

Completing the record

The idea, or ideal, of a complete record of all that has been printed is not new. Barely a century after the invention of printing, Conrad Gesner's *Bibliotheca universalis* (1545) was the first work to attempt such a task¹. It was not the fact that the books were printed that led him to undertake it, rather to establish a canon of authors and their works, such as Johann Trithem (*De scriptoribus ecclesiasticis*, 1494) and before him Tommaso Parentucelli, Pope Nicolas V, had earlier attempted. Gesner had listed some 10 000 works; he was, however, well aware of the importance of the means by which works were divulged, and in *Pandectae, siue partitiones uniuersales* (1548-1549) he extended the list to 30 000, this time arranged by subject, under nineteen headings, each section dedicated to one of the scholar printers of his time, each with his achievements listed. In doing so he made full use of their own lists of publications, of booksellers' catalogues and other lists of books available. So, from the very beginning of the first attempt to account for what the printing press had brought into existence, two types of information from two different sources were acknowledged: the book or sheet that could be held in the hand and read, and a printed record of the same, under title, author or subject, for use as a source of information or as a means of selling the works described (the Frankfurt book fair catalogues served both purposes).

A hundred years later, the ground had shifted slightly. The invention of printing, with all that it had brought, was now acknowledged as a historic fact, with a date, 1440, and therefore with a bicentenary to celebrate. In 1640, then, Bernard von Mallinkrodt's *De ortu ac progressu artis typographiae dissertatio academica* appeared at Cologne. Its main purpose was to establish not only the date but also the place of the invention. The latter was the more important, since Scriuerius's *Laure-crans* (1628) had claimed the discovery for the Dutch. Mallinkrodt's rejoinder, also based both on documentary sources and examination of the books themselves, showed that printing had spread not from Haarlem but Mainz; it was in effect the first attempt at a history of

* Editor, *The Book Collector*.

¹ Bibliographies and catalogues cited are listed at the end of the paper.

printing. The need to establish dates and places of printing to satisfy national claims to priority determined the course of many works that followed. The ideal of a complete list of all that had been printed became a secondary goal, if only because, as the volume of works printed grew exponentially, the means to achieve it diminished. Mallinkrodt, by defining the object of his work as “incunabula”, did not give it a precise temporal significance. That was left to Johann Saubert, whose *Historia bibliothecae Norimbergensis* (Nürnberg, 1643) included an appendix “*De Inventore Typographiae, itemque Catalogus librorum proximis ab inuentione usque ad A. C. 1500 editorum*”. This was important as the first attempt to list all the early books in a particular library, but even more so by setting 1500 as the end-date for his work. Both were influential innovations.

Gesner had realised that the names of printers, as well as the places and dates of their work, were critical for establishing the record. Mallinkrodt knew and quoted Gesner, but it was left to Theodore Janszoon van Almeloveen to carry this third element to its logical conclusion by publishing the first monograph on a single printing-house. *De Vitis Stephanorum celebrium typographorum* (Amsterdam, 1683), besides biographies of the members of the Estienne family, also included Henry Estienne II’s *Querimonia artis typographiae* and *Epistola de statu suae typographiae*, and, most significantly, an *Index librorum qui ex omnium Stephanorum officinis unquam prodierunt*. Where Gesner had based his similar lists on what were only, in effect, publisher’s lists of books in print, Van Almeloveen regarded his work as one of historic scholarship, to list all the books that had been printed *Sub Oliva* by all the different members of the Estienne family in Paris or Geneva; it was augmented by Michael Maittaire in *Stephanorum historia* (1709).

What Saubert had done for Germany and Nürnberg was done for France by Philippe Labbé, whose *Noua bibliotheca manuscriptorum librorum* (1653) included a list of the early printed books in the Bibliothèque royale, by Jean de La Caille, the title of whose *Histoire de l’imprimerie et de la librairie* (1689) reveals his double interest, and by André Chevillier in *L’origine de l’imprimerie à Paris* (1694). England made a false start with Robert Atkyns’s *Original and Growth of Printing in England* (1664), which promulgated the false 1468 Oxford press, a self-serving legend finally despatched by Conyers Middleton’s *Dissertation concerning the Origin of Printing in England* (1735). The first apparently independent work on the subject in English, *The History of the Art of Printing* (Edinburgh, 1714), was in fact a translation of La Caille’s work by a Scotsman, John Spottiswoode. The first historic account of any part of the British press as such was the *Life of Wyllyam Caxton* (1737) by John Lewis; as vicar of Margate he was more interested in Caxton as an eminent Kentish man than to list the works printed by him or his contemporaries. Those who wished to form an idea of what resources might be available in Britain would have consulted Thomas Hyde’s *Catalogus impressorum librorum Bibliothecae Bodlejane*

in *Academia Oxoniensi*, the 1674 catalogue of the library of the University of Oxford, printed at the University Press, and widely used as the basis for the catalogues of other libraries. But knowledge of what was printed in the first two centuries of printing (up to 1663) was summed up in the *Annales typographici* (1709-41) of Maittaire; compiled by a Huguenot who lived in England and printed in The Hague, Amsterdam and London, it typified the international scholarship of its time.

