

Counterpoint

Archivists and Changing Social and Information Spaces: A Continuum Approach to Recordkeeping and Archiving in Online Cultures



FRANK UPWARD, SUE McKEMMISH, and
BARBARA REED*

RÉSUMÉ Les auteurs explorent des façons créatives d'aborder les processus d'archivage et de gestion de l'information dans le contexte du continuum de l'information qui est documenté et généré à l'intérieur de nos cultures en ligne. Ils cherchent à regarder au-delà de la complexité des espaces sociaux et des actions collectives qui créent des archives, afin de trouver les constantes qui peuvent nous permettre de réorganiser les relations entre les communautés et la façon dont elles documentent et sauvegardent l'information liée à leurs transactions. Le continuum de l'information documentée qu'est le Web est en expansion à l'infini et, compte tenu de la multiplicité des points d'observation de cette expansion, il est aussi divisible à l'infini. Il s'agit d'une nouvelle zone de pratique qui implique des changements dans la prestation de l'information. Afin de pouvoir évoluer au même rythme que l'écologie informatique, toutefois, nous avons besoin de nouvelles formes de conscience, de nouvelles façons de percevoir nos fonctions, ainsi que de nouvelles tactiques, structures et stratégies. Les auteurs examinent cette nouvelle zone en se servant de perspectives théoriques et d'études de cas qui étudient les défis posés aux formes traditionnelles de l'accès aux archives par la théorie du continuum, Wikileaks, et la création des archives des communautés autochtones.

ABSTRACT This article looks for creative ways of addressing archiving and record-keeping processes within the continuum of recorded information being formed in our online cultures. It is concerned with looking beyond the complexities of the social spaces and communal actions that form archives, seeking patterns that can help us reorder the relationship between communities and the way they record and store information

* The authors acknowledge the eighty-one participants from the Koorie communities of Victoria who agreed to be interviewed as part of the Trust and Technology Project, along with thirteen archival service providers, managers and mediators, the Project's Advisory Group, and Koorie Liaison Officer and research team member Diane Singh. The preparedness of research participants to share their time, opinions, and experiences is greatly appreciated and valued.

about their transactions. The infinitely expanding, and (given the multiplicity of points of observation of that expansion) the indefinitely divisible continuum of recorded information that is the larger web sphere is a new zone of practice involving changes in the delivery of recorded information. To evolve with modern information ecologies, however, we need new forms of consciousness, new ways of viewing our functions and new tactics, structures, and strategies. This article will explore this new zone using theoretical perspectives and case studies, examining the challenge to traditional forms of archival access posed by continuum theory, WikiLeaks, and the formation of archives in Indigenous communities.

Introduction

Beginning in 1959 with an article written by Ian Maclean in *American Archivist*, groups of “continuum archivists” in Australia have argued the case for the integration of current and historical recordkeeping, creating many bridging mechanisms between the two.¹ The integration of recordkeeping and archiving processes in this way, together with a multi-dimensional and pluralist view of archival functionality, have come to be known as the “records continuum approach.” It has been a protracted argument with many shifts and changes, but a continuum approach is still feasible as a possible way of patterning our archival and recordkeeping activities, despite the massive changes in technologies over the years.² An integrated, process-centred, continuum approach is increasingly recognized as relevant to complex postmodern recordkeeping and archiving problems. As a way of thinking about current and historical recordkeeping activities, it is proving to be irrepressible and robust in an evolving archival multi-verse,³ which encompasses “the pluralism of evidentiary texts, memory-keeping

- 1 The foundation article for a continuum approach was most likely Ian Maclean, “Australian Experience in Records and Archives Management,” *American Archivist*, vol. 22, no. 4 (1959), pp. 383–418, although it can be argued that Maclean was following an approach established by Margaret Cross Norton and Philip Brooks in the United States. An account of Brooks’s contribution can be found in Frank B. Evans, “Archivists and Records Managers, Variations on a Theme,” in *A Modern Archives Reader*, eds. Maygene F. Daniels and Timothy Walch (Washington, DC, 1984), pp. 25–37. Many items relating to the multi-dimensionality of the continuum can be found on the Monash Records Continuum Research group website, <http://www.infotech.monash.edu.au/research/groups/rcrg> (accessed on 21 July 2011). Some works not on that site include Sue McKemmish, Barbara Reed, and Frank Upward, “The Records Continuum,” in *Encyclopedia of Library and Information Sciences*, 3rd ed., eds. M. Bates and M. Maack (New York, 2009), pp. 4447–59, and Sue McKemmish, Michael Piggott, Barbara Reed, and Frank Upward, eds., *Archives: Recordkeeping in Society* (Wagga Wagga, 2005).
- 2 See for example the introduction to the US National Archives and Records Administration’s (NARA) discussion on Transforming Classification, the Blog of the Public Interest Declassification Board, <http://blogs.archives.gov/transformingclassification/?p=55> (accessed on 20 March 2011).
- 3 Originally coined in 1895 by philosopher and psychologist William James, the term “multi-verse” is used today to refer to the hypothetical set of multiple possible universes (see *Oxford*

