Quality in Bibliographic Control

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ABSTRACT

THE QUALITY OF CATALOGING IS AN ISSUE that has engendered much discussion over decades of bibliographic control. Juxtaposed against the standard of full, accurate, and timely bibliographic records is the pressure to produce reliable access in a cost-effective manner. In reviewing the definition of quality at the Library of Congress (LC), the relationship of quality cataloging to copy cataloging, minimal level cataloging, the core bibliographic record, and outsourcing, the author concludes that the definition of quality is dynamic and dependent on the values and needs of catalog users.

QUALITY IN BIBLIOGRAPHIC CONTROL

For most of this century, catalogers and catalog administrators have struggled with the concept of quality cataloging. In a speech before the American Library Institute in 1941, subsequently published in *Library Quarterly*, Osborn (1941) described a "crisis in cataloging" (p. 410). With thoughts so contemporary that they could still be relevant, Osborn, chief of the cataloging department at Harvard University and a representative on a three-member panel appointed by Librarian of Congress Archibald MacLeish in 1940 to assess cataloging and processing at the Library of Congress, asserted: "Cataloging has become elaborate, highly technical, a skill too often existing in and for itself" (p. 395).

At LC, Osborn found a situation described by MacLeish (1944) in a report on the reorganization of LC:

> there was...an unprocessed arrearage in the Library of 1,670,161
> volumes–that is to say, better than a million and a half of the six
> million volumes and pamphlets (exclusive of maps, music, manu-
> scripts, prints, etc.) estimated to be held by the Library of Congress
> at that time were not represented in the public catalog. And what
> was worse, the arrearage was piling up at the rate of thirty thousand
> books and pamphlets a year. (p. 28)

It is ironic, if not poignant, that fifty years after the appointment of
MacLeish, a new Library of Congress encountered a distressing similar
situation—an arrearage of startling proportions and LC procedures much
as Osborn had described. LC catalogers followed a particular set of LC-
specific rules, the Library of Congress Rule Interpretations, with a ten-
dency to follow a "vast set of particular precedents, rather than general
principles, which might be applied in a common sense manner"
(Gallagher, 1991, p. 11). It was also considered that the best means of
becoming fully acquainted with LC practice was to be employed as an LC
cataloger (Gallagher, 1991).

The conclusion drawn by Osborn and his fellow committee mem-
bers in their report to MacLeish was that LC practice led to backlogs and
other regrettable consequences. These consequences are summed up by
Gallagher (1991) in her analysis of Osborn's (1941) "Crisis in Catalog-
ing" as bibliographic records "not expressing a shared context in mean-
ing, functioning as a barrier to the patron, unnecessarily legalistic, par-
ticular rather than general, and too detailed" (p. 17).

The word "quality" does not enter into Osborn's discussion of the so-
called crisis in cataloging. Rather, Osborn employs the concept of per-
fectionism to describe a hyper-emphasis on exactitude and precision—in
this case, quality gone awry by being taken to an extreme. That today's
problems so closely mirror those of a half-century ago, despite dramatic
technical advances and a growing body of literature about library patrons
and catalog users, gives one pause.

At the Library of Congress, an institution which is surely seen by
most, if not all, practitioners of cataloging as the sine qua non for biblio-
graphic control, every record is deemed a sterling example of "quality
cataloging"—i.e., every full original cataloging record. For the past de-
cade, the standard for quality cataloging has been altered, some would
say eroded, by compromises that include tolerance for, and even the
embracing of, such cataloging practices as minimal-level cataloging, col-
lection-level cataloging, copy cataloging and, most recently, the core bib-
liographic record. To review the changing values in this area of biblio-
graphic control, it is useful to examine these cataloging variations and
their relationship to a corresponding shift in the definition of quality
associated with them. Quality is not immutable but is rather a standard
of excellence that reflects the values of the individuals proclaiming it.

Thus, in the 1990s, the Total Quality Management (TQM) literature defined "quality" as deriving from the customer's perception of quality, recognizing that the goodness of results could have various characteristics including timeliness, accuracy, and detail of information (Younger, 1991).