These are the *primordia* of the catalogues, data bases and other sources of information about early printed books. How have we got from there to here? What have we lost on the way? What can we now retrieve? Whether for current use or historic research, the same quadripartite definition of a book was required: author, title, place of publication and date. These constituted the categories that had to be recorded to tell one book or edition of a book from another. But it had taken almost a century for them to become a universal standard, and even then it was still a matter of chance whether they would be found at the front or the back of the book. The next century saw the emergence of the archaeological approach to the early books where details were most often lacking, concentrating (filigranology not as yet invented) on the shape and size of printing types. Such observations were the guides for all the writers from Mallinkrodt to Maittaire. They informed Guillaume de Bure's *Bibliographie instructive* (1763-8), the first work to use "bibliography" in our sense of the word, the principles of François-Xavier Laire's *Specimen historicum typographiae Romanae X saeculi* (1778), later applied to his *Index librorum ab inuenta typographia ad annum 1500* attached to De Bure's catalogue of the library of cardinal Loménie de Brienne (1791-2), Dom Placidus Braun's *Notitia historico-literaria de libris ab artis typographicae inuentione usque ad annum MCCCCLXXVIII (MD) impressis*, in which he applied Mabillon's use of engraved plates of palaeographical details to early printing types, and Georg Panzer's *Annales typographici ab artis inuenta origine ad annum MD* (Nürnberg, 1793-1803). The last, by listing books in chronological rather than alphabetic order, altered the emphasis of previous lists significantly.

In fact Panzer extended his stated terminus to 1536, but in the nineteenth century, from Hain's *Repertorium bibliographicum* (1826-38) to the inception of the *Gesamtkatalog der Wiegendrucke* (GW) in 1904, scholarly exploration of the typographic corpus increasingly tended to end at 1500. The impact of religious reform on the press lay like a mountain in the path of scholarly explorers beyond the year 1520 (or 1534 in England); even Robert Proctor, who knew no fear, stuck at this point. True, library, regional and special catalogues advanced into this territory, but the proliferation of contemporary print prevented great libraries, the British Museum and the Bibliothèque nationale, with the largest collections of books printed after 1500, from publishing their earlier holdings.

The first sign of change was the publication in 1884 of the *Catalogue of books in the library of the British Museum printed in England, Scotland and Ireland, and of English books printed abroad, to the year 1640*, under the direction of George Bullen, the Museum's Keeper of Printed Books. This is not the place to explore the influence of this catalogue on the general appreciation of British books and literature of the period. One outcome of its publication has, however, had an influence outside the geographical and temporal limits of its subject. This was the inception in 1918 by A. W. Pollard and G. R. Redgrave of the work ultimately published by the Bibliographical Society in 1926 as *A Short-title Catalogue of Books printed in England, Scotland and Ireland, and of English books printed abroad, 1475-1640*.

The word "short-title" had been coined fifty years earlier to provide a convenient abbreviation for the often lengthy titles of Acts of Parliament. It is not clear if it was first applied to a catalogue of books by Pollard and Redgrave when they started on the work originally known as "Pollard & Redgrave" and only later as "STC". The alacrity and vigour with which the whole bibliographical community took up the task was recorded by Pollard in his preface to the book when printed. The extension of its coverage from the British Museum to over 150 other libraries, some abroad (including the Bibliothèque nationale, whose printed catalogue began in 1897), in so short a time is a measure of the hunger for its publication. But it was not the first 'short-title' catalogue to be published as such. The *Short-title Catalogue of Books printed in Spain and of Spanish Books printed elsewhere in Europe before 1601 now in the British Museum* compiled by Henry Thomas had appeared in 1921 (following a similar catalogue of Portuguese books originally published in the *Revue hispanique*). To these Thomas added the *Short-title Catalogue of Books printed in France and of French Books printed in other countries from 1470 to 1600 now in the British Museum* in 1924. In the latter work Thomas credited the "short-title" form to P. S. Allen, editor of the letters of Erasmus. There was then a long interval, but similar catalogues of the output for other European countries followed between 1940 and 1965.

"STC" and "BM STC" now became a regular part of the battery of bibliographical references attached to catalogues and other works dealing with European books in the sixteenth century. There was an obvious difference between the two. Henry Thomas was unapologetic but realistic about the limitations of his work and the Museum collection of French books:

The brevity of the title is not due to any desire to avoid trouble; it has been carefully thought out in order to provide a work of reference for the use of students at a minimum price and in a convenient compass... to register nearly twelve thousand editions in a single handy volume, and it is believed that, for the moment, this is the largest homogeneous collection of early French books of which a catalogue has been

printed. Considerable as the collection is, it represents probably not much more than a fifth of the editions known to have been printed at Paris, and less than a sixth of the output of the French provinces. But it registers a good many editions not in the printed catalogue of the Bibliothèque nationale, and it is hoped that it will be found useful not only by students... and by booksellers desirous of helping to enrich the Museum collections, but by the future compilers of a French bibliography in which titles will be set out with a fullness which, if adopted in a series of catalogues of individual collections, would involve much unneeded repetition.

