

## ***Metadata Strategies and Archival Description: Comparing Apples to Oranges***

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### ***Résumé***

Les tenants de l'approche «méta informationnelle» de la description des dossiers informatiques soutiennent que la capacité de la méta information de fournir de l'information de nature descriptive sur la nature du contexte de la création des dossiers informatiques va parer à, ou réduire de manière significative, la nécessité de la description archivistique traditionnelle. Cet article examine les suppositions à propos de la nature de la description archivistique et de la méta information sur lesquelles les stratégies méta informationnelles sont fondées dans le but de vérifier les questions suivantes: si le scepticisme entourant la capacité de la description traditionnelle de relever les défis de la prétendue «deuxième génération» des dossiers informatiques est justifié; si l'utilisation de la méta information comme description archivistique est compatible avec sa nature et son but; et enfin, si la méta information est capable de servir les buts de la description archivistique.

### ***Abstract***

Advocates of a "metadata systems approach" to the description of electronic records argue that metadata's capacity to provide descriptive information about the context of electronic records creation will obviate, or reduce significantly, the need for traditional archival description. This article examines the assumptions about the nature of archival description and of metadata on which metadata strategies are grounded, for the purposes of ascertaining the following: whether the skepticism concerning the capacity of traditional description to meet the challenges posed by the so-called "second generation" of electronic records is justified; whether the use of metadata as archival description is consistent with their nature and purpose; and whether metadata are capable of serving archival descriptive purposes.

In recent archival literature on electronic records, much attention has been paid to the attributes and advantages of metadata, defined in general terms as “data describing data and data systems that may include the structure of databases, their characteristics, location, and usage.”<sup>1</sup> In an article published in *Archivaria*, David Wallace summarized recent writing on the subject of metadata and concluded that “[d]ata dictionaries and the types of metadata that they house *and can be built to house* should be seriously evaluated by archivists”<sup>2</sup> because of their potential to significantly improve and ultimately transform traditional archival practice in the areas of appraisal, arrangement, description, reference, and access.

In the area of description, specifically, advocates of “metadata management” or a “metadata systems approach” believe that metadata’s capacity to provide descriptive information about the context of electronic records creation will obviate, or reduce significantly, the need for traditional description. According to Charles Dollar, if a metadata systems approach were to be followed,

Description would occur at the time of information systems design and would be reflected in an information resource dictionary system, which, among other things, would identify all the information elements, define their relations, explain their context of creation and use, provide audit trails of use, and specify organizational responsibility for their maintenance. In this transformation, an information resource dictionary would constitute a first draft of a rudimentary inventory of an information system, and a finding aid to the products of the information system to which a more comprehensive archival description would later add value.<sup>3</sup>

Underlying the calls for metadata management as an alternative strategy for the intellectual and physical control of electronic records is a skepticism about the capacity of traditional descriptive techniques to meet the challenges posed by electronic records. “Electronic records best illustrate the potential for exploiting the metadata that organizations create for archival description,” Margaret Hedstrom suggests, “as well as the folly of describing electronic records using a separate set of tools and techniques.”<sup>4</sup> Since “current metadata systems do not account for the provenancial and contextual information needed to manage archival records,”<sup>5</sup> archivists are exhorted to direct their research efforts (and research dollars) toward the identification of the types of metadata that ought to be captured and created to meet archival descriptive requirements. Such research, it is argued, is necessary if archivists are to participate in a meaningful way in, for example, the Information Resource Dictionary System (IRDS) standard. Charles Dollar maintains that archival participation in the IRDS standard is essential to ensure that archival requirements, including descriptive requirements, are understood and adopted within it.<sup>6</sup>

Before the archival profession assigns to traditional archival description the diminished role of “added value” (i.e., accessory) or abandons it altogether, the assumptions about the nature of archival description and of metadata on which metadata strategies are grounded ought to be carefully examined. Such examination is necessary to ascertain the following: whether the skepticism concerning the capacity of traditional description to meet the challenges posed by the so-called “second generation” of electronic records is justified, whether the use of metadata

as archival description is consistent with their nature and purpose, and whether metadata are capable of serving archival purposes.

