

# Another Bloody Caslon

*An essay by  
David Foster for  
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This book describes the process and outcome of a revival project completed as part of the Type & Media masters programme at the Royal Academy of Art in The Netherlands under the guidance of Paul van der Laan.

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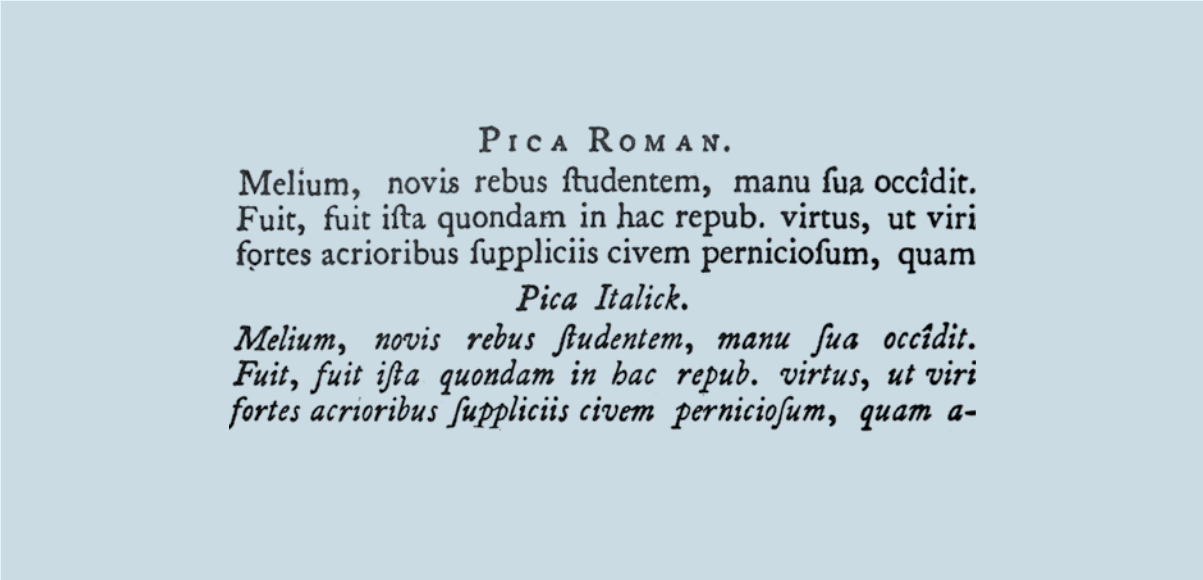
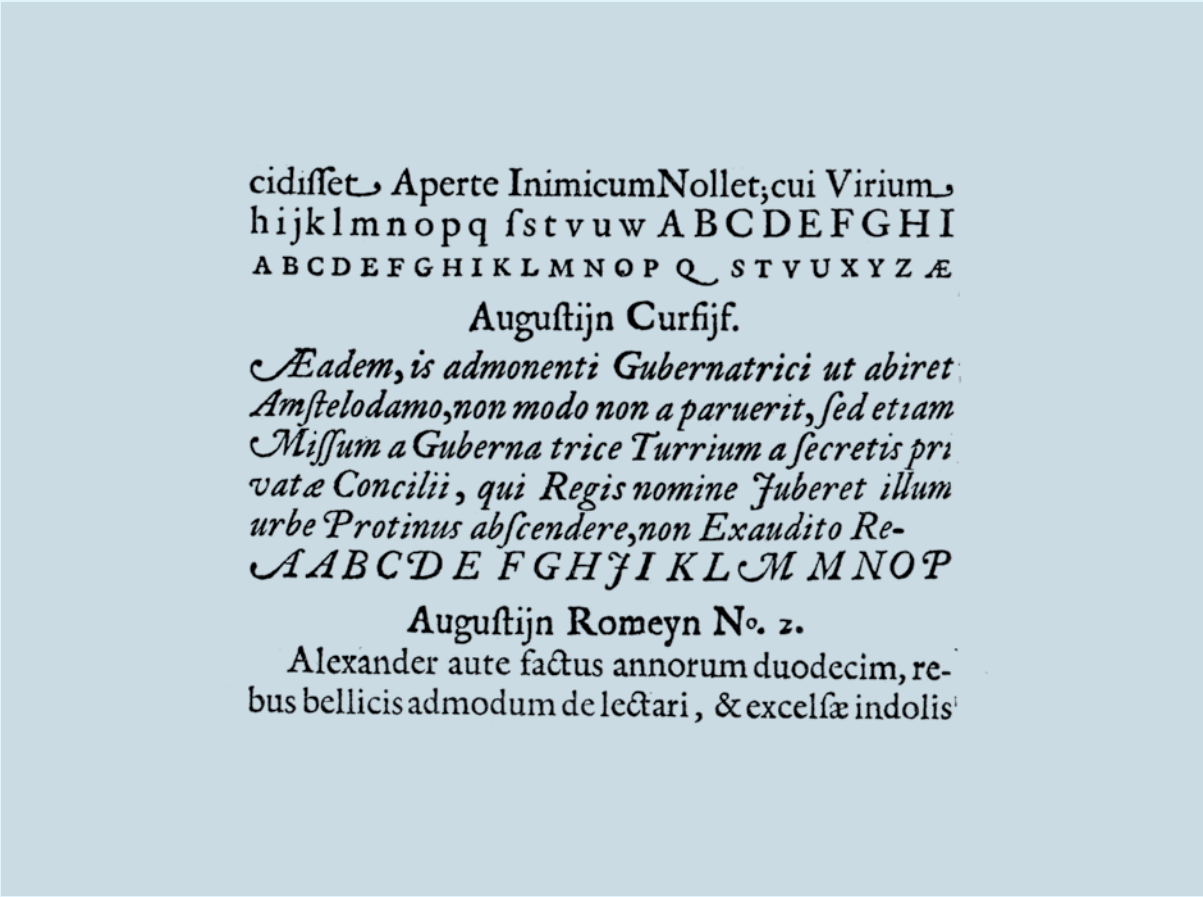


A new look at Caslon

## Intention

When considering which typeface to select we were required to write down what we liked about our selections and the characteristics we wanted to preserve. Below is the text written about Caslon that served as a brief for the project.

*“My intention is to revive a well-proportioned and balanced typeface from which I can learn. I believe Caslon fulfils these criteria. It is a robust and attractive typeface with small irregularities that help it appear unpretentious, honest and approachable. I want to revive this so that it is a usable typeface for readers of today. The contrast of the stroke and the overall rhythm of the type create liveliness on the page while maintaining a sense of order. The angularities it contains, especially at the arches of lowercase letters like a, h, m and n are a feature I want to preserve. Many revivals of this type exist, but I think it would be a good opportunity to learn from a brilliant type and see to if I could recreate the same characteristics in a digital form.”*



Above: van Dijck's Augustijn Romein  
Below: Caslon's Pica Roman

## Caslon History

The lineage of the Caslon family is complicated because they all shared similar names, even their wives. Unless initials are present, it should be assumed that the first name is William. If no roman numerals are present afterwards, that person was the first with that name.

### Main influences on Caslon

For many reasons,<sup>1</sup> The Crown of England enforced regulations on the printing presses from the mid-16th century until the beginning of the 18th-century.<sup>2</sup> This dampened efforts to establish type founding in England. Consequently, type was imported, mainly from Holland. Dr. John Fell bought punches and matrices for the Oxford University Press in 1670. Seven years later, Cambridge University Press also imported type from Holland. These were the works of Dirk Voskens and Christoffel van Dijck<sup>3</sup> respectively, who were major influences on Caslon as noted by Morison<sup>4</sup>, Johnson<sup>5</sup> and Lane.<sup>6</sup> Miklós Tótfalusi Kis, a Hungarian who had been Voskens' apprentice and who later cut Janson, was also influential. Updike explains the fame and excellence of Caslon's types:<sup>7</sup>

“While he modelled his letters on Dutch types, they were much better; for he introduced into his fonts a quality of interest, a variety of design, and a delicacy of modelling, which few Dutch types possessed. Dutch fonts were monotonous, but Caslon's fonts were not so. His letters when analyzed, especially in the smaller sizes, are not perfect individually; but in their mass their effect is agreeable. That is, I think, their secret: a perfection of the whole, derived from harmonious but not necessarily perfect individual letterforms.”