STC, on the other hand, had aimed at complete coverage of its area and time. How far short it fell was revealed when the second edition, the work of W. A. Jackson, F. S. Ferguson and Katharine F. Panzer, appeared in 1976-1991. The original 26 000 entries had increased to 35 or even 40 000. The original editors had been as cautious as Thomas about the outcome of their work:

The original idea for this preliminary record of research, in preparation for a full-dress catalogue, was that of a 'handlist' of books of which copies could be traced, excluding those only known from report. It was intended from the first that the list should also serve as an index to the extant books entered on the Stationers' Register, and other possibilities were kept in mind; but as long as the entry served to identify book and edition, nothing more was desired, because anything more might stand in the way of the full-dress catalogue that was the ultimate ideal. One of the discoveries, however, to which the work done for this Short-title Catalogue has led is the existence of a much larger number than had been expected of variant editions and issues bearing the same date. The differences between these are often quite slight, and to record them demands scrupulous care. The trouble is that when scrupulous care is evident in some entries, it is expected in all, and one object of this preface is to warn all users of this book that from the mixed character of its sources it is a dangerous work for anyone to handle lazily, that is, without verification.

No one was more aware of the need for scrupulous care, nor better able to apply it, than Katharine Pantzer, the last editor of the revised STC. The "much larger number than had been expected of variant editions and issues" noted in 1926 had grown sixty years later beyond all expectation. The rules of semi-facsimile transcription, the only means then of transmitting information about the appearance of early printed matter, did not provide for duplicate settings. Contrariwise, what appeared to be two editions of a book published a year apart turned out to be the same with only the change of a single figure of the date in the imprint, to give the appearance of *aggiornamento*. There was, however, the more complex problem of genuine duplicate settings. The task of comparing copies of what appeared to be the same book had been made easier, cheaper and more reliable by the availability of photocopying machines in the 1970s (photography, available for a century, was then still too expensive and cumbersome to be used other than occasionally for specific reasons). As the means of comparison got better, it soon became clear that the order of the Court

of the Stationers in 1587, which, following a petition to the Privy Council in 1582 by “the whole company of journeymen and workmen of the science of printing”, had forbidden formes to be kept standing, and also limited the number of impressions from a single setting of type to 1250 or 1500, had resulted in many more such duplications. Regularising work-flow, as well as regulating the press, may have been part of a concordat between the Stationers’ Company and the licensing authorities, rather than an oppressive restriction of the freedom of the press. When ESTC, the Eighteenth-Century Short-title Catalogue of English books, also began to use photocopies of title-pages as a regular check on transcriptions, more such duplicate settings were revealed. It remains to be seen whether the same practice is found elsewhere in Europe.

“Shared printing” between two or more printing houses involved a further extension of co-operative practice, here between separate but adjacent businesses, rather than within a single printing house. In the course of minute bibliographical research into the early printing of the text of Shakespeare, published as *The Texts of “King Lear” and their Origins: Nicholas Okes and the First Quarto* (Cambridge, 1982), Peter Blayney discovered that other books, as well as the First Quarto edition of *King Lear*, purporting to be printed by Nicholas Okes, had in fact been shared with other printers, among them Edward Alde, George Eld, William Jaggard and William White, who were his colleagues or neighbours in the western part of the City, the traditional centre of the book trade. The distinctive founts of type used by the different printers betrayed their several shares in the manufacture of books, which might or might not bear the names of the partners. A more detailed examination by Blayney of the geography of the premises of stationers and printers in the early seventeenth century followed, published as *The Bookshops in Paul’s Cross Churchyard* (The Bibliographical Society, 1990). This required in effect three-dimensional mapping, since the printers’ buildings were not just adjacent but actually overlapped each other vertically. Balancing the flow of work between compositors and pressmen could be extended to take in the needs and commitments of several different work-forces.

The implications of this for the bibliographical record are considerable. It had hitherto been assumed that the printer whose name appeared on the title-page of a book was responsible for the whole book; so he may have been, but only as the “main contractor”, sub-contracting a share, in some cases the major share, to other printers. A bibliographical description of the result of this process would require an extended *collation*, distinguishing which sheets had been printed by which printer. This would further involve making a complete record of all the different types and ornaments held by the relevant printers, in order to identify their shares. Nor would this investigation be limited to the typographical equipment. It would also mean identifying the paper stocks used, which might or might not be the same. Paper might be supplied by the

same or by different paper wholesalers to different printers, with potentially differentiated stocks. These could be distinguished by watermarks, if present; if not, by accurate measurement of chain- and wire-lines. There would be compensations for such an arduous task. Within London, or any town that had more than one printing house, it would be possible to build up a portrait of each establishment. It would not be a stable or a uniform portrait, since types wear out and have to be changed, and paper stocks change, sometimes in the middle of a job, but over time a bank of information would be built up, not only about an individual book or group of books, but about the working habits of the trade in a particular locality. These kinds of resources have been the familiar staple of incunabular studies over more than three centuries; there is no reason why, in an age of increasingly rapid accumulation of computerised information, it should not be extended to the sixteenth century, and beyond.

