Locating Leaves: Identifying Early-Printed Fragments in the Turnbull Collections[1]

Anthony Tedeschi

In his *Times Literary Supplement* article 'Book Collecting in the 1930s', A. N. L. Munby, antiquarian book dealer and from 1947, Librarian of King's College, Cambridge, wrote that thanks to the proceeds from the sale of two medieval manuscripts he was able to acquire a half share in a 1925 type 40 Bugatti, which was 'regularly taken to pieces by the roadside'. Munby (1923–1974) continued, 'its mechanical eccentricities involved me in a small piece of vandalism which I recall with shame. One of its gaskets, which kept blowing, was finally found to be responsive to vellum, and a thick leaf from a water-stained and ruined liturgical manuscript was cut up for the purpose; and this, when enthusiasts asked the Bugatti's age, enabled one to indulge in a little piece of lifemanship and reply nonchalantly, "Parts of it date back to the 'fifteenth century'."

I relate this story here, not to frown upon Munby's action for which he later expressed regret, but to illustrate the point: Fragments of old books – be they manuscript or print – can turn up just about anywhere, and finding and identifying them are among the many things I love about working in rare books. Indeed, when I come across folders labelled like this – 'Loose leaves | Examples of early printing | probably incunables' – or like this – 'Unidentifiable fragment' – or shelf-marks such as 'Vita 15--?' or simply the word 'Problem', found in the Turnbull collection written on the spine-edge of a book's archival enclosure, I take it as a personal challenge to find out what lies inside. The game is afoot.

It just so happened, too, that fragments of early-printing made the news about a fortnight ago when two fifteenth-century leaves printed by England's first printer William Caxton (ca. 1422–ca. 1491) were discovered in the University of Reading Library. These fragments were once used as binder's waste, a subject which we will visit later.

It is folders, boxes and fragments like these Caxton leaves that bring us here this evening. I chose to focus on fragments of early printing mainly because early-printed books are a particular interest of mine, but fragments from medieval manuscripts will also get a mention. I should note, too, that the sub-title should probably read 'Turnbull (and other)

collections', since I will include some specimens held by Dunedin City Library and by the University of Melbourne.

Before jumping into what we can consider the detective portion of my talk, I would like to spend a few minutes providing some context as to how fragments become separated from their parent copies. This is the realm of what the collector William Blades called 'the enemies of books' in his 1880 publication of the same name. Over the course of 10 chapters, Blades covered threats to books from fire and water to bookbinders and collectors. A personal favourite is Chapter 5: Ignorance and Bigotry.

It will surprise no one sitting in this room that we are venturing into the world of biblioiconoclasism or the destruction of books. This is a subject worthy of a talk in and of itself, along with that of the dispersal of private libraries: two areas of book history written about by people far more knowledgeable than me. I will therefore not dedicate too much time to the topic, only draw out a few historical events that are most relevant to the dismemberment of fifteenth- and sixteenth-century books.

Suffice it to say were it not for conflict, avarice and ignorance there would be far fewer fragments of books – not to mention other cultural objects – scattered throughout collections around the world. The story I chose to open this section of my talk is that of Holland House, a seventeenth-century mansion built in Kensington and home to Giles Holland Fox-Strangways, sixth Earl of Ilchester (1874–1959), President of the Roxburgh Club of book collectors and the London Library. On 7 September 1940, during the early stages of Nazi Germany's bombing campaign against London, Holland House was hit by multiple incendiary bombs. Much of the building was destroyed, yet the library miraculously survived almost intact. Lord Ilchester decided to sell his once fine book collection, and there is a remarkable photograph showing three booksellers casually examining the shelves amongst the rubble as if in a quiet, Charing Cross Road bookshop.

