

The evolution of the finding aid in the United States: from physical to digital document genre

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Abstract In this article, we examine the American finding aid as a form of genre from both a cognitive and a sociological perspective and use this analysis to articulate some of the hidden or underlying regularities and assumptions of archives work. As finding aids increasingly are created and delivered digitally, we can anticipate tensions in the form and use of these genres giving rise to increased scrutiny of archival practices that in turn should cause us to explore the representation of the archives profession in a digital world. A particular focus of this article is to advance an argument that for too long, the actual consumption and use, that is, the reading of finding aids, has been ignored or overlooked. Yet, it is likely that only through understanding how people exploit and read these documents in real use can we improve their design. In so doing, we make a case for archival research to move further into the analysis of user behavior, information seeking, and contemporary information practices so as to improve and extend the appreciation of how archives contribute to the larger information field.

Keywords Genre · Genre theory · Finding aids · Digital genres · Archival science · Information science · Archival description · Information behavior · User-centered design · Human–computer interaction

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Introduction

Perhaps the real business of postmodern archival enterprise ought to be re-evaluating just what finding aids represent over time, studying them as a documentary source reflecting attitudes and practices of the archival community at various times (Cox 2007, p. 9).

Genres exist as representational communicative structures that enable groups to create, share, and interpret meaning. While they exist in all communicative forms, they are most studied by researchers in the written form of documents. Here, genres provide a set of conventions or expectations for what is communicated, how it is ordered and arranged, and how it is expected to be read or used. The value of genre in discourse can be tied directly to the underlying cognitive processes of communicants where constraints on memory, and on speed of consumption, can be mitigated by mutual expectations for meaningful exchange, priming both parties to deliver and interpret new information according to regularities of language, content, and form (Rubin 1997). From a sociological perspective, genres are also seen as being an integral part of how people experience, construct, and carry out social practices; helping people perform meaningful actions within recurring, everyday situations.

While most work on genre theory has used canonical forms of discourse, such as scientific papers, news articles, or short works of fiction as test cases, it is now generally recognized that genre structures exist across all communicative networks, and that most professional communities rely, often without explicit articulation, on genre structures to complete their collective work. Even if not labeled as genres, a large part of the education and socialization of new professionals involves their learning to identify, create, and use accepted communication patterns when working with other members of their profession.

Genre theory has origins in discourse studies and in linguistics where it was often assumed that the emergence of genres was a slow, unquestioned process and that once emerged, genres remained relatively stable. In relation to documentation, the rapid shift from analog to digital form has raised questions not only about the speed with which a genre form can evolve but also about the deliberate reflection and exploitation of genre form to allow for increased usability and acceptability of digital documents (see e.g., Dillon 2004).

The shift from paper to digital forms of documents has often been accompanied by two competing goals: to mimic the established forms of paper so as to ease the transition for creators and users, while exploiting the power of the new medium to enhance access, navigation, and location. These ambitions often contradict and in so doing offer a challenge to publishers, creators, and consumers of documentation. Further, as documents become available online, the potential for increased exposure and use can impact how professional groups interact with each other and with external constituencies. Questions of authority and quality become important in understanding how digital forms are used, re-purposed, and continually re-designed.

In American archival practice, the finding aid is perhaps the most canonical genre form and represents both a particular document type and a means of expressing

archival work to people both inside and outside of the profession. As a genre type, the finding aid embeds significant shared assumptions and understandings of the materials and practices of archival work. The application of genre theory in this context offers us a lens through which to examine these assumptions over time, and through this analysis to identify ways of advancing archivists' abilities to exploit new understandings for shaping education and practice.

In this article, we examine the American finding aid as a form of genre from both a cognitive and a sociological perspective and use this analysis to articulate some of the hidden or underlying regularities and assumptions of archives work. As finding aids increasingly are created and delivered digitally, we anticipate that tensions in the form and use of these genres will give rise to increased scrutiny of archival practices, which in turn should cause us to explore the representation of the archives profession in a digital world. A particular focus of this article is to advance an argument that for too long the actual consumption and use, that is, the reading of finding aids, has been ignored or overlooked. Yet, it is likely that only through understanding how people exploit and read these documents in real use can we improve their design. In so doing, we make a case for archival research to move further into the analysis of user behavior, information seeking, and contemporary information practices so as to improve and extend the appreciation of how archives contribute to the larger information field.

The first section of this article outlines the emergence and evolution of the finding aid in the United States in the twentieth century. Uncovering the significant shared assumptions and understanding of the materials and practices of archival work embedded in the archival finding aid sets up the notion of the finding aid as socially constructed text (MacNeil 2005). The second section examines the nature and meaning of the term "genre," accompanied by a discussion of current approaches to genre studies encompassing the linguistic and rhetorical traditions. This section concludes with a discussion of the work that has focused on how the notion of genre might be exploited to aid the transfer of document forms to the digital environment. The third section builds from the historical analysis and the review of the genre literature in order to (1) more fully analyze how finding aids act as representational communicative structures and (2) to move this conversation forward by exploring the implications and opportunities provided by the shift in these documents from paper to digital form. The article concludes with a discussion of the implications for the general archival profession, particularly vis-à-vis the need for a new program of research on user (reader) interactions with finding aids.

