The Conceptual Fonds and the Physical Collection

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RÉSUMÉ Cet article examine certaines idées au sujet du fonds, de la collection et du croisement entre eux. Les archivistes présument habituellement que les collections « artificielles » et les fonds « organiques » sont des catégories qui s'excluent mutuellement, mais l'auteur affirme que les distinctions rigides entre « artificiel » et « organique » sont sans fondement. Au contraire, s'il existe une différence cruciale entre collection et fonds, elle se trouve au niveau de la compréhension qu'une collection est physique ou matérielle, alors qu'un fonds est une entité conceptuelle qui ne requiert pas que les parties constituantes soient rassemblées physiquement. Les fonds sont difficiles à circonscrire, d'abord parce qu'il existe un potentiel que plusieurs fonds se chevauchent les uns les autres, et aussi parce que leurs limites sont sujet à interprétation. L'identification des collections est moins subjective; bien qu'elles puissent être reconstituées avec le temps et que leur classement interne n'ait pas besoin d'être revu, on arrive assez facilement à reconnaître leurs limites externes, et ce, à n'importe quel moment. Cet article conclut en explorant diverses façons dont les archivistes pourraient documenter les fonds et collections et exposer leurs liens actuels et passés.

ABSTRACT This paper examines ideas about the fonds, the collection, and the intersections between them. Archivists usually assume that "artificial" collections and "organic" fonds are mutually exclusive categories, but the author argues that rigid distinctions between "artificial" and "organic" are unsupportable. Instead, if there is a critical difference between collection and fonds, it lies in the understanding that collections are physical or material, whereas fonds are conceptual entities whose membership need not be physically brought together. Fonds are difficult to circumscribe, both because there is potential for a multiplicity of overlapping fonds and because their boundaries are open to interpretation. Identification of collections is less subjective; although they can be re-formed over time and their internal orderings need not be fixed, their external borders at any given moment are usually easy to recognize. The paper concludes by exploring some possible ways in which archivists might document both fonds and collections and expose their current and past relationships.

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Introduction

"Archives are not collected, never ever." This forthright assertion was made by Joan Van Albada, Municipal Archivist of Dordrecht, in a paper in *American Archivist* in 1991 in which he upbraided the archival profession in the United States for placing emphasis on collections.[1] Such, too, has been the view of many writers on archival science and many compilers of descriptive standards: our discipline is, or should be, concerned not with *collections* but with *fonds*. This article sets out to challenge that view. It examines a range of ideas about the fonds, the collection, and the intersections between them, primarily, but by no means exclusively, in the context of paper records. A second article, submitted for later publication, will take the exploration further into the digital world.

This will be a fairly long journey, as befits a complex topic, and along the way we will visit the Australian series system, Terry Cook's writings about the conceptual fonds, ideas about collections and collecting from a number of other disciplines, the papers of the Earl of Leicester and my old friend Joe Smith, the Semantic Web, and much else besides. In 2002, in *Archivaria* 53, Laura Millar argued that archivists should embrace the collection and bid farewell to the fonds,[2] but that is not our destination. We will not replace the primacy of the fonds with the primacy of the collection. At the conclusion of the journey, we will find that neither the fonds nor the collection occupies the exact niche that has been traditionally assigned to it, but both still have important roles to play in archival thinking and practice.

What Defines a Collection?

In the glossary published by the Society of American Archivists in 2005, the first definition of a collection is "a group of materials with some unifying characteristic."[3] Five years earlier, in the library community, Andy Powell, Michael Heaney, and Lorcan Dempsey offered a lengthier but broadly similar definition of a collection as "a set of items grouped physically, electronically and/or logically on the basis of a property or properties the items have in common."[4]

1 Joan Van Albada, "On the Identity of the American Archival Profession: A European Perspective," *American Archivist* 54, no. 3 (1991): 399.

2 Laura Millar, "The Death of the Fonds and the Resurrection of Provenance: Archival Context in Space and Time," *Archivaria* 53 (Spring 2002): 14.

3 Richard Pearce-Moses, *A Glossary of Archival and Records Terminology* (Chicago, 2005), 76.

4 Andy Powell, Michael Heaney, and Lorcan Dempsey, "RSLP Collection Description," *D-Lib Magazine* 6, no. 9 (2000), http://www.dlib.org/dlib/september00/powell/09powell.html (accessed 7 October 2011).

However, I want to suggest that, while the components of collections usually have – or are usually perceived to have – common characteristics, this is not the defining feature of a collection. The critical aspect is that the collection's components have been assembled or brought together (as the Latin root of the word *collection* implies).[5] We can speak of "dogs" or "cars" or "pictures" as having common characteristics, but in the first instance these are categories rather than collections; members of the category "pictures" only form collections when someone brings them together in some way.

The notion of "bringing together" offers a number of possibilities. A collection could be brought together in terms of ownership (the Yeo Collection is the collection of objects that I own), custody (the ABC Museum Collection comprises the objects of which the museum is custodian), or co-location (the Kitchen Cupboard Collection consists of objects that are housed together in the cupboard). Many collections meet all of these criteria; the constituents of the ABC Museum Collection may all be in the legal ownership of the museum and housed in a single museum building. But it is also possible for a museum collection to include items loaned to the museum by other owners, or to be dispersed across multiple sites. Co-location is not a necessary condition of custody or ownership, yet both concepts are haunted by a sense of the bringing together of material, and the rights of the custodian or owner of a collection would seem to include a standing possibility of physically assembling its components. The primary focus of this paper will be on the collection as a physical or material entity.

Physical collections may be formed by the forces of nature (for example, collections of driftwood on a beach brought together by the receding tide), but the collections most commonly discussed in the literature are those that result from collecting activity by human agents. These agents may actively seek to create or acquire objects for the collection, or they may merely choose to retain objects they have found, objects others have sent them, or objects they acquired or created for purposes initially unconnected with their collecting activity. Powell and his colleagues assumed that collectors are independent of the creators of the objects they collect and that acts of collecting are conducted proactively at a temporal distance from acts of creation. Typically, the author writes a book, the publisher publishes it, and at some subsequent moment an independent third party (the librarian) sets out to acquire a copy of it for the library's collection. But that is not the only possible model. Visitors to the houses and studios once occupied by artists such as Salvador Dali and Joan Miró will need no reminder that creators of objects can assemble collections of their own work; creators can also commission others to form collections on their behalf.

5 The Latin noun *collectio* is derived from the verb *colligere* ("to gather [things or people] together").

Important though the role of the collector may be, collections frequently outlive their collectors. Unsurprisingly, this is often the case with collections assembled by private individuals. Some collections are assembled with a view to permanence or near-permanence, as in the case of the so-called "permanent collections" of museums. But others are assembled in the knowledge that their existence will be temporary: an accession consignment, the materials gathered in the back of a delivery truck, or the objects brought together for an exhibition are not usually perceived as anything more than a transient collection. The digital world has opened the way for collections that can be *very* temporary, existing only for brief moments of time.[6]

The contents of a collection need not have any shared characteristics apart from their common ownership, custody, or location. A co-located collection might consist of objects that are random: the Collection of Things That Happen to Have Come Together. The components of the Collection of Things That I Have Brought Together for Reasons of Serendipity are co-located because I chose to make them so, and this collection would seem to have just two "common characteristics": its co-location and my role in assembling it. Nevertheless, many collections are brought together on the basis of the supposed logical similarity of their contents, in terms of one or more shared attributes. The range of possible attributes is vast: origin, age, genre, physical form, colour, size, media, language, and subject matter are only some of the facets of objects that may offer a basis for a collection. It is not unusual for a collection to be based on a combination of attributes: a Collection of Big Green Things would have shared attributes both of size and of colour. Particularly in institutional settings, collections may also be formed on the basis of some common action or rule that has been or is to be applied to the objects concerned.

The literary theorist Susan Stewart suggested that a collection of objects with defined common attributes – a collection that "depends upon an acceptance of differentiation as its very basis for existence" – is of a higher order than collections brought together by mere hoarders, with their "uncontrollable impulse to take and keep." According to Stewart, a differentiated collection is "dependent upon principles of organization."[7] It is likely to have an appeal to,

6 For a fuller discussion of digital collections, see Geoffrey Yeo, "Bringing Things Together: Aggregate Records in a Digital Age," forthcoming.

7 Susan Stewart, *On Longing: Narratives of the Miniature, the Gigantic, the Souvenir, the Collection* (Durham, N.C., 1993), 153–4. Stewart's ideas on "hoarding" appear to derive from Jean Baudrillard, *Le système des objets* (Paris, 1968). Cf. also Frederick Baekeland, "Psychological Aspects of Art Collecting," *Psychiatry* 44 (1981): 45–59; Russell W. Belk, "Collectors and Collecting," *Advances in Consumer Research* 15 (1988): 548–53. There is a considerable literature on the psychology of collecting; Susan M. Pearce, *On Collecting: An Investigation into Collecting in the European Tradition* (London, 1995) is a useful introduction.

and perhaps require the skills of, curatorial professionals. We may assume that such professionals are less likely to assemble a random assortment of objects than to bring together materials of similar content, context, or perceived utility to given audiences.[8] Differentiated collecting implies selectivity and the privileging of some objects over others. In choosing to collect Big Green Things, I am making a conscious decision that Big Green Things are in some way more worthy of my attention, or the attention of my audience, than things that are not big and green. Moreover, unless I have unlimited resources, sooner or later I am likely to decide that my collection cannot be exhaustive; instead of trying to assemble all the Big Green Things in the universe, I will decide to collect only a representative selection, or only the finest examples, or only those that I consider most interesting or important. In the words of museum curator Susan Pearce, "the selection process is the crucial act of the collector, regardless of what intellectual, economic or idiosyncratic reasons he may well have when he decides how his selection will work, what he will choose and what he will reject."[9] Depending on the commentator's viewpoint, the formation of a selective collection may be seen as an act requiring the exercise of objective professional judgment or as an act necessarily biased by the subjective tastes and cultural prejudices of the collector. Many critics would insist that, no matter what attempts are made at establishing scientific criteria for selection, a level of subjectivity is inevitable, irrespective of whether the collector is a "professional" or an "amateur."

The notion of a collection also implies the imposition of boundaries around a set of entities or objects.[10] When a collection results from the conscious activity of a collector, rather than from mere accident or the forces of nature, the determination of its boundaries is the collector's prerogative, though normally subject to any constraints – in terms of resources or permitted behaviour – under which the collector operates.

8 See, for example, H.-L. Lee, "What Is a Collection?" *Journal of the American Society for Information Science* 51, no. 12 (2000): 1106–13; James Currall et al., "What Is a Collection?" *Archivaria* 58 (Fall 2004): 131–46; Carole L. Palmer et al., "Collection Definition in Federated Digital Resource Development" (Champaign, Ill., 2006), http://imlsdcc.grainger.uiuc.edu/docs/ASIST06FinalSubmittedVersion.pdf (accessed 7 October 2011). Writings like these, which emanate from library and information science or are influenced by its modes of thinking, tend to emphasize the taxonomic characteristics of collections that emerge from the work of curatorial professionals rather than the relatively unstructured collecting that may occur outside curatorial institutions.