Those who advocate metadata strategies as an alternative to archival description make a number of assertions about what description ought to be in the future, based on questionable assumptions about its nature. According to David Wallace, “archivists will need to concentrate their efforts on metadata systems creation rather than informational content descriptions, since in the electronic realm, archivists’ concern for informational value will be eclipsed by concern for the evidential value of the system.”<sup>7</sup> Charles Dollar, for his part, predicts that, rather than emphasize “the products of an information system,” a metadata systems approach to description will focus on “an understanding of the information system context that supports organization-wide information sharing.”<sup>8</sup> The emphasis on content over context may be characteristic of the approach to description taken by archivists dealing with the first generation of electronic records. For archivists dealing with more traditional records, however, the notion that description should be context- rather than content-oriented is hardly a revelation. Such an assumption is embedded in the 1898 Dutch manual on arrangement and description<sup>9</sup> and it remains evident in most contemporary manuals of description, including Michael Cook’s *Manual of Archival Description*, Frederic Miller’s *Arranging and Describing Archives and Manuscripts*, the Bureau of Canadian Archivists’ *Rules for Archival Description*, as well as in the ICA Statement of Principles for Archival Description and the International Standard Archival Description (General) (ISAD(G)).<sup>10</sup> In all of these works, it is assumed that to understand the meaning of records, it is necessary to explain the administrative context (meaning the functional and structural context) as well as the documentary context in which they were created and used; that is why all these manuals prescribe that description proceed from the general to the specific. It may be true that past descriptive practices for electronic records ignored their nature as evidence of actions and transactions. Such nature, however, has long been the foundation of descriptive practices and standards directed toward more traditional forms of archival documents.

Metadata systems have been compared to more traditional, context-oriented descriptive tools, such as archival inventories. A comparison of the scope, context, perspective, and level of detail of metadata and of the products of archival description, however, reveals considerably more dissimilarities than similarities between them. Metadata map administrative and documentary relationships among individual items within a particular electronic record system during the life cycle of that system. Within an organization, however, there may be any number of electronic, as well as any number of non-electronic, record systems. Archival description maps administrative and documentary relationships across all the record systems, both electronic and non-electronic, textual and non-textual, within and across fonds over time.

Because its scope is broader, the context that description seeks to explain is also broader and includes: the mandate, mission, and purpose of an organization; its competences; supporting structure, and relationship with other organizations; the lines of evolution of structure and competence; the series that are created out of the activities and procedures of each major competence; the lines of evolution of the

series resulting from the same function independently of the office creating them; and the relationships between those series and others created by different organizations. Because their scope and context are comparatively narrow, metadata circumscribe and atomize these various contexts of records creation. Archival description, on the other hand, enlarges and integrates them. In so doing it reveals continuities and discontinuities in the matrix of function, structure, and record-keeping *over time*.

Metadata are part of this broader context, since they constitute a series within the creator's fonds. The partial context provided by metadata should not, however, be mistaken for the whole context. Metadata, for example, may be capable of explaining contextual attributes of the data within an electronic records system, but they are incapable of describing themselves—i.e., their own context of creation and use—because they cannot be detached from themselves. For this reason, it is necessary to describe the context in which the metadata are created so that their meaning also will be preserved over time.

A clear distinction between metadata and archival description is also evident in their differing perspectives. As David Wallace points out, "metadata housed within a data dictionary [are] built up as the database structure/architecture is developed and altered."<sup>11</sup> A metadata system is like a diary that, in telegraphic style, records the daily events that take place in the life of an individual as they occur and from that individual's perspective. Description, on the other hand, is like a biography that, in narrational style, examines a life already lived, from a perspective broader than that in which it was lived: the genealogical ties that bind it, the personal, familial, professional, and societal influences that shaped it, and the evolution of all these factors over time. Because it is positioned outside the life rather than within it, a biography is capable, in a way a diary is not, of revealing the larger pattern of a life: the way "a plowed field seen from a plane reveals the geometry of the tractor's path,"<sup>12</sup> to borrow William Gass's turn of phrase. Archival description, it could be said, is the view from the plane; metadata, the view from the field as it is plowed.