Inside the Cataloging Directorate of the Library of Congress, passionate debates about the essence of quality cataloging have taken place, and catalogers and reference librarians alike have argued that anything less than the full original cataloging record created by specialists at the Library of Congress introduced corruption into LC's online catalog, and that the distribution of cataloging other than this type was a disservice to other libraries depending on LC for the solid foundation on which they constructed their own online public access catalogs and other bibliographic files. Searchers in LC's online catalog expected a homogeneity that only LC cataloging could provide, and which was an essential aspect of reliable retrieval. And, if libraries external to LC relied heavily on LC cataloging for copy, didn't LC have an obligation to provide records of the highest quality for others to copy? These are sensible arguments, and these have strong proponents. Most frequently in discussions about quality, speakers juxtapose the word "quantity" against the word "quality" as if they are opposites. To increase production or quantity is to threaten quality. At this point in the debate, people usually begin to get enmeshed in the definition of quality.

Although the *American Heritage Dictionary* defines "quality" in terms of excellence or superiority, in the bibliographic world, quality cataloging often means something far more specific. Under the aegis of the Cataloging Forum at the Library of Congress, several LC staff members have presented their views on quality in cataloging (Cataloging Quality..., 1995, p. 17). In the flyer announcing the Cataloging Forum of October 17, 1994, Susan Morris, then senior cataloger in the Social Sciences Cataloging Division, stated: "Quality in cataloging is measured by the degree to which a library's catalog fosters access to materials which benefit the user," while Lee Avdoyan, Near East and Armenian Specialist in the African and Middle Eastern Division, defined quality cataloging as "the consistent creation of a comprehensive bibliographic record, aimed at the highest level of researcher, yet retrievable by all users both now and (with minimal adaptation if necessary) in the future" (Library of Congress Cataloging Forum, 1995, p. 3). Mann (1994), a reference librarian at the Library of Congress, noted in a recent Cataloging Forum opinion paper:

The quality (or lack of quality) of cataloging and classification may be judged insofar as these operations foster (or undercut) three goals:

   a) promoting *predictability* of retrieval, as opposed to guess work
   b) promoting *serendipity* in retrieval
   c) promoting *depth of access* to books. (p. 4)

After asking all interested staff to complete the definition "Cataloging quality is ...," Barbara Tillett, chief of the Cataloging Policy and Support Office, Cataloging Directorate at the Library of Congress, summarized the responses as "Cataloging quality is..."

- accurate bibliographic information that
- meets the users' needs and provides
- appropriate access in a
- timely fashion (Cataloging Quality is..., 1995, p. 28).

The difficulty in resolving the question of what quality cataloging is lies partially in the subjective dimensions of the definition. While accuracy is seldom disputable, the needs of users are varied, and there is insufficient documentation of what these needs are. Similarly, appropriate access is a fuzzy characteristic if there is confusion about user needs. By focusing on measurable aspects of the bibliographic record—such as accuracy and adherence to rules and rule interpretations—catalogers weighted heavily the creation of individual products that minimized the subjective nature of their professional assignments.

At the Library of Congress, for example, until 1992, catalogers adhered to rigid standards for bibliographic description, subject analysis, and content designation. Deviations from norms prescribed in the *Descriptive Cataloging Manual* or other official documents were judged as errors, and even a very modest number of infractions could cause the cataloging to be rejected and result in promotions being withheld or less than satisfactory performance ratings given. Records passing muster were high quality cataloging, while records with too many errors were clearly inferior. The absolute standards became identical with quality, and hundreds of LC's catalogers were trained to these standards and strove to uphold them.

LC's standards for quality cataloging codified certain principles that have been traditional in cataloging for many years. Cutter's *Rules for a Dictionary Catalog*, published in their definitive edition in 1904, cited the purpose of a catalog as an instrument to enable a user of the catalog to find a book of which the author, title, or subject is known; to show what the library holds; and to assist in the choice of a book (Cutter, 1904, p. 12). LC's standard for excellence placed a premium on adherence to rules contained in the *Anglo-American Cataloguing Rules*, The Library of Congress Rule Interpretations, the descriptive and subject cataloging manuals, and the MARC Format for Bibliographic Description. The essence of these rules was the achievement of predictability, thereby enabling the catalog user to locate library materials effectively. The importance of this insistence on consistency should not be underestimated. LC's own internal consistency, applied to catalog records produced for its own

catalogs, coupled with its catholic collections, led to the widespread use of its cataloging card sets distributed through the Cataloging Distribution Service by other libraries which were able to rely on this dependable standard. Similarly, the employment of the MARC format for content designation nourished the growth of large bibliographic databases such as OCLC, RLIN, and WLN through the sharing of bibliographic records, another advantage of an agreement on a standard.

