The role of typeface categorization systems in the typographic education of the printer: a corrective legacy still with us today

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This paper traces the origins of current classificatory tools to the early typeface categorizations developed for use within the printing trade over a century ago. It identifies a set of corrective values underpinning these early categorizations passed on through the influence of the Vox system and a problem of bias. It locates in the scholarship of Nicolete Gray, an alternative perspective in constructing more representative overviews of typeform design.

1. Introduction

Categorization systems, often formalized into proper classifications, are a key feature of the typographic education toolkit, being used in both the synchronic and diachronic representation of the type design field, and also to facilitate an understanding of the visual forms of Latin typefaces especially. Of the more formal classifications developed, the Vox system (Vox: 1954 a & b) has provided a particular point of international reference.

Analysis shows, that the origins of the categorization system underpinning the Vox system can be located in the typeface categorizations as developed initially by printers, later typefounders and scholars, in Europe and North America at the end of the nineteenth and start of the twentieth centuries. Yet, these early categorizations can be shown to embody a set of commercial and corrective aesthetic values contemporary with their original publication dates. More particularly, they exhibit a descriptive bias to text typefaces at the expense of advertising forms.

Alternative views, however, were in existence. Nicolete Gray made a study of advertising typefaces of the nineteenth century (Gray 1938), from which she was able to offer new insight into the formal invention of such types in relation to subsequent developments in the broader field. Rediscovery of this aspect of past practice provided a long overdue challenge to existing historiographies and opened up possibilities for re-contextualizing subsequent formal tendencies in typeface design, arguably key to developing more appropriate overview tools for the educational contexts of today.

2. Categorization tools for educating the printer

The categorization of typeforms grew out of a changing climate in production, when, during the nineteenth century, printers experienced an intense broadening in the range of typefaces at their disposal. Alongside the existing book styles and sizes, new display styles were introduced for setting at much larger sizes. Type styles also began to be deliberately 'revived' from earlier periods. However, as these typeforms were being introduced there was little consistency between manufacturers in the use of terms to describe them. Sans serif types, for example, were variously marketed as 'grotesque', 'sans surryphs', 'gothic', 'doric' and even as 'egyptians' though the latter term was more familiarly associated with typeforms with slab serifs. (Gray 1976: 194) It became increasingly necessary to find a way of ordering type: to ease communication between printers and clients, and as an organizational aid within the printing trade.

To help printers negotiate these new developments, two new publications were, by the turn of the new century, offering typeform classifications: *Practical printing* (Southward 1898) and *Plain printing types* (De Vinne 1900). Very much in the genre of trade manuals, these volumes reflected a very practical concern with application, written for printers by printers and using the language of practice, as it would have been familiar to the intended readership. The emphasis in classification is formal and functional, the latter especially clear (De Vinne 1900: 192–3). The scope of classification is restricted to contemporary types in common use. In contrast to the very UK-focused Southward, De Vinne included types in use both in Britain and the United States, the rigor of his survey effectively introducing type design as a new area for scholarly study.

The need to order types was not restricted to printers alone and type manufacturers soon took on the categorization challenge themselves, though the earliest foundry systems were intended for archive contexts not the commercial market. In 1903 Thibaudeau devised a system for the historic material of the Peignot foundry in France (Thibaudeau 1924), with Bullen, Librarian for the American Typefounders, publishing his system between 1911–12 (Bullen 1911–12). Bullen's intention in this was not simply the tidying of history. Rather he introduces an analytical approach for better understanding typefaces as forms, so that once understood, they could be used to better effect (Bullen 1911–12, vol. II no. 3: 173). Here we see a shift in agenda from that of Southward and De Vinne in the explicit intent to improve printing practice through education. Although defined differently, the basic categories of Bullen's system differed little however, from the common-usage terminologies of theirs (fig. 1)

Bullen's advocacy of the qualitative benefits of a more informed approach to the variety of typefaces available was echoed by printer D. B. Updike, in the introduction to *Printing types* (Updike