These differing perspectives affect, in turn, the level of detail represented by description and metadata. If description provides a panorama shot of a whole, metadata provides a close-up shot of its individual parts. While a close-up shot—such as the capture of a database view—may be necessary for the purposes of preserving record context and system functionality, it does not follow that such a snapshot is necessary or even desirable for the purposes of description. "What must be perceptible to those who read [archival descriptions]," Gerard and Christiane Naud suggest, "is the chain of the different stages of administrative action [and] the hierarchy of its aspects."<sup>13</sup> Because the context revealed by metadata systems is so detailed, and the volume of transactions they capture so enormous, metadata may in fact obscure, rather than illuminate, the broader administrative context and thereby bias the users' understanding of the records' meaning. In fact, parts of actions and transactions may develop entirely outside of the electronic system and never be included in the metadata.

If, in the terms discussed so far, the context of archival description is considerably broader and less detailed than that of metadata systems, it is, in other ways,

considerably narrower. Whereas metadata capture all of the records in an electronic record system, and all the views of those records, description represents only what is left of the whole after everything inessential has fallen away. This difference inevitably affects the meaning of records that is communicated by metadata systems and that which is communicated by description, a meaning subtly shaped by the ongoing appraisal of records over time. Procedural relationships that existed between documents at the time of their creation, years later, may only exist in the metadata. Some phases of procedures may have been deleted over time and not be reflected in the documents that have survived. If the metadata are kept in their entirety, users searching for documents will have to wade through a great deal of irrelevant data to find what they need. If the metadata are chopped up into bits corresponding to what has been kept, how comprehensible will they be to the user?

It is worth asking at this point, where the outside user figures in all of this. When a major advocate for metadata strategies suggests that “description will focus on the information systems context, in support of information-sharing across the organization” and that “additional value could be added later by both archivists and users of the system,”<sup>14</sup> one begins to get the feeling that the user community being envisaged and accommodated by metadata management strategies does not extend beyond the records creators themselves. The shift in direction implied here is not an insignificant one, and it contrasts sharply with the direction in which description has been headed over the last decade or more. Descriptive standards development has been driven by the twin objectives of facilitating access to archival holdings—on equitable terms, to all users, for whatever purpose—and of sharing information about holdings—across institutions, not just within them. It is further understood that the holdings to be described should embrace both public and private records as well as all media of record. These objectives have shaped, in turn, the primary purpose of descriptive standards, which is the creation of integrated and essentially self-explanatory descriptive tools. It is difficult to identify any aspect of metadata strategies that is comparable to either this purpose or its underlying objectives.

Thus far, I have explored the question of whether metadata should replace archival description from the perspective of what description is and is not. I would now like to address the question from the point of view of what metadata are. The tendency to describe metadata in metaphorical terms, e.g., in relation to archival inventories, has distracted attention from consideration of what metadata are in substantial, concrete terms. They are, in fact, records created and used in the conduct of affairs of which they form a part. Now, as records, metadata are analogous to more traditional types of records; their closest analogs are the registers that have been used in European countries with registry systems since the time of Napoleon I (in Italy, they are known as “protocol registers”).<sup>15</sup> The purpose of the registers is to control the stages of distribution and transit for every official document that passes through the registry. The protocol register, for example, records the document’s protocol number (i.e., a unique identifier), its date, the date when it was received (in the case of documents received), the name and official title of the sender, the protocol number in the office of the sender (if applicable), the nature of the action, an indication of any enclosures and their types, the assigned classification number, and the office handling the matter. The register also records the consequences of the initial action: the date of the office’s response, the person to

whom the response has been sent, the nature of the response, an indication of any enclosures sent, the protocol number of the preceding and succeeding document participating in the same affair, and, finally, the document's disposition.<sup>16</sup>