Next to fire, warfare and religious or political upheaval are the greatest destroyers of books. In his paper 'Lost: The Destruction, Dispersal and Rediscovery of Manuscripts', Peter Beal noted that during the English Civil War, more than one library was despoiled by parliamentary troops. To quote Beal, 'A plaintive lament about such destruction is heard from the Scottish writer Sir Thomas Urquhart, who was captured by Cromwell's forces in 1651 … Three large trunks containing nearly 3,000 sheets of his manuscripts were 'scattered over the floor'.[2] Some suffered, in Sir

Thomas's words, the 'inexorable rage of Vulcan', while others the tobacco pipes of musketeers and yet others the ultimate indignity of 'posterior use'.[3]

Staying with Beal and the British Isles, the Dissolution of the Monasteries under Henry VIII between 1536 and 1540 saw numerous monastic library collections removed to the Royal Library or their contents dispersed and flooded into the book market. In the 1550s, the Act Against Superstitious Books and Images came into law whereby, 'all books … heretofore used for service of the Church' were prohibited. One result, Beal wrote, was that 'missals, decretals, and other medieval religious books, especially on vellum, tend to have been preserved only as fragments, still to be found in many books and manuscripts as covers or binders waste'.[4] An example of a religious text incorporated into a binding was highlighted recently on the Princeton University Library blog 'Notabilia'. The Library's Department of Rare Books and Special Collections acquired a seventeenth-century German ordinance of litigation within the Electorate of Saxony, the binding of which was covered by a fragment of the Gutenberg Bible printed on vellum.[5] Despite its status today, the Gutenberg Bible was not always such a treasured object and once later printed editions of the Bible appeared it was seen during the later fifteenth and sixteen centuries as an obsolete edition and, therefore, of more use to bookbinders than to theologians.

During the eighteenth and early-nineteenth century the French Revolution and Napoleonic Wars saw numerous aristocratic and theological libraries either pillaged or removed to the national library in Paris. As Kristian Jensen writes in *Revolution and the Antiquarian Book Trade: Reshaping the Past, 1780–1815*, 'Books were always vulnerable when their texts were seen to be of no use and to belong to a superseded, unlamented past. But now they could equally be vulnerable to destruction for being meaningful in another way, when they were judged as objects of a despised past'.[6] British collectors at the time were not concerned with how the French citizens viewed their history, and many books from French libraries were sold to enrich collections across the English Channel. Thousands of books that remained behind were destined for kindling, musket wadding, book binding, wrapping fish and many other less than literary uses as we saw with poor Sir Thomas Urquhart's manuscripts.

Then there is intentional dismemberment, which generally falls into two themes as defined by Christopher de Hamel in *Disbound and Dispersed: The Leaf Book Considered*. The first is the practice of cutting

up one book to ornament or improve another book. The second is relic collecting. De Hamel's summaries of these phenomena are worth quoting in full and so I hope you will indulge my reading:

> Both practices go back into the Middle Ages. There are numerous examples of fifteenth- and sixteenth-century devotional manuscripts with decoration supplied by pasting or binding in cuttings from earlier illuminated manuscripts or from early printed books with woodcuts or engravings. By the late sixteenth century, booksellers sometimes bought volumes of engravings, especially biblical scenes, and cut them up to supplement other books, mainly Bibles and prayer books, which were afterward resold as composite editions.
>
> The trade in religious relics, genuine and spurious, goes far back into antiquity. It is a curious fact that manuscripts were seldom regarded as relics in the high Middle Ages, even if they had certainly belonged to known saints, but by the 17th century books with saintly provenances were sometimes cut up for distribution to faithful believers. The 18th century was an age of rationalism and the consequent self-righteous destruction of supposedly holy relics as superstitious and credulous vices. It is notable, then, that the period coincides exactly with the high point of the veneration of secular relics of historic heroes: fragments of Shakespeare's mulberry tree or Nelson's Victory, for example, or locks of Mozart's hair. At these moments in history, for the first time, early printed books began to be cut up and distributed for no other reason than as collectible relics of great printers.[7]

Thus was born the trade in selling leaves for profit. The dismemberment of books for sale by members of the antiquarian book trade continued into the twentieth century and I can only lament that the practice has not ceased.

