

Running head: PANIZZI AS ORGANIZER

Panizzi as Organizer

Michael Stoler

San José State University, School of Library and Information Science

LIBR 249, Fall 2006 – Dr. Deborah Karpuk

Research Paper – December 7, 2006

Abstract

This paper discusses the role of Antonio Panizzi in the development of a catalog for the British Museum Library in the 1830's and 40's. It describes the procedures and rules used, and explains how they came to be, making reference to the life and character of Panizzi and others involved, to the way the Museum was set up and run, and to previous work in cataloging. It shows ways in which the methods and rules are still relevant today. And it attributes the success of the catalog not so much to Panizzi's skills in literature, bibliography, and cataloging, as to his management abilities, which were demonstrated in other aspects of his work at the Library.

Panizzi as Organizer

The British Museum Library (since 1973 separated from the Museum as simply the British Library (Weimerskirch, 1999)), is and long has been one of the great libraries of the world. Its buildings have sheltered, and its huge collections have nourished, generations of readers of all levels of scholarship, and its catalog has guided them to what they needed. All three of these were put on track to their modern forms by Antonio, later Sir Anthony, Panizzi, Keeper of the Printed Books from 1837 to 1856, and then Principal Librarian until his retirement in 1866. The issues with which he dealt continue to this day to be basic to library operations. He transformed the library physically, acquiring new buildings better configured for book storage, and transferring the collection to them. And he conceived of and had built the circular Reading Room, one of the landmarks of library construction. He instituted more effective procedures for retrieving books for readers and keeping track of who had them, using slips of paper that were retained until the books were returned, despite the protests of long-time users resistant to change. Hoping to make the Library the equal of any in Europe, especially the one in Paris, he embarked on a massive acquisitions program, obtaining collections and books from all over the world, including a wide range of works from the United States, and volumes on such radical ideas as socialism (McCrimmon, 1983). He became the principal enforcer of the Copyright Act, which required printers to deposit an exemplar of every book with the Library, again overcoming significant resistance. During his time as Keeper and Principal Librarian he increased the Library's holdings almost threefold. Biographies of Panizzi tend to focus on these achievements, more understandable to the general public, and on the political and bureaucratic struggles over these issues and the catalog, rather than the arcana of the cataloging rules themselves. This paper

will focus on Panizzi's work in building the catalog of the Library in the 1830's and 40's, in terms of procedures employed, and his promulgation of a set of rules for cataloging that is considered the ancestor of all modern cataloging codes. In discussing the process by which these rules reached their final form, it will explain the various intellectual and practical influences on Panizzi, and place them in a context of their times, and of the development of libraries and cataloging.

Panizzi's Life

Panizzi was born in northern Italy, in 1797, when the country had been united under French rule and competent, even liberal administration, though accompanied by a certain amount of exploitation and carrying off of treasures, including books, back to France. With the fall of Napoleon in 1814-1815, Italy was once more divided into petty dukedoms and areas of Austrian dominion. Panizzi attended law school and practiced as a lawyer, training which seemed to leave a lasting mark: it will be seen that he enjoyed arguing and marshalling evidence to support his positions, which came in very useful in the controversies in which he would become involved as a librarian. He also got involved with Italian revolutionary secret societies and published anti-government writings. Discovered, he had to flee the country with a price on his head. He made it to England in 1823, not knowing the language at all, but through connections was able to find work as a tutor and lecturer. He translated Ariosto's epic "Orlando Furioso", and in 1831 was appointed to the British Museum Library. His first assignment was to catalog the collection of French Revolutionary pamphlets, which interestingly was also the first cataloging job performed by the present writer. Although he was naturalized a British subject, and many high officials of

the Museum and Library had been foreign-born (Sternberg, 1998), he long labored under a certain prejudice in Britain against foreigners; many thought him rude and ignorant of English ways and manners. Italians were seen as florid and artistic, but hardly the people to undertake organizational tasks. (Had they forgotten the Romans?) In some ways, however, his nationality was an advantage: it garnered him sympathy in some circles; it led him to a more international perspective, so that he could see his Library as compared to other institutions; and gave him an excuse for bluntness when he needed it. Still, that he was able to overcome his “original sin” (McCrimmon, 1983) and achieve so much testifies to the strength of his intellect and character, and to his energy and work ethic, which was proverbial within the Library.

The British Museum Library

The foundation of the British Museum dates from 1753, when Sir Hans Sloane willed his large collection to the nation. Like the British Empire in the famous phrase of Sir John Seeley, the library collection was acquired in a fit of absentmindedness, with various private holdings acquired or donated with no real plan. Among the most important was the so-called King's Library, which had been amassed by George III, and sold to the Museum by his son George IV in 1823. The Museum was run by a board of 41 Trustees, including some high officials, such as the Archbishop of Canterbury, the Speaker of the House of Commons, and the Lord Chancellor, but also representatives of the estates that had donated books, and other appointees. At most meetings of the Trustees, however, only a handful would show up, and almost none of them knew much about libraries, yet they felt themselves competent to inquire about and manage the tiniest minutiae of operations. The longtime Secretary of the Trustees, who served as the point of

contact with the staff, was Josiah Forshall, who took a dislike to Panizzi. The titular head of the Library was the Principal Librarian, but his duties were actually quite limited; the real authority lay in the hands of the Keepers of the various Departments: Manuscripts, Specimens, Printed Books, etc. Each had assistants (the position in which Panizzi began), but all were poorly paid and often needed outside employment to support themselves. Like modern librarians, Panizzi would find himself constantly fighting with his board over funding and administrative procedures.