The transactions captured by metadata systems may be at a more microscopic level than those captured in registers and the context may be more detailed, given the technological complexity of electronic record-keeping environments. Nevertheless, their function remains the same. Like protocol registers, metadata constitute evidence of the creation and receipt of records in a record-keeping system, their interrelationships, and the actions taken on them. They show the detailed context of the creation and use of individual items within the record-keeping system, both those that have been preserved and those that have been destroyed. And, like protocol registers, whose permanent retention is legislated, metadata need to be preserved in perpetuity because they are concrete evidence of what documents were made and received, who handled them, with what results, and the transactions to which they relate. Metadata are thus capable of preserving some of the documentary context of records that is usually lost in the appraisal process. While it is true that metadata systems show or reveal the context in which transactions occur in an electronic system and therefore constitute a kind of description of it—Jenkinson made the same observation about registers—their real object is to record the fact of those transactions; they should be, like registers, “preserved as a [record] of the proceedings in that connection.”<sup>17</sup>

A particular danger inherent in the metadata management approach is its advocacy for the creation as well as the capture of metadata for archival descriptive purposes. Margaret Hedstrom, for example, argues that

Successful descriptive practices for archival records must incorporate archival descriptive practices into the design of information systems, so that archival description can exploit the rich descriptive information that is an integral part of many electronic records systems. To accomplish this, the archival profession must articulate its requirements clearly and convincingly to records creators and the designers of record-keeping systems, or otherwise miss the opportunities for more effective descriptive practices that the electronic era offers.<sup>18</sup>

Viewing metadata systems as tools for achieving archival purposes, rather than as tools for achieving the creators' purposes is dangerous because it encourages us to, in effect, privilege potential secondary uses of metadata over their actual primary use; in so doing, we could reshape such use for purposes other than the conduct of affairs of which they are a part. Since this runs directly counter to the administrative reasons why a records creator would preserve metadata, it contravenes the archivist's primary duty to protect and preserve the inherent characteristics of archives—their impartiality, authenticity, and interrelatedness—which derive from the circumstances of their creation. These characteristics guarantee the documents' probative nature, that is, their capacity to serve as evidence of actions and transactions. As Jane Turner puts it, “from this guarantee of reliability, intentions and actions can be compared, the accuracy of the evidence can be determined, and its historical meaning can be derived.”<sup>19</sup>

Metadata strategies risk compromising, specifically, the impartiality of the records' creation. Archives are, in J.H. Hodson's words, the "unselfconscious byproducts of human activity, [and, as such] they possess the objective formlessness of raw material, compared with the subjective roundedness of literary artefacts such as books"<sup>20</sup> or, we could add, "archival inventories." Because records are created and maintained for the purposes of the creator, rather than for the purposes of others, the information in them is theoretically impartial and capable of providing reliable evidence of the creator's activities. For archivists to introduce in the formation of metadata records requirements directed toward the future needs of archivists and researchers rather than toward the current needs of the creator would contribute an element of self-consciousness into the records creation process that is inconsistent with the preservation of the records' impartiality. If the impartiality of the metadata is compromised, their value as evidence will be compromised, which means, ultimately, that the underlying objective of metadata strategies—the preservation of evidence—will be defeated.

From a purely practical point of view, it must also be said that since such requirements would create extra work and do little to further the dispatch of business, they likely would be ignored. John McDonald underlines this point in his comments on the Information Management and Office Systems Management (IMOSA) Project. According to McDonald, "organizations will not tolerate the imposition of rules and procedures that are not in line with their own direction and/or implementation timetable."<sup>21</sup> Even supposing that archival descriptive requirements could be built into the system automatically, the effect inevitably will be to burden the metadata system, thereby undermining its efficiency for its primary purpose (the management of electronic information) and eroding the protection of the system's authenticity—which is necessary for its use as precedent and as evidence.

