

## Documenting sites of creation

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*Meaning is lost when records are moved from the sites in which they were made and kept to archives. This paper weighs the significance of that loss by identifying different kinds of context that may be found in sites of creation. Should archivists emulate archaeologists and document sites before they disturb them? What difficulties arise? This paper finds that, even though physical contexts cannot be perfectly captured or wholly preserved, there is still value in documenting sites where there is a strong connection between environment, records and creator. Furthermore, that documentation can then be used as a powerful tool to enhance access.*

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Original order, as traditionally understood, refers to the last, logical ordering of records by their creators.<sup>1</sup> According to this principle, it is that *intellectual* order that matters; the *physical* arrangement of records in space is not necessarily significant. When acquiring custody of records, archivists uproot them, endeavouring to identify and preserve ‘original order’ (often by reconstructing it), but disrupting physical relationships amongst records and the connections between records and their sites of creation (loosely defined as the physical environments in which records are made, used and kept). Many archivists have acknowledged that context is lost when records are packed up and removed to archives. Brothman, for example, identifies this as ‘the most basic disruption of original order’.<sup>2</sup> Even Jenkinson recognises a connection between some records and the ‘physical fact of the place, in which they were preserved’.<sup>3</sup> How significant is this loss of context? Can anything be done to ameliorate it?

### Reading sites of creation

Sites of creation are potentially loaded with information about records and about the creators of records. The very fact of a record’s physical location can, for example, indicate who made it or who was responsible for it. Jenkinson recounts an incident, which occurred following the Allied entry into Rome in 1944, when a set of copied Italian situation reports, annotated with blue chalk markings, was narrowly saved from being discarded out the window of a building. These records were preserved, because it was discovered that the building contained Mussolini’s *Archivio Ordinario*. They had likely been either marked for Mussolini’s attention or annotated by him personally.<sup>4</sup> Physical environments

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can also shed light on the functional and symbolic meanings of records, describe work processes and record-making technologies and illustrate creators' characters.

Ketelaar encourages archivists to ask: '[w]here was the archive kept, in the safe or in the bedroom?'<sup>5</sup> Evidence of placement can reveal the role of particular records. One might, for example, find deeds stored safely in locked cabinets, while circular memoranda are stuffed into drawers unread, and letters and bills are kept in piles on desks until answered. Horsman provides a pre-modern example of the link between placement and function in his description of the first inventory of the Dordrecht town archives. This list contains idiosyncratic groupings, such as 'charters in the "Iron Cupboard"' (a large cabinet with twelve locks) and 'charters in the "Room of the Orphan Masters"'. A later archivist erased these distinctions, grouping all the charters together in a single series in the belief that the physical arrangement was insignificant and, in the process, obscured evidence of what was later revealed to be significant differences in the functions of the two sets of charters.<sup>6</sup>

The attitudes of individuals and organisations towards particular records are sometimes apparent in sites of creation. What is kept in the bottom drawer? What lies hidden between two books on a shelf? Which files did a company send downstairs into the mouldy basement? Which computer files were stored encrypted or in a hidden folder? Rekrut suggests looking for clues, such as a recordkeeping system's visibility to clients, the quality of the furniture used to house records and the design of boxes, folders and other storage media. These 'may', she argues, 'indicate the value and meaning of the records to the organization and their intended role in communicating with clients; instilling confidence through visible signs of order, neatness, economy, and prosperity'.<sup>7</sup>

Physical environments can also attest to the work habits of individuals and the workflows of organisations. People rarely work in the precisely ordered patterns suggested by archival arrangements of records. Based on his study of working environments, Malone concludes that people generally arrange paper records in 'files' or 'piles': files are ordered according to a scheme (and, thus, are easily described by archivists); piles, on the other hand, 'have no systematic order ... [and] their spatial location is often especially important in finding them'.<sup>8</sup> For the creators of records, these piles are significant: they serve as aids for finding information and as prompts for recall. Malone quotes Kenneth, one of his research subjects, who describes his desk:

The desk is sort of random. It's sort of mostly recent stuff, because I periodically do clean off my desk. For about 30 seconds it's clean. I usually separate it into piles that have to be instantly answered, should be answered in a week, or whatever has appropriate places. That pile is mostly stuff that should be dealt with in a week ... And it's been sitting for months.<sup>9</sup>

The application of the principle of original order to Kenneth's desk would likely entail rearrangement, based on Kenneth's business functions and activities. Although probably necessary for accessibility, such an intervention would mask the chaotic nature of his actual working habits, indicating a simple and exact order that never existed in practice. Archival arrangement and description cannot fully represent the complex ways in which individuals actually create and use records.

