Making the Leap from Parts to Whole: Evidence and Inference in Archival Arrangement and Description

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Abstract

This article examines the analytical process in arrangement and description, and considers how the archivist arrives at an understanding of the records sufficient for contextualizing and providing intellectual access to them. The discussion characterizes the process of intellectual arrangement as one of identifying and/or creating the contextual relationships of a body of records, and it highlights certain common factors in the process, such as the historical standpoint of the archivist, the use of evidence, and the role of inference. Underscoring the speculative nature of the analytical process and the active role of the archivist in shaping the records, this article suggests ways for archivists to account for these aspects of practice on an individual, departmental or institutional, and professional level.

Introduction

Recent discussions of arrangement and description have, directly or indirectly, focused increasingly on the process of the archivist, calling attention to the mediating nature of the archivist's role and outlining ways for addressing this in thought and practice.[1] Concerned with the subjectivity of archival

[1] See, for example, Michelle Light and Tom Hyry, "Colophons and Annotations: New Directions for the Finding Aid," *American Archivist* 65 (Fall/Winter 2002): 216–30; Elizabeth Yakel, "Archival Representation," *Archival Science* 3 (2003): 1–25; Heather MacNeil, "Picking Our Text: Archival Description, Authenticity, and the Archivist as Editor," *American Archivist* 68 (Fall/Winter 2005): 264–78.

M A K I N G   t h e   L e a p   f r o m   P a r t s   t o   W h o l e :
E v i d e n c e   a n d   I n f e r e n c e   i n   A r c h i v a l
A r r a n g e m e n t   a n d   D e s c r i p t i o n

processing, these discussions go so far as to characterize arrangement and description as interpretive and representative by nature, but they do not elaborate on the particular acts of interpretation and representation involved. To do so would involve placing the archivist's own understanding at the center of the discussion and considering not just what information one needs to interpret and represent the records effectively, but, more specifically, how one uses the information on hand to arrive at an understanding of the context(s) of the records and to support the decision making involved in arranging and describing them. It would also involve clarifying and elaborating on the particular acts that constitute each archivist's individual processes of analysis and interpretation and that likewise constitute the archivist as a subject and active agent in these processes.

This article elaborates on some of the particular acts of interpretation and representation involved in archival arrangement and description, and it explores the dynamics of the interaction(s) between the archivist and the records. In particular, this article examines the analytical process in arrangement and description and considers how the archivist arrives at an understanding of the records sufficient for contextualizing and providing intellectual access to them. In doing so, the goal is to characterize the overall process of analysis, rather than to outline particular steps of the process or methods for carrying it out. Building upon certain themes in the literature on archival arrangement, this discussion characterizes the process of intellectual arrangement as one of identifying and/or creating the contextual relationships of a body of records. Drawing upon cross-disciplinary ideas about the analysis of sources, this discussion highlights certain common factors in the process, such as the historical standpoint of the archivist, the use of evidence, and the role of inference. This article also suggests ways for individual archivists, archival institutions, and the archival profession to account for the speculative nature of the analytical process in arrangement and description and the active role of the archivist in shaping the records.

The Analytical Process in Archival Arrangement

Arrangement is, broadly speaking, "the process of organizing materials with respect to their provenance and original order, to protect their context and to achieve physical or intellectual control over the materials."[2] Organizing material with respect to provenance means identifying and bringing together material from the same creator or source, which protects the administrative and

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[2] Richard Pearce-Moses, *A Glossary of Archival and Records Terminology*, Society of American Archivists, available at http://www.archivists.org/glossary/term_details.asp?DefinitionKey=294, accessed 29 July 2008) s.v. "arrangement."

provenancial contexts in which the records were created, maintained, transmitted, and used,[3] and establishes control at the collection and/or series level. Organizing material with respect to original order means identifying and preserving the filing structures or groupings of material within a collection, which protects the procedural and documentary contexts in which the records were created, maintained, transmitted, and used,[4] and establishes control at the series, file, and/or item level.

In distinguishing between these two types of arrangement, Fredric Miller associates "arrangement by provenance" with intellectual arrangement and "arrangement by filing structure" with physical arrangement.[5] This distinction between what amounts to external and internal arrangement goes some way toward clarifying the various approaches associated with the different types of arrangement and levels of control. For instance, approaches to external arrangement include those based on the fonds, record group, or series for organizational records, and those based on the fonds or collection for personal papers. Approaches to internal arrangement, while largely determined by the extent of overall processing, could include maintaining material in received order, preserving or reconstituting original order, and/or imposing an order deemed meaningful. Yet, Miller's distinction between intellectual and physical arrangement misconstrues the intellectual work involved in arranging at and below the series level, and it overlooks the common factors at play in any process of establishing physical and intellectual control, regardless of the level to which it is carried out.

Terry Eastwood provides an alternative way of thinking about the different types of arrangement by making a distinction between "the external structure of provenance" and "the internal structure of provenance." Rather than suggesting that one type has solely to do with intellectual arrangement and the other with physical arrangement, he focuses on the intellectual aspects of arrangement as it relates to the external and internal structure of a body of records, arguing that "[a]rchival arrangement is essentially a process of identifying relationships, not a process of physically ordering and storing documents."[6] While Miller makes a similar point about arrangement involving the

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[3] *Juridical-administrative context* is defined as "the legal and organizational system in which the creating body belongs" and *provenancial context* is defined as "the creating body, its mandate, structure, and functions." *The InterPARES Glossary* (Vancouver: University of British Columbia, 2002), available at http://www.interpares.org/documents/InterPARES%20Glossary%202002-1.pdf, accessed 17 November 2007.