There remain two further questions that must be addressed: how reliable are the resources which we must depend on to explore further, and nearer our own time, and how nearly complete, or rather how much less than complete, will be the final record that we may achieve? First, we have to acknowledge that we have carelessly allowed the concept of the STC to change, and with that we have to accept a level of imprecision that our graver predecessors would not have willingly allowed. "Willingly", because a catalogue compiled by many hands must, however strictly its rules are applied, accept some fluctuation in its standards. The original STC was so conceived, in Pollard's words, "that with the catalogues already in print, if only information as to the early English books in the Bodleian could be made available, the way lay open for 'a short-title handlist' of extant English books of the sixteenth century, 'leaving a full-dress catalogue to be produced when we know enough to make it a good one' ". Like the Second Coming, this was expected soon, and STC was to be a temporary as well as economical substitute for the "full-dress" catalogue. No one at the time expected it to have a long life, let alone an independent utility. But the need, amounting to hunger, for a list of English books from Caxton to the Civil War, with Shakespeare the dominant central figure, was so great that its users could not wait; they might annotate, correct and enlarge their copies, but they could not be prevented from using the text as the best available account of the English books of the period.

This caused all sorts of problems. The process of abbreviation, on which Pollard had dwelt at length in the *Memoranda* prefixed to STC, inevitably created ambiguities. "The opening words of every title have been regarded as sacred: in the rest of the title abridgement has been drastic and (except for special reasons) without any indication of omission", he had written, but both editors knew "that the rod which they were making for their own backs was a heavy one". Then there was the question of arrangement. Pollard and Redgrave, example close at hand, had inevitably followed the example of Bullen's British

Museum *Catalogue*, but it was arguable that Charles Sayle's *Early English Printed Books in the University Library, Cambridge, 1475 to 1640* (1900-1907), which had listed books by press and date, the order that Henry Bradshaw had adopted and Proctor and Pollard followed for the British Museum *Catalogue of Books printed in the XVth Century*, gave a better picture of the output of the press in the period. Worst of all was the problem of completeness. The absence of a printed catalogue of early English books in the Bodleian had been remedied by Francis Needham and Henry Plomer, who between them added entries for those books not in the British Museum and Bodleian locations for those that were. But it was a stop-press remedy, and subsequent work has shown how many more there were, not to be discovered until the second edition was completed, and yet more outstanding since. This again seemed a lesser problem than the many collections and locations that remained uncovered. In 1926, 155 was a creditable number, given the speed of compilation. But the promised comparison of the list of books thus generated with the titles recorded in Arber's *Transcript of the registers of the Company of Stationers of London, 1554-1640* (1875-1894) revealed an alarming lack of correspondence. Why were there no known copies of some of the titles entered? Why were so many extant books not registered? There are still no complete or reliable answers to these questions.

All these problems and questions affected the impact of STC, pure and simple, on English bibliographical scholarship and a wider range of historical and literary work. But the British Museum STCs had pursued a different path. Limited to the British Museum collections, which nonetheless grew, necessitating later enlarged editions, as well as extensions into the seventeenth century, they came to be regarded as the best alternative to national records. From 1958 they contained indexes of printers, listing their works in chronological order, as Sayle had done. These were a handy guide to output; if by no means as comprehensive as the existing regional and national lists, they had the advantage of offering access to the Museum collections. "BM STC" with a page number, or better "Not in BM STC", became a valuable addition to the book trade's battery of references. The fact that there were two kinds of STC, one temporary and national, the other permanent and local, caused little concern. The letters STC, like a magic spell, ceased to have any special meaning; they opened doors, as if by magic, and that was all that was asked of them.

In 1976, the second edition of the original STC began to appear, reaching its third and last volume in 1991. With some 400 locations, it was based on careful examination of every book listed. The third and last volume was devoted to four indexes. The first covered printers and publishers, each with a short biography and annual lists of items bearing their names; there were supplementary lists of authors whose names appeared in imprints, patrons, patentees, and others involved, and appendixes covering the lists of books issued by the "English

Stock” of the Stationers’ Company. The second index covered books printed at places other than London, with annual lists of books for each place (including fictitious names). The third analysed London imprints, including imported books and false imprints, the signs and addresses of members of the book trade, with maps made necessary by the complex associations that Blayney had revealed. A fourth provided a chronological conspectus, every item listed by number under the year in which it appeared. The conclusion of this enterprise, letterpress printed at the Oxford University Press, can be seen as the apogee of the bibliographical scholarship and also the printing process that it exemplified.

The terminus of STC at 1640 had been enforced, like that on earlier printing, by another mountain, in this case the Civil War. This had not deterred a resolute explorer, Donald Wing, from attempting single-handed the record of English books, 1641-1700. Begun in 1933, it was finally published in 1945-51. Although titled a “Short-title Catalogue”, it was always known by its heroic compiler’s name as “Wing”. Like STC, revision started soon after publication, and the first volume of its second edition appeared in the year of Wing’s death, 1972. In 1976, the same year that the first volume of the revised STC appeared, the British Library, having taken over the Museum’s responsibility for a national union catalogue, began to address the eighteenth century, hitherto *terra incognita*. The new catalogue was called ESTC, despite the fact that the titles were no longer short, nor, since it was to be computer-based, was there any economic need for brevity, apart from the then limitation in the length of fields imposed by computer technology. This was, to a much greater degree, a co-operative enterprise, with all the added risks that multiple authorship brings with it. By 1980 ESTC had become a co-operative Anglo-American enterprise, available online, and in 1987, by joint agreement of the Bibliographical Society and the Modern Language Society of America, the copyright holders of STC and Wing, the ESTC database was extended to cover the record of all English books from 1475 to 1800, the term ESTC now translated to become “English Short-title Catalogue”.