Throughout the years, the standards for quality have changed, becoming more explicit and more objective. An internal LC document tracing the history of quality review (QR) notes that: "In the 1979 version of QR, a distinction was made, for example, between major and minor errors, the former being assigned three points and the latter one point" (Quality Task Force of the Library of Congress to Cataloging Directorate Staff, personal communication, April 15, 1995). In 1985, this distinction was eliminated, and all errors were given an equal scoring weight of one point. In the 1985 version of QR, errors were defined (to put it very broadly) as mistakes of commission or omission involving access points of a record (including access points on related authority records) but excluding mistakes in capitalization, diacritics, and non-ISBD punctuation; access points included, for example, the main entry heading, title proper, added entries, series tracings, and cross references. "Mistakes in nonaccess areas of a record were generally not counted as errors" (*Descriptive Cataloging Quality Control...*, 1995, pp. 1-2).

The importance of creating a quality record that complied with the guidelines set forth was underscored by the many layers of review that the records received on their way to distribution and the relationship between the numbers of errors found and the adjectival rating ranging from outstanding to unsatisfactory, depending on the accuracy of the cataloging and its conformance to rules. Authority headings were considered to be so critical to an excellent record that they underwent exhaustive cycles of revision. In the days of manual catalog card creation, the cataloger prepared cards for new headings, filed them in the Official Catalog, and initialed and dated the record. Next the nonindependent cataloger's reviewer would revise the cataloging and countersign the official catalog heading, followed by another review from the section head or very senior cataloger. At the top of the reviewing chain was the Office of the Principal Descriptive Cataloger, but occasionally, even typists charged with creating cross references designated on the cards also detected mistakes as did filers. The review of headings by as many as five individuals at varying levels in the organization created a fine sieve virtually impenetrable by error (Quality Task Force of the Library of Congress to Cataloging Directorate Staff, personal communication, April 15, 1995).

Subject cataloging, a highly specialized domain at the Library of Congress, had equally stringent standards and reviews. Phil Barber, senior

cataloger in the Social Science Cataloging Division, asserted that: "Speci-
ficity in the assignment of subject headings is the core of high quality
subject cataloging. It is essential that this work be performed by subject
specialists because, knowing the field of discipline, they can achieve this
specificity accurately and efficiently" (*Cataloging Forum*, 1994, p. 1). Quality
standards at the Library of Congress were rigorous because the library prided
itself on the excellence of its cataloging and because of the public exposure
of that cataloging through the sale of card sets, the *National Union Catalog*
(NUC), and the MARC tapes. Embarrassing errors damaged the library's
reputation, and cataloging sought to eradicate mistakes through frequent
review. In the days before MARC, if someone discovered an error in a card,
a revised card set was issued, while a mistake in a printed volume was a per-
manent blemish only partially corrected through a revision in a subsequent
publication. Errors in access points permanently obscured access to materi-
als, and this made accuracy extremely critical. The advent of machine-read-
able records improved the situation slightly, but libraries which had used a
bibliographic record from LC that was later revised would not automatically
learn of the revision, and consequently, records loaded into their OPACs
(Online Public Access Catalogs) retained the error or had to be revised lo-
cally by their cataloging staff.

THE DOWN SIDE OF QUALITY AND QUALITY REVIEW

As a consequence of LC's emphasis on quality, its cataloging records
were indeed quite uniform, accurate, and reflective of the cataloging rules
of the era in which they appeared. As a by-product of shared cataloging,
whether through LC card sets, the printed NUC or, later, MARC records,
libraries preferred to wait for LC records rather than to catalog an item
originally themselves or to use the original cataloging of a non-LC li-
brary. Since it was demonstrably cheaper to use LC copy as the basis for
one's records, catalog departments voluntarily or involuntarily shifted
staff from the professional side of the ledger to the support staff side.
The wait for LC copy led to the creation of backlogs of unprocessed
materials. Coincidentally, overlap studies determined that, as extensive
as LC's collection was, it did not contain every item held by other librar-
ies around the country. Gradually, libraries began to accept the catalog-
ing of other libraries in lieu of LC copy, sometimes drafting blacklists of
libraries whose records were unacceptable or whitelists of libraries whose
cataloging was of sufficient quality to be used with minimum modifica-
tion (McCue et al., 1991, p. 66). Budgets, stretched to accommodate
inflation in materials allocations and growing automation expenditures,
put pressure on the technical services side of the house, which was ex-
pected to cut costs through the application of new technology and the
use of copy cataloging. To reduce local review, libraries, which had pre-

viously carefully scrutinized LC cataloging, making modifications to suit local practice, began to accept LC cataloging unquestioningly or with a mostly cursory review. Because copy cataloging with LC cataloging was regarded as the simplest form of copy cataloging, fairly low levels of staff completed its processing thereby making it also the most economical form of library processing.