practices and institutions, bureaucratic and personal motivations, community perspectives and needs, and cultural legal constructs ...”⁴ in and through time.

This paper will introduce a new vocabulary to those who encounter for the first time information continuum theory, Australian records continuum theory, or continuum philosophies. It is a vocabulary different from that used in finite, end product, or shelving-orientated views of archives. As in the above example of the multiverse, we will try to explain key words and/or use them in contexts that indicate their meaning. Information continuum theory (in the variation we have been developing) involves discussing the infinite expansion of recorded information in a modern information ecology in which there are no end products. Any event in the lifespan of an information object can be relevant to its archival management; “creation” recursively occurs in places of situated action. Historical recordkeeping tasks, for example, create the record anew or, as more normalized archival discourse might say, recontextualize the document.

A major focus of this paper is “archival access.” Within a continuum approach, this term is used to describe processes that can be applied to records that are moments old or a thousand years old. The defining criterion is whether the processes provide access to recorded information about situated action, not the age of the object accessed. Janus’s temple in Roman mythology was located at the crossroads between the past and the future, not thirty years or so down the track. As explored by Barbara Reed later in this article, WikiLeaks jolts traditional notions of archival access. It does so across the four basic dimensions of the continuum of recorded information: the situated action of creation (1D); the capture of information as a record (2D); the organization of recorded information within an archive (3D); and the pluralization of recorded information (4D).⁵

In what follows, we demonstrate the relevance of a continuum approach to archiving and recordkeeping processes involved in online transactions of any type, especially those using digital means of information representation and electronic communications (loosely called online cultures). We do this in a way that de-emphasizes governmental recordkeeping and re-emphasizes the archive

English Dictionary Online <http://www.oed.com>, accessed on 15 January 2011). It has been explored in the context of many different disciplines, including cosmology, physics, astronomy, psychology, cultural studies, and literature.

- 4 Pluralizing the Archival Curriculum Group (PACG), “Educating for the Archival Multiverse,” *American Archivist*, vol. 74, no. 1 (Spring/Summer 2011), pp. 69–101.
- 5 While WikiLeaks raises questions about the creatorship of records (4D/1D) (e.g., who is the creator and what is the provenance of the information?), it also raises questions about how we capture (2D/1D) and organize (3D/1D) recorded information of the type that archivists may be dealing with for some time. The dimensional shorthand was first used in Frank Upward, “Structuring the Records Continuum, Part One: Postcustodial Principles and Properties,” *Archives and Manuscripts*, vol. 24, no. 2 (1996), pp. 268–85; it has been widely disseminated by others.

as governance in the sense of the control, direction, and authorization of our processes. We look across:

- continuum thinking as a form of consciousness;
- transforming archival functionality and professional recordkeeping practice to better engage with complexity and plurality;
- the need for strategies, tactics, and structures that address the pluralization and massive complexification of the infinitely expanding and indefinitely divisible continuum of recorded information that is engulfing us.

These three themes are addressed as a basis for brainstorming sustainable ideas for recordkeeping in online cultures through discussion of the continuum as a metaview of reality and exploration of two case studies. The case studies demonstrate how a continuum approach can illuminate and address the plurality and complexity of the archival multiverse, and help us move from “an archival universe dominated by one cultural paradigm to an archival multiverse; from a world constructed in terms of ‘the one’ and ‘the other’ to a world of multiple ways of knowing and practicing, of multiple narratives co-existing in one space.”⁶

Presentation of the continuum as metaview is based on Frank Upward’s writings and doctoral research. Sue McKemmish’s case study is drawn from research relating to re-setting the relationship between Indigenous Australians and the archival community (encompassing in the continuum archival institutions, organizational recordkeeping programs, the profession, and individual recordkeeping professionals/archivists). This research was undertaken in the Australian Research Council Trust and Technology Project and related projects. In the second case study, Barbara Reed provides a reflexive, recordkeeping continuum reading of WikiLeaks as a global and quintessentially online phenomenon that challenges traditional archival access approaches, and suggests ways in which we might address those challenges continuum-style in professional practice.