9 Susan M. Pearce, *Museums, Objects, and Collections: A Cultural Study* (Leicester, 1992), 38.

10 Howard F. Greisdorf and Brian C. O'Connor, *Structures of Image Collections* (Westport, Conn., 2008), 6–7.

Notions of "Collection" and "Fonds" in Archival Discourse

Writings about archives, at any rate in the European and (more recently) the Canadian traditions, have generally focused not on the collection but on the fonds. Over the past twenty years, since the adoption of the fonds as the lynchpin of Canadian and international descriptive standards, many English-language definitions of this term have been offered. Most of them trace their ancestry to the statement in the French *Manuel d'archivistique* that a fonds is "l'ensemble des pièces de toute nature que tout corps administratif, toute personne physique ou morale, a automatiquement et organiquement réuni en raison même de ses fonctions ou de son activité."[11] In the *Rules for Archival Description* (RAD), for example, a fonds is defined as "the whole of the documents, regardless of form or medium, automatically and organically created and/or accumulated and used by a particular individual, family, or corporate body in the course of that creator's activities and functions."[12] The definition in the second edition of ISAD(G), the *International Standard for Archival Description*, shows only a slight variation in its wording: "the whole of the records ... organically created and/or accumulated and used by a particular person, family, or corporate body in the course of that creator's activities and functions."[13] The glossary published by the Society of American Archivists defines a fonds as "the entire body of records of an organization, family, or individual that have been created and accumulated as the result of an organic process reflecting the functions of the creator."[14] Recent French and Spanish definitions are broadly similar but use the phrase "produced and received" in place of "created" to indicate that a fonds is likely to include items sent to an individual, family, or organization in the course of activity.[15]

The word *collection* is conspicuously absent from all these definitions, but the notion of the fonds as a body of records that is "accumulated" clearly suggests that the constituents of a fonds are perceived as "coming together" in some way. These overtones are perhaps most explicit in the original French definition, with its reference to "*l'ensemble ... réuni*," which Hans Hofman has

11 R.-H. Bautier, "Définitions générales et problèmes juridiques des archives," in Ministère des Affaires Culturelles, *Manuel d'archivistique* (Paris, 1970), 22–3.

12 Bureau of Canadian Archivists, *Rules for Archival Description*, revised version (2008), http://www.cdncouncilarchives.ca/RAD/RADComplete_July2008.pdf (hereafter cited as RAD), Appendix D, D-5 (accessed 7 October 2011).

13 International Council on Archives, *ISAD(G): General International Standard Archival Description*, 2nd ed. (2000), http://www.icacds.org.uk/eng/ISAD(G).pdf (hereafter cited as ISAD(G)), p. 10 (accessed 7 October 2011).

14 Pearce-Moses, *Glossary*, 173.

15 Michel Duchein, "Glossaire," in *La pratique archivistique française*, ed. J. Favier (Paris, 1993), 588; Antonia Heredia Herrera, *Archivística General, Teoría y Práctica*, 2nd ed. (Seville, 1987), 227.

translated as "the whole ... brought together."[16] In all the definitions, however, the creation and accumulation of the *pièces* are characterized as organic or even automatic, from which we might infer that the processes by which they are brought together bear a closer resemblance to the assembly of driftwood on the seashore or clouds on a mountaintop than to acts of co-location by human agents.[17] The "activities and functions" of the creator are presumably purposeful, but the fonds is presented as a natural outcome of those activities and functions rather than a product of intentional decision-making.

In line with archival thinking in continental Europe, both RAD and ISAD(G) reserve the word *collection* for aggregations that are described as artificial or intentionally assembled, typically comprising items of unrelated provenance. According to ISAD(G), a collection is "an artificial assemblage of documents accumulated on the basis of some common characteristic without regard to the provenance of those documents." In RAD, it is "a grouping of documents of any provenance intentionally assembled on the basis of some common characteristic."[18] For Carol Couture and Jean-Yves Rousseau, whose work reflects the French-Canadian tradition, "an archives collection … is an artificial construct, an arbitrary creation, often the work of chance."[19] Promoters of this view insist that collections are fundamentally different from fonds. ISAD(G) tells us that a collection is "not to be confused with an archival fonds."[20] Couture and Rousseau described collections as "anti-fonds" and as "l'antithèse du fonds," and the same tone is found in the *Manuel d'archivistique*, which asserts that "une collection ne saurait avoir le caractère organique du fonds d'archives."[21] American writers such as Maygene Daniels and Kris Kiesling voiced similar concerns, although the word *fonds* is rarely used in the United States, and these writers distinguished collections ("intentionally assembled, usually around some theme or topic") from "archives," "records," or "personal papers."[22]

16 Hans Hofman, "The Archive," in *Archives: Recordkeeping in Society*, eds. S. McKemmish et al. (Wagga Wagga, NSW, 2005), 133.

17 It must be admitted that there is some ambiguity in the phrase "organically created and/or accumulated and used," which appears in both RAD and ISAD(G): is it merely the act of creation that is said to be organic, or does the organicity extend to accumulation and (even less plausibly) to use? In Pearce-Moses, *Glossary*, 173, the reference to use is removed and the words are reordered to indicate that both creation and accumulation supposedly result from an "organic process."

18 ISAD(G), 10; RAD, Appendix D, D-3.

19 Carol Couture and Jean-Yves Rousseau, *The Life of a Document: A Global Approach to Archives and Records Management* (Montreal, 1987), 161.

20 ISAD(G), 10.

21 Couture and Rousseau, *Life of a Document*, 161; Jean-Yves Rousseau, Carol Couture et collaborateurs, *Les fondements de la discipline archivistique* (Sainte-Foy, Qué., 1994), 81, 283; Bautier, "Définitions générales," 24.

22 Maygene F. Daniels, "Introduction to Archival Terminology," in *A Modern Archives Reader*,

In the literature of librarianship, the term *collection* usually bears positive connotations of ownership, place, control, or permanence,[23] but for many archivists these connotations seem to be absent and "collection" conjures up notions of acquisitiveness, antiquarianism, and artificiality, as well as a range of pejorative metaphors involving squirrels or pack rats. As Kiesling noted, "archivists have sometimes had a rather elitist attitude toward collections, characterizing them as being somehow impure or second-class materials." Purists, especially in the European tradition, dislike the idea that collections might fall within the purview of archivists, and Sir Hilary Jenkinson famously said, "I wish the word 'collection' could be banished from the archivist's vocabulary."[24]

In practice, however, many archivists show no desire to restrict the use of the term. It is widely employed in the USA, especially by those who work with personal papers; and in their public discourse many archivists in the UK refer to all highest-level aggregations as "collections," alleging that the term operates as a user-friendly synonym for "fonds." Among these archivists, a collection can be either "artificial" or "organic"; artificial collections are commonly distinguished from those that are supposedly organic, but (following a precedent set by T.R. Schellenberg) the term *collection* is applied to both.[25]

In 2004, the American descriptive standard DACS claimed to have eliminated the concept of the artificial collection. More precisely, it claimed to have removed the notion that such collections should be handled or described differently from "materials traditionally considered to be organic."[26] However, the idea of the artificial collection has not disappeared from professional thinking and practice. In DACS, the distinction survives in a rule that the label "collection" should be reserved for "an intentionally assembled collection," and other archival units should be denominated as "records" or "papers."[27] In Canada, most archivists assume that any given accumulation is *either* a collection *or* a fonds; RAD insists that, when choosing a "title proper," archivists must designate Joe Smith's accumulation either the Joe Smith Fonds or the Joe Smith Collection. Collections are admitted to standards such as

eds. M.F. Daniels and T. Walch (Washington, D.C., 1984), 337; Kris Kiesling, "Why Two Standards? RAD2 and DACS" (2004), formerly at http://www.wien2004.ica.org/imagesUpload/pres_140_KIESLING_Z-DRY%2001.pdf.

23 Mary Frances Casserly, "Developing a Concept of Collection for the Digital Age," *Libraries and the Academy* 2, no. 4 (2002): 579.

24 Kiesling, "Why Two Standards?"; and Hilary Jenkinson, *The English Archivist: A New Profession* (London, 1948), 4.

25 T.R. Schellenberg, *The Management of Archives* (New York, 1965), 173–4.

26 Society of American Archivists, *Describing Archives: A Content Standard* (Chicago, 2004), viii.

27 Ibid., rule 2.3.18.

RAD, not because the distinction between artificial and organic has collapsed, but because many of the holdings of archival repositories are perceived to be "artificial" collections of which archivists must (however reluctantly) take cognizance. Collections and fonds are assumed to operate at the same level of description and to be describable in the same manner, but they are still believed to be mutually exclusive categories. A dualism is assumed to be at work: any given item is part of either an artificial collection or an organic fonds, but no aggregation can partake of the nature of both.

"Artificial" and "Organic": A False Dichotomy?

To test the validity of these assumptions, in 2008 I made a survey of aggregations of personal papers assigned to students in the UK for archival description projects.[28] Each of these aggregations was supposedly a fonds consisting of "documents created and/or accumulated by a particular individual" in the course of personal activity; none had been labelled an "artificial collection." However, I discovered that at least 37 percent of the aggregations included items that had been added by third parties at a later date. Many contained supplementary items inserted by a widow after her husband's death; others had been added to, and sometimes rearranged, by later custodians. One comprised items reassembled from the dispersed papers of a noted individual together with items of different provenance that mentioned him in their textual content.[29] I found it impossible to make a clear division between aggregations that were artificial and those that were not. It seems preferable to suggest that a continuum runs from aggregations created during daily life that have remained largely intact to those whose present shape results from interplay by many hands, including collecting by antiquarians who may be more interested in subject matter than provenance.

Even when responsibility for the present shape of an aggregation rests with a single individual, similar conclusions may be drawn. Many supposed "organic fonds" of individuals include a few documentary items that the individual appears to have bought or been given, in addition to the surviving records of his or her life and personal activities.[30] At the other extreme, so-called "antiquarian collections" may be found to contain some records of acquisition activities as well as the range of items that the antiquarian took pains to acquire. In the middle ground, we encounter aggregations such as the

28 For details of the survey, see Geoffrey Yeo, "Custodial History, Provenance, and the Description of Personal Records," *Libraries and the Cultural Record* 44, no. 1 (2009): 50–64.

29 Ibid., 57.

30 For some examples, see Laura Millar, *Archives: Principles and Practices* (London, 2010), 108.

Joseph Medicine Crow papers at Little Big Horn College in Montana, where records produced or received during the activities of Crow's life appear to be intermixed with numerous items from other provenances, which he collected from third-party sources.[31] Writers and scholars may collect such materials for research purposes as part of their daily activities, but it does not seem possible to impose a hard boundary between individuals who collect miscellanea for research and those who collect for antiquarian reasons. Once again, rigid distinctions between "organic" and "artificial" are unsupportable; we have a continuum, from aggregations composed entirely of records generated during an individual's life and work to those whose contents were wholly acquired from external sources or in the marketplace, with innumerable intermediate gradations.

Ultimately, any aggregation that results from conscious human action is an artificial creation. Collections of driftwood may result naturally from tides, but the processes of appraisal, capture, and arrangement that shape the aggregation of records are matters of choice made by humans. Of course, the amount of thought given to such choices may vary: an individual writer's decision to keep copies of her letters may be less carefully considered than an organization-wide retention program devised by a records manager or archivist, and quick decisions to store sets of documents in convenient places may be less systematic than formal resolutions to structure them using functional classification schemes. But in every case, the aggregation is determined by decision-making on the part of human beings; in the language of RAD and DACS, it is "intentionally assembled."

Physical and Conceptual Aggregations

What, then, are we to make of the terms *fonds* and *collection*? Traditional thinking has often led to assertions that "the only difference between a collection and a fonds is that a collection is artificially accumulated while a fonds is organically accumulated,"[32] but I have attempted to show that such claims are problematic. If there is a critical difference between fonds and collection, we must seek it in another dimension. Since the pioneering articles by Debra Barr and Terry Cook,[33] some archivists have begun to consider that the fonds might

31 Little Big Horn College, "Joseph Medicine Crow Collection Inventory" (1990), http://lib.lbhc.edu/archives/inventory_crow.php (accessed 7 October 2011). I am grateful to Erin Hollingsworth for drawing my attention to this finding aid.