This excursion into the recent record of English books after 1600 explains the course taken by many other union catalogues over the last thirty years, taking over the responsibility for the account of the rest of the European press precariously maintained by the BM STCs, with Adams’s *Catalogue of books printed on the continent of Europe, 1501-1640, in Cambridge libraries* (1967) often on the shelf beside them. The number of such sources is now considerable. Besides GKW and IGI, there is ISTC for incunabula. There are national online catalogues of books printed up to and after 1600 for France (CCFr, backed by the BnF catalogue). Existing catalogues for Belgium and the Netherlands are being extended online. For Germany VD16 and VD17 cover the printed output of the *Sprachgebiet* in the sixteenth and seventeenth centuries. Italy has Edit16, continued online. Spain aims to extend CCPBE beyond books printed in the

Iberian peninsular. Britain has COPAC, the USA has NUC, and its derivative OCLC; both countries have shares in NSTC, which has joined ESTC.

No one can deny the vast amount of new information accumulated in barely a generation, its growth accelerated by the even greater capacity of the computer systems involved in storing and analysing information gathered from an ever-increasing number of sources. But there is a danger lying hid in all this new wealth. All the cautious precision, the checking and re-checking of copies, that went into a STC entry were not just devoted to making it the most economical expression of an identity, but also (and primarily) to ensuring that the book thus identified could not be confused with any other, however similar the appearance, title or make-up. We have seen that the extension of editorial responsibility diluted this precision. A further risk came with the invention by the Library of Congress in the USA of derived "cataloging", as part of the Library's service to the nation's libraries, becoming an essential part of NUC and OCLC. Its standard definition, "the process of taking a MARC record and modifying it to represent an item different than the item the MARC record originally represented", reveals the danger: where STC aimed to create a minimum unique identifier, MARC aimed for maximum correspondence. A mass of bibliographic distinction separates the two. Yet without derived cataloguing and the opportunity it provides to match digitally the contents of many libraries, union catalogues, especially of early printed books, would not have been possible. COPAC avoids some of the risks by repeating all the information on what may be copies of the same book supplied by every one of its component libraries. But no more vivid contrast can be seen than in the entries supplied by different libraries to VD16 in its printed form, the many from the Bayerische Staatsbibliothek, Munich, curt if effective, the fewer from Narodna in Univerzitetna Knjižnica, Ljubljana, copious to a degree. USTC, the *Universal Short Title Catalogue* is the latest comer to the party, "a collective database (...) that brings together data from established national bibliographical projects and new projects undertaken by the project team in St Andrews". Its stated objective is to "encompass approximately 355 000 editions and around 1,5 million surviving copies located in over 5 000 libraries", but as a collection based on already collective catalogues it is a further step away from bibliographical reality.

The largest of all the collaborative databases currently available, that of the Consortium of European Research Libraries, CERL, initially called HPB (for "Hand Press Book", since changed to the less vivid "Heritage of the Printed Book"), is also available online, though only in libraries that contribute to CERL. It is not a cumulation of diverse pre-existing catalogues, but aims to restore the standard of reliable information to that of the earlier "hand made" catalogues, to provide accurate information about a particular book, rather than snapshots of what may or may not be identical items. It assembles the results of expert *de visu* cataloguing from 37 (the number is expanding) different

“contributors”, some of them covering multiple European libraries, with Yale in the USA, and unifies the results of different cataloguing traditions through its *Thesaurus* system, which operates very successfully. So far it has accumulated 3,5 millions discrete records (again, the number is expanding). It is a much more sophisticated enterprise than the many listed above, which are based on the conversion to digital form of earlier catalogues, made to different standards and to meet different needs. It also expects sophisticated use: its object is not to provide immediate answers to an ephemeral need, but to provide the materials for scholarly users to form their own judgments on identity or to find the wider context that a record that incorporates provenance as well as location may eventually supply.

If there are lessons to be learned as we look back over the mere thirty years that separates the publication of the last volume of STC from HPB in its present form, it must be to distinguish the value of the single soundly based identity from that of a composite list of approximations. The last appendix of STC2 was Philip Rider’s chronological index of STC entries, year by year. It was intended to be a guide to what might be found for any year in STC. It aimed to be inclusive: that is, to offer as many different approaches to what was produced in any year as possible. Inevitably, there were duplications: legal year-books run from March to March, their imprint dates from January to January; both constitute an entry in the index. Even without such complications, a single book, such as the Second Folio of Shakespeare, can create as many as eight entries for bibliographically distinct variants or issues. Different issues of substantially the same book may be spread over twenty years or more, resulting in as many different entries. But an entry in a catalogue is not the same as a book, and the assumption that they are the same, if used, as it was in the fourth volume of the *Cambridge History of the Book in Britain, 1557-1695* (2002) to calculate the volume of publication for different periods, can cause a potential statistical error of 10 % or even 20 %, unless allowance is made for the margin of error, and duly stated. Such errors in different places can cancel each other out, creating an illusion of accuracy; this does not alter the fact that the base is flawed.