### Establishing the foundry

In 1692, William Caslon was born in Cradley, England. After serving an apprenticeship with a metal-worker, he left and began engraving ornamental gun-locks, gun-barrels as well as silver-chasing and making book binding tools, presumably ones used to place lettering on spines and covers.<sup>8</sup> It was only later he became involved with type when two separate strangers noticed his lettering on books found in Mr. Browne's bookshop. The first was Bowyer, the second was John Watts. Both printers recognised Caslon's potential to repair the standard of printing since its decline from the days of Caxton.<sup>9</sup>

<sup>1</sup> Including financial gain, censorship and control.  
<sup>2</sup> Jane Smith, Regulating the Press, May 2010, <http://mistrisparliament.wordpress.com/2010/05/04/regulating-the-press>  
<sup>3</sup> Wikipedia, The History of Western Typography, January 2012, [http://en.wikipedia.org/wiki/History\\_of\\_western\\_typography](http://en.wikipedia.org/wiki/History_of_western_typography)  
<sup>4</sup> Stanley Morison, A Tally of Types, Cambridge at the University Press, second edition, 1973, pages 24–27.  
<sup>5</sup> Alfred F. Johnson, A Note on Caslon, in: The Monotype Recorder, vol. 35, no. 4, 1936–7, pages 3–7.  
<sup>6</sup> John Lane, The Dutch Golden Age Seminar, held at the uva Special Collection, Amsterdam, October 2011.  
<sup>7</sup> MyFonts, Caslon, [http://nemyfonts.com/person/\\_Caslon\\_1/](http://nemyfonts.com/person/_Caslon_1/)  
<sup>8</sup> Clive Ponsford, Caslon's Foundry Clock, Antiquarian Horology Society <http://wwahsoc.demon.co.uk/caslon-watermarks.pdf>  
<sup>9</sup> Talbot Baines Reed, A History of the Old English Letter Foundries with Notes on the Rise and Progress of English Typography. Oxford University Press. London: Elliot Stock, 1887. A new edition by A. F. Johnson. Faber and Faber Limited. 1952, Pages 230–256.



“the elder Mr. Bowyer, [...] accidentally observed in a bookseller’s ship a bound book, the lettering on the back of which seem to him to be executed with more than common neatness; and on inquiry finding Mr. Caslon to be the artist by whom the letters had been cut, he was induced to seek an acquaintance with him.”<sup>1</sup>

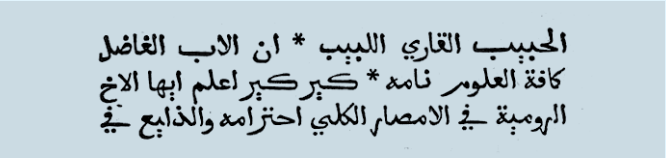
Bowyer took Caslon to James’ Foundry. Caslon had never been exposed to type founding before. He was asked whether he could undertake the cutting of types, Caslon requested one day to consider. When one day passed he replied that he had no doubt that he could. Bowyer, Watts and Bettenham (another printer) then lent him £500 to establish the Caslon Foundry.

#### The growth of the foundry

His first commission was in 1720, an Arabic fount to set the *New Testament* and *Psalters* (completed 1727 and 1725 respectively) for the Society for Promoting Christian Knowledge.<sup>2</sup> For the bottom of the specimen he cut the letters of his name in Pica Roman. Mr. Palmer, the author of *Psalmanazar’s History of Printing* encouraged him to complete the whole fount. Caslon’s Pica Roman exceeded the quality of many other founders at the time, many of whom Palmer’s circumstances as an author relied on. He promptly withdrew his advice and discouraged Caslon from further development.

Caslon always acknowledged Bowyer as his master and generous patron, from who he had learned his art.

Caslon’s first comission, an arabic.



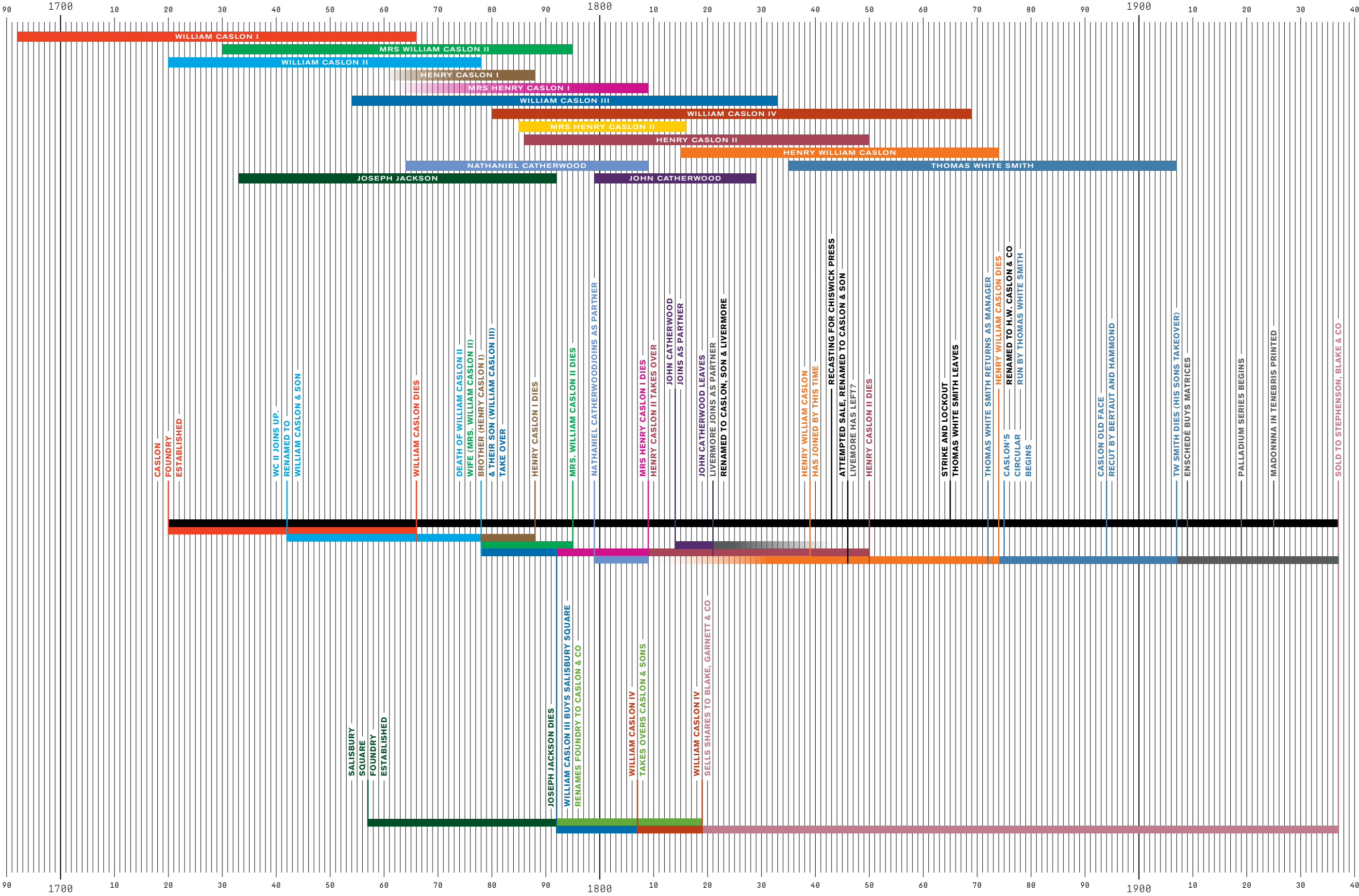
The fame of the Caslon foundry developed through further commissions, including Coptic, Armenian, Gothic and Black letter. His son, Caslon II developed Etruscan and Ethiopic. The foundry became less reliant on its patrons. In 1730, he had the custom of the King’s printers, excluding all others. In 1734, after fourteen years of work, the Caslon foundry published a specimen that included thirty-eight founts. Excluding three, all are Caslon’s work.<sup>3</sup> Reeds says ‘It placed Caslon absolutely without rival at the head of his profession.’ One of these specimens resides in the Meermanno Museum.

#### William Caslon II – Caslon & Son

By 1742 and 48, Caslon printed his specimens showing founts created by his son, Caslon II, who was now partner and the firm changed names. The young Caslon proved to be as able as his father.<sup>4</sup> Under his watch, the specimens of 1763 and 64 displayed twice the amount of founts since the first specimen.<sup>5</sup> Caslon dies two years later in 1766 at Bethnal Green. From here onwards, the history becomes complex. An attempt has been made to simplify it with the aid of a timeline and family tree.



1 J. Bunney, The Freemason’s magazine, for March 1796. ‘Mrs Elizabeth Caslon, with a portrait’, 1796, pages 146–149.  
2 For the benefit of missionary efforts in Palestine, Syria, Mesopotamia, Arabia and Egypt, who’s constitutions did not allow printing.  
3 Canon Roman (Moxon), English Syriac (Polyglot Foundry), Pica Samaritan (Dummers).  
4 Allan Haley, John Wiley and Sons, Typographic Milestones, September 1992, Page 8.  
5 44 new founts, 2 Titling, 15 Romans, 4 Greeks, 9 Hebrews, 1 Ethiopic, 1 Etruscan, 2 Saxons, 8 blacks, and 2 music, 63 flowers.







