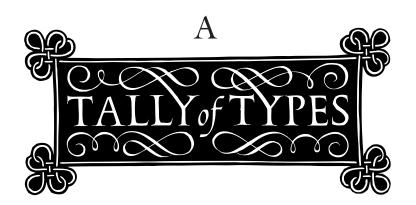
A TALLY OF TYPES

STANLEY MORISON



WITH ADDITIONS BY SEVERAL HANDS

EDITED BY BROOKE CRUTCHLEY

With a New Introduction by Mike Parker



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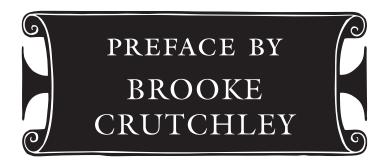
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This work first appeared in 1953, when it was issued as a Christmas keepsake to 'friends of the University Printer in printing and publishing'. The full title was *A Tally of Types cut for machine composition and introduced at the University Press, Cambridge, 1922–1932.* Four hundred and fifty copies were printed.

The reasons why the Cambridge University Press was so deeply involved in the typographical burgeoning of those years were recounted in a preface which I wrote for that edition. Stanley Morison became associated with the then Lanston Monotype Corporation in London in 1922 and in the following year Walter Lewis, with whom he had been on close terms for some time, was appointed University Printer at Cambridge. Morison had laid before the managing director of Monotype a plan for the production of an extensive range of type-faces for the firm's composing machines. He needed the support of a prominent book house to convince the management of the commercial worth of his proposals; he also needed a printer of high quality to do credit to the types produced under his direction. The Cambridge Press under Walter Lewis became an essential ally in his campaign, which was to cause so profound a change in the appearance of books all over the world.

A book published in 1971 (*Stanley Morison: his Typographic Achievement*) by James Moran doubted whether there ever was a programme of the sort Morison described. *The Monotype Recorder* for January/February 1924 would seem, however, to support Morison's claim. The opening article, in characteristic Morisonian style, refers to the new Poliphilus type in which the issue was set and to the Monotype Corporation's ambition 'to promote the extension of, and to create interest in, beautiful printing'. It went on: 'It is hoped, in the

course of time, to make available to the present day other distinguished faces of the past and in addition at least one original design. As a further instalment of the programme, the Corporation have under consideration...' and three projected faces are mentioned.

The article must actually have been written in 1923, since it refers to the production of Monotype Garamond 'last year'. In his biography of Morison (1972) Nicolas Barker provides good evidence that his services were actually being used by the Monotype Corporation during 1922 and that he may well have proposed to them the cutting of Garamond in the previous year. As for the 'oft-repeated' assertion, of which Mr Moran writes, that Morison had been appointed to Cambridge in 1923, it was indeed in that year that he started visiting the Press, soon after Lewis had arrived there, and in the following year that the Syndics offered him the post of typographical adviser, to date from the beginning of 1925. A man with a far more exact memory than his might have slipped up in this way; the correct date was given in the 1953 edition of this book.

When Morison acceded to my request to write this account, I think he had not realized what a task it would prove to be. The fruits of his efforts of twenty and thirty years back were still to be seen, but the mental processes which had paved the way for them, the researches and evaluations upon which decisions had been based—of these the reminding evidence was scarce, Hider's bombs having destroyed most of the records in the meantime. He wrote to Jan van Krimpen in 1956: 'I have not the *Tally* at hand, and do not remember what was in it. I may well have failed to explain myself, because the whole thing was written at great speed, at Crutchley's request, and I felt at the time that the kind of book it was going to be had better not be published.' However, with the help of numerous people, particularly his eventual successor at Monotype and Cambridge, John Dreyfus, the story was pieced together and remains of lasting interest.

Notes have been added to this edition to correct errors (fewer than Morison feared) or to add information which has since come to light. The original preface and postscript have been dropped and Morison's introductory chapter has been revised and amplified by Miss P. M. Handover, on lines which he had approved before his death in 1967. I am grateful to her for undertaking, so successfully, this difficult task, and to many others who have helped with comments and contributions, notably John Dreyfus, Harry Carter, Nicolas Barker, James Mosley, Mike Parker, Giovanni Mardersteig. The first two, with Netty Hoeflake, contributed the notes on three type-faces, not covered

in the first edition, which appear on pages 113-25. The engraving on the titlepage is by Reynolds Stone. The Bauer Typefoundry of Frankfurt supplied the specimen of the Weiss type which appears on page 18 and the Monotype Corporation has been most generous in the assistance it has given to this edition, as to the original work. The index was compiled by Frank Collieson.