None of these objections should be taken to suggest that archivists do not have a role to play in the design and maintenance of metadata systems. It is, rather, to suggest that that role must be driven by our primary obligation to protect and preserve, to the extent possible, the essential characteristics of archives. As Jenkinson observed more than fifty years ago, in laying out rules for archive-making, archivists must strike a "balance between the desire to provide for the needs of the Future and a determination to copy the impartiality of the Past;"<sup>22</sup> in other words, we may shape the direction of the formation of archives of the future, so long as we do not alter their archival character. How is this balancing act to be accomplished? Luciana Duranti offers useful guidance on the archivist's role in the creation and maintenance of current records:

It is against the impartial nature of archives to instigate records creators to generate records that they would not otherwise create in the normal course of affairs or to maintain records of activities that do not serve accountability ... in the broadest sense, and legal, operational and organizational needs. It is perfectly appropriate, particularly with creators using new information technologies, to offer our knowledge to enable them to create and maintain the records which they have the mandate, competence, and social duty to create and maintain, in such a way that the contextual aspects of the records will remain evident when the records become inac-

tive. We would not advise them on what to create but on how to create what they would produce anyway.<sup>23</sup>

Duranti's comments clearly define the acceptable nature and necessary limits of archival intervention in the design of metadata systems. Organizations create metadata "because [they] need systematic description of data elements, relations, and systems in order to operate effective information systems for current needs."<sup>24</sup> The proper role of an archivist in the design of a metadata system, then, is to assist the organization in identifying its own descriptive needs as well as to ensure that the identification process is driven, not by narrowly defined system requirements, but by the organization's overarching need and obligation to create and maintain complete, reliable, and authentic records. If the advice archivists provide to records creators is consistent with, and integrally related to, the natural processes and purposes of administrative action, its translation into appropriate standards, procedures, and guidelines for the capture and preservation of metadata becomes part of the normal course of administrative action and does not compromise the records' impartiality. The creation and preservation of meaningful evidence of administrative actions and transactions, it must be underscored, is a benefit to the organization, a byproduct of which is the creation and preservation of better quality records for posterity.<sup>25</sup> To advocate that organizations create and preserve such evidence because it is in their own interest to do so is as active and self-interested as archivists are entitled to be in pursuit of the objective of preserving, perpetuating, and authenticating documentary memory.

This leads to a final observation about metadata. Many of the metadata strategies that have been proposed confuse management methods with descriptive solutions. When David Wallace asserts that "arrangement and description will be collapsed into a single activity, largely performed during system design, before the records are even created,"<sup>26</sup> we need to pause and consider whether he is talking about arrangement and description or about the creation of an electronic classification scheme. When Margaret Hedstrom suggests that electronic records must have sufficient descriptive information to identify them, understand their meaning, interpret their content, establish their authenticity, and manage them for continuing access,<sup>27</sup> is she defining archival descriptive requirements or *electronic records management* requirements? The contextual information both Wallace and Hedstrom consider essential to description is, first and foremost, information necessary for ensuring that records remain complete, accurate, and reliable as well as available, understandable, and usable<sup>28</sup> throughout their life cycle. That is why it is essential that information holdings are identified and described in a meaningful way, organized in a logical manner that facilitates their access, and preserved in a manner that permits their continuing use.