In this article, the authors posit the view that genre theory has both an explanatory and a prognostic power. It is argued that genre theory is a suitable orienting framework, providing a theoretical lens and a specific vocabulary in which to understand and analyze document genres and the associated communicative practices that brought the genre into being. It is also argued that genre theory carries with it the sense or the possibility of a prognostic or guiding power; a situation that can come about if a community adapts or exploits a document genre as a way of responding to, or instigating, change as a community's purpose or goals shift over time.

History of the American finding aid

In an American context, the term finding aid encompasses a wide range of formats, including card indexes, calendars, guides, shelf and container lists, inventories, and registers.¹ Inventories and registers, the focus of this article, are products of a process of identifying, analyzing, arranging, documenting, and describing material so that archivists can “establish grounds for presuming records to be authentic” (documenting their chain of custody, their arrangement, and the circumstances of their creation and use); “promote the understanding of such materials by documenting their context, structure, and content”; and “provide access to archival materials by means of a description that is retrievable, at a minimum, by provenance” (Canada-U.S. Task Force on Archival Description 2002).

In the United States, the history of the finding aid is bound up with the development and the relationship between two archival traditions: the historical manuscripts tradition, dominant from the 1700s until the 1960s, and the public archives tradition that emerged following the establishment of the first state archive in Alabama in 1901 (Berner 1983). These two traditions adopted different approaches to archival arrangement and description (processing); approaches that drew from earlier European models.

Duranti links archival description to the rise of municipal autonomy in Europe and the attendant need to “study precedents, document rights and defend the interests of the city against the central power” (Duranti 1993, p. 48). In the city-states of the Italian peninsula from the twelfth to the fifteenth centuries, processing consisted of “storing the documents in the same order in which they had been accumulated by their creator, retrieval was based on location lists and perhaps indexes, and description was only done to account for the holdings” (Duranti 1993, p. 51). During the latter half of the eighteenth century, the rise of scientific history and the increasing use of archival materials for historical research rather than for more administrative purposes led to arrangement and description becoming more intimately linked (Duranti 1993). The need for guides to help researchers locate historical material led archivists to create item-level descriptions of documents which had generally been assembled together by form or subject and to devise methods of classification based on a determination of how each document needed to be presented in the finding aid (Duranti 1993). The activities of what we think of as

¹ Calendars are defined as “lists of documents included in an archival collection... usually annotated to include the date, contents, and other characteristics of each item” (Reitz 2004). Explanations of the term “guide,” “inventory,” and “register” are provided by Tweedale. Guides are descriptive lists created to acquaint researchers with a repository’s holdings or a portion of the holdings related to a specific area or period. In the United States, the inventory was developed largely as an internal document by the National Archives to describe its record groups. A refinement of the inventory, the register, was developed by the American Library of Congress in the 1950s and consists of a more detailed description of a collection than that given in a catalog entry and, in addition, includes a note about the arrangement of a collection (Tweedale 1976). The difference between an index and a catalog has been explained by Schellenberg. “Indexes are designed merely to point the way to subject content, to indicate where information on subjects may be found in records. They are not designed to describe records, as are catalogs, but only to identify them in relation to subjects. Indexes are thus locating media; catalogs are descriptive media, through they too, obviously, may be used to locate information” (Schellenberg 1965, p. 273).

“modern archival science” only emerged in the western world in the nineteenth century (Duff and Harris 2002). In this new archival science, classification by subject was now rejected in favor of the principles of respect des fonds (provenance) and original order, and in doing so description came to follow arrangement, and was used as a way to highlight the original order of the documents (Duranti 1993).

From the outset, the historical manuscripts tradition and the public archives tradition in the United States had a vested interest in distinct types of documentary genres (manuscripts/personal papers versus public records). Both traditions also had competing notions about the value of archival material (historical versus administrative); the nature and scope of the unit to be classified and described (item level versus record aggregates); the basis on which classification (later called “arrangement”)² was to be carried out (by subject matter or date according to library practice or by provenance in accordance with emerging European archival principles of provenance and original order); and the relationship between, and timing of, the activities of classification and description. These differences can be seen in two key publications of the early twentieth century: the Library of Congress’ *Notes on the Care, Cataloguing, Calendaring and Arranging of Manuscripts* (1913) (written by J. C. Fitzpatrick, Chief Assistant of the Manuscript Division) and the Public Archives Commission’s uncompleted *Primer of Archival Economy*.

