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The Incunabula Short Title Catalogue (ISTC) Past, Present and Future

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Abstract From its foundation in 1980, the ISTC has been one of the most important international reference sources for incunabula studies. Based on a merger of F.R. Goff's *Incunabula in North American Libraries: A Third Census* and the *Indice Generale degli Incunaboli delle Biblioteche d'Italia*, it aimed to be a comprehensive list both of 15th-century editions and of surviving copies of incunabula. While maintaining its original purpose, it has striven to take advantage of new partnerships and technical innovations to ensure its continued utility as a cornerstone of incunabula research. Managed by the British Library in London and hosted by CERL, the ISTC continues to rely on cooperation and partnership from holding institutions and researchers worldwide. Free since 2003, the ISTC can be used as a simple guide to editions and copies, but also as a dataset enabling researchers to look at 15th-century printing in new ways. After briefly looking at the ISTC's history, this essay focuses on new developments made to the database, highlighting its continued relevance and potential to support traditional incunabula research as well as new projects, and its managers' intention and flexibility to improve the file in response to its users' feedback.

Keywords Incunabula. ISTC. Digital humanities. British Library. CERL.

Summary 1 The Past. – 2 The Present. – 3 Future.



1 The Past

With ISTC (founded in 1980) now approaching its fortieth anniversary, it seems an opportune moment to consider what the database has achieved in that time, and to look to its future. Although begun, and still managed today, at the British Library in London, it must be said at once that nearly all its success derives from the enthusiastic support of the custodians and cataloguers of incunabula across the world.¹

ISTC arose in part as the British Library wished to further explore the use of its cataloguing systems to hold bibliographic records that would be simpler than full-dress catalogue records, but would address the needs and wishes of scholars frustrated by the lack of easy access to information about the books they wanted to see. The Library had started down this route with the launch in 1976 of the Eighteenth Century Short Title Catalogue, ESTC: an international partnership that aimed to produce a simplified but usable catalogue of English printing from what was then seen as a difficult period for bibliography, bringing together libraries holding relevant material from across the globe.

Access to incunabula at that time was also far from easy. Many libraries had catalogues that were only available at the library itself (this is the period before online access and retrospective cataloguing), or if published, were still incomplete, as was the case at the British Library. In many libraries, incunabula had been regarded as a relatively low priority earlier in the twentieth century as it was expected that the soon-to-be completed Gesamtkatalog der Wiegendrucke would provide all the necessary information. Although the Gesamtkatalog's publication had restarted in 1972 after a pause of over thirty years, publication was only proceeding slowly, and at the time ISTC was conceived, the letter F had yet to be completed; and of course, the Second World War had not only disrupted the Gesamtkatalog, but had rendered a proportion of its location information out-of-date. So there were good reasons for looking at a computerised bibliography of incunabula as a way forward. As Lotte Hellinga at the British Library realised, this was an idea whose time had come.

Frederick R. Goff's census of incunabula in North America was chosen as a place to start, with Goff's support.² There were good

¹ There is not the space here for a full list of those whose work has made ISTC what it is. But we would like to remember a few of the people whose contributions have been outstanding, traces of whose work can be found throughout the database. At the British Library, Lotte Hellinga, Martin Davies, Marcella Leembruggen and Craig Mitchell. At the Bayerische Staatsbibliothek, Gertrud Friedl and Bettina Wagner. At the Biblioteca Nazionale Centrale in Rome, Giuliana Sciascia and Pasqualino Avigliano. At the Royal Library at The Haque, Gerard van Thienen. At the Huntington Library, Stephen Tabor.

² Goff, Incunabula in American Libraries.

reasons for this choice. A great virtue of Goff's catalogue is his highly regularised and simplified form of recording, derived of course from older traditions for the description of incunabula. All places of printing and printers' names, for example, are recorded in exactly the same form, regardless of what appears in the books themselves. Goff also only printed each heading, each author's name and each title once, using dashes to stand in when describing other editions. This high degree of uniformity and repetition meant that his entries could be very easily keyboarded to form the initial database, and with the added advantage that his entries were instantly indexed without needing extensive editing; indeed without needing much editing to speak of at all. Goff's entries also provided generous quantities of references to other published catalogues. Rendering these into electronic form facilitated reference to other sources, and would therefore help to identify entries in other catalogues not already present in ISTC.