**WILLIAM CASLON**  
**1692–1766**

AMUEL CASLON

MARY CASLON

1783 CASLON

**WILLIAM CASLON II**  
**1720–1778**

**MRS WILLIAM CARSLON II  
(ELIZABETH CARTLICH)  
1730—1795**

**MRS HENRY CASLON I  
(ELIZABETH ROWE)  
?—1809**

HENRY CASL  
?—1788

**MRS WILLIAM CASLON III  
(MISS WITTENHAM)**

**HENRY CASLO**  
1786–1850

**MRS HENRY CASLON II**  
**MARY ANN CASLON**  
**1785 — 1816**

**WILLIAM CASLON IV**  
**1780—1869**

**HENRY WILLIAM CASLON**  
1815—1874

In 1757, there was a strike for higher pay. It was awarded to the workers, but the two ringleaders, Cottrell and Jackson (both ex-apprentices) were fired. Both men can be seen in this engraving seven years earlier. Jackson rubbing and Cottrell dressing. Jackson took the secrets he had learned and started the Salisbury Square Foundry, a rival of the Caslon Foundry but later purchased in 1792 by Caslon III when Jackson died and run in parallel to the original Caslon Foundry under the name Caslon & Co. Caslon IV eventually sold it to Blake, Garnett & Co in 1819. The same company which would acquire the original Caslon Foundry more than one hundred years later in 1937.

Hints on Decorative Printing, London, 1822, showing specimens of Mrs Caslon's Roman contrasted with the old models of the foundry.

When Caslon II died in 1778, the foundry was split between three people. His brother (Henry Caslon I), Wife (Mrs Caslon II) and their son (Caslon III). One specimen appeared in 1785 but nothing else was released until 1800. In 1788, H Caslon died, leaving his share to his two-year-old son, H Caslon II.

A major change happened in 1792 when Caslon III sold his shares to his mother, Mrs Caslon II and sister-in-law, Mrs H. Caslon for £3000. He then purchased Joseph Jackson's foundry and renamed it to Caslon & Co.

Three years after Caslon III left, Mrs Caslon II died without a will. Mrs Henry Caslon was required to purchase the foundry for £520 (a fraction of the price Caslon III had received seven years before). The Caslon name was no longer enough to sell type and the foundry was fading. She commissioned John Drury to cut new types. She also took on Nathaniel Catherwood (a distant relation) as partner she was able to restore the foundry's reputation by 1808.

In 1805, they released an important specimen containing ‘new romans of Caslon and Catherwood’. Most cuts were completed between 1802 and 1804. Another specimen was released in 1808 with *Stower’s Printers Grammar*. The original founts of Caslon had been put away and forgotten.

*"All the once admired founts of the originator of the foundry have been discarded, and between the specimen of 1785 and 1808 there is absolutely no feature in common."<sup>1</sup>*

In 1809, Mrs H Caslon and N Catherwood both died. Control passed to her son – Henry Caslon II.





Henry Caslon II

H Caslon II took Nathaniel’s brother, John Catherwood as a partner. Together they looked after the business well. Hansard says, ‘the additions and varieties made to the stock of the foundry have been immense.’<sup>1</sup> John Catherwood leaves in 1821. One year later, Martin Livermore, a trusted employee is promoted as partner. They built the stock of the foundry towards advertising types like fat faces and Egyptians.

Henry William Caslon and The Chiswick Press

In 1839, a specimen is released under the name Caslon, Son and Livermore. This signalled Henry William Caslon, the son of Henry Caslon II, joining the firm. In 1844, Charles Whittingham of the Chiswick Press requested the original Caslon, known as Old Face, in Great Primer to print *The Diary of Lady Willoughby* as the type was appropriate to the story’s history. The Caslon foundry had the original matrices in storage and recast Whittingham a small amount of Great Primer. The Chiswick Press continued to use the type for further books and in 1958 used electrotyped matrices to cast type by hand.

“Unlike modern printers in search of historic designs, the proprietor of the Chiswick Press, was not compelled to have the Caslon type recut; he simply went to the firm run by Caslon and discovered that the original matrices were still in storage.”<sup>2</sup>

1846 saw an attempted sale of the foundry under the name Caslon & Son (apparently Livermore had left). But no acceptable offer was made. Henry Caslon dies 4 years later. Old Face returned to popular use later in the 1850’s when a historicist movement in fine printing adopted the typeface.<sup>3</sup> The foundry then began displaying Old Face in specimens again.

The Caslon Foundry at Chiswell Street



1 T.C Hansard, *Typographia: an historical sketch of the origin and progress of the art of printing*, Printed for Baldwin, Cradock, and Joy, 1825, pages 352–364.  
2 S. Peterson, *The Kelmscott Press: a history of Morris’s typographical adventure*, University of California Press, 1991, page 22.  
3 Edited by Andrew Boag and Lawrence Wallis. *The Monotype Recorder*, centenary issue. One hundred years of Type Making, 1897–1997. New Series, no. 10.



The premises that TW Smith established at Hackney Wick in 1900.

H.W Caslon & Co

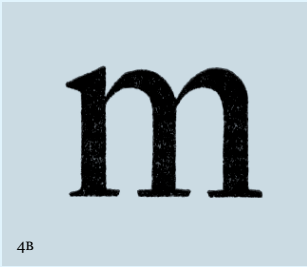
With H Caslon II dead, HW Caslon was the sole proprietor. Thomas White Smith, a trusted employee of the firm since 1857, describes HW Caslon as ‘a man of generous impulse but of little wisdom in business matters’. The firm then purchased Glasgow Letter Foundry. Alexander and Patrick, the grandsons of the founder joined Caslon & Son and it was renamed to H.W Caslon & Co. In 1865 there was an 8-month-long strike and lockout. Smith and the two Wilson partners left. In 1872, HW Caslon became ill and asked Smith to return as manager. He returned and HW Caslon died two years later at Medmenham. He was the last male in the Caslon lineage and left the whole foundry to Smith.

Thomas White Smith

Smith made immeasurable improvements to the business. In 1875 he sets up *Caslon’s Circular*, an important publication regularly issued by the foundry. In 1878–79 it published articles by De Vinne about the point system for measuring type. Smith was a leading campaigner for its introduction. In 1886 he made a formal proposal that was only accepted by the other founders later, in 1898. It took until 1905 before the transition was complete, according to Southward.<sup>1</sup> They also used *Caslon’s Circular* to vocally oppose the piracy of type using electrotyping and defend themselves against trade publications that criticised them for ‘obstructing the progress of mechanical invention’. This was untrue; Smith was an early pioneer of combing matrices in a line, a precursor to the linotype machine.

The term ‘Old Face’ refers to the original founts of Caslon, owned by foundry. The first reference appeared in 1854. The name ‘Old Style’ stems from two events. One in the 1850’s when predecessors of the ATF published identical type, most likely from electrotyped matrices with the permission of the Caslon Foundry. The second occurred in Edinburgh at Miller & Richard. Their punchcutter, Phemister made an ‘Old Style’ ‘in which they have endeavoured to avoid the objectionable peculiarities, whilst retaining the distinctive characteristics of the medieval letters.’<sup>1</sup> This induced the Caslon Foundry into cutting their version too. Reed says, ‘In spite of the vogue for Caslon Old Face, they found it expedient to cut their own copy of Old Style, which was first shown in 1877 and the full range completed in 1880.’

1 J. Southward, *Modern Printing*, 1924, VOL. 1 page 106  
2 Miller & Richard, *Specimen*, 1860.



- <sup>1</sup> Comparison of changes (72 point)  
<sup>2</sup> The Hackney Wick Premesis  
<sup>3</sup> Changes to lowercase a  
<sup>4</sup> Changes to lowercase m

In 1878 there was an article stating an increased demand for Old Face. But there were complaints about irregularity and rough edges then uncommon in modern faces. Smith published the following in *The Circular*:

“We are taking steps to improve them [the original founts] so far as smoothness of face is concerned, and to produce them by the machine-casting process, without altering their shapes in the least degree.”

In the specimen of 1884, it is possible to see the progress of this, a small amount of founts are ‘smoothed out’, others are not. Justin Howes (1963–2005), a scholar of Caslon, placed the recutting of Old Face from around 1893.<sup>1</sup> The first size was the Great Primer, equivalent to 18-point. Emile Bertaut and George Hammond were the punchcutters responsible for the work that took place between October 1894 and 1908.<sup>2</sup> In 1896, Smith’s three sons joined and changed their name to Caslon-Smith and later to Caslon. In 1900, he retired, the year a newly equipped foundry at Hackney Wick was established. In 1907 he died. 20 years later in 1937, the Caslon Foundry to Stephenson, Blake & Co.

