	Birmingham	Printer (copperplate), Engraver/etcher, Printer

Printer	Trade Dates	Place	Book Trades
COTTON, C	1843 - 1843	Birmingham	Engraver/etcher, Printer
COTTON, George	1841 (before) - 1841	Birmingham	Engraver/etcher, Printer (copperplate)
COTTON, George	1845 - 1845	Birmingham	Printer, Engraver/etcher
COTTRELL & SON, ---	1838 - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Printer
COTTRELL, John	1802 - 1850	Birmingham	Printer (copperplate), Printer, Engraver/etcher (copperplate), Engraver/etcher
COURT, John	1828 - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Printer
COWELL, George	1845 (before) - 1850	Birmingham	Newsagent/vendor/man/news agent, Printer, Stationer
COX, T	1846 - 1847	Birmingham	Engraver/etcher, Printer (copperplate)
CRICK, Ebenezer	1834 - 1835	Birmingham	Printer, Chapman
CROMPTON, Joseph	1849 (before) - 1850	Birmingham	Engraver/etcher, Printer (copperplate)
CROSSLEY, J S & Co	1845 - 1845	Rugby	Bookseller, Bookbinder, Printer, Stationer, Librarian/owner of circulating library
CROSSLEY, John Sidney	1836 - 1847	Rugby	Bookseller, Stationer, Printer, Librarian/owner of circulating library, Bookbinder
CROWDER, Edward	1849 (before) - 1850	Birmingham	Ink maker, Printer
CROWDER, William	1850 (before) - 1850	Birmingham	Engraver/etcher, Printer (copperplate)
CULLINGWORTH, James	1827 - 1830	Birmingham	Printer
DAIN, Joseph	1836 (before) - 1850	Birmingham	Newspaper proprietor, Printer, Publisher
DANIEL, William	1846 - 1847	Birmingham	Printer (lithographic)
DANIELL, William	1845 - 1845	Birmingham	Printer (lithographic)
DANIELS, William	1839 - 1839	Birmingham	Printer (lithographic)
DARBY, William	1820 - 1825	Birmingham	Printer
DARK, John	1837 - 1874	Leamington	Bookbinder, Printer, Bookseller, Engraver/etcher, Librarian/owner of circulating library, Stationer
DAVIES, R	1819 - 1861	Henley-in-Arden	Printer, Newsagent/vendor/man/news agent
DAVIES, Richard	1833 (before) - 1876	Birmingham	Bookseller, Stationer, Printer, Lithographer, Printer (letter), Printer (lithographic)
DAVIES, Samuel	1841 (before) - 1841	Birmingham	Printer
DAVIS, Benjamin	1838 - 1839	Birmingham	Printer (copperplate), Engraver/etcher
DAVIS, George	1849 (before) - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Printer
DAVIS, Richard	1847 - 1847	Birmingham	Printer, Bookseller, Stationer
DAVIS, Sophia	1844 - 1872	Atherstone	Bookseller, Stationer, Printer, Librarian/owner of circulating library, Newsagent/vendor/man/news agent
DAVIS, Thomas	1847 (before) - 1864	Leamington	Bookbinder, Stationer, Printer, Newsagent/vendor/man/news agent
DAVIS, William	1827 - 1844	Atherstone	Bookseller, Stationer, Printer, Newsagent/vendor/man/news agent, Librarian/owner of circulating library
DEAKIN, Andrew	1845 - 1845	Birmingham	Printer

Printer	Trade Dates	Place	Book Trades
DEAKIN, Andrew	1845 - 1850	Birmingham	Printer, Engraver/etcher (wood), Engraver/etcher
DEAKIN, D P	1849 - 1849	Birmingham	Printer, Lithographer
DEAKIN, David Prowett	1849 (before) - 1850	Birmingham	Printer (copperplate), Printer, Lithographer, Printer (letter), Printer (lithographic)
DEE, George H	1827 - 1830	Birmingham	Engraver/etcher, Printer (copperplate), Bookbinder
DEE, George Horatio	1845 - 1847	Birmingham	Engraver/etcher, Printer, Printer (copperplate)
DEELEY, Caleb N	1822 - 1832	Birmingham	Engraver/etcher (copperplate), Printer, Engraver/etcher
DENT, John	1827 - 1829	Nuneaton	Bookseller, Printer, Stationer
DESPATCH PRINTING, OFFICE	1834 - 1876	Birmingham	Printer, Stationer, Newsagent/vendor/man/news agent
DEVONSHIRE, H	1839 - 1839	Birmingham	Printer
DEVONSHIRE, Henry	1830 - 1850	Birmingham	Stationer, Engraver/etcher, Printer, Bookseller, Newsagent/vendor/man/news agent, Printer (copperplate), Bookbinder, Bookseller (periodical)
DEWE, John	1840 (before) - 1854	Leamington	Bookseller, Printer, Stationer, Librarian/owner of circulating library, Bookbinder, Printer (copperplate), Reading society/institute
DEWHIRST, Thomas Sheppard	1847 - 1850	Leamington	Printer, Bookseller, Print seller, Bookbinder, Librarian/owner of circulating library, Stationer, Publisher
DEWS, William	1841 - 1850	Bedworth	Bookseller, Printer, Stationer, Bookbinder
DEWSON & CO, ---	1850 - 1855	Birmingham	Printer, Stationer, Bookbinder, Account-book manufacturer/maker
DEWSON & SON, ---	1832 - 1850	Birmingham	Stationer (wholesale), Printer, Bookbinder, Paper merchant, Librarian/owner of circulating library, Printer (copperplate)
DEWSON, James	1834 - 1855	Birmingham	Bookseller, Stationer, Printer, Bookbinder, Librarian/owner of circulating library
DEWSON, Thomas	1810 - 1834	Birmingham	Stationer (wholesale), Stationer, Bookbinder, Printer, Paper merchant, Librarian/owner of circulating library, Printer (copperplate), Machine-ruler
DINGLEY, Joseph	1845 (before) - 1850	Birmingham	Printer (copperplate), Engraver/etcher, Printer
DOLPHIN, George	1850 - 1896	Alcester	Printer (journeyman), Bookseller, Stationer
DRAKE, Elizabeth (Mrs)	1845 - 1847	Birmingham	Bookbinder, Bookseller, Stationer (law), Printer, Publisher, Stationer
DRAKE, James	1814 - 1847	Birmingham	Bookseller, Bookseller (law), Printer, Printer (copperplate), Engraver/etcher (copperplate), Music seller, Bookbinder, Print seller, Stationer (law), Stationer
DYDE, William	1816 - 1831	Beaudesert	Bookseller, Printer
EAGLE PRESS, ---	1849 ? - 1859	Birmingham	Printer, Printer (copperplate)
EAGLES, Charles	1849 (before) - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Printer
EATON, Samuel	1831 - 1831	Birmingham	Printer
EBBS, George	1845 - 1849	Leamington	Printer, Bookseller, Stationer
EBERS, John	1828 - 1835	Leamington	Bookseller, Librarian/owner of circulating library, Stationer, Printer
EDMONDS, Ebenezer	1832 - 1834	Birmingham	Printer (copperplate), Engraver/etcher

Printer	Trade Dates	Place	Book Trades
EDMONDS, George Whitfield	1813 (before) - 1832	Birmingham	Printer, Printer (law), Printer (newspaper), Typefounder
EDWARDS & CO, William	1834 - 1837	Birmingham	Bookbinder, Printer (copperplate), Engraver/etcher, Papermaker, Printer, Stationer
EDWARDS & ROYLE, ---	1820 - 1830	Birmingham	Engraver/etcher, Printer (copperplate)
EDWARDS, ---	1820 - 1830	Birmingham	Engraver/etcher, Printer (copperplate)
EDWARDS, Alfred	1849 (before) - 1850	Birmingham	Engraver/etcher, Printer (copperplate)
EDWARDS, E R	1830 - 1830	Birmingham	Printer, Printer (copperplate), Stationer
EDWARDS, E R	1839 - 1839	Birmingham	Printer
EDWARDS, Edward Robert	1825 - 1850	Birmingham	Printer (copperplate), Engraver/etcher, Printer, Stationer, Bookseller, Bookbinder
EDWARDS, Joseph	1834 - 1835	Birmingham	Printer (copperplate), Engraver/etcher
EDWARDS, Mary Ann	1838 - 1842	Birmingham	Engraver/etcher, Printer (copperplate)
EDWARDS, Richard	1850 (before) - 1850	Birmingham	Printer
EDWARDS, William	1820 - 1837	Birmingham	Engraver/etcher, Printer (copperplate), Paper merchant, Bookbinder, Stationer
EDWARDS, William	1849 (before) - 1850	Birmingham	Engraver/etcher, Printer (copperplate)
EDWARDS, William	1827 (before) - 1850	Coventry	Bookseller, Printer, Stationer, Bookbinder
ELLIS, Samuel	1849 - 1849	Birmingham	Printer (copperplate), Engraver/etcher
ELLISTON, William Gore	1816 - 1828	Leamington	Librarian/owner of circulating library, Bookseller, Printer, Stationer, Newsagent/vendor/man/news agent
ENCOH, William	1839 - 1860	Leamington	Bookseller, Librarian/owner of circulating library, Printer, Stationer
ENDALL, William	1845 - 1878	Henley-in-Arden	Bookseller, Printer, Stationer, Auctioneer
ENOCH, William	1839 - 1860	Warwick	Bookseller, Printer, Librarian/owner of circulating library
EVANS, Thomas	1838 (before) - 1851	Birmingham	Bookseller, Printer, Stationer, Librarian/owner of circulating library, Bookbinder, Printer (copperplate), Engraver/etcher, Librarian/owner of circulating library (subscription)
EVANS, Thomas	1843 - 1843	Birmingham	Bookbinder's toolcutter/toolmaker, Typographer/Letter-cutter, Printer
FAIRFAX, James	1828 - 1828	Leamington	Printer (newspaper), Publisher (newspaper)
FAIRFAX, John	1828 (before) - 1846	Leamington	Printer, Bookseller, Librarian/owner of circulating library, Stationer, Newspaper proprietor, Bookbinder, Printer (copperplate), Bookseller (periodical), Newsagent/vendor/man/news agent
FARRADAY, Alfred	1845 - 1845	Birmingham	Printer (copperplate)
FAULKNER, Joseph	1834 - 1839	Birmingham	Printer, Newsagent/vendor/man/news agent
FEENEY, John Frederick	1835 - 1869	Birmingham	Newspaper proprietor, Printer, Publisher
FEREDAY, Alfred	1841 (before) - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Printer
FEREDAY, J	1845 - 1845	Birmingham	Printer
FEREDAY, John	1827 - 1847	Birmingham	Engraver/etcher, Printer (copperplate), Printer, Stationer
FERRALL, James	1802 - 1824	Birmingham	Printer, Printer (newspaper), Stationer, Bookseller

Printer	Trade Dates	Place	Book Trades
FIDDIAN BROTHERS, ---	1827 - 1850	Birmingham	Papermaker, Paper merchant (wholesale), Printer, Pasteboard maker/dealer, Paper merchant
FIELD, William	1834 - 1850	Birmingham	Stationer, Printer, Papermaker, Paper merchant, Paper merchant (wholesale)
FLANDERS, John	1821 - 1821	Alcester	Bookseller, Printer
FLANDERS, John	1820 (before) - 1822	Atherstone	Bookseller, Stationer, Printer, Bookbinder
FLAVELL, William	1835 - 1850	Birmingham	Engraver/etcher, Printer (copperplate)
FLINDELL, Francis Bassett Shenstone	1835 - 1841	Birmingham	Printer, Printer (newspaper)
FLOYD, Thomas	1822 - 1823	Birmingham	Printer, Bookbinder, Engraver/etcher
FODEN, Edward	1818 - 1854	Leamington	Printer, Printer (copperplate), Bookbinder, Stationer
FODEN, Edward	1818 - 1823	Warwick	Bookbinder, Printer
FODEN, Edward	1820 - 1826	Warwick	Printer, Bookbinder, Bookseller
FOOTERAPE, John	1850 (before) - 1850	Birmingham	Bookbinder, Engraver/etcher, Printer (copperplate)
FORD, Thomas	1828 - 1830	Birmingham	Printer, Stationer, Newspaper proprietor
FRANCIS, Thomas	1846 - 1850	Birmingham	Printer (copperplate), Printer, Engraver/etcher
FULLWOOD, James	1814 - 1839	Birmingham	Engraver/etcher, Printer (copperplate), Bookbinder, Stationer, Machine-ruler
GARNER, Thomas	1827 - 1850	Birmingham	Engraver/etcher, Printer (copperplate)
GILES, Benjamin	1838 - 1850	Birmingham	Printer, Printer (copperplate)
GILES, Charles West	1814 - 1817	Birmingham	Engraver/etcher, Engraver/etcher (copperplate), Printer (copperplate)
GLOVER, Joseph	1848 - 1891	Leamington	Printer, Bookseller, Stationer, Printer (newspaper)
GOESBURY, William	1838 - 1839	Birmingham	Printer
GOODE, Edward	1850 - 1850	Coventry	Bookseller, Stationer, Printer
GOOLD, Ebenezer	1849 (before) - 1874	Leamington	Bookseller, Librarian/owner of circulating library, Printer, Stationer
GOUGH & SUMMER, ---	1849 (before) - 1850	Birmingham	Engraver/etcher, Paper merchant, Stationer (wholesale), Printer, Printer (copperplate), Stationer, Paper merchant (wholesale)
GOUGH, James	1799 - 1847	Birmingham	Engraver/etcher, Printer (copperplate)
GOUGH, William	1815 - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Typographer/Letter-cutter, Paper merchant, Paper-hanger
GRAFTON & CO, ---	1806 (before) - 1830	Birmingham	Paper merchant (wholesale), Stationer (wholesale), Printer (newspaper), Papermaker, Rag-merchant
GRAFTON & MARTIN, ---	1838 (before) - 1838	Birmingham	Printer
GRAFTON, Charles	1796 - 1838	Birmingham	Printer, Bookseller, Stationer, Papermaker, Ink maker, Bookbinder, Printer (newspaper)
GREAVES & SON, J C	1810 ? - 1850	Birmingham	Engraver/etcher, Printer, Printer (copperplate), Pasteboard maker/dealer, Papermaker, Paper merchant, Stationer, Paper merchant (wholesale)
GREAVES, James Charles	1831 (before) - 1860	Birmingham	Printer, Stationer, Printer (copperplate), Engraver/etcher, Paper merchant, Pasteboard maker/dealer
GREEN, Charles Frederick	1850 (before) - 1850	Birmingham	Lithographer, Printer, Printer (lithographic)