Cataloging at the British Museum Library

Attempts had been made to catalog the collection over the years, using various means and with various levels of success. A two-volume (folio) printed catalog appeared in 1787. Between 1806 and 1812, Sir Henry Ellis, a cleric and literary scholar serving as Keeper of the Printed Books, and Henry Harvey Baber, his assistant, compiled a new catalog. Ellis had taken the letters A-F and P-R, and Baber the rest, and, Ellis would later claim (though Rapple (1996) doubts this) that instead of just revising the existing catalog, they had actually compared each entry in it to the actual book on the shelf (or "press", from the days when books were squeezed together to keep them flat and avoid rot.) The catalogers did not use a formal set of rules, but since there were only two of them, they could keep fairly consistent within their own work and coordinate somewhat with each other (though again, according to Rapple, not very well.) The product of their labors was printed in seven octavo volumes between 1813 and 1819, and contained about 120,000 entries (Gray, 1849). However, and this was the problem with all printed catalogs, once printed, it could not easily be updated. As more books were added to the collection, the octavo

pages had been unbound and pasted onto folio leaves, with additional folio leaves in between, to allow for new entries to be hand-written in or cut and pasted from printed catalogs of private collections that were acquired by the Library. The resulting catalog, of which there were two heavily-used and worn copies, one for the public and one for the staff, ran to twenty-three volumes, and was a mess, and more than that, an incomplete mess, omitting many new acquisitions, though there would not have been room for many more of them on the existing leaves anyway. And many of the entries, having been written by poorly-trained and monitored staff, contained errors (Miller, 1967), of which Panizzi, as he worked as Assistant Keeper, became more and more aware. There was a separate catalog for the King's Library collection, which contained about 61,000 volumes (Gray, 1849), which had arrived after the printing of the Ellis/Baber effort, but it too was incomplete.

So in the early 1830's, there was clamor for a new catalog. The first great issue was whether the new catalog was to be "classed", that is, organized by subjects, or alphabetical, by author or title. (Arrangement by chronology, or by shelf position, or even by size, found in medieval catalogs, had largely become obsolete (Strout, 1956).). "Classed" or "subject" cataloging, however, had a different meaning than today; rather than using systems of classification, with catalogers expected to read the book to determine its subject, they would, derive it by choosing a key word from the title, hoping the title was actually descriptive. So a classed catalog was particularly useful for scientific works, and since it allows a user to search for information, not just a specific book (Kilgour, 1992), more to the taste of scientists than literary scholars. Alphabetical ordering by author name had first appeared around 1500, in indexes to chronologically ordered catalogs (Strout, 1956). It had been taken up by Thomas James, who had worked under Sir Thomas Bodley at the Oxford University library that bears his

name, in the early 1600's. On the other hand, the Frenchman Frederic Rostgaard had in 1697 published an influential book detailing a plan for cataloging by subject, date, and, yes, still, size. Starting in 1768, Giovanni Battista Audiffredi had published an alphabetical catalog of the Casatense Library at the Vatican, though he only got four volumes out before he died in 1788. In 1791, the revolutionary French government began seizing the collections of religious institutions and emigre nobles (Taylor, 2004, Organization). The idea was to create a huge national library with a union catalog, following a uniform national code, created by the Abbé Leblond and Mercier de Saint-Leger. For writing down the entries, they ordered the use of playing cards, which were durable, common, of standard size and blank on one side. The cards would be strung together and arranged in drawers in the order of author's surname, or a title keyword if there were no author given. (There were no headings, placed at the beginning of entries; instead, the whole title page was copied down, with the filing word underlined (Strout, 1956). According to Smalley (1991), however, the process was more complicated and analytical; instead of just copying the title page, the cataloger would transcribe, in order, the title and statement of responsibility, publication information, and a physical description, including extent, size, and type of binding and paper. Since one purpose of the union catalog was to reveal the existence of duplicates and allow them to be sold off to raise money for the impoverished revolutionary government, characteristics that would add to a volume's value were particularly to be noted.) The instructions make amusing reading, as they are directed towards local amateurs with no experience in cataloging, who need to be reminded, for instance, to file by surname rather than personal name.) Either alphabetical or classed arrangement made the catalog an aid for users in finding books, not just a list or inventory for verifying if they were present (Strout, 1956). It

would be up to Panizzi to make a catalog that was truly an intellectual achievement, illustrating the connections among works in a structured way.