Perhaps the most famous example of the aforementioned leaf-book is what is known as the Noble Fragment. In 1921, the New York-based book dealer Gabriel Wells acquired a damaged and incomplete two-volume copy of the Gutenberg Bible. Rather than attempt to sell the defective copy, Wells dismembered the volumes and sold each leaf individually. An essay by the notable collector A. Edward Newton (1864–1940) accompanied each leaf and the two were bound in black morocco; the title-page reads, 'A Noble Fragment Being a Leaf of the Gutenberg Bible'. Specimens still turn up on the market and can be purchased for $75,000 or more.

Unless an institution is actively acquiring fragments as, say, specimens of typography, handmade paper or parchment, or as examples of the work of notable printers, the best place to look for them is in

the bindings of books.[8] As we have seen, book binders in the past used discarded fragments of manuscripts and printed leaves for a variety of purposes: From lining the spines of books and as sewing guards, to covering the boards of a binding and as pastedowns. Examples of each are found in the Turnbull collection, such as five fragments from Peter Drach's edition of Petrus de Aquila's commentary on Peter Lombard's *Sentences* printed in Speyer around 1485 and cut-up for use as pasteboard with traces of sewing holes and an unidentified early-printed edition of Gratian's *Decretum* used to cover the Turnbull copy of an early seventeenth-century German text on Dutch exploration.[9] Fragments can even be found lining the inside of boxes known as pyxides, which were used to transport letters and other handwritten documents.[10]

Sometimes it can be difficult or impossible to access fragments used as binding waste be they, for example, covered over with later paper or within a tightly-bound volume. There is, however, some highly interesting work being done by Professor Erik Kwakkel and a team of researchers at the University of Leiden using an imaging technique called macro x-ray fluorescence spectrometry to capture images of manuscript fragments through the binding and isolating compounds in the ink to render the letterforms visible. The idea came from Kwakkel's colleague Joris Dik's use of MA-XRF to look beneath the layers of a Rembrandt self-portrait to see the earlier version beneath the paint.

This is just one of the ways modern technology can be applied to the study of medieval manuscript and early-printed book fragments. Another, as my colleague in Collection Care Mark Strange and I recently discussed, is the potential use of content analysis software to identify and match typefaces and other visual characteristics in early books, much in the way this software is being used to match similar paintings or photographs. Content analysis technology is not there yet when it comes to typeface recognition, indeed I am not entirely sure that anyone is working towards this goal at present, but work is being done by Cristina Dondi at Oxford and others on the use of image-recognition software and early, illustrated printed books, matching, for example, ornamental borders or woodcuts scanned into a large database.

Of more immediate importance to me is the free availability of digitised copies. Were it not for the scanning programmes of the state libraries in Germany and other holding institutions throughout Europe and the United States my job of identifying fragments would be far more time consuming, as I would have to turn to microfiched copies in nearly every instance or e-mail a proxy researcher and ask him or her to examine

a local copy on my behalf.

This brings me to my first example of using digitised copies to identify a text and, more curiously, a rare occasion where a section of text – and not a physical leaf – has become divorced from its parent text. The book to which I am referring is held by the University of Melbourne. It is one of the Baillieu Library's two fifteenth-century editions of the *Gesta Romanorum* (Deeds of the Romans), a collection of entertaining short stories meant for moral edification.[11]

This particular copy is from an edition printed in Strasbourg by one of the many early printers whom we know not by name, but by a particular work from their press: the Printer of the 1483 *Vitas Patrum* (Lives of the Church Fathers). The copy includes a pencilled note stating it is missing a leaf, which was curiously replaced with a leaf from another book. Upon examination this appeared to be the case. The text on the recto of the replacement leaf corresponds to an edition of a work called the *Historia destructionis Troiae* (History of the Destruction of Troy) written by the thirteenth-century Italian judge Guido de Columna.