Following its founding in 1897, the Library of Congress adopted a rationalistic and classificatory approach to arrangement and description based on library principles and aimed at facilitating historical study, whereby “collections and items were arranged geographically and chronologically as well as by record type,” and cataloging and calendaring (item lists) were in vogue as descriptive practices for manuscript material (Reynolds 1991, p. 468). Such practices were codified in Fitzpatrick’s pamphlet—with the concept of arrangement according to original order being recognized for both official records and personal papers but judged useless from an historical perspective; any order only being saved in so far as it could serve as a basis for rearrangement of the material using predetermined classificatory systems. In Fitzpatrick’s model, cataloging preceded and determined arrangement, and the chief source of information for the catalog record was drawn from the manuscripts themselves, and not from any other finding aid. Given the focus on the use of archival material for historical research, it was acknowledged, however, that the pressure to make material available meant that arrangement often preceded cataloging and calendaring.

At the same time, those vested in the public archives tradition were coalescing, somewhat belatedly, around the set of principles and techniques drawn from their European archival counterparts which privileged context-based over content-based descriptive systems, and that viewed the role of description as serving not as a surrogate, but as a representation of the material. Such thinking included an adherence to the principle of provenance and a renunciation of library approaches to classification and cataloging. The historian Waldo Leland, described as a “leading figure in the call for archival theory based on European traditions” (Reynolds 1991,

² The term “arrangement” came into common use following the US National Archives’ introduction of the Record Group concept in 1941 (Stapleton 1985).

pp. 473–474), championed these ideas through his call for the Conference of Archivists to create a manual of archival practice. Despite a concerted effort, this manual of archival economy never came to pass, but the legacy of this work, and American archivists' pragmatic adoption and reimagining of these European principles of arrangement and description can be seen in subsequent efforts at the U.S. National Archives to rethink archival administration. In 1940–1941, findings of a special committee at the National Archives (*Finding Mediums Committee*) led to the adoption of provenance over subject as the basis of classification (Fenyo 1966). The record group concept was adopted as the way of organizing government records, and the card catalog pushed aside in favor of using the preliminary inventory as the primary finding aid of choice. Preliminary inventories were largely internal access tools at this point and provided information about the origins, types, relationships, and arrangement of records, with records described at the record group level first and then according to series within the record group. In a continued nod to library principles, inventories also included information on the records' chronological, geographical, or subject-matter coverage. The preliminary inventory was meant to be followed by a final inventory, but these rarely materialized. As the preliminary inventory was an internal document, researchers relied instead on tools such as general guides and special lists of records to learn about collections. Theodore Schellenberg (director of Archival Management at the National Archives) cemented these ideas about archival administration in a number of staff information circulars, and through publication of his book *Modern Archives: Principles and Techniques* (1956).

By the early 1950s, the influence of the work of the National Archives can be seen in the Library of Congress' adoption of the idea of the record group and their adaption of the preliminary inventory format to create short and full-length registers, neither of which, however, was fully integrated with the library's existing card catalog (Berner 1983). Meanwhile, the utilization of traditional library-based bibliographic forms for the cataloging of manuscript material continued apace, as seen in the Library of Congress' compilation of a national register for manuscript records, the National Union Catalog of Manuscript Collections (NUCMC), and an associated cataloging code to describe this material.

By the 1960s, following the growth of the National Archives and of the Society of American Archivists (SAA), the public archives tradition was in ascendancy. This, coupled with the size of twentieth-century manuscript collections, and an increasing sense of the archival character of historical manuscripts, led to a growing call to bring this material, and the principles and techniques for arranging and describing it, into the archival fold. This meant following the principles of provenance and original order when arranging manuscript material, arrangement preceding description, and advocating for a finding aid to be used in conjunction with, or sometimes in preference to, the card catalog. The results of a survey of US manuscript repositories in the early 1970s indicated that by this period, a hybrid system of both library and archival methods was firmly in place for describing manuscript material (Berner 1971). With calendaring of documents now long out of style (Radoff 1948), Berner's survey indicated that card catalogs functioned as the primary descriptive tool, although there was some uncertainty as to whether the

catalog functioned as an index or as a referral tool for other finding aids in the repository. Other repository finding aids (including registers, guides, inventories, and calendars) generally served as “bonus features for ‘more important’ collections and for searchers using those collections” (Berner 1971, p. 369).