Printer	Trade Dates	Place	Book Trades
GREEN, John	1831 (before) - 1831	Warwick	Printer, Printer (journeyman)
GREEN, John	1846 - 1846	Warwick	Printer
GREEN, Thomas	1832 - 1842	Atherstone	Bookseller, Printer, Stationer
GREEN, Thomas	1806 (before) - 1852	Warwick	Printer (journeyman), Pressman
GREW & SON, ---	1849 - 1850	Birmingham	Printer, Bookseller, Stationer, Librarian/owner of circulating library
GREW, William	1849 - 1850	Birmingham	Printer, Bookseller, Stationer, Librarian/owner of circulating library
GRIFFIN, Charles	1848 - 1849	Leamington	Printer
GRIMES, John	1834 - 1834	Birmingham	Printer
GRIMES, William Medhurst	1828 - 1834	Birmingham	Printer, Printer (copperplate)
GROVE, James	1849 (before) - 1850	Birmingham	Engraver/etcher (wood), Printer (copperplate), Printer, Printer (letter)
GUEST, Elizabeth	1819 - 1821	Birmingham	Printer
GUEST, James	1830 - 1879	Birmingham	Bookseller, Printer, Newsagent/vendor/man/news agent, Printer (stereotype), Publisher, Bookbinder, Stationer, Bookseller (periodical), Music seller, Printer (copperplate), Engraver/etcher, Printer (letter)
GUMMERY, B K	1849 - 1849	Leamington	Printer
GYDE, Henry John	1827 - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Typographer/Letter-cutter
HAILSTONE, George	1849 (before) - 1850	Birmingham	Engraver/etcher, Printer (copperplate)
HALE, Nathaniel	1824 - 1834	Birmingham	Printer (copperplate), Engraver/etcher
HALL & OSBORNE, ---	1827 - 1827	Birmingham	Engraver/etcher, Printer (copperplate)
HALL & TAYLOR, ---	1828 - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Printer
HALL, ---	1828 - 1850	Birmingham	Engraver/etcher, Printer (copperplate)
HALL, Benjamin	1839 - 1867	Birmingham	Stationer, Bookseller, Printer, Account-book manufacturer/maker, Bookbinder, Paper marbler, Papermaker (coloured), Papermaker (marbled), Publisher, Paper merchant (wholesale), Printer (letter), Papermaker, Paper merchant
HALL, William H & Co	1834 - 1847	Birmingham	Printer (copperplate), Engraver/etcher, Printer
HALLAM, Thomas	1849 (before) - 1850	Birmingham	Engraver/etcher, Printer (copperplate)
HALLIDAY, Thomas	1815 - 1845	Birmingham	Engraver/etcher, Printer (copperplate), Typographer/Letter-cutter
HAMMOND & SON, ---	1845 - 1847	Birmingham	Bookbinder, Bookseller, Engraver/etcher, Printer, Stationer, Printer (copperplate), Printer (lithographic)
HAMMOND, Charles	1820 - 1847	Birmingham	Engraver/etcher, Printer, Bookbinder, Bookseller, Stationer, Printer (copperplate), Paper merchant, Printer (lithographic)
HANCE, John Worthy	1850 (before) - 1850	Alcester	Bookseller, Printer, Stationer, Librarian/owner of circulating library
HANDS, Jacob	1839 - 1839	Birmingham	Printer
HANNETT, John	1844 - 1869	Henley-in-Arden	Bookseller, Printer, Stationer, Newsagent/vendor/man/news agent, Bookbinder

Printer	Trade Dates	Place	Book Trades
HANSON, Joseph	1849 - 1849	Leamington	Printer
HARLOW, John	1835 - 1839	Birmingham	Printer
HARPER, Joseph	1796 - 1830	Birmingham	Printer (copperplate), Stationer, Paper merchant, Printer
HARRIOTT, George	1850 - 1850	Birmingham	Paper merchant, Printer
HARRIS, Henry	1832 - 1836	Birmingham	Printer, Printer (lithographic), Engraver/etcher, Engraver/etcher (lithographic)
HARRIS, James	1792 - 1826	Atherstone	Printer, Stationer, Newsagent/vendor/man/news agent
HARRIS, W	1846 - 1847	Birmingham	Printer
HARRIS, William	1819 (before) - 1864	Birmingham	Bookbinder, Printer, Printer (ballad), Newsagent/vendor/man/news agent, Stationer
HARRISON, Henry	1834 - 1845	Birmingham	Engraver/etcher, Printer (copperplate)
HARRISON, Henry Morris	1827 - 1828	Birmingham	Printer, Stationer
HARRISON, James	1849 (before) - 1850	Birmingham	Printer (copperplate)
HARVEY, John	1838 - 1839	Birmingham	Printer, Engraver/etcher
HASLOCK, James	1850 (before) - 1850	Birmingham	Engraver/etcher, Printer (copperplate)
HASWELL, John Partis	1842 - 1854	Birmingham	Bookseller, Stationer, Printer, Engraver/etcher (copperplate), Music seller, Bookbinder, Stationer (law), Bookseller (law)
HATFIELD, William	1834 - 1835	Leamington	Printer, Printer (newspaper)
HAWESFORD, William H	1850 (before) - 1850	Birmingham	Printer (copperplate)
HAWKE, ---	1838 - 1838	Birmingham	Bookbinder, Bookseller, Engraver/etcher, Printer, Stationer, Account-book manufacturer/maker
HAWKER, Charles	1842 - 1842	Birmingham	Printer
HAWKESFORD, William H	1849 - 1850	Birmingham	Printer (copperplate), Engraver/etcher
HAYES, Richard	1821 - 1821	Birmingham	Printer (copperplate), Engraver/etcher
HEATH, John Joseph	1832 - 1850	Birmingham	Printer (copperplate), Printer, Engraver/etcher
HEATH, William Henry	1836 - 1850	Leamington	Print seller, Stationer, Engraver/etcher, Stationer (fancy), Printer, Printer (copperplate)
HEATHCOTE & FODEN, ---	1818 - 1823	Warwick	Printer, Bookbinder
HEATHCOTE, Ebenezer	1828 - 1829	Leamington	Bookseller, Printer
HEATHCOTE, Ebenezer	1808 - 1840	Warwick	Bookbinder, Bookseller, Music seller, Printer, Stationer, Librarian/owner of circulating library, Newsroom/readingroom
HEATHCOTE, Mary	1840 - 1848	Warwick	Bookseller, Printer, Stationer, Librarian/owner of circulating library, Printer (copperplate)
HEATHCOTE, Thomas Boyes	1848 - 1855	Warwick	Bookseller, Printer, Stationer, Librarian/owner of circulating library, Printer (copperplate), Bookbinder
HEMING, Richard	1814 (date from imprint) - 1829	Alcester	Printer
HEMING, Thomas	1791 - 1816	Alcester	Printer, Bookseller

Printer	Trade Dates	Place	Book Trades
HENSHAW, ---	1828 - 1829	Birmingham	Printer (copperplate), Engraver/etcher
HENSHAW, Thomas	1834 - 1838	Birmingham	Printer (copperplate), Engraver/etcher
HENSHAW, Thomas Arnold	1827 - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Typographer/Letter-cutter, Printer, Engraver/etcher (copperplate)
HEPPEL, Robert	1820 - 1840	Birmingham	Printer, Printer (copperplate), Stationer
HEPPEL, Robert Thompson	1845 - 1845	Birmingham	Printer
HEWETT, John	1826 - 1864	Leamington	Bookseller, Stationer, Printer, Librarian/owner of circulating library, Printer (copperplate), Music seller, Engraver/etcher, Newsroom/readingroom, Publisher (music)
HICKLING, Daniel	1829 - 1830	Kenilworth	Printer, Bookseller, Stationer
HICKLING, William	1821 - 1860	Coventry	Bookseller, Stationer, Printer, Librarian/owner of circulating library, Bookbinder
HICKMAN, Thomas	1822 - 1839	Birmingham	Printer
HILL & SON, William	1838 (before) - 1838	Birmingham	Printer
HILL, Arthur	1819 - 1833	Birmingham	Printer
HILL, Benjamin	1834 - 1839	Birmingham	Bookseller, Print seller, Printer, Stationer
HILL, John	1841 - 1850	Coventry	Stationer, Paper merchant, Bookseller, Printer
HILL, Rowland	1819 - 1827	Birmingham	Printer
HILL, Thomas Wright	1819 - 1833	Birmingham	Printer
HINTON, William	1838 - 1839	Birmingham	Printer
HOBBS, George	1849 - 1849	Birmingham	Printer
HODGETTS, Alfred	1849 (before) - 1850	Birmingham	Printer (copperplate), Paper merchant, Stationer, Engraver/etcher, Printer (lithographic), Account-book manufacturer/maker
HODGETTS, William	1817 - 1874	Birmingham	Printer, Printer (newspaper), Bookseller, Stationer, Bookbinder, Publisher, Engraver/etcher
HODGETTS, William	1839 - 1839	Birmingham	Printer, Bookseller, Stationer
HOLDEN, Edward	1841 (before) - 1841	Birmingham	Engraver/etcher, Printer (copperplate)
HOLDEN, Edward Rose	1827 - 1830	Birmingham	Engraver/etcher, Printer (copperplate)
HOLLAND & WOOD, ---	1841 - 1847	Birmingham	Engraver/etcher, Printer (copperplate), Paper merchant (wholesale), Printer, Paper merchant, Stationer
HOLLAND, James	1841 (before) - 1841	Birmingham	Printer
HOLLAND, Joseph	1828 (before) - 1850	Birmingham	Printer (copperplate), Engraver/etcher, Paper merchant (wholesale), Printer, Paper merchant, Stationer
HOLLAND, Joseph	1830 - 1830	Birmingham	Printer (copperplate), Engraver/etcher
HOLLAND, William Chaplain	1834 - 1868	Atherstone	Bookseller, Stationer, Printer, Music seller
HOLLIS, Charles	1828 - 1850	Birmingham	Printer (copperplate), Engraver/etcher, Typographer/Letter-cutter
HOLLOWAY, Daniel	1839 - 1860	Birmingham	Printer
HOLT, ---	1820 - 1820	Birmingham	Printer

Printer	Trade Dates	Place	Book Trades
HOPE, Thomas	1849 (before) - 1850	Birmingham	Engraver/etcher, Printer (copperplate)
HOPKINSON, Robert	1836 - 1836	Birmingham	Printer
HORSFALL, Henry Lambert	1845 - 1850	Coventry	Bookseller, Stationer, Newsagent/vendor/man/news agent, Librarian/owner of circulating library (subscription), Printer, Newsagent/vendor/man/news agent (wholesale)
HORTON, Joseph	1825 - 1832	Birmingham	Engraver/etcher, Printer (copperplate), Printer, Paper merchant, Pocket-book maker
HORTON, Thomas	1830 - 1830	Birmingham	Printer (copperplate)
HOSKINS, James	1829 - 1849	Birmingham	Printer
HOSKINS, James	1831 - 1871	Birmingham	Printer
HUDSON & SON, ---	1851 - 1988	Birmingham	Bookseller, Printer, Stationer, Publisher, Music seller, Bookbinder, Printer (newspaper)
HUDSON, Benjamin	1810 - 1875	Birmingham	Bookseller, Printer, Stationer, Publisher, Music seller, Bookbinder, Printer (newspaper), Publisher (newspaper), Paper merchant, Account-book manufacturer/maker
HUDSON, Edward	1841 (before) - 1841	Birmingham	Bookseller, Printer, Stationer
HULM, John	1827 (before) - 1827	Coventry	Printer (journeyman)
HUNT & SON, ---	1827 ? - 1842	Birmingham	Bookbinder, Stationer, Printer
HUNT & SONS, Benjamin	1835 - 1860	Birmingham	Stationer, Bookbinder, Printer, Paper merchant, Engraver/etcher (wholesale), Stationer (wholesale), Stationer (law), Printer (copperplate), Engraver/etcher
HUNT, Benjamin jr	1835 - 1860	Birmingham	Stationer, Bookbinder, Printer, Paper merchant
HUNT, Benjamin sr	1807 - 1838	Birmingham	Bookbinder, Stationer, Bookseller, Printer, Paper merchant
HUNT, George	1834 - 1880	Birmingham	Engraver/etcher, Printer (copperplate), Printer, Stationer, Bookseller
HUNT, William Edwin	1835 - 1860	Birmingham	Stationer, Bookbinder, Printer, Paper merchant
HUSSELBEE, Obed	1850 (before) - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Printer
HUSSELBEE, Obed	1850 (before) - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Printer
ILIFFE, William	1838 - 1851	Coventry	Printer, Stationer, Newspaper proprietor, Bookseller, Librarian/owner of circulating library, Rag-merchant
IMMS, John	1834 - 1835	Birmingham	Printer (copperplate), Engraver/etcher, Engraver/etcher (historical)
IMUS, John	1834 - 1834	Birmingham	Printer (copperplate), Engraver/etcher
INWOOD, Robert	1849 (before) - 1850	Birmingham	Stationer, Printer
IRELAND, T	1845 - 1850	Rugby	Bookbinder, Printer, Printer (copperplate)
JABET & MOORE, ---	1811 - 1822	Birmingham	Printer (newspaper), Stationer, Bookseller
JABET, Richard	1806 - 1822	Birmingham	Printer, Printer (newspaper), Bookseller, Stationer
JACKSON & SON, William	1843 - 1850	Birmingham	Bookseller, Stationer, Printer
JACKSON, William	1840 ? - 1855	Birmingham	Printer, Bookseller, Bookseller (ballad), Stationer
JENKINSON, Richard	1829 - 1854	Birmingham	Printer, Publisher, Newsagent/vendor/man/news agent, Stationer, Bookseller (periodical)