Corporate offices contain important clues about the work processes that generate organisational records. Nelson and Webster maintain that the 'routinization of activity' is an even more important source of 'organizational memory' than formal records

themselves.<sup>10</sup> In making this argument, they refer principally to the tacit knowledge that is bound up in employees' skills and interactions, but they also contend that working environments are important as context.<sup>11</sup> For Nelson and Webster, the office is at once a relatively stable stage for the performance of work routines and, at the same time, a malleable space in which alterations (such as a letter arriving on a desk) can be prompts for action.<sup>12</sup> The imprints of organisational work processes can be read in these fixed and unfixed features. The Chief Secretary's Building in Sydney provides an example. Encoded in the floor plan of this nineteenth-century structure are the workflows of the two colonial government departments for which it was purpose built: the Chief Secretary's Department (at that time, the Colonial Secretary's Department) and the Department of Public Works. The layout of the building still reflects this original purpose. The Chief Secretary's corner office, for instance, has balconies connecting it directly to the offices of the Principal Under Secretary and the Chief Clerk (the highest ranking members of the department) and to the Executive Council chamber. Viewing the floor plan, one can visualise how information flowed through the department to the Principal Under Secretary, down the enclosed balcony to the Chief Secretary and thence to the Executive Council.

Evidence of the technologies used to create or manage records may also be found in their originating environments. In the collection of the State Records Authority of New South Wales, for example, is a large, pigeonhole cabinet that once belonged to the Chief Secretary's department. It is now just an empty piece of furniture, but it gives a material explanation for the complex ordering of records in that department. Once records are removed from the sites of their creation and use, it is difficult to retain connections to significant pieces of equipment and technology. Yakel recalls an example involving the Archbishop of Cincinnati's personal records, where, in the process of accessioning, the Archbishop's letters were removed from an antique pigeonhole case and rehoused in archival boxes. The order in which the records were maintained by the Archbishop (alphabetical) was preserved in the archives, yet their manner of presentation (now in standard archival boxes) was subtly changed. Yakel concludes:

Representational and recordkeeping systems are fragile and extend beyond order and organization and into context of the creator, their culture, and the technologies or representational systems that bind them together. Technological obsolescence of representational systems, however, is problematic, whether archivists are dealing with turn of the century cataloging practices, such as the Amberg filing rules, pigeonholed desks, or personal computers.<sup>13</sup>

Personal computers are a particularly interesting form of technology, for not only are they tools that frame how digital records are made, they also constitute virtual spaces themselves: sites of creation *within* sites of creation. A desktop computer has a desktop, file system and a trash can of its own. When Emory University recently accessioned Salman Rushdie's digital papers, they preserved the electronic hardware intact and have taken the innovative step of providing access to the papers within an emulated version of Rushdie's Macintosh computer, trash can and all. In their paper describing this project, Kirschenbaum et al. identify the rationale for the approach:

Computers are writing technologies, but they are also *environments*: work spaces, surrogate desktops that function as extensions of self. As computers become more and more integrated into our daily routines they become the site for managing multiple aspects of our lives ... We personalize our computers – and to a large extent we inhabit them.<sup>14</sup>

Digital technologies, such as emulation, create new possibilities for preserving evidence of working environments. But they also raise the question: if a virtual environment is significant context, why not the physical environment, as well? Isn't Salman Rushdie's paper trash can as interesting as his virtual one? Indeed, Kirschenbaum et al. recognise this, suggesting, at the end of their paper, that it is important to document the original physical settings in which personal computers are used with photographs and video.<sup>15</sup>