[4] *Procedural context* is defined as "the business process in the course of which the record is created" and *documentary context* is defined as "the archival fonds to which a record belongs, and its internal structure." *InterPARES Glossary.*

[5] Fredric Miller, *Arranging and Describing Archives and Manuscripts* (Chicago: Society of American Archivists, 1990), 60.

[6] Terry Eastwood, "Putting the Parts of the Whole Together: Systematic Arrangement of Archives," *Archivaria* 50 (Fall 2000): 93–94.

identification of "relationships among sets of records and between records and their creators,"[7] he seems to suggest that this activity is merely a means of carrying out organization. Eastwood, on the other hand, characterizes the identification of external and internal relationships as fundamental to what an archivist does when organizing material within a collection, whether it is comprised of organizational records or personal papers.

Eastwood's characterization provides a different set of terms for clarifying what any approach to arrangement or level of control entails. In identifying the external and internal relationships of a body of records and communicating them to users through arrangement and description, the archivist is both protecting and representing the context of the records. What's more, identifying the component parts of a collection or identifying the creator(s) of a particular series of records amounts to identifying and/or creating the relationships of "the external structure of provenance"—in other words, the relationships that place the records as a whole in their specific sociocultural, administrative, and provenancial contexts. Likewise, identifying and preserving the file structure of a series of records or identifying another meaningful order for a group of records amounts to identifying and/or creating the relationships of "the internal structure of provenance"—in other words, the relationships that place the records in their specific procedural, documentary, and technological contexts. This characterization ultimately clarifies the nature and impact of intellectual arrangement at all levels of control, while foregrounding the analysis and decision making involved in the process and bringing into greater relief the role of the archivist.

To elaborate on these aspects of practice, as individual practitioners and as a profession, we need to address the following questions: 1) What does the archivist analyze when determining the intellectual arrangement of a body of records? 2) What serves as the basis for such decision making? In answer to the first question, we could say that the archivist analyzes the records themselves and their contexts of creation, maintenance, transmittal, and use; and/or analyzes the relationships between the records and the creator, and between and among the records. In answer to the second question, we could say that the archivist's understanding of the content, context, and structure of the records and/or identification of the external and internal relationships of the records serve as the basis for the decisions about how to arrange a body of records intellectually.[8] But to account for the nature and impact of intellectual arrangement, we also need to say something about *how* the archivist arrives at an understanding of the content, context, and structure of the records. And we also need to address the question

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[7] Miller, *Arranging and Describing*, 57.

[8] The local needs and practices of an institution also form part of the basis for decision making. However, I am choosing not to focus on these, which are bound to be different in each case, and am focusing instead on commonalities in the analytical process at a broad level.

of whether the relationships of external and internal structure necessarily exist beforehand, awaiting interpretation and representation by the archivist, or whether the archivist in effect creates these relationships in the act of interpreting and representing them through arrangement and description.

Addressing these matters will shed important light on the dynamic interactions between the archivist and the records in the course of arrangement and description and, in doing so, will enable us as individual practioners and as a profession to account better for the speculative nature of the process and the active role of the archivist. Addressing these matters will also lead to reconsidering the role of archival principles in the analytical process of intellectual arrangement. Are the principles of provenance and respect for original order guidelines for what to analyze or identify when arranging a body of records? Or do they serve as a conceptual framework for understanding and creating the contextual relationships that give a body of records its meaning and significance?

Evidence and Inference in Intellectual Arrangement

In discussing the ways scholars from different disciplines draw conclusions about events in the past, David Schum highlights three common factors: 1) the historical standpoint of the scholar, 2) the necessity of using evidence, and 3) the role of inference in the process. The scholar's historical standpoint comes from seeking to understand or draw conclusions about an event that may or may not have happened in the past. Given this, the scholar has no firsthand knowledge of the event and therefore must rely on existing sources as evidence. Even though the content and substance of evidence will be different for each scholar and even though each scholar will have different methods for assessing and evaluating evidentiary sources depending on the discipline, the process of using evidence involves making inferences about what is not known from what is known.[9] The factors that Schum highlights are also at play in the analytical processes associated with intellectual arrangement. By taking a closer look at these factors as they relate to the interpretive and representative acts of arrangement, it becomes possible to better understand, and eventually account for, what the process of analysis actually entails, not just in terms of what sources and what information is used, but in terms of *how* we as archivists use those sources and the information gleaned from them and *why* we must use them in the particular way that we do.