Printer	Trade Dates	Place	Book Trades
JESSOP, Robert Green	1849 (before) - 1850	Birmingham	Engraver/etcher, Printer (copperplate)
JOESBURY, Joseph	1815 - 1850	Birmingham	Engraver/etcher, Printer (copperplate)
JOESBURY, William	1838 - 1919	Birmingham	Printer, Stationer, Bookbinder, Printer (copperplate), Engraver/etcher, Librarian/owner of circulating library, Bookseller, Printer (letter)
JOHNSON, A B	1849 - 1849	Birmingham	Printer, Lithographer
JOHNSON, Anthony B	1832 - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Printer, Lithographer, Engraver/etcher (maps), Printer (lithographic), Printer (letter)
JOHNSON, Jonathan Evans	1828 - 1830	Birmingham	Printer
JOHNSON, William	1815 - 1827	Alcester	Bookseller, Printer
JOHNSON, William	1845 - 1847	Birmingham	Printer
JOLLEY, J	1838 - 1838	Birmingham	Engraver/etcher, Printer
JONES & CO, Daniel	1830 (before) - 1834	Birmingham	Bookbinder, Printer, Engraver/etcher, Bookseller, Paper merchant, Stationer, Librarian/owner of circulating library
JONES & WALKINSHAW, ---	1828 - 1829	Birmingham	Printer, Stationer
JONES, ---	1828 - 1829	Birmingham	Printer, Stationer
JONES, Daniel	1828 - 1839	Birmingham	Printer (copperplate), Printer, Stereotyper/stereotype founder, Engraver/etcher, Stationer, Paper merchant, Bookbinder, Librarian/owner of circulating library, Bookseller
JONES, Edward	1781 - 1831	Birmingham	Printer, Bookseller, Bookbinder, Stationer
JONES, Henry	1846 - 1847	Birmingham	Printer (copperplate), Engraver/etcher
JONES, James	1838 - 1843	Birmingham	Engraver/etcher, Printer (copperplate)
JONES, John	1828 - 1829	Birmingham	Printer (copperplate), Engraver/etcher
JONES, William	1841 - 1843	Leamington	Printer
JORDAN, William	1827 - 1830	Birmingham	Engraver/etcher, Printer (copperplate)
KEENE & GILES, ---	1834 - 1834	Birmingham	Printer (copperplate), Engraver/etcher, Papermaker (coloured)
KEENE, Alfred	1849 (before) - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Printer
KEENE, Joseph	1834 - 1850	Birmingham	Printer, Printer (copperplate), Press maker, Engraver/etcher, Papermaker (coloured), Stationer
KEMPSON, Thomas Collins	1838 - 1839	Birmingham	Printer, Bookseller, Stationer
KEPPELL, Robert	1830 - 1830	Birmingham	Printer, Printer (copperplate), Stationer
KETTLE, Samuel	1838 - 1839	Birmingham	Engraver/etcher, Printer
KEYTE, Samuel	1850 (before) - 1850	Birmingham	Printer (copperplate)
KING, T	1830 ? - 1830	Birmingham	Printer
KNAPP, Stephen	1850 (before) - 1850	Coundon	Printer

Printer	Trade Dates	Place	Book Trades
KNAPP, Stephen	1829 - 1857	Coventry	Printer, Stationer, Printer (copperplate)
KNIGHT, Arthur Ludwig	1841 (before) - 1849	Birmingham	Lithographer, Printer (lithographic), Engraver/etcher
KNOTT, HAWKE &, COBURN	1838 - 1839	Birmingham	Bookbinder, Bookseller, Engraver/etcher, Printer, Stationer, Account-book manufacturer/maker
KNOTT, John Morgan	1825 - 1841	Birmingham	Printer, Printer (newspaper), Ink maker (manufacturing), Stationer (wholesale), Papermaker (coloured), Bookseller
KNOTT, Thomas I	1811 - 1831	Birmingham	Printer, Publisher (newspaper), Stationer, Papermaker
KNOTT, Thomas II	1814 - 1839	Birmingham	Printer, Paper merchant, Bookseller, Publisher (newspaper)
LANGBRIDGE, Henry Charles	1825 (before) - 1849	Birmingham	Bookseller, Stationer, Printer, Publisher, Librarian/owner of circulating library, Bookbinder
LAPWORTH, ---	1843 - 1843	Birmingham	Printer
LAPWORTH, Richard	1823 - 1859	Stratford on Avon	Bookseller, Printer, Librarian/owner of circulating library, Stationer, Newsroom/readingroom
LAPWORTH, William Richard	1822 - 1827	Leamington	Bookseller, Printer, Stationer, Printer (copperplate), Bookbinder, Librarian/owner of circulating library
LAPWORTH, William Richard	1821 - 1834	Warwick	Bookseller, Printer, Stationer, Printer (copperplate), Bookbinder, Librarian/owner of circulating library
LEBAS & HORTON, ---	1825 - 1829	Birmingham	Engraver/etcher, Printer (copperplate), Papermaker, Paper merchant, Publisher
LEBAS, Charles Frederick	1817 (before) - 1839	Birmingham	Printer (copperplate), Engraver/etcher, Printer, Papermaker, Paper merchant, Paper merchant (wholesale)
LEBBS, Charlotte	1841 - 1843	Birmingham	Engraver/etcher, Printer, Printer (copperplate)
LEECH, F	1838 - 1839	Birmingham	Printer
LEES, Thomas	1821 - 1829	Nuneaton	Bookseller, Printer, Stationer
LEMOINE, Henry	1823 - 1830	Henley-in-Arden	Printer
LEONARD, William Henry	1838 - 1850	Birmingham	Engraver/etcher, Printer, Printer (copperplate)
LEVI & SON, ---	1849 (before) - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Printer
LEVI, Charles Lyon	1832 - 1850	Birmingham	Engraver/etcher, Printer, Engraver/etcher (copperplate), Printer (copperplate), Printer (letter)
LEWIN, David	1829 - 1860	Coventry	Bookbinder, Printer, Bookseller, Printer (copperplate), Stationer
LEWIS, Evan Cruickshank	1847 (before) - 1859	Coventry	Printer, Bookseller, Stationer, Printer (newspaper)
LIEBENROOD, Georg Christopher	1836 - 1872	Leamington	Printer, Publisher (newspaper), Newspaper proprietor
LITTLEHALES, William	1850 (before) - 1850	Birmingham	Engraver/etcher, Printer (copperplate)
LOCKYER, Joseph Hooley	1839 - 1839	Rugby	Printer
LONDON, Richard	1850 - 1850	Henley-in-Arden	Bookseller, Stationer, Printer
LONDON, Richard Wallington	1825 - 1850	Henley-in-Arden	Printer
LONGMORE, Thomas	1817 - 1829	Birmingham	Printer (copperplate), Engraver/etcher
LOWE, Charles	1841 (before) - 1843	Birmingham	Engraver/etcher, Printer (copperplate), Printer
LOWE, Charles	1843 - 1843	Birmingham	Printer

Printer	Trade Dates	Place	Book Trades
LOWE, Daniel	1845 - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Typographer/Letter-cutter
LOWE, Joseph	1838 - 1839	Birmingham	Printer
LOWE, Robert	1814 - 1820	Birmingham	Printer (copperplate), Engraver/etcher, Engraver/etcher (copperplate)
LOWE, William	1817 - 1850	Birmingham	Bookseller, Stationer, Printer (copperplate), Printer, Engraver/etcher
LUCAS & WILLIAMS, ---	1845 (before) - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Printer
LUCAS, Edward	1822 - 1847	Birmingham	Engraver/etcher, Printer (copperplate), Printer
LUCAS, William	1837 - 1850	Birmingham	Printer, Printers' joiner, Rule-cutter
LYON, Joseph	1843 - 1845	Birmingham	Bookseller, Printer, Stationer, Paper merchant, Bookbinder
MACMINN, James Thomson	1849 - 1854	Leamington	Printer, Stationer
MADDEN, Edward	1846 - 1847	Birmingham	Engraver/etcher, Printer (copperplate)
MADDOCKS, James	1800 - 1830	Birmingham	Printer (copperplate), Engraver/etcher
MAHER, Michael	1838 - 1850	Birmingham	Bookseller, Stationer, Printer
MARSHALL, John A	1850 (before) - 1850	Birmingham	Engraver/etcher, Printer (copperplate)
MARTIN, Sarah	1840 - 1850	Birmingham	Ink maker, Printer
MASON, Henry	1815 - 1835	Birmingham	Engraver/etcher, Printer (copperplate)
MASON, John	1820 - 1829	Birmingham	Engraver/etcher, Printer (copperplate)
MASSEY, Edward	1834 - 1876	Birmingham	Printer, Stationer, Newsagent/vendor/man/news agent, Bookseller (periodical)
MATTHISON & CO, Richard	1838 - 1847	Birmingham	Bookseller, Stationer, Printer, Paper merchant
MATTHISON, Richard	1838 - 1850	Birmingham	Bookseller, Bookbinder, Printer (copperplate), Printer, Stationer, Engraver/etcher, Engraver/etcher (copperplate)
MAUDSLEY, Alexander	1841 (before) - 1843	Birmingham	Lithographer, Printer (lithographic), Printer, Draughtsman (lithographic), Author
MAURICE, Isaac Wilks	1826 (before) - 1830	Birmingham	Printer, Bookbinder, Stationer
MAURICE, J W	1828 - 1829	Birmingham	Printer, Bookbinder, Stationer
MAURICE, J W	1830 - 1830	Birmingham	Printer, Bookbinder, Stationer
MAYFIELD, Benjamin	1845 - 1850	Birmingham	Engraver/etcher, Printer (copperplate)
MCARTHUR & SEYMORE, ---	1832 - 1835	Birmingham	Printer
MCARTHUR, George	1831 - 1835	Birmingham	Printer
MEEK, James	1831 (before) - 1832	Birmingham	Printer, Bookseller, Stationer, Bookbinder, Paper merchant
MERIDEW & SONS, ---	1813 - 1817	Coventry	Bookbinder, Bookseller, Printer, Stationer, Publisher (newspaper)
MERRIDEW & JONES, ---	1842 - 1842	Leamington	Printer, Librarian/owner of circulating library
MERRIDEW & SON, ---	1818 - 1818	Coventry	Bookbinder, Bookseller, Printer, Stationer, Publisher (newspaper)

Printer	Trade Dates	Place	Book Trades
MERRIDEW & SON, ---	1821 (before) - 1823	Coventry	Bookseller, Printer, Stationer
MERRIDEW, Henry	1810 - 1842	Coventry	Printer, Publisher (newspaper), Bookseller, Bookbinder, Paper merchant, Stationer
MERRIDEW, Henry	1826 - 1830	Warwick	Printer, Bookseller, Publisher (newspaper)
MERRIDEW, John	1813 - 1852	Coventry	Printer, Bookseller
MERRIDEW, John	1850 - 1850	Coventry	Bookseller, Printer, Stationer
MERRIDEW, John	1828 (before) - 1841	Leamington	Bookseller, Bookbinder, Music seller, Stationer, Printer (copperplate), Printer, Librarian/owner of circulating library, Print seller
MERRIDEW, John	1763 (date of apprentice-ship) - 1841	Warwick	Printer, Bookseller, Librarian/owner of circulating library, Publisher, Music seller, Stationer, Bookbinder, Printer (copperplate)
MERRIDEW, Nathaniel	1784 - 1823	Coventry	Printer, Bookseller, Stationer, Bookbinder, Printer (music), Paper merchant, Printer (newspaper)
MERRIDEW, Nathaniel	1845 - 1856	Leamington	Printer, Music seller
MERRIDEW, Thomas Howell	1818 - 1818	Coventry	Printer, Printer (newspaper)
MILLINER, John	1846 - 1849	Leamington	Printer
MILLS, Henry	1849 - 1849	Birmingham	Printer
MOODY, Robert Boucher	1834 - 1868	Birmingham	Lithographer, Printer, Printer (copperplate), Draughtsman, Printer (lithographic), Engraver/etcher, Draughtsman (lithographic), Printer (letter)
MOORE, John	1811 - 1850	Birmingham	Printer, Publisher (newspaper), Printer (copperplate), Stationer (wholesale), Stationer, Engraver/etcher
MOORE, John	1850 (before) - 1850	Birmingham	Engraver/etcher, Printer (copperplate)
MOORE, Peter	1819 - 1820	Henley-in-Arden	Bookseller, Printer, Stationer
MOORE, William	1816 - 1819	Henley-in-Arden	Printer, Bookseller
MORRIS, Charles John	1828 - 1829	Leamington	Bookseller, Stationer, Printer, Librarian/owner of circulating library, Print seller
MORRIS, Edward	1838 - 1839	Birmingham	Printer
MORRIS, Mary	1827 - 1830	Stratford on Avon	Bookseller, Printer, Stationer
MORRIS, William George	1790 - 1825	Stratford on Avon	Bookseller, Printer, Stationer
MORTIBOYS, Edwin	1851 - 1851	Alcester	Printer (journeyman)
MOSELEY, Richard S	1846 - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Printer
NEALE, Edward	1828 - 1847	Birmingham	Printer (copperplate), Engraver/etcher
NELSON, Catherine	1838 - 1839	Birmingham	Printer (copperplate), Engraver/etcher (copperplate), Librarian/owner of circulating library
NELSON, Edward	1817 - 1839	Birmingham	Engraver/etcher, Bookseller, Stationer, Printer, Printer (copperplate)
NELSON, William Henry	1841 - 1847	Birmingham	Engraver/etcher, Printer, Printer (copperplate)
NEVILL, John Palmer	1828 - 1834	Birmingham	Bookbinder, Engraver/etcher, Printer
NEVILL, Samuel	1828 - 1850	Birmingham	Engraver/etcher, Printer (copperplate)