Sometimes understanding the symbolic use of records is as important as understanding their contents. O'Toole gives examples of records, such as school diplomas, wills, family bibles and baptismal records, which are heavy with symbolic meaning.<sup>16</sup> These kinds of records are not just created and used: they are cherished, protected and displayed. Through such acts, families, schools and communities tell their stories. Seeing records in the settings in which they were created and used (and we should consider the display of records to be a kind of use, as well) can be critical to the unpacking of such meanings. O'Toole relates the tale of the American Constitution, now enshrined in the National Archives, but previously stored in 'a vacant grist mill' and later in the Washington Orphan Asylum.<sup>17</sup> This progress through a succession of sites tells how the symbolic role of this document has changed over time, from the point of its creation in Independence Hall in Philadelphia, through a period of neglect and right up to its continuing use today as a potent national symbol.

Emotional resonance may also be lost by removing records to archives. Just as encountering original documents can give users a sense of direct emotional connection to records' creators, so can visiting sites of creation (which is why people visit sites like Shakespeare's birthplace or Wilfrid Laurier's Ottawa home). For personal records, the emotional significance of sites of creation is especially important. Hobbs writes of the importance of intimacy in personal records and of the value of personal records in documenting an individual's character, and she exhorts archivists to preserve evidence of the 'inner, more intimate aspects of human character', by including such facets in archival descriptions.<sup>18</sup> Private spaces can tell us a lot about individuals. For example, furnishings, decoration and the arrangement of space often projects status. Judges' private chambers, ministers' offices, boardrooms: these kinds of spaces contain overt displays of power. Self-image may also be encoded in personal spaces. What pictures hang on the wall? What books are on the shelves? What view can be seen from the windows? *The Guardian* has a wonderful series of portraits of writers' rooms that conveys rich details about various authors' personalities and their methods of work. The portrait of Charles Darwin's room, for example, shows a study furnished like a ship's cabin (*a la* the *HMS Beagle*). Tellingly, it has a wash basin just behind the desk, which he installed because of his chronic illness.<sup>19</sup>

All of these meanings – specific and non-specific, practical, symbolic and emotional – are potentially disrupted when records are collected from desks, filing cabinets, pigeonholes and personal computers and transferred to the shelves and servers of archival repositories. Collections are homogenised in archives – neatly arranged, placed in identical folders and boxes, their use restricted to closely monitored access in reading rooms – and transplanting records into this new environment serves to partially sterilise them. It also imbues them with new meanings. Several archivists have noted the effect that archival processes and archival spaces have on the interpretation of records. Brothman, for instance, identifies the accessioning and descriptive work of archivists as 'a ministering gesture', which transforms records, giving them added legitimacy and import.<sup>20</sup> Both Ketelaar and Schwartz analyse archival institutions as places of power, with their use of surveillance, their rituals and their monumental architecture.<sup>21</sup> These

expressions of power condition readers' responses to the records that they encounter in those spaces. Removing records from sites of creation, therefore, both subtracts context and adds new and distorted meanings to records.

### **Documenting sites of creation**

In some cases, records can be preserved and made accessible at sites connected to their creation and use: many business and university archives, for example, remain on-site; the Franklin D. Roosevelt Library and the Royal Archives at Windsor Castle are other examples. It should also be noted that digital records open up new possibilities for non-custodial approaches to managing digital archives. In many cases, however, and for valid reasons, such as accessibility and preservation, records must still be moved to foreign sites (archives), where meaning is inevitably lost. Given this, would it be useful to document sites of creation during accessioning? What challenges lie in the way of this possibility?

When Howard Carter unearthed Tutankhamun's tomb in late 1922, one of his early acts was to engage the services of fellow Egyptologist and archaeological photographer Harry Burton. Burton's images, taken before the removal of the funereal relics and furnishings from the site, appear to show the tomb in a state much as Carter found it.<sup>22</sup> The photographs give rich context to items that are now scattered between various museums. In the arrangement of objects within the tomb, we witness a sacred and ritual order, which was disrupted both by the processes of decomposition and by the intrusion of early graverobbers. The photographs provide an immersive experience, allowing for an endless rediscovery of the site.