Southward (GB) 1898	De Vinne (USA) 1900	Bullen (USA) 1911–12

Body or text types
  The *modern face Roman*
  The *old style*, or *Caslon Roman*,
    otherwise called *Caslon Elzevir*
    or 'old face' to distinguish it from
    modern imitations
  The *modernised old face*, commonly
    called *old style*.
  The *Jenson style* roman or 'Venetian'
    founts
  The *French old style*
  To these may be added types of the
    kind which founders call 'cut on the
    back', based on a style invented by
    the Basle printer Froben.
Fancy or display types
  Ionic (Clarendon, etc)
  Sans-serif (doric, grotesque)
  Scripts (rondes and character scripts)
  Black letter
  Skeleton face
  wide (extended, expanded)
  narrow (condensed, elongated)
  inclination forward and backward
    (back slope)
  lining, blocking, shading, rimming,
    outlining, floriating, face tinting,
    grounding etc
	Roman, including: old style; modern
	  face; modernised old-style; Modern
	  faces of roman letter eg scotch-face,
	  condensed french-face, compressed
	  face, round faces, light faces, etc.
	Italic, a simplified style of disconnected
	  script. Its capitals differ from roman
	  mostly in their inclination.
	Script types, imitations of different
	  styles of handwriting,
	  but every one of them [...] modelled
	  on some fashion of roman letter pre-
	  ferred or used by early copyists.
	Black-letter, a degenerate form of
	  roman, in which angles are substi-
	  tuted for curves.
	Gothic, without serifs, the simplest and
	  rudest of all styles, seems an imitation
	  of roman capitals cut in stone.
	Italian, a roman in which the positions
	  of hair-line and thick-stroke have been
	  transposed'.
	Title, or *fat-face*, a broad style of roman
	  with over-thick body-marks.
	Antique, a roman in which the lines of
	  all the characters are nearly uniform
	  as to thickness, with square corners
	  and of greatly increased boldness.
	Ornamentals of every style, and even
	  the newest varieties of eccentric
	  types, show some conformity to the
	  roman model.
		Latin
		  Italic
		  Script
		  Texts or black letter
		  Roman
		    Body or book types
		      old style roman
		      modern Roman
		    Display types
		      gothic
		      antique
		      ionics
		      old style antique
		      old style antique/ionic
		      latin
		      french ionic
		      french antique
		      egyptian
		      runic
		      celts
		      'fancy' or 'ornamental'
		  Publicity types,
		    'a new classification [...] includes
		    many admirable designs, such as
		    Cheltenham, Della Robia, Pabst
		    old style, Bewick roman, which
		    are unsuitable for the body of
		    periodicals or books of standard
		    literature, but which have a
		    limited use in books of luxury
		    and a widening use in the field
		    of commercial publicity.'

Figure 1. Typeform categorizations of Southward, De Vinne and Bullen

1922: xxxv], the first extensive historical overview of type design. The emphasis of the categorization underpinning Updike's overview charted the morphological progression of typeform against geographical location and period, though the scope of the work was restricted to book types.

Other historically determined overviews followed: Morison's *On type designs past and present* (Morison 1926), also bookish in emphasis and *Type designs* from Johnson (Johnson 1934). Along with Updike, such overview texts became seminal reference. Within these overviews, the basic principles of typeface categorization are still at work, although in a perhaps less explicit way than self-titled 'classification' systems. And while not intended as proposals for more general use, these overview categorizations (fig. 2) maintained their seminal status and the similarities in both content and emphasis they share with each other and those that followed indicates the extent of this influence. This is especially true of the Johnson categorization as compared with that of the later Vox system (fig. 3).

3. A corrective legacy

Yet, these early categorizations in which lie the structural origins of the Vox system, are themselves underpinned in their structural emphases and objectives by a set of values contemporary with them. Of particular significance is a narrative emphasis and detailed descriptive bias typically afforded to 'roman' types (ie intended for books). The morphological shifts between iterations of roman are noticeably attended to in the categorizations of Southward, Morison, and Johnson and later in the Vox categories of 'humanes', 'garaldes', 'reales' and 'didones'.

With book production remaining the main occupation of type design until the late eighteenth/early nineteenth centuries, in quantitative terms the production of roman types had dominated for the greater period of type history. That such an emphasis should be reflected in categorization is perhaps not surprising, though the distribution of material across all categories was found not to be operating on such a quantitative basis. What we find is that roman typefaces are afforded a detailed level of differentiation not afforded to 'display' types (ie developed for advertising contexts), even though the latter show a greater breadth of formal invention.