During this period, the archival profession also “focused heavily on providing more direct access to information contents of archival documents through better understanding of the subject needs of researchers, exploration of the possibilities of subject indexing and subject guides to archival material, and on the potential of improving subject access through adaption of information science, automated indexing, and sharing information from archives through national automated networks based on standardized description” (Nesmith 1993, p. 5). This can be seen as an ongoing development of a tradition that Duranti notes took hold in Europe in the 1930s in which “description began to be seen as a means for making the user independent of the archivist’s specialized knowledge, and to be aimed primarily at compiling ‘instruments of research’ for the user, not the archivist” (Duranti 1993, p. 52). Concomitantly in the 1960s, the American library profession embarked on its pioneering efforts in automation at the national level. This included the development of the first bibliographic information network, the Ohio College Library Center (OCLC), and the development of the automated Master Record of Manuscript Collections (MRMC) by the Library of Congress, a special format for manuscripts cataloging compatible with the MARC record structure. Following in the footsteps of their library colleagues, the American archival profession also turned to the question of automation and the development of a national information system for the exchange of information about archival holdings. Archivists had largely rejected the library-oriented MARC format with its focus on item-level description and were unhappy with the policy of the Library of Congress with regard to which archival holdings could appear in NUCMC; a policy that excluded particular types of holdings, including government records. In response to these concerns, the National Historical Publications and Records Commission (NHPRC) sought to spur interest in the development of a national database of union catalog records of repository and collection data using a National Archives and Records Service (NARS) batch mode, mainframe software system called SPINDEX II (Selective Permutation Indexing), a derivative of an earlier application developed at the Library of Congress (see Burke 1967; Hickerson et al. 1976; Kesner 1978).

In the 1970s, the SAA took steps toward standardizing archival description and with these developments came the emergence of strong genre conventions within the field. In analyzing the structure and content of a representative sample of over 400 finding aids from archival and manuscript repositories in the United States, the report of the Committee on Finding Aids (1976) articulated and outlined the basic components of inventories and registers of the time: preface, introduction, biographical sketch/agency history, scope and content note (rarely employed in archival inventories at the time), series description, container listing (rarely employed in archival inventories at the time), item listing, and index (the last two rarely employed in either type of finding aid). Gracy (1977) in turn declared the inventory the basic finding aid for users, and indexes to inventories the preferred format over the card catalog as a way of facilitating access to material.

The argument between American manuscript curators and archivists over the appropriate national information system for archival description (NUCMC vs. SPINDEX) came to a head in 1977 when SAA appointed the National Information System Task Force (NISTF) to look into the matter (see Bearman 1986; Davis 2003; Matters 1992). Rather than selecting an information system, NISTF retooled its mission over the next 5 years in order to focus on establishing basic standards of practice for the archival profession—including the first comprehensive articulation of the common data elements found in archival descriptive sources (*Data Elements Used in Archives, Manuscripts and Records Repositories Information Systems: A Dictionary of Standard Terminology*), which were later mapped to existing fields in the MARC record. In undertaking its work, NISTF waded into the long-standing dispute between manuscript curators and archivists over descriptive practice and in the end saw much commonality between the two traditions. NISTF chose to adapt library practice for archival needs, adopting the USMARC format to create a data structure standard for the archival profession (USMARC Format for Archival and Manuscripts Control—MARC AMC). With the adoption of MARC AMC, authority work moved beyond the traditional administrative history or biographical sketch to include access points and controlled vocabulary, and administrative and collection management data became more of an integral component of archival description. In the 1980s, archivists also worked on creating data content standards for catalog records, cooperating with the Library of Congress to create a manual of archival description (*Archives, Personal Papers, and Manuscripts*) (Hensen 1983). While APPM was based upon the revised Anglo American Cataloging Rules (AACR2), it interpreted the MARC format for archivists, recognizing and supporting the primacy of provenance and the collective level as the locus of control, and providing a framework for multi-level description (Hensen 1997). The declaration in APPM that the chief source of information for archival materials was the finding aid prepared for those materials further cemented the status of the finding aid as the canonical genre of American archival description, a genre on which all other archival descriptive products (such as catalog records) were to be based. Within a decade of the publication of APPM, the US MARC AMC format was declared to have “come of age,” “taking its place in the mainstream of both archival and cataloging thinking, theory, and practice” (Martin 1994, p. 482).

By the mid-1990s, with the advent of the World Wide Web and with a basic framework of standardized and shared archival description firmly in place, the foundation was laid for the emergence of a more uniquely archival description and access system, encoded archival description (EAD). As a computer-based data structure standard for encoding finding aids for the Web, EAD has been referred to as the next logical step in archival description—an encoding standard that complements MARC AMC by creating a data structure standard that works with, but takes us beyond, collection-level description, to provide online access to the more detailed description in the finding aids themselves (Pitti 1997). With EAD, American archivists initiated an almost straight transfer of the existing analog form of the finding aid to the digital realm and often created direct access paths to these online finding aids via MARC records in online library catalogs. A new companion content standard was also created for the American archival profession to describe

both catalog records and full finding aids, *Describing Archives: A Content Standard* (DACS). DACS, as a US implementation of international standards for the description of archival material, supports the current trend of greater integration of standards among archival constituencies and the increased focus on including enhanced authority work as part of archival descriptive systems—authority work that, in including separate but linked information about record creators and about the context of records creation, allows relationships in and among collections to be explored.