In her redefinition of provenance, Millar draws from archaeological theory (in particular, the notions of spatial context and 'findspots') to propose a greater emphasis on the description of custodial history and the 'physical management and movement of records over time'.<sup>23</sup> The documentation of sites of creation with videos or photographs, such as those taken by Harry Burton, might contribute towards the rich views of recordkeeping systems across space and time that Millar anticipates.<sup>24</sup> The visual documentation of sites has a venerable history, and archivists could draw from existing literature in fields such as archaeology, heritage studies and even forensic science, in order to develop a methodology. Heritage professionals, for example, employ a process called 'archival recording', which is the documentation (written and visual) of heritage sites, often before they are subsequently changed or destroyed. The New South Wales Heritage Office publishes a guidebook describing this process, which also gives practical advice, such as linking photographs to a general site plan, conducting research to find evidence of earlier uses and changes to a site, and making film or video recordings of any industrial or social processes conducted at a site.<sup>25</sup>

It must be admitted, however, that archivists face challenges in translating such techniques into their own practice. Heritage buildings, archaeological digs or murder scenes all seem relatively stable when compared to workspaces and the records contained within them, which are often in states of constant flux. Organisations move, restructure, change functions and alter their systems of records management. Individuals can work in several spaces at once (at home, while commuting and at work) and will normally be associated with many different locations over their lifetime. From day-to-day, those separate working environments can each undergo transformation: my desk today looks quite different to how it looked yesterday. Furthermore, as they travel through the continuum, records are repurposed and can take on new meanings and roles. As the example of the American Constitution shows, records can be associated

with several significant sites over time. Simply documenting a last site of creation in its final resting state might serve to mislead researchers, by giving a false context to records that have been created in quite different circumstances. And it may, of course, also result in a lot of photographs of boxes in attics and filing cabinets in basements.

The case of a history professor, recently retired from his university and now considering how to dispose of his records, serves as an example of these difficulties. The one particular site that would arguably give the ‘best’ context to this professor’s records is his old study in a sandstone wing of the university overlooking the quadrangle, where he worked for the greater part of his university career, surrounded by overladen bookshelves and rickety old metal filing cabinets. However, in his last years at the university, he was unceremoniously moved by university managers into a boxy little room in a modern building, with strict new rules concerning furnishings and *how he must not place books on top of his bookshelf*. Following his retirement, his personal records are now located at home, perhaps in boxes under the ping-pong table. In a case like this, which of these environments do you document?

One could argue that, just as many archives aim only to document the last arrangement of records from their period of active use (the received order), an archivist’s responsibility extends only to recording the context that they themselves disrupt (either by removing records themselves or by causing the removal of records). In our historian’s case, that would mean a picture of the underside of a ping-pong table. Certainly, this image would not be entirely devoid of meaning, but it would not greatly extend context. The underside of a ping-pong table is no Tutankhamun’s tomb. But that is a misleading example. Archaeological sites may seem static, but they are rarely, if ever, so. Carter’s excavation of Tutankhamun’s tomb is not a representative example of archaeological practice. Archaeologists – on the contrary – recognise that sites are subject to a host of changes, or transformations, over time. These transformations may be natural processes (such as erosion) or cultural-formation processes (human activity before the site became buried and human activity – like ploughing or looting – which affected the site after burial).<sup>26</sup> Contemporary archival theorists make very similar arguments for records. MacNeil, for example, in her critique of a traditional, frozen-in-time view of original order, points to an emerging consensus that aggregations of records are actually in constant flux and present ‘multiple logical and physical orders, each of which is worth studying in its own right’.<sup>27</sup> Following this line of argument, we can consider all of the places in which our history professor created and used his records to be sites of creation (and perhaps even the archives, post-transfer) – all of which are potentially worthy of documentation.