This slender book entered my life quietly enough in the spring of 1956 as I was completing my master's thesis on Garamont's types at Yale. At Alvin Eisenman's suggestion, I examined his copy of the original Cambridge Christmas book. A year's work was obsolete. Morison's passages on Garamont described him and his work with startling new clarity and authority, but without footnotes giving sources. My letter to Morison was promptly answered, revealing that the new information originated with Harry Carter's reconnaissance of the typographical material surviving at the Plantin-Moretus Museum in Antwerp, Belgium. The young curators, Leon Voet and H. D. L. Vervliet, were opening the definitive resources of the museum to international scholars. Morison's letter led me back to Alvin, then to Ray Nash at Dartmouth, his mentor and pioneer in the formulation and teaching of American typography, who helped me to obtain a grant from the Belgian American Educational Foundation, which took me to Antwerp and the Museum. The work led me to Harry, Ella and Matthew Carter at Oxford, to Netty Hoeflake at Enschedé, to Ellic Howe, John and Irène Dreyfus, Stanley Morison and Beatrice Warde in London, and finally, three eventful years later, to Jackson Burke at Mergenthaler Linotype in Brooklyn, New York, the start of a life in type.

The *Tally* provides more than the historical information that excited me. It casts a strong if sometimes oblique light on every part of the design and industrial creation of typefaces, on Morison's use of historical models and links to designers, on the relationship of type design to publishing, and on the organisation of the companies that manufactured type. It tells of the crea-

tion of a group of typefaces that lie at the heart of the library of book faces we all use today in our new world of digital communication.

To appreciate the brilliance of the Monotype achievement, one must understand something of the situations that lie all but unmentioned beneath Morison's account. Linotype and Monotype entered a world where one could choose types from any of hundreds of foundries, and combine them to typeset any manuscript. With the age of composing machines, each letter became an intricate machine-part, the matrix. Your only source of matrices was the manufacturer of your equipment.

Manufacturing executives faced two immense and immediate problems: first, to craft letters of apparently handset quality to run on intricate and obdurate machines, and then to choose or create a grand library of designs that would enable the equipment to assume its place in the world.

Those who planned to reshape any type, old or new, for use on a mechanical composing machine required the ultimate in craft and craftsmen if the effects of deforming mechanical requirements were not to be apparent on the page.

In 1899 the Monotype Corporation of London engaged Frank Hinman Pierpont as Works Manager to build and run the Monotype factories at Salfords, in Surrey. Pierpont was a Connecticut engineer, a brilliant autocrat with a passion for quality in equipment, and a feeling for spacing and shape in type. He came to Monotype from Berlin, where he had been the managing director of the Typograph Aktiengesellschaft, a company that briefly competed with Linotype. Although Typograph is remembered today for the manually operated display device that survived at Ludlow, the original Typograph was a complex keyboard driven linecaster invented by John R. Rogers in 1890.

As Works Manager, Pierpont's inflexible pursuit of disciplined accuracy has become Monotype legend. He brought to Salfords his own team, headed by Fritz Max Stelzer. He had Stelzer manage the letterdrawing office, although his own passion for the craft led him to oversee in detail the preparation of each new typeface. He built a major library of typefaces suited to British taste and manufactured the matrices to British standards.

For the first twenty-five years Pierpont's matrices ran on keyboards and casters designed and built in America. Production of munitions 1914–1918 expanded Pierpont's factories and led management to move beyond peripherals. In 1924, shortly after Morison became Monotype's typographical adviser, a wholly British line of equipment began to appear from Salfords. At his death in 1937 Pierpont had sixty-nine refinements to machine tools and

typesetting machines patented in his name, attesting to his engineering abilities and hinting at the originality of thought behind the autocracy.¹

Pierpont was trained in preparing typefaces for linecasting machines, an operation demanding tight discipline if good character shape and spacing was to be achieved. The system allowed no kerning, and in its fully developed form required each character in italic and boldface fonts to adopt the width of the roman letter. The early Monotype systems in particular were similarly Procrustean and required equal discipline. The Monotype diecase contained fifteen rows of fifteen matrices each, with six characters omitted from each corner. All of the characters in a row share a single escapement and had to be prepared on the same width. After studying a type family, the letterdrawing office assigned a width of eighteen units to the widest potential characters, with a height to width ratio appropriate to the design. Each of the characters in the roman, italic and bold were then assigned to an available width in discrete units, and a place in a row.