Another reason for favouring Goff as a place to start rested in the representative nature of the North American collections that he covered. Although other printed union catalogues of incunabula existed at the time that could in theory have been used, for Poland, for Hungary, and of course for Italy, none was as large, or as comprehensive, as Goff. This is to do with the nature of American collecting, and the wide range of books that American collectors and libraries have been able to amass (and are still amassing). It also supported the goal of ISTC from the outset, which was to contain brief information on all known surviving editions of books printed in the 15th century. Information collected along the way ensured that ISTC has also come to act as a census of surviving copies of incunabula. From the beginning, ISTC's aim was thus in many ways very different from that of the Gesamtkatalog der Wiegendrucke: only rarely has ISTC provided incipit and explicit transcriptions, collational formulae, details of numbers of leaves, or details of types used. This is very much the GW's area of expertise, and users should consult both files in parallel.

ISTC was not to confine itself to the Anglophone world. Right from the start there was interest from continental Europe. Permission was granted almost at once for ISTC to add records for books appearing in the Italian national census, the IGI, that had no entry in Goff, with the intention of using ISTC as the basis for a revision and updating of IGI.³

An editing phase began with the harmonisation of Goff and IGI. This was coupled with filling out the data by listing the incunables at the British Library, the Bodleian at Oxford, and the university libraries in Cambridge and Manchester. All of these libraries provided data in the same Proctor-order as in use at the BL, enabling editing

³ Guarnaschelli, Valenziani et al., Indice generale degli incunaboli delle biblioteche d'Italia.

to be done from a place-and-printer viewpoint as well as the alphabetical approach of Goff and IGI.

Help from other countries was not slow in coming: the Royal Library in Brussels was keen to use ISTC to update the locations of incunabula in Belgium that had been published in the thirties. Even more significant was the offer from the late Gerard van Thienen at the Royal Library in The Hague to supply records for all books in Dutch libraries not already in ISTC, and for all books printed in the Low Countries not yet in the database.⁴

The Low Countries' contributions helped to demonstrate the advantage of electronic compilation then only beginning to be exploited, i.e. the facility for continual revision. Low Countries printing is characterised by the substantial proportion of books with no printer's name or date. Goff's Census, which provided ISTC's base file, had been published in 1964, only a few years before the Hellingas' account of Dutch printing produced in some cases ground-breaking new chronologies for the Dutch book.⁵ Gerard van Thienen nobly undertook to digest this information for ISTC and provide revised dates for each ISTC number affected. While this work was in progress, the dating of Dutch books was revised yet again by Ina Kok on the basis of illustrated incunabula. More recently many dates had to be revised all over again to take account of van Thienen's own work based on his extensive examination of paper and watermarks, published in the Watermarks in Incunabula printed in the Low Countries database, WILC, to which relevant ISTC entries are linked.7

But this is to jump ahead. 1984 saw ISTC become publicly available via the British Library's online system BLAISE. Almost prohibitively expensive for use outside the British Library, internally it enabled us to answer questions from users, and to interact with the data in ways we had not always expected. Most usefully, it became even easier to provide printouts of selections by author, or printer or library that could be easily checked and annotated by contributors.

Also in 1984 Lotte Hellinga organised a small colloquium, designed to explore the research needs of people using or wanting to use 15th century books. The discussions in the colloquium showed very clearly the expectations that ISTC had already raised, and made clear to us the frustration felt by users of the plethora of catalogues and bibliographies that were coming into being. Something that indexed all of these catalogues and bibliographies was clearly very desirable. An important matter raised early on at the colloquium was

⁴ Polain, Catalogue des livres imprimés; van Thienen, Incunabula in Dutch libraries.

⁵ Hellinga W., Hellinga L., The Fifteenth-Century Printing Types of the Low Countries.

⁶ Published later as Kok. Woodcuts in Incunabula Printed in the Low Countries.