With this proliferation of sites of creation, perhaps some kind of selection is called for. O’Toole identifies symbolic meaning in many records, but he does not suggest that all records have significant symbolic value: ‘[p]robably most of the records archivists encounter, especially those functional and instrumental records of modern bureaucratic organizations, will exhibit far more practical than symbolic characteristics’.<sup>28</sup> Boles makes a similar point for the arrangements of records. Some orderings, he suggests, are more meaningful than others. ‘Creators first create documents’, he writes, ‘[i]t is into this activity that they pour most of their labor. It is in the completed documents that they express their deepest thoughts and profoundest emotions. Documents are filed when this process is finished. Filing is a secondary activity’.<sup>29</sup> Sites of creation may be viewed in a similar way. In some environments, creators leave a strong presence. They may have invested a lot of energy in designing or shaping the space around them or they may have dropped dead at their desks, leaving their records *in situ*. Other environments may not contain enough traces to warrant documentation. In the same way that we choose the

details which we include in archival descriptions, we can make decisions about which sites of creation to document, how to document them (photographic, video or textual descriptions) and when to document them (ideally, in a moment of active creation or use).

If archivists do begin to document sites of creation – if they go forth with clipboards, cameras and measuring tapes – then they step over the archival threshold, and they are no longer neutral, passive recipients of records. Documenting sites of creation is subjective: the relevant space must be defined – is it just a room that is deemed significant? Or is it an entire building or neighbourhood? In addition, a time must be chosen, as to when to document that space. Because of this subjectivity, images of sites of creation, without sufficient context, are dangerous, perhaps more dangerous than textual archival descriptions, because they risk posing as timeless and truthful views of collections, when they are, in fact, deliberately created viewpoints capturing single moments in time. As Schwartz writes:

despite the rhetoric of unmediated representation, the photograph was, and continues to be, the material evidence of a human decision to preserve the appearance of a person, an object, a document, a building, or an event judged to have abiding value.<sup>30</sup>

Hedstrom calls for archival ‘interfaces’ that ‘serve as devices for exposing, rather than obscuring, the imprint that archivists leave on records through appraisal and descriptive practices’.<sup>31</sup> Looked at from this perspective, the principal limitations of images – that they cannot show all the various relevant contexts and that they only show collections at single points in time – may actually hide strengths; in their own subjectivity, they can attest to the subjectivity of all archival interventions. Shanks argues: ‘[p]hotographs can help us attend to materiality by saying “look at what has been omitted”, rather than “look, believe this text”’.<sup>32</sup> It may be impossible to capture all the relevant environments affecting records, but many other relevant contexts, and many records, are lost, too. In fact, an image of a collection before it is processed may point to such absences, by showing culled records, and thereby cause users to question archivists’ appraisal and processing choices. A single image cannot represent changing environments, different orderings of records and variations of the use of records over time, but archival arrangements are fixed, too. Brothman writes that archival arrangements produce ‘a version among other possible versions of the information universe’.<sup>33</sup> By providing visual evidence of a different physical order, documentation of sites of creation with records *in situ* may encourage researchers to judge the validity of archival arrangements.

Documentation of sites of creation will not prevent meaning being lost when records are moved to archives. In many cases, there will not be enough relevant contextual information in a site to warrant documentation. Where sites can usefully be documented, images will only capture single perspectives at single moments in time. Despite these limitations, the documentation of sites of creation can still provide new views on collections that give valuable context and enhance, as well as trouble, the contexts currently offered by archivists.

### **Sites of creation as description**

As well as preserving contextual information, the documentation of sites of creation has the potential to be a powerful tool for supporting access to archives. Images enable visceral connections between users and creators and provide visual explanations of the principles of provenance and original order.

The general, public lack of understanding of the principles underpinning archival arrangement remains an important barrier to access. Users typically rely on archivists to

translate their own subject- or name-based questions into provenance-based questions that will guide them to the right collection and to the right record (that is, which creator is likely to have created records related to this query?). This process works in reading rooms, given enough trained and knowledgeable staff, but it breaks down online. On the Internet, archivists are not available as mediators, and users expect to quickly find relevant information through simple search interfaces and will often drop in from search engines and dive straight down to items, bypassing the contextual information available elsewhere in the catalogue. How do you assist such users to navigate archival finding aids more effectively, without hindering their ability to wander and search freely? How do you communicate to them the richness of archival context? And, as Schwartz asks: ‘how do we ensure that archival documents are not robbed of their meaning by their presentation in dematerialized and decontextualized form?’<sup>34</sup> Archival description is not just about enabling access and supporting the evidential qualities of records. The contexts that archivists provide should enhance the experience of reading records by promoting authentic empathic links between users and creators.