Drawing upon Upward’s theory-building work and continuum discourse analysis, the paper argues that the continuum as a metaview of reality “takes time seriously.”⁷ It helps us to address the accelerating complexity of change, novelty, and the world as process in online cultures in their full plurality. It

6 Pluralizing the Archival Curriculum Group (PACG), “Educating for the Archival Multiverse,” p. 73.

7 The usage here of “taking time seriously” follows Quentin Gibson, *Facing Philosophical Problems*, rev. ed. (Melbourne, 1961), p. 39. He wrote: “Both writers [Samuel Alexander and A.N. Whitehead] take time seriously. For both of them, the world is a process, and nothing actually falls outside of that process. If a theory is to be arrived at by ‘descriptive generalizations’ from observed fact, the observed fact of temporal change, and of new things for ever coming into existence, is one which both insist must not be ignored.” Although at one time this concept fell out of favour, it is now one of the big ideologies underpinning modern chaos theory, with its pulsating and evolutionary mix of irregularity and regularity.

enables exploration of the implications for professional recordkeeping practice of continuum-based, pluralist ways of envisaging archival functionality within an archival multiverse, with particular reference to archival purposes associated with identity, social justice, transparency, and accountability. And it sets up structures, strategies, and tactics for implementing integrated archiving and recordkeeping processes that are in tune with our own era.

McKemmish's case study considers how pluralization continuum-style might contribute to a decolonizing of the archive, freeing Indigenous peoples who have hitherto been the "captives of the archives,"⁸ the subjects of recordkeeping, and the objects of the archival gaze. She addresses Aboriginal and Torres Strait Islander Social Justice Commissioner Mick Gooda's call to reposition Indigenous peoples as active participatory agents in archival and recordkeeping processes.⁹ In terms of how archival functionality and professional recordkeeping practice might be envisaged from Australian Indigenous perspectives, the case study explores the relevance of continuum concepts of co-creatorship, multiple simultaneous and parallel provenance, and participatory models of the archive. In relation to transforming current practice, it considers how current and historical professional recordkeeping structures, strategies, and tactics might be reinvented to play a reconciling role as part of a broader re-setting of relationships between Indigenous and non-Indigenous Australia. The case study highlights how digital technologies and social networking can support frameworks for the implementation of participatory recordkeeping and archival models (globally and locally), the negotiation of appraisal by records co-creators, the development of meta-metadata schemes that can deal with multiple and parallel provenance and related rights management in current and historical recordkeeping settings, the sharing of recordkeeping and archival spaces, and differentiated access in online cultures.

Finally, Reed's case study of WikiLeaks, based on analysis of the WikiLeaks *modus operandi*, as well as a close reading of commentaries and reactions, demonstrates how the continuum as a metaview of reality assists us in understanding and addressing the implications for archival functionality and

8 Henrietta Fourmile, "Who Owns the Past? – Aborigines as Captives of the Archives," *Aboriginal History* 13 (1989), pp. 1–2.

9 Commissioner Gooda was speaking at the Archives and Indigenous Human Rights (AIHR) Workshop, *Towards an Understanding of the Archival and Recordkeeping Implications of Australian and International Human Rights for Indigenous Australians* (12 October 2010), sponsored by the Centre of Australian Indigenous Studies, the CASTAN Centre for Human Rights and the Centre for Organisational and Social Informatics at Monash University, and the National Archives of Australia, <http://infotech.monash.edu.au/non-cms/about/news/conferences/aihr/index.html> (accessed on 21 July 2011). It was held during the 2010 conference of the Australian Society of Archivists in Melbourne. Participants came from all over Australia and engaged in vigorous debate and dialogue. Papers based on the workshop will be published in a forthcoming special issue of *Archival Science*, entitled "Keeping Cultures Alive: Archives and Indigenous Human Rights."

professional recordkeeping practice of WikiLeaks as a global phenomenon that deliberately breaks the norms and customs associated with fixed time approaches to the release of government information. Exploring WikiLeaks from a continuum perspective illustrates the creative capacity of continuum thinking to imagine alternative recordkeeping realities in rampantly transactional and rapidly changing online environments. The case study points to WikiLeaks as a provocative instance of a digital archive that reinvents many of our professional structures, strategies, and tactics to deal with the complexity of place, time, volume, authority, and ultimately accountability in our online recordkeeping present and future, while demonstrating innovative use of Web technologies from which we might learn.