So-called Venetian/Jenson-style/humanist/humane types are formally distinguished from old face/garalde, even though the formal differences are very subtle and even though such a distinction is only appropriate for a very few types. However, a basic distinction, which can differentiate between large numbers of slab serif types on the basis of their serif structure is not made,

Updike (USA) (1911–6)	Morison (GB) 1926	Johnson (GB) 1934
Types of the C15th in: Germany Italy France Netherlands Spain England	(The Carolingian miniscule) (Gothic and humanistic hands) **The first gothic types** (The Neo-Carolingian hand) **The first humanist types** Nicholas Jenson Aldus **The origins of 'Old face'** **The Aldine italic** **The Arrighi italic** The Garamond Old face Robert Granjon Christopher van Dyck **The Dutch letter** 'Modern' face Phillipe Grandjean P S Fournier J M Fleischman The Caslons John Baskerville John Bell's Modern The influence of calligraphy F A Didot Giambattista Bodoni The effect of the Industrial Revolution **New 'Black' letters** The Caslon revival Louis Perrin The Gothic revival William Morris Private Press types J F Unger **The Brush-drawn letter** German type design American type design French type design	Gothic types Roman, *The venetians and old-face group* The evolution of the modern-face roman Old-face types in the Victorian age Italic, *the old-face* Italic type in the eighteenth century Script types Early advertising types, *fat faces and egyptians (and sans serifs)*
The Aldine italic		
Types between 1500-1800 in: Germany Italy France, *with specific index reference made to royal types, the Imprimerie Royale and the Fournier family.* Netherlands, *with specific index reference made to the work of the Plantin press and Elzevir.* Spain England, *with specific index reference made to the period from Pynson to William Caslon, William Caslon and the Caslon foundry, John Baskerville, and Wilson, Fry, Martin and other foundries.*		
Types used in the American colonies, and some early American specimens.		
Nineteenth century 'classical' types, Bodoni and the Didots.		
English types: 1800-1844		
Revival of Caslon and Fell types.		
English and American revival of early typeforms and its effect on continental types.		

Figure 2. Early historical categorizations of typeforms

if such types are acknowledged at all. Morison omits them entirely, while the Vox system simply groups 'clarendons' or 'ionics' (that is bracketed slab serifs) and 'egyptians' (that is square-ended, unbracketed slab serifs) together as 'mécanes'.

Such bias reflects a general preoccupation at that time with the ancestry of the roman typeface, located in the inscriptional lettering of the Roman Imperial period. Edward Johnston's revivalist teaching at the Central School (1899–1912) helped to focus attention on the 'Trajan' letter, identified as an exemplary model (Mosley 1964). Here the corrective agenda was clear, borne of a perceived need to return to 'absolute standards', and to reintroduce, 'good taste into an art, which had been debased; which the lamentable vagaries of nineteenth-century commercialism' had diverted from its true nature and purpose. (Gray 1960: 13)

More generally though a qualitative distinction was drawn between printed matter of an ephemeral nature ie commercial jobbing printing, and the production of books with the prestige of books , extended to the roman types in which they were typically printed. This association with durable commercial value and existing orthodoxies helped to distinguish book types from the throw-away experimentation of their commercial advertising counterparts, not seen as worthy of serious or scholarly attention. (Carter 1938)

Commercial market forces also determined an interest in the manufacture and marketing of roman types. The first half of the twentieth century was the boom era for the large-scale machine type manufacturers such as Monotype and Linotype. The considerable economic costs of their machinery and fonts focused the market upon the sales of 'investment' types, ie roman text faces not as susceptible to the vagaries of fashion and which would generally see more use than those types intended for display purposes. In a series such as Monotype's historic revivals, aesthetic orthodoxy could be turned into economic gain in the hands of an individual such as Morison, who, as Warde would later recall, was someone able to infuse his wide ranging scholarly interests into marketable products intended for a commercial publishing context in need of some corrective steering. (Warde 1967)

Figure 3. The influence of Vox

Johnson (GB) 1934
- Gothic types
- Roman,
- *The venetians and old-face group*
- *The evolution of the modern-face*
- *roman*
- Old-face types in the Victorian age
- *Italic, the old-face*
- Italic type in the eighteenth century
- Script types
- Early advertising types,
- *fat faces and egyptians*
- *(and sans serifs)*

Vox (F) 1954 (a) + b
- 1 (médièves)
- 2 humanes
- 3 garaldes
- 4 réales (granvilles, 1972)
- 5 didones
- 6 simplices
- 7 mécanes
- 8 incises
- 9 manuaires
- 10 scriptes