<sup>1</sup> Justin Howes, Caslon Old Face: an inventory, 8-page insert in his article, Caslon’s punches and matrices, Matrix no. 20, 2000, page 1–7.  
<sup>2</sup> James Mosley, Recasting Caslon Old Face, December 2011, <http://typefoundry.blogspot.com/2009/01/recasting-caslon-old-face.html>

## Palladium Caslon

This outlines the main reference for the revival and conclusions about what it is and how it fits into the story of the Caslon Foundry.



The series’ stamp designed by Jan van Krimpen.

open, een spiegel  
er zoenen, en derg  
enitentiën, als daa  
ngen, de diligenc  
ijenkorfje, en and  
el gekust en evenv

angezicht te lezen,  
idmaal meer onder  
enschen, dan ik ge  
k ware thuis geblev  
van juffrouw Kegg  
van den charmanten



Scans from Enschedé specimens

Enschedé Archive Records  
Type name: Text romein 4409 (no. 18)  
Type number: 4409  
Generic title: Romein en cursief  
schriften (Serie 60)  
Original title: Roman 18 punten  
Origin: H.W Caslon & Co.  
Acquired in 1909  
Matrices in E 039 (98 pcs)  
Reference: Matrijzenboek B page 32

Among specimens examined, several Enschedé letterproefs<sup>3</sup> were found that contained a match. On both, the type was labelled as 16 PT Text Caslon, 4409. Records at the Enschedé Museum show the purchase of matrices for a variety of sizes from 6 to 42 point from H.W Caslon & Co in 1909, only a short time after the renovation was complete. The type was set by hand because the series was an exhibition of fine printing in limited editions, and there is an absence of any reference to machine-setting processes. New italic swashes, created in 1878 when the smoothness of face was being implemented were present. Casting at Enschedé occurred by machine. An article published in 1878 from *The Circular* says: “The art [handcasting] is not taught to new hands, and the consequence is that in a few years hand-casters and their art will be unknown.”<sup>4</sup>

In conclusion, it’s possible that Palladium Caslon is the Old Style recut in the late 1880’s. However, it is more likely the improved Old Face released in the 1890’s and finished in 1908. This is due to the timings of releases, the ‘original title’ from the Enschedé entry containing a point size (something that wasn’t institutionalised before 1900) and the matching peculiar italics.

<sup>1</sup> Wikipedia, The Palladium Series, October 2011, <http://nl.wikipedia.org/wiki/Palladium-reeks>  
<sup>2</sup> Observed at the Meermannno Museum, copy for Dr. M. R. Radermacher Schorer.  
<sup>3</sup> Lettergieterij Joh. Enschedé en Zonen, Letterproef, bevattende romein en cursief schreefloos, compact halfvet, Nederduitsch, schrijf muziek, Teekens en koperen lijnen etc., Haarlem, 1932.  
Letterproef, Boek en Fantasielletter initialen, Muziek, Ornamenten, Teekens, Spelen, Koperenlijnen, Schaduwvignetten, Wapens Enz.  
<sup>4</sup> Thomas Smith, Caslon’s Circular, Article ‘Hand-cast vs. machine-cast type’, 1878.



Ludlow Caslon  
Monotype Caslon  
Adobe Caslon (1990)  
Caslon Old Face  
Caslon Old Face Open  
Caslon Old Heavy  
Mergenthaler Caslon (1921)  
Caslon 471  
Caslon 540  
Caslon 3  
Caslon 128  
Caslon 641  
Caslon 224  
Big Caslon  
Caslon Openface  
itc Founders Caslon (1998)  
H.W Caslon version  
ITC Caslon (2005)  
ITC Caslon Remix  
Wyld  
Caslon Text  
Franklin Caslon  
Caslon Antique, ATF  
Caslon Roman  
Haas Caslon  
Caslon Classico (1993)  
Caslon Graphique (2002)  
Caslon Gotisch (2010)  
Caslon Graphique EF (2001)

A comparison to Founders Caslon

The work of Caslon has made a large impact on typography. The amount of revivals, their varying accuracy and lack of a trademark on the name lead to the term ‘Caslon’ becoming ambiguous. To make a detailed comparison to them all is impossible. A list has been compiled from different sources.<sup>1</sup> Below is a comparison of a similar revival, based one the same sources.

In 1998 ITC released Justin Howes’ *Founders Caslon*. It is thoroughly researched, and it includes optical sizes (12, 30, 42, Poster). After the release in 2001, he released an expanded size range (8, 10, 12, 14, 18, 22, 24, 30, 36, 42, 48, 60, 72, 96) under his own foundry, reviving the name H.W Caslon & Company. After his death the foundry shut and this expanded version is no longer available. But as Berkson points out, when compared to the original Caslon, or even the hot-metal linotype version, ‘It clearly shows that it is a product of the 1990s.’<sup>2</sup> The glyphs seem to be auto-traced scans, with rough edges and even some glyphs are scans of damaged sorts, making it seem antiquated. Berkson continues ‘the reality is that just doesn’t look good today as a font for regular use in books and magazines.’

The shapes are similar but different, the main difference is the smoothness of contours. Palladium Caslon was interpreted to make the font usable in today’s context. Case sensitive diacritics and an alternative set of caps were added. It also covers a size no longer available from ITC, a middle point between headline and text, well positioned for scaling to either. Kinks remain that keep the angularity that was observed at the start of the project.

ITC Founders Caslon 12	contours	contours
Palladium Caslon	contours	contours
ITC Founders Caslon 30	contours	contours
Adobe Caslon	contours	contours

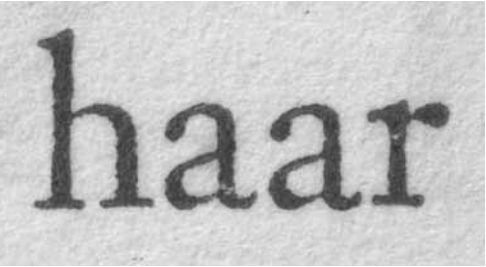
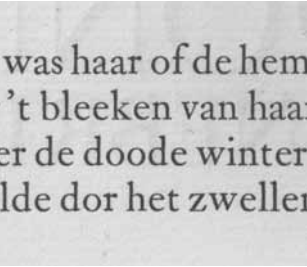
<sup>1</sup> Wikipedia, Caslon Types, <http://en.wikipedia.org/wiki/Caslon>  
Pincus Jaspert, Turner Berry, A.F. Johnson, The Encyclopedia of Typefaces, 4th Edition, Blandford Press, 1990.  
Luc Devroye, McGill University, Montreal, Canada, <http://luc.devroye.org/fonts-25187.html>  
<sup>2</sup> William Berkson, Reviving Caslon ‘The Snare of Authenticity’, July 2010.

Process

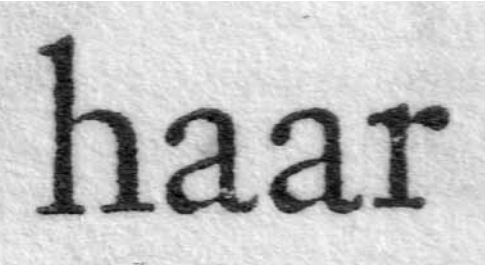
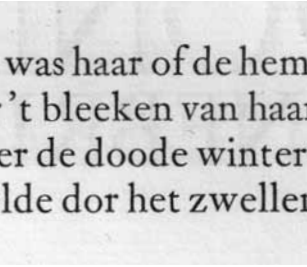
Research was obviously part of the process, but his section is purely about my technical process, the design decisions I faced and the reasons why I made them.

Data collection

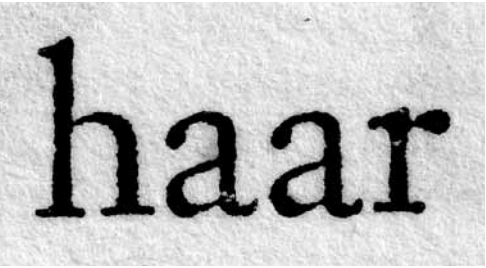
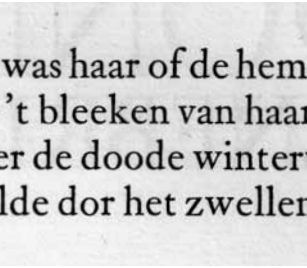
The initial step was to collect raw data. The book was scanned in entirety on two separate scanners, at various resolutions and settings. The intention throughout the process was to defer making any subjective decisions for as long as possible, starting rough and refining. Even though it was tempting to take the clearer, sharper scans, they were almost too clear. The first scan was chosen, photoshop could be used to make even slightly blurry scans better.