Continuum consciousness points to the need for archivists/recordkeeping professionals to pay much more attention to the capture of records, the formation and reformation of archives, and the return of recorded information into situated action in ways that support identity, social justice, transparency, and accountability. This is, of course, a goal shared by most archivists/recordkeeping professionals, but the task is a complex one in the digital era in an archival multiverse. We are losing contact with the need to develop new rules for archiving the exponential expansion of recorded information around us. As our colleague Livia Iacovino has argued, “[t]he greatest challenge for archivists is to decide to take a continuum view and be involved with records’ formative processes to ensure that records become part of the ‘corporate and social fabric’ or to limit themselves to a temporal role where they are only responsible for the small portion of documentation that has passed the archival threshold.”¹⁰

If we, as a profession, limit ourselves, we will increasingly be marginalized from the formation of archives in online cultures. If we accept the challenge, we will be charting an uncertain course into new zones of practice. We will have to rethink our role in relation to the creation and capture of recorded information, the formation and reformation of the archive through time, and the pluralization of archives and records, and do so using a new vocabulary suited to an infinitely expanding web of recorded information.

Developing Our Continuum Consciousness

Taking Time Seriously (Frank Upward)

In his book *Space-Time and Deity* published in 1920, Anglo-Australian continuum philosopher Samuel Alexander imagined that humanity was in the process of evolving to a more God-like position in which it would be normal for

10 Livia Iacovino, “Archives as Arsenals of Accountability,” in *Currents in Archival Thinking*, eds. Terry Eastwood and Heather MacNeil (Santa Barbara, 2009), p. 182.

us to want to stand outside of the theatre of perpetual movement. One of his mental models for this was the way that a scientist can stand aside and study the “molecules of gas that dash against the sides [of a vessel] and each other in all manner of lines of advance. The gas is not considered as it is at any moment but as it exists over a lapse of time.”¹¹

This emphasis on elapsed time is not simply historicism in the nineteenth-century mould; it is an acknowledgement that taking time seriously involves recognizing the space-time continuum’s capacity to produce change and novelty, and studying this as a process. If he were alive today, Alexander would undoubtedly have to rethink his position as a result of such failures as our inability to acknowledge the inconvenient truths underlying climate change, and how such changes expand and multiply. Far from getting better at managing the future, in this instance it seems to be running all over us.

In helping archivists to take time as seriously as Alexander did, the word “perduring” – a common enough technical term in philosophy – can be introduced into the conversation. For archivists it is probably best explained by an illustration such as Alexander’s molecules of gas instance. Sue McKemmish has pointed to its logical meaning in describing records as “always in a process of becoming,”¹² definable only in terms of their multiple and dynamic documentary and contextual relationships, configured and reconfigured by their use in and through space and time.¹³ From this perspective, she notes the relevance to documentary analysis of Richard Holmes’s wave motion analogy of biographical subjects as subatomic particles: “never existing in all their complexity in any one place or time ... you cannot freeze them, you cannot pinpoint them, at any particular turn in the road, bend of the river, view from the window.”¹⁴ An archival document exists differently in spacetime and can never be experienced in all its complexity by a witness at any one point. This is a better way of thinking about documents in a digital era than one that imagines that archival documents only endure in fixed forms.

In North American philosophy the difference between perduring and

11 Samuel Alexander, *Space-Time and Deity, The Gifford Lectures at Glasgow 1916–1918*, vol. 1 (New York, 1920), p. 63.

12 Sue McKemmish, “Are Records Ever Actual?” in *The Records Continuum: Ian Maclean and Australian Archives First Fifty Years*, eds. Sue McKemmish and Michael Piggott (Clayton, 1994), p. 200, <http://www.infotech.monash.edu.au/research/groups/rcrg/publications/smcktrc.html> (accessed on 21 July 2011).