⁷ URL http://watermark.kb.nl/page/index/title/Introduction.

the question whether ISTC should include copy-specific information. It seemed to us at the time that the need for the overarching list of editions and the location of copies should be our priority, but that we should not turn our backs on copy information, which could be addressed at a later stage.⁸

There is only space here to pick out a handful of other significant developments. 1988 saw the signing of an agreement to help establish an office at the Bayerische Staatsbibliothek in Munich to carry out a census of incunabula in West Germany, supported by the Deutsche Forschungsgemeinschaft. Technological developments now meant that it was possible to exchange data electronically (the Dutch and Belgian information had all had to be keyboarded from paper slips), and so floppy disks travelled by mail from London to Munich and back, later replaced by ftp and e-mail attachments. After 1989, the census was soon extended to cover newly unified Germany, and a parallel office was set up in Rome at the Biblioteca nazionale centrale in 1991 to realise the vision of the revision of IGI. I am happy to note that both projects are now largely complete, and have added extensive quantities of data to ISTC. The German census team also added a substantial number of bibliographical references to ISTC, and incorporated the whole of the catalogue of German single-sheet printing, the VE15, as well as many other entries for editions new to ISTC.9

Incunabula from many other countries have been added to ISTC via other shared projects that have now encompassed most of the rest of Europe, as well as the smaller accumulations of incunabula that are to be found in such places as Asia, Australasia, Latin America and South Africa. In many cases lists or data have been sent to ISTC; in other cases we have been directed to published, or nowadays online, information, and have been able to extract the data ourselves. In this last task, we have been frequently assisted by accepting postgraduate students wishing to gain some experience in the field. A particular contribution has been made by students from the École des Chartes in Paris, who have done more in recent years to help keep ISTC up-to-date than almost anyone else.

We have always been concerned about the ease of access to ISTC, and to keep up its momentum, and have aimed to achieve this by taking advantage of technological developments. ISTC records have been loaded into various data systems outside the British Library, for example, such as RLIN in the United States, LIBRIS in Sweden, and the Hand Press Book database (now Heritage of the Printed Book =

⁸ The proceedings were published as *Bibliography and the Study of 15th-Century Civilisation*, edited by Lotte Hellinga and John Goldfinch.

⁹ Eisermann et al., Verzeichnis der typographischen Einblattdrucke des 15. Jahrhunderts.

HPB) of the Consortium of European Research Libraries. By the early nineties, CD-ROM was becoming an increasingly popular alternative to expensive online databases, and, together with a consortium of our partners, the EU funded a project, INCIPIT, to make ISTC available on CD-ROM together with scanned images of pages from as many incunable editions as we could manage. Full digitisation was impractical in the nineties, and we hoped that showing key pages would help overcome the absence from ISTC of full descriptions, and would remove some of the need for the traditional transcription of key passages, a descriptive method always prone to error. Our commercial partner, then called Primary Source Media, would handle the production and sale of the CD, and was committed to publishing regular updates. A first version appeared in 1996, with a second edition in 1998.

The CD-ROM made ISTC directly available to researchers in libraries for the first time, and led to feedback of all kinds from academic researchers as well as encouraging more approaches from libraries. It also enabled users to interact with the data in ways that had only hitherto been possible within the British Library, and the first attempts to examine the data from new perspectives, as demonstrated in 2005 by Jonathan Green. ¹⁰

By the early 2000s, the CD-ROM was already becoming out-of-date, and the old British Library systems were being closed down. Thanks to some imaginative partnerships between some of our technical colleagues at the Library and university computing departments, Liverpool University devised a website to hold the ISTC data, as well as an editing interface, which deposited us in 2003 into the full glare of the Internet. At a stroke, ISTC became freely available to anyone with a web connection, and as a result use increased around the world. From the start the records were available for Google and other search engines to index, resulting in greater numbers of additions and corrections being reported, and it became a simple matter to incorporate live links between ISTC and other online catalogues such as Bod-inc and BSB-Ink, and especially the Gesamtkatalog der Wiegendrucke, where work was carried out by both ISTC and the GW to exchange information to reduce errors and to align the projects more closely.

2 The Present

For many researchers ISTC is now the starting point for their work from where they move on to other databases, digital surrogates or individual library catalogues. It is still a comprehensive list of 15th-century editions and a census of surviving copies, but it has under-

gone a number of changes and developments over the years and will of course continue to do so. From the British Library's BLAISE-LINE service via CD-ROMs and Liverpool to CERL, ISTC has moved several times since its foundation in 1980. All moves brought with them changes and opportunities as well as issues and challenges, and the latest move was no exception. Since the end of 2016, the file has been hosted by CERL and is being maintained by Alexander Jahnke and his team at the Data Conversion Group (DCG) in Göttingen. The editorial centre remains at the British Library in London and ISTC's regular contributors at the Biblioteca nazionale centrale in Rome and the Bavarian State Library in Munich have retained their full editorial rights.