The transdisciplinary concept of genre

This historical account of the emergence of and discourse concerning finding aids within the archives and library professions in the United States offers us a glimpse into the communicative practices of a community that are typically at the heart of any genre analyses. Though currently in vogue as an analytical and descriptive tool for social science, the concept of “genre” as representing narrative forms can be traced back to Plato and Aristotle and their division of communicative forms into three basic categories: poetry, drama, and prose. In its basic usage, the term genre can describe a class or form of work, as in the broad delineation of the early Greek philosophers, but in more recent times, the term has been significantly refined in meaning and application to reflect the underlying characteristics that establish similarities or differences between multiple instances of a form. In exploring genre, scholars typically examine both content and structure to understand what makes any instance of a document more or less a member of a generic category. A subset of this work also examines the emergence of genre forms that, up until recently, were assumed to be slowly evolving, though recent developments in digital publishing have led to a reexamination of this in light of so-called digital genres (Dillon and Gushrowski 2000). Such work is seen as relevant and timely for archival practice as we seek to better understand archival work in twenty-first century information contexts.

Antunes et al. (2006) argue that genre initially served as a way to organize and index literary works as well as a way of settling on rules to literary creation, but that in more recent times, it is the identification and articulation of rules and regularities in the creation and consumption of works, far beyond literary texts, that has attracted the most attention from scholars. Indeed, genre studies more generally reflect an ongoing discourse beyond traditional disciplinary divisions as one finds work on genre by humanists, social and cognitive scientists, linguists, and computer scientists, all of whom apply their particular methodological approaches and theoretical lenses to understanding the nature and purpose of genre forms (Bawarshi 2000). In current research, we find particular attention given to manifestations of genres used in everyday settings and within academic and professional disciplines (see e.g., Bazerman 1988; Devitt 1993; Orlikowski and Yates 1994).

While the diversity of contemporary approaches to genre studies can prove confusing, Luzón (2005) identifies two distinct traditions: the linguistic and the rhetorical. The linguistic approach focuses heavily on the textual analysis of

language and of the structure of the text, with an eye to translating these findings into models for education and literacy. Within this tradition, Halliday (2003) argues that oral and written language play a key role in peoples' socialization into a community and in how people carry out meaningful actions within recurring situations. For Halliday, language consists of text (what people say or write), situation (the environment in which the text comes to life), the register (semantic variety of types of which a text is an instance), code (which controls the semantic styles available to people in a given context), linguistic system, and a social structure (Halliday 2003). Language variation is said to be linked to the social context in which language is used. From this understanding comes Halliday's theory of registers—a theory in which three variables combine to form the register of a text—field (what language talks about), tenor (the participants of an activity, their role in the activity and their relationship to each other vis-à-vis issues such as power and status), and mode (the way in which language takes part in the activity, such as whether the language is in written or spoken form).

Rhetorical genre studies have been explicitly linked to the phenomenological and sociological traditions (Bawarshi and Reiff 2010). This second approach focuses on the rhetorical dimensions of language use, social constructionism, rhetorical versions of rationality, and speech act theory (where language is viewed, among other things, as a mode of action) (Freedman and Medway 2003). Emphasis is placed on the relationship of a text to the broader social context in which genres reside (Luzón 2005) and requires an understanding of the “complex social, cultural, institutional and disciplinary factors” at play as people produce, learn, and interact with language through different kinds of writing (Freedman and Medway 2003, p. 2). Genres are also seen to play a role in how people “experience, co-construct, and enact social practices and sites of activity” (Bawarshi and Reiff 2010, p. 59). From this viewpoint, genres are seen as “relatively unstable, or ‘stabilized-for-now,’ rhetorical forms that must be studied in their context of use and in relation to the goals that they are used to accomplish in a specific discourse community” (Luzón 2005, p. 286). This focus on the study of genres as “forms of situated cognition, social action, and social reproduction” is less concerned with the precise linguistic analysis characteristic of systemic functional genre research (Bawarshi and Reiff 2010, p. 60).

There are complementary empirical approaches to genre analysis that do not fit neatly under Luzón's (2005) division. Yates and Orlikowski (1992), for example, offer an analysis of genre in business organizations through a historical analysis informed by structuration theory. This work was considered the driver of much subsequent genre research in the information systems literature where literary text analysis and genre studies previously had little purchase (Firth and Lawrence 2003). In particular, social and cognitive scientists concerned with document use in organizations and in the design of new digital forms have approached the concept of genre through everyday use studies, interviews, or even experimental investigation, leading to a data-driven research front which attempts to understand how documents can affect rather than reflect group practices and understanding (for a good summary of such work, see Bawarshi and Reiff 2010). As such, this approach is the most relevant to the designing of digital documents and therefore offers particular

relevance to our consideration of the finding aid as it moves from paper to digital form.