32 Cynthia J. Durance, "Interpretation of the Concepts of Fonds, Collection, and Item in the Description of Archival Holdings: A Position Paper" (unpublished paper, 1993), 24.

33 Debra Barr, "The Fonds Concept in the Working Group on Archival Descriptive Standards Report," *Archivaria* 25 (Winter 1987–88): 163–70; 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. T. Eastwood (Ottawa, 1992); Terry Cook,

be better understood as a conceptual abstraction rather than a physical entity. I wish to argue that the organic/artificial distinction fails because it assumes that fonds and collections are both essentially physical. We can perceive that a collection has physicality, but a fonds, as Cook affirmed, should be seen as an intellectual construct.[34]

Some of the ground that I need to traverse has been trodden before. In 1994, Sue McKemmish noted that the rules devised by Jenkinson and the Dutch trio were "rooted in an understanding of the fonds as a physical object ... capable of reconstruction on the shelves in the repository."[35] Much the same can be said of the rules expounded more recently by the compilers of RAD and ISAD(G). Subsequent writers, including Laura Millar and Peter Horsman in this journal in 2002, have noted that physical aggregations in repositories rarely equate to a fonds as ISAD(G) and RAD define it. Horsman observed that the records of an organization are often divided across multiple locations and that by the time records are made available for consultation in an archival repository "the vast majority of what once existed has been destroyed, … by neglect, accident [or] decision." Millar noted that when the records of an organization are split between several repositories, each repository may describe its holdings as a fonds, but this practice makes nonsense of the notion that the fonds is a single entity comprehending the entire records of the organization.[36] Similarly, if an archival repository holds only "non-current" records and the organization's "current" records remain with the creator, it seems erroneous to use the term *fonds* to refer to the non-current records alone, since they are not the "whole of the records" that constitute a fonds as descriptive standards define it.

The articles by Horsman and Millar focused on organizational records, but personal papers are also subject to loss "by neglect, accident [or] decision." More perhaps than organizational records, personal papers are also subject to dispersal. For example, Simon Adams has shown how the papers of Robert Dudley, Earl of Leicester and favourite of Queen Elizabeth I, were dispersed among his servants and officers upon his death in 1588 and were subject to numerous further dispersals and losses over the centuries that followed. Most of the papers that initially came into the hands of Arthur Atye, Leicester's principal secretary, were owned by the manuscript collector Sir Robert Cotton

"The Concept of the Archival Fonds in the Post-Custodial Era," *Archivaria* 35 (Spring 1993): 24–37.

34 Cook, "The Concept of the Archival Fonds: Theory, Description, and Provenance," 73.

35 Sue McKemmish, "Are Records Ever Actual?" in *The Records Continuum: Ian Maclean and Australian Archives First Fifty Years*, eds. S. McKemmish and M. Piggott (Clayton, Victoria, Australia, 1994), 188.

36 Peter Horsman, "The Last Dance of the Phoenix, or the De-discovery of the Archival Fonds," *Archivaria* 54 (Fall 2002): 22; Millar, "The Death of the Fonds," 7.

in the seventeenth century, but some found their way into the custody of George Carew, Earl of Totnes, and others were distributed among at least four other collectors. The papers that were in the hands of Richard Browne when Leicester died were subdivided into at least three separate aggregations during the seventeenth century, and each of these was further subdivided at later dates, chiefly as a result of the activities of nineteenth-century antiquarians. Two of Leicester's account books were destroyed in a fire in 1879, and other papers, including many relating to Mary, Queen of Scots, have been lost.[37]

Dispersal among private collectors is often paralleled by the distribution of personal papers among archival repositories. The guide to *Papers of British Colonial Governors, 1782–1900*, issued by the Royal Commission on Historical Manuscripts in 1986, gave details of 353 personal archives, of which about 160 were known to be divided between two or more repositories. The guide to *Papers of British Politicians, 1782–1900*, published in 1989, listed 704 personal archives, with almost 270 divided between two or more repositories. In his study of the family papers of the Dukes of Portland, R.J. Olney reported that they had been distributed among five different repositories.[38] Most readers of *Archivaria* will know of many other examples.

Less well documented than losses and dispersals are the many aggregations that acquire extraneous additions before (or even after) transfer to an archival repository. About a quarter of the aggregations of personal papers that I surveyed in 2008 were largely created by a named individual but also contained materials created or inserted later by other family members. Some of these might perhaps have been more accurately described as family rather than personal papers; as Millar has noted, an aggregation that originates as the personal papers of an individual can be repeatedly transformed over time as it develops into the archives of an ever-widening family.[39] But it is not only family members who add, remove, or rearrange items. In my survey, I discovered seven instances in which extraneous items appeared to have been inserted into the papers of an individual by later custodians who were not family members and (more worryingly) two instances in which such items had been inserted by the repository where the papers were held.[40] The inserted items mentioned the individuals in question but had not been created by them. Extraneous additions are sometimes found in aggregations of organizational records but seem

37 Simon Adams, "The Papers of Robert Dudley, Earl of Leicester," *Archives* 87 (1992): 63–85, and *Archives* 90 (1993): 131–44.

38 Royal Commission on Historical Manuscripts, *Papers of British Colonial Governors, 1782–1900* (London, 1986); Royal Commission on Historical Manuscripts, *Papers of British Politicians, 1782–1900* (London, 1989); R.J. Olney, "The Portland Papers," *Archives* 82 (1989): 78–87.

39 Millar, *Archives: Principles and Practices*, 106.

40 Yeo, "Custodial History," 55.

more common among personal papers.[41]

After dispersals have occurred or extraneous material has been inserted, what we have are collections. When the records of an organization or the papers of an individual or family are dispersed, their components may come to be constituted as a number of smaller collections (like the collections into which the Portland papers have been divided); or some or all of these components may become attached to existing collections that contain material from a variety of sources (like the Leicester papers acquired by Cotton, which were bound into volumes together with other papers of varying provenance). Collections of this latter kind – particularly those assembled by noted antiquarians such as Cotton (now in the British Library) and Carew (now in Lambeth Palace Library, London) – are likely to be the first that come to mind when archivists consider the notion of an "artificial" collection. Such collections arise both from what the great nineteenth-century collector Sir Thomas Phillipps called "the ardour of the pursuit ... to secure good manuscripts"[42] and from a desire to memorialize aspects of the past that the collector considers significant; they commonly include selections from numerous dissolved archives. Aggregations that emerge when later custodians insert materials into the papers of an individual are perhaps less prototypical, but we may assume that those responsible for such insertions often act from motives of memorialization not unlike those of an antiquarian collector. The aggregations they create must be seen as collections, not fonds.

Individual items may be members of different collections at different times, but if the fonds is "first and foremost a concept linked to the creator" (as Cook argued in 1992)[43] or linked to the contexts of creation (as we might now prefer to say), this variability of collection membership does not affect their relation to a conceptual fonds. For example, the fifteenth-century cartulary of the London church of St. Peter Cornhill left the church's custody

41 Much of the explanation for this phenomenon doubtless lies in the frequency with which personal papers progress through the hands of other family members, and perhaps a sequence of further custodians, before transfer to a repository. Organizational records are more often transferred directly, with no intermediaries involved. Christine Wiesenthal's account of the papers of the murdered poet Pat Lowther indicates that even if family custodians do not insert items themselves, they may allow others to do so: "of the many anonymous visitors who have passed through the boxes over the years, some have left posthumous donations, miscellaneous materials ... mixed in willy-nilly" (Wiesenthal, "The Archives of Pat (and Roy) Lowther," *Journal of Canadian Studies* 40 (2006): 36). However, custodians and "anonymous visitors" are not the only sources of additional materials; both organizational and personal aggregations sometimes contain extraneous items because a third party entrusted them to the organization or individual concerned, or merely because third parties worked or lived on the same premises and their records became intermixed.

42 Seymour de Ricci, *English Collectors of Books and Manuscripts, 1530–1930* (Cambridge, 1930), 119.

43 Cook, "The Concept of the Archival Fonds: Theory, Description, and Provenance," 65.

several centuries ago; like many medieval “treasures,” it found its way into the hands of private owners and collectors, but unlike many of its coevals, it was eventually reunited with the church’s archives, at Guildhall Library (London) in the twentieth century.[44] During its life, the cartulary has almost certainly belonged to a variety of collections, but we can perceive its membership of the church’s fonds as unaltered by the vicissitudes of its physical location. Similarly, but on a far larger scale, when more than 100,000 “registers, bundles or cartons” were removed from the Vatican archives by Napoleon’s agents between 1808 and 1813 and taken to Paris to join the huge quantities of archival documents confiscated from Austria, Germany, Spain, and elsewhere,[45] neither their brief sojourn in the centralized collection at the Hôtel de Soubise nor their subsequent return to their place of origin affected their membership of the Vatican’s conceptual fonds. Even when many of the records of English cathedrals were confiscated in the 1640s and taken to a secular depository in London, where (according to a contemporary account) they were randomly intermixed and “made altogether useless,” and subsequently “trodden under foot upon the floor in a far greater confusion,”[46] these adventures did not diminish the conceptual fonds – the totality of records created in the course of the work of each cathedral – but in their day, they had profound effects on the physical collections and their availability for use.

When collections are dispersed, other collections may be formed in their turn, as materials pass from one collector to another. When Sir Thomas Phillipps’s vast collection, perhaps the largest ever assembled by a private collector, was dissolved and sold after his death in 1872, items that Phillipps had acquired found their way into numerous private and public collections, in “every part of Europe and ... America”; some of the purchasers pursued choice items through the salerooms with an ardour comparable to that shown by Phillipps when he initially acquired them.[47] Archival institutions also play their part in the formation of collections. In London, the Manuscripts Section of Guildhall Library has been active in assembling collections of items from the dispersed archives of the seventeenth-century banking business of Clayton and Morris, buying documents from dealers as they become available on the market. The archivist at University College London is responsible for the

44 Guildhall Library, London, Ms.4158. Cf. *Sixth Report of the Royal Commission on Historical Manuscripts* (London, 1877), Appendix, 407.

45 Raymond J. Maras, “Napoleon’s Quest for a Super-Archival Center in Paris,” in *The Consortium on Revolutionary Europe 1750–1850: Selected Papers, 1994,* eds. R. Caldwell et al. (Tallahassee, Fla., 1994).

46 Geoffrey Yeo, “Record-keeping at St Paul’s Cathedral,” *Journal of the Society of Archivists* 8, no. 1 (1986): 32–33; Bodleian Library, MS Tanner 141, fo.109, quoted by Dorothy M. Owen, “Bringing Home the Records,” *Archives* 8 (1967–68): 124–25.

47 M.R. James, *The Wanderings and Homes of Manuscripts* (London, 1919), 90; A.N.L. Munby, *The Dispersal of the Phillipps Library* (Cambridge, 1960).

"George Orwell Archive," a collection that contains both Orwell's own papers and numerous items of "Orwelliana" acquired by the college from other sources. Similarly, the "Papers of Millicent Garrett Fawcett" at the Women's Library, London, contain both Fawcett's personal papers and a range of Fawcett memorabilia assembled by the library from various provenances. The work of generating collections is not exclusive to private collectors.