The classifiers had struck back in the person of Thomas Hartwell Horne, who in 1827 published a set of rules and a classed catalog for Queen's College at Cambridge University, and petitioned for the opportunity to compile one for the British Museum as well. And the Library's Banksian Collection of Natural Philosophy had in fact been cataloged with a classed system, by Jonas Dryander. Panizzi already had a certain experience with classed catalogs; in 1832, he had been engaged by the scientifically-oriented Royal Society to update and revise their classed catalog, which had already been sent to press. (His point of contact was the Secretary of the Society, Peter Mark Roget, the creator of the thesaurus, who, presumably, would have known a thing or two about the organization of knowledge.) He found it to be full of errors, with parts of titles being taken for names and parts of names for titles, so that, anticipating an error this writer was to make some 170 years later, the French word "feu", which before a name means "late", was confused with the noun "feu", which means "fire", and taken as indicating the subject matter. Some items were totally misclassified :a work on starfish had been placed in "Astronomy"(Fagan, 1880). Panizzi refused to work further on the catalog unless he could start from scratch, despite the waste of previous effort this would entail. The Society's Library Committee agreed, but with strict constricting limitations on Panizzi's authority: every revision he made had to be approved by the Committee (Miller, 1967). As Panizzi toiled away, the Committee constantly interfered with his work. He eventually finished the job (and the equally difficult job of getting the Society to pay him his agreed-on fee.) But this experience with classed catalogs helps explain his later opposition to them. And his experience with the politics and bureaucracy of catalog-making also foreshadowed his later trials.

At this point, Panizzi already had strong ideas about how a catalog for the British Museum Library should look and work. He believed, first of all, that a great nation needed a great library, and a great library a truly comprehensive catalog. He wanted to do a deliberate, complete, uniform job that would be useful for a long time. Useful to whom? He "believed that anyone looking for a particular work should be able to find it through the catalog (Taylor, 2004, Wynar's, p. 25)."

Baber, since 1812 the Keeper of the Printed Books, had a straightforward plan, supported by Panizzi: a catalog arranged alphabetically by the author's last name, even if it was a pseudonym; if there was no author given, a significant word from the title would be used. (Panizzi preferred to use the first word that was not a preposition or article, a practice that had been introduced by Audiffredi (McCrimmon, 1983). The problem with this method is that it requires the user to know the title he is seeking, not the general aboutness (Carpenter, 2002).) There was a set of sixteen rules for writing the description. (Francis, 1953). Three catalogers -- new hires, to avoid falling behind on other work -- would divide up the main task, but a fourth -- Panizzi -- would check everything for uniformity and quality. Existing entries would be compared with the actual books on the shelves, not just checked and passed on. To guarantee a complete job, the catalogers would work book by book, cataloging them on slips of paper that would later be placed in alphabetical order, rather than finding all the A's, then all the B's, etc. Thus, until the entire catalog was finished in manuscript, no part of it could or would be printed. Unfortunately, the Trustees, influenced by Ellis, the Principal Librarian, who felt that the new catalog could be compiled pretty much the way he and Baber had done the old one, did not see the need for overall coordination during the cataloging process, just editing and revision when it was done (which Panizzi felt was an inefficient use of time, since errors, instead of being caught

as they were made, would linger for years, possibly giving rise to greater errors, and in general becoming harder to track down and correct, as when a writer of a paper, in a hurry to keep up with the flow of his words, neglects to put his references in proper form as he goes, and has to try to find and correct them all at the end, as his deadline approaches. Panizzi also wanted greater collaboration and mutual assistance among the catalogers, instead of isolating them on particular tracks and types of tracts. In this he was influenced by the examples of Thomas Hyde at the Bodleian Library, Audifreddi at the Vatican, and the recent catalog of the Geneva Public Library, compiled by fifteen experts working independently, but according to rules, whose work, though finished quickly, required several years of revision before it was usable (Chaplin, 1987.) The Trustees only authorized the employment of three catalogers, each with his own language area, and accepted the entries that had been done for the classed catalog as finished and in no need of further checking, despite Panizzi's strong protestations. Baber reluctantly went along, too, glad at least to have defused the Trustees' continued interest in a classed catalog by promising that each entry slip would contain a notation of subject, by which all the slips could be sorted later. Meanwhile, as a stopgap measure, other assistants would transcribe the decaying 1819 catalog.

The work, inefficiently organized though it was, was making progress, when it was interrupted by a Parliamentary investigation of the Museum in 1835-6. This was prompted by an obscure personnel matter, but it soon extended to every aspect of the Museum's operation, including cataloging. Baber and Panizzi kept a united front, still fighting to maintain the elements of the original plan, with Baber strongly arguing the superiority of an alphabetical over a classed catalog, citing Panizzi's experience with the Royal Society as evidence, and Panizzi stressing that using multiple catalogers required supervision by one person. He promised, if not a classed catalog, a subject index to the alphabetical catalog, and special catalogs for some of the

specific collections. In a written report to the investigating committee, he emphasized that by not having a good alphabetical catalog, the Library was failing in a primary purpose, to make its holdings available and useful to the public. (Miller, 1967) Panizzi thus became one of the first to articulate a vision of the library as user-centered, rather than built around books for their own sake. This was even though he felt most of the public saw the Library as a "show place", indifferent to its role in furthering public education (Setton, 1959). For instance, he wanted the library to acquire both a wide range of books, and costly, rare scholarly ones, in order that the poorest student might benefit from the world's knowledge. He would have loved the World Wide Web!