Wallace believes "that post hoc description of electronic records systems will fail, given the amount of data likely to have to be evaluated."<sup>29</sup> Post hoc description of electronic records will fail only if the records were poorly managed during their life cycle. Record-keeping requirements for electronic records must address the need to render documentary relationships visible and to build in procedures for authentication and preservation: such measures will ensure that record-keeping systems meet the criteria of "integrity, currency and relevancy"<sup>30</sup> necessary to the



records creator. If these requirements are met, the contextual information needed to support future archival descriptive requirements will be preserved as a natural consequence; and if the records are appraised in a timely and strategic manner, the volume of records to be described will be manageable. In other words, effective description is a consequence of effective records management and intelligent appraisal, not their purpose. If the primary objectives of metadata are met, description will be facilitated and the need for description at lower levels (e.g., below the series level) may even be obviated.

Since the different objects and objectives of metadata and description condition the nature of the communicative acts they represent, it is important that they not be confused. Metadata systems capture and communicate information about transactions and the context in which they occur within an electronic record system. They are a management tool that allows for the continuing usefulness of records to their creators; more broadly, they are one means by which corporate memory is preserved and organizational accountability embedded in an electronic record system.

Description, on the other hand, captures and communicates knowledge about the broad administrative and documentary contexts of records creation within an organization as a whole as one moves further away from the original circumstances of creation. Its purpose is to preserve, perpetuate, and authenticate meaning over time so that it is available and comprehensible to all users—present and potential. In that sense, description is an essential embodiment of archival accountability. As Jenkinson characterizes it, it is an account of our “stewardship” of the records.<sup>31</sup>

Metadata systems cannot and should not replace archival description. To meet the challenges posed by electronic records, it is more important than ever that we follow the dictates of archival science, which begin from a consideration of the nature of archives. Archival participation in the design and maintenance of metadata systems must be driven by the need to preserve them as archival documents, that is, as evidence of actions and transactions, not as descriptive tools. Our role is not to promote our own interests, but to deepen the creator’s understanding of its interests in preserving the evidence of its own actions and transactions. We can contribute to that understanding because we have a broader view of the creator’s needs over time. In supporting these interests, we indirectly promote our own.

The methods and techniques developed for *describing* electronic records, while they will undoubtedly be influenced by those developed for their appraisal and preservation, must be consonant with and integrated into methods and techniques for describing records in any other media. Descriptive strategies, in other words, should be built on the foundation of descriptive principles and practices that have already been established. To ensure that our descriptive infrastructure is sound—that is to say, comprehensible, flexible, efficient, and effective—we need equally to analyze our own information management methods and, out of that analysis, to develop complementary systems of administrative and intellectual control that will build upon each other. By these means we will be able to accommodate the diversity and complexity of the record-keeping environments with which we must deal.