13 The use of space and time as separate concepts here is deliberate. Actions like the use of record information can be viewed spatially (where) and temporally (when) but recorded information, as the reference to spacetime later in this paragraph indicates, is carried across the conjoint and singularly diverse concept, the spacetime continuum.

14 Richard Holmes, *Footsteps: Adventures of a Romantic Biographer* (London, 1995), p. 27, cited by Frank Upward and Sue McKemmish, “In Search of the Lost Tiger, by Way of Sainte-Beuve: Re-Constructing the Possibilities in ‘Evidence of Me...’,” *Archives and Manuscripts*, vol. 29, no. 1 (2001), pp. 23–43.

enduring views has tended to be treated as a dualism, the continuum as process versus an Aristotelian view of things. For archivists it is a merged duality. Our technologies can give us information objects that are both fixed and fluid. Even the fixed electronic document, however, establishes a perduring but not necessarily enduring set of relationships with other documents as it moves through time.

If we go to the opposite end of the scale in our examples, the universe as a perduring world of process is characterized by its infinite expansion, its indefinite divisibility, and the relativity of particular observation points. Only a Deity (or a student of changes, novelty, and ordering patterns across elapsed time) can stand apart from it. That cosmology has its pragmatic correlation in the way most scientists these days endorse an approach in which the elements of scientific knowledge and their combinations have to be studied as they are forming and as they have been formed. The larger general laws of science are always revisable and need to be framed in ways that enable constant re-testing. You can have certainty, but it is the certainty of specific occurrence, of observations in particular spacetime (think of the archival principles of provenience and provenance or, in other words, source and spacetime transmission). It is uncertainty that drives on the thirst for knowledge.

What has this got to do with recorded information in the digital age? Turn on your computer, open your Web browser, and consider the access you have to a blending, merging, exponentially expanding, and indefinitely divisible continuum of information. Is that a continuum you are observing from your point in the universe? Is it the same thing you viewed yesterday? Can you sense that you are looking at an expanding venue for our galloping transactionality? And the critical question for archivists: Are you looking at a finite thing (e.g., a Web 2.0 application) or at how social networking is expanding (Web² perhaps), or even the expanding continuum of recorded information itself (Web[∞])?¹⁵ Where does the main archival task rest: in the archiving and recordkeeping processes needed to manage the complex transactionality of the Web, or in the preservation of a few elements from it?

Another way to increase your continuum consciousness is to turn to French literary philosophy. Think of the many ideas that have sprung from philosophers who had Henri Bergson and Edmond Husserl among their intellectual ancestors.¹⁶ These two philosophers paid particular attention to the way recorded

15 “Web squared” (Web²) is the term that the creators of the term Web 2.0 came to prefer, while “Web infinity” is a commonplace marketing term used by those selling communication and information apparatuses and services. For a discussion of Web², see Tim O’Reilly and John Batelle, “Web Squared: Web 2.0 Five Years On,” <http://www.web2summit.com/web2009/public/schedule/detail/10194> (accessed on 21 July 2011).

16 Henri Bergson’s seminal work was *Creative Evolution* (New York, 1911), published in 1907, and first published in English in 1911. Edmund Husserl’s influence is not based on any

information from indirect storage spaces governs our situated actions. Bergson drew attention to the flicker of the continual renewal of things in time, in which “at each moment, everything tends to be spread out into an instantaneous, indefinitely divisible continuum, which will not prolong itself into the next instant, but will pass away, only to be reborn in the following instant in a flicker or shiver that constantly begins again.”¹⁷ Husserl examined the difference between our perception of things in direct information spaces (our situated observation of reality) and their replay to us from indirect information storage spaces (the use of information objects as records that purport to represent actions and things for carriage over spacetime).¹⁸