Of course, a more "normal" role for archival institutions is to acquire material by undertaking appraisal, selecting for long-term preservation those parts of undispersed personal or corporate archives that are perceived to have continuing value. I suggest that these selected residues are also effectively collections. As we have seen, several writers have noted that a selected residue cannot be identified with a fonds as defined in RAD and ISAD(G). In response to these concerns, the compilers of RAD added a rubric that "for the purposes of these rules, that part of a fonds that is actually present in the repository is what is described at the fonds level."[48] Following this change, RAD now asserts that the word *fonds* has a particular meaning ("the whole of the documents ... organically created ...") but will be used in practice to mean something else. It defines the fonds conceptually but advises practitioners to use the term to refer to physical aggregations that may not correspond to the conceptual definition. This kind of compromise cannot be satisfactory. It would be preferable to recognize that archival appraisal and selection exercises involve acts of gathering together and thus lead to the formation of collections. Decisions on what to keep and what to reject are inherent in differentiated collecting; we may recall Pearce's remark, quoted earlier, that "the selection process is the crucial act of the collector." Ultimately, the archivist who initiates sampling exercises or appraises records or functions on the basis of their supposed "value" is acting in much the same way as the collector of Big Green Things who acknowledges that an exhaustive collection is impractical. Their fields of interest and the environments in which they operate may differ, but both are making retention choices because they feel unable to keep everything. In undertaking appraisal, archivists select a (supposedly permanent) collection of objects destined to survive and make another (much more temporary) collection of those destined for shredding or incineration. Insofar as the collection that survives the appraisal process comprises records with a common provenance, it might be labelled a "record group," following American usage, as Horsman suggested in 2002; but such a group is not a fonds as archivists acknowledge it.[49] In the conceptual

48 RAD, Appendix D, D-5.

49 Horsman, in "The Last Dance of the Phoenix," 21, argued that "almost all fonds in the custody of archivists are just record groups or groupings of records ... the term 'record group' actually expresses better the nature of the archivists' construct." Cf. Pearce-Moses, *Glossary*, 76, where it is suggested that the term *collection* is "synonymous with record group" if its common characteristic is provenance.

fonds, "records no longer extant or moved elsewhere can still be observed in the place they once occupied" (as Frank Upward claimed of records' continuity in spacetime), but in the physical collection they are absent.[50]

Distinctions between fonds and collections now emerge as differentiations between conceptual and physical groupings. The fonds is re-imagined as a concept; its components are logically interrelated but need not be physically brought together. Physical aggregations that result from human decisions about selection or co-location are most appropriately labelled as collections. Many of the collections discussed in this article employ tangible media such as paper, but collections are also formed when we aggregate electronic objects; in the words of one commentator, "the bits ... are somewhere real and physical,"[51] and collections are equally at home in the digital world.

These understandings of physical aggregations as collections can also be applied to "original" aggregations maintained by the organizations and individuals that performed or participated in the actions the records represent. This may seem a radical suggestion in conflict with established ideas about the fonds. Because archivists perceive the fonds as intimately bound to the actions of individuals and organizations, the aggregations maintained by those individuals and organizations at or near the time the actions took place may appear to embody the fonds in its elemental purity: its untarnished state before it is disturbed by the caprices of history or the implementation of disposal schedules or archival appraisal exercises. As we have seen, the fonds is commonly presented as an organic growth. According to Luciana Duranti, writing in the European tradition, it is "the whole of the records that a physical or juridical person *naturally accumulates* by reason of its activities and as byproducts of them."[52] In this tradition, organizations and individuals seem to exercise little or no conscious judgment in assembling a fonds; once actions are decided on and undertaken, their records come into existence and accumulate as an inevitable consequence, and the fonds is formed as a matter of course, its components linked by a bond or bonds that are ineluctably determined by the actions that give rise to the records.[53]

50 Frank Upward, "Modelling the Continuum as Paradigm Shift in Recordkeeping and Archiving Processes and Beyond: A Personal Reflection," *Records Management Journal* 10, no. 3 (2000): 119. I have appropriated Upward's phraseology while recognizing that he probably would not agree with my account of collections.

51 David M. Levy, *Scrolling Forward: Making Sense of Documents in the Digital Age* (New York, 2001), 156.

52 Luciana Duranti, "The Concept of Electronic Record," in *Preservation of the Integrity of Electronic Records*, eds. L. Duranti, T. Eastwood and H. MacNeil (Dordrecht, 2002), 16; my italics.

53 Giorgio Cencetti, *Scritti Archivistici* (Rome, 1970), 39–40; Elio Lodolini, *Archivistica: Principi e Problemi*, 2nd ed. (Milan, 1985), 127, 161; Luciana Duranti, "The Archival Bond," *Archives and Museum Informatics* 11 (1997): 213–18; Luciana Duranti, "More than

We should have no difficulty in accepting that records of related actions are themselves interrelated, but when we examine the growth and retention of physical aggregations, we will find that assumptions about naturalness and inevitability are open to challenge. Records at item level may perhaps be said to come into existence more or less naturally as life or business progresses, but no individual or organization retains everything automatically. In most contemporary organizations, some items are consciously destroyed soon after their creation, and some are left to take their chance in the no man's land between accidental loss and random survival. Formal aggregations are created by administrators, records managers, or secretarial assistants who choose which documents will be systematically captured and which will not, decide whether copies of outgoing letters will be made for filing, and determine whether internal drafts will be kept or destroyed. These are not natural or inevitable outcomes but decisions based on fallible human judgment. I would argue that a selective aggregation assembled on this basis should also be seen as a collection.

In 1992, Cook wrote that "the key lies in viewing the fonds, not as a physical entity, but as an abstract concept."[54] However, in a later paragraph, he described it as "primarily" an intellectual construct, and the tone of his writing suggests a reluctance to reject physical aspects unequivocally. An alternative approach would be to see the fonds solely as what Christine Nougaret has called "une réalité théorique,"[55] detached from physicality and unaffected by decisions about the assembly or dismantling of physical aggregations. Its components have (or once had) a physical existence, but the fonds itself need never have taken formal shape as a physical collection. If we see a fonds as conceptual, we need not exclude from membership interrelated records that for one reason or another have not been, or could not be, physically captured. Viewing the fonds in this way enables us to conceptualize it as a totality of interdependent records produced and received in the course of an individual's life or an organization's functions and activities, without limiting it in any way by considerations of physical aggregability or survival.

Conceptually, the fonds of an individual grows while that individual remains active, but its growth ceases when the individual dies. Likewise, organizational fonds can expand no further when organizations cease to function. Collections, however, can continue to change, as collectors and custodians subject them to division, enlargement, merger, or dispersal. Over time, collections can be formed and re-formed. Some owe their shape largely or wholly to the

Information, Other than Knowledge: The Nature of Archives in the Digital Era," *Cadernos BAD* 2 (2003): 6–16.

54 Cook, "The Concept of the Archival Fonds: Theory, Description, and Provenance," 65.

55 Christine Nougaret, "Classement et description: des principes à la pratique," in *La pratique archivistique française*, ed. J. Favier (Paris, 1993), 140.

work of a single person, but others have multiple creators; some emerge from the actions of many different people over many years.

Realizing Fonds

Conceptual fonds and physical collection can sometimes coincide. For example, a small and short-lived voluntary association may create only a very few records in the course of its activities, and these may remain together as a discrete and intact collection while the association exists and perhaps also after its demise. Larger collections may also correspond to conceptual fonds at certain points of time, although when the quantity of records is greater, such a state of affairs may be less likely to persist over longer periods. Elsewhere I have offered a case study of the papers of Sir Richard Fanshawe, a seventeenth-century English diplomat.[56] These papers are now dispersed and confused, but originally Fanshawe seems to have kept everything he received or wrote while serving on diplomatic missions in Portugal and Spain; the documents that his widow brought back from Spain after his death in 1666 formed a single aggregation that closely corresponded to the fonds as many archivists would understand it. Cases such as this demonstrate that even if we perceive the fonds as a conceptual abstraction, such a fonds *can* be realized physically. Even when (as in the case of the Fanshawe papers) a fonds is no longer realized as a single physical collection, it may have been realized at some moment in the past.

In practice, no collection of records remains entirely unchanged over time. Even a collection that persistently realizes the whole, or a large part, of a conceptual fonds will experience some alteration. Most obviously, it will be subject to wear and tear through handling, and to aging and possible physical deterioration of its contents, both during the lifetime of the records creator and subsequently. Changes may also be made to its classification or storage arrangements. Heather MacNeil has recounted how the Archivio di Stato of Florence has been arranged and rearranged in accordance with the changing professional perceptions of its guardians, and how the Bakunin family archives in Russia have been reorganized on several occasions, with differing systems of numeration, by successive custodians. With each custodial intervention, "the relationships between and among bodies of records" are reconfigured.[57]

Of course, when collections undergo internal rearrangement, their external boundaries need not change; a collection that has been reorganized can retain its correspondence with a conceptual fonds. However, the range of possible

56 Yeo, "Custodial History."

57 Heather MacNeil, "Archivalterity: Rethinking Original Order," *Archivaria* 66 (Fall 2008): 14–21.

interventions by custodians is not limited to disturbing or rearranging the order in which collections are presented. Selections are made when collections are formed, and custodians can destroy or remove items from existing collections. In doing so, they distance the collection further from the totality of records that once existed. In earlier times, when fewer records were created and destruction may have been less commonplace, it was perhaps more practicable for organizations or individuals to preserve every record they produced or received so that the collections they held might realize a fonds in its entirety. Now destruction occurs frequently, losses and dispersals are widespread, and one-to-one correspondence between fonds and collection seems much rarer. We are more likely to encounter collections that correspond to part of a fonds or parts of several fonds. Some collections may include material that cannot be associated with a fonds. The components of a fonds may be distributed across several collections and may move from one collection to another. Some of its components may no longer exist in any collection.

If fonds are indeed conceptual rather than physical, acts of ordering and arrangement (and the troublesome notion of "original" order) cannot be applied directly to a fonds and must necessarily relate to a collection. MacNeil suggested that reordering by custodians should not be seen as mere "contamination," to be eradicated by archivists seeking to present an unsullied original order.[58] The adventures of archives over time are part of their story and determine much of the shape of the archives as users see them. The stories at issue here are the adventures of physical collections, not conceptual fonds, and they embrace changes to collection boundaries over time as well as reordering within a single collection. The condition in which we now see an archival item is partly determined by the collections to which it has belonged, and we should not try to erase or ignore the evolving histories of collection membership.

All collections convey levels of meaning. Each has its own contexts: where the formation of a collection results from human activity, the purposeful seeking out of material and the decisions made by the collector come into play, as well as the actions of other parties (or accidents of history) that delimit the collector's range of choice. Collections – past or present – indicate what collectors over time have thought interesting, important, typical, or exceptional, and what combinations they have believed might constitute a satisfactory whole. Selection and aggregation decisions are inevitably influenced by the cultural contexts in which they are made, and the composition of collections reflects the contextualized modes of thought of those who assembled them.

In an era when selection seems a prerequisite for retention, these statements are as true of the work of archivists as of the activities of antiquarians

58 Ibid., 14.

and private collectors. Many of them apply equally to collections assembled at or near the point of records creation: the collections that seem most likely to correspond to a conceptual fonds. In organizational contexts, a collection physically put together by records creators or records managers can normally be expected to represent the work of the organization (or some part of it), but will also provide insight into the priorities of those who assembled the collection and the ways in which they perceived the functioning of the organization or wanted others to perceive it. Decisions about what to capture and preserve tell us a lot about the assessments of value that records managers and archivists have made and how they have exercised their power to accept or reject.