Genre in relation to document design

The focus on genre and how it might be exploited to aid the transfer of document forms to the digital environment started to gain momentum within the field of human–computer interaction design in the 1990s. Despite the early promise of digital documents and hypertext linking, it became clear that simply copying the paper form and replicating it digitally offered limited chances of successful transfer, and researchers identified a series of process and outcome differences between media that affect most users (see Dillon (2004) for a review of these empirical findings). In an attempt to exploit the power of digital documents to present searchable text, linked sections, and alternative layouts, research efforts have focused on how readers learn to navigate through information space and gain a sense of order and location when the normal cues of the paper form are altered or removed. Such questions immediately brought an examination of genre to the fore.

The act of reading is a complex process that involves physical, perceptual, cognitive, and social processes. Genre analysis focuses largely on the intersection of cognition and social processes. Specifically, schema theory is invoked to explain how individuals extract regularities from recurring events or communicative processes and subsequently come to invoke these and rely on them in making sense of incomplete information in similar contexts. In these terms, genre forms in documents are viewable as schematic structures that facilitate interpretation and comprehension of textual cues as well as guiding exploration, enabling the user to estimate location and relationships between elements. Exploring this process through experiments, Dillon and Schaap (1996) showed that experienced readers of scholarly articles could estimate the location of isolated paragraphs of text drawn from such articles with a high degree of accuracy, and significantly more than did those who were inexperienced with such material. Such work has been extended by Toms et al. (1999), Rho and Gedeon (2000), and Turner (2008) to study how people respond to information presented digitally and how design can improve the immediate or intuitive grasp of material for users. Zhang et al. (2011) extend such analysis to the creation of a new reading environment for scholarly journal articles.

The emphasis of much of this work is on identifying and exploiting the cues that readers use when actively engaged with a document. In this way, it is hoped that important sources of information for navigation and comprehension can be maintained or even enhanced in the digital environment. However, there is commensurate interest in understanding these cues so as to enable authors or document creators to prepare documents that are compatible with the expectations and needs of “users,” a term that is more typically used than “readers” when discussing digital material [a useful summary can be found in Bromme and Stahl (2002)]. The combination of such concerns reflects the role of genres to provide a shared structural framework for both writers and readers (or speakers and receivers more broadly) to exploit when crafting or interpreting information content.

Such work has led to an operationalisation of the genre concept that encourages a critical evaluation approach to digital document design. Rather than adopting a straight transfer of existing paper or analog forms to the digital realm or encouraging a shedding of traditional structures of form and layout given the opportunity to start anew, the examination of genre as part of the design process is aimed at understanding and utilizing the elements of a form that best support the communication of meaning in a given context of use. In particular, this work emphasizes the idea that document structures are learned, not objectively presented as a neutral construction that can be interpreted uniformly by all. Furthermore, it places emphasis on treating digital genres as emergent and fluid, as communities of practice learn to shape their communicative norms in a new medium. Since Dillon and Gushrowski (2000) argued that the “home page” was the first uniquely digital genre, multiple studies have examined the emergence or shifting of genres on the web, from examinations of evolving US government web pages (Ryan et al. 2003) to the framing of resources such as research resources, lists, and scholars’ personal webpages in accordance with the intellectual and social organization of an academic discipline (Fry and Talja 2007). This work is indicative of an approach to the analysis of archival document forms, particularly the finding aid, which might yield interesting insights about how both archivists and users of archival materials make sense and order of a collection. The application of genre theory in this manner is the focus of the next section.

The finding aid as exemplary genre

The account that has been given of the emergence and evolution of the finding aid in the United States provides the context in which to understand how representational forms reflect practices and assumptions in and among different communities. Over and throughout time, it can be seen that finding aids have accomplished specific communicative functions, have been imbued with certain practices and values, and have been intended for certain contexts and audiences. With a framework drawn from genre theory, these understandings and expectations can be brought to light and analyzed: providing insights into the socially recognized purposes of the finding aid, as well as insights into expectations vis-à-vis the content of the communication, the participants and their roles, the form of the genre, etc. (see Yates and Orlikowski 2002, 2007). Abstracted in this manner, we can envisage these documents as genre forms in a manner that can strengthen and deepen our own field’s understanding of archives as practiced, and well as our understanding of the relationship of archives to the wider information profession.