In the end, the Parliamentary committee advised some administrative changes and reform of the Trustees, but took no stance on the catalog, and the plan, so unsatisfactory to Baber and Panizzi, remained in force, an alphabetical catalog with no person in charge overall. Now, two more issues came to the fore: whether the catalog was to be printed or not (and how quickly), and what rules were being used for the work of compilation. When Baber retired, and Panizzi succeeded him as Keeper of the Printed Books in 1837 (chosen for his energy and hard work over a more senior candidate, despite the prejudiced murmurs against him), he communicated with the Trustees more directly, and bore the brunt of their tirades.

The Rules

To the Trustees' demand to know the rules being used, Panizzi replied that they did not really need to know, and that besides, the catalogers did not really need rules, if they were being appropriately supervised and coordinated (McCrimmon, 1983). In this, Panizzi showed that it

was not rules that were so important to him, but good management; he was not so much a lawyer as an administrator. He later claimed he was using Baber's sixteen rules, having absorbed them in a general way, although he did not have a paper copy of them. He could not be sure if the catalogers were using the rules, because he had not gone over all their work, and even if they were all using the same rules, there might be differences in interpretation, and thus inconsistencies in cataloging. What he was really arguing for, of course, was overall supervision.

The Trustees insisted on approving any rules, or any changes to the rules (Blake, 2002). As new staff were hired, they asked for rules to guide them, and when in 1838 Panizzi had suggested slight modifications to Baber's rules (such as his old hobbyhorse, using the first word of the title rather than a significant word), and encouraged the use of as many cross references as possible (McCrimmon, 1983), the Trustees repeated their demand for a clear statement of the cataloging rules. (At least the principal that there ought to be rules seemed to be agreed on.) With great help from his assistants, John Winter Jones, Thomas Watts, Edward Edwards, and John Humffreys Parry, working day and night at Panizzi's residence, Panizzi framed his rules in little more than a week, and on March 18, 1839 (exactly 129 years before the birth of the present writer), presented them to the Trustees, with illustrative examples, noting that they had been compiled in some haste, and did not cover all cases. (Carpenter (2002) refutes this story as a romantic legend circulated later by one of the assistants, arguing that Panizzi really would have had to have prepared his rules long before, by himself, and the assistants just helped him get them ready for press and presentation.) His original list contained 73 rules, on eight pages, with twelve more of examples (Blake, 2002) but the Trustees deleted a few, added some more, and divided others, resulting in the final famous count of 91 (although Taylor (2004, Organization) claims he had more than this to start with.) He requested that the Trustees consider the rules as a

whole, as a complete system, and not attempt to change individual rules, as that would throw the whole scheme off. "Far greater evils," he wrote, "result from a deviation from a principle than from its inflexible application." (Fagan, 1880, p. 169) The retired Baber had seen and approved the rules several days before. The Trustees accepted them in July (Brault, 1972).

Some of Panizzi's rules merely codified current traditional cataloging practice; others diverged from it. Panizzi's first 53 specific rules were based closely on Baber's sixteen more general ones. The first rule is procedural, that entries for all items should be written on slips, those of the King's Library simply distinguished by a crown symbol. The second calls for alphabetic arrangement by author, and, in works with no given author, for disregarding any names that might be hand-written in, though they could be placed in brackets in the entry. (The system of alphabetization was a bit different than today's, with no distinction being made between I and J, or U and V. And at least in the published volume of the catalog, spaces, word-breaks, are sometimes ignored in favor of letter-by-letter alphabetization, sometimes not.) If there is more than one name, file by the first. There are other rules that deal with the order of the elements of description, and where the information is to be found. Rule XVIII calls for titles to be transcribed "in as few words ... as may be necessary to exhibit all that the author meant to convey", and in the original spelling. Rule XX directs the cataloger where to get his information in the absence of a title page; that the title page should be the chief source of information is never explicitly stated, but was so much a part of cataloging practice that it could just be assumed.

The next element in the description would be the number of volumes, then the place of publication, with the printer's name only "in the instance of early or very eminent typographers" (Rule XXVII), and the date, which could be guessed at but then had to be put in brackets. Other physical description details included the size/format, the type of paper and type (which had also

been included in the French Revolutionary system) and whether the work was a first edition.

"Any striking imperfection in a book to be carefully noted, and any remarkable peculiarity," says Rule XIX, though it does not specify where in the description this would go. There is no provision for such modern elements of the physical description as type of illustrations, or even number of pages, which had been included in some earlier catalogs.

Rules XXI to XXIV deal with works in foreign languages and scripts; works in all "oriental" alphabets, except Hebrew, would go in a separate catalog. The actual catalog contains title entries in Hebrew, Cyrillic, and Greek.