Large figures, like government statistics, generate more suspicion than conviction, but CERL has produced extensive lists of the contents of European libraries, some (notably those of Hungarian libraries) for the sixteenth century alone, but mostly for the longer period up to 1830. CERL also provides a useful online support in its *Thesaurus*, designed to provide multilingual definitions of place and personal names and other terms, a very necessary aid to prevent duplication as well as error. The CERL portal leads to other sources of information, on provenance, paper watermarks and other kinds of material evidence, and CERL also runs regular annual international seminars as well as

regional and national workshops. One particular project, Eric White's research into incunabular print runs, is already producing interesting facts. Of some 28 000 incunabular titles, the precise number printed is known for nearly 250. Not quite 1 % is not a large proportion on which to generalise, but average figures that creep up decade by decade from the 200-300 familiar from the often quoted figures for Sweynheym and Pannartz's Roman editions or those of the Ripoli press at Florence to 600-800 by the end of the century seem to reflect what a comparison of the titles suggests, the steady growth of a new wholesale market for books. Distorting factors make further speculation dangerous. The original contract that obliged Nicolaus Spindeler to print 400 copies of *Tirant lo Blanch* at Valencia in 1489 was superseded by another that lifted the run to 715. We do not know the reasons for the change, but only four copies are known today. Pynson's lawsuit against John Rushe indicates that he was regularly printing 600 copies in the 1490s, whether of liturgical or literary texts. A single book, Breitenbach's *Consilium ad concessionem laticiniorum*, was printed in an edition of 5000 at Leipzig between December 1491 and August 1492 to meet an immediate need, thwarted when virtually all copies were confiscated by the Duke of Saxony and the Bishop of Merseberg. On the other hand, Baptista de Tortis printed two editions, each of 2 300 copies, of Gregory IX *Decretales* in Venice in 1491 and again in 1494, and Matthaeus Moravus 2 000 of the sermons of Roberto Caracciolo at Naples in 1489.

If an average somewhere between 200 and 2000 is too vague for valid analysis, so is an estimate of 1,5 million surviving copies of 355 000 editions. Only one uncomfortable fact remains: the number of books and editions of books altogether lost is probably greater than that of all that survive. Can it be true that the number of what is lost exceeds that of what survives – of copies certainly, of titles too, perhaps? If so many have been lost, a further question follows: but what sort of books have disappeared totally and irretrievably? The existence of quite a number of books is only known today from the re-use of fragments as printers' waste, sometimes interestingly proof-sheets, for end-leaves in book-bindings. A systematic study of these remains, such as the late Neil Ker devoted to those found in Oxford bindings at the turn of the fifteenth century, can be doubly revealing: sometimes the waste is ancient, and shows what books were now thought to be out of date and useless; but much is contemporary, and possibly evidence of books not otherwise known to have existed (it is important not only to preserve the fragments, but also to record the source where they were found). There is a very telling graph in the "Introduction" to Lotte Hellinga's eleventh volume of the *Catalogue of Books Printed in the XVth Century in the British Library* (2010), demonstrating the survival of English incunabula: there are very few peaks, and a large number of items barely registered, known only by a unique copy, fragments, or, in

extreme cases, by the survival of offsets, a ghostly mirror image of what was once a tangible printed sheet.

In this context it is interesting to ponder the books of which only one copy is known to exist now. By what minute fraction of chance have they survived? Is it pure chance, or did one uniquely careful owner see the need for preservation? A few examples may be instructive. “Livres gothiques”, the vernacular books, often small in format and short in extent, printed in France in “lettres bâtarde” or “lettres de somme”, by printers in Paris just before or after 1500, have always had a strong attraction for collectors. One of these was Alexandre de Lurde (1800-1872), whose life and library catalogue were published by Alphonse de Ruble in 1875, in two editions, one plain and one (limited to 60 copies *sur vélin*) illustrated. Among the books listed in it was “*Le Patenostre des verollez*, s.l.n.d., Pet. in-8 carré de 4ff”, sumptuously bound by Trautz-Bauzonnet. This was noted as “exemplaire réputé unique à ce jour”, and a type facsimile of it was edited by Auguste Veinant and printed by Crapelet in 1847. By what miracle it survived from *ca.*1500-20, when it was printed, until acquired by Lurde, is not known; probably it was in a collection of such pieces, broken up when they became individually valuable in the nineteenth century. It was thus known and recorded between 1847 and 1875, but then disappeared again. Purchased from the Lurde collection by Baron James Edouard de Rothschild (1844-81), it passed by the bequest of Baron Henri de Rothschild to the Bibliothèque nationale in 1949. As the entire Rothschild collection was kept in the Département des manuscrits, it remained there *incognito* until 2002, when that collection was included in the Catalogue collectif de France, where it is identified as MS [sic] Rothschild 3243. A further century of disappearance may not seem long after three more centuries earlier, but it typifies the uncertain survival path of books on the edge between survival and final loss.