Collections are what custodians store, process, and present to their users. In Pearce's words, "collections make a difference."[59] Any collection merely offers one possible view of the world, but its configuration is likely to affect the responses of the people who encounter it. Regardless of how closely a collection may correspond to a conceptual fonds, the judgments that have moulded the extent and shape of the collection are principal factors in determining what archivists curate and what users retrieve and examine. For those whose primary interest is in the impact of archives on users in contemporary society, the constitution of collections is paramount. When studies in the UK suggest that "community archiving" initiatives offer benefits in terms of "supporting lifelong learning, community empowerment, digital inclusion ... a dialogue about identities ... and ... a greater sense of self-belief and esteem," they emphatically claim that these benefits are achieved through engagement with a collection of materials, and perhaps also through the act of collecting.[60]

However, it would be a mistake to give so much emphasis to collections and their development over time that we lose sight of understandings embodied in traditional notions of the fonds. In earlier work, I suggested that it can be helpful to see records in terms of representations. Archivists often speak about representation when discussing description or imaging, but I proposed that we can also characterize a record as a kind of representation: a persistent representation of an activity, a set of activities, or some other occurrent.[61] A

59 Pearce, *On Collecting*, 181.

60 Andrew Flinn, "The Impact of Independent and Community Archives on Professional Archival Thinking and Practice," in *The Future of Archives and Recordkeeping*, ed. J. Hill (London, 2011), 154–55. Of course, collections and collecting are not limited to the sphere of archives; for an examination of similar affordances of the collecting impulse more generally, see Ruth Formanek, "Why They Collect: Collectors Reveal Their Motivations," *Journal of Social Behavior and Personality* 6, no. 6 (1991): 275–86.

61 Geoffrey Yeo, "Concepts of Record (1): Evidence, Information, and Persistent Representations," *American Archivist* 70, no. 2 (2007): 334–43; "Concepts of Record (2): Prototypes and Boundary Objects," *American Archivist* 71, no. 1 (2008): 135–40. The term *occurrents* encompasses activities, functions, processes, transactions, events, and other temporal phenomena that may be represented in records. These phenomena are ill defined

fonds has the potential to be just such a record; conceptually, it represents the work of an organization or the life of a person or a group of persons, and its components can be assumed to have associations and interrelationships determined by the circumstances of their creation. We must accept that no representation is perfect, and no fonds can represent work or life in its fullness, not least because some ideas, actions, and events remain unrecorded; nevertheless, it can be argued that people and organizations keep records because they feel impelled to maintain representations of their activities, and that a fonds marks out the fullest such representation we can feasibly postulate.

A fonds transcends the notion of a collection brought together in a particular space. The interrelationships of its components do not depend on custody or co-location; indeed, they are not so much relations linking one component record to another as relations linking the activities these records represent. We may perceive them as logical relations even if they are never realized in a physical aggregation. The components of a fonds are also related to other entities in their environment; the classificatory systems we commonly use are only partially able to encode the complexity of the relationships that may be found or imagined.[62] Nevertheless, as a conceptual unit the fonds is underscored by what seems to be the densest possible web of mutual relationships; given the inevitable limitations of any attempt to understand and tame complexities, the fonds also appears to offer the most effective framework within which we can seek to achieve a degree of comprehension.

Of course, in the real world, conceptual units can only be apprehended dimly, and fonds need to be realized if we are to use them in any practical way. A physical collection that realizes a fonds in its entirety may be increasingly rare; nevertheless, it can be expected to bestow our most comprehensive opportunity to explore a record of organizational work or personal life and to

and archival literature lacks a collective term for them; in my 2008 paper, I suggested that *occurrents* might be the most appropriate term to use. A record of an occurrent could be a single item, a part of an item, or a group of items at any level of aggregation.

62 Geoffrey Yeo, "Debates about Description," in *Currents of Archival Thinking*, eds. T. Eastwood and H. MacNeil (Santa Barbara, Calif., 2010), 92–94. In contrast to Luciana Duranti's view that an "archival bond" arises at the moment when documents are "set aside" and "put into relation with other records" (Duranti, "The Archival Bond," 216), I would argue that, like fonds themselves, relationships of the components of fonds are conceptual; they are independent of physical arrangements or formal structures of registration. The phrase "archival bond" derives from Italian archival tradition, and other writers in this tradition have asserted that such bonds exist conceptually even if they are never realized in a physical aggregation or classification scheme (see, for example, Paola Carucci, *Le Fonti Archivistiche: Ordinamento e Conservazione* (Rome, 1983), 230; Donato Tamblè, *La Teoria Archivistica Italiana Contemporanea* (Rome, 1993), 109). For a further critique of notions that acts of capture or "setting aside" achieve a kind of intellectual transformation, see Geoffrey Yeo, "Rising to the Level of a Record? Some Thoughts on Records and Documents," *Records Management Journal* 21, no. 1 (2011): 8–27.

examine the interrelationships of its components. A selective collection that realizes only part of a fonds is likely to be easier to manage, makes fewer demands on archivists' finite resources, and may be simpler for users to navigate, but its interrelationships are less intact and it is necessarily a less complete representation.

A Multiplicity of Conceptual Fonds

Cook's assertion that the fonds should be seen as an intellectual construct was founded on arguments about the volatile administrative structures and complex patterns of record creation in contemporary organizations, the issues of multiple provenance that exercised Peter Scott in Australia in the 1960s, and the supposedly fluid and collaborative nature of much record creation in the digital era. The arguments regarding organizational change are now well known. When responsibilities for business processes move from one agency or department to another, the life of a series of records often extends across such changes, and different creators add records to a single series. To archivists who see the fonds as a physical aggregation, series of this kind are problematic because they have claims to membership of several fonds. The traditional solution has been to assign such a series to just one of a number of possible fonds, but (in Scott's words) this "provides a partly false administrative context." As Cook remarked in 1992, "obscuring the act of multiple creation by assigning records physically to single fonds distorts provenance."[63]

The Australian "series system," which emerged from Scott's work, responds to these challenges by separating what Scott called "context control" from "record control." Its separate description of creators and series allows a series to be linked to as many different record-creating entities as context documentation requires.[64] Australian practice usually eschews the term *fonds*, but some analysts of the series system accept that it implicitly allows a series to be a member of many different fonds. From this perspective, the totality of records associated with each creating entity can be recognized as a fonds, but since the components of fonds are not mutually exclusive, it is impossible to assemble each fonds as a distinct physical aggregation on repository shelves. If we accept this, we cannot maintain that fonds are essentially physical; instead, we

63 Peter J. Scott, "The Record Group Concept: A Case for Abandonment," *American Archivist* 29, no. 4 (1966): 495; Cook, "The Concept of the Archival Fonds: Theory, Description, and Provenance," 65.

64 Mark Wagland and Russell Kelly, "The Series System: A Revolution in Archival Control," in *The Records Continuum: Ian Maclean and Australian Archives First Fifty Years*, eds. S. McKemmish and M. Piggott (Clayton, Victoria, Australia, 1994); Clive Smith, "The Australian Series System," *Archivaria* 40 (Fall 1995): 86–93; Adrian Cunningham, ed., *The Arrangement and Description of Archives amid Administrative and Technological Change* (Brisbane, 2010).

must see them as conceptual totalities whose membership can be documented but need not be physically brought together.[65] Scott's work thus underpins and endorses Cook's ideas; although Scott did not use (and might not have recognized) Cook's terminology, McKemmish and her colleagues were broadly correct in saying that Scott's approach "rested on an understanding of the fonds as a logical not a physical construct."[66]

The notion that a fonds might have non-exclusive membership is not countenanced in traditional archival practice, but if we view the fonds as conceptual, we should have no difficulty in recognizing that even individual items may belong to more than one fonds. A sixteenth-century volume in the Archives Department of St. Bartholomew's Hospital, London, for example, contains both the accounts of the churchwardens of the London parish of St. Nicholas Shambles, 1526–1546, and minutes of the meetings of the governors of St. Bartholomew's Hospital, 1549–1561; the pages in the second half of the volume were used for the governors' minutes after the parish was dissolved.[67] Physically the volume is housed within the series of governors' minutes in the records of the hospital, but conceptually it has membership in two distinct fonds. In this instance, our understanding that the fonds is conceptual arises not from a transfer of responsibility for a single business process, but from the use of a single physical volume to record the distinct business processes of two different organizations.

Scott's seminal article, published in 1966, discussed personal and family papers as well as organizational records,[68] but most subsequent discussions of multiple provenance have focused on organizational contexts. Because the lives of individuals are not susceptible to the kinds of administrative restructuring that affect the work of organizations, it has often been thought that personal papers are exempt from the difficulties to which traditional notions of the fonds give rise. Writers in the 1990s claimed that "personal fonds are the simplest" and that "in the field of personal records there is a direct correlation

65 Chris Hurley, "The Australian 'Series' System: An Exposition," in *The Records Continuum*, 167–68; Adrian Cunningham, "Recent Developments in Standards for Archival Description and Metadata" (2001), http://enj.org/portal/biblioteca/funcional_y_apoyo/archivistica/42.pdf (accessed 7 October 2011); Chris Hurley, "Parallel Provenance: (2) When Something Is *Not* Related to Everything Else," *Archives and Manuscripts* 33, no. 2 (2005): 67–9. See also Barr, "The Fonds Concept," 163, 168; Terry Eastwood, "Putting the Parts of the Whole Together: Systematic Arrangement of Archives," *Archivaria* 50 (Fall 2000): 108, 114.

66 Sue McKemmish, Barbara Reed and Michael Piggott, "The Archives," in *Archives: Recordkeeping in Society*, eds. S. McKemmish et al. (Wagga Wagga, NSW, 2005), 168. It is interesting to note Hilary Jenkinson's concern (*A Manual of Archive Administration* (Oxford, 1922), 84) to define "the qualities of a fonds ... in terms of administration rather than terms of documents," a distinction that seems to prefigure understandings of fonds as logical constructs.

67 St. Bartholomew's Hospital Archives (London), HA1/1.

68 Scott, "The Record Group Concept," 502.

between the fonds and the individual's recordkeeping systems."[69] However, as Cook noted, in reality personal papers are much more complex;[70] we cannot assume that, outside the corporate world, identification of fonds is unproblematic, and that conceptual and physical aggregations always coincide. We have already seen how an individual's papers can be distributed across several collections. It is also possible for single items to be attributed to more than one conceptual fonds. Personal and official papers are often intermixed.

Joe Smith is both an individual and a member of the Smith family, and we may doubt whether he can fully distinguish the actions he performs and the records he creates as an individual from those he performs and creates in his capacity as a family member, on behalf of his family, or in conjunction with them. It must be equally debatable whether his personal fonds and the Smith family fonds are wholly distinct. Let us suppose that a letter arrives in an envelope addressed to Joe, but some of the contents of the letter are directed by name to Joe's wife and children; the sender has written to Joe but expects him to share the letter with his family. Any attempt to assign it exclusively to Joe's personal fonds or exclusively to a wider Smith family fonds can only be arbitrary; if we accept that these fonds are conceptual, we can attribute the letter to either or to both.

Depending on our understanding of how Joe and his family interact, we might also seek to identify a variety of family fonds: a fonds of Joe and his children, a fonds that also includes his parents or grandparents, perhaps a fonds that embraces more distant relatives. If Joe were to remarry or if his children were to be adopted, we might conceptualize further fonds of the new families that would emerge. The people in these family groupings are interconnected; if we perceive that their lives and actions are also intertwined, and that the records produced and received in the course of those lives and actions cannot all be assigned exclusively to the fonds of a single person or family grouping, we will need to recognize a multiplicity of overlapping fonds.