The fourteen rules from IV to XVII concern the forms of names to be used: when to use given names instead of surnames (for rabbis and friars, but not for noblemen; their family names were to be looked up if not on the title page, a departure from Panizzi's usual pattern of going only by what was in the book itself), when to use foreign names (or translations of names) instead of English forms. Preceding prepositions and articles were to be kept in English names, such as "À Becket, (Gilbert Abbott)"(Rule II), including those of foreign origin, but dropped for foreign names (Rule XII), except for French names, which would keep articles but not prepositions, a practice that had been established by the French bibliographer J.A. Quérard, in his "La France littéraire". Some titles of nobility would be noted, others not (Rule XVII). If an author changes his or her name, stick with the earlier form, but note the new one (Rule XI); if the title page makes clear who the author is without naming him or her, it's all right to use the name. (Again, this requires outside knowledge.) Rule IX is interesting: it recognizes the corporate authorship of documents, but places them not under the names of the corporate entities, but by the country or city where they are located. (According to Taylor (2004, Organization) and

Carpenter (2002), he had wanted to allow for entry under corporate names, but had been overruled.) The issue of corporate names and entries is still a contentious one among librarians.

Rules XXXIII to LII expand on the naming issue, explaining how to choose the name for the heading. Anonymous works, if biographical, would be filed by their subject, if his or her name appeared in the title (Rule XXXIII) (Or the name of a group: "Anecdotes of Africans" went under the final word.) Otherwise, they would be filed by the first substantive (noun) in the title. If the author's name on the title page was a pseudonym, assumed, or falsely attributed, it would be used the heading, even if the real name were known (Rule XLI-XLIII). Rules XLIV to XLIX deal with collections of various writers or of laws. Rules L and LI provide for the names of translators and commentators to be noted in the description, but not used as the main entry, a practice dating to Andrew Maunsell's 1595 "Catalogue of English Printed Books" (Strout, 1956).

But the most controversial rule concerned anonymous works with no personal or geographic term that could be used as the heading, meaning one would have to be drawn from the title. Should one use as the heading the first word, the first substantive, or some word judged to be the most important? This controversy had raged through the whole process of preparing the British Museum catalog, and had a long history. Maunsell had ordered anonymous works under their title, or their subject, or both (Strout, 1956). Audiffredi had used the first word. In calling for anonymous works to be classified by the first word of the title, rather than some word judged to be most important, Panizzi was following the example of the French bibliographer Antoine-Alexandre Barbier, who during the Revolution and after had compiled the "Dictionnaire des Ouvrages Anonymes". In his introduction, Barbier compares the two methods of entry, and pronounces the use of the first word, whatever it may be, to be "plus simple et plus sure" (Barbier, 1872). Panizzi's general approach was to avoid having to depend on the judgment of

the individual cataloger, since it might not be the same as another cataloger, or of the user. His rules were designed to be mechanical, allowing both cataloger and user to go by what was written on the title page, not what the cataloger happened to know, think he could figure out, or judge appropriate.

The rules on cross-references are in many ways the core of the catalog and of Panizzi's intellectual achievement. Later, they would be derided as too complex, slowing down the progress of the work. Cross-references had first appeared in the 15th century (Strout). Baber's rules did not provide for them, though his catalog had certainly used them. Panizzi's ukase was never to enter a work twice "at full length. Whenever requisite, cross-references to be introduced." (Rule LIV) Cross-references would be of three types: "name to name, from name to work, and from work to work" (Rule LV). Cross-references would use the full entry, not just the heading (in other words, they would mention the name *and* title, not just the name, as in previous practice, which could make it very hard to find the book referred to if there were many by that author.)

The last group of rules seem to violate Panizzi's principle of going mechanically by the title page. He creates certain "form headings", areas under which items would be filed by their nature, no matter what was on their title pages. The first was "Academies", under which all works of "learned societies" would be placed. This would be separated by geography, by dividing the world into Europe, the Americas, Asia, etc., then subdividing each continent into countries, then cities within the countries. Some of those divisions, though, might appear odd to us. Italy is not one country, rather a set of different states arranged among the others of Europe; Bohemia, part of the Austrian Empire, gets its own entry. Unless the user had exactly the same political and geographic conceptions as Panizzi, he or she might have a lot of trouble finding the

learned society in question. Similarly, all "periodical publications" would be placed together (Rule LXXXI), all "almanacs, calendars, ephemerides" under "ephemerides" (Rule LXXXII), all dictionaries (if anonymous) under "dictionaries". Although the nature of an item might be obvious to a trained cataloger, it might not be to a user. Whenever items are placed into categories, there are marginal examples that do not fit very well, and are hard to judge.