Typefaces don't naturally divide themselves into sets of fifteen characters, with all characters in a set fitting properly into one of eighteen strictly related widths. Letters were moved from width to width and row to row until the scheme was balanced for the machine. The full set of characters was then redrawn until the spacing, color, and shape were properly adjusted to fit the new width assignments. Craftsmanship of a high order was required if the adjustments were not to be visible as irregularities. Pierpont solved the first massive problem. For as long as he lived Monotype fonts were known for good shape, even fit and color.

He was immediately thrown into the second problem, adaptation of typefaces and the building of a Monotype library. After a difficult start with two designs, Miller & Richard's *Modern* and *Old Style* in 1900 and 1901, the early series poured out—thirty-one faces by the start of 1905—one hundred by the end of 1911. All were faithful adaptations of existing designs to the Monotype requirements.

In that year Monotype Series 59 *Veronese* hinted at things to come. Cut for the London publisher J. M. Dent, *Veronese* forms part of the revival of Nicholas Jenson's types started by William Morris with his *Golden Type* in 1890. A single roman lacking an italic, *Veronese* is not a faithful copy, but owes much to ATF *Jenson* and the 1900 *Doves Roman*, with a skillful contribution

¹ Lawrence Wallis, "Frank Hinman Pierpont: An unsung pioneer of mechanical typesetting", *Electronic Publishing*, 15 July 1994.

from the Monotype type drawing office. This distinctive design survived at Monotype for many years as display sizes for *Italian Old Style*, cut the following year.

The change really arrived in 1912 with Series 101, *Imprint*, the first original series designed for the Monotype machine. Morison describes it here as "portentous . . . the first design, not copied or stolen from the typefounders, to establish itself as a standard bookface." The design of a reformed Caslon deliberately envisioned for use on the Monotype by Gerard Meynell, Edward Johnston and J. H. Mason began the second phase, the creative construction of a *Monotype* library of typefaces, ten years before Morison's arrival on the scene. Pierpont's contribution, quality of drawing and fit, is impeccable. Three quarters of a century later *Imprint* retains the status of an industry standard, offered in excellent cuttings by Berthold, Bitstream, Linotype and Monotype.

The experience galvanised Pierpont. Encouraged by that farseeing managing-director and fellow American, Harold Malcolm Duncan, he was off to Antwerp and was back in April 1913 with samples and "historical data" from the Plantin Museum. Monotype's second original typeface, *Plantin*, was released that August, a prompt performance that left little time for scholarly enquiry or reflection. The typeface met with immediate commercial success, and has remained a standard, offered today by Berthold, Bitstream, Linotype and Monotype, Agfa-Compugraphic, Alphatype, Autologic, triple I, Letraset, Scangraphic, Varityper and Visual Graphics.

The serious visitor to the Plantin in those days, browsing through the sixteenth century documents, sooner or later became conscious of a series of vigorous and unusually spirited romans from the hand of an unknown punchcutter. Pierpont recognized the quality of this design, and seized on heavily inked proofs of the *Gros Cicero*. They had been taken off worn type that had been cast in the 1730s for the Moretus. Pierpont accepted the model at hand, although disfigured by J. M. Smit's replacement "a", and produced a typeface softer and heavier than the original, distinguished mainly by the superior quality of color and spacing.

A more complete realization of the design was not to appear for sixty-five years. In the summer of 1939 Ray Nash cast type at the Museum from the *Ascendonica* and identified the cutter as Robert Granjon. The outbreak of war interrupted his progress, which was to lead eventually to the cutting of Matthew Carter's *Galliard*, released by Linotype in 1978, and in which these words are set. Based on careful analysis of Granjon's romans and italics, his

character and intentions, *Galliard* revealed what Nash had recognized, an original as brilliant as the designs of John Baskerville.

Pierpont's development of new faces continued with the cutting of a traditional *Caslon* in 1915, and after the War with *Scotch Roman* in 1920 and *Bodoni* in 1921, followed by the *Garamond* of 1922. All followed *Plantin* in their solid craft, brisk development and conservative interpretation, and all met with immediate commercial success.

The cutting of *Garamond* followed the visit of an industry deputation, which attended on Duncan to solicit Monotype participation in this popular series, obtainable from ATF since 1917. Duncan was inclining towards an active in-house Monotype program to foresee industry requirements, and he found the means of introducing it in the person of Stanley Morison. Frank Pierpont was enjoying typographic development, the mastery of his chosen craft, the swiftness and efficiency of his straightforward methods for filling customers' requirements, and the quality of the organisation he had created at the Works. One can imagine his reaction at the introduction of this young conscientious objector, provocatively radical, chosen to elaborate and direct the origination of new type designs for a program he had created and managed in detail for nearly a quarter of a century.