Din 16518 (D) *proposal 1959*
- **1 Romans**
- 1:1 Renaissance styles (Venetians)
- 1:11 Early types and styles (Jenson)
- 1:12 Late styles (Garamond)
- 1:13 Modern styles (Palatino)
- 1:2 Baroque styles
- 1:21 Dutch styles (Van Dijk)
- 1:22 English styles (Caslon)
- 1:23 French styles (Fournier)
- 1:24 Modern styles (Times)
- 1:3 Classical styles
- 1:31 Early styles (Bodoni)
- 1:32 Late styles (Bulmer)
- 1:33 News styles (Melior)
- 1:34 Modern styles (Corvinus)
- 1:4 Free Romans
- 1:41 Victorian styles (Auriol)
- 1:42 Non-serif romans (Lydian, Optima)
- 1:43 Individual styles (Hammer Uncial, Matura)
- 1:5 Linear Romans
- 1:51 Early styles (Grot no.9)
- 1:52 Modern styles (Futura, Gill)
- 1:6 Block styles
- 1:61 Early styles (19c.)
- 1:62 Late styles (Clarendon)
- 1:63 Modern styles (Beton)
- 1:64 Typewriter types.
- 1:7 Scripts
- 1:71 Stress variation (Legend)
- 1:72 Expanding strokes (Invitation script)
- 1:73 Uniform stroke (Signal)
- 1:74 Brush stroke (Mistral)
- **2 Black letter**
- 2:1 Textura (Black letter gothic)
- 2:2 Rotunda (Wallau)
- 2:3 Schwabacher (Alt-Schwabacher)
- 2:4 Fraktur (Unger)
- 2:5 Kurrent (Chancery)
- **3 Non-roman characters**
- 3:1 Greek
- 3:2 Cyrrilic
- 3:3 Hebrew
- 3:4 Arabic
- 3:5 Others

Din 16518 (D) 1964
- Venetianische Renaissance-Antiqua
- Französische Renaissance-Antiqua
- Barock-Antiqua
- Klassizistische Antiqua
- Serifenbetonte Linear-Antiqua
- Serifenlose Linear-Antiqua
- Antiqua-Varianten
- Schreibschriften/Script
- Handschriftliche Antiqua/Manuale
- Gebrochene Schriften
- Gotisch
- Rundgotisch
- Schwabacher
- Fraktur
- Fraktur-Varianten
- Fremde Schrift

British Standard 2961 (GB) 1967
- humanist
- garalde
- transitional
- didone
- slab-serif
- lineale
- grotesque
- neo–grotesque
- geometric
- humanist
- glyphic
- script
- graphic

Pohlen (NL) 2010
- **Vox +1**
- Text typefaces
- 1:1 Humanistic
- 1:2 Garaldes
- 1:3 Transitionals
- 1:4 Didones
- 1:5 Slab-serifs
- 1:6 Humanistic sans-serifs
- 1:7 Neoclassical sans-serifs
- 1:8 Benton sans-serifs
- 1:9 Geometrical sans-serifs
- 1:10 Glyphics
- 1:11 Scripts
- 1:12 Graphics
- 1:13 Gothic
- **Vox +2**
- Display typefaces
- 2:1 Classic Deco
- 2:2 Typographic
- 2:3 Disorder
- 2:4 Techno
- 2:5 Modular
- 2:6 Fantasy
- **Vox +3**
- Pi fonts
- 3:1 Ornaments
- 3:2 Symbols
- 3:3 Pictograms
- **Vox +4**
- Non-Latin

4.   Rebuilding the past

While this paper seeks to argue the ongoing validity of a proxy-reliance on these early categorizations, the original historical scholarship informing them is often far from obsolete. Refinements have been made over the years yet much of the thorough research activity has withstood the test of time. What needs to be recognized, is that while the facts presented may be accurate, the selectivity employed in bringing this information together was informed by a view of history very much of its time.

All classificatory tools are products of their times, in terms of the histories they choose to represent and the objectives they seek to address. It is indeed arguable that roman typefaces require a greater level of understanding to be able to use them effectively within text, and that display typefaces perhaps 'speak for themselves' in terms of their forms. Yet, arguable or not, the issue is that in their bias towards roman text types, these early categorizations do not tell us the full story in terms of the progression of formal invention across the whole field of type design. Further, not having that full story remains an ongoing obstacle to adequately locating and understanding more recent formal progressions.

This becomes clear in reading the study made by Gray (Gray 1938) of the, until then, widely ignored advertising typefaces of the nineteenth century. Her detailed documentation tracks the shifts in contextual influences and the changing formal references made within type design across the century, from which she is able to offer new insight into the formal configuration of stylistic elements in operation within type design both then, and subsequently.