As genre theory predicts, and the history of the finding aid has shown, a text can be understood only in relation to the broader social, and in this case disciplinary, context in which it resides. We can see that the repertoire of communicative structures in the American archival profession has evolved over time to meet the needs and goals of this community, and in the process so too has the purpose and form of these finding aids. If finding aids are always produced toward some end, so in the early history of the American archival profession, the purpose of the finding

aid was to serve as an internal tool to help provide access to collections. It was a tool written by archivists *for* archivists. More than that, however, the early history of the finding aid in an American context was bound up with attempts to persuade, influence, and motivate different audiences. In particular, the finding aid became the site of an ongoing tug-of-war over boundaries between disciplines; a site of contestation over which tradition (public archives versus historical manuscripts, archives versus library) would come to dominate archival practice. The notion drawn from genre theory that, within particular communities, genres can both respond to and co-construct other genres highlights the interrelationship between the finding aid and associated document genres (manuals, data content standards, etc.) that have been used over the years to formalize, reify, legitimize, and legitimate one approach to descriptive practice over the other. Today, the most common “stabilized-for-now” rhetorical form is a document akin to the traditional inventory or register. The finding aid has crystallized into a regularized form with multiple purposes—a genre whose function is to stand, as Yakel (2003) would say, as a form of representation, describing the scope and content of a collection, as well as describing and outlining its system of arrangement for an internal and for an external audience.

Understanding a genre is also bound up with identifying the rules and regularities in play in the creation of a text. A genre is said to provide expectations about what the content (the specific information contained within the communication), and what the form (including media, structuring devices, and linguistic elements contained therein) of that communication will be (Yates and Orlikowski 2007). As the historical overview has shown, over time the rules dictating American archival description have shifted to such a degree that archivists have moved from an item-level listing of the documents, or a simple collection-level bibliographic record, to a focus that requires an expanded number of data elements in order to document the broader context of the collection. With the move into automation, the relationship of the MARC record to the finding aid has also led to a situation in which descriptive content often has a second life. This “derivative reuse of content” can be seen as both positive and negative in that it is a process that simultaneously facilitates “efficiency and continuity [of genres] while also restricting creativity and innovation” (Yates and Orlikowski 2007, p. 82).

Genre theory also draws our attention to what is missing in this communicative process, thus allowing us to highlight what is not sanctioned or practiced by a community (Yates and Orlikowski 2007). As work by Light and Hyry (2002) has shown, this omission in the context of the American finding aid often includes any acknowledgment of the often transformative work that the archivist has had on the collection in the process of appraising, arranging, describing, and preserving the material. It can be argued that as archivists we have long sought to downplay our role in the communicative process, not only by omitting certain details about what has been done to the collection, but also by using a style of language and of writing that generally eschews all forms of editorializing, thus further disguising and negating our own voice. Genre theory, however, allows us to look under the covers and to disclose and reveal the work of the archivist as translator—translating the original record-creating environment and the documentary context of the collection

through the lens of current day archival practices and principles, taking that translation and adding layers of representation as the collection is worked on in the archive, and sharing the final product (though not generally the process) of these acts of translation with external user communities.

As the linguistic approach to genre theory demonstrates, another purpose of genres is to play a role in how people are socialized into a community, thus helping to achieve social cohesion. A large part of the education and socialization of new archival professionals involves genre knowledge; a fact highlighted by the continued importance given to the topic of processing and to learning to process within the American graduate archival education curriculum. In effect, for people new to the profession, the processing of a collection and the creation of the attendant finding aid with all its constituent parts become the *de facto* test of whether and to what extent key archival principles (provenance, original order, etc.) and archival concepts (fond, record group, series, etc.) have been fundamentally understood and incorporated into a student's framework of professional knowledge. Although not always understood by archivists as such, the finding aid is also a form of socialization for a wider audience. As stated previously, the finding aid is a representation to the outside world of what the archivist wishes to communicate and share about their work on a collection—work that is both practical (documenting, for example, how the collection is administered) and intellectual (documenting how the archivist understands the broader context in which the collection was created and maintained).

In any historical or present-day analysis of who initiates the genre and to whom it is addressed, it is evident that ostensibly the finding aid is a medium of communication between the archivist (as the writer) and outside researchers (as the receiver). However, in contexts where finding aids are used by people unfamiliar with archival principles and processes, the nature and scope of the content, and indeed the form of the language (including the use of specific archival terminology) have proven to be overwhelming for some. The same holds true for other structural aspects of the finding aid, with the hierarchical, multi-level nature of the finding aid proving particularly confusing for some novice users (see Scheir 2006). While such issues can be overcome when a finding aid is used by a researcher in the presence of an archivist (the archivist can provide additional clarification and guidance as needed), in instances where finding aids are placed online, the lack of a temporal and physical connection between writer and receiver is much more difficult to surmount. Therefore, despite efforts to put this genre online and to make finding aids more accessible, it can be argued that, at least in an American context, this genre has always reflected, privileged, enabled, and given control to the writer (archivist) more so than to the receiver (researcher). That it is within archivists' capability to remove some of the constraints of this genre, as well as to shift and change the roles in this relationship, is clear not only within the context of genre theory, but also in recent practical attempts within the American archival profession to loosen the grip on authorship and open up this genre for comment and for annotation by people outside the profession (see Light and Hyry 2002).