Copy Cataloging

As libraries began to confront their backlogs, they increasingly examined ways of utilizing other libraries' original cataloging. Many institutions contributed records only to one database, and the bibliographic community discussed the quality of the databases based on the perceived superiority of records contained therein, the hit rates, or the amount of copy found. Intner (1989) found surprisingly little variation in quality in the bibliographic records contained in the OCLC and RLIN databases. In a comparison of "best" member copy with records from the Library of Congress, researchers at Cornell found no significant differences in the number of changes made to LC cataloging and the records of a select group of institutions (McCue et al., 1991). The conclusion was that savings could be obtained through the broader acceptance of member copy created by institutions recognized as producing quality cataloging. In the end, administrators made recommendations about access to databases as much or more on the results of the quantity of records found as on the quality of the records. The last twenty years indicate an increasing awareness of costs in libraries and a shift from quality of records as an absolute toward a redefinition of quality service rather than strictly quality cataloging—i.e., libraries placed a greater emphasis on making materials accessible soon after their arrival. The timely availability of copy became an ever-increasing factor in cataloging circles. Efforts to determine the cost of cataloging, to reduce expenditures for cataloging, and to expedite cataloging have led to numerous cost studies and initiatives that began to question the necessity of the level of quality in bibliographic records.

Mandel (1988) investigated the cost of cataloging, urging librarians to understand the costs and benefits of these actions and stating that responsible management requires them to think of the services they perform in terms of their dollar values (p. 220). Mandel concluded that, "a formal and quantitative approach to analyzing questions of quality and productivity in technical services will result in a net benefit to library users" (p. 220).

Mandel and Kantor were engaged by the Council on Library Resources (CLR) to examine the cataloging practices and procedures in several prominent research libraries with the aim of identifying an efficient and cost-effective standard that might serve as a model for other institutions and lead to savings in cataloging and improvements in

processing throughputs. They discovered that there was little uniformity in the departments they studied and no agreement on a best practice (Council on Library Resources, 1990). At the same time, another endeavor to improve the quality of cataloging was being promoted by CLR and the Library of Congress. The National Coordinated Cataloging Program (NCCP) combined the efforts of LC and eight participating libraries in the generation of cataloging records that were to be identical with those created by LC staff. Through extensive training of the participants and a review of LC standards and guidelines, the program would result in an increase in quality cataloging in the nation's shared databases. Although the program was successful in reducing LC's cataloging costs because LC used the resulting NCCP records with only minimal adjustments, it was heavily subsidized by CLR, and some program participants, rather than increasing their efforts to catalog in the manner of LC, began to criticize the pressure to achieve highly consistent records. Gregor and Mandel (1991), in their widely publicized article "Cataloging Must Change," argued that the requirements for revising headings to become ever more precise resulted in a maintenance burden on libraries that was counterproductive to their aim of making more publications accessible in a cost-effective manner. Furthermore, since the assignment of subject headings was, by its very nature, subjective and dependent on the education, training, and experience of the subject cataloger, interindexer consistency was exacted at a high price. Studies of user interaction with catalogs determined that many users encountered failure when trying to locate materials by subject, and they certainly had difficulty in reconstructing the elaborate subject heading strings that comprised the assigned Library of Congress Subject Heading. Mandel and Gregor advocated moving away from the highly prescriptive norms embodied in LC cataloging to a cataloging environment that promoted cataloger judgment and tolerance of minor inconsistencies in some areas. By relaxing the approach to cataloging in this way, they suggested that catalogers would increase the number of items under bibliographic control without a deleterious impact on quality of access (Gregor & Mandel, 1991).