## Notes

- \* Originally presented at the Annual Meeting of the Association of Canadian Archivists, Ottawa, 24 May 1994. Revised and edited for publication. I would like to acknowledge an enormous debt to Luciana Duranti, who greatly assisted me in understanding the theoretical issues underlying the question of whether metadata should replace archival description and who provided much helpful advice during the writing of the original paper and this article.
- 1 Charles M. Dollar in Oddo Bucci, ed., *Archival Theory and Information Technologies: The Impact of Information Technologies on Archival Principles and Methods* (Ancona, 1992), p. 87.
  - 2 David A. Wallace, "Metadata and the Archival Management of Electronic Records: A Review," *Archivaria* 36 (Autumn 1993), p. 95.
  - 3 Dollar, *Archival Theory and Information Technologies*, p. 59.
  - 4 Margaret Hedstrom, "Descriptive Practices for Electronic Records: Deciding What is Essential and Imagining What is Possible," *Archivaria* 36 (Autumn 1993), p. 58.
  - 5 *Ibid.*, p. 60.
  - 6 Dollar, *Archival Theory and Information Technologies*, p. 51.
  - 7 Wallace, "Metadata," p. 99.
  - 8 Dollar, *Archival Theory and Information Technologies*, p. 59.
  - 9 Samuel Muller, J.A. Feith, and R. Fruin, *Manual for the Arrangement and Description of Archives*, 2nd. ed., trans. Arthur Levitt (New York, 1968).
  - 10 Michael Cook and Margaret Procter, *A Manual of Archival Description*, 2nd ed. (Brookfield, 1989); Frederic M. Miller, *Arranging and Describing Archives and Manuscripts* (Chicago, 1990); Bureau of Canadian Archivists' Planning Committee on Descriptive Standards, *Rules for Archival Description* (Ottawa, 1990); International Council on Archives, "Statement of Principles Regarding Archival Description," *Archivaria* 34 (Summer 1992), pp. 8-16; International Council on Archives, "ISAD(G): General International Standard Archival Description," *Archivaria* 34 (Summer 1992), pp. 17-32.
  - 11 Wallace, "Metadata," p. 92.
  - 12 William Gass, "The Art of Self: Autobiography in an Age of Narcissism," *Harpers* (May 1994), p. 51.
  - 13 Quoted in Luciana Duranti, *Diplomatics: New Uses for an Old Science (Part IV)*, "Archivaria 31 (Winter 1990-91), p. 22.
  - 14 Wallace, "Metadata," p. 99.
  - 15 The analogy between metadata and the register was suggested to me by Luciana Duranti.
  - 16 An illustration of the elements of the protocol register is provided in Elio Lodolini, *Archivistica. Principi e problemi*, 4th ed. (Milano, 1987), pp. 92-93.
  - 17 Hilary Jenkinson, *A Manual of Archive Administration*, 2nd ed. (London, 1965), p. 187.
  - 18 Hedstrom, "Descriptive Practices," pp. 57-58.
  - 19 Jane Turner, "A Study of the Theory of Appraisal for Selection," (MAS Thesis, University of British Columbia, 1992), p. 28.
  - 20 J.H. Hodson, *The Administration of Archives* (Oxford, 1972), p. 4.
  - 21 John McDonald, "Managing Information in an Office Systems Environment: The IMOSA Project," in Angelika Menne-Hartzig, ed., *Information Handling in Offices and Archives* (London, New York, Paris, 1993), p. 143.
  - 22 Jenkinson, *Manual*, pp. 156-157.
  - 23 Luciana Duranti, "ACA 1991 Conference Overview," *ACA Bulletin* 15, no. 6 (Ju'y 1991), p. 26.
  - 24 Hedstrom, "Descriptive Practices," p. 58.
  - 25 This assertion is little more than a contemporary twist on an observation made more than forty years ago by the Grigg Committee when it considered the proper role of departmental registration systems in facilitating the selection of records for the Public Record Office:  

We would repeat that the main consideration to be taken into account in organizing registry work is the need to facilitate the conduct of the Department's business. But the way in which current papers are handled has its effect on their quality as archives. ...It would be lacking in a sense of proportion for us to recommend that Departments should look to their registration work in order to improve the quality of the records they send to the Public Record Office. But we record it as our belief that if Departments paid more attention to the work of their registries they would gain advantages for themselves that would have as a by-product the production of better quality records for the Public Record Office.

United Kingdom, Committee on Departmental Records, *Report*, Sir James Grigg, Chair Cmnd. 8531 (London, 1954), pp. 35-36.

The context for the Committee's observations may have been different, but the words hold as much truth today as they did in 1954.

- 26 Wallace, "Metadata," p. 99.
- 27 Hedstrom, "Descriptive Practices," p. 55.
- 28 These are the "key attributes of information" identified in National Archives of Canada/Treasury Board of Canada Secretariat, *Guide to the Review of the Management of Government Information Holdings: Exposure Draft, January 1994* (Ottawa, 1994), p. 10.
- 29 Wallace, "Metadata," p. 106.
- 30 Criteria for determining the quality of electronic records as identified in the IMOSA Project, cited in Treasury Board, *Guide to Review of the Management of Government Information Holdings*, p. 104.
- 31 According to Jenkinson, the preparation of an archival inventory "constitutes one of the archivist's most important tasks. In it he renders an account of his stewardship." Jenkinson, *Manual of Archive Administration*, p. 120.