It has often been assumed that the boundaries of personal and family fonds are defined by recordkeeping practices: that the records constituting a single fonds are those that are kept together, or perhaps those that were kept together at some (possibly ill-defined) moment in the past. On this basis, the fonds membership of the letters that Joe receives is assumed to depend on whether they have been placed in his own filing system or a shared family system. If Joe's daughter is thought not to have kept any records separately from those of other people in her family (or, at any rate, if her records did not arrive

69 Hugo Stibbe, "Implementing the Concept of Fonds: Primary Access Point, Multilevel Description and Authority Control," *Archivaria* 34 (Summer 1992): 134; Adrian Cunningham, "The Archival Management of Personal Records in Electronic Form: Some Suggestions," *Archives and Manuscripts* 22, no. 1 (1994): 100.

70 Cook, "The Concept of the Archival Fonds: Theory, Description, and Provenance," 46.

separately at the archival institution), then – so the argument runs – she has no records that qualify for the status of a separate fonds. However, this argument relates not to conceptual fonds but to physical collections, whose storage arrangements may in any case vary over time. In the Churchill Archives Centre at Churchill College, Cambridge, England, papers of Blanche Lloyd (née Lascelles) can be found both in the collection entitled Papers of Lord Lloyd of Dolobran and in the collection entitled Papers of Sir Alan Lascelles,[71] but these storage arrangements need not impede conceptual understandings that her dispersed papers may constitute a single personal fonds (representing her own activities) as well as parts of the fonds of the two families in which she was a member. Associations and interrelationships between records are not confined to those housed together; it is open to us to describe as many overlapping fonds as we think appropriate.

Even the fonds of a single individual is unlikely to have a clear perimeter. Does Joe's personal fonds include items that he created but failed to capture in his recordkeeping systems? Does it include the photographs that he posted to Flickr or Picasa as well as those he pasted into his physical photograph album? Might it encompass his contributions to his friends' blogs as well as to his own? Perhaps his fonds includes records he created while working for his employer as well as those that arose from his personal life; or objects he used in his work or daily life as well as records he produced or received. A case could be made for including any or all of these in Joe's fonds, but their inclusion will undoubtedly be contested; the boundaries are fuzzy and open to varying interpretation.

Archivists have traditionally perceived the fonds as a grouping determined by the scope of record capture and possession in the "real world," as well as by its logical interdependence and its connection to individual and organizational functions and activities. According to the conventional view, if Joe discards a draft he has been working on or decides not to keep an invitation he has just received, his decision not to capture these items means they are not considered part of his fonds; if he sends a letter to someone else, the fact that he no longer possesses it means it does not become part of his fonds and can only form part of the fonds of its recipient.[72] But these perceptions still confine the

71 Elizabeth Wells, "Related Material: A Study of the Treatment of Family Papers in Specialist Repositories" (Master's diss., University College London, 2009), 57. The titles assigned to these collections are not fully indicative of their contents.

72 Lodolini, *Archivistica*, 119. In this connection, RAD distinguishes between "creators" and "authors" on the grounds that "the creator of a fonds may be different from the individual responsible for the ... content of, for example, a letter" (Kent M. Haworth, "The Voyage of *RAD*: From the Old World to the New," *Archivaria* 36 (Autumn 1993): 8). Although DACS does not refer to "authors," the compilers of DACS also recognized that "the creator of a single document may not be the same as the creator of the ... body of materials" in which it is housed (Kiesling, "Why Two Standards?"). This must be correct, but it is open to dispute whether a fonds is necessarily a "body of materials" in this sense. Physical aggregations

fonds within the limitations of the physical world of collections. If we are willing to release our notions of the fonds from the constraints of materiality, we need not feel obliged to restrict it to objects that were physically retained by an individual or organization in the course of their life or work; conceptually, we can envisage Joe's fonds as an interrelated whole arising from activities in which he participated, irrespective of whether its components are all known to survive or where they have been held.

Many archivists will be startled by the suggestion that Joe's fonds might be thought to include the originals of letters that he wrote and sent to other people as well as the copies (if any) that he kept for himself. Yet each original letter that Joe sent represents activity he performed; each is presumably related to its reply, and very probably to other letters that Joe sent and received, and to enclosures that he may or may not have retained. As well as documenting the fact that Betty received a letter from Joe and placed it in her collection on a certain date, we might also want to associate the letter with the contexts of its production among the activities that Joe undertook. Could we not choose to see it as part of Joe's conceptual fonds as well as Betty's? Original letters that Joe dispatched and drafts that he discarded do not form part of his physical collection but might still be perceived as part of his immaterial fonds.

We could perhaps associate Joe with many overlapping fonds: a fonds of records that he captured in his recordkeeping systems, a fonds that also includes the records he sent to a third party or consigned to the wastepaper basket early in their life, a fonds that (to adapt Jenkinson's famous example) includes Joe's pet elephant as well as the letter from the viceroy, or from the pet shop, that accompanied its acquisition. Alternatively, we might choose to conclude that Joe has a single fonds whose core may be largely undisputed but whose boundary is fluid.

Attempts to assign a fixed limit to the fonds – to determine it with finality – are almost always doomed to failure. Recognition that fonds are conceptual opens the possibility not only of overlapping fonds but also of varying interpretations of their borders. To those archivists who believe that boundaries of fonds can be objectively defined, this idea will probably appear heretical. Yet even Michel Duchein, normally perceived as a traditionalist thinker, has admitted that "la notion de documents ‹‹ produits ou reçus [par une personne ou un organisme] dans l'exercice de son activité ›› est, au fond, imprécise."[73] Some observers may seek to define the boundaries tightly; others may want to allow more latitude.

can be said to be created by the persons who assemble them, but if fonds are conceptual it is legitimate to ask how far they can be said to have creators responsible for "housing" their components.

73 Michel Duchein, "Archives, archivistes, archivistique: définitions et problématique," in *La pratique archivistique française*, ed. J. Favier (Paris, 1993), 24.

Nevertheless, the subjectivity of its boundaries and the multiplicity of possible boundaries do not negate the concept of the fonds or render it meaningless. The fuzziness of the limits of a fonds does not mean that we must see it as having no limits at all. We may argue about whether the email messages I have exchanged with the editor of this journal form part of my personal fonds or the fonds of my employer, the editor, the journal, the Association of Canadian Archivists, or the Internet providers who hosted the messages on their journeys; depending on the perspective we adopt, we might choose to conclude that some or all of them belong to any or all of these fonds, but we would find it much less easy to construct an argument that they belong to the fonds of Leonardo da Vinci or the Bank of Azerbaijan.

Description and Modelling

In view of the multiplicity of fonds and the physical reality of collections, it might be expected that archivists and records managers would seek to document both fonds and collections and to expose current and past relationships between them. However, ventures of this kind are poorly supported by existing practices and descriptive methods. Our descriptive standards do not provide for mapping units of description both to fonds and to collections. ISAD(G) assumes that descriptive work is focused on single and largely static aggregations. In professional practice, description of a conceptual fonds often seems to be subordinated to, or conflated with, description of a physical collection in a particular repository.

When records associated with a single creator have been dispersed or subjected to selective destruction, one possible solution might be to create descriptions of two distinct kinds. A description of a fonds might gather such information as is available about the larger whole from which the existing collection or collections have been selected; hypothetically, fonds descriptions in controlled recordkeeping environments could use or reuse metadata captured systematically at the point of records creation, including "stubs" of metadata planned to survive any episodes of destruction or dispersal. A collection description, if limited to the contents of the collection currently to hand, might appropriately be labelled a "finding aid." Either or both of the descriptions could be expected to evolve further over time, and mechanisms would be needed to indicate how collections and fonds are related.

The perceived scope and extent of dispersed fonds can also be represented using images. Digital imaging provides an obvious means of presenting a unified view of dispersed materials and has been used in projects such as the Charles Booth Online Archive (http://booth.lse.ac.uk) and the Walt Whitman

Archive (http://www.whitmanarchive.org), which bring together images of items held in different physical collections.[74] Projects of this kind can be highly successful. Even if some original items have been lost or destroyed, it may be possible to represent them using copies or transcripts. If such copies are unavailable, missing components of a conceptual fonds can still be represented by textual metadata if information about them is known. Moreover, it is not only collections corresponding to conceptual fonds that can be presented in this way. One could imagine, for example, projects to assemble images or other representations of the collections of notable collectors like Sir Thomas Phillipps, whose vast collection was assembled from the dissolution of earlier archives but is now itself dispersed. Representational systems can provide us with surrogates for a plenitude of things that are otherwise unavailable or beyond our reach.

However, these approaches may be less effective if we want to depict a number of overlapping fonds. We may want to be able to represent Blanche Lloyd's fonds as well as the fonds of the various families to which she was attached at different stages of her life. We may want to construct a number of representations of Joe's personal fonds or the fonds of his family, each offering a different interpretation of its boundaries. We may want to represent Joe's fonds as it was when he was young or middle-aged, as well as the larger fonds of Joe's old age. We could depict these various alternatives using separate descriptions or separate sets of images, but only at a cost of considerable repetition of duplicate information. Similar issues arise if we want to address the changing shape of collections. If we seek to document differing collection memberships at different time periods, we need efficient mechanisms that avoid unnecessary redundancy.

Standards such as ISAD(G) and RAD are not designed to support this multiplicity of representation. ISAD(G) presupposes a monohierarchical structure that restricts each lower-level record to membership of a single high-level entity, labelled a "fonds," which – as descriptive standards present it – wavers ambiguously between conceptual and physical aggregation. Although the standards recommend the use of metadata elements such as "archival history" or "custodial history," these elements provide only a minimal basis for representing the evolving relationships between individual records and the collections in which they have been held;[75] ISAD(G) offers no effective means

74 Caroline Shaw, "Creating the Charles Booth Online Archive: From Nineteenth Century London Poverty to Twenty-first Century Digital Riches," *Library Review* 50, no. 5 (2001): 225–30; Katherine L. Walter and Kenneth M. Price, "An Online Guide to Walt Whitman's Dispersed Manuscripts," *Library HiTech* 22, no. 3 (2004): 277–82.

75 For a discussion of the limitations of these elements, see Heather MacNeil, "Trusting Description: Authenticity, Accountability, and Archival Description Standards," *Journal of Archival Organization* 7, no. 3 (2009): 94–99.

of acknowledging that such records may also be perceived as having membership of many conceptual fonds. Authority control systems using ISAAR(CPF) – and the subsequent development of EAC – can be seen as tentative responses to the challenges of documenting multiple creators of single aggregations, but some commentators remain doubtful whether any authority system can adequately represent the contexts of archival materials;[76] the current suite of authority standards offers little to help us model the complex relations between collections and fonds. What appears to be needed is a richer framework that does not require us to impose a single set of boundaries, allows us to represent collections as well as fonds, acknowledges that fonds may overlap and may not correspond precisely to any existing collection, and recognizes that items or sets of items may move from one collection to another as collections are formed and re-formed over time.