Similarly, Graham (1990), in an article entitled "Quality in Cataloging: Making Distinctions," urged catalogers to distinguish truly important and necessary aspects of cataloging from those elements that were nonessential for the average user. By spending time on areas of the cataloging record that held little use in retrieval or about which few users cared, catalogers made original cataloging more costly than it needed to be and restricted the number of publications that were cataloged. Graham maintained that it was appropriate to shift a certain level of detail of information-seeking behavior to the user in the interest of reducing the cost of cataloging, and he also examined different types of cataloging from the perspective of their adequacy for users and relative cost. His

article begins with the strong statement: "Quality in cataloging is inversely proportional to cataloging productivity" (p. 213). Noting that quality is not well defined in the literature, Graham proceeds to emphasize two characteristics: extent and accuracy. According to Graham, catalogers should construct "lean" records, reduce revisions, live with some errors, know and justify the costs of elements of cataloging such as authority control, and espouse a service goal of the "provision of good access to as many materials as possible" (p. 217).

CONSER, NCCP, AND THE PCC CORE BIBLIOGRAPHIC RECORD

Libraries have struggled to meet the demands of meeting traditional objectives for description and analysis while avoiding backlogs. They have explored different avenues in their quest to satisfy the administrator's need to use resources wisely and the user's requirements for access. Programs such as CONSER and NCCP stressed the quality of the bibliographic record while capitalizing on the strength in numbers and in coordination to increase the cost-effectiveness of cataloging. CONSER, a cooperative online serials program, began in the early 1970s as a project supporting retrospective conversion of serial cataloging. The program now focuses on the cataloging of new serial titles and the maintenance of existing serials cataloging. "High quality" and "authoritative" are words frequently used to describe the cataloging produced through this cooperative program involving about twenty-four libraries. The principle behind the CONSER program is the agreement by a small group of committed, carefully selected partners to catalog to a specific standard, which will result in authoritative records that support the majority of serial titles held by libraries in North America and, through the distribution and subsequent reuse of these records, cost savings will accrue (Bartley, 1993).

The Library of Congress established NCCP to achieve similar results, but the program differed from CONSER in that CONSER members set standards for cataloging serials collaboratively, whereas NCCP participants conformed entirely to LC standards (Wiggins, 1993). The desire to revisit cataloging standards for monograph cataloging (and the cataloging of other formats as well) served as an impetus for the evolution of NCCP to the Program for Cooperative Cataloging (PCC) in the early 1990s (Thomas, In press). The mission of the PCC is to promote the creation of unique original cataloging according to a mutually agreed upon standard in a timely and cost-effective manner. Key to the values espoused by the PCC is the emphasis on "mutually agreed upon standards" rather than the more abstract term "quality." By the time the PCC had begun to flower, many librarians equated the call for adherence to "quality" cataloging as a retrograde insistence on the retention of arcane and expensive practices that had demonstrated insufficient benefit. Some spoke of the misguided concentration on the "pristine" or "perfect" record. On

the other hand, proponents of quality cataloging countered with the argument that cutting back on quality diluted the usefulness of the record and was potentially a short-sighted economic tradeoff. After careful consideration, the PCC endorsed the concept of the core bibliographic record, a cataloging record constructed to contain reliable, accurate, and authoritative access points but without the full complement of notes or subject headings that a full-level record would contain. According to preliminary trials, catalogers could create core bibliographic records in 25 percent less time than it took to produce full records. Following a year of use of the core level record at Cornell, Christian Boissonas reported at a PCC Executive Council meeting on June 22, 1995, that the use of the core bibliographic record at Cornell resulted in a 14 to 20 percent improvement in production over full original cataloging. At UCLA, in an experiment using a small sample of records, Schottlaender and Kelley (to PCC Executive Committee, personal communication, June 9, 1995) determined a time savings of 8.5 percent to 17 percent per record. They concluded that significant savings accrue to core record cataloging over when NACO authority work is included. Still in its infancy in cataloging, the core record is a promising, but as yet unproven, solution to the quandary of producing quality cataloging in less time and at lower cost. It is, however, not the only effort of the PCC to support cataloging that adds value to the retrieval process. Through the PCC's initiatives, the definition of quality cataloging has undergone a subtle shift to a record that is more thoroughly utilitarian. Like the quality record standard employed at the Library of Congress up until its reorganization in 1992, the PCC record insists on accuracy and adherence to AACR2 and the use of authoritative headings established in conformance with the rules governing the national authority file. However, rather than dependence on directives, the cataloger, creating records according to the PCC value system, employs more judgment and thinks about the practical consequences of his choices as well as the economic justification of his investment. The record is not an end unto itself but is a means for the user to locate material held by the library.