In seeking to understand the content, context, and structure of a particular body of records, the archivist is in part seeking to understand and draw conclusions about certain past events—namely, the previous acts of records creation,

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[9] David Schum, "Evidence and Inferences about Past Events: An Overview of Six Case Studies," in *Evidence and Inference in History and Law: Interdisciplinary Dialogues*, ed. William Twining and Iain Hampsher-Monk (Evanston, Ill.: Northwestern University Press, 2003), 9–62.

maintenance, transmittal, and use as carried out by the creator or previous custodian(s). The particular elements relating to these past events of most concern to the processing archivist include (but are not limited to) how and why the creator created, accumulated, used, and maintained the records; how the creator or custodian transmitted the records across space and time; how the records relate to the various frameworks of action in which they participated over time; how the records relate to the particular functions and activities of the creator; how the role of the records changed and evolved over time; and so on. While the previous acts of records creation, maintenance, transmittal, and use can in no way be characterized as a fixed occurrence, or even set of occurrences, pinpointed in a singular place and time, these initial acts, as carried out by the creator or prior custodian(s), can be characterized as events that have, by and large, taken place in the past.[10] As such, the archivist is removed from these events by both time and space, and can therefore have no firsthand knowledge of the acts of records making and keeping that took place prior to archival custody.[11] There are, of course, any number of exceptions to this, such as archivists who carry out records management functions within an organization or archivists who are involved in developing and implementing electronic recordkeeping systems, both of whom might participate to some extent in the initial acts of records creation, maintenance, transmittal, and use. But, for the vast majority of archivists charged with creating physical and intellectual access to records, especially those working in collecting repositories, this work is typically done at several removes from these events. The historical standpoint of the archivist[12] is an unavoidable factor in any archival process and especially in arrangement and description. It defines the nature of the archivist's interaction with the records at hand and the limits of what can be known about them. As archivists we are only too aware of the limitations imposed on us by lack of time and resources, but are we also equally aware of the limitations imposed by our position vis-à-vis the material with which we work?

[10] I am not discounting the archival context of the records, or what could be called the event(s) of archival intervention, which of course plays a large part in the evolving meaning and use of the records. I am limiting my comments here to the past events that an archivist seeks to understand in analyzing the records at hand, but my discussion as a whole could be seen as pertaining to the archival context of records, elaborating on certain aspects of the archivist's interaction with the records in the course of arrangement and description.

[11] Depending on how long the archival or manuscript collection has been in archival custody before processing, the archivist could also lack firsthand knowledge about the previous acts of archival intervention. And, without appropriate documentation of acquisition and accessioning procedures, the archivist could also lack even secondhand knowledge about such past events.

[12] While the issue of standpoint in general has relevance to this discussion, I am employing Schum's notion of historical standpoint to specifically highlight the spatiotemporal dimension of the archivist's position in relation to the records in question.

Having no firsthand knowledge of the events that comprise the various contexts of the records, the archivist must rely upon existing sources, and, moreover, must put them to particular use so that they shed light on what knowledge is needed to carry out the work of intellectual arrangement and to make informed decisions about how best to place and preserve records in context. In this way, individual archivists come to be seen as users of the records on which they work and not just outside parties.[13] The archivist's use of records, and other existing sources, isn't a passive process of just reading the sources for their informational content; rather, it is an active process of using the sources *as evidence*—that is, as the basis for inferring facts about past events. Through this active process, the archivist generates an understanding of the various and variegated contexts of the records, which ultimately provides the grounds for making decisions about how to arrange records intellectually and how to communicate this structure through description.

As archivists we are not unfamiliar with the notion of evidence—particularly as it relates to our ideas about the nature, use, and value of records[14]—but we have never gone so far as to characterize any particular archival function as necessitating the use of evidence. Yet, as Schum argues, "evidence and inference are of concern to any discipline and practical activity in which conclusions are reached and decisions are made on the basis of incomplete information."[15] Also of concern is the historical standpoint of the individual who seeks to draw inferences concerning "events that may or may not have happened in the past."[16] Whether we realize it or not, these concerns are everyday realities for archivists charged with making decisions about the arrangement and description of a given archival or manuscript collection on the basis of an analysis of its content, context, and structure. Our historical standpoint is largely the reason *why* we archivists must use existing sources as evidence, and inference inevitably plays a key role in *how* we use those evidentiary sources and the information gleaned from them.

[13] Current manuals for writing history often address many of the issues related to using records that I am trying to raise here. For instance, one such manual maintains that existing sources are the basis of our knowledge about the past and that useful knowledge can be gotten from a critical engagement with the sources. At the same time, there remains a degree of uncertainty in our knowledge about the past, due to "the stubborn opacity of sources" as well as to "our inherent inability to get beyond the sources themselves." Martha Howell and Walter Prevenier, *From Reliable Resources: An Introduction of Historical Methods* (Ithaca, N.Y.: Cornell University Press, 2001), 3. This and other manuals usually go on to discuss methods for using sources, which typically involve establishing grounds for use and for interpreting or explaining the sources (that is, for connecting them into a story about the past). It remains to be explored whether any particular historical methods could be brought to bear upon methods for archival analysis.

[14] Elsewhere, I have discussed ideas of evidence in archival discourse as part of outlining an archival concept of evidence as a relation between record and event and considering some of the possible applications and implications of such a concept for archival practice. See Jennifer Meehan, "Towards an Archival Concept of Evidence," *Archivaria* 61 (Spring 2006): 127–46.

[15] Schum discussed in Twining and Hampsher-Monk, "Introduction," 5.

[16] Schum, "Evidence and Inferences about Past Events," 11.

By examining archival analysis, in effect by deconstructing the overall process into its component parts, the nature of the process and the role of inference come into greater relief. Though many different steps—some traceable, some not—comprise the overall process of archival analysis, the sum total of these can usefully be grouped into two parts. The first part of the process involves the *gathering* of particular contextual information, and the second part involves *using* that information to generate a particular understanding of the various contexts of the records. This distinction between the gathering and use of information in archival analysis is by no means hard and fast, nor is it meant to be, yet it is still an important one to make.[17] While an understanding of context is based upon the information gleaned from existing sources (the records themselves and other documentation), such understanding comprises a whole that is greater than the sum of its parts. Archivists actively generate this whole by putting the gathered parts to particular use. What follows is a broad outline of the component parts of archival analysis with some examples to illustrate the more general points of the discussion.