Although unable to create an original design himself, Pierpont was a demonstrated master at drawing and adapting them for difficult machines. When designs new to Monotype were requested from the field, with usable models supplied, Pierpont continued with their development himself. So the flow of Monotype adaptations remained in his hands. He polished his ability to discipline unruly originals, notably turning Berthold's end-of-the-century *Ideal Grotesk* into the 1926 Monotype *Grotesques 215 and 216*, and then transforming the Inland Type Foundry's 1911 *Litho Antique* into the 1933 *Monotype Rockwell*.

Morison faced a problem in getting his own faces into production, expressed in his own words in the *Tally*:

Accordingly the continuity of the plan hinged upon the possibility of counteracting the obstruction of the works by ensuring orders in advance for the matrices that were planned. It was, therefore, peculiarly fortunate that the typographical adviser to the Corporation should become associated in a similar capacity with the Cambridge Press, headed as it was by a Printer empowered to include or to exclude any typographical equipment that might be rendered available.²

Walter Lewis and the CUP provided Morison with support for his program from the highest levels of the industry, support that enabled him to get his ideas into production.

As Typographical Adviser to the Monotype Corporation in London, Morison worked at Monotype House in Fetter Lane, thirty miles from Salfords. He enjoyed the backing of the Managing Director, initially Duncan, followed by Burch, and worked through them as necessary. One can understand his emphasis on controlling the development program in his dealings with Pierpont, autocrat of the works, upon whose skills he so depended. The tensions are portrayed in an unpublished draft of a letter to Cyril Burt from Beatrice Warde written on 22 July 1953, the period when the *Tally* was being prepared.

None of these faces was cut for the Corporation for any other reason than Mr Morison said so and they'd lose him if they didn't obey orders. "Fetter Lane", the seat of the Managing Director until 1939, took on the programme with the same zest and pride, and at least with great faith in S. M. "The Works" on the other hand down at Salfords i.e. Mr Pierpont, a Connecticut engineer, hated S. M. and all he stood for, and was always surly in coming to heel.... Pierpont died before the 2nd war but left the works impregnated with his personality. They are wonderful engineers and that's all.³

Morison's own opinion of Pierpont's methods are to be found toward the end of the introduction and most vividly in the chapter on the *Poliphilus*. The two parts of the development program ran side by side, with little contact.

Pierpont's view of Morison might well have been reinforced by Morison's essay in the Tally portraying the Garamond Italic as "*The Italic of Robert Granjon* / Originally Cut for the Printer of Paris 1530 / First Recut by the Monotype Corporation 1922". The typeface so described is Jean Jannon's c. 1610 italic in a brisk and faithful recutting in Pierpont style, the pair to the straightforward version of the Jannon roman released as *Monotype Garamond*.

² Tally of Types, p. 34.

³ Draft, Beatrice Warde papers in the Morison Collection, Manuscript Collection, University Library, Cambridge.

The text in the *Tally* actually describes a series of tied characters and swash capitals skillfully based on a characteristically exuberant Granjon model. In January 1923, shortly after release of the *Garamond*, Morison wrote to D. B. Updike about

the Le Bé fount with its *m* [final] *n* [final] *nt* [ligature] *e* [final] *et* [ligature] *at* [ligature] and other italic ligatures who at my requisition are now to be had on the Monotype (English Corp.) for use with their Garamond. In a day or two I hope to send you specimens. I invite your opinion of the face. I hope it is at least an improvement on the A.T.C.'s version. Yours faithfully, Stanley Morison⁴

The wording suggests that these additional italic characters make up Morison's contribution to the *Garamond*, the first typeface in his program. They are used lavishly in the Tally to dress up the composition, while lending a strong Granjon flavour to the setting. The original capitals appear sparsely and signal the Jannon origin; the C, F, and R stand out in particular.

The relations between the two men may have also obscured an American contribution to the origin of *Times New Roman*. A similar roman from The Lanston Monotype Company, Number 54 in their development program, anticipates and strongly resembles *Times*, and further study may throw light on the excogitation of the design mentioned by Morison in the *Tally*.