After comparing this text with digitised fifteenth-century editions available through ISTC, I found that this leaf matched an edition of Guido's *Historia* printed by none other than the Printer of the 1483 *Vitas Patrum*. So, how did text from Guido's *Historia* wind up in the *Gesta*?

The answer, which changed, not solved, the question, was found on the verso of the leaf, for the verso text matched that of the *Gesta*. Checking the conjugate leaf verified my suspicions: The text on the recto of this leaf matched the *Gesta* and the verso text that of the *Historia*, so I suspect these two works were in production simultaneously and there was a mix-up in the half-printed paper stacks. Perhaps a printer removed the sheet in order to check it and then mistakenly returned it to the wrong stack of paper, or maybe a few sheets were mixed up before the printer realised there was a problem. As the error does not appear in the three digitised copies I checked for comparison, the problem was obviously caught and corrected, but not before the Melbourne copy somehow slipped past the corrector.

This curious case study aside, what do we do as librarians and curators when faced with collections of bibliographical disjecta membra?

The answer is of course dependant on institutional resources. Fragments used as binder's waste are not always recorded in catalogue descriptions (the Turnbull's thankfully are), since not every cataloguing department has the time or possibly the skill base to do so. Often folders of individual leaves might be given a high-level record summarising

the contents. Such records are more than sufficient to note the number and type of specimens in a collection, especially if the leaves are only being used as teaching tools. I would, however, encourage attempts at identifying these fragments and not leaving them unexamined. Knowing exactly what you have to hand is no bad thing, and can turn up some real rarities with potential research value. The Caxton leaves found in the University of Reading, for example, are just two of ten known fragments to survive from an otherwise lost edition of a Catholic manual used in Salisbury.[12] I believe, too, that leaving fragments unidentified does a disservice to the people involved in the production of the original object – the authors, printers, proof readers, paper-makers and so on – and their recipients, the owners and readers. We must not lose sight of the fact that these fragments are the results of hard labour and were created and read by people who were once as alive as you and me.

Methodologies

The first step in trying to identify a fragment is to take some time and simply look at what is in front of you. Clues can be picked up by carefully examining the recto and verso of the fragment and of course the more phyiscally complete a frgment is the better. The single leaf I'll use as an example has a lot to tell us. It is printed in Latin. The layout in different font sizes suggests strongly that this leaf is from a scholarly edition, that is, the larger-sized text is the primary source and the smaller text surrounding it is the scholarly apparatus or commentary. This is useful when it comes to narrowing down the list of possible editions once you have hopefully identified the text, since you can rule out any editions that lack commentary. Along the top we find 'Quintus F. CCXXXVI', so this section is from chapter or book 5 of the parent text and is leaf 236 in a foliated edition.

There is also a signature – R3 – towards the foot of the page. Signatures served as a guide to the binder in assembling the leaves correctly and normally run from A to Z, omitting by convention J and U, and often W, for these letters did not appear in the Latin alphabet.

Noting the typeface we have a roman font, suggesting the text was printed perhaps in Italy or France, since the design lacks the more gothic appearance of northern European typefaces from Germanic regions.

The paper, too, should be examined. Checking the chain-lines from the mould used to make the paper stock, we see the presence of horizontal lines, which suggests the sheet is a quarto as opposed to a folio or smaller octavo, which typically have vertical chain-lines and are

generally larger or smaller in size, respectively. Knowing the format will eliminate further editions.

Now, I must confess that this particular leaf is something of a cheat. It just happened to come from towards the end of the book and its verso includes a conclusion written by the author – the Italian humanist Filipo Beroaldo (1453–1505) – along with the colophon, or publication details, below, which tells us this is an edition of Beroaldo's commentary on Cicero's philosophical work the *Tusculanae Disputationes* (Tusculan Disputations). The colophon tells us further that the book was printed in Paris in the year of our Lord 1519 in the month of October. Searching these details in the Universal Short-Title Catalogue (hereafter USTC) located a match that revealed the name of the printer, Pierre Gaudoul, and that there is only a single recorded copy held by the Médiathèque municipale in Roanne, France.