Printing the Catalog

The other great issue was whether the catalog should be printed or not. The Trustees, led by Sir Robert Inglis, who disliked Panizzi, kept pressing for a printed catalog, and even as he tried to comply with this directive, Panizzi kept appealing against it. Although it would be practical to produce catalogs of some of the smaller, specialized collections, printing the full catalog, whose final length Panizzi estimated at seventy volumes, would be extremely expensive. Who in the public, Panizzi wondered, would buy such a thing, besides a few extremely wealthy scholars (not the more ordinary clientele whom Panizzi felt it important to cultivate), especially as it would be obsolete as soon as new materials came into the Library, as they were constantly doing? The Library's own copy would be, like the octavo catalog, full of manuscript additions anyway, or need a separate supplement, either way requiring the user to look in two places (Chaplin, 1987). Even worse, printing in volume order, first the "A"s, then the "B"s, etc. would undermine the system of cross-references; how could one make a reference to an entry in a volume that had not been written yet? And since many items would be changing their headings (to different authors, or different keywords), what would be done with all the items discovered later that belonged in the 'A' volume? When Panizzi had presented his rules in 1839, he argued

that all the previous work would have to be inspected for conformity with them. This may have been another example of his trying to turn the Trustees' demands to his own advantage, but the Trustees did not bite; they told him he was free to go through the existing work, as long as the printing schedule was maintained. Panizzi promised that he could finish the 'A' volume soon, and this he managed to do, in 1841, though he was highly dissatisfied with it. Afterwards, no further volumes were published. By 1846, the Trustees had noticed this too, and were calling on Panizzi, and others, to explain why. Ellis blamed the complexity of Panizzi's rules, the length of entries, and the number of cross-references they required. Another problem, he said, was that Panizzi was insisting on checking each entry, as he had wanted to do all along, and that staff were being diverted to cataloging the many new acquisitions (McCrimmon, 1992). Panizzi should look at the assistants' work, Ellis said, but not so closely. He and Baber, he testified, had been able to put together a printed catalog in seven years, just the two of them; why couldn't Panizzi and his team follow their example? But Panizzi, as always enjoying an argument and sure of the correctness of his position, blamed everything on the Trustees, their failure to adopt Baber's original plan, and their constant interference. As for Ellis, Panizzi exhaustively listed the egregious errors in the old printed catalog. If you want a catalog done right, it would require time, effort -- and smarts. Ellis's ideas, and the Trustees' demands, would produce a quick-and-dirty catalog, no better than the 1819 version, and the short-entry policy would waste all the effort that had gone into producing long, complete entries. Ellis tried to riposte with a few examples of errors in Panizzi's catalog, which only prompted Panizzi to document Ellis's own mistakes even more damningly. If the Trustees wanted a printed catalog, Panizzi's answer was that a manuscript catalog could not be finished before 1854, that it could not then be prepared for printing before 1860, and that checking over the seventy volumes he estimated it would fill

would take until 1895! (Fagan, 1880) Finally, the Trustees gave in, and at the end of 1847, accepted Panizzi's plan for a manuscript catalog. The paper slips with the entries would be pasted onto sheets in such a way that they could be moved easily, and the whole thing would be held together by "reliures mobiles", a sort of early loose-leaf binding.

The Royal Commission

However, the Trustees weren't the only ones discontented with the state of affairs at the Library: users, some of them prominent and well-connected, complained about everything from the new borrowing procedures Panizzi had instituted to the lack of a finished catalog. This led to the appointment, in 1847, of a Royal Commission, headed by the Earl of Ellesmere. Panizzi welcomed the move, as it would give him an opportunity to confront and answer his accusers (Lubetzky, 1995), and many of its members were his friends and political allies. All the old issues were raised: classed versus alphabetical cataloging, short versus long entries, printing versus manuscript, the 91 rules ...

The Commission took testimony from over twenty witnesses, including such notables as Thomas Carlyle. Carlyle had a long-running feud with Panizzi, apparently stemming from some delays he had experienced in finding and accessing particular items he wanted. (Miller, 1967) Carlyle's testimony was somewhat disorganized and self-contradictory. Though he conceded, even boasted, that he was not a cataloger, he felt competent to opine that speed was of the essence in catalog-making. (As Panizzi testified, "One of the great misfortunes of my department is that every one who has a library, or knows anything about printed books, thinks that he knows about the cataloguing of them." (Rapple, 1996)) Carlyle supported the position that too much

time was being spent creating catalog entries that were too long and detailed, that quickly-produced short entries, serving to identify the books, would suffice; after all, most scholars knew all about the books in their areas of study; they just had to find them. (Fagan, 1880) He pushed for separate catalogs for small collections (as Panizzi had, for the French Revolutionary pamphlets, Carlyle's particular area of interest, for example.) He cited an example of a mistake in the catalog which had inconvenienced his brother; but he maintained that an imperfect catalog, done quickly, was better than none at all, which was the current state of affairs as the work dragged on. Panizzi's envisioned catalog would never be perfect, and would take forever (Rapple, 1996). Anyway, Carlyle asserted, there was no real need for a catalog. A librarian should just know where everything was, the way a shopkeeper knew what was in his store. This expectation of librarians, unfortunately, still prevails among some patrons.

In Lubetzky's (1995) view, Carlyle "saw the book as a material object, a separate entity unrelated to any other book in the library," while Panizzi "saw the book as an edition of a particular work that is intimately related to the other editions," a modern viewpoint expressed in the newest cataloging codes. Panizzi took the long view, the big picture, and wanted the time and space to present this to the reader, so that he could appreciate and make use of it. It would be worth it to take the time to produce a good catalog that would make these connections. Carlyle accused Panizzi of attempting to create a reference tool, rather than a book list (Rapple, 1996) -- and this was basically true.