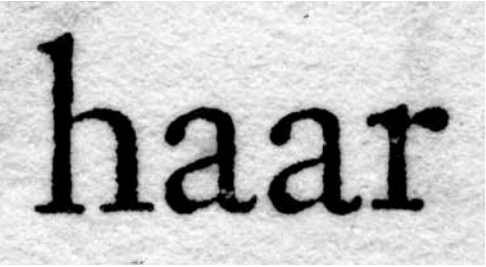
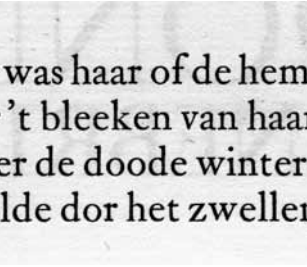
Epson Stylus sx515w  
2400 dpi  
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All optimisation off  
Selected as main source



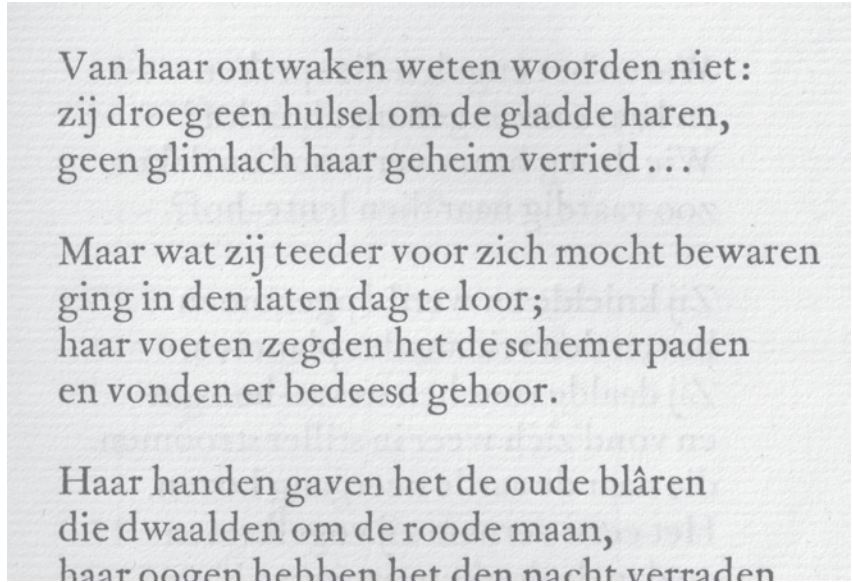
Epson Stylus sx515w  
1200 dpi  
Scanned as grayscale  
Levels



Epson Stylus sx515w  
3200 dpi  
Scanned as grayscale  
Unsharp and levels at scanner

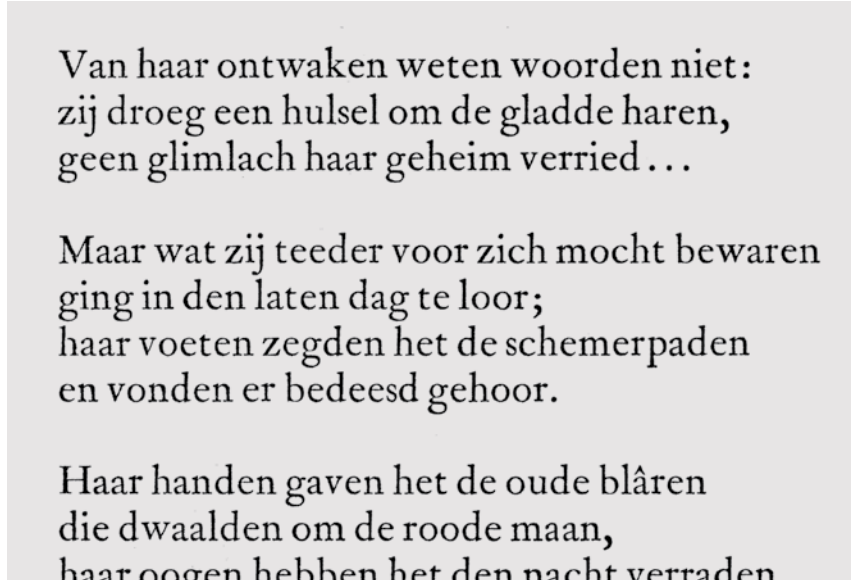
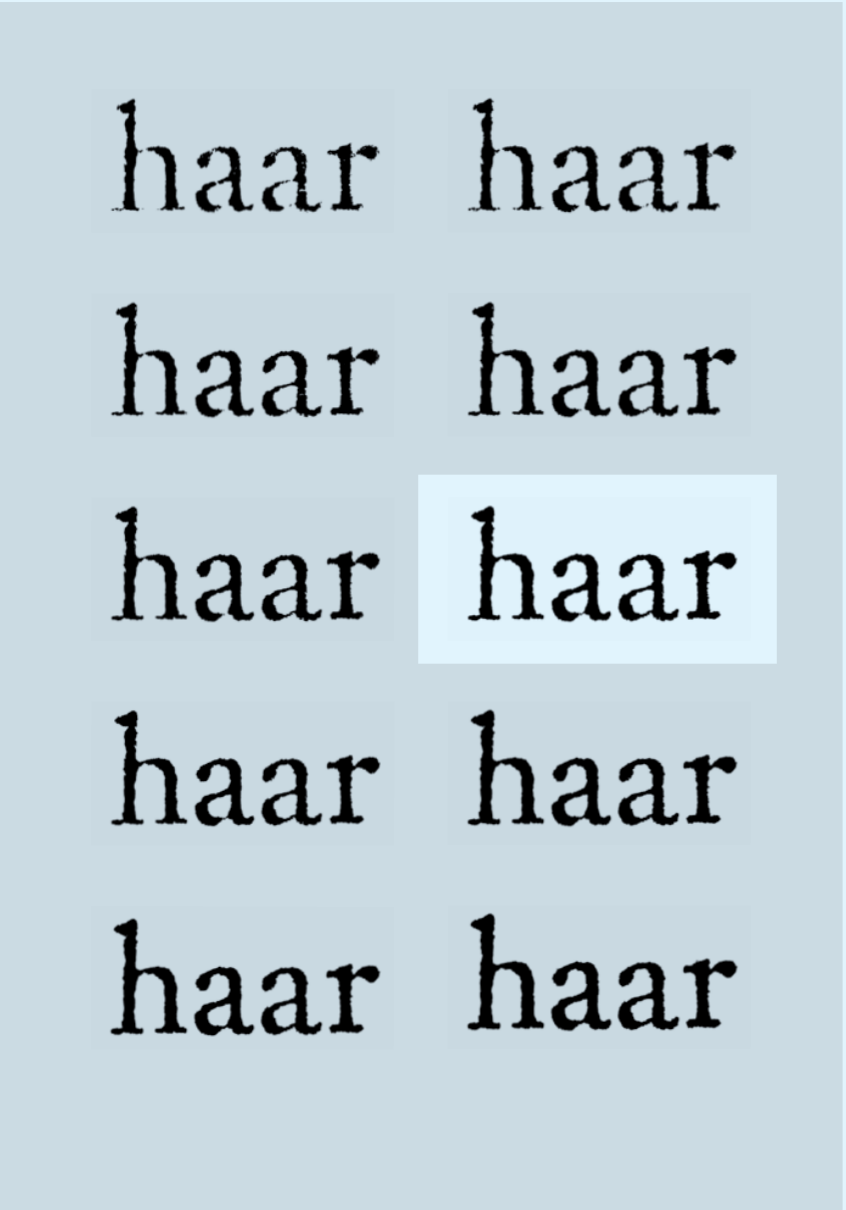


Epson Photo Stylus 3200  
2400 dpi  
Scanned as colour and converted  
Unsharp and levels

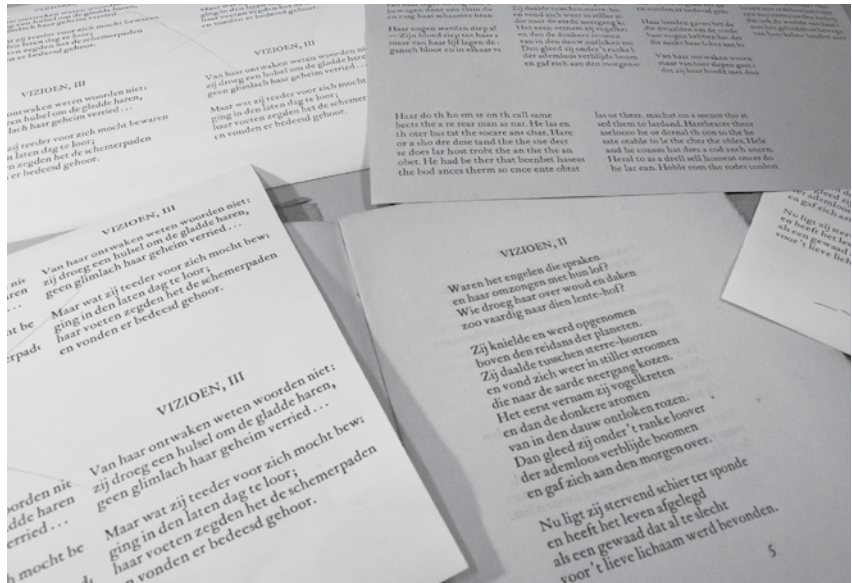


Original scan optimised  
with levels and alignment

Close up of tolerance range



Selected tolerance level  
to match original book



Printed comparisons

*Treating the raw data*  
Scans were cropped and aligned in photoshop so the baseline was flat. Levels were adjusted to remove excessive gray and to clarify the shapes of the letters.