In 1926 the first printing of Shakespeare’s “Henry IV Part I”, one of the most successful and often reprinted of the quarto plays of the period, was represented in STC by a single quire (C) in the Folger Library, Washington, its title, *The Historie of Henrie the fourth*, in the headlines, distinguishing it from all the subsequent reprintings of the text. Fifty years later when the second volume of STC appeared, after the extensive search for all early editions of Shakespeare that began with Steevens and Malone had passed into the hands of Fergusson, Jackson and Panzer, no other complete copy of the first edition was found. Another generation later, no more has been found. William Barksted or Baxter (his name is spelt differently every time that it occurs), whose career as actor and playwright spread over some thirty years *ca.*1607-38, was born about 1587-90, and seems to have modelled his career deliberately on that of Shakespeare, beginning as he did with two narrative poems. His first poem to be published, *Mirrha the mother of Adonis, or, Lustes prodegies* was printed by Edwarde Allde

for John Bache in 1607. *Hiren: or the faire Greeke*, written earlier, was printed by Nicholas Okes (not so stated, but attributable from Blayney's research) for Roger Barnes in 1611. The two poems mirror *Venus and Adonis* and *The Rape of Lucrece*, and there can be no doubt that this was a polite compliment, echoed in the last stanza of *Mirrha*, which mentions Shakespeare by name. Barksted's name recurs in the annals of the stage as actor or writer up to 1630, and in particular seems to have part-ghosted *The insatiate countess*, published under John Marston's name in 1613. He was, in short, a professional, and the books published under his name or those of others were issued by established printers. Yet one copy only of each of the works mentioned survives today; if they, or any one of them, had not survived, there would have been no record of the work of a playwright, if a minor one, contemporary with Shakespeare.

The survival rate of plays is not high, Ben Jonson's a significant exception. Shakespeare's fare better than most, but reading between the lines of STC leaves the reader with the uncomfortable suspicion that there may have been more editions that have not survived. Those that have owe their existence initially to being bound up together in volumes of similar (or dissimilar) material, most of which have now been broken up, either to return their contents to individual status, or to be sent for waste. Ephemeral works, that is, matter designed for a special occasion, are at greater risk, however significant the event that brought them into existence. *Epithalamium Martis et Palladis* was printed at Paris in 1548 by Michel Vascosan. It is a short poem in elegiac couplets, only four quarto pages long, celebrating the wedding on 20 October 1548 of Jeanne d'Albret and Antoine de Bourbon, duc de Vendome, the future parents of Henri IV. It is signed at the end "C. D. faciebat Lutetiae, mense Decembri". Could the author be Charles de Grassailles, author of *Regalia Franciae* (1538), advocating the theory that the sovereign was wedded to the state? Whatever the circumstances of its writing or printing, it has barely survived. Only one copy seems to have been preserved, in the Herzog August Bibliothek, Wolfenbüttel, none in any French library, unless it remains unnoticed in some other collective volume of similar *pièces d'occasion*.

The occasion of *Filiabus Sion, Lutetiae Virginibus uotiuum Carmen Gallico-Latinum* is even more specific, although only a trace of the author's (or authors') name or names appears. It is a small octavo of sixteen pages, French on verso pages, Latin on rectos, with no title-page other than the words above, without imprint or date as such, only an oddly worded colophon. An unnamed author, we are told, wrote the French verses, not altogether bad in the opinion of a second equally anonymous author, who has turned them into not much better Latin, while in the country at the end of Lent. Now, in the year 1560, he sends them out to invite women to contemplate Christ Crucified, according to the ancient rite of our holy mother the church at the vigil of Easter. The running headlines throughout read "*Elegie sur le Vendredi Sainct*". The simple

French verses, urging their readers to follow the way of the Cross that leads from the earthly to the heavenly city, are translated into more elaborate classical elegiac couplets. What further purpose, other than the simple aim stated, why the French verses were written and why translated, what the occasion of the printing, are left unsaid. Which printer printed the little pamphlet, the text in italic, with biblical citations in smaller roman as shoulder notes, is again not obvious. There was until recently but one copy known, in the British Library, bound, rather inappositely, with four or five anti-Huguenot tracts printed twenty years later than this more eirenic work. Another copy has since appeared in the catalogue of the Bibliothèque nationale de France.

One of the hardest tasks set for themselves by the original compilers of STC was to record those works printed outside the British Isles, which contained a significant amount of text in English. An important class of these was the many multilingual phrase-books, dictionaries and grammars. One of these, which achieved a lasting popularity, was Noel Barlement's *Colloques ou dialogues avec un dictionnaire en six langues*, printed at Antwerp and elsewhere. It had begun with only two, French and Flemish, in 1536, but, grown to six by 1576, English was added to its repertoire. Only two such editions were recorded in 1926, those of 1576 and 1639; sixty years later in STC2 the number had grown to 37 (the current figure in ESTC is 46). Of these, nine are known by a single copy. Few of the rest had many more, but what was more impressive was the amazing diversity of the locations (including a significant number of Polish libraries), a tribute to the energy of all those, all over the world, who have devoted time to making this part of the "printed heritage" of the sixteenth century as complete as it now is.

It is difficult to explain why any of the books described above should chance to have been preserved, still less to see any common factor that unites them. Contemporary need for such books can be imagined, needs more or less relevant today, but as part of the complete record of early printing, they amount to no more than a *pot pourri* in a drawing room.