Gathering Contextual Information

As evidentiary sources, the records within and the external documentation about any given collection contain certain parts (contextual information), which serve as the basis for inferring a whole (the contexts of the records).[18] Archivists go about gathering this contextual information by, in essence, reading the existing sources—which could include oral sources, such as interviews with donors, as well as written ones—for their informational content, taking note of key elements that point to the larger picture of how the records were created, maintained, transmitted, and used over time. Reading, as a practical activity, is fundamental to so much of what archivists do that not surprisingly the notion is often invoked in archival literature to describe certain aspects of archival practice. For instance, Carolyn Heald suggests that good archivists read, or deconstruct, records as much for their context as for their content.[19] While Heald's notion of

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[17] This distinction between the gathering and use of information in archival analysis first came to my attention when training and supervising graduate student assistants in the processing of manuscript collections. While the students were often more than capable of gathering adequate contextual information about the records and even devising appropriate titles for files, they were not always as equipped to use that information in arranging files into meaningful groupings or describing the parts of the collection and their relation to the whole. Making this distinction serves not only to clarify individual practice, but also to underscore the components of processing that will always require professional expertise no matter how technical some of the work is or to what degree the profession modifies the guidelines for carrying out such work.

[18] In this discussion, I am using the term *contextual information* to refer to the pieces of data or information (such as names, dates, activities, and the like) that point to or tell the archivist something about the contexts of records, but do not themselves comprise those contexts.

[19] Carolyn Heald, "Is There Room for Archives in the Postmodern World?," *American Archivist* 59 (1996): 93.

"reading for context" aptly describes certain interactions between the archivist and the records, it glosses over the particular nature of those interactions. Reading, as a metaphor, could potentially say much about the nature of archival analysis in arrangement and description.[20]

The archivist reads the records and external documentation about the records and about the creator to gather available facts[21] pertinent to understanding the context of a given collection. The top-down mode of analysis typically involves reading documentation by and about the creator. The archivist might read mandates, annual reports, organizational charts, and the like, or CVs, reference works, and printed material to take note of functions, activities, dates, names, and places. In this instance, the archivist seeks to gather any available facts that would provide specific clues about the external relationships, or provenance, of a body of records. Likewise, the bottom-up mode of analysis typically involves reading the records themselves, individually and collectively, to take note of names, dates, record formats, and any existing organization, seeking to gather any available facts that provide specific clues about the internal relationships, or original order, of a body of records. Alternatively, these same facts could be gathered from transfer documents, acquisition records, and file plans.

For instance, in analyzing the collection of an artist's papers that also consists of scattered papers created by his wife and his father-in-law, it is necessary to consult external sources such as the deed(s) of gift and accession records to gather particular information about who donated the papers and when (*names*[22] and *dates*), how the papers were donated (whether all at once to one repository, over time in different accessions to one repository, in different accessions to different repositories, and/or in later transfers from one repository to another), what parts of the collection were donated at which time (*descriptions of material* and *dates*), and who the various creators and custodians are or were (*names* and *dates*). It is also necessary to consult the records themselves to gather specific information about the creator of particular records or groupings of records within the collection (*names, dates, roles,* and *activities*) as well as record types (*genres* and *forms*). This contextual information is then used to trace the external structure or provenancial relationships of the collection(s).

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[20] The Canadian writer Alberto Manguel suggests that reading constitutes the very processes by which we come to understand the world and ourselves within the world, that it determines our interaction with and our interpretation of the objects, events, and places of the world, and that it establishes our knowledge of the world, giving shape to ideas and forming systems of ideas. See Alberto Manguel, *A History of Reading* (New York: Viking, 1996).

[21] Here, and in the rest of the discussion, I use the term *fact* not as a "verifiable, indisputable object of knowledge" (Howell and Prevenier, *From Reliable Resources,* 148), but in its broader sense of "an actual or alleged event or circumstance" (*Black's Law Dictionary,* 8th ed., s.v. "fact").

[22] The italics in the following discussion are meant to indicate the potentially available facts to be gathered by the archivist.

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The situation is much more complex when analyzing the records of a government agency that has undergone changes in name and function and/or organizational restructuring over the years. The records themselves are not consulted as much as external sources—the specific pieces of legislation or other official documents that established, modified, or abolished the agency, as well as organizational charts, mandates, agency histories, and so on—for information that can be gleaned about the authority or sphere of functional responsibility of the agency over time (*functions*), the superior entity to whom the agency reports, and any and all predecessor and/or successor agencies. Also gathered are the key facts of administration (*basic operations* and *business and recordkeeping procedures*) and of administrative history (*events, dates, parties involved*).[23] This contextual information is then used to trace the complicated contours of creatorship with an eye toward establishing a linkage between the creator and the physical records, which, as Terry Cook argues, is not necessarily a one-to-one relationship.[24]