The one thing on which Panizzi agreed with Carlyle was the latter's suggestion that certain staff members at the Library dedicate their time to answering users' questions and requests (Miller, 1967), anticipating the modern idea of the reference librarian. However, no action was taken on this until long after Panizzi was gone.

Another hostile witness was J. Payne Collier, who was serving as Secretary of the Commission. He actually went ahead and cataloged several dozen of his own books according to a short entry system, and submitted the results to the Commission as an example to be followed universally. Panizzi, as with the Royal Society and Ellis's catalog, turned his disciplined cataloger's brain on Collier's work, and found numerous errors in it, more than two per entry, some of which he gleefully pointed out. (For instance, Collier had cataloged one item, with no name on the title page, under a conjectured author name, and his system did not allow the reader to distinguish multiple editions of the same work which had appeared in the same year. In reply, Collier claimed to using "the English mode of cataloging ... diametrically opposed to [Panizzi's] foreign mode," playing the old nationality card; while Panizzi replied that he had never seen an "English mode", and that Collier's mistakes would be mistakes in any language. Jewett (1853, p. 20-22) repeats a lengthy description of this exchange.)

But Panizzi also had his supporters. One was August De Morgan, a prominent mathematician and logician (and also a bibliographer, with some legal training.) He criticized classed catalogs, noting the problem of categorization, that not all items are obviously and indisputably on a certain subject. He praised Panizzi's rules simply because they were rules, consistent and uniform. In his testimony (Brault, 1972), he is not always enthusiastic about a particular rule, but endorses "because it is a rule", and part of a system. Perhaps he saw something mathematical in their precision.

Of course, Panizzi's best witness was Panizzi himself. On the subject of classed catalogs, he held that no two people ever agreed on how to make or implement one. (He still wanted to have a subject keyword index to his catalog, however.) On the issue of full versus short titles, Panizzi argued that having catalogers make judgments about how to abridge titles was an

invitation to inconsistency and inaccuracy; it was easier just to copy them than to think about them. (He realized that thinking, obtaining information, can have a cost in time and energy that makes it no longer worthwhile.) It would be easier for the user, too, since he or she would not have to try to decide whether the shortened title actually represented the work he or she wanted; it would match, or it wouldn't. Panizzi wanted users to be able to distinguish various editions of works. In a long letter to Ellesmere, he used as an example the works of Peter Abelard; the library had over 500 editions of them. If only short entries were given, how would they be distinguished? (Panizzi, 1848) Panizzi's assistant Jones pointed out that short titles, especially for books on multiple subjects, might tend to include the words of interest to particular audiences, and thus mislead others (Setton, 1959). This might be fine for booksellers, but not for a great catalog of a national library.

When the Commission's report came out, it was a triumph for Panizzi, endorsing all his proposals over the years, and criticising the Trustees for failing to heed them. Already, other librarians were becoming interested in Panizzi's system. In America, Charles Coffin Jewett created his first catalog, for Brown University, in 1843; it was alphabetic, with a subject index. In 1850, he visited the British Museum Library, and met Panizzi. His rules, published in 1853, were largely cribbed from Panizzi's, as were many of his reasons for them. Classed catalogs, he wrote, were invariably "arbitrary" and "unsatisfactory", and that applying them demands too much judgment on the part of the cataloger, becoming "fatal to uniformity". Charles Ammi Cutter cited Panizzi in the introduction to his "Rules for a Dictionary Catalog". Although their systems change the order of the rules and emphasize different aspects of them, both Jewett and Cutter agreed that the goal of the catalog was the convenience of the user, not that of the cataloger. As Hufford (1991) puts it, "For each, the convenience of the public was always to be

held in mind, over and against the inventory of the collection, on the one hand, or the ease of the cataloger, on the other. This was a remarkable development, which when interjected into the nascent program of education for professional librarians, saw the growth of pragmatism and rationalism in the construction of tools for knowledge organization over the next three-quarters of a century."

Because Panizzi was above all a practical man. Although trained as a lawyer, and versed in literature, it was as an administrator and planner that he really found his niche. His work on building up the collection, the physical facilities of the Library, and the staff, (who were inspired by his rise from the ranks by hard work and brilliance rather than patronage appointment) runs parallel to his work on the catalog. Although it is an intellectual triumph, it is also a managerial one. He was constantly thinking about how to get the job done, a job which he defined as creating a catalog that would be an intellectual monument and a milestone. His rules and policies, his methods for quality control, show a sense of management that anticipates the industrial planners of the 20th century. And his work laid the foundations for a library, and a profession, that will last well beyond that.