*Tolerance proofing*  
The magic wand tool was applied to the same co-ordinate on the artboard then filled with black. This was done sevel times within a range between 15 and 80 in increments of 5. Every page required different settings. These were printed and compared to the original at 600 DPI. This process resulted in raw black and white data that matched the weight of the type in the book.





Selection of glyphs for use

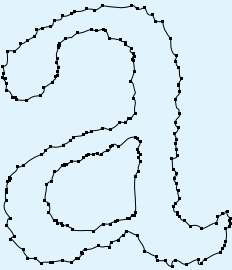
Van haar ontwaken weten woorden niet:  
zij droegen een valsheid om de gladde haren,  
geen glimlach haar geheim verried...

Wat zij teeder voor hem mocht bewaren  
ging in den laten dag te

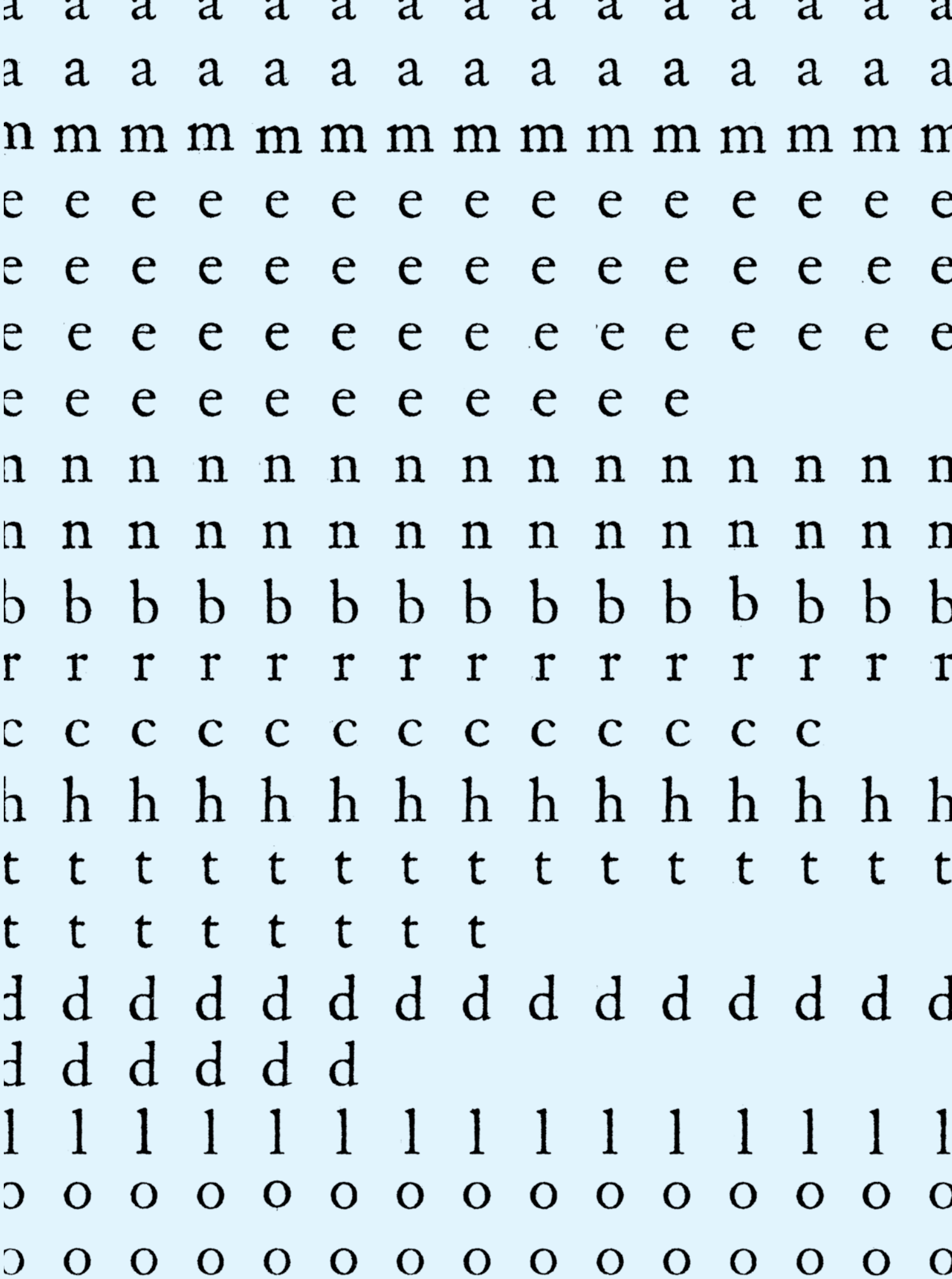
haar voeten zegden het de schemerpaden  
en vonden er bedeesd gehoor.

Haar handen gaven het de oude blâren  
die dwaalden om de roode maan,  
haar oogen hebben het den nacht verraden  
die naakt haar lokte aan het raam.

Van haar ontwaken weten woorden niet:  
maar van haar slapen gaat de vreemde mare  
dat zij haar hoofd met doornen kronen liet.



Illustrator's autotrace was then explored, but the results were complicated and misleading.





*Determining the weight and dimensions*  
Glyphs were eliminated rather than selected based on criteria that promoted glyphs with more clarity. Elimination stopped when there were a small number of ideal glyphs remaining. These glyphs were merged into one .tif file, overlapping at a low opacity. The intention of this process was to attain the correct weight and contrast. To determine the dimensions of the type I placed the opacity merged tifs into photoshop on a baseline and resizes the height from ascender to descender to 1000.