The British Library decided to move ISTC to CERL because it was keen to secure the database's survival within a European context. The move was also necessary for two other reasons. First, a safe and reliable host was needed for the data. With a constantly growing database, it is important to ensure that all data is safe and that there is no risk of major data loss. Second, ISTC needed to be moved to a more flexible and more up-to-date software that could cope with and accommodate the changes and developments that need to be implemented in order to keep the file relevant for incunabula researchers in the 21st century. The combination of changing user needs and habits and the flexibility of the new software has also made ISTC mobile-device friendly for the first time in its history.

The data was moved from Liverpool to CERL in the summer of 2016, and just before Christmas that year the new version of ISTC was made available to researchers all over the world. The current interface looks very different from the one in Liverpool, but it is very familiar to researchers using other CERL databases, such as Material Evidence in Incunabula (MEI) or the CERL Thesaurus. There were of course teething problems in the transfer of the data, and the editors received a number of comments and suggestions from ISTC's regular users and contributors. These led to small changes soon after the database was launched and have largely now been completed.

All updates to ISTC are now instant, and all changes can be seen by anyone straight away. This makes working with contributors a lot easier as they can review and comment on any changes the editors make in real time. The URLs for all records are now stable, so if libraries or researchers add them to their catalogue records or databases, they will be easy to translate into new URLs should the database need to move again in the future. The database structure has been made clearer and more flexible, and records are no longer hampered by a limit on the number or size of fields as they were in older versions of ISTC. The database is currently available in English and in German, and the language is set depending on the user's IP address with the default outside Germany being English. There are plans to develop interfaces in other languages in due course.

The functionality of ISTC is unchanged, but the display of the records has become clearer. The bibliographical part of the entries as well as the order of fields within the body of the record remains unchanged: ISTC ID, author, title, imprint, format, notes, references, and related resources. The links to databases and catalogues such as GW and BSB-Ink are still there, and links to Bod-Inc have been added. All fields are searchable and author, BL shelf mark, copy-specific note, publication year, format, printer/publisher, place of publication, ISTC number, holding institution (all of them, including those in the US), publication year (original), references, and title can also be browsed.

Most users will remember that ISTC used to contain countries of holding institutions called 'Other' and 'Other Europe'. These were a compromise due to the number of fields allowed in former versions of the database, but they enabled the editorial team to accommodate more countries than the system had fields for. The new software does not have such constraints and can accommodate all countries individually. The holdings are now listed by country in alphabetical order of English country name with all holding institutions listed alphabetically within each country. The alphabetical sorting by English country names means that in the German interface some countries are out of sequence, most notably probably 'Deutschland' which is filed under G for 'Germany'. The editors and CERL know that this is not ideal, but it is unfortunately technically not possible at the moment to have two separate alphabetical orders. Despite this, however, the listing of individual holding institutions within countries allows users to get a more accurate picture of the distribution of surviving copies of individual editions in institutions and private hands around the world.

ISTC's current interface also has a counting tool, but this is currently a location count rather than a copy count due to the fact that the information on the numbers of copies held by institutions is contained within the general copy-specific notes field and not yet in a field of its own. Moving from location counting to copy counting will be a future development, but the interim location count at least makes it easier for users to get a more accurate picture of the numbers of surviving copies of each edition in the database. Rather than having to count every single copy individually, users now only have to add institutions with multiple holdings to the total provided automatically at the end of each record.

To enable users to manipulate datasets for their own research purposes, ISTC now provides a download function. The data is available in different formats that can be specified by the user. The most frequently used format is Excel, but the data is also available in YAML, ISBD, MARC21, and BibTeX. Every user can create a log-in that enables them to save searches or individual records and revisit them at a later stage.

From an editorial point of view it has become easier to deal with larger amounts of data and to edit several records at the same time using bulk editing. For example, a large number of links to digitised

incunabula can now be uploaded easily if contributors send the information to the editors in the correct format, ideally in an Excel spreadsheet listing ISTC numbers and corresponding URLs.

In its first iteration, the search field of the current ISTC consisted of one box only, and users had to construct their searches by not only entering their search terms but also the codes for the fields to be searched. All fields are searchable and can be combined, and while the search is very powerful and accurate, it is rather labour-intensive. While it is of course still possible to enter search terms in the search box without specifying the fields to be searched, the results are less reliable than when the fields to be searched are specified.