Analyzing the papers of a critic and writer to trace the internal structure of the collection requires study of external sources, such as newspaper and magazine articles and published works, if any, by or about the creator, and the records themselves—such as biographical material, including resumes and CVs, and correspondence—to gather information about specific research and writing projects, staff positions and/or freelance jobs, funding received from grants and other agencies, and related professional activities. The records are also consulted for any clues about their existing organization (*file titles, order of files, dates, genres,* and *forms*). If it so happens that the creator initiated a research and writing project under the auspices of a particular funding agency but never completed it, the archivist consults external and internal sources for information about various aspects of the project (including *names* and *roles of the various persons involved,* as well as *dates of involvement*).[25]

Though the modes and the substance of archival analysis may vary depending on the records-creating and archives-keeping environments, the nature of the archivist's process is going to be much the same. The archivist relies on and uses existing sources as evidence in the course of archival analysis. The archivist reads the records and/or external documentation to gather whatever facts, in the form of contextual information, are available. Having intellectually assembled what are the existing parts, the archivist then looks to create or arrive at some sense of a whole.

[23] Eastwood, "Putting the Parts of the Whole Together," 105–14.

[24] Terry Cook, "The Concept of the Archival Fonds: Theory, Description, and Provenance in the Post-Custodial Era," in *The Archival Fonds: From Theory to Practice,* ed. Terry Eastwood (Ottawa: Bureau of Canadian Archivists, 1992), 52–53.

[25] The extent of analysis depends, of course, on the level to which a collection is being processed. To elaborate on some of the steps involved in the process, I am describing a more detailed level of analysis with regard to the internal structure of a collection. However, I am not suggesting that such a level is necessarily required in all cases.

The Use of Contextual Information

After gathering contextual information, the archivist uses these available facts to draw conclusions about other facts that are not and cannot be directly perceived or observed, namely the contexts of records creation, maintenance, transmittal, and use. These *other facts* are not themselves available or even contained within the records and external documentation. Therefore, an archivist cannot arrive at them by merely identifying what facts are available and therefore knowable; rather, these *other facts* must be inferred from the available facts.

As archivists we must reason about the records in this way not only because we are removed from past events by both space and time, but because the information *about* these events obtained from existing sources is always only partial, and therefore incomplete. Gathering contextual information is not sufficient to understand the various contexts of any given collection. To arrive at such an understanding requires the archivist to make a leap of sorts, an inferential leap from what is available in the present texts (the contextual information) to some past event (the specific activity that gave rise to and/or subsequently shaped the records). In making this leap, the archivist in effect creates the external and internal relationships of a body of records. Rather than merely identifying these relationships on the basis of gathered information, the archivist for all intents and purposes constructs these relationships on the basis of the inferences drawn from the gathered information.[26]

For instance, the archivist uses what information can be gleaned about the records and the creator to infer how the existing records relate to the various past activities of the creator, how the records were initially created, how they were subsequently used over time, and so on. On the basis of these sorts of inferences, the archivist draws conclusions about the sociocultural, administrative, and provenancial contexts of the collection, and creates some sense of the external relationships of the records. Likewise, the archivist uses what information can be gleaned about the records and their organization to infer how the records (or groupings of records) relate to one another and how the ordering of the records and files relates to the development of the activity that gave rise to them and to any subsequent activities in which they participated. On the basis of these sorts of inferences, the archivist draws conclusions about the procedural, documentary, and technological contexts of the collection and creates some sense of the internal relationships of the records.

In the example of the artist's papers, the archivist uses the gathered information about the different aspects of provenance (the various creators represented in the collection, the various custodians and donors of the collection)

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[26] This aspect of creating the external and internal relationships of a body of records is perhaps easier to recognize in instances when the archivist is imposing an order, rather than preserving one. However, given the speculative nature of the analytical process and the incomplete information available, identifying and preserving an existing or original order still requires the archivist to actively interpret and represent, rather than passively discover and present, what may already exist, and therefore serves, in effect, to create the external and internal relationships of a body of records.

to infer the particular nature of the relationship between the different creators, not just in terms of familial connection, and the relationship of each creator to the collection(s) as a whole. Based on these sorts of inferences, the archivist draws conclusions about which individual—the artist, his wife, or his father-in-law—created which part of the collection, and what the presence of each creator's papers may or may not signify for the overall collection. If it turns out that the artist's wife is an artist in her own right and that other portions of her papers already comprise another collection distinct from the artist's own, and if the archivist determines that her relationship to the artist's collection was more custodial than anything else, then the archivist is likely to decide to transfer the portion of her papers among the artist's collection to her own. Likewise, if the archivist determines that there is only a familial connection between the artist and his father-in-law (and not, for instance, one of mentoring), then the archivist may decide to transfer the father-in-law's papers to his daughter's collection (the artist's wife, who is also an artist in her own right).

In the example of the government agency's records, the archivist uses the gathered information about the operation and administration of the unit to infer the nature of its position in the hierarchical structure and its relationships to other creating entities within the organization, as well as what impact organizational change has had upon recordkeeping. Based on these inferences, the archivist draws conclusions concerning the role of each entity in the creation, maintenance, transmittal, and use of the records over time to determine which series of records belongs to which creator or, more likely, the different creators of a particular series of records. From these conclusions, the archivist arrives at an understanding or the best likely interpretation of the external relationships of a body of records and establishes the one-to-one, one-to-many, or many-to-many relationships between records and creator(s) that are so crucial for representing the records in all their complexity to users.