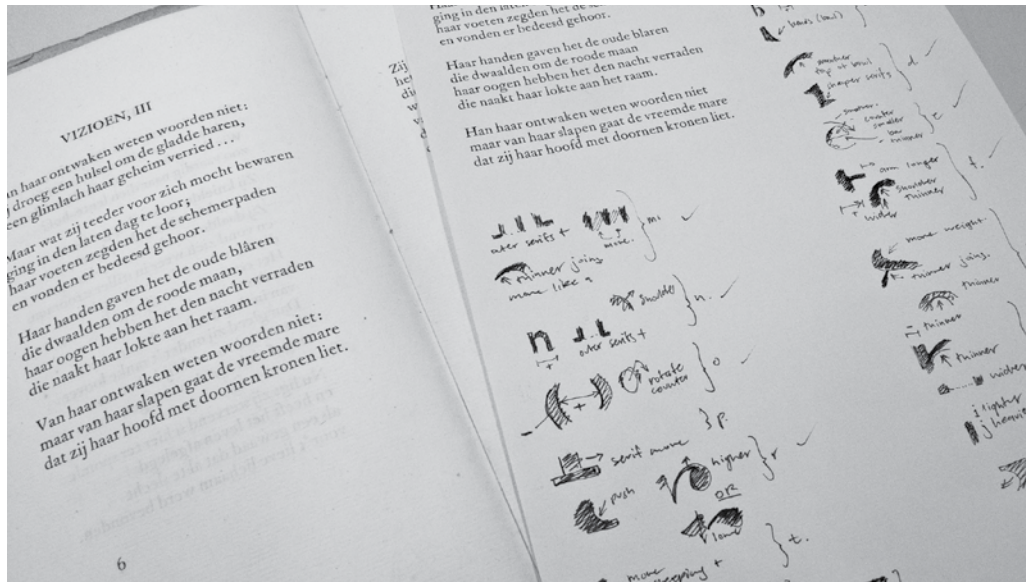
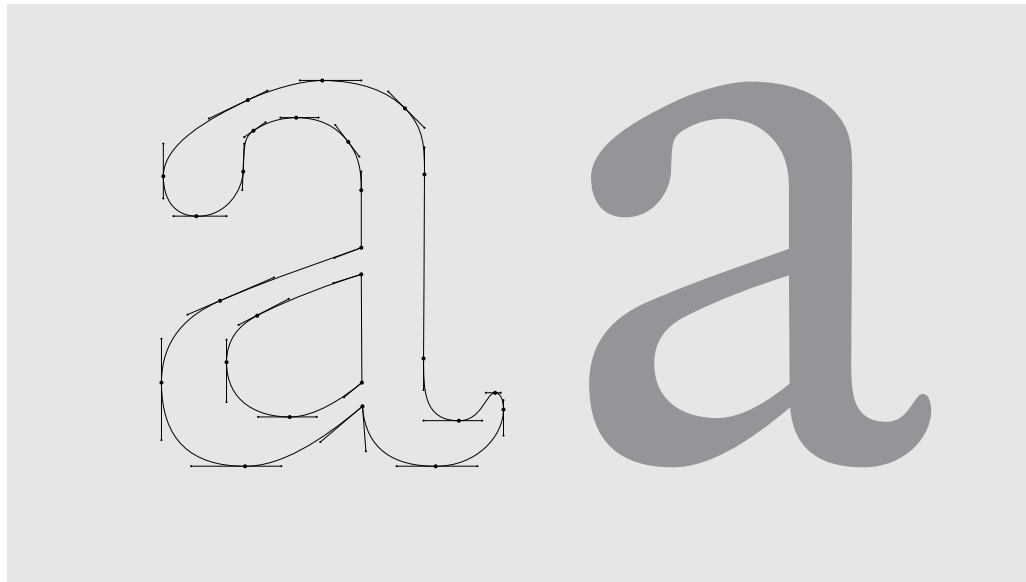


*Initial tracing of the opacity merges*  
The dimensions were inserted into *Robofont*. The images were placed in the background layer and scaled using the in-built scaling function. Glyphs were traced manually with straight lines. It was clearer what shapes in the type were common, or what was a defect depending on the shade of grey. Basic spacing was added, then print outs could be made at the correct size. A paper was selected for proofing based on its similarity to the book. It took numerous iterations before the colour and contrast of the type was accurate.



Top: Finding the correct weight with opacity merges  
Above: Working in Robofont  
Top right: Measuring the dimensions  
Far right: Tracing with straight lines



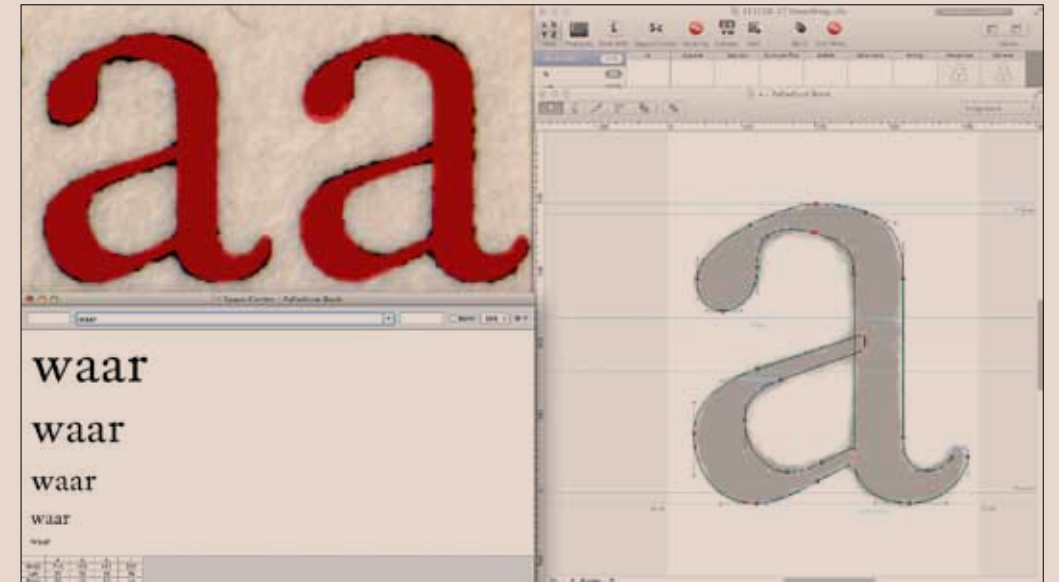


#### *Smoothing the contour*

After most of the letters had reached this part, a key decision was required. Either adding anchors so the shape smoothed out in combination with some kind of randomisation to emulate letterpress, or create smooth contours with the minimum amount of anchors needed. The decision was made to smooth the contours, because the brief was to revive a typeface and not to simulate a printing environment, it also made editing faster. There were now three layers. Scan, rough outlines and smooth contours.

#### *Refining the details*

The smooth contours were only useful to gain a median image of the type. Once the smooth contours roughly reflected the correct shape, further refinement was needed by eye to insert quirks and finer details. The workspace was arranged so that a glyph could be edited, referencing an original specimen and the spacing centre. This is the point when the smallest details like curves changes, serifs and stroke endings were refined and where the specimens, which were printed on smoother paper became useful.





Spacing

Spacing was done throughout the previous steps. The first side bearings established were from the o, because it is symmetrical. From then onwards any side bearing of an adjacent letter to the letter o could be established, and that process continued until all were filled. Using robofont’s test install function it was easy to overlay type on top of the scans in Photoshop, cross referencing a number of pages to get an average spacing. Spacing tests were also used to evaluate effectiveness separately from the scans.

Standardisation

Keeping in mind that Caslon’s character actually comes through in quirks and inconsistencies, small inconsistencies in spacing were ironed out because they served little purpose. To maintain some irregularity serifs were systemised only in depth but not length. Stem widths were also brought within an average.

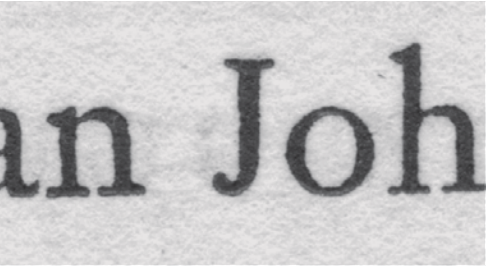


Above: Original unrefined shapes  
Below: Standardised serifs, ductus added to all shapes consistently, diagonal widths made more similar, bowl weights made to match vertical strokes.

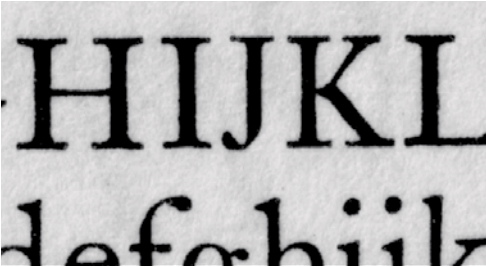
Design changes

The goal of this project, as outlined by the initial brief was to create a type suitable for use today. A major role of typography is simply not to be noticed so the reader is undistracted. It seemed that the heavy capitals and punctuation were not normal to a modern reader’s eye and a stylistic set was created, containing the original heavier forms. With the new, thinner uppercase and punctuation were set as default settings. Another oddity was the lowercase s, which appeared extremely light and narrow. This was moved to stylistic set 1 too, and the default setting filled with a wider and thicker s.

The forms of some letters within the Palladium book were particularly hard to decipher, due to a low frequency of occurrence, mixed with over inking. In these situations, different sizes of type in the specimen were used as reference. For example, the uppercase J taken from the book was a poor representation. Smaller sizes from the specimen shared similar proportions. The decision was taken to make the final outline closer to the 20 pt cut, to avoid clotting and appear better at larger sizes.



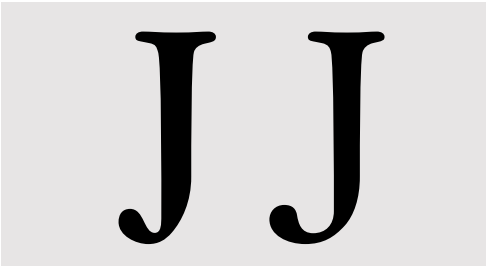
Original J from book  
16 pt Text  
Very narrow, resulting in clogging



J from specimen  
12 pt Augustijn  
Closer to an original shape without clogging



J from another specimen  
20 pt Roman  
Wider and clearer shape



Comparison of originally traced J, referenced from book and adjusted J, referenced from 20 pt specimen.



### Extending the character set

Some other glyphs, including diacritics were present in the reference materials; however, many were created from scratch using the internal logic of the typeface.