Printer	Trade Dates	Place	Book Trades
NEVITT, Samuel	1828 - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Printer
NEWMAN, Henry	1843 - 1847	Birmingham	Bookseller, Stationer (fancy), Paper merchant, Bookbinder, Stationer, Printer, Printer (copperplate)
NICHOLLS, William	1827 - 1830	Birmingham	Bookseller, Printer, Stationer
NICHOLS, Richard	1845 - 1847	Birmingham	Bookbinder, Bookseller, Engraver/etcher, Printer, Stationer
NOTT, T 2	1819 ? - 1819	Birmingham	Printer
OSBORN, Joseph	1839 - 1839	Birmingham	Printer, Engraver/etcher
OSBORN, W	1849 - 1849	Birmingham	Printer (copperplate), Engraver/etcher
OSBORN, William	1846 - 1847	Birmingham	Printer, Engraver/etcher, Printer (copperplate)
OSBORN, William	1850 (before) - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Printer
OSBORNE & HENSHAW, ---	1828 - 1830	Birmingham	Printer (copperplate), Engraver/etcher
OSBORNE & TAYLOR, ---	1828 - 1829	Birmingham	Engraver/etcher, Printer (copperplate)
OSBORNE, E C & W	1837 - 1839	Birmingham	Bookseller, Printer, Stationer, Publisher
OSBORNE, Edward Corn	1834 - 1882	Birmingham	Bookseller, Printer, Stationer, Publisher, Bookbinder, Paper merchant, Engraver/etcher, Printer (copperplate)
OSBORNE, Joseph	1819 - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Printer
OSBORNE, Marmaduke William	1837 - 1840	Birmingham	Bookseller, Printer
OWEN & HALL, ---	1850 - 1850	Birmingham	Printer (copperplate), Engraver/etcher
OWEN, Edward	1845 - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Engraver/etcher (copperplate)
PARKER, Thomas	1802 - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Typographer/Letter-cutter
PARKIN, John	1828 - 1829	Birmingham	Printer (copperplate), Engraver/etcher
PARSALL, John	1828 (before) - 1828	Birmingham	Printer (copperplate), Engraver/etcher
PARSONAGE, Thomas	1828 - 1829	Birmingham	Printer (copperplate), Engraver/etcher
PARSONS, Thomas	1846 - 1846	Warwick	Printer
PASSEY, Samuel	1834 - 1839	Birmingham	Printer, Stationer, Engraver/etcher, Rag-merchant
PEARCE & JOHNSON, ---	1850 - 1850	Birmingham	Printer (copperplate), Printer, Printer (letter)
PEARCE, Edward	1829 - 1842	Alcester	Bookseller, Stationer, Printer, Engraver/etcher, Bookbinder
PEARCE, Samuel Burt	1841 - 1855	Birmingham	Printer (copperplate), Printer, Engraver/etcher
PEARCE, William Henry	1815 - 1817	Birmingham	Printer, Bookseller, Stationer
PEART & SON, ---	1814 (before) - 1850	Birmingham	Printer, Bookseller, Stationer, Bookbinder, Paper merchant, Librarian/owner of circulating library, Paper merchant (wholesale), Account-book manufacturer/maker, Printer (copperplate), Engraver/etcher, Printer (lithographic), Papermaker, Printer (letter), Machine-ruler
PEART, Richard & Son	1849 - 1849	Birmingham	Account-book manufacturer/maker, Printer, Lithographer

Printer	Trade Dates	Place	Book Trades
PEART, Richard II	1814 - 1845	Birmingham	Printer, Bookseller, Stationer, Bookbinder, Papermaker, Paper merchant, Librarian/owner of circulating library
PEDLEY, Oliver	1845 - 1850	Birmingham	Engraver/etcher, Printer (copperplate)
PEGG, George G	1840 ? - 1840	Coventry	Printer
PEIRCE, Henry	1835 - 1839	Birmingham	Printer, Printer (copperplate), Engraver/etcher
PENDRELL, John Alexander	1822 - 1825	Birmingham	Printer, Bookbinder
PENN, Charles Joshua	1838 - 1851	Birmingham	Engraver/etcher, Printer (copperplate), Printer
PENN, J	1831 - 1833	Leamington	Bookseller, Stationer, Printer, Librarian/owner of circulating library, Publisher (newspaper)
PEPPERDAY, William	1847 - 1883	Rugby	Bookseller, Printer, Stationer
PERCY, Joseph Wilcox	1845 - 1852	Leamington	Printer
PERRY, John	1803 - 1820	Stratford on Avon	Printer, Librarian/owner of circulating library, Bookseller
PERRY, Michael	1847 - 1850	Birmingham	Printer, Stationer, Librarian/owner of circulating library, Newsagent/vendor/man/news agent
PERRY, Thomas	1841 (before) - 1847	Birmingham	Engraver/etcher, Printer (copperplate)
PERRY, William	1795 - 1825	Warwick	Music seller, Printer, Bookseller
PERRY, William Groves	1815 - 1864	Warwick	Bookseller, Printer, Music seller, Stationer, Bookbinder, Librarian/owner of circulating library (subscription)
PERRYMAN, Joseph Henry	1838 - 1850	Birmingham	Bookseller, Print seller, Stationer, Printer
PETTIT, George	1827 - 1834	Birmingham	Engraver/etcher, Printer (copperplate)
PHILLIPS, Philip	1815 - 1820	Birmingham	Engraver/etcher, Printer (copperplate), Engraver/etcher (copperplate)
PHILLIPS, Thomas	1843 - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Printer, Printer (lithographic)
PICKARD, Thomas Morris	1824 - 1837	Birmingham	Engraver/etcher, Printer (copperplate), Bookbinder's supplier, Bookbinder's toolcutter/toolmaker
PIERCE & SEYMOUR, ---	1834 - 1834	Birmingham	Printer (copperplate), Printer, Engraver/etcher
PIKE, Cornelius	1849 - 1849	Birmingham	Printer, Bookseller
PILTER, R	1840 (before) - 1850	Birmingham	Printer
PLASTANS, William	1828 - 1850	Birmingham	Bookbinder, Bookseller, Stationer, Newsagent/vendor/man/news agent, Publisher, Bookseller (periodical), Printer (letter)
POLLARD, John	1826 - 1826	Kenilworth	Printer
POLLARD, John	1826 - 1829	Leamington	Bookseller, Stationer, Printer
POLLARD, Stephen	1826 - 1826	Kenilworth	Printer
POULTER, George	1845 (before) - 1855	Leamington	Bookseller, Stationer, Printer, Bookbinder
POWELL & WAKEMAN, ---	1832 (before) - 1839	Birmingham	Engraver/etcher, Printer (copperplate), Printer, Papermaker, Paper merchant, Stationer (wholesale), Typographer/Letter-cutter
POWELL, James	1831 - 1834	Birmingham	Printer

Printer	Trade Dates	Place	Book Trades
POWELL, Thomas	1817 - 1838	Birmingham	Engraver/etcher, Paper merchant, Printer, Stationer (wholesale), Typographer/Letter-cutter
PRATT, William	1840 (before) - 1860	Birmingham	Printer, Stationer, Bookseller, Printer (ballad), Bookbinder, Newsagent/vendor/man/news agent, Bookseller (periodical)
PRICE & CO, ---	1838 - 1851	Birmingham	Printer, Stationer (wholesale), Engraver/etcher, Paper merchant, Printer (copperplate), Stationer, Bookseller, Pen dealer (steel)
PRICE, Edward	1846 - 1847	Birmingham	Printer, Stationer
PRICE, Frederick	1838 (before) - 1849	Birmingham	Printer
PRICE, J & Co	1843 - 1843	Birmingham	Stationer, Printer
PRICE, James	1841 - 1841	Birmingham	Printer
PRICE, John	1845 - 1850	Birmingham	Engraver/etcher, Printer (copperplate)
PRICE, Joseph	1845 - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Paper merchant, Printer, Stationer, Stationer (wholesale), Paper merchant (wholesale), Engraver/etcher (wood), Account-book manufacturer/maker
PRICE, Thomas	1823 - 1851	Birmingham	Printer, Stationer (wholesale), Engraver/etcher, Paper merchant, Printer (copperplate), Stationer
PRICE, Thomas	1834 - 1834	Coventry	Bookseller, Printer, Stationer
PURSALL, John	1814 - 1842	Birmingham	Engraver/etcher, Printer (copperplate), Typographer/Letter-cutter
PYE, John	1838 - 1843	Birmingham	Engraver/etcher, Printer
QUINN & SON, ---	1841 (before) - 1841	Birmingham	Printer (copperplate)
QUINN, John	1841 - 1841	Birmingham	Printer (copperplate)
QUINN, John & Son	1841 - 1845	Birmingham	Printer (copperplate), Printer, Engraver/etcher
QUINN, William Arthur	1842 (before) - 1842	Birmingham	Printer (copperplate), Engraver/etcher
RADCLIFFE & CO, Thomas	1838 - 1838	Birmingham	Engraver/etcher, Printer, Stationer
RADCLIFFE & CO, William	1832 - 1834	Birmingham	Engraver/etcher, Printer, Bookbinder, Stationer
RADCLIFFE, Thomas	1814 - 1855	Birmingham	Engraver/etcher, Printer (copperplate), Stationer, Bookbinder, Lithographer, Print seller
RADCLIFFE, William	1814 - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Bookbinder, Stationer, Print seller
RADCLIFFE, William & Thomas	1817 - 1830	Birmingham	Engraver/etcher, Printer, Printer (copperplate), Bookbinder, Print seller, Stationer (fancy)
RADCLYFFE, T	1849 - 1849	Birmingham	Printer (copperplate), Engraver/etcher
RADCLYFFE, T & Son	1849 - 1849	Birmingham	Printer, Lithographer
RADCLYFFE, Thomas & Co	1839 - 1839	Birmingham	Printer, Engraver/etcher
RADNALL, Richard	1833 - 1847	Birmingham	Bookseller, Printer, Stationer
RAGG, George	1809 - 1822	Birmingham	Printer, Bookseller, Newsagent/vendor/man/news agent
RAGG, Thomas	1841 - 1859	Birmingham	Printer, Bookseller, Publisher (newspaper), Stationer, Bookbinder, Paper merchant, Publisher, Newspaper proprietor

Printer	Trade Dates	Place	Book Trades
RANN, James	1846 - 1847	Birmingham	Printer
READER, William	1835 - 1837	Birmingham	Printer, Bookseller
READER, William	1797 (date of apprentice-ship) - 1852	Coventry	Printer, Bookseller, Stationer
REILY, Edwin	1849 - 1849	Birmingham	Printer, Engraver/etcher
REILY, Edwin	1850 - 1850	Birmingham	Engraver/etcher, Printer, Lithographer
RENSHAW, James	1822 - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Printer
REYNOLDS & CO, ---	1838 - 1838	Birmingham	Printer (copperplate), Printer, Engraver/etcher, Paper merchant (wholesale)
REYNOLDS, J A	1838 - 1838	Birmingham	Printer (copperplate), Printer, Engraver/etcher, Paper merchant (wholesale)
REYNOLDS, J A & Co	1839 - 1839	Birmingham	Printer, Engraver/etcher
REYNOLDS, John	1827 - 1830	Birmingham	Engraver/etcher, Printer (copperplate)
REYNOLDS, William	1796 - 1824	Birmingham	Engraver/etcher, Printer (copperplate)
ROBERTS, Frederick James	1838 - 1845	Birmingham	Engraver/etcher, Printer (copperplate)
ROBINSON, George Richard	1837 - 1864	Leamington	Bookbinder, Bookseller, Printer, Stationer
ROBINSON, T	1846 - 1847	Birmingham	Printer (copperplate), Engraver/etcher
ROBOTHAM, Thomas	1845 - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Printer
ROLLASON & READER, ---	1821 - 1821	Coventry	Printer (newspaper)
ROLLASON, Ann	1817 - 1839	Coventry	Bookseller, Stationer, Printer, Newspaper proprietor
ROLLASON, Charles Aris Noah	1829 (before) - 1855	Coventry	Printer, Bookseller, Stationer, Publisher (newspaper)
ROLLASON, W	1838 - 1838	Coventry	Printer
ROPER, J N	1848 - 1848	Atherstone	Printer (journeyman), Bookseller, Stationer
ROSE & LAPWORTH, ---	1821 - 1826	Leamington	Printer, Bookbinder
ROSE, George Frederick	1845 - 1847	Birmingham	Engraver/etcher, Printer, Bookseller, Printer (copperplate), Stationer
ROSE, William	1821 - 1827	Leamington	Bookseller, Printer, Stationer, Bookbinder, Music seller
ROSE, William	1820 - 1867	Warwick	Bookseller, Printer, Stationer, Bookbinder, Music seller, Printer (copperplate), Engraver/etcher, Printer (ornamental), Publisher
ROSE, William Marshall	1822 - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Bookseller, Stationer
ROSEWARNE, J	1840 (before) - 1840	Birmingham	Printer, Printer (chapbook)
ROTHERAM, William	1850 - 1850	Coventry	Printer (letter)
ROTHERHAM, William	1804 - 1855	Coventry	Printer, Bookseller, Stationer, Bookbinder
ROWELL & SONS, Sarah	1827 (before) - 1829	Rugby	Bookseller, Stationer, Printer
ROWELL, Robert	1810 - 1827	Rugby	Bookseller, Printer, Stationer

Printer	Trade Dates	Place	Book Trades
ROWELL, Sarah	1827 - 1842	Rugby	Bookseller, Printer, Stationer
ROYLE, Henry	1820 - 1839	Birmingham	Engraver/etcher, Printer (copperplate)
ROYLE, James	1841 (before) - 1841	Birmingham	Engraver/etcher, Printer (copperplate)
RUSSELL & CO, William	1827 - 1829	Alcester	Bookseller, Stationer, Printer, Engraver/etcher
RUSSELL & WHITING, ---	1832 - 1832	Birmingham	Printer, Printer (ballad), Printer (chapbook), Bookseller, Bookbinder, Stationer
RUSSELL, Joseph	1811 - 1839	Birmingham	Printer, Bookbinder, Printer (ballad), Stationer, Printer (chapbook), Bookseller
RUSSELL, Joseph	1841 - 1847	Birmingham	Printer, Stationer
RUSSELL, Joseph	1839 - 1840	Solihull	Printer
RUSSELL, Richard	1849 - 1862	Leamington	Printer
RUSSELL, Samuel	1834 - 1851	Birmingham	Engraver/etcher, Printer (copperplate), Printer (letter)
RUSSON, William	1827 (before) - 1830	Alcester	Bookseller, Engraver/etcher, Printer, Stationer
SALTER, R J	1848 (before) - 1848	Birmingham	Printer
SAMUEL, Nathan	1831 - 1831	Birmingham	Printer
SARGENT, George	1834 - 1841	Birmingham	Engraver/etcher, Printer (copperplate), Typographer/Letter-cutter
SAVAGE, William C	1846 - 1850	Birmingham	Engraver/etcher (copperplate), Printer (copperplate), Printer, Engraver/etcher
SCOTT, George	1828 - 1832	Birmingham	Printer, Bookseller, Stationer, Bookbinder, Paper merchant
SEDGWICK, Francis	1834 (before) - 1835	Birmingham	Printer
SELKIRK, William James	1841 - 1850	Birmingham	Typographer/Letter-cutter, Engraver/etcher, Printer (copperplate)
SEYMOUR, Charles	1833 - 1850	Birmingham	Engraver/etcher, Stationer, Printer (copperplate), Bookseller, Printer (letter)
SHARP, James jr	1828 - 1847	Warwick	Printer
SHARP, Samuel	1850 - 1850	Rugby	Bookseller, Printer, Stationer
SHARPE, Charles	1820 - 1821	Birmingham	Engraver/etcher, Printer (copperplate), Bookseller
SHARPE, Henry I	1825 - 1831	Leamington	Printer, Bookseller, Newspaper proprietor
SHARPE, Henry I	1791 - 1831	Warwick	Bookseller, Printer, Publisher, Music seller, Stationer
SHARPE, Henry II	1825 - 1876	Leamington	Printer, Bookseller, Newspaper proprietor
SHARPE, Henry II	1813 - 1876	Warwick	Printer, Bookseller, Newspaper proprietor, Stationer, Bookbinder, Publisher (newspaper)
SHARPE, Samuel	1849 (before) - 1855	Rugby	Bookseller, Stationer, Printer, Bookbinder
SHELDON, John	1815 - 1828	Birmingham	Engraver/etcher, Printer (copperplate), Typographer/Letter-cutter
SHELDON, John	1827 - 1830	Birmingham	Engraver/etcher, Printer (copperplate)
SHEPHARD, Frederick	1827 - 1830	Birmingham	Engraver/etcher, Printer (copperplate)
SHEPHERD, George	1827 - 1830	Birmingham	Engraver/etcher, Printer (copperplate)