In the example of the critic and writer's papers, the archivist uses the gathered information about the way the creator organized the records to infer what, if any, natural groupings already exist and what such groupings may signify. The archivist determines whether the existing organization is the creator's own or whether a later custodian or a previous archivist has subsequently imposed it, and what each possibility might mean for the collection as a whole. If such record groupings are only partial—as is most often the case, when they exist at all—the archivist goes further and uses the gathered information about the different projects and activities of the critic and writer to infer the nature and scope of each, as well as what records were created and how the creator used them in the course of activity. These inferences lead to conclusions about which records or files of records relate to each activity, enabling the archivist to bring these related files together in an arrangement that best reflects the functions and roles of the creator if this arrangement is deemed most appropriate.

The process of inferring one thing from another and drawing meaningful conclusions about something of which the archivist has no direct knowledge is anything but conclusive. And the results of this process are anything but certain. A fair amount of speculation is inevitable in archival analysis undertaken as part of arrangement and description, as well as in that undertaken as part of other archival functions, such as appraisal for selection and acquisition. Tom Nesmith writes about the role of speculation in the development of archival theory, and much of what he says also applies to the analytical work involved in archival practice. According to Nesmith, speculation is "the key means of helping us to arrive at what we know." He continues

> [W]hat we know is . . . rarely free of important speculative elements . . . Our knowledge will forever be haunted by what we do not perceive and articulate, and what we cannot prove and know . . . we cannot connect the pieces of knowledge we have into larger patterns of meaning . . . without recourse to the threads of speculation. And here speculation includes reasoned inferences about the unknown or unknowable from what we may know.[27]

For the processing archivist, speculation is key to inferring what may be known about context from what is known in the form of gathered contextual information. In other words, it is a key means of making the leap from the parts available—the bits and pieces of information gleaned from the records and other documentation—to an imagined whole—an understanding of the contexts of records creation, maintenance, transmittal, and use. This in turn lays the groundwork for transforming the physical parts in hand—rarely, if ever, "the whole of the records"—into a meaningful, if imaginary, whole—a collection or fonds, organized and represented in a finding aid.

While much of the work involved in arrangement and description is open to the interpretation of the individual practitioner, this work is nonetheless carried out within a particular interpretive framework. The archivist negotiates the leap from what is known to what needs to be known by asking particular questions of the sources available. The answers arrived at—the inferences made—are only as sound as the questions asked. The archival concepts of provenance and original order act less as guidelines to be followed in arrangement and description and more as a conceptual framework for understanding a body of records, highlighting the knowledge necessary to place and preserve records in context.[28] Broadly speaking, the important questions to ask are

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[27] Tom Nesmith, "Still Fuzzy, But More Accurate: Some Thoughts on the 'Ghosts' of Archival Theory," *Archivaria* 47 (Spring 1999): 139–40.

[28] Elsewhere, I have explored the idea of original order as a conceptual framework for analyzing and understanding personal records. Jennifer Meehan, " 'Everything in Its Right Place': Re-thinking the Idea of Original Order with Regard to Personal Records," paper presented at the Third International Conference on the History of Records and Archives, Boston, Massachusetts, 28 September 2007.

- Who created the records, how and why?
- What specific function or activity do the records relate to?
- What specific procedure or process gave rise to them?
- How were the records maintained by the creator and/or custodian?
- How were they used and transmitted over space and time?
- What are the different record formats?
- What functions did the different record formats each serve in the framework of action within which they participated?

These general questions in turn lead to a host of more specific questions. This sort of "cross-examination"[29] is just business as usual for many archivists, whether identifying records for selection or acquisition, or identifying record groupings within a particular archival or manuscript collection. In terms of this discussion, the questioning of sources is crucial for individual archivists to guide their inferential leap from gathered bits and pieces of contextual information to as holistic an understanding of context as possible. Making the process of cross-examination more explicit also makes it and the overall process of archival analysis more directed and focused. While doing so will not produce more certain results, it can potentially lead to a greater degree of consistency in analysis and more accountable decision making in arrangement and description.

The limitations of the sources available and of an archivist's ability to know anything with much certainty about the past events of record making and keeping render it impossible to configure archival analysis in arrangement and description as anything other than various ongoing, often overlapping, and ultimately open-ended processes of reasoning about records. Whether carrying out a relatively simple analysis to determine the different creators represented in a collection of personal papers or a more complex analysis to determine the different offices involved in creating a series of records and their relationships to each other, the archivist's process of reasoning invariably includes, to one extent or another, gathering contextual information from existing sources, making inferences from that information, and drawing conclusions about context(s) on the basis of those inferences. This configuration, though rather broad, renders a more accurate account of the archivist's process of *making sense* of the records en route to contextualizing them, preserving their integrity, and ultimately rendering them intelligible to users.

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[29] The idea of "cross-examination" of sources comes from Marc Bloch. He writes that "[cross-examination] is the prime necessity of well-conducted historical research" since the sources "will speak only when they are properly questioned." He goes on to say: "[E]very historical research supposes that the inquiry has a direction at the very first step. In the beginning, there must be the guiding spirit. Mere passive observation, even supposing such a thing were possible, has never contributed anything productive to science." Marc Bloch, *The Historian's Craft* (New York: Vintage Books, 1953), 64–65. I believe much of this applies to what I am trying to say here about analysis in arrangement and description and the role of archival principles.