*Kerning*

The font contains 1741 kerning pairs covering the following combinations:  
Uppercase/Uppercase, Uppercase/Lowercase, Lowercase/Lowercase,  
Punctuation/Uppercase and Lowercase and flipped, Figures/Figures.

## Features

Basic features such as ligatures and tabular figures were added early but the main feature was the addition of the Stylistic Set that contained the original, historically accurate heavy capitals, punctuation and skinny lowercase s. It was a conscience decision to make them harder to reach because they would probably be the least used.

# Kerning in Metrics Machine



## OpenType Features



## Specimen

This is the specimen containing character sets, a comparison to an original scan and test settings for examination.

Uppercase  
(Lighter weight for  
modern use)

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z  
À Á Â Ã Ä Å Æ Ç È É Ê Ë Ì Í Î Ï Ñ Ò Ó Ô Õ Ö Ø  
Š Ÿ Ù Ú Û Ü Ý Þ ß à á â ã

Stylistic Set I  
(Original Duplication)

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
 ÀÁÂÃÄÅĀĂĄÇÈÊĚĚĚİİİİİŃÒÓÔÕÖ  
 ŌŠÙÚÛÜŮŰŴŶŸŽ&ÆÐΦϘŁŁŒſſ

Lowercase

abcdefghijklmnopqrstuvwxyz  
 àáâãäåäçèéêëëîíîïñðóôõöøùúûüũ  
 ŵwŵwŷÿžßæðøþııœfffbfjfkflfffbff

## Figures

0123456789 0123456789  $\frac{1}{4}\frac{1}{2}\frac{3}{4}\frac{1}{3}\frac{2}{3}$  <sup>1234</sup>

## Interpunction

/["("“”ıđ|\_...,,;:•- - - \*|?!"")'"]\

Palladium Caslon  
Character set

A B C D E F  
G H I J K L M  
N O P Q R S T  
U V W X Y Z

---

Uppercase original  
Stylistic set one  
80/94pt

---

A B C D E F  
G H I J K L M  
N O P Q R S T  
U V W X Y Z

---

Uppercase adapted  
Default setting  
80/94pt

---

a b c d e f g h i j  
k l m n o p q r s  
t u v w x y z

---

Lowercase  
Default setting  
80/87pt

---

I 2 3 4 5 6 7 8 9  
—  
I 2 3 4 5 6 7 8 9

---

Proportional and tabular figures  
Default setting  
80/94pt

---

### VIZIOEN, III

Van haar ontwaken weten woorden niet:  
zij droeg een hulsel om de gladde haren,  
geen glimlach haar geheim verried...

Maar wat zij teeder voor zich mocht bewaren  
ging in den laten dag te loor;  
haar voeten zegden het de schemerpaden  
en vonden er bedeesd gehoor.

Haar handen gaven het de oude blâren  
die dwaalden om de roode maan,  
haar oogen hebben het den nacht verraden  
die naakt haar lokte aan het raam.

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8/10.5 PT	For many reasons, The Crown of England enforced regulations on the printing presses from the mid-16th century until the beginning of the 18th-century. This dampened efforts to establish type founding in England. Consequently, type was imported, mainly from Holland. Dr. John Fell bought punches and matrices for the Oxford University Press in 1670. Seven years later, Cambridge University Press also imported type from Holland. These were the works of Dirk Voskens and Christoffel van Dijck respectively, who were major influences on Caslon as
10/13 PT	Spacing was done throughout the previous steps. The first side bearings established were from the o, because it is symmetrical. From then onwards any side bearing of an adjacent letter to the letter o could be established, and that process continued until all were filled. Using robofont’s test install function it was easy to overlay type on top of the scans in Photoshop, cross referencing a number of pages to get an average spacing. Spacing tests were also used to evaluate effectiveness separately from the scans.
12/15 PT	Among specimens examined, several Enschedé letterproofs were found that contained a match. On both, the type was labelled as 16pt Text Caslon, 4409. Records at the Enschedé Museum show the purchase of matrices for a variety of sizes from 6 to 42 point from H.W Caslon & Co in 1909, only a short time after the renovation was complete. The type was set by hand because the series was an exhibition of fine printing in limited editions, and there is an absence
14/17.5 PT	The fame of the Caslon foundry developed through further commissions, including Coptic, Armenian, Gothic and Black letter. His son, Caslon II developed Etruscan and Ethiopic. The foundry became less reliant on its patrons. In 1730, he had the custom of the King’s printers, excluding all others. In 1734, after fourteen years of work, the Caslon foundry published a specimen that included
17/20 PT	The goal of this project, as outlined by the initial brief was to create a type suitable for use today. A major role of typography is simply not to be noticed so the reader is undistracted. It seemed that the heavy capitals and punctuation were not normal to a modern reader’s eye

Body text examples
Stylistic set one
Various sizes

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Body text examples
Deafult setting
Various sizes

Seven years later, Cambridge University Press also imported type from Holland. These were the works of Dirk Voskens and Christoffel van Dijck respectively, who were major influences on Caslon as noted by Morison, Johnson and Lane. Miklós Tótfalusi Kis, a Hungarian who had been Voskens' apprentice and who later cut Janson, was also influential. Updike explains the fame and excellence of Caslon's types:

---

Large text examples  
Stylistic set one  
33/39 pt

---

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Large text examples  
Default setting  
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Cambridge  
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Christoffel van

---

Large text examples  
Stylistic set one  
60/66pt

---

Seven years later,  
Cambridge  
University Press  
also imported type  
from Holland.  
These were the  
works of Dirk  
Voskens and  
Christoffel van

---

Large text examples  
Default setting  
60/66pt

---

Christoffel van Dijk

Misztótfalusi Kis Miklós

Dirk Voskens

Doctor John Fell

William Caslon



Spacing tests  
Default setting  
16/19pt

Frequent kerning pairs  
Default setting  
80/94 pt

Aardvark Abandon Acappella Adjective Aerosol  
African Agriculture Ahead Airport Ajar Akita  
Algebraic Ambidextrous Ancestor Aorta Apocalyptic  
Aquarius Arbitrate Asparagus Atlantic Augmentation  
Avoidance Awkward Axiom Ayatollah Azimuthal  
Background Bdelium Beautiful Bhojpuri Bilateral  
Blast Bolts Bracket Butane Byzantine Cavitation  
Cedilla Chocolate Circumference Clearance Cochlea  
Critical Cuneiform Cyborg Czar Daffodil Decoration  
Diagram Dorian Drizzle Dune Dynamic Earth Ebony  
Economics Education Effusion Egotism Einstein  
Eject Ekman Electrostatic Embedding Enchilada Eon  
Epoxy Equestrian Ergometer Escape Ethology Europa  
Event Ewalt Extrusion Eyepiece Ezra Farfel Fence  
Field Floured Formula Frontier Fungus Fylot Garden  
Generation Giraffe Glamour Gopher Graduate Guild  
Gymnasium Halogen Helicopter High Home Hunt  
Iambic Icosahedron Identify Ignore Illumination  
Imagination Internal Ionic Iris Island Italics Ivory  
Jazz Jeopardy Jingle Jockey Jubilee Kaiser Keystone

Kingdom Klondike Knowledge Kohinoor Krishna  
Lambada Lecture Limit Location Lunar Lymphnode  
Magic McDonald Metrics Mission Mobile Munch  
Mylar National Neon Nitrogen Nocturnal Number  
Nylon Oasis Obvious Octave Odour Oestrogen  
Offensive Ointment Olive Omniscience Onset  
Operation Orange Osculatory Outbalance Override  
Owner Oxidation Ozone Pattern Perception Phonetic  
Picture Pleasure Pneumatic Pocket Precision  
Pseudoscope Public Pythagorean Quantum Radiation  
Reassembly Risk Rotation Rupture Saute Scandal  
Secure Shuffle Signal Ski Slopes Smell Snooze Source  
Specific Squadron Stability Suppression Swamp  
Synapse Tactic Temporal Theory Time Torque  
Transpose Turbulence Twilight Typhoon Ubiquitous  
Ugly Ukrainian Universal Uprise Uranium Valence  
Vector Vision Vortex Water Weight Whirl Window  
Woman Write Xanorpha Xenogenesis Xylograph  
Yawn Yeast Yield Youth Yuletide Zambomba Zealot  
Zinc Zodiac Zygotic

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46

47

This book is set in Dante, designed  
by Giovanni Mardersteig in 1957 for  
hot metal, digitised by Ron Carpenter  
and released in 1993 by Monotype.

Thank you	Paul van der Laan
	Johan de Zoete
	James Mosley
	William Berkson
	Thierry Blancpain
	My classmates