At present, the most promising approaches to developing such a framework are to be found in the world of relational and object-oriented modelling, which in recent years has formed the basis of the CIDOC reference model for museums, the FRBR model in librarianship, and a handful of initiatives in the archives and records domain, of which the best known is the Australian SPIRT model.[77] The growing interest in modelling entities and their relationships reflects a growing awareness in our domain that logical associations of records extend beyond the records themselves and embrace relations with other entities in the wider world. These include relations not only with creators and business functions, but potentially also with collectors and custodians, whose role is

76 International Council on Archives, *ISAAR(CPF): International Standard Archival Authority Record for Corporate Bodies, Persons and Families*, 2nd ed. (2004), http://www.icacds.org.uk/eng/ISAAR(CPF)2ed.pdf (accessed 7 October 2011). Critics of authority control systems include McKemmish, "Are Records Ever Actual?" 195, and Chris Hurley, "Parallel Provenance: (1) What, If Anything, Is Archival Description?" *Archives and Manuscripts* 33, no. 1 (2005): 113. A more optimistic view of ISAAR(CPF) can be found in Maurizio Savoja and Stefano Vitali, "Authority Control for Creators in Italy: Theory and Practice," *Journal of Archival Organization* 5, nos. 1–2 (2007): 121–47. For EAC (Encoded Archival Context), see Daniel V. Pitti, "Creator Description: Encoded Archival Context," *Cataloging and Classification Quarterly* 38, nos. 3–4 (2004): 201–26; and Richard V. Szary, "Encoded Archival Context (EAC) and Archival Description: Rationale and Background," *Journal of Archival Organization* 3, nos. 2–3 (2005): 217–27.

77 ISO 21127:2006 *A Reference Ontology for the Interchange of Cultural Heritage Information* (*CIDOC CRM*); International Federation of Library Associations and Institutions, *Functional Requirements for Bibliographic Records* (Frankfurt, 1997); Sue McKemmish et al., "Describing Records in Context in the Continuum: The Australian Recordkeeping Metadata Schema," *Archivaria* 48 (Fall 1999): 3–43. Proponents of the CIDOC model have claimed that it is compatible with Encoded Archival Description (Lina Bountouri et al., "Integrating Cultural Heritage Information Sources" (2009), http://www.ercim-dis.org/ercim_dis_09.pdf (accessed 7 October 2011)) and with functional understandings of records management (Lina Bountouri et al., "Modelling the Public Sector Information through the *CIDOC* Conceptual Reference Model" (2010), http://www.cidoc-crm.org/docs/64280404.pdf (accessed 7 October 2011)), but these claims remain untested outside the CIDOC community.

largely ignored in existing standards.

The SPIRT model was developed in 1998–99 and was subsequently incorporated into the ISO 23081 metadata standard. It was designed for use in organizational contexts and shows relationships between three (or four) classes of entity: agents, records, and business, and the mandates associated with them.[78] It also depicts a subclass, entitled "business recordkeeping." Additionally, each class supports internal relationships; for example, the "agents" class includes "person/actors" who belong to "work groups," which in turn form part of a "corporate body." In principle, there is no reason to limit the number of entity classes to three or four; ISO 23081-2 claims that the model is hospitable to further classes,[79] although it follows SPIRT in restricting its detailed analysis to agents, records, business processes, and their mandates and relationships.

According to the authors of the SPIRT model, "the records entity class encompasses records at any layer of aggregation or disaggregation," and these layers include the "archive," which SPIRT defines as "the whole of the records of an organization." SPIRT makes no mention of "fonds" or "collection," but its definition of "archive" is reminiscent of traditional definitions of the fonds and perhaps leaves us similarly uncertain whether this "layer of aggregation" is meant to be physical or conceptual.[80] SPIRT was developed at the height of Australian enthusiasm for postcustodialism, and we may assume that its authors did not wish to consider the possibility that collections could have meanings that are independent of notions of "record-ness."[81]

78 ISO 23081-1:2006 *Metadata for Records: Part 1: Principles*; ISO 23081-2:2009 *Metadata for Records: Part II: Conceptual and Implementation Issues*; McKemmish et al., "Describing Records in Context," 13–15.

79 The 2007 edition of ISO 23081-2 made this claim more strongly than its 2009 successor. The statement that "there can be other classes or types of class beyond those shown" (ISO/TS 23081-2:2007, clause 6.2) was removed from the 2009 revision, but perhaps remains implicit in the assertion that the model "supports any number of entities" (ISO 23081-2:2009, clause 6.1).

80 McKemmish et al., "Describing Records in Context," 14. SPIRT's use of "archive" is derived from Upward's writings about the records continuum, but also carries overtones of the use of words such as *archief* and *archivio* as synonyms for "fonds" in various European languages.

81 The orthodox view at the time was that "in the electronic environment ... the location of the records is meaningless" (Marian Hoy and Andrea Rosenbusch, "Describing Electronic Series" (2001), formerly at http://www.rmaa.com.au/events/natcon2001/papers/section030.pdf). This view (often still held today), when combined with archivists' traditional suspicion of so-called "artificial" collections, led many writers to conclude that any consideration of collecting and co-location should be deprecated and that physical collections were relics of a custodial mindset that should play no part in archival thinking. Chris Hurley, for example, saw "collection description" as inimical to the provision of "contextualising knowledge" (Hurley, "The Making and Keeping of Records: (1) What Are Finding Aids For?" *Archives and Manuscripts* 26, no.1 (1998): 59) and went so far as to attribute "a hatred of collecting" to pioneer Australian thinkers such as Peter Scott and Ian Maclean (Hurley, "What, If Anything, Is the Australian ('Series') System?" (2008), http://www.infotech.monash.edu.au/research/groups/rcrg/publications/ch-australian-system.doc, 3 (accessed 7 October

However, relational models need not be limited to the SPIRT world view. If we accept that assemblages that arise from collecting decisions can be meaningful, we could set out to model the fragmented histories and changing membership of physical collections as well as the links between records and business activities. Description of "agents" should remain separate from description of records, but the class of agents could embrace collectors and custodians as well as creators and recordkeepers. An inclusive model would more fully recognize that records emerge from the lives of individuals as well as the work of organizations; it would also allow us to acknowledge that the fonds is a meaningful concept, though its boundaries are necessarily subjective.

We can assume that developing such a model would not be a simple task. Besides SPIRT, other existing models might be helpful, though none address the full range of issues explored in this paper. A good starting point might be Horsman's 1998 *Design for an Archival Description System*, which sought to depict what Horsman called "custodial fonds" and to maintain a distinction between custodial aggregations and conceptual provenance.[82] Heaney's study of "collections and their catalogues" is also relevant; his model relates collections to agents, items, and locations, but is firmly in the library tradition and shows little awareness of archival concepts of provenance and contextuality.[83] More recently, the Spanish *Modelo Conceptual de Descripción Archivística* has included both *fondos* and *colecciones* in its adaptation of the SPIRT model, but its basis is merely the time-worn distinction between supposedly "organic" and "artificial" *agrupaciones.*[84] The Committee on Best Practices and Standards of the International Council on Archives has plans to develop a new conceptual model, but its scope for creative problem-solving seems likely to be constrained by expectations that it must accommodate the existing standards – ISAD(G), ISAAR(CPF), and ISDF – in any modelling it undertakes.

A new model could embrace a wider range of entity classes than its predecessors. These might include rights (mentioned as a putative entity in ISO 23081-1 and extensively analyzed in 1999–2000 in the INDECS project), places, and dates (both of which have entity status in CIDOC but are mere data elements in SPIRT). Elsewhere I have suggested that since records, artifacts, and information products are not mutually exclusive categories, such a model

2011)). Whatever feelings Maclean and Scott may have had about "collecting," it is certainly a notion that the later generation of Australian "recordkeepers" found distasteful.

82 Peter Horsman, "Design for an Archival Description System, Application of ISAD(G): A Study" (1998), http://www.asap.unimelb.edu.au/asa/stama/conf/WWKisad.htm, sec.2.3 (accessed 7 October 2011).

83 Michael Heaney, "An Analytical Model of Collections and Their Catalogues" (2000), http://www.ukoln.ac.uk/metadata/rslp/model/amcc-v31.pdf (accessed 7 October 2011).

84 Comisión de Normas Españolas de Descripción Archivística, "Modelo Conceptual de Descripción Archivística" (2008), http://www.mcu.es/archivos/docs/NEDATiposEntidad_20081215.pdf (accessed 7 October 2011).

might also move closer to a goal of an integrated system serving the needs of artifact curators and bibliographers, as well as archivists, record creators, and multifarious user communities.[85] Considerable research would be needed to take this forward; it would be premature to make further strategic recommendations in this paper. Focusing specifically on issues relating to fonds and collections, however, one tentative suggestion is that collections but *not* fonds should be declared as entities; when representations of fonds are needed, they should be derivable in other ways.

Much will depend on our knowledge of the circumstances of record creation. If relationships between individual records and their producers and recipients are documented, and if we have information about records that are unavailable (e.g., metadata stubs for records that have been destroyed or sent to third parties), the fonds need not appear as a formal entity in the model; instead, by identifying all the records in whose creation particular "agents" or combinations of agents played a part, we can obtain representations of fonds when we want them. Moreover, as we have seen, the boundaries of fonds are to some extent a matter of interpretation; provided that contextual relationships are documented at a granular level, we should be able to set different boundaries to match differing perceptions and also represent overlapping fonds when needed. If the model seeks to reflect relationships among agents, their actions, and the individual records with which they are associated, we should be able to set the parameters of the fonds we wish to present without incurring descriptive redundancy or undertaking laborious physical rearrangement. Because fonds are not modelled as predetermined entities, this approach helps to accommodate different groupings and alternative interpretations.

Identification of collections is less subjective. Although the boundaries of collections may change over time, their physicality means that their boundaries at any given moment are less open to debate than the boundaries of fonds; it seems both feasible and useful to model collections as entities. Since a collection is rarely "the whole of the records" but is usually a fragment of that whole, or an assemblage of fragments from several wholes, it would be appropriate to declare collection entities separately from "record" entity classes and to offer reciprocal links indicating current and past membership of collections. Collections appear to have distinctive characteristics and relationships to collectors, custodians, and locations. They are subject to a wide range of actions and events, not merely those definable as "business recordkeeping." In terms of description, we may want to say things about a collection that go beyond particularized information about its components; documentation of collection entities could include a considered overview of each collection, the "view from

85 Yeo, "Concepts of Record (2)," 142–43; "Debates about Description," 104–6.

the plane" that MacNeil called for in 1995.[86] We may also want to describe temporal aspects of the collection: its dates of assembly and dismantling or its states at different time periods. Equally importantly (especially if metadata stubs are deficient), we may want to provide an account of the extent to which a collection is (or was) believed to contain all the records produced or received by a named agent.

Where does this leave respect des fonds? Clearly, it is important that we do not lose information about the extent and structure of collections assembled, at or near the time of occurrents represented in the records, by persons who participated in those occurrents. Although such information cannot be expected to supply everything we might wish to know about the records, it can indicate how the participants translated their understanding of the records into decisions about filing; it will tell us what aggregations of records were available for reference at that time; particularly with older collections, it will also frequently enable us to make inferences about the records and their contexts and logical interrelationships that we can no longer reach in any other way. Nothing said in this paper is intended to discourage archivists from striving to preserve contextuality or from maintaining collections that correspond as nearly as possible to some particular interpretation of the fonds. However, we must accept that mapping fonds to collections will frequently be contentious and that full realization of a fonds is often impossible. Provenance is crucial, but relying on our ability to identify a fonds with a physical collection is a very imperfect way of protecting it. Relational approaches of the kind proposed here can be more effective in documenting the complexities of provenance, but they make it apparent that the fonds is an ending of an archival quest as much as a beginning, a destination as much as a starting point.