The story of French literary philosophy in the last century shows what happens if you take time seriously and address order, change, novelty, and the world as process within a long-standing juridical tradition that gave us the notion of the archives as governance in the first place. We exist in a web of recorded information, and if you let the notary out of the bag and into the con-

seminal text. For his works, see Donn Welton, ed., *The Essential Husserl: Basic Writings in Transcendental Phenomenology* (Bloomington, IN, 1999). For those wishing to explore the continuing and widespread nature of their intellectual ancestry, Wikipedia is the place to start. The operation of Bergsonism in French literary philosophy from an archivist’s viewpoint is explored in Franklyn Upward, “Managing the Flicker: Continuum Concepts and the Formation of Archives” (PhD diss., Monash University, 2010), particularly pp. 103–149. The argument follows a line of thought begun in Upward, “The Records Continuum” in *Archives: Recordkeeping in Society* (ibid), pp. 208–211. In a string of nutshells explored in Upward’s dissertation, Jacques Derrida, working out from Bergson’s flicker and our different observation points, threw doubt over the certainties of context, demonstrating how recorded information is never viewable from stable positions. Michel Foucault focused more on the perduring nature of discourses – Bergson’s concept of duration – studying them as they form in fits and starts involving many re-commencements, sometimes centuries apart. Gilles Deleuze developed his own form of Bergsonian thinking, which spreads across the terrain, changing and altering as it goes (some call it horizontal thinking but he called it rhizoid, i.e., weed-like), and comparisons can be made with the digital rhizome that is spreading and changing today across Web∞. Jean-François Lyotard wrote his best-known work, *The Postmodern Condition* (Minneapolis, MN, 1984), to argue that if we wanted to minimize terror, the simple solution was to open up our memory banks and databases to those with competing meta-prescriptions (the sort of political activism present in WikiLeaks). His actual solution was, of course, much more complex and involved, recognizing that information systems and related apparatuses have replaced traditional science as the dominant way of forming knowledge about the world around us. (These summaries are the perspectives of an archivist regarding some of Bergson’s influence on key ideas of these writers, not assessments of their works, or of the intellectual influences upon them.)

17 Gilles Deleuze, *Bergsonism*, trans. Hugh Tomlinson and Barbara Habberjam (New York, 1988), pp. 86–87.

18 For Husserl’s writings, see Welton, *The Essential Husserl*. For a useful lead into one of his many ideas about information spaces that should be of interest to archivists looking to understand records continuum thinking, see http://en.wikipedia.org/wiki/Retention_and_potention (accessed on 14 September 2011). The concept of protention raises in philosophical fashion the issue of appraisal processes that focus on the expected path of information objects.

tinuum, then archival ideas can erupt as they did across the works of writers such as Jacques Derrida, Michel Foucault, Gilles Deleuze, and Jean-François Lyotard.

There is also an Anglo-American strand of continuum thinking which, while remaining transcendental (i.e., offering us a continuum-based metaview of reality), is much more pragmatic.¹⁹ Indeed two of the progenitors of modern continuum thinking, William James and Samuel Alexander, have already been rediscovered in archival practice. Alexander's theatre of perpetual movement helped shape the emergence of continuum practices in Australia, while James (as indicated in the introduction) has given us the concept of the multiverse. Both James and Alexander were, in their own ways, also inspired by Bergson's big idea. The continuum is singularly diverse, and its singularity is built up out of the massive plurality involved in the archiving of past, present, and future moments. All is archive.

Continuum Consciousness, Plurality, and Indigenous Ways of Knowing ***(Sue McKemmish)***

Archivists worldwide are beginning to explore the capacity of digital information and new social networking technologies to enhance the accessibility of the traditional custodial archive. As yet there is little recognition of the power of these technologies to transform relationships between archival²⁰ and other communities in online cultures, when their implementation is informed by continuum consciousness, which focuses attention on integrated recordkeeping and archiving processes for the capture of records, the formation and reformation of the archive, and the return of recorded information into situated action in ways that support identity, social justice, transparency, and accountability.

In a recent paper relating to “dis-trust” in the archive and the possibility of reconciliation²¹ between archival and Indigenous communities in Australia,

19 This is particularly obvious in the work of the “grandfathers” of American transcendental pragmatism, C.S. Peirce and John Dewey, and the person to whom they are often given a grandfatherly connection, Richard Rorty. Their form of transcendental pragmatism has received an interesting treatment recently in Jerold Abrams, “Towards a Transcendental Pragmatic Reconciliation of Analytical and Continental Philosophy,” in *Nordic Studies in Pragmatism* 1, “Ideas in Action, Proceedings of the ‘Applying Peirce’ Conference” (2010), eds. M. Bergman, S. Pietarinen, and H. Rydenfelt, pp. 62–73. Peirce, Dewey, and Rorty were prolific writers, and continuum-style, transcendental pragmatism ripples through all their mature works; a starting point for studying North American continuum styles of transcendental pragmatism, however, is provided by two of Rorty's books, *Philosophy and the Mirror of Nature* (Princeton, NJ, 1979) and *Consequences of Pragmatism* (Minneapolis, 1982).