We can imagine pictures or videos of sites of creation becoming online finding aids. For example, in a photograph of a study, clicking on a document lying visible on the desk might link a user to a description or rendition of the record. This would provide a browseable interface that surrounds records with context and educates users in archival principles. Bearman urges archivists to construct ‘a model of the archives as an information system, which users can maintain as an archetype and employ to navigate through the documentation which archivists create’.<sup>35</sup> Images of sites of creation may provide such a model by demonstrating the connection between creators and records, by indicating the physical extent of collections, by visually representing an original order and, above all, by illustrating provenance. Such an interface would not be complete: the contextual information conveyed would not be comprehensive or definitive. As a supplement, however, it has the potential to both illuminate collections and make traditional archival documentation more comprehensible to users.

Looking to the future, there may be other, even more elaborate ways of making use of the documentation of sites of creation, in order to enhance access. Over ten years ago, Horsman prophesised:

Using Dordrecht as a model, I fantasize about a kind of virtual reality, in which the computer screen brings you into the townhall, in which you can even choose a role to play: an elder of the guilds in the seventeenth century, a member of the council, a clerk, a secretary, or an early nineteenth century scholar. At the entrance a guard might ask what you are looking for, and show you the way to the right floor and room. You walk through the building, from room to room, looking at the series.<sup>36</sup>

He concludes: ‘[w]ould it not be a reconstruction of the original order closest to the original order itself?’<sup>37</sup> This type of virtual access is already being employed by archaeologists and museum curators. Harry Burton’s photographs of Tutankhamun’s tomb, for example, form the basis of a complete virtual environment that allows users to ‘discover’ the tomb themselves.<sup>38</sup> Tolva describes the rationale for this website:

[p]resentation and preservation of artifacts in a physical museum setting necessarily removes them from their original setting. It follows that a useful way to provide a superior visitor experience is try to mitigate this decontextualization by re-situating a collection in the milieu of its creation, usage, or discovery.<sup>39</sup>

Admittedly, virtual sites of creation as online interfaces will not appeal to all users of archives, many of whom will just want quick access to a particular record of interest. That said, there is no universal or complete interface, and we should not expect to find one. Let's not content ourselves with a single search box. As more and more users of archives rely on the Internet exclusively for their research, we have a critical need to explore and experiment with new interfaces that not only enable discovery, but that present context and communicate archival principles to users in an engaging way.

## Conclusion

Removing records from sites of creation disrupts context and destroys meaning. To a certain extent, this destruction is inevitable. Nevertheless, archivists can still do something. Where there are strong connections between environments, records and creators, archivists can emulate archaeologists and document those sites. Even though this will only result in partial preservation of context, it will still expand the horizon of meanings available to researchers. As well as preserving context, documentation of sites of creation has the potential to be used to create new online access tools that visually convey context and illustrate the archival principles of provenance and original order.

## Endnotes

1. This traditional view of 'original order' is challenged in contemporary archival theory. See, for example, H MacNeil, 'Archivalterity: Rethinking Original Order', *Archivaria*, vol. 66, Fall 2008, pp. 1–24.
2. B Brothman, 'Orders of Value: Probing the Theoretical Terms of Archival Practice', *Archivaria*, vol. 32, Summer 1991, p. 85.
3. H Jenkinson, 'The English Archivist: A New Profession', *Selected Writings of Sir Hilary Jenkinson*, Alan Sutton Publishing, Gloucester, 1980, p. 239.
4. Jenkinson, p. 239.
5. E Ketelaar, 'Tacit Narratives: The Meanings of Archives', *Archival Science*, vol. 1, no. 2, June 2001, p. 140.
6. P Horsman, 'Dirty Hands: A New Perspective on the Original Order', *Archives and Manuscripts*, vol. 27, no. 1, May 1999, pp. 48–9.
7. A Rekrut, 'Material Literacy: Reading Records as Material Culture', *Archivaria*, vol. 60, Fall 2005, p. 25.
8. T Malone, 'How do People Organise their Desks? Implications for the Design of Office Information Systems', *ACM Transactions on Office Information Systems*, vol. 1, no. 1, January 1983, p. 106.
9. Malone, p. 104.
10. Richard R Nelson and Sidney G Webster, *An Evolutionary Theory of Economic Change*, Belknap Press, Cambridge, 1982, pp. 99–100.
11. *ibid.*, p. 105.
12. *ibid.*, pp. 101, 105.
13. E Yael, 'Archival Representation', *Archival Science*, vol. 3, no. 1, March 2003, p. 16.
14. M Kirschenbaum, E Farr, K Kraus, N Nelson, C Peters, G Redwine and D Reside, 'Digital Materiality: Preserving Access to Computers as Complete Environments', *iPRES 2009: the Sixth International Conference on Preservation of Digital Objects*, UC Office of the President, p. 111, available at <<http://escholarship.org/uc/item/7d3465vg>>, accessed 25 July 2012.
15. *ibid.*, p. 112.
16. J O'Toole, 'The Symbolic Significance of Archives', *American Archivist*, vol. 56, no. 2, Spring 1993, pp. 238–40.
17. *ibid.*, p. 250.
18. C Hobbs, 'The Character of Personal Archives: Reflections on the Value of Records of Individuals', *Archivaria*, vol. 52, Fall 2001, p. 131.