Responding to user feedback, especially around the search functionality, the ISTC's editors have worked closely with CERL to improve the file further and have made enhancements to the search functionality their highest priority. While the simple search remains and users can still search for a random selection of terms or specify the fields to be searched, an 'advanced search' functionality has been added. This contains a combination of drop-down lists, free text fields and suggester fields to allow users to construct more complicated searches without having to enter the field codes together with their search terms. The file shows users the number of records retrieved for each search term they entered so that they can see how far their results are being limited by entering additional search terms. When users click on the number next to the search box, the search will be carried out in the database and the list of records will be displayed.

The display of the results list has also changed. Users can now look at a short list of records or at a detailed list of records. From each entry in the short or in the detailed list users can go to the full records. Search results can be sorted alphabetically, chronologically, by author/title, by oldest or newest date of publication, by ISTC number, by country of publication, by place of printing or by printer. The facets on the right-hand side allow users to limit their search results by format, country of holding institution and country of publication. Other facets will be added in the future when constraints on the numbers of items displayed for each list of facets have been removed from the software.

3 **Future**

Improvements to a live file will always be necessary: some of them are the legacies of earlier iterations of the database, others are longheld desiderata. Following the changes to the search functionality and the display that were implemented in September 2018, the editors and CERL held a meeting in January 2019 to discuss the next stages of development. While small changes, additions and corrections will always be made on a daily basis and records are tidied up as necessary, work has begun on further improvements. The first step is to work through the list of holding institutions and move the data currently incorrectly held in the holdings field into the copy-specific notes field. This will make an overview of holdings by institution easier and will provide a more accurate count of the number of incunabula held in each institution. As part of this development, users will be given the opportunity to see full institution names for all holding institutions and not, as is so far the case for all institutions but those in the US, abbreviations only. The counting of holding institutions will be developed into a counting of copies. However, this is a longer-term ambition as it will require a number of changes to the structure of the data before copies rather than institutions can be counted. Links to digitised incunabula will continue to be added as and when they are reported to the editors. There are also plans to add links from ISTC records to descriptions of individual copies of incunabula in MEI where these are available and to run the CERL Thesaurus in the background of ISTC so that variant forms of names can be retrieved more easily.

ISTC is and always will be a work in progress. For all of the changes and improvements its editors made in the past, make now and we will make in the future, they rely very much on holding institutions and researchers around the world to work with them and to provide feedback on how ISTC can be improved further in the future and retain its status as the go-to database for incunabula researchers around the world.

Bibliography

- Eisermann, Falk et al. Verzeichnis der typographischen Einblattdrucke des 15. Jahrhunderts im Heiligen Römischen Reich Deutscher Nation. 3 Bde. Reichert: Dr Ludwig Reichert Verlag, 2004.
- Goff, Frederick R. Incunabula in American Libraries: A Third Census of Fifteenth-Century Books Recorded in North American Collections. Millwood (N.Y.): Kraus Reprint Co., 1973. Reproduced from the annotated copy of the original edition (New York: Bibliographical Society of America, 1964), maintained by Goff.
- Green, Jonathan. "Opening the Illustrated Incunable Short Title Catalog on Cdrom: An Enduser's Approach to an Essential Database". Digital medievalist, 1, 2005. URL https://journal.digitalmedievalist.org/articles/10.16995/dm.6/print/(2019-11-08).
- Guarnaschelli, T.M; Valenziani, E. et al. (a cura di). Indice generale degli incunaboli delle biblioteche d'Italia. 6 voll. Roma: La libreria dello stato, 1943-81.
- Hellinga, Lotte; Goldfinch, John (eds). Bibliography and the Study of 15th-century Civilisation = Papers Presented at a Colloquium at the British Library (26-28 September 1984). London: British Library, 1987.
- Hellinga, Wytze; Hellinga, Lotte. The Fifteenth-Century Printing Types of the Low Countries. 2 vols. Amsterdam: Menno Hertzberger, 1966.
- Kok, Ina. Woodcuts in Incunabula Printed in the Low Countries. Houten: Brill; Hes & De Graaf, 2013.
- Polain, M.-Louis. Catalogue des livres imprimés au quinzième siècle des bibliothèques de Belgique. 5 vols. Bruxelles: Société des Bibliophiles & iconophiles de Belgique, 1932-78.
- van Thienen, Gerard (Hrsg.), Incunabula in Dutch Libraries, 2 Bde, Nieuwkoop: De Graff, 1983. Bibliotheca Bibliographica Neerlandica 17.