The management of any composing machine manufacturer was familiar with conflicts between engineers and artist/typographers. Few found a Pierpont; most struggled with half-disciplined drawing offices and accepted lower typographic quality, selling machines through speed and price. Those who achieved stable design discipline were faced with paying customers constantly demanding machine versions of every cut of every popular typeface, many of them overlapping duplicates. In the clamor of the first years, Linotype and Monotype were too busy satisfying customers' demands to recognize the benefits of planning typeface design. An innovative program of new designs based on market analysis, scholarship and artistic imagination stood little chance against the rush of proven cash demand provided by raw customers' orders.

⁴ Stanley Morison & D. B. Updike, *Selected Correspondence*, David McKitterick ed. (London: Scolar Press, 1980), p.19.

The pause of the First World War seemed to draw management's attention to the opportunity. At Mergenthaler in 1915 C. H. Griffith, country printer and Linotype salesman, proposed a rational typographic development program; he was promoted to manage the matrix factory and bring order to a confused library. He retained the best version of each significant design, scrapping duplicates produced to customer orders; he examined the typographic requirements of each market for Linotype machines and rebuilt the library with original typefaces designed to better serve each of them.

Seven years later The Monotype Corporation, London, engaged Morison as Typographical Adviser for a similar purpose. Mergenthaler had employed Griffith to pilot a program and improve craftsmanship, resolving both aspects of the problem. Faced with two powerful but clashing personalities in Morison and Pierpont, Monotype took the unusual course of institutionalising the conflict between them, and out of opposition produced a brilliant result. Morison founded the Monotype's creative growth on the deep original historical scholarship so evident in the Tally and augmented by his close cooperation with Eric Gill. Pierpont could be counted on to provide the necessary craftsmanship.

Understanding the situation at Monotype in those years illuminates many aspects of the *Tally*—Morison's preference for exploring new designs with outside designers and hand punchcutters, the sections on *Garamond* and the *Granjon Italic*, on *Poliphilus* and *Bembo*, the mix-up between *Fournier* and *Barbou*—and may illuminate the origin of *Times New Roman*. The Monotype releases that do not appear in the *Tally* are by and large the typefaces with which Morison was not concerned: the 1926 *Monotype Grotesques* and the 1933 *Monotype Rockwell* were clearly the work of Pierpont; yet the thoughtful quality of this adaptations of *Ideal Grotesque* and *Litho Antique* seem to show Morison's influence. In 1928 Pierpont cut *Othello*, an unauthorised version of *Neuland*. By 1936 its place in the line was taken by Berthold Wolpe's *Albertus*, undertaken at Morison's instigation.

We forget, and perhaps the world never fully understood, the sum of the difficulties facing the ambitious manufacturers of early composing machines. We tend to underrate the labor of tailoring typefaces to fit stubborn and difficult machines, while maintaining an apparently easy elegance of shape and fit. By comparison our common digital problem of intelligently scaling and rasterising outlines for screens, printers and imagesetters are simple and direct. As manufacturers accept a handful of digital formats for fonts as standards that run industry-wide we can forget the anxiety of depending upon

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> the offerings of a single equipment manufacturer for all of our typographic requirements. We find that once again we can purchase fonts for our equipment from a variety of sources, not the least of which is Monotype, a firm that continues to provide the fonts that poured out over half a century ago in the unsurpassed outburst of typographic development chronicled here.

> In the *Tally* we have an insider's account of the brilliant, innovative and vital side of the powerful double-barreled program that Stanley Morison and Fetter Lane, Frank Pierpont and The Works, Walter Lewis and the Cambridge University Press all conspired to develop. As Typographical Adviser to the Monotype Corporation, Cambridge University Press, and Times Newspapers Limited, Morison's typographic accomplishments remain unsurpassed. We can surmise the importance of Pierpont's contribution in craftsmanship and manufacturing judgement. The quality and variety of the typefaces in the program remain as useful to our present digital world as they were when cast in typemetal sixty years ago. Combining creative typeface design with the realities of manufacturing equipment and matrices in the first half of this century was never easy. In all probability, the extraordinary success of this ultimately cooperative effort is perhaps the lasting monument of the management genius of Harold Malcolm Duncan and William Burch.

Careful reading of the *Tally* can leave the reader with a sense of lacunae, of significant things left unsaid. Indication of the other half of the program would be at best incomplete without access to that vast repository of information on the craft, industry and art of the typographic tradition, the Saint Bride Printing Library, and the guidance of its Librarian, James Mosley, from whose enquiring mind and through whose collection other Monotype realities will surely take on shape, form and detail.

MIKE PARKER San Diego, December 1998

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Asterisks refer to notes on pp. 127–33