This conspectus of some of the outlying fringes of the record only serves to show, yet again, how thin the boundary is between inclusion and outright loss, how fragile our grasp of all the varieties of printed matter that must one day find a place in a union catalogue of everything printed in the sixteenth century. What form that record may take is again obscure. Gesner's original prescript of recording author, title, imprint and date has survived a long time, and in the last generation the enormous expansion of collective and cumulative databases has given the formula new force. But bibliographic scholarship over the same period has tended to deconstruct this foundation. Whether a fragment or a whole book is the object of study, we now see it as divided into a number

of processes: composition of type, imposition of pages, press-work, storing, gathering, collating and sewing sheets, binding them in covers of different kinds. Each of them may create an anomaly, perhaps desired, perhaps unintentional. Whether the intention was there or not, we have to acknowledge and record it as a bibliographical fact, to understand how it has come about. To know that it is part of such an entity gives it a definite place, in a library, in the larger world of print, or, through the many hands through which it has passed, in the whole sum of human intellectual activity.

But how to record it? At one level, it simply involves an increasing complexity of data to define and integrate and search. This is a way of proceeding for which the digital computer is ideally equipped. Reducing events or processes to the smallest individual unit, sorting those units in different orders, so that all those that share certain coordinates can be listed or combined, is technically easy. It requires intelligence and experience to define how the units should be defined and processed, but that is the form that all research takes.

Take, for example, the most complex process, composition. We know how it was done; both the earliest writers on the subject, Joseph Moxon and Martin Fertel, define it in almost poetic terms, appropriately because composition is an act of poesis. Moxon says “as his Eyes are very quick in reading his *Copy*, and shifting its Visual Ray to the several *Boxes* he is to have a *Letter* out of, so is his choice what *Letter* to take up very sudden; for though the *Box* be full of *Letters*, yet in an instant he resolves and pitches his Fingers upon that one, which for its posture and position his Fancy reckons lyes most commodious for his immediate seizing”, and Fertel “on doit travailler aussi habilement des yeux et des mains, & la veritable methode pour se render habile, est de jeter les yeux sur chaque Lettre que l’on veut prendre, dans le moment qu’on porte la main pour la lever; afin de n’en point prendre d’autre que celle sur laquelle on aura fixé les yeux”. What happens to types thus composed has been analysed by Charlton Hinman, and thanks to the invention of the Hinman Collating Machine and his subsequent research with it we know how types thus composed behave when imposed, when under the press, again when unlocked for correction and re-imposed, and finally when distributed back unto the case. We can also trace the compositor’s movements to and fro, from the “instant he resolves and pitches his Finger”, on this letter or that to the source of his choice, his copy, and thence to deduce his natural habits in such matters as spacing, punctuation and spelling; in short, we can give him a character, if not a name, other than Compositor A, B, C and the rest.

We also know that type set and imposed for printing in this way was not the only way by which a text was given printable form. From at least 1669 Joseph Athias had been printing English bibles for illicit import into England from whole-page plates cast from moulds that were possibly made from *papier mâché*.

This process and others like it, also used to reproduce woodcut ornaments or maps, may date back earlier. It is a reminder that despite all the effort that has gone into the physical examination of books and all the further information about their manufacture derived from archival documents and printing manuals, there is much that we still do not know, and have yet to discover, if we can. The knowledge that a single text might be set twice and that more than one printing house might silently cooperate in its printing creates the possibility of a great many different combinations and permutations in its eventual forms. Analysing these forms is a necessary part of creating the record and reinforces the belief that no two copies of the same book should be regarded as necessarily the same in every respect. All structures must *au fond* be atomic, and to discover how the atoms that make up a book behave, joining, separating and rejoining each other, is fundamental to the creation of the record of printed matter.

But will we ever achieve such a record? Where are “the future compilers of a French bibliography in which titles will be set out with a fullness that they deserve”, that Henry Thomas imagined? A. W. Pollard well knew what “fullness” meant. “The differences”, he wrote of English books, “between these are often quite slight, and to record them demands scrupulous care”. What that involves is a sobering consideration to us, as, with all the advances of modern technology, we contemplate the same objective as Pollard, “the full-dress catalogue that was the ultimate ideal”. As he went on, “The trouble is that when scrupulous care is evident in some entries, it is expected in all, and one object of this preface is to warn all users of this book that from the mixed character of its sources it is a dangerous work for anyone to handle lazily, that is, without verification”. Copying out transcriptions made by others, even under the portmanteau of ‘derived cataloguing’, is dangerous. Laziness, whether in inaccurate copying of titles, too easy acceptance of previous statements or untested assumptions, making guesses to save the burden of accurate computation—all this is not only immoral behaviour in itself; it creates the worse result of perpetuating error. As Pollard also said in a different context, “Once a bibliographical ghost has been raised, no power on earth can lay it”.

The “full-dress catalogue” may in any form that we would recognise it now be unattainable. But if we have more data at our disposal than ever before, we also have greater and more powerful methods of handling them. An ever-diversifying field of enquiry lies before us, with undreamed of access to archival resources, optical methods of recording and comparing printed images, computational methods that will enable us to count and evaluate vast tracts of statistics and to use them to invent other methods of enhancing the record, and, above all, the greater ability to study the work of previous labourers in the field and to profit from their example. What we should not expect is instant answers, neatly labelled and numbered like an STC entry. Information is only as good as the

purpose for which it is intended. Used with “scrupulous care”, these tools may yet enable us to achieve, not so much a full-dress catalogue as a reliable picture of the printed word in all its manifestations in the sixteenth century, and with it the materials and information that will enable further research into all aspects of the period.

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