20 As stated in the Introduction, “archival community” as used in this paper encompasses archival institutions, organizational recordkeeping programs, the profession, and individual recordkeeping professionals/archivists.

21 The social movement known as reconciliation within Australia began as a groundswell as

Sue McKemmish, Shannon Faulkhead, and Lynette Russell explore “the role of archives in the construction of Australian Indigeneity, past, present and future, with reference to the colonial and post-colonial culture of the archive in Australia, the possibilities for refiguring the archive present in post-colonial thinking, Indigenous ways of knowing, and digital technologies.”²² The case study of plurality and Indigenous ways of knowing presented below explores how continuum consciousness might support this refiguring. It is based on: 1) the findings of a project funded by the Australian Research Council, entitled *Trust and Technology: Building Archival Systems for Indigenous Oral Memory*²³; 2) doctoral research undertaken by Faulkhead relating to the continuum of orality and written text in the narratives of Koori²⁴ Victoria;

settler Australians reflected on the dispossession of Aboriginal Australians. The reconciliation movement aims to end the conflict between Indigenous and settler Australians that has existed within Australian society since the British colonization of Australia in 1788. Council for Aboriginal Reconciliation and Reconciliation Australia, *Australians for Native Title and Reconciliation (ANTAR)* (2001), http://www.antar.org.au/issues_and_campaigns/reconciliation/reconciliation_australia (accessed on 28 September 2010). Archival reconciliation involves acknowledging the role of archives as instruments of colonization and recognition of mutual rights in records, and the development of frameworks for the respectful coexistence of Indigenous and non-Indigenous records.

- 22 Sue McKemmish, Shannon Faulkhead, and Lynette Russell, “Dis-trust in the Archive: Reconciling Records,” *Archival Science* (2011, in press).
- 23 Monash University Caulfield School of Information Technology and Centre for Australian Indigenous Studies, the Public Record Office of Victoria, the Koorie Heritage Trust Inc., the Victorian Koorie Records Taskforce, and the Australian Society of Archivists Indigenous Issues Special Interest Group, *Trust and Technology: Building Archival Systems for Indigenous Oral Memory. Final Report of the Australian Research Council Project* (2009), <http://www.infotech.monash.edu.au/research/centres/cosi/projects/trust/final-report/> (accessed on 1 September 2010). There were three broad and interrelated phases in the Trust and Technology Project. Phase One involved semi-structured interviews with seventy-two Koorie and other Indigenous people covering issues relating to storytelling and story recording, trust and authenticity in oral and written records, trusted custodians for recorded stories, control, ownership, access, privacy, and experiences of using existing archival services. Phase Two involved a case study evaluating existing archival services provided to Koorie people by two of the Project partner organizations: the Public Record Office Victoria and the Koorie Heritage Trust. In Phase Three, Trust and Technology researchers at the Public Record Office Victoria, in consultation with other research partner organizations and Monash-based researchers and a Koorie Reference Group, developed a specification for a Koorie Archiving System (KAS) to address the high-priority need expressed by interviewees in Phase One to challenge the contents of “official” archives, “set the record straight,” and incorporate their stories, memories, and other narratives into archival systems in response to existing written archival records. See Fiona Ross, Sue McKemmish, and Shannon Faulkhead, “Indigenous Knowledge and the Archives: Designing Trusted Archival Systems for Koorie Communities,” *Archives and Manuscripts*, vol. 34, no. 2 (2006), pp. 112–51, <http://www.infotech.monash.edu.au/research/centres/cosi/projects/trust/rmf2006.pdf> (accessed on 5 March 2011).
- 24 Koorie is a name used to identify Indigenous people of southeastern Australia, including Victoria and parts of New South Wales.

and 3) understandings drawn from the writings of postmodern, postcustodial, and post-colonial archival writers.²⁵

Most Indigenous interviewees in the Trust and Technology Project view all records that relate to them as *their own* records, including records of government and other non-Indigenous organizations relating to them, a point highlighted by Indigenous legal expert Terri Janke. Many Indigenous people feel that it is unjust that records of great sensitivity and importance to them should be owned by non-Indigenous organizations and people. The records are often held far away from the communities to which they relate.²⁶