Finding aids as digital representations

The media of finding aids have shifted over time, particularly in the last 15 years. As a genre, the finding aid now exists in both physical (as a paper document that can be referenced in the archival repository) and digital forms (as an online document that can often be freely accessed via the web). As finding aids get placed online and removed from the immediate social sphere controlled by the archivist, the pressure for this genre to serve as a stand-alone deliverable is increased.

In the United States, the development and implementation of MARC and EAD has been accompanied by a limited interest in evaluation and usability testing of finding aids though much more work is required. Work that speaks to this fledgling interest includes research by Spindler and Pearce-Moses (1993) studying patron understanding of MARC AMC records, Meissner's (1997) description of how to reengineer finding aids (look, feel, and structure) for online delivery, Yakel's (2004) usability testing of online finding aids, and Prom's (2004) study of how users navigate online finding aids with a view to designing interfaces that facilitate efficient search strategies. More recent work has re-imagined traditional finding aid structures and functionality using Web 2.0 technologies (Yakel et al. 2007), examined the search functionality of a digital archives database (Northwest Digital Archives 2008), determined the usability of a redesigned union database of encoded archival finding aids (Lee 2009), and examined the ways in which people are coming to online finding aids (mainly via search engines or linking in Wikipedia rather than the library catalog) (O'English 2011).³ Such work speaks to American archivists' concern with reengineering the existing finding aid genre, whether it is by tweaking the display of the finding aid by more clearly identifying elements, or by optimizing the arrangement and display of finding aid elements, or by suppressing certain elements in the Web display, etc.

However, even given this research, as Cox has noted, and user studies have verified, archivists continue to "prepare their finding aids in a language and manner they are more comfortable with than are the researchers seeking to use archives, and they maintain the same content and format of the finding aids even as they have learned that researchers and their expectations are changing" (Cox 2007, p. 8). Further, Cox argues that "Despite what appears to be continual transformation in archival descriptive standards over the past half-century.... these standards when applied still amount to lots of lists and often unimaginative ways of trying to communicate to researchers what is available in an archives or a particular archival fonds" (Cox 2007, pp. 19–20). The seeming tension between genre-exploitation and genre-extension has been recognized by others in the community. For example, Yakel (2003, p. 18) states that "even in the digital environment (such as in EAD), archivists treat the finding aid as a document genre, rather than as a set of discrete data elements. One consequence of this focus has been the slow development of uniquely digital representations for archival collection information."

³ In an international context, such work has included the study of users' opinions on the content and format of displays in archival information systems (Duff and Stoyanova 1998), as well as the study of the retrieval side of intellectual access to archival materials (Zhang and Kamps 2010).

If genre theory provides a lens through which to understand how finding aids within any particular social context (the United States or otherwise) reflect and shape archival practices and assumptions, so too does it give us the ability to break free of this tradition (once known and understood) and re-imagine this genre in the digital realm. As the historical outline suggests (and further studies of finding aids in other national contexts should corroborate), and as genre theory dictates, simply copying the paper form and replicating it digitally will not work. We argue that archivists need to exploit the power of digital documents by utilizing the elements of form that will best support the communication of meaning in this context. Only then will archivists be able to prepare documents that are compatible with the expectations and needs of our users.

Given what we have learned from several decades of work on human–computer interaction and document design about the failure of direct translations of form from the analog to the digital medium in meeting user requirements, we suggest the best course forward to be a more robust program of research on user (reader) interactions with finding aids to guide the design of more interactive forms. This would be a natural extension of user-centered design practices to finding aids. In one sense, this forces us to address directly the socio-cognitive construction of genre within archival practice while raising the possibility that the existing genre form might itself not be sufficient or even ideal for designing digital representations and aids. Either way, there seems little real prospect for advancing our knowledge without such an empirical effort, and, of necessity, this will require educating a different kind of archival expert (one educated in methods of human–computer interaction, user testing, and design) or partnering and collaborating with experts beyond the archival community, a problem similarly occurring for librarianship and museum studies. The concerns are analogous to early debates over the presentation of books electronically, debates that made progress only through a strong program of empirical research to determine how readers respond to documents and to alternative designs.

In other areas of information studies (broadly conceived), there has been a greater than three-decade long effort at incorporating user studies into the development of information-seeking models, new human–computer interfaces, and the information usage patterns of previously understudied communities. Archival research, on the other hand, has largely remained outside the user-centered movement articulated first within the field by Dervin and Nilan (1986). Consequently, though most visibly located within library and information programs, archival education and research has operated somewhat independently, which we might argue has been to the detriment of all research in this domain. Most pertinently, the work on interaction design has largely by-passed analysis of archival resources nor has it been incorporated by archival researchers into their work. It is our view that archival research should move further into the analysis of user behavior, information seeking, and contemporary information practices so as to bridge this gap and to place archival resources into the core of information studies research. Genre theory offers a suitable orienting framework within which to advance this appreciation of new methods and with which to advance the design and use of archival materials for the benefit of the profession, the discipline, and society.

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