In so doing, Gray facilitates the re-contextualization of a design trend more generally associated with the digital era. King locates the trend of merging 'disparate typographic styles' very clearly within the digital type design developments following the introduction of PostScript (King 2001). Such merging of styles might be characterized by an overt historic eclecticism, as in Scott Makela's Dead History typeface from 1990 (fig. 4), or in far more subtle reconfigurations. Frere-Jones's FF Dolores font from 1992 combines, for example, character shapes loosely derived from the roman model with the unevenness of line and rhythm associated with handwriting and a set of thick slab serifs borrowed from the graphic vernacular (fig.5). Yet, the fragmentation of visual elements and their reconfiguration in alternative combinations in new stylistic contexts is clearly identified by Gray as being symptomatic of a fundamental shift in practice over a century earlier. Of the introduction of the Latin-Runic types from 1865 onwards, she comments, that they:

> 'completed the break up of the idea of display faces being variations on one basic alphabet. These new semi-ornamental letters are exercises in a new freedom, and although so far no very drastic changes have been made, categories are becoming blurred and classification complicated; a new era has begun.' (Gray 1976: 84)

While the accessibility and low overheads of the digital production technologies clearly facilitated the merging of existing visual languages, and allowed too for an escalation in the scale of produc-

Figure 4. Dead History (screen-shot: <http://www.emigre.com/EF.php?fid=88> 1 May 2012)

Figure 5. FF Dolores (screen-shot: <https://www.fontfont.com/fonts/dolores> 1 May 2012)

tion of such fusion types, Gray shows (fig. 6) that their introduction is far from a digital phenomenon.

It is perhaps true that the typefaces Gray was referencing represented practices towards the extremes of contemporary creative invention in advertising type design and would have represented a more niche market than the mainstream text typeface design of the day. Yet, the influence of such practices upon the mainstream is evidenced in the greater subtlety introduced to typefaces from the previously advertising-oriented categories of sans serifs and slab serifs, leading to wider application for text purposes and the increased blurring of the distinctions between text and display.

Rediscovery of this past practice offers then the potential for re-exploring existing historiographies of the field, especially in relation to the changing nature throughout the twentieth century of this formal exchange between the areas of text and display type design. Further, the ability to relocate the trend of reconfiguring existing formal references in new contexts much earlier than previously thought, provides the possibility for re-establishing a link between pre- and post-digital practices, thereby overcoming a common fracture in documentation, where separate histories are published for each (see Lawson 1990 and Heller & Fink 1997). At the very least, this rediscovery of the past offers a way forward in terms of redefining existing categorizations of typeface
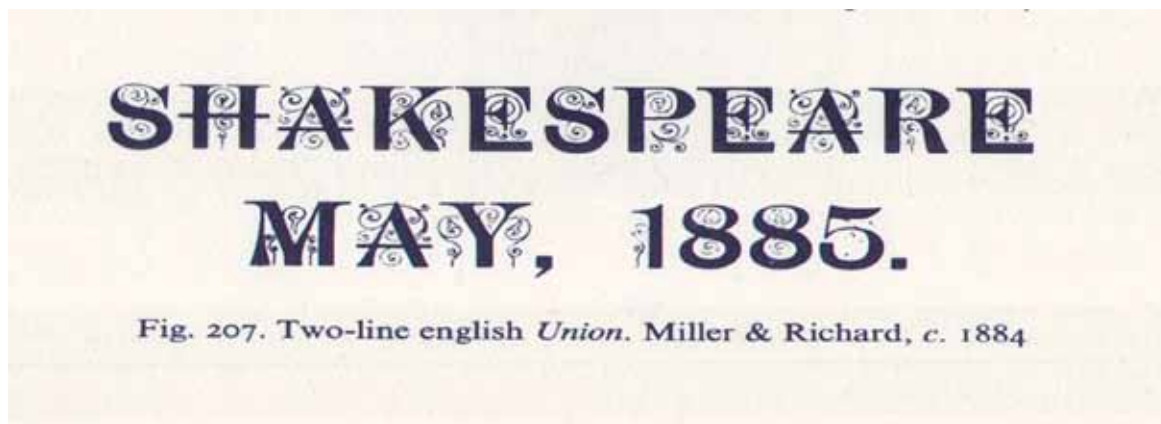
Figure 6. Illustration from Nicolete Gray, showing the exercising of the new freedom in fusing formal references she describes, here serif and sans serif structures combined with decorative detailing (photo by Catherine Dixon).