Printer	Trade Dates	Place	Book Trades
SHEPHERD, George & Samuel	1830 (before) - 1830	Birmingham	Engraver/etcher, Printer (copperplate)
SHEPHERD, Samuel	1827 - 1850	Birmingham	Engraver/etcher, Printer (copperplate)
SHEPHERD, William	1822 - 1834	Birmingham	Engraver/etcher, Printer (copperplate)
SHERWOOD, Isaac	1834 - 1834	Birmingham	Engraver/etcher, Printer (copperplate)
SHIPWAY, Benjamin	1837 - 1847	Birmingham	Printer, Engraver/etcher (copperplate), Printer (copperplate), Printer (letter)
SHORT, Edward William	1832 - 1850	Nuneaton	Bookseller, Printer, Stationer, Librarian/owner of circulating library, Newsagent/vendor/man/news agent
SHORT, Mary Ann	1850 - 1850	Nuneaton	Bookseller, Librarian/owner of circulating library, Printer, Stationer
SHOWELL, John Whitehouse	1828 (before) - 1856	Birmingham	Printer, Stationer, Printer (copperplate), Bookseller, Bookbinder, Print seller, Engraver/etcher, Printer (letter)
SIMISTER, John	1841 - 1850	Birmingham	Engraver/etcher, Printer, Paper merchant (wholesale), Printer (copperplate), Stationer (wholesale), Printer (letter), Paper merchant
SIMMISTER, John	1841 - 1850	Birmingham	Printer, Stationer (wholesale), Paper merchant (wholesale), Printer (copperplate), Engraver/etcher
SIMMONS, George	1846 - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Paper merchant, Printer, Paper merchant (wholesale), Printer (copperplate), Printer (letter)
SIMMS, Thomas	1824 - 1830	Birmingham	Engraver/etcher, Printer, Printer (copperplate)
SKIPP, Samuel	1843 - 1849	Birmingham	Engraver/etcher, Printer (copperplate)
SMALLWOOD, William	1828 (before) - 1834	Alcester	Printer
SMITH & GREAVES, ---	1824 - 1834	Birmingham	Engraver/etcher, Printer (copperplate), Printer, Paper merchant
SMITH & WHITEMAN, ---	1822 (before) - 1822	Birmingham	Engraver/etcher, Printer (copperplate)
SMITH, Charles	1827 - 1834	Birmingham	Printer, Printer (copperplate), Engraver/etcher
SMITH, David	1834 - 1850	Birmingham	Printer (copperplate), Engraver/etcher, Bookseller, Newsagent/vendor/man/news agent, Printer, Stationer, Map/chart maker, Lithographer, Bookseller (periodical), Printer (letter)
SMITH, Dyer Berry (Barry)	1831 (before) - 1860	Birmingham	Printer, Stationer, Printer (copperplate), Engraver/etcher, Press maker, Papermaker, Paper merchant
SMITH, Francis	1819 - 1876	Southam	Bookseller, Stationer, Printer, Newsagent/vendor/man/news agent
SMITH, James	1838 - 1841	Coventry	Engraver/etcher, Printer (copperplate)
SMITH, Job Orton	1809 - 1818	Birmingham	Printer, Librarian/owner of circulating library, Publisher (newspaper)
SMITH, John	1822 - 1822	Birmingham	Engraver/etcher, Printer (copperplate)
SMITH, Joseph	1840 - 1845	Stratford on Avon	Printer
SMITH, Michael	1835 - 1839	Birmingham	Printer, Bookbinder
SMITH, Thomas	1820 - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Printer, Paper merchant, Stationer
SMITH, Thomas	1827 - 1835	Coleshill	Printer, Stationer, Papermaker
SMITH, William Benjamin	1850 (before) - 1850	Birmingham	Newspaper proprietor, Publisher (newspaper), Printer, Printer (letter)

Printer	Trade Dates	Place	Book Trades
SMITH, William Hawkes	1812 - 1840	Birmingham	Printer, Librarian/owner of circulating library, Stationer, Paper merchant, Printer (copperplate), Printer (lithographic), Printer (newspaper), Bookseller, Music seller, Author, Publisher
SODEN, William Watts	1842 (before) - 1854	Warwick	Bookseller, Printer, Stationer, Bookbinder
SOLOMON, George	1841 (before) - 1850	Birmingham	Stationer, Bookbinder, Copperplate maker (retail), Stationer (wholesale), Printer (letter), Printer (copperplate), Engraver/etcher, Paper merchant, Paper merchant (wholesale), Account-book manufacturer/maker
SPENCER, John	1832 - 1841	Birmingham	Printer (copperplate), Engraver/etcher
SPOONER, Isaac	1822 - 1824	Birmingham	Printer
SPURR, Mary Ann	1832 - 1834	Birmingham	Printer (copperplate), Engraver/etcher
SPURR, Robert	1811 - 1832	Birmingham	Printer (copperplate), Engraver/etcher
SPURRIER, James	1835 - 1835	Birmingham	Printer
SQUIRES, John	1846 - 1846	Warwick	Printer
SQUIRES, Joseph Fowler	1846 - 1846	Warwick	Printer
STAMPS & CO, ---	1841 - 1850	Birmingham	Engraver/etcher, Printer, Printer (copperplate), Papermaker (wholesale), Printer (letter), Papermaker, Paper merchant
STAMPS, James	1841 (before) - 1850	Birmingham	Engraver/etcher, Printer, Printer (copperplate), Papermaker (wholesale), Paper merchant (wholesale)
STANSBIE, Henry	1827 - 1830	Birmingham	Printer, Stationer, Papermaker, Paper merchant, Cardmaker
STANSBIE, Hezekiah	1821 - 1829	Birmingham	Papermaker, Paper merchant, Stationer, Printer, Pasteboard maker/dealer
STEPHENS, Jane	1834 - 1834	Alcester	Bookseller, Librarian/owner of circulating library, Printer, Stationer
STEWART, Alfred	1849 - 1850	Birmingham	Engraver/etcher, Printer (copperplate)
STOKES, Thomas	1834 - 1834	Birmingham	Printer (copperplate), Engraver/etcher, Stationer
STONE, Edward James	1849 - 1849	Birmingham	Bookbinder, Engraver/etcher, Printer
STONE, Richard Peach	1827 - 1839	Birmingham	Printer, Printer (copperplate), Lithographer, Bookbinder, Stationer, Bookseller
STONE, William	1839 - 1850	Birmingham	Printer, Bookseller, Bookbinder, Stationer, Printer (copperplate), Printer (letter), Engraver/etcher, Bookbinder
STORR, Edward & Elizabeth	1842 - 1843	Alcester	Bookseller, Stationer, Printer, Bookbinder, Newsagent/vendor/man/news agent
STOTT, Richard	1811 (date from advertisment or newspaper) - 1845	Coventry	Bookseller, Bookbinder, Stationer, Printer, Bookseller (periodical)
STRICKLAND & PETEFER, ---	1841 (before) - 1841	Birmingham	Engraver/etcher, Printer (copperplate)
STRICKLAND & PETTEFER, ---	1841 - 1841	Birmingham	Printer (copperplate), Engraver/etcher
SUFFIELD, William	1811 - 1847	Birmingham	Bookseller, Stationer, Paper merchant, Printer, Bookbinder, Librarian/owner of circulating library, Paper-hanger

Printer	Trade Dates	Place	Book Trades
SWAN BROTHERS, ---	1849 - 1851	Birmingham	Engraver/etcher, Printer (copperplate), Printer, Lithographer, Account-book manufacturer/maker, Stationer (wholesale), Stationer, Printer (letter), Printer (lithographic)
TAIT, William Ironside	1845 - 1850	Rugby	Bookseller, Bookbinder, Stationer, Printer
TALBOT, William	1817 (before) - 1830	Birmingham	Printer, Printer (copperplate), Engraver/etcher, Bookseller, Stationer
TALLIS, John I	1820 - 1821	Birmingham	Printer, Bookseller, Publisher
TAYLOR, ---	1828 - 1829	Birmingham	Engraver/etcher, Printer (copperplate)
TAYLOR, ---	1848 - 1850	Birmingham	Printer, Bookseller, Stationer, Newsagent/vendor/man/news agent
TAYLOR, Edward	1815 - 1875	Birmingham	Printer, Bookbinder, Printer (lithographic), Engraver/etcher, Newsagent/vendor/man/news agent
TAYLOR, Edward	1841 - 1850	Birmingham	Bookbinder, Printer (copperplate), Printer (letter), Engraver/etcher, Newsagent/vendor/man/news agent, Bookseller (periodical)
TAYLOR, GLOVER & CO., ---	1849 - 1850	Birmingham	Bookseller, Newsagent/vendor/man/news agent, Stationer, Bookseller (periodical), Librarian/owner of circulating library, Printer (letter), Bookbinder, Newsroom/readingroom
TAYLOR, Joseph	1850 (before) - 1850	Birmingham	Engraver/etcher, Printer (copperplate)
TAYLOR, Joseph (Josh)	1838 - 1847	Birmingham	Printer, Bookseller, Newsagent/vendor/man/news agent, Stationer, Printer (letter)
TAYLOR, Sarah	1800 ? - 1818	Birmingham	Printer, Stationer
TAYLOR, William	1849 - 1849	Birmingham	Printer, Engraver/etcher
THOMSON, Lewis	1807 - 1824	Birmingham	Printer, Bookseller, Bookbinder (law), Stationer (law), Paper merchant (wholesale), Newsagent/vendor/man/news agent
TIBBETTS, James	1850 (before) - 1850	Birmingham	Engraver/etcher, Printer (copperplate)
TIBBETTS, John	1830 - 1830	Birmingham	Printer (copperplate), Engraver/etcher, Paper merchant
TIBBITS, John	1827 - 1852	Birmingham	Printer, Engraver/etcher, Printer (copperplate), Paper merchant, Papermaker, Stationer (wholesale)
TIBBITTS, J	1849 - 1849	Birmingham	Printer (copperplate)
TITE, William	1814 - 1872	Coleshill	Printer, Bookseller, Stationer, Bookbinder, Print seller
TOBIN, John	1841 (before) - 1846	Birmingham	Engraver/etcher, Printer (copperplate)
TOLLEY & SONS, William	1820 (after) - 1820	Birmingham	Engraver/etcher, Printer (copperplate)
TOLLEY, E	1843 - 1847	Birmingham	Engraver/etcher, Engraver/etcher (maps), Printer, Printer (copperplate)
TOLLEY, J	1839 - 1839	Birmingham	Printer, Engraver/etcher
TOLLEY, James	1827 - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Printer, Lithographer, Printer (lithographic)
TOLLEY, William	1790 (before) - 1830	Birmingham	Engraver/etcher, Printer (copperplate)
TOMKINSON, J	1839 - 1839	Birmingham	Printer, Engraver/etcher
TOMKINSON, Joseph	1833 - 1881	Birmingham	Stationer (wholesale), Printer, Bookbinder, Paper merchant, Papermaker, Rag-merchant
TOMKINSON, Joseph	1843 - 1881	Coventry	Printer, Engraver/etcher, Paper merchant, Bookseller, Rag-merchant, Stationer

Printer	Trade Dates	Place	Book Trades
TOMKINSON, Joshua & Nephew	1843 (date from advertisment or newspaper) - 1843	Birmingham	Printer, Stationer
TOMKINSON, R. C.	1849 - 1849	Birmingham	Account-book manufacturer/maker, Printer, Lithographer
TOMKINSON, Richard Cyples jr	1845 - 1860	Birmingham	Paper merchant, Stationer (wholesale), Bookbinder, Printer, Paper merchant (wholesale), Stationer, Printer (letter), Engraver/etcher, Rag-merchant, Printer (copperplate), Lithographer
TOMKINSON, Richard Cyples jr	1838 - 1860	Coventry	Printer, Engraver/etcher, Paper merchant, Stationer, Rag-merchant, Cardmaker
TOMPKINSON, Joseph	1844 (before) - 1844	Birmingham	Printer (journeyman)
TOMPKINSON, R P	1838 - 1839	Coventry	Printer, Stationer, Cardmaker
TONKS, John	1843 - 1868	Birmingham	Printer, Engraver/etcher, Stationer, Bookbinder, Lithographer, Printer (copperplate), Printer (letter), Printer (lithographic)
TONKS, Thomas	1843 - 1844	Birmingham	Printer, Engraver/etcher, Stationer
TURNER & SON, ---	1845 - 1845	Birmingham	Printer
TURNER, F & J	1839 - 1839	Birmingham	Printer
TURNER, Frances	1838 - 1842	Birmingham	Printer, Stationer
TURNER, Frederick	1832 (before) - 1850	Birmingham	Printer, Bookseller, Music seller, Bookbinder, Stationer
TURNER, Frederick & Julius	1832 (before) - 1832	Birmingham	Printer
TURNER, Frederick James	1828 - 1860	Birmingham	Printer, Bookseller, Music seller, Stationer
TURNER, James	1841 - 1850	Birmingham	Printer, Printer (copperplate)
TURNER, John	1846 - 1850	Birmingham	Bookseller, Stationer, Printer
TURNER, John	1830 - 1830	Coventry	Printer, Bookseller, Stationer
TURNER, John jr	1833 - 1849	Coventry	Bookseller, Printer, Stationer, Newspaper proprietor, Publisher (newspaper), Printer (newspaper)
TURNER, John sr	1787 - 1863	Coventry	Bookseller, Printer, Stationer
TURNER, Julius	1831 - 1840	Birmingham	Printer
TURNER, Sarah	1819 - 1840	Birmingham	Bookseller, Printer, Stationer, Music seller, Bookseller (antiquarian)
TWIST, William	1845 - 1849	Birmingham	Engraver/etcher, Printer (copperplate)
TYE, John	1821 - 1847	Birmingham	Lithographer, Printer (copperplate), Engraver/etcher, Printer
TYE, John, Jun.	1845 - 1845	Birmingham	Printer, Engraver/etcher
TYLER, William	1845 - 1847	Birmingham	Printer (copperplate), Engraver/etcher
UMFREVILLE, Henry	1838 - 1851	Birmingham	Engraver/etcher, Printer (copperplate), Printer (lithographic)
UNDERWOOD, Thomas	1832 - 1872	Birmingham	Lithographer, Printer (copperplate), Printer, Stationer, Printer (lithographic), Draughtsman (lithographic), Engraver/etcher
VALE & BALDWIN, ---	1827 - 1830	Birmingham	Engraver/etcher, Printer (copperplate), Printer, Papermaker, Paper merchant