Unfortunately, not every fragment is the colophon leaf (were life so easy), but the steps I outlined above go a long way in winnowing down a list of potential editions. Understanding the text, however, is key before proceeding further. This will require some knowledge of languages, especially Latin and other European dialects when working with books of this age printed in England or on the Continent. That said, more and more texts are becoming available on-line and so with some clever searching you can potentially identify texts without being able to read the language itself.

Take for example the two tiny fragments measuring 130 x 50mm held by Dunedin City Library. Upon first glance their identification may seem a near impossible task given their size and the limited amount of visible text. That said the fact that the text is in French proved to be key. Drawing out a few words suggested the text was from a classical source rather than from a medieval text. Looking up, for example, 'pancicrates' in a Google search led to a digitised French edition of Livy's history of ancient Rome. Fortunately, there was only a single French-language edition printed during the fifteenth century, published in Paris by Antoine Caillaut and Jean Du Pré in 1486–1487.

This of course does not yet mean we have an exact match and I could find no digitised copy available for comparison. This might perhaps seem like the end of the road to some of the younger attendees present, but all was not lost. Thankfully, the Turnbull holds a very good collection of non-digital reference books and research tools, including the set of microfiched incunabula called *Incunabula: the Printing Revolution in Europe, 1455–1500*. A copy of the Paris edition of Livy was microfiched

as part of this project and a comparison showed the fragments matched based on the typeface.[13]

One of the challenges I used as an example towards the beginning of my talk was a folder labelled 'unidentifiable fragment'. This leaf, a bifolium, includes no printed folio numbers, though it had been foliated by hand, and there are no headings or signatures. Reading the text, however, revealed the fragment to be from a very interesting work: a letter written by Pope Pius II (1405–1464) and addressed to the Ottoman sultan Mehmed II (1432–1481), conqueror of Constantinople and much of the Balkan region. In the letter, Pius sought to convert the sultan to Christianity by attempting to convince Mehmed through theological argument that Christ was the redeemer. Although it is agreed the letter was never sent, scholarly opinion remains divided over Pius's true motivation for writing it. I, for one, like to imagine the sultan's reaction had he received the letter. Uproarious laughter no doubt, echoing from the palace across all of Istanbul.

The question then became: What exact edition?

The letter was originally written in 1461 and first published in Cologne in 1464. Looking up Pius II in the Incunabula Short Title Catalogue (hereafter ISTC) I found 170 editions of his works listed. The majority of these results were for papal decrees and theological texts. Adding 'epistola ad Mahumetem' reduced the results list to just eleven editions – the text of each consisting solely of Pius's letter to Mehmed II – printed between ca. 1469 and 1490.

Many of the ISTC records contained links to fully digitised copies so, after some patient work comparing texts with our fragment, I found the Turnbull fragment matched an edition printed in Rome by Stephan Plannck, best known for printing the widely circulated 1493 Latin translation of Christopher Columbus's letter describing his discoveries in the New World made the previous year.

As mentioned earlier this evening fragments are not just small cuttings and individual leaves, but can also be substantial portions of a particular text. Let's take a look at the volume enclosed in the box marked 'Problem', which is a Latin text that has neither its title-page nor a colophon, along with a process known as bibliographical fingerprinting.

The first page of text tells us the work was dedicated to the French king Charles IX (1550–1574) by its author Dionysius Lambinus, or Denis Lambin (1520–1572), a French classical scholar teaching in Paris, so we already have a pretty good idea where the book was likely printed. The recto of the next leaf includes further details, most importantly the name

and title of the classical text Lambin edited: Lucretius' philosophical poem *De Rerum Natura* (On the Nature of Things).

Having established the text the next step as we've seen is determining the exact edition. One way to do this is to take a book's fingerprints. There are two approaches to bibliographical fingerprinting: The LOC fingerprint developed in the UK by bibliographers working in London, Oxford and Cambridge and the STCN fingerprint created for use in the national Short-Title Catalogues of the Netherlands and Belgium and also used in the USTC.