MINIMAL-LEVEL CATALOGING

The direction of the Program for Cooperative Cataloging is, at least in part, a response to other efforts to trim the cost of cataloging that had preceded it. Faced with a sense of increasing urgency about making incoming materials rapidly available to students and researchers, and with a growing intolerance for backlogs in which inaccessible documents languished, librarians proposed various solutions. In the eyes of many catalogers and reference librarians, the proposed solutions were often an unworthy compromise that lowered the quality of their work and diminished pride in their calling. Minimal-level cataloging (MLC) is one such

activity. MLC, as practiced by the Library of Congress, eliminates the often costly functions of classification, subject analysis, and the creation of new authority records. The library reserved MLC for categories of materials that had been in arrearage for over three years or for certain publications for which subject access was an uncommon aspect of retrieval. Subject catalogers decried the loss of access simply on the basis of chronology, however, and their reference colleagues supported them saying that the savings realized in cataloging were lost as they bore the additional cost of trying to locate materials inadequately described in the database. Outside the Library of Congress, many deplored the additional cost to local libraries which individually had to upgrade LC's MLC copy (Ross & West, 1986). Other libraries, however, faced with financial exigencies, developed their own brand of MLC and sharply reduced their production of full original cataloging.

Another approach pursued by libraries seeking to cut costs and expedite processing was to streamline copy cataloging procedures. First, they increasingly accepted LC copy without modification and, as they did this, they transferred responsibility for review of LC copy from professional staff to support staff and from higher levels of technicians to lower levels. They abandoned their practice of recuttering LC call numbers in order to integrate these appropriately in their shelflist, determining that the value added by such revision was not justified by its cost. Then they increased their use of member supplied copy rather than waiting until LC copy appeared in a database. One goal of the PCC is to generate original cataloging from members at such a level of uniformity that existing record information would require no modification. If a library desired, it could augment the record to improve its comprehensiveness (by adding subject terminology or enriching it with table-of-contents data), but it would not need to and should not waste its time revising a record that met PCC standards. Some libraries are investigating check-in cataloging or acquiring materials that come shelf ready—i.e., already barcoded and cataloged.

The 1990s have been a period of great foment in cataloging, with a number of initiatives suggesting answers to the dilemma of how to provide access to a library's holdings. At the National Library of Canada, for example, a Bibliographic Access Re-engineering Team applied business process re-engineering to examine the cataloging function. Among the actions the team recommended were to strengthen focus on users, reduce cataloging levels, and assign subject headings to more titles. They concluded that "work processes must be streamlined and made more productive. The content of a bibliographic record must be kept to the essential" (McKeen & Parent, In press).

This trend toward providing the "essential" elements of bibliographic access joins with the effort to determine a core bibliographic record and

the emphasis on improving productivity and decreasing processing time, two other recommendations of the NLC team, which finds their expression in the heightened interest in outsourcing or contracting out cataloging.

OUTSOURCING

Because of the expense associated with original cataloging, especially original cataloging practiced by those who focus only on the absolute full record without regard to cost or efficiency, there is a growing trend to contract out, or outsource, the work of providing access to materials acquired by librarians. For several years, it has been common to seek outside assistance in the areas of specialized language where in-house expertise was lacking and where the library was acquiring unique materials unlikely to be cataloged by another library. In addition, many libraries have contracted out their authority control to vendors who compare the headings on the library's machine-readable cataloging against copies of the Library of Congress' machine-readable authority file, reporting anomalies for libraries to investigate at a later date. By automating the authority file—a significant aspect and the single most expensive at that—libraries have sought to maintain the quality associated with an authority controlled catalog at a reduced cost. Post-processing makes some concessions, however, by sacrificing the real-time contribution of records to online catalogs by comparing headings against an LC authority file that is days and weeks out of synchronization with the LC files, which average 800 new headings added by LC and its NACO patrons daily. Obviously, the many libraries pursuing this alternative to manual review find this compromise in absolute quality acceptable and even desirable since there exists considerable vendor activity in this area.

With the advance of technology has come the possibility of expediting and streamlining the cataloging process still further. In the 1990s, the concept of "check-in" cataloging emerged, with the object being refining the acceptance of catalog copy to the simplest of tasks. Check-in cataloging essentially eliminates review and subsequent modification of the record. The library benefits in terms of efficiency, in the use of lower-level paid staff, and in the rapidity with which it provides access. Lost in the process is the close review of the bibliographic record and the insertion of local practice to make the record conform to the local OPAC.