Of course, use of relational models may require substantial changes in working methods; there are likely to be many questions about the availability of resources to implement these approaches. In Australia, despite widespread promotion of recordkeeping metadata standards based on the SPIRT recommendations, many organizations have been reluctant to adopt them. Reports also suggest that museums have seen implementation of the CIDOC model as too onerous.[87] But such models have the potential to supply levels of expressive power that otherwise seem unachievable; we need to find ways to make their adoption less burdensome.

86 Heather MacNeil, "Metadata Strategies and Archival Description: Comparing Apples to Oranges," *Archivaria* 39 (Spring 1995): 25.

87 Joanne Evans, "Building Capacities for Sustainable Recordkeeping Metadata Interoperability" (PhD diss., Monash University, 2007), http://users.monash.edu.au/~joevans/rejp_thesis.pdf, 19 (accessed 7 October 2011); Kirk Martinez and Leif Isaksen, "The Semantic Web Approach to Increasing Access to Cultural Heritage," in *Revisualizing Visual Culture,* eds. C. Bailey and H. Gardiner (Farnham, England, 2010), 39–40.

In the field of information technology, models of this kind play a major role in developing what computer scientists call "ontologies." An ontology expresses a shared understanding of the structure and composition of a domain and offers explicit formal specifications of entities and their relationships.[88] Most ontologies are rigorously designed to support computer processing. Together with uniform resource identifiers (URIs) and use of "linked data,"[89] they are expected to form key components of semantically aware information systems, particularly the long-awaited Semantic Web. The challenges archivists face in implementing highly developed models are repeated on a much larger scale in Semantic Web initiatives, but Semantic Web projects are underpinned by research in data mining and artificial intelligence, in which automated and semi-automated techniques for ontology generation are being explored. Besides techniques for recognizing and analyzing content, methods of automatically harvesting certain kinds of contextual information are under investigation and could prove greatly valuable in archival work.[90] This research

88 B. Chandrasekaran et al., "What Are Ontologies, and Why Do We Need Them?" *IEEE Intelligent Systems* 14, no. 1 (1999): 20–6. Technologists and information scientists have borrowed the term "ontology" from philosophy, where it refers to the study of being, and use it to label specific approaches to representing "how things are" or how they are supposed to be. The CIDOC model is often described as an ontology.

89 Tim Berners-Lee, "Linked Data" (2006), http://www.w3.org/DesignIssues/LinkedData.html (accessed 7 October 2011).

90 Attempts at automated extraction of context or provenance present much greater challenges than the analysis of content, but several interesting projects have already been undertaken. See, for example, P. Chirita et al., "Desktop Context Detection Using Implicit Feedback" (2006), http://pim.ischool.washington.edu/pim06/files/chirita-paper.pdf (accessed 7 October 2011); A. Marins et al., "Modeling Provenance for Semantic Desktop Applications" (2007), http://www.cidoc-crm.org/docs/Modeling%20Provenance%20for%20Semantic%20Desktop%20Applications.pdf (accessed 7 October 2011); R. Mayer et al., "Interacting with (Semi-) Automatically Extracted Context of Digital Objects" (2009), http://www.idi.ntnu.no/~neumayer/pubs/MAY09_ciao.pdf (accessed 7 October 2011). Much computer science work in this area (such as U. Braun et al., "Issues in Automatic Provenance Collection" (2006), http://www.eecs.harvard.edu/syrah/pass/pubs/ipaw06.pdf (accessed 20 January 2012)) is concerned with provenance of *data*, but there are also "activity-based computing" projects that seek to capture contemporaneous information about activities in the workplace (S. Voida and E.D. Mynatt, "It Feels Better than Filing: Everyday Work Experiences in an Activity-Based Computing System," in *CHI '09: Proceedings of the 27th International Conference on Human Factors in Computing Systems* (New York, 2009): 259–68), as well as initiatives seeking to mine contextual information retrospectively in such diverse fields as digital video curation (C. Shah, "Mining Contextual Information for Ephemeral Digital Video Preservation," *International Journal of Digital Curation* 1 (2009): 175–92), email analysis (M. Dredze et al., "Automatically Classifying Emails into Activities," in *IUI '06: Proceedings of the 11th International Conference on Intelligent User Interfaces* (New York, 2006): 70–7; M. Esteva et al., "Finding Narratives of Activities through Archival Bond in Electronically Stored Information" (2009), http://web.archive.org/web/20100722172246/http://www.law.pitt.edu/DESI3_Workshop/Papers/DESI_III.Esteva-Xu-Nair.pdf (accessed 7 October 2011); H. Kang et al., "Making Sense of Archived E-mail: Exploring the Enron Collection with NetLens," *Journal of the American Society for Information Science and*

is still in its infancy, and its early findings must be treated with caution, but in the longer term automated solutions are likely to expedite what are currently time-consuming manual processes; we can expect to see tools that archivists can use, if we have in place technological frameworks that allow us to take advantage of them. It seems reasonable to foresee a time when artificial intelligence capabilities will relieve archivists of some of the more mundane aspects of description, thereby allowing us to employ richer models and concentrate our resources on aspects that cannot be automated.

A further caveat relates to assumptions that underlie much recent work in this arena. The SPIRT model and the standards that use it appear to be designed for a world where messiness is absent and competing interpretations have been abolished. It also seems to be a world of Big Brother or Jeremy Bentham's panopticon: a world in which records are perhaps "always becoming," as McKemmish has affirmed, but where the becomingness is constantly monitored by the recordkeeping system, which delimits every action in which the record participates. Like most promoters of ontologies, the developers of recordkeeping metadata standards have tended to assume that their domain of interest can be precisely defined and controlled in a way that conforms to their particular viewpoint. Australian recordkeeping standards are certainly not the "liberatory" standards advocated by Wendy Duff and Verne Harris,[91] and we may suspect that the patrolled universe assumed by their designers does not resemble the messy, diffuse, and frequently unsatisfactory world in which most archivists must operate. We need a more open approach: a model that is hospitable to the records of individuals, community groups, and informally structured organizations, and also to retrospective description and less-controlled collecting environments.

If we accept that records have evolving relationships and that collection memberships change over time, it will be appropriate to use relational systems that support documentation of change, but we will want systems that offer flexibility to interpret relationships in different ways and to accommodate degrees of uncertainty. Custodial histories of older archives may not be fully known, and past contextual relationships may have to be inferred long after the event. We must be able to take account of uncertainties and ambiguities, not just about what relationships might once have existed, but about when they were formed, how they were structured, and how long they lasted. A possible exemplar that appears to offer at least some of these capabilities is the MPEG-7 standard for describing multimedia, which allows objects or relationships to

Technology 61, no. 4 (2010): 723–44), and digitization of medieval accounting records (A. Ciula et al., "Expressing Complex Associations in Medieval Historical Documents: The Henry III Fine Rolls Project," *Literary and Linguistic Computing* 23 (2008): 311–25).

91 Wendy M. Duff and Verne Harris, "Stories and Names: Archival Description as Narrating Records and Constructing Meanings," *Archival Science* 2, nos. 3–4 (2002): 284–5.

be documented even if they are not precisely defined, and also permits the addition of further detail when descriptions can be amplified.[92] Standards of this kind could be expected to support a variety of curatorial and user requirements as well as different levels of interactivity and resource availability.

Conclusion

As Pearce has observed, "collections are a significant element in our attempt to construct the world."[93] For many archivists, the prototype of a collection is an assemblage of miscellanea put together by well-meaning but misguided antiquarians; however, the scope of the term is much wider than this. Collections are ubiquitous, in digital environments as well as in the analogue world. Joe has a collection of files stored on his computer, and I have a different collection on mine. Joe and I can share access if we want, and can move or copy files from one collection to another, but (despite the frequent allegations that divisions are removed and boundaries dissolved in digital space) such sharing and copying does not eliminate the physical separateness of the two collections. The aggregations that organizations and their records managers assemble – and those that archival repositories acquire from organizations or individuals – are also best understood as collections. Internal orderings of collections need not be fixed, but their external borders at any given moment are usually easy to recognize.

The collections held by archival repositories and by other organizations, communities, and individuals are the aggregate entities that their custodians manage and maintain; if open to use by third parties, they are the aggregate entities that users encounter at particular times and places. But they are also related to other, perhaps larger, entities: across time, to collections that existed physically in the past but are now broken up; across space, to other collections existing physically in the present; and, in ways that may transcend both time and space, to conceptual groupings that might never have had a physical realization. Such conceptualizations may perhaps take different forms (a possibility that I will consider in a forthcoming paper),[94] but many strands of archival thinking suggest that our pre-eminent intellectual construct should be the fonds.

We must acknowledge, however, that fonds are difficult to circumscribe, not only because they are conceptualizations rather than physical aggrega-

92 Hawley K. Rising and Corinne Jörgensen, "Semantic Description in *MPEG-7*: The Rich Recursion of Ripeness," *Journal of the American Society for Information Science and Technology* 58, no. 9 (2007): 1338–45.

93 Pearce, *Museums, Objects and Collections,* 37.

94 Yeo, "Bringing Things Together," forthcoming.

tions, but also because their boundaries are a matter of interpretation. It is usually, perhaps always, impossible to construct a definitive statement of what constitutes "*all* the records" of the life of an individual, a family, a partnership, or an organization. Sometimes the perceived boundaries of a fonds may correspond to a collection held in a particular repository, but such cases are probably exceptional. The possibility of realization is never wholly absent from conceptual notions of the fonds, but in practice, in an era of multiple overlapping fonds, coincidence between fonds and collection is increasingly rare.

Elusive though the fonds may be, it continues to claim our attention. The importance we attach to what we perceive as full records of life and work can be seen in recent digital "lifelogging" initiatives, whose selling point is the assertion that they will effortlessly "capture everything we do ... record every event we experience ... and ... enable total recall of our lives," in the words of a recent study.[95] Based on assumptions about ever cheaper and more capacious storage, these initiatives seek to use sensors or other automated capture devices to provide lifeloggers with a full record of their lives. Contextualization is enhanced, since no selections are made and every item in the lifelog supplies context for the others. Lifelogging projects may seem frighteningly ambitious and as yet show few signs of progressing beyond the research laboratory, but they demonstrate the strength of the human urge to maintain a record that is as complete as possible. Even in the digital age, our desire to realize the fonds does not diminish.

Archivists have traditionally claimed that professional practices that seek to respect the fonds enable those who encounter records to authenticate and trust them, or at least make judgments about their authenticity or trustworthiness. Insofar as the ability to make these judgments rests on protecting the provenance of records – their association with the activities they represent, the persons involved in those activities, and the world in which the activities occurred – it seems clear that relational documentation systems can offer firmer support than reliance on physical ordering or hierarchical description. This paper has argued that these systems also provide more effective methods of documenting collection histories and the adventures of records over time.

Relational systems do not eliminate the holding of physical collections. If records and archives are to be preserved, it is scarcely possible or desirable to preserve them as isolated specimens; people, institutions, or machines must maintain collections of them. Many archivists are likely to advocate maintaining collections that resemble record groups: collections of records whose common characteristic is their shared origins. Others may favour the view that the collection in a given repository should comprise many record groups

95 Abigail J. Sellen and Steve Whittaker, "Beyond Total Capture: A Constructive Critique of Lifelogging," *Communications of the ACM* 53, no. 5 (2010): 70.

or perhaps many series. Ultimately, collections consist of individual records or objects at item level. Whichever view we take, our collections should be underpinned by rich documentation systems that help us to navigate them and understand their wider contexts. Such systems need to extend beyond the borders of single collections, but we should be wary of suggestions that collections have no place in the world of archives or that new understandings of virtuality have rendered them obsolete. In analogue and digital environments alike, collections have primary roles in physical storage, operational management, and user access.