Printer	Trade Dates	Place	Book Trades
VALE & SIMMS, ---	1824 (before) - 1824	Birmingham	Stationer, Printer, Engraver/etcher
VALE, Thomas	1846 - 1847	Birmingham	Printer (letter)
VALE, Thomas J	1830 - 1830	Birmingham	Printer (copperplate), Printer
VALE, Thomas James	1818 - 1850	Birmingham	Printer, Printer (copperplate), Stationer, Engraver/etcher
VEALE, Edward	1838 - 1838	Birmingham	Printer (copperplate)
VERNON, William Henry	1850 (before) - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Printer, Lithographer
WADSWORTH, Henry	1802 - 1818	Birmingham	Bookseller, Printer (ballad), Printer
WADSWORTH, Joseph	1849 - 1850	Birmingham	Bookseller, Stationer, Engraver/etcher, Printer (copperplate), Printer, Bookbinder
WAIT, William Ironside	1842 - 1887	Rugby	Bookseller, Printer, Printer (newspaper)
WAKEMAN, James	1841 - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Printer, Typographer/Letter-cutter, Stationer, Printer (letter)
WALKINSHAW, Henry	1827 - 1856	Birmingham	Engraver/etcher, Printer (copperplate), Printer, Paper merchant (wholesale), Printer (lithographic)
WALTON, W	1838 - 1838	Birmingham	Printer, Stationer
WALTON, William	1846 - 1847	Birmingham	Printer (letter)
WARD & PRICE, ---	1823 - 1823	Birmingham	Printer, Printer (copperplate)
WARD, E Mrs	1841 - 1852	Stratford on Avon	Bookseller, Printer, Newsagent/vendor/man/news agent
WARD, Frederick	1841 - 1852	Stratford on Avon	Bookseller, Printer, Newsagent/vendor/man/news agent, Stationer
WARD, Frederick & George	1850 - 1850	Stratford on Avon	Bookseller, Printer, Stationer
WARD, George	1843 - 1850	Alcester	Bookseller, Printer, Newsagent/vendor/man/news agent, Stationer
WARD, George	1850 (before) - 1850	Stratford on Avon	Bookseller, Stationer, Printer
WARD, James	1827 - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Typographer/Letter-cutter
WARD, James	1806 - 1841	Stratford on Avon	Bookseller, Printer, Newsagent/vendor/man/news agent, Stationer (law), Stationer, Newsroom/reading-room
WARD, John	1838 - 1841	Birmingham	Printer (copperplate)
WARD, John	1839 - 1839	Birmingham	Printer (copperplate)
WARD, William	1823 - 1833	Birmingham	Printer, Printer (copperplate), Music seller
WARRILOW, John	1827 - 1850	Birmingham	Engraver/etcher, Lithographer, Printer (copperplate), Printer, Paper merchant, Papermaker (coloured)
WARWICKSHIRE ALBION PRINTING OFFICE, ---	1850 - 1850	Leamington	Printer
WATSON & OMBLER, ---	1846 - 1847	Birmingham	Printer (letter)
WATSON, Charles	1826 - 1854	Birmingham	Printer, Printer (copperplate), Printer (ballad), Newspaper proprietor, Printer (letter), Publisher (newspaper), Printer (newspaper)

Printer	Trade Dates	Place	Book Trades
WATSON, George	1841 - 1850	Birmingham	Paper merchant, Printer, Stationer, Stationer (wholesale), Paper merchant (wholesale), Account-book manufacturer/maker, Printer (copperplate), Printer (letter), Engraver/etcher
WATT, Robert	1839 - 1850	Birmingham	Stationer, Bookbinder, Printer (copperplate), Printer, Lithographer, Machine-ruler, Pocket-book maker, Account-book manufacturer/maker, Printer (lithographic)
WATTON & PRICE, ---	1838 - 1838	Birmingham	Printer, Stationer
WATTON & PRICE, ---	1839 - 1839	Birmingham	Printer, Stationer
WATTON, William	1832 - 1880	Birmingham	Printer, Bookbinder
WATTS, James	1846 - 1847	Birmingham	Printer, Newsagent/vendor/man/news agent
WATTS, Thomas	1834 - 1850	Birmingham	Printer (copperplate), Printer, Bookbinder, Bookseller, Newsagent/vendor/man/news agent, Bookseller (periodical), Stationer (wholesale), Printer (letter), Stationer
WEBB, Joseph	1820 - 1850	Birmingham	Bookseller, Printer, Stationer, Publisher (newspaper), Printer (newspaper)
WEBSTER, John jr	1817 - 1832	Birmingham	Printer, Bookseller, Newsagent/vendor/man/news agent, Stationer, Papermaker, Printer (copperplate), Newsroom/readingroom, Newsroom/readingroom
WESTON, James	1841 (before) - 1841	Birmingham	Engraver/etcher, Printer (copperplate), Printer
WHITE & HARRISON, ---	1827 (before) - 1827	Birmingham	Printer, Stationer
WHITE & PIKE, ---	1849 - 1850	Birmingham	Bookseller, Stationer, Printer, Bookbinder, Machine-ruler
WHITE, Edward	1828 - 1841	Birmingham	Engraver/etcher, Printer (copperplate), Printer
WHITE, Lancelot	1827 (before) - 1827	Birmingham	Printer, Stationer
WHITEHEAD & SON, ---	1818 - 1818	Coventry	Bookbinder, Printer (copperplate)
WHITEHEAD, Charles	1841 - 1841	Birmingham	Printer
WHITEHEAD, Charles	1827 - 1854	Coventry	Bookbinder, Printer (copperplate)
WHITEHEAD, Richard	1795 - 1830	Coventry	Bookbinder, Printer (copperplate)
WHITEHOUSE & HARRIS, ---	1819 (before) - 1819	Birmingham	Printer
WHITEHOUSE, John	1819 (before) - 1845	Birmingham	Printer (copperplate), Bookbinder, Printer, Stationer, Printer (letter), Engraver/etcher
WHITEHOUSE, Richard	1828 - 1847	Birmingham	Engraver/etcher, Printer (copperplate)
WHITFIELD, William Henry	1832 - 1834	Birmingham	Engraver/etcher, Printer (copperplate)
WHITING, John	1832 - 1835	Birmingham	Printer, Bookseller, Stationer
WHITNASH PRESS, ---	1851 - 1851	Whitnash	Printer
WIGG, Edgar Smith	1845 - 1848	Atherstone	Printer, Stationer, Bookbinder, Bookseller, Printer (copperplate), Newsagent/vendor/man/news agent, Printer (letter)
WIGHTMAN, John Henry	1834 - 1834	Birmingham	Printer (copperplate), Engraver/etcher
WILKINS, Samuel	1845 - 1850	Birmingham	Printer (copperplate), Engraver/etcher, Printer (letter)
WILKINSON, Charles	1846 - 1847	Birmingham	Printer

Printer	Trade Dates	Place	Book Trades
WILKINSON, Charles	1849 - 1850	Birmingham	Printer, Engraver/etcher, Printer (letter)
WILKINSON, William	1850 (before) - 1850	Birmingham	Engraver/etcher, Printer (copperplate), Printer
WILKS, Charles	1802 - 1818	Birmingham	Printer, Bookseller, Stationer
WILLIAMS, Benjamin	1841 (before) - 1850	Coleshill	Printer, Stationer, Bookseller
WILLIAMS, Eliza Mrs	1845 - 1850	Alcester	Bookseller, Stationer, Printer, Librarian/owner of circulating library
WILSON & CO, ---	1846 - 1847	Birmingham	Printer
WILSON & CO, ---	1849 - 1850	Birmingham	Printer
WILSON, John	1850 (before) - 1850	Birmingham	Printer
WINDSOR, James	1849 - 1850	Birmingham	Printer
WINNALL, Henry	1846 - 1850	Birmingham	Bookseller, Stationer, Printer, Bookbinder
WOOD & BENTON, ---	1841 - 1841	Birmingham	Printer (copperplate), Engraver/etcher
WOOD & TIBBETTS, ---	1830 - 1830	Birmingham	Printer (copperplate), Engraver/etcher, Stationer (wholesale)
WOOD & TIBBITTS, ---	1828 - 1828	Birmingham	Printer (copperplate), Printer, Engraver/etcher, Stationer (wholesale)
WOOD, ---	1828 - 1829	Birmingham	Printer (copperplate), Printer, Engraver/etcher, Stationer (wholesale)
WOOD, John	1839 - 1839	Birmingham	Printer, Engraver/etcher
WOOD, Joseph	1841 (before) - 1850	Birmingham	Bookbinder, Printer, Stationer, Printer (copperplate), Printer (letter), Engraver/etcher
WOOD, T	1839 - 1839	Birmingham	Printer (copperplate)
WOOD, T & W	1824 - 1824	Birmingham	Bookseller, Printer, Stationer
WOOD, Thomas	1830 - 1830	Birmingham	Printer (copperplate), Printer
WOOD, Thomas jr	1824 - 1850	Birmingham	Bookseller, Printer, Stationer, Printer, Printer (copperplate), Bookbinder
WOOD, Thomas sr	1790 - 1824	Birmingham	Printer, Printer (copperplate), Bookseller, Bookbinder, Engraver/etcher, Stationer
WOOD, William	1824 - 1847	Birmingham	Bookseller, Printer, Stationer, Bookbinder
WOOD, William	1830 - 1838	Birmingham	Printer, Engraver/etcher
WOOD, William	1839 - 1839	Birmingham	Printer, Engraver/etcher
WRIGHT & BALDWIN, ---	1839 - 1839	Birmingham	Printer, Engraver/etcher
WRIGHT & DAIN, ---	1841 - 1850	Birmingham	Publisher (newspaper), Printer
WRIGHT, George	1828 - 1835	Birmingham	Engraver/etcher, Printer (copperplate)
WRIGHT, Henry	1834 - 1834	Birmingham	Printer (copperplate)
WRIGHT, Mary Ann	1837 - 1841	Birmingham	Printer
WRIGHT, R & W	1846 - 1846	Birmingham	Bookbinder, Bookseller, Printer, Print seller, Stationer
WRIGHT, Thomas Barber	1834 - 1878	Birmingham	Printer, Newspaper proprietor, Publisher, Bookbinder, Printer (copperplate)

WRIGHT, William	1850 (before) - 1854	Alcester	Bookseller, Printer, Stationer
WRIGHT, William	1820 - 1855	Birmingham	Printer, Bookseller, Engraver/etcher, Printer (ballad), Printer (copperplate), Printer (letter), Engraver/etcher (wood), Bookbinder
WRIGHTON, Daniel jr	1820 - 1822	Birmingham	Printer
WRIGHTON, Daniel sr	1810 - 1820	Birmingham	Printer, Pasteboard maker/dealer, Cardmaker
WRIGHTON, WHITTLE & CO., ---	1849 - 1849	Birmingham	Engraver/etcher, Typographer/Letter-cutter, Printer
WRIGHTSON & WEBB, ---	1839 - 1847	Birmingham	Bookbinder, Bookseller, Stationer, Printer, Account-book manufacturer/maker, Printer (copperplate), Printer (letter), Paper merchant (wholesale), Publisher
WRIGHTSON, Robert	1807 - 1850	Birmingham	Printer, Bookseller, Bookbinder, Stationer, Paper merchant (wholesale), Newsagent/vendor/man/news agent, Printer (copperplate), Music seller, Lithographer, Publisher
YOUNG, John	1828 (before) - 1839	Birmingham	Engraver/etcher, Printer (copperplate)
YOUNG, Joseph T	1846 - 1847	Birmingham	Printer (copperplate), Engraver/etcher
YOUNGMAN, Arthur	1839 - 1846	Leamington	Printer

Table 3.12 Printers identified in the ephemera sample.