E v i d e n c e   a n d   I n f e r e n c e   i n   A r c h i v a l   D e s c r i p t i o n

Ensuring accountable practice necessarily involves being able to render a complete and accurate account of actions taken and decisions made. This suggests that as archivists we can begin to account for the inferential and speculative nature of archival analysis in intellectual arrangement through the narratives, or narrative accounts, we construct about a body of records as part of archival description. The following section briefly discusses some possible ways to account for our actions and decisions—and our impact upon the records—on an individual, institutional or departmental, and professional level.

Individual archivists must of necessity work within certain constraints imposed at the institutional or departmental level, such as specific policies and procedures for describing collections in finding aids and catalog records and for implementing descriptive standards. To a large extent, these policies determine the amount and type of information presented about a collection. Even within these constraints, however, individual archivists can address the speculative nature of their reasoning and/or indicate particular gaps in their knowledge through the use of language in the narrative sections of a finding aid or catalog record, particularly in the biographical or historical note and the scope and content note.[30] For instance, Heather MacNeil cites an approach to writing historical narratives advocated by Carlo Ginzburg and relates it to archival description, recommending the use of conditional phrases such as "perhaps" and "may have been" to qualify statements that would otherwise seem conclusive.[31] The effect of using such language, a minor thing in and of itself, would be to leave the representation of the collection open to other possible interpretations or imaginings.

The institution or department can decide to capture and/or present other types of information about the processing of the collection beyond the merely administrative aspects, which may or may not already be documented to a certain extent in the processing information note of the finding aid.[32] Such information could include details about the analytical work done during processing, including the rationale for a particular arrangement, the reasoning behind decisions, and the sources of information used in reaching a particular decision. This sort of information would go a long way toward documenting the archival context of the records. And, if made available to the public, this information would enable users to make their own decisions about the possible meaning or order(s) of a particular collection. To account for the historical standpoint of the archivist, the decision can be made to capture and/or present information

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[30] These notes correspond to the <bioghist> and <scopecontent> elements of the EAD finding aid and the 545 and 520 fields of the MARC record and are required elements in DACS, RAD, and ISAD(G).

[31] MacNeil, "Picking Our Text," 273–74.

[32] This note corresponds to the <processinfo> element of the EAD finding aid. Tellingly, there is currently no corresponding element in DACS, RAD, or ISAD(G), nor is a field in MARC utilized in quite the same way.

Making the Leap from Parts to Whole:
Evidence and Inference in Archival
Arrangement and Description

about the archivist who has processed the collection.[33] Michelle Light and Tom Hyry suggest one viable means for presenting such crucial information—about both the process and the processor(s)—to users: adding the element of a colophon to the finding aid. They further underscore the need for capturing and presenting this information: "While some of the information may seem obvious, routine, and even unimportant to archivists, it does give researchers potentially important information that has been obscured by the intervention of the archival processes."[34] Individual archivists may recognize the need to be more aware of their own technical and mental processes and to be more explicit in documenting what they do and why, but the decision to implement any changes in response to these concerns will typically be made at a higher level. Even though it will often fall to managers and supervisors to execute changes in policies and procedures, it is always possible for archivists to introduce or at least propose such changes from the ground up.

To a large extent, the profession as a whole guides individuals and institutions in their actions. On a professional level, as archivists we can address the issues raised here by expanding our shared body of knowledge to include an account of the use of evidence and the role of inference in archival arrangement and description. Furthermore, as archivists we can revisit and rethink our tools (the ones we use and the ones we create) in light of these concerns and issues. Evidence and inference effectively become a part of the collective account of what goes on between the archivist and the records during arrangement and description when archivists explicitly engage these, and similar, realities in the archival literature. With a broader perspective on the archivist's process in arrangement and description, the profession as a whole can begin to explore different ways of thinking about and implementing the principles of provenance and respect for original order.

If, as I suggest, a key component of archival analysis is questioning available sources, then individual practitioners would be served well if the profession addressed specific methods for using sources and formulating appropriate questions to guide analysis.[35] Moreover, focusing on the archivist's process of

[33] According to David Schum, "[a] declaration of standpoint involves answering three questions: (a) Who am I? (b) At what stage in what process am I? and (c) What am I trying to do?" Answering question (a) involves "mak[ing] clear the perspective from which [the scholar] generated the evidence and drew conclusions from it." Answering question (b) involves "be[ing] specific about any temporal or contextual factors that have influenced his or her perspective in the inference being reported." And answering question (c) involves "be[ing] forthcoming about what objectives are being entertained throughout the life cycle of the inference task being described." Schum, "Evidence and Inferences about Past Events," 35–36.

[34] Light and Hyry, "Colophons and Annotations," 224.

[35] To this end, some of the rules outlined by Terry Eastwood in his article on the systematic arrangement of archives could provide a useful framework for formulating such questions with regard to organizational records. Eastwood, "Putting the Parts of the Whole Together," 99–115. However, nothing similar exists in the literature for the analysis of personal papers. An important first step in this direction would seem to be developing a broad set of rules or principled views for personal papers akin to Eastwood's, not as guidelines to be followed but as an analytical framework for understanding personal papers according to how they were created and used and not just according to their format or supposed research value.

analysis provides not only for a more accurate account of archival activities, but also for a more holistic approach to considering the full range of archival material and functions. At the level of analysis where archivists must rely on existing sources in order to draw conclusions about certain facts of which we have no firsthand knowledge, the process is remarkably similar for both organizational records and personal papers, whether in the course of selecting material for retention or devising an arrangement scheme, and whether carried out in an institutional archives or a collecting repository. A better understanding of the commonalities across archival functions would enable archivists to make better use of the tools (methods, standards, best practices) at hand and to devise additional tools that would enhance and streamline our work with different materials and in different settings.