The cataloging is generally available through two different approaches, each of which, for most libraries, cuts the cost of cataloging substantially. One library reported a reduction of over $200,000 (Winters, 1994). In the first approach, a library contracts with a vendor to catalog its materials according to a set of individually prepared specifications. The specifications determine the price and the quality of the product which can be explicitly linked with price. The vendor often main-

tains a staff of both original and copy catalogers, so the library is able to outsource its full cataloging spectrum if desired.

Libraries have the option of sending materials to the vendor for cataloging or for only certain relevant bibliographic information such as title pages. They can outsource their entire acquisitions or a portion of them. Because the library establishes the specifications and has the opportunity to review the cataloging upon receipt, they can retain control over the quality of cataloging. Examples of institutions which have contracted out their cataloging in this manner are Wright State University and Michigan State University.

Still another permutation of outsourcing is the procurement of shelf-ready cataloging. In this arrangement, the library contracts with its approval plan vendor to receive a value-added service—i.e., machine-readable cataloging records that arrive co-terminus with ordered or approval plan materials. This approach has the advantage of vastly eliminating multiple handling of materials by completely bypassing the catalog department. Materials can arrive "shelf-ready," that is, bar coded and already cataloged. The concept appears to be technically and economically feasible. Michigan State experimented with OCLC's Prompt Cat source to obtain cataloging copy for items acquired through vendor Yankee Book Peddler in the last quarter of 1993, finding that over 90 percent of materials had copy, and that they could minimize review ("The Future is Now...," 1994, pp. 36-37). Stanford University has recently conducted an extensive survey to ascertain which vendors offer this value-added service and have published a report in which they conclude that it will be advantageous for Stanford to acquire at least some of its material under these conditions (Stanford University Libraries, 1995). The primary benefits are faster availability of material to patrons and reduction of processing costs. The University of Alberta Libraries and the University of Manitoba Libraries contracted with ISM Library Information Services in 1994 for the supply of MARC records for acquisitions from certain vendors. ISM provides a two-week turnaround from the time it receives a shipment from the vendor to the time shelf-ready materials are shipped to the University of Manitoba Libraries ("UML and ISM...," 1994).

At the University of Alberta Libraries, Ingles, director of libraries, concluded that outsourcing was a success because the library saved 40 percent of book processing costs and "service improved dramatically" (Hall, 1995). Outsourcing has engendered substantial controversy with critics who claim it affects the quality of bibliographic control in overt and subtle ways. First, critics charge that the cataloging done by contractors is inferior. The lower costs for contract cataloging are obtainable only through the use of inadequately trained personnel with the consequent sacrifice in quality. Specifically, they are concerned that contract catalogers bring an inadequate understanding of subject analysis and class

of descriptive cataloging, with a resulting loss of precision and the intro-
duction of inconsistencies in the OPACs. Taken to its logical conclusion,
these deficiencies will mean false retrievals or missed searches or failure
to provide catalog users with optimum search and retrieval conditions.
Equally threatening is the loss to the organization of skills of catalogers
in the library environment. Although contracting out is often a reaction
against inefficiencies in cataloging departments and exasperation with
the cost and length of time cataloging takes, frequently administrators
overlook the many services performed by an in-house cataloging staff. In
addition to cataloging, they contribute their organizational expertise to
committees, studies, and other initiatives. In-house catalogers may be
paid higher salaries than contractors, but they invariably spend fewer work
hours in actual cataloging than do contractors. The overall value of the
cataloger to the library must be taken into consideration when deciding
to outsource and reduce technical staff. Not only the quality of the cata-
loging must be assessed but also the needs of the total library environment.

The issue of quality of bibliographic control and how to establish the
level of quality commensurate to good service is a challenging one. Ad-
vocates of quality who see excellence essentially as adherence to code,
fullness of record, and scrupulous accuracy at the expense of timely ac-
cess and at a higher price than managers can justify are on the wane. A
more pragmatic approach is prevailing. Cooperation, the core biblio-
graphic record, and greater clarity about what goes into the creation of a
cataloging record—in effort and in costs—are contributing to the redefi-
nition of cataloging at the end of this century. As users of the catalog, the
ever-broadening universal catalog available through linked Internet re-
sources, increases in number and in frequency of use, and as the technol-
ogy underpinning the catalog changes, the definition of quality will no
doubt be revised again as these developments in technology continually
call into question previous practices and policies. Since both bibliographic
control and the definition of quality are dynamic, they must be viewed
along the continuum of users' evolving needs and services.