Printer	Printers Address	Ephemera Dates	Times in sample
ALLDAY LTD.	128/30 Edmond Street, Birmingham	1892-1913	9
ALLEN, Josiah		1885	1
Bacon and Co. Ltd., G.W.	127 Strand, London	1910	2
BaKunin Press	London	1913	1
BALDWIN, James & Son	Meville Street, Birmingham	1920	1
Bartholomew, J	Edinburgh	1920	7
BILLING SON & CO., Martin BILLING, Martin	Livery Street, Birmingham Steam Press offices, 75/6 Newhall Street, Birmingham	1853-1919	5
Birmingham Citizens' Council		1904	1
Birmingham Daily Gazzette Birmingham Gazette Company, Limited	52 High Street, Birmingham	1884-92	2
Birmingham Daily Post		1902-5	2
Birmingham News and General Printers Ltd. Birmingham News and Printing Co., Limited	John Bright Street, Birmingham	1895-1906	2
Birmingham Post & Mail		1839-1926	1
BIRMINGHAM PRINTERS LTD.	14 Pershore Street, Birmingham 42-44 Hill Street, Birmingham	1905-21	15
Birmingham Weekly Post	Birmingham	1911	1
Borough Surveyor's Office	Birmingham	1885	1
Bradshaw & Blacklock	Manchester	1839-50	11
bradshaw printing co., trade union printers	harborne, birmingham	1920	2
Bremros & Sons	Derby	1908	1
Bristol & Co., J.W.	50a, William Edwards Street, Birmingham	1893	1
Brueton, J	Stafford Street, Birmingham	1905-14	1
Buckler & Webb, ltd.	Argyle Works, Church Street, Birmingham Church Street, Birmingham	1837-1923	3
Cave & Sever	Manchester	1855	1
City of Birmingham Stationary Department	Birmingham	1911	1
Cooper & Co., Ltd., C.	Law Courts Press, 194 Corporation Street, Birmingham	1892-1923	4
CORBETT & SON	109 Soho road, Handsworth, Birmingham	1912-17	2
CORNISH BROS	New Street, Birmingham	1871	1
Corquadale and Co. Limited, M.	London Works, Newton	1837-1923	1
COULTON F.	32a Edward Road, Birmingham	1905-14	3
Cox & Son, H.	71 glovers road, small heath, birmingham	1906	2
Curative Workshops	Highbury Hospital, Moseley, Birmingham	1925	1

Drew, James	Edmund Street, Birmingham	1881-97	1
Edkins, Clement	Bridgnorth	1868-84	5
Educational Offices	Margaret Street, Birmingham	1912	1
EYRE & SPOTTISWOODE	London	1901	1
Free Press Co.	West Bromwich	1885	1
Gall & Inglis	London & Edinburgh	1898	2
Garden City Press, limited	Letchworth	1906	1
general printers	16 union street, Birmingham	1908	1
Gitton, G.R.	Bridgnorth	1832	2
GOODMAN & SONS, J.		1903-6	2
Green & Dewbery	Albert Street, Birmingham	1892-1906	1
GREW, Frederick	Albert Steam Press, Moor Street and Albert Street, Birmingham	1879-85	8
Guest, Henry	Priory Electric Press, 1 and 2, Lower Priory, Birmingham	1903 c.	1
HALL, Benjamin	High Street, Birmingham	1864	1
HAMMOND, Charles		1840s	1
Hansard	London	1842	4
HARRIS, William	High Street, Deritend, Birmingham	1837	1
HARWOOD	Derwent Buildings, Derby	1906	1
Hatton & Co.	Print Works, Market Street Passage and 108 New Street, Birmingham	1869	2
Haydon, R.E.	Birmingham	1905-14	1
Hayman, Christy & Lilly	Farringdon Road, London	1898	1
Herald & Daily Post	West Wear Street	1890 c.	1
Hodges, J.A.	66 Villa Road, Handsworth, Birmingham	1880	5
Hodges, K.	31 Dudley Street, 7 Dials	1806-92	1
Howell	Birmingham	1833	2
HUDSON & SON, ---	Edmond & Livery Street, Birmingham	1837-1923 c. (1887)	44
HUNT & SONS, Benjamin	75 High Street, Birmingham	1847	1
HUNT, George		1862	1
Iliffe & Son	Vicar lane, Coventry	1892-1906	1
Ireland, E.G.	Birmingham	1906	1
Irish unionist alliance	Dublin & London	1892	1
J. Pigot and Co.	Basing Lane, London, and Fountain Street, Manchester Fleet Street, and Fountain Street, Manchester	1835-41	6
JACKSON & SON, William	Moor Street, Birmingham	1806-92	1
JOESBURY, William	Aston Street, Birmingham	1848	6
Johnston, W. & A.K.	Edinburgh & London	1921	1
JONES & CO., George	12 Aston cross, birmingham	1920	1
Jones & Sons, Fred	55 Temple Row	1906 c.	6
Jones, Fred	53 Aston Road, Birmingham	1892	1
Kenrick & Jefferson, Ltd.	West Bromwich	1892	1

KETTLE, Samuel	84 digbeth, birmingham	1806-92	1
KING, T	birmingham	1806-92	3
KING, W.R.	CORNWALL STREET	1907	1
Kirby, Henry	73 lionel street, birmingham	1869	1
LADBROOK, A.A.	Bordesley, Birmingham	1905-14	5
Lake & Son, W.	Aston, Manor, Birmingham	1909	1
Lakins, T.H.	Edmund Street, birmingham	1874-86	10
LAWRENCE & C. LAWRENCE & CO.	Steelhouse lane, Birmingham	1892-1906	1
LAWRENCE & CO.	Newton Street, Birmingham	1892-1927	7
LEE, Herbert w.	67 Erkskine street, Birmingham	1921	1
Liberal Publication Department	London	1892-1906	3
Lovett & Son, Wm.	High Street, Birmingham	1905-14	1
MacMillan & Co.	London	1891 c.	2
Manwarings LTD.	John Bright street, Birmingham	1911-16	3
Midland educational company Limited	Corporation & Canon street	1891	1
Midlands Counties Herald		1862-1929	1
MOODY Brothers	Needless Alley, birmingham	1895-1907	3
Morland & Co.	170 Edmund Street, Birmingham	1903-4	2
Munton, g.j.	Hockley prinitng works, 2 great king street, hockley, birmingham	1923	1
MURRY, TOM	London	1892	1
Myers	York Pass, High Street, Birmingham	1894	1
News office	John bright street	1893	1
Observer Office	Manchester	1867	1
Ordnance Survey Office	Southampton	1888-1913	10
OSBORNE	New Street, Birmingham	1881 c.	1
OSBORNE & Son, E.C.	84 New Street, Birmingham	1892-1910	4
Packman, O.J.	146 Hockley Hill, Birmingham	1905-14	2
Palethorpe, Edwin	The 'Century' Press, Fleet Street, birmingham	1906	2
Parker Brothers	Dale End, Birmingham	1920	1
Parkes & Manwarings LTD.	Coleshill Street, Birmingham	1902-25	2
Parkes and Groves Theatrical Printers	33 Coleshill Street, Birmingham	1908-18	10
Peirce & Seymore	High Street, birmingham	1839 c.	1
PERCIVAL JONES LIMITED	148-9 Great Charles Street, Birmingham	1906-12	4
Pheonix Printing Co.	10 Parade Birmingham, and Handsworth	1862-1920	1
PRATT, William	82 digbeth, birmingham	1806-92	2
RAGG, Thomas	90 high street, birmingham	1806-92	1
Richard Clay	Bread Street Hill, London	1834	4
Roobottom, George	Globe Printing Works, High Street (Barton Arms), Aston Manor	1903 c.	1
RylanD, Howard	217 Bradford Street, Birmingham	1862-1929	1
Saxton, A.H.	Erdington, Birmingham	1913	1
SHAKESPEARE PRESS (BIRMINGHAM) LTD.	Hinckley Street, Birmingham	1923	1
Shipway & Co.	Masshouse lane & Albert Street, Birmingham	1906	1
SHIPWAY, G & J.H.	29 moor street, birmingham	1892	1

Slade & Marshall	albert street, birmingham	1905-14	1
Smith, S.	2 Broad Street corner, birmingham	1880	1
SMITH, W.H.	Nechells Park Post Office, Birmingham	1837-1923	1
Sport & Play ltd.	Lionel Street, Birmingham	1921	1
Stennett, W.J. & H.	Nottingham	1867	1
Stevens, A.	19 bromsgrove street	1888	1
Straker, W.	London	1905-14	1
SWAN BROTHERS, ---	45 Ann Street, birmingham	1849-51	1
TEMPLAR PRINTING WORKS	168 Edmund Street, Birmingham	1905-21	3
The 'Journal'	31 canon street, birmingham	1862-1920	1
The Robert Spennell Press	19 church street, Warwick	1920	1
TONKS, John	60-61 Hill St. (1845-49). 61 Hill St AND 65 Constitution Hill (1846-47). House: 83 Parade (1849). 85 New St. 22 Congreve St. 61 Hill St & 83 Parade (1850)	1854	1
TRUMAN, E	32, Newhall Street, Birmingham	1872-1903	1
TURNER, F & J		1839 c.	1
TURNER, Frederick	3 Snowhill, Birmingham	1834-56	6
Unett	glovers road, small heath, birmingham	1862-1929	1
Unknown	Unknown	1816-1929	337
Up-to-date Printers	73 St Paul's Road, New Ladypool Road	1862-1929	1
UPTON LIMITED, J.	Cambridge Street, Birmingham	1837-1926	4
UPTON, J.	Great Charles Street, Birmingham	1880-90 c.	3
VALE, Thomas James	Suffolk St. 2 Church St. 29/41/113 Moor St. 29 Cannon St. 3-4 Weaman St. 3/7 Freeman St.	1806-36	2
Wellson	Lecester	1905-14	1
WHITE & Co., J.R.	Newton Street, Birmingham	1876	1
WHITE & PIKE	Moor street printing works, birmingham	1892-1925	5
WHITE, J.R	203 Bloomsbury Street	1900-4	3
WHITEHOUSE & STEPHENSON	SUTTON STREET, ASTON	1903	1
William Walker & Sons	Otley	1905 c.	7
WILSON & CO., J.	New Street, Birmingham	1892	1
WOOD, A.	73 Digbeth, Birmingham	1862-1929	1
WRIGHTSON & WEBB, ---	The Athenaeum, 7/8 New St	1847	30

Table 3.13 Printers in the ephemera sample excluded from the analysis of document classes.

Printers	Printers Address	Ephemera Dates	Document Class	Narrower term	Times in sample.
WRIGHTSON & WEBB, ---	The Athenaeum, 7/8 New St, Birmingham	1847	Trade Directory Pages		30
BIRMINGHAM PRINTERS LTD.	14 Pershore Street, Birmingham 42-44 Hill Street, Birmingham	1905-21	Handbills Posters Leaflets Trade Catalogues	Political Posters Election Leaflets Printers' Specimen	15
Bradshaw & Blacklock	Manchester	1839-50	Timetables Maps/Plans Charts Advertisements	Railway Maps Travel Time Tables	11
Ordnance Survey Office	Southampton	1888-1913	Maps/Plans	Road Maps Street Maps	10
Bartholomew, J	Edinburgh	1920	Maps/Plans	Tourists Maps, Road Maps, Cycle Maps	7
William Walker & Sons	Otley	1905 c.	Booklets Advertisements Trade Catalogues	Advertising Booklets	7
J. Pigot and Co.	Basing Lane, London, and Fountain Street, Manchester Fleet Street, and Fountain Street, Manchester	1835-41	Trade Directory Pages		6
JOESBURY, William	Aston Street, Birmingham	1848	Charts	WallCharts	6
Hodges, J.A.	66 Villa Road, Handsworth, Birmingham	1880	Trade Catalogues	Printers' Specimen	5
Hansard	London	1842	Charts		4
Richard Clay	Bread Street Hill, London	1834	Trade Directory Pages		4

Table 3.14 Top printers in the sample ordered by quantity of ephemera produced.

Printers	Printers Address	Ephemera Dates	Document Class	Narrower term	Times in sample
HUDSON & SON, ---	Edmond & Livery Street, Birmingham	1851-1923	Advertisements Posters Charts Handbills Booklets Stationery Magazines Leaflets Trade Cards Invitations	Warning Notices Political Posters Educational Posters Election Leaflets Election Posters Circulars Magazine Advertisements Magazine Covers Hand cards Ballot Papers Lists Letters	44
Parkes and Groves Theatrical Printers; (Parkes & Manwarings LTD.)	33 Coleshill Street, Birmingham	1908-18; (1918-25)	Playbills Programmes	Cinema Programmes	12
Lakins, T.H.	Edmund Street, birmingham	1874-86	Posters Leaflets Forms Stationery	Application Forms Election Posters Election Leaflets Ballot Papers Letters	10
ALLDAY LTD.	128/30 Edmond Street, Birmingham	1892-1913	Leaflets Playbills Trade Cards Handbills Programmes Posters	Educational Posters, Election Leaflets, Showcards	9
GREW, Frederick	Albert Steam Press, Moor Street and Albert Street, Birmingham	1879-85	Advertisements Magazines Newspapers	Magazine Advertisements Magazine Covers Newspaper Advertisements	8
LAWRENCE & CO.	Newton Street, Birmingham	1892-1927	Handbills Posters	Warning Notices Election Posters State-of-the-poll-notices	7

Jones & Sons, Fred	55 Temple Row	*c.* 1906	Advertisements Booklets Programmes	Programme Advertise-ments	6
TURNER, Frederick	3 Snowhill, Birmingham	1834-56	Playbills Broadsides	Notices	6
BILLING SON & CO., Martin BILLING, Martin	Livery Street, Birmingham Steam Press offices, 75/6 Newhall Street, Birmingham	1853-1919	Playbills Posters Handbills	Political Posters Product Posters	5
Edkins, Clement	Bridgnorth	1868-84	Playbills		5
LADBROOK, A.A.	Bordesley, Birmingham	1905-14	Programmes Handbills Posters Forms Stationery	Order of Service Political Posters Hand Cards Application Forms Letters	5
WHITE & PIKE	Moor street printing works, birmingham	1892-1925	Leaflets Advertisements Handbills Posters	Circulars	5
Cooper & Co., Ltd., C.	Law Courts Press, 194 Corporation Street, Birmingham	1892-1923	Posters	Election Posters Product Posters	4
OSBORNE & Son, E.C.	84 New Street, Birmingham	1892-1910	Handbills	Hand Cards Ballot Papers	4
PERCIVAL JONES LIMITED	148-9 Great Charles Street, Birmingham	1906-12	Posters Handbills Trade Cards	Political Posters Hand Cards Ballot Papers Showcards Election Posters	4
UPTON LIMITED, J.	Cambridge Street, Birmingham	1837-1926	Posters Handbills Advertisements Charts	Almanac Exhibition Posters	4
Manwarings LTD.	John Bright street, Birmingham	1911-16	Programmes Handbills	Cinema Programmes	3
Buckler & Webb, ltd.	Argyle Works, Church Street, Birmingham Church Street, Birmingham	1837-1923	Posters Handbills	Protest Posters Political Posters	3
COULTON F.	32a Edward Road, Birmingham	1905-14	Handbills Posters	Sports Posters	3
KING, T	birmingham	1806-92	Broadsides	Ballad Sheets	3
Liberal Publication Department	London	1892-1906	Handbills Leaflets	Election Leaflets	3
MOODY Brothers	Needless Alley, birmingham	1895-1907	Maps/Plans Handbills	Seating Plans Hand Cards Ballot Papers	3

TEMPLAR PRINTING WORKS	168 Edmund Street, Birmingham	1905-21	Handbills Posters Leaflets	Protest Posters	3
UPTON, J.	Great Charles Street, Birmingham	*c.* 1880-90	Playbills Programmes	Theatre Programmes	3
WHITE, J.R	203 Bloomsbury Street	1900-4	Posters Handbills Stationery	Election Posters Announcement Notices Letters	3
Birmingham Daily Gazzette Birmingham Gazette Company, Limited	52 High Street, Birmingham	1884-92	Posters Leaflets	Protest Posters Election Leaflets	2
Birmingham Daily Post		1902-5	Newspapers		2
Birmingham News and General Printers Ltd. Birmingham News and Printing Co., Limited	John Bright Street, Birmingham	1895-1906	Leaflets Newspapers	Election Leaflets	2
bradshaw printing co., trade union printers	harborne, birmingham	1920	Handbills Playbills		2
CORBETT & SON	109 Soho road, Handsworth, Birmingham	1912-17	Handbills	Hand cards, Ballot Papers	2
Cox & Son, H.	71 glovers road, small heath, birmingham	1906	Posters Handbills	Election Posters	2
Gall & Inglis	London & Edinburgh	1898	Maps/Plans	Tourist Maps, Road Maps, Cycle Maps	2
Gitton, G.R.	Bridgnorth	1832	Playbills Handbills		2
GOODMAN & SONS, J.		1903-6	Handbills		2
Hatton & Co.	Print Works, Market Street Passage and 108 New Street, Birmingham	1869	Advertisements Newspapers	Newspaper Advertise-ments	2
Howell	Birmingham	1833	Broadsides	Execution Broadsides	2
MacMillan & Co.	London	*c.* 1891	Pamphlets Advertisements	Circulars	2
Morland & Co.	170 Edmund Street, Birmingham	1903-4	Handbills	Hand Cards Ballot Papers	2
Packman, O.J.	146 Hockley Hill, Birmingham	1905-14	Handbills Playbills		2
Palethorpe, Edwin	The 'Century' Press, Fleet Street, birming-ham	1906	Handbills		2
PRATT, William	82 digbeth, birmingham	1806-92	Broadsides	Ballad Sheets	2
VALE, Thomas James	Suffolk St. 2 Church St. 29/41/113 Moor St. 29 Cannon St. 3-4 Weaman St. 3/7 Freeman St.	1806-36	Broadsides		2

Table 3.15 Printers who produced 'Posters' in the ephemera sample.