References

- Barbier, A.- A. (1872). *Dictionnaire des ouvrages anonymes*. Paris: P. Daffis.
- Blake, V. (2002). Forging the Anglo-American cataloging alliance: descriptive cataloging, 1830-1908. *Cataloging & Classification Quarterly*, 35, 3-22.
- Brault, N. (1972). *The great debate on Panizzi's rules in 1847-1849: the issues discussed*. Los Angeles: The School of Library Service & the University Library, University of California, Los Angeles.
- British Museum. Department of Printed Books. (1841). *Catalogue of printed books in the British Museum. Volume I*. London: Printed by order of the Trustees.
- Carpenter, M. (2002). The original 73 rules of the British Museum: a preliminary analysis. *Cataloging & Classification Quarterly*, 35, 23-36.
- Chaplin, A. (1987). *GK: 150 years of the General Catalogue of Printed Books in the British Museum*. Aldershot, England: Scolar Press.
- Chaplin, A. (1953). A reconsideration of the British Museum rules for compiling the catalogs of printed books – II. In Piggott, M. (Ed.), *Cataloguing Principles & Practice – An Inquiry*. (p. 27-39). London: Library Association
- Cutter, C. (1904). *Rules for a dictionary catalog*. Fourth edition, rewritten. Washington: Government Printing Office.
- Fagan, L. (1880). *The life of Sir Anthony Panizzi, K.C.B., late Principal Librarian of the British Museum, Senator of Italy. Vol. 1*. Research & Source Works Series 586; Essays in Literature and Criticism 97. New York: Burt Franklin. (Reprinted 1970)

- Francis, F. (1953). A reconsideration of the British Museum rules for compiling the catalogs of printed books – I. In Piggott, M. (Ed.), *Cataloguing Principles & Practice – An Inquiry*. (p. 27-36). London: Library Association
- Gray, J. (1849). *A second letter to the Earl of Ellesmere on the management of the Library of Printed Books in the British Museum*. London: Spottiswoodes and Shaw. Retrieved from Google Scholar database on December 1, 2006.
- Harris, M., Ed. (1975). *The age of Jewett: Charles Coffin Jewett and American librarianship, 1841-1868*. Littleton, CO: Libraries Unlimited.
- Hayes, R. (1985). Panizzi and Babbage: a speculation. *Journal of Library History* 20, 179-185.
- Hufford, J. (1991). The pragmatic basis of catalog codes: has the user been ignored? *Cataloging & Classification Quarterly*, 14, 27-38.
- Jewett, C. (1853). *On the construction of catalogues of libraries, and their publication by means of separate, stereotyped titles*. (Second edition.) Washington: Smithsonian Institution.
- Kilgour, F. (1992) Entrepreneurial leadership. *Library Trends*, 40, 457-474.
- Lehnus, D. (1974). *Milestones in cataloging: famous catalogers and their writings, 1835-1969*. Research Studies in Library Science, no. 13. Littleton, CO: Libraries Unlimited.
- Lubetzky, S. (1995). The vicissitudes of ideology and technology in Anglo-American cataloging since Panizzi and a prospective reformation of the catalog for the next century. In E. Svenonius, D. McGarry, (compilers and editors), *Seymour Lubetzky: writings on the classical art of cataloging*. Englewood, CO.: Libraries Unlimited (2001).
- McCrimmon, B. (1963). *Antonio Panizzi as administrator*. University of Illinois, Graduate School of Library Science Occasional Papers, 68.

- McCrimmon, B. (1983). Whose ninety-one rules? A revisionist view. *Journal of Library History*, 18, 163-177.
- McCrimmon, B. (1992). Ellis v. Panizzi: an unequal cataloging contest. *Libraries & Culture*, 27, 177-191.
- Miller, E. (1967). *Prince of librarians: the life and times of Antonio Panizzi of the British Museum*. London: Andre Deutsch.
- Panizzi, A. ([1848] 1985). Mr. Panizzi to the Right Hon. the Earl of Ellesmere, British Museum, January 29, 1848. Reprinted from Appendix to the report of the commissioner appointed to inquire into the constitution and management of the British Museum. In M. Carpenter & E. Svenonius (Eds.), *Foundations of descriptive cataloging: A Sourcebook* (pp. 18-47). Littleton, CO: Libraries Unlimited.
- Rapple, B. (1996). Coping with catalogues: Thomas Carlyle in the British Museum. *Contemporary Review*, 269, 302-306. Retrieved through Academic Search Premier database on December 1, 2006.
- Setton, K. (1959) From medieval to modern library. *Proceedings of the American Philosophical Society*, 104, 371-390.
- Smalley, J. (1991). The French cataloging code of 1791: a translation. *Library Quarterly*, 61, 1-14.
- Smiraglia, R. (2002). The progress of theory in knowledge organization. *Library Trends*, 50, 30-349. Retrieved through Academic Search Premier database.
- Sternberg, I. (1998). Oh! To have been a fly on the wall: Panizzi, his precursors and contemporaries. *Library History*, 14, 143-150.

Strout, R. (1956). The development of the catalog and cataloging codes. *Library Quarterly*, 26, 254-275.

Taylor, A. (2004). *The organization of information*. (Second edition.) Library and Information Science Text Series. Westport, CT: Libraries Unlimited.

Taylor, A. (2004). *Wynar's introduction to cataloging and classification*. (Revised ninth edition.) Library and Information Science Text Series. Westport, Conn.: Libraries Unlimited.

Weimerskirch, P. (1999). A review article: the national library of England -- past and present. *Library Quarterly*, 69, 505-510.