REFERENCES
Bartley, L. K. (1993). The CONSER model: A personal view. *Cataloging & Classification Quar-
    terly, 17*(3/4), 75-86.
Cash, M. (1995). Making book on the future. *Winnipeg Free Press*, Business Sect., February
    23, p. 1.
Cataloging Quality: A Library of Congress Symposium. (1995). Washington, DC: Library of Con-
    gress Cataloging Forum.
Council on Library Resources. (1990). *The National Coordinated Cataloging Program: An as-
    sessment of the pilot project.* Washington, DC: The Council.
Cromwell, W. (1994). The core bibliographic record: A new bibliographic standard. *Library
    Resources & Technical Services, 38*(October), 415-424.
Cutter, C. A. (1904). *Rules for a dictionary catalog*, 4th ed. Washington, DC: USGPO.
The future is now: The changing face of technical services. (1994) (Proceedings of the OCLC
    Symposium, ALA Midwinter Conference, February 4, 1994). Dublin, OH: OCLC.

Gallagher, H. M. (1994). Dr. Osborn's 1941 "The crisis in cataloging": A shift in thought toward American pragmatism. *Cataloging & Classification Quarterly, 12*(3/4), 3-33.

Gorman, M., & Winkler, P. (1988). *Anglo-American cataloguing rules,* 2d ed. Chicago, IL: American Library Association.

Graham, P. S. (1990). Quality in cataloging: Making distinctions. *Journal of Academic Librarianship, 16*(4), 213-218.

Gregor, D., & Mandel, C. (1991). Cataloging must change! *Library Journal, 116*(6), 42-47.

Hall, V. (1995). Library borrows from information highway to curb job losses. *The Edmonton Journal,* February 21, B2.

Intner, S. (1989). Much ado about nothing: OCLC and RLIN cataloging quality. *Library Journal,* (February 1), 38-40.

LeBlanc, J. (1993). Cataloging in the 1990's: Managing the crisis mentality. *Library Resources & Technical Services, 37*(4), 423-433.

Library of Congress Cataloging Forum. (1995). *Cataloging Quality Is...:(1993) Five Perspectives.* Washington, DC: Cataloging Forum.

Library of Congress. Cataloging Policy and Support Office. (1995). *Descriptive cataloging manual.* Washington, DC: LC, CPSO.

MacLeish, A. (1944). The reorganization of the Library of Congress. *Library Quarterly, 14*(4), 28.

Mandel, C. A. (1988). Trade-offs: Quantifying quality in library technical services. *Journal of Academic Librarianship, 14*(4), 214-220.

Mann, T. (1994). *Cataloging and classification quality at the Library of Congress.* Washington, DC: Library of Congress Cataloging Forum.

McCue, J.; Weiss, P. J.; & Wilson, M. (1991). An analysis of cataloging copy: Library of Congress vs. selected RLIN members. *Library Resources & Technical Services, 35*(1), 65-75.

McKeen, L., & Parent, I. (In press). Re-engineering as a change agent at the National Library of Canada. *Alexandria.*

Osborn, A. (1941). The crisis in cataloging. *Library Quarterly, 11*(4), 393-411.

Ross, R., & West, L. (1986). MLC: A contrary viewpoint. *Journal of Academic Librarianship, 11,* 334-336.

Stanford University Libraries. (1995). *Redesigning the acquisitions-to-access process: Final report of the Stanford University Libraries redesign team.* Stanford, CA: Stanford University Libraries.

Thomas, S. E. (In press). The core bibliographic record and the Program for Cooperative Cataloging. *Cataloging & Classification Quarterly.*

UML and ISM—partners in "proof of concept initiative." (1994). *Recently at UML.* Manitoba, Canada: University of Manitoba Libraries (December, News Release No. 36).

Winters, B. A. (1994). Catalog outsourcing at Wright State University: Implications for acquisitions managers. *Library Acquisitions: Practice & Theory, 18*(4), 367-373.

Wiggins, B. (1993). The National Coordinated Cataloging program. *Cataloging & Classification Quarterly, 17*(3/4), 163-188.

Younger, J. (1991). Total quality management: Can we move beyond the jargon? *ALCTS Newsletter, 2*(8).