The LOC fingerprint is a 16-character code, divided into four groups of four characters. To construct or verify a fingerprint, you first identify the first printed recto that follows the title-page, in this case the Dedication to Charles IX; locate the final lines of text on that page: fingerprints 1 and 2 equal the last two characters of the final line; fingerprints 3 and 4 equal the last two characters of the penultimate line. This process is repeated on three other designated leaves. You now have the book's fingerprints, which you can use to compare editions in order to try and find a match, since if a text was reprinted the type will have been reset and the page layout – and therefore the fingerprint – will differ.

The STCN fingerprint is a little more straightforward and was the method I used in identifying this edition. Following the STCN approach, fingerprints are taken using the signature found on the first page of text proper and the final signature and recording exactly where the signature falls in relation to the text above it. I compared these details with a digitised copy available in the HathiTrust website linked through the USTC record. The volume turned out to be a copy of the 1563 first edition of Lambin's translation of Lucretius printed in Lyon for Guillaume Rouillé and Philippe Gaultier.

My second example of a large fragment is the book with the shelf-mark 'VITA 15--?'. Affixed to the front pastedown is a clipping from a book dealer's catalogue, which tells us the volume is an incomplete copy of the *Lives of the Saints* made in Milan probably during the sixteenth century. It is a folio consisting of 168 leaves. While useful, it is always best to check to be certain that the description is accurate.

First, the text itself, which is an Italian-language edition of the *Legenda Aurea* (the Golden Legend), a hagiography compiled by the archbishop of Genoa Jacobus de Voragine (1228–1298). The first signed leaf present is H1 and there are four unsigned leaves that precede it. The gathering signed H consists of 8 leaves, so we are missing gatherings A through F and the first four leaves of gathering G, so fifty-two leaves are

potentially missing. The copy is also missing leaves towards the end, so we do not have a colophon if one was present.

Searching ISTC for Italian editions of the *Legenda* printed in Milan I was thrilled to find just one: An edition printed in April 1497 by Ulderic Scinzenzeler that survives in just four known copies. Oliver Düntze, a colleague working in the State Library in Berlin, sent me a scan of one of the pages from the National Library of Austria copy for comparison. It turned out that the Turnbull fragment is a close resetting of the 1497 edition, but not an exact match.

Turning to the Italian national database EDIT16, I found records for three sixteenth-century Milan editions: two by Scinzenzeler published in 1511 and 1519, respectively, and one by Leonard Pachel – Scinzenzeler's former partner – printed in 1507. I called in a favour with an Italian academic friend of mine who happily wrote to each institution on my behalf. While I waited, I checked a major bibliography of Italian editions of the *Legenda*. No matches were found.[14]

Then replies came in from Italy: The Turnbull copy did not match either of the later editions by Scinzenzeler. This was becoming more and more interesting. If the Turnbull copy did not match the 1507 edition printed by Pachel, then what we had was the only surviving copy known of a lost edition. In the end, it turned out that our copy matched the 1507, but while not unique, the Turnbull copy is only one of two known to have survived – the other being held by the National University Library in Turin and it, too, is a large fragment. The scarcity of these fragments can open up a number potential research strands: What happened to the other copies? What was local competition like to sell editions of this popular text? Did Pachel and Scinzenzeler fall out over who owned the rights to print it? Was Pachel found in the wrong by the Milanese authorities and the illegal copies of this edition gathered up and destroyed? Are there any copies in private hands or unrecorded in institutional collections?

There's a story to tell. One that I hope to write up.