Printer	Ephemera Dates	Narrower_term	Times in sample
BILLING SON & CO., Martin	1852-1921	Political Posters	19
Cooper & Co., Ltd., C.	1873-1906	Election Posters	16
BALDWIN, James & Son	1839-1926 c.	Campaign Posters	10
ALLDAY LTD.	1907-13	Educational Posters	6
Corquadale and Co. Limited, M.	1837-1923 c.	Exhibition Posters	6
BILLING, M.	1837-1923 c.	Product Posters	5
Birmingham Daily Gazzette	1837-1923 c.	Protest Posters	5
COULTON F.	1902-25	Sports Posters	4
City of Birmingham Stationary Department	1837-1923 c.	Warning Notices	4
Unknown	1904-20	Announcement Notices	3
UPTON LIMITED, J.	1837-1926 c.	Almanac	2
HUDSON & SON, ---	1906	Showcards, Election Posters	2
Unknown	1872	N/A	2
Unknown	1839-1926	Decorative Posters, Exhibition Posters, Stock Posters	1
Unknown	1919	Political Posters, Lists	1
EYRE & SPOTTISWOODE	1901	Proclamations	1
Unknown	1920-1	Showcards, Campaign Posters	1
Unknown	1905-14	Showcards, Political Posters	1
Bremros & Sons	1908	Travel and Transport Posters	1

Table 3.16 Printers who produced 'Playbills' in the ephemera sample.

Printer	Ephemera Dates	Narrower_term	Times in sample
Parkes and Groves Theatrical Printers	1907-11		10
TURNER, Frederick	1839-56 c.		6
Edkins, Clement	1868-84		5
Unknown	1832-1911 c.	Notices	4
BILLING SON & CO., Martin	1858-64		2
Gitton, G.R.	1832		2
UPTON, J.	1880-1 c.		2
ALLDAY LTD.	1893	Showcards	1
Bradshaw printing co., trade union printers	1920		1
HARRIS, William	1837		1
Observer Office	1867		1
Packman, O.J.	1905-14		1
Peirce & Seymore	1839 c.		1
Smith, S.	1880		1
Stennett, W.J. & H.	1867		1
WHITE & Co., J.R.	1876		1

Table 3.17 Printers who produced 'Broadsides' in the ephemera sample.

Printer	Ephemera Dates	Narrower_term	Times in sample
Unknown	1833-92 c.	Notices, Ballad Sheets	11
KING, T	1833-92	Ballad Sheets	3
howell	1833-63 c.	Execution Broadsides	2
PRATT, William	1833-92	Ballad Sheets	2
VALE, Thomas James	1832-36 c.		2
Hodges, K.	1833-92 c.	Ballad Sheets	1
HUNT & SONS, Benjamin	1847	Notices	1
JACKSON & SON, William	1833-92	Ballad Sheets	1
KETTLE, Samuel	1833-92	Ballad Sheets	1
RAGG, Thomas	1806-92		1
TURNER, Frederick	1834	Notices	1

Appendix 4: Themes and Categories

The following Tables and Figures show supporting material concerning the use of Themes and Categories using the ephemera sample.

Table 4.1 The ephemera sample by Themes and Categories.

	Across All Themes	Commercial Life Only	Commercial Life and In- formation	Commercial Life and In- struction	Information Only	Information and Instruc- tion	Instruction Only	Total
Education		1	4		15	5	1	26
Education Entertainment		3	2		2	2		9
Education Entertainment Governance	1	3	5		2	5		16
Education Entertainment Governance Politics		6	1					7
Education Entertainment Governance Religion			1					1
Education Entertainment Governance Trade					1	1		2
Education Entertainment Politics	1					1		2
Education Entertainment Trade		6	3		1	1		11
Education Entertainment Trade Transport		1						1
Education Governance	2	1	5		4	2	1	15
Education Governance Politics			1					1

Education Governance Politics Trade			1					1
Education Governance Trade			2		2	1		5
Education Governance Transport					1			1
Education Politics		2		2		3		7
Education Politics Trade					1	1		2
Education Religion		1	1	1	2	1		6
Education Trade		5	9		2	1		17
Education Trade Transport		1			1			2
Education Transport		2	8		17			27
Entertainment	9	34	21	2	4	4	2	76
Entertainment Governance	3		4		3	3	2	15
Entertainment Governance Politics		2	1		1			4
Entertainment Governance Trade	2		3		1			6
Entertainment Governance Trade Transport	1		1					2
Entertainment Governance Transport			1					1
Entertainment Politics					1	2		3
Entertainment Politics Religion							1	1

Entertainment Religion		1	1		1			3
Entertainment Trade	2	9	2		2			15
Entertainment Trade Transport			2					2
Entertainment Transport			1		1			2
Governance	3	1	4	2	9	8	1	28
Governance Politics	3	4	2	6	8	6	1	30
Governance Politics Trade	3		1	1	2	5	2	14
Governance Politics Trade Transport	1						1	2
Governance Religion			2	1	1	2		6
Governance Trade		1		1	1	2		5
Governance Transport		1						1
Politics	18	21	22	28	18	22	9	138
Politics Religion							1	1
Politics Trade				1	2	3	2	8
Politics Trade Transport						1		1
Politics Transport						1		1
Religion	2		9	3	4	4		22
Religion Trade	2	2	2	1	2			9
Trade	5	79	38	9	16	8	3	158
Trade Transport		5	1		2			8
Transport	1	1			6			8
	59	**193**	**161**	**58**	**136**	**95**	**27**	**729**

Table 4.2 The ephemera sample by Themes and the category of Education.

	Across All Themes	Commercial Life Only	Commercial Life and In-formation	Commercial Life and In-struction	Information Only	Information and Instruc-tion	Instruction Only	Total
Education		1	4		15	5	1	**26**
Education Entertainment		3	2		2	2		**9**
Education Entertainment Governance	1	3	5		2	5		**16**
Education Entertainment Governance Politics		6	1					**7**
Education Entertainment Governance Religion			1					**1**
Education Entertainment Governance Trade					1	1		**2**
Education Entertainment Politics	1					1		**2**
Education Entertainment Trade		6	3		1	1		**11**
Education Entertainment Trade Transport		1						**1**
Education Governance	2	1	5		4	2	1	**15**
Education Governance Politics			1					**1**
Education Governance Politics Trade			1					**1**
Education Governance Trade			2		2	1		**5**
Education Governance Transport					1			**1**

Education Politics		2		2		3		**7**
Education Politics Trade					1	1		**2**
Education Religion		1	1	1	2	1		**6**
Education Trade		5	9		2	1		**17**
Education Trade Transport		1			1			**2**
Education Transport		2	8		17			**27**
	4	**32**	**43**	**3**	**51**	**24**	**2**	**159**

Table 4.3 The ephemera sample by Themes and the category of Entertainment.

	Across All Themes	Commercial Life Only	Commercial Life and Information	Commercial Life and Instruction	Information Only	Information and Instruction	Instruction Only	Total
Entertainment	9	34	21	2	4	4	2	76
Education Entertainment		3	2		2	2		9
Education Entertainment Governance	1	3	5		2	5		16
Education Entertainment Governance Politics		6	1					7
Education Entertainment Governance Religion			1					1
Education Entertainment Governance Trade					1	1		2
Education Entertainment Politics	1					1		2
Education Entertainment Trade		6	3		1	1		11
Education Entertainment Trade Transport		1						1
Entertainment Governance	3		4		3	3	2	15
Entertainment Governance Politics		2	1		1			4
Entertainment Governance Trade	2		3		1			6
Entertainment Governance Trade Transport	1		1					2
Entertainment Governance Transport			1					1

Entertainment Politics					1	2		**3**
Entertainment Politics Religion							1	**1**
Entertainment Religion		1	1		1			**3**
Entertainment Trade	2	9	2		2			**15**
Entertainment Trade Transport			2					**2**
Entertainment Transport			1		1			**2**
	19	**65**	**49**	**2**	**20**	**19**	**5**	**179**

Table 4.4 The ephemera sample by Themes and the category of Governance.

	Across All Themes	Commercial Life Only	Commercial Life and In-formation	Commercial Life and In-struction	Information Only	Information and Instruction	Instruc-tion Only	Total
Governance	3	1	4	2	9	8	1	**28**
Education Entertainment Governance	1	3	5		2	5		**16**
Education Entertainment Governance Politics		6	1					**7**
Education Entertainment Governance Religion			1					**1**
Education Entertainment Governance Trade					1	1		**2**
Education Governance	2	1	5		4	2	1	**15**
Education Governance Politics			1					**1**
Education Governance Politics Trade			1					**1**
Education Governance Trade			2		2	1		**5**
Education Governance Transport					1			**1**
Entertainment Governance	3		4		3	3	2	**15**
Entertainment Governance Politics		2	1		1			**4**
Entertainment Governance Trade	2		3		1			**6**
Entertainment Governance Trade Transport	1		1					**2**

Entertainment Governance Transport			1					**1**
Governance Politics	3	4	2	6	8	6	1	**30**
Governance Politics Trade	3		1	1	2	5	2	**14**
Governance Politics Trade Transport	1						1	**2**
Governance Religion			2	1	1	2		**6**
Governance Trade		1		1	1	2		**5**
Governance Transport		1						**1**
	19	**19**	**35**	**11**	**36**	**35**	**8**	**163**

Table 4.5 The ephemera sample by Themes and the category of Politics.

	Across All Themes	Commercial Life Only	Commercial Life and Information	Commercial Life and Instruction	Information Only	Information and Instruction	Instruction Only	Total
Politics	18	21	22	28	18	22	9	**138**
Education Entertainment Governance Politics		6	1					**7**
Education Entertainment Politics	1					1		**2**
Education Governance Politics			1					**1**
Education Governance Politics Trade			1					**1**
Education Politics		2		2		3		**7**
Education Politics Trade					1	1		**2**
Entertainment Governance Politics		2	1		1			**4**
Entertainment Politics					1	2		**3**
Entertainment Politics Religion							1	**1**
Governance Politics	3	4	2	6	8	6	1	**30**
Governance Politics Trade	3		1	1	2	5	2	**14**
Governance Politics Trade Transport	1						1	**2**
Politics Religion							1	**1**
Politics Trade				1	2	3	2	**8**

Politics Trade Transport						1		1
Politics Transport						1		1
	26	35	29	38	33	45	17	223

Table 4.6 The ephemera sample by Themes and the category of Religion.

	Across All Themes	Commercial Life Only	Commercial Life and In-formation	Commercial Life and In-struction	Information Only	Information and Instruction	Instruction Only	Total
Religion	2		9	3	4	4		22
Education Entertainment Governance Religion			1					1
Education Religion		1	1	1	2	1		6
Entertainment Politics Religion							1	1
Entertainment Religion		1	1		1			3
Governance Religion			2	1	1	2		6
Politics Religion							1	1
Religion Trade	2	2	2	1	2			9
	4	4	16	6	10	7	2	49

Table 4.7 The ephemera sample by Themes and the category of Trade.

	Across All Themes	Commercial Life Only	Commercial Life and In-formation	Commercial Life and In-struction	Information Only	Information and Instruction	Instruction Only	Total
Trade	5	79	38	9	16	8	3	158
Education Entertainment Governance Trade					1	1		2
Education Entertainment Trade		6	3		1	1		11
Education Entertainment Trade Transport		1						1
Education Governance Politics Trade			1					1
Education Governance Trade			2		2	1		5
Education Politics Trade					1	1		2
Education Trade		5	9		2	1		17
Education Trade Transport		1			1			2
Entertainment Governance Trade	2		3		1			6
Entertainment Governance Trade Transport	1		1					2
Entertainment Trade	2	9	2		2			15
Entertainment Trade Transport			2					2
Governance Politics Trade	3		1	1	2	5	2	14

Governance Politics Trade Transport	1						1	2
Governance Trade		1		1	1	2		5
Politics Trade				1	2	3	2	8
Politics Trade Transport						1		1
Religion Trade	2	2	2	1	2			9
Trade Transport		5	1		2			8
	16	**109**	**65**	**13**	**36**	**24**	**8**	**271**

Table 4.8 The ephemera sample by Themes and the category of Transport.

	Across All Themes	Commercial Life Only	Commercial Life and Information	Commercial Life and Instruction	Information Only	Information and Instruction	Instruction Only	Total
Transport	1	1			6			8
Education Entertainment Trade Transport		1						1
Education Governance Transport					1			1
Education Trade Transport		1			1			2
Education Transport		2	8		17			27
Entertainment Governance Trade Transport	1		1					2
Entertainment Governance Transport			1					1
Entertainment Trade Transport			2					2
Entertainment Transport			1		1			2
Governance Politics Trade Transport	1						1	2
Governance Transport		1						1
Politics Trade Transport						1		1
Politics Transport						1		1
Trade Transport		5	1		2			8
	3	**11**	**14**	**0**	**28**	**2**	**1**	**59**