Finally, highlighting the archivist's process of analysis and including evidence and inference in the collective account of archival arrangement and description ultimately forces the profession to rethink the tools we as archivists create as the end results or products of our efforts. The finding aid, for example, presents as a cohesive whole something (a body of records) that is more often than not comprised of parts and fragments, and that is moreover only partially understood by the processing archivist. As presently conceived and created across the profession, the finding aid offers only a partial representation of a given collection, one that doesn't properly allow for the lacunae in the collection and in the archivist's understanding of the collection. In addition to some of the different ways of thinking about archival description and new elements for the finding aid suggested by other archival writers,[36] using citations or footnotes in the finding aid could be another way of addressing the particular concerns raised by the incompleteness of available sources, especially the incompleteness of the particular collection being arranged and described, and the inconclusiveness of the archivist's own process.[37] Citations or footnotes, employed throughout the narrative sections as well as the contents list of finding aids, could be used to

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[36] For instance, Elizabeth Yakel puts forth the notion of "archival representation" as a more apt term for the processes of arrangement and description, one that, she argues, "more precisely captures the actual work of the archivist in (re)ordering, interpreting, creating surrogates, and designing architectures for representational systems that contain those surrogates to stand in for or represent actual archival materials." Yakel, "Archival Representation," 2. In addition to the colophon, Light and Hyry also suggest adding annotations to the finding aid. Such elements would serve to acknowledge the role of the archivist "in shaping a collection and presenting a specific view of it to patrons" and would allow for the inclusion of other possible views. Light and Hyry, "Colophons and Annotations," 224.

[37] Of the footnote, Anthony Grafton writes: "In documenting the thought and research that underpin the narrative above them, footnotes prove that it is a historically contingent product, dependent on the forms of research, opportunities, and states of particular questions that existed when the historian went to work. Like an engineer's diagram of a splendid building, the footnote reveals the occasionally crude braces, the unavoidable weak points, and the hidden stresses that an elevation of the façade would conceal." Anthony Grafton, *The Footnote: A Curious History* (Cambridge, Mass.: Harvard University Press, 1997), 23. I see the footnote as possibly serving much the same function in the finding aid and across archival description as a whole.

M A K I N G   t h e   L e a p   f r o m   P a r t s   t o   W h o l e :
E v i d e n c e   a n d   I n f e r e n c e   i n   A r c h i v a l
A r r a n g e m e n t   a n d   D e s c r i p t i o n

explain the reasoning behind a particular arrangement decision; for instance, why a range of files is part of one series when it could have just as likely been part of another. They could also be employed to cite the sources used in support of a particular decision, whether specific items in the collection or outside sources. While it would be neither feasible nor desirable to provide a footnote for each and every decision made in interpreting and representing a given collection, footnotes could be used most effectively to document particularly complicated or problematic decisions resulting from lacking or conflicting information, or from a greater degree of ambiguity in the process. By including this element or one with a similar function, the finding aid would serve not only as an access tool, but would also document an important component of the *archival context* of the collection, namely what was done to the collection in the hands of the archivist as part of preserving it, making it accessible, and rendering it intelligible to users. In this way, the finding aid might provide a more complete, but not necessarily more seamless, representation of a collection, and it could become an important tool (one of many) for achieving greater accountability in archival practice.

C o n c l u s i o n

The overall process of archival arrangement and description creates a cohesive whole from disparate parts. It produces a single conceptual and physical entity—a processed collection—from different groups or accessions of records in various states of (in)completeness and (dis)array. The analytical process in arrangement and description likewise transforms disparate parts (the bits and pieces of information available from existing sources) into a whole (an understanding of content, context, and structure) that is greater than the sum of its parts. Making the leap from parts to whole is perhaps the biggest act of interpretation and representation involved in arranging and describing a body of records, since neither "whole"—the processed collection or the archivist's understanding of it—exists apart from the processes geared toward rendering it accessible and intelligible. Archivists need to acknowledge and address the constructive nature of our processes, as well as the constructed nature of both the intended products and the unintended by-products of those processes.

In characterizing the analytical process based on the position of the archivist vis-à-vis the records, this discussion offers a different set of terms for understanding and further exploring the dynamic interactions between the archivist and the records. This characterization serves to clarify and elaborate on some of the individual acts of interpretation and representation involved in arrangement and description, which include gathering contextual information (or identifying that which may tell us something about what we need to know); using such information to infer the contexts of records creation, maintenance, transmittal, and

use relative to the content and structure of a body of records; deciding where to place records within a collection to preserve or elucidate important aspects of context; and creating the contextual relationships that give the records their meaning and significance. In highlighting the speculative nature of archival analysis and the active role of the archivist, this characterization also serves to make some of the archivist's implicit processes more explicit and allows for rendering a more accurate account of archival activities to present and future colleagues and users. In response to these issues, as a profession we need to expand our idea of what the study of records and recordkeeping calls for on the part of the individual archivist. To negotiate the leap from what is known to what is unknown about records takes not only well-developed research skills and subject knowledge, but also a nuanced understanding of archival principles, critical and creative thinking, and, perhaps more than anything, an imaginative frame of mind.