Conclusion

These are just some examples of the discoveries I've made so far. While I have had good success identifying fragments in the Turnbull collection there are always those that are set aside in the 'too hard basket' and ear-marked to send to more knowledgeable colleagues. Five fragments cut for use as binder's waste, for example, were catalogued as coming from a commentary on a work by Aristotle written by the Archbishop

and logician Giles of Rome and published in Venice in 1495. With the exception of the title-page fragment these cuttings do not match this publication and so far I have been unable to identify the exact text or edition whence they came.[15] Then there are those times when you come tantalisingly close to finding a match, only to be let down again and again. There is a leaf in the collection from an Italian edition of Petrarch's series of poems *I Trionfi* (the Triumphs). While more than one copy examined nearly match in layout and format, none so far have proved identical. I use this leaf as an example because there is another leaf from *I Trionfi* very similar to the Turnbull specimen held by Dunedin City Library, so unknown fragments of this work have been following me since at least 2011!

It is, however, only a matter of time: More editions will be digitised and freely available on the Web for the purpose of comparison; image content analysis software will likely be adapted to handle different typefaces used in early-printed books and coded to work with Latin contractions and abbreviations, so it can be applied to matching of manuscript or printed fragments.

In the meantime, more fragments are coming to light and the work continues. Who knows? There may be further fragments from Caxton's lost church manual or from the Gutenberg Bible awaiting discovery in Australasian collections. It just takes the right combination of time, curiosity, knowledge, technology and patience.

Endnotes

1. This paper is a revised version of an ARANZ public lecture delivered at the National Library of New Zealand on 28 May 2017. I wish to thank Jess Moran for extending the invitation to speak, Séan McMahon and the other members of the ARANZ Council for accepting the idea and LIANZA for its additional support.
2. Peter Beal, 'Lost: the Destruction, Dispersal and Rediscovery of Manuscripts' in *Books on the Move: Tracking Copies through Collections and the Book Trade* edited by Robin Myers, Michael Harris and Giles Mandelbrote (London; New Castle, Delaware: the British Library; Oak Knoll Press, 2007), 2.
3. Ibid.
4. Ibid, 3.
5. 'Princeton Acquires a Vellum Fragment of the Gutenberg Bible Preserved as a Book Cover': https://blogs.princeton.edu/notabilia/2017/04/18/princeton-acquires-a-vellum-fragment-of-the-gutenberg-bible-preserved-as-a-book-cover/ (Accessed 19 April 2017).
6. Kristian Jensen, *Revolution and the Antiquarian Book: Reshaping the Past* (Cambridge: Cambridge University Press, 2011), 34.
7. Christopher de Hamel, 'The Leaf Book' in *Disbound and Dispersed: the Leaf Book Considered* compiled by Christopher de Hamel and Joel Silver (Chicago: the Caxton Club, 2005), 6–7.
8. No paper addressing the study of fragments and bookbindings is complete without acknowledging the work done by the Oxford paleographer Neil R. Ker in his influential *Fragments of Medieval Manuscripts Used as Pastedowns in Oxford Bindings* (Oxford: Oxford Bibliographical Society, 1954).
9. Isaac Genius, *Neundte Schiffart, das ist, Gründtliche Erklärung, was sich mit den Hollvnnd Seeländern in Ost-Indien Anno 1604 …* (Franckfurt am Mayn: Wolfgang Richtern, 1606).
10. For further information on pyxides, see Elisabeth Leedham-Green, 'Seventeenth-Century Cambridge Pyxides' in *For the Love of Binding: Studies in Bookbinding History Presented to Mirjam Foot* edited by David Pearson (London; New Castle, Delaware: British Library; Oak Knoll

Press, 2000), 197–207.

11. This discovery was first published on my blog Antipodean Footnotes in September 2013.
12. The other eight leaves from the manual printed by Caxton are held by the British Library.
13. *Incunabula: the Printing Revolution in Europe 1455–1500*, Unit 2 – the Classics in Translation, CT 49.
14. Linda Pagnotta, *Le edizioni della 'Legenda aurea'* (Firenze: Apax libri, 2005).
15. These fragments have since been identified by Oliver Duntze (State Library of Berlin) as coming from the edition of Petrus de Aquila's *Quaestiones in IV libros sententiarum printed in Speyer* by Peter Drach, ca. 1485.