design, as the basis for providing more accurate representations of the field, especially diachronic overviews, and for use as educational tools in facilitating an understanding of the visual language of typeform.[1]

Yet, a reliance on the Vox system, and the embedded bias it carries forward, persists (Blackwell 2004, Pohlen 2011). The Vox system was, when first published, a key structure in the move towards international compliancy in the categorization of typefaces (fig. 3), and such is the scale of the change in approach to be considered, and the ongoing influence of Vox, it remains a kind of default unifying focus. The current limitations of the Vox system are acknowledged, though as examination of the modifications made for the publication *Letter Fountain* (Pohlen 2011) show, perhaps not for the right reasons. Here a series of extensions are built on to the basic original Vox system to enhance the detailed description of especially contemporary display typefaces (fig. 3). However, by simply adding these extensions, a sense is created of a pre-digital era when the Vox system was adequate and a post-digital period after which it wasn't. In so doing the bolt-on modifications both reinforce the false fracture in considerations of recent and past type design practice, and the ongoing association of the digital era alone with the most significant formal shifts in practice.

In conclusion, this paper argues that in having continued with the scholarly and aesthetic premises of the early twentieth century in approaches to the categorization of typefaces, we have missed key ideas, which help to fully understand the progression of formal invention in type design. Does this matter? While we are no longer concerned so much with the education of the printer, there is a lot to be done in providing a set of tools to help the design student fully understand both synchronic and diachronic overviews of the field of typeface design, as well as the basics of the language of type as form. This paper shows that in simply taking the existing tools without fully challenging the values underpinning them, we simply compound the problems we are trying to resolve.

1 Development of a tool facilitating an understanding of the visual language of typeform following Gray's premise for understanding formal progression was the focus for the author's PhD (Dixon 2001)

References

Blackwell, L. 2004. *Twentieth century type*, London: Laurence King

British Standards Institution. 1967. *Typeface nomenclature and classification BS 2961: 1967*, London

Bullen, H. L. 1911–2. 'Notes towards the study of types', *The Graphic Arts*, vol.I, no.1; vol.I, no.3; vol.I, no.5; vol.II, no.3; vol.III, no.5, Boston: National Arts Publishing

Carter, H. 1938. Review of Nicolette Gray *XIXth ornamented types and title pages*, in *Signature*, no.10: 50, London: Curwen Press

De Vinne, T. L. 1900. *Plain Printing types*, New York: The Century Co

Deutsche Industrie Norm (DIN). 1959. *Print in Britain*, vol.7, no.4: 97, London

Dixon, C. 2001. *A description framework for typeforms: an applied study*, PhD thesis, Central Saint Martins / University of the Arts London

Gray, N. 1938. *XIXth century ornamented types and title pages*, London: Faber & Faber

_____. 1960. *Lettering on buildings*, London: Architectural Press

_____. 1976. *Nineteenth century ornamented types*, London: Faber & Faber

Heller, S. & Fink, A. *Faces on the edge: type in the digital age*, New York: Van Nostrand Reinhold

Johnson, A. F. 1934. *Type designs, their history and development*, London: Grafton

King, E. 2001. 'Digital type decade, *Eye*, vol.10, no.40: 40–7 Croydon: Quantum

Lawson, A. 1990. *Anatomy of a typeface*, London: Hamish Hamilton

Mosley, J. 1964. 'Trajan revived', *Alphabet*, no.1: 13–42, London: James Moran/Kynoch Press

Morison, S. *On type designs past and present*, London: The Fleuron

Pohlen, J. 2011. *Letter* fountain: the anatomy of type, Cologne: Taschen

Southward, J. 1898. *Modern printing: Section 1 The composing room*, London: Raithby, Lawrence & Co

Thibaudeau, F. 1924. 'Clasification des caractères d'imprimerie', *Manuel français de typographie moderne*: 37–109, Paris: Bureau de l'édition

Updike, D. B. 1922. *Printing types*, Cambridge (Mass.): Harvard University Press

Vox, M. 1954a. *Pour une nouvelle classification des caractères*, Paris: École Estienne.

_____. 1954b. *Nouvelle classification des caractères*, Paris: Ècole Estienne.

Warde, B. 1967. 'Recollections of Stanley Morison', *The Sunday Times*, London.

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