19. J Browne, 'Writers' Rooms: Charles Darwin', *The Guardian*, 20 June 2008, available at <<http://www.guardian.co.uk/books/2008/jun/20/writers.rooms.charles.darwin>>, accessed 24 September 2012.
20. Brothman, p. 82.
21. E Ketelaar, 'Archival Temples, Archival Prisons: Modes of Power and Protection', *Archival Science*, vol. 2, nos 3–4, September 2002, p. 234; J Schwartz, "'Having New Eyes": Spaces of Archives, Landscapes of Power', *Archivaria*, vol. 61, Spring 2006, p. 18.
22. The Griffith Institute, 'Tutankhamun: Anatomy of an Excavation', available at <<http://www.griffith.ox.ac.uk/tutankhamundiscovery.html>>, accessed 25 July 2012.
23. L Millar, 'The Death of the Fonds and the Resurrection of Provenance: Archival Context in Space and Time', *Archivaria*, vol. 53, Spring 2002, pp. 12–13.
24. It should be made clear here that documenting sites of creation is not, on its own, enough for the type of rich description as envisaged by Millar. For a full picture, you would also need to document the recordkeeping processes that occurred at those sites over time.
25. New South Wales Heritage Office, *How to Prepare Archival Records of Heritage Items*, 3rd edn, NSW Heritage Office, Sydney, 1998, pp. 3, 5.
26. C Renfrew and P Bahn, *Archaeology: Theories, Methods and Practice*, 3rd edn, Thames and Hudson, New York, 2000, p. 44.
27. MacNeil, p. 20.
28. O'Toole, p. 255.
29. F Boles, 'Disrespecting Original Order', *American Archivist*, vol. 45, no. 1, Winter 1982, p. 29.
30. J Schwartz, "'Records of Simple Truth and Precision": Photography, Archives, and the Illusion of Control', *Archivaria*, vol. 50, Fall 2000, p. 19.
31. M Hedstrom, 'Archives, Memory, and Interfaces with the Past', *Archival Science*, vol. 1, nos 1–2, p. 33.
32. M Shanks, 'Photography and Archaeology', in Brian Leigh Molyneux (ed.), *The Cultural Life of Images: Visual Representation in Archaeology*, Routledge, London, 1997, p. 102.
33. Brothman, p. 84.
34. J Schwartz, "'Having New Eyes": Spaces of Archives, Landscapes of Power', *Archivaria*, vol. 61, Spring 2006, p. 12.
35. D Bearman, 'Documenting Documentation', *Archivaria*, vol. 34, Summer 1992, p. 45.
36. Horsman, p. 51.
37. *ibid.*
38. *Eternal Egypt*, available at <<http://www.eternalegypt.org>>, accessed 25 July 2012.
39. John Tolva, 'Recontextualizing the Collection: Virtual Reconstruction, Replacement, and Repatriation', in J Trant and D Bearman (eds), *Museums and the Web 2005: Proceedings*, Archives and Museum Informatics, Toronto, 2005.