Archival institutions that have custody of these records view them as the records of the organizations that “set them aside.”²⁷ This view is supported by archival laws, and underpinned by traditional archival science constructs of provenance and the singular records creator. As subjects of the record, Indigenous people have access rights, but do not participate in decision-making relating to appraisal, custody, preservation, description, and access. Policies, processes, and systems in mainstream archives are based on particular constructs of records creation, provenance, access, privacy, and individual (but not collective) rights in records that are derived from epistemologies that differ from those of Indigenous communities.

In Walter Ong’s continuum of orality and literacy, new dimensions of orality manifest themselves, co-exist, and interact with writing in today’s society, enabled by new digital technologies.²⁸ In colonial and post-colonial societies, however, orality has been constructed as an inferior form of evidence and knowledge transmission. Faulkhead’s thesis has explored how this false dichotomy underpins Australian legal systems today and is manifest in much

25 Jeannette Bastian, *Owning Memory: How a Caribbean Community Lost its Archive and Found its History* (Westport, CT, and London, UK, 2003); Terry Cook “Fashionable Nonsense or Professional Rebirth: Postmodernism and the Practice of Archives,” *Archivaria* 51 (Spring 2001), pp. 14–35; Andrew Flinn “Migrations, Disputed Heritages and Multicultural Identities: Archives in a Post-Colonial Society,” *Archives and Manuscripts*, vol. 36, no. 2 (2008), pp. 54–75; Carolyn Hamilton, Verne Harris, Jane Taylor, Michele Pickover, Graeme Reid, and Razia Saleh, eds. *Refiguring the Archive* (Dordrecht, Boston, and London, 2002); Tom Nesmith “The Concept of Societal Provenance and Records of Nineteenth-Century Aboriginal-European Relations in Western Canada: Implications for Archival Theory and Practice,” *Archival Science*, vol. 6, nos. 3–4 (2006), pp. 351–60; Joan Schwarz and Terry Cook, “Archives, Records, and Power: The Making of Modern Memory,” *Archival Science*, vol. 2, nos. 1–2 (2002), pp. 13–18; Ann Laura Stoler, “Colonial Archives and the Arts of Governance,” *Archival Science*, vol. 2, nos. 1–2 (2002), pp. 92–109; and another work by Stoler, which because of its emphasis on process fits well with continuum thinking: “The Pulse of the Archive,” in *Along the Grain: Epistemic Anxieties and Colonial Common Sense* (Princeton, NJ, 2009), pp. 17–23.

26 Terri Janke was speaking at the 2010 AIHR Workshop (see note 9).

27 Ross, McKemmish, and Faulkhead, “Indigenous Knowledge and the Archives.”

28 Walter Ong, *Orality and Literacy: The Technologizing of the Word*, 2nd ed. (New York, NY, 2002).

of the writing of Australian history; it is also found in historical and current recordkeeping practice, perpetuating the oppression of Aboriginal peoples. Canadian Adele Perry refers to a similar dichotomy that emerged in Canada in the nineteenth century and continues to influence mainstream relationships with First Nations. Perry calls this the “savagery-orality-myth” versus “literacy-civilization-history” dichotomy. She argues that it has been endorsed through time by the way the official archives privilege and contextualize written records.²⁹ Faulkhead argues that within the continuum, the plurality of the record (including oral and written forms) needs to be accessed and understood in the context of multiple knowledge systems and transmission processes,³⁰ and with reference to the way “written sources are often based on orality, and modern orality is itself saturated with writing, and how the World Wide Web’s support for multimedia forms of communication blurs the boundaries traditionally drawn between oral and written text-based communications.”³¹ McKemmish, Faulkhead, and Russell conclude:

As Indigenous and settler communities in various countries and regions have jointly reflected on their engagement with archives, there has been a growing recognition that western archival science and practice reflect and reinforce a privileging of settler/invader/colonist voices and narratives over Indigenous ones, of written over oral records. Further, the conventional positioning of individuals as the subjects of the official archival record has had a particularly disempowering effect on Indigenous peoples whose lives have been so extensively documented in archives for the purposes of surveillance, control and dispossession.³²

While the written records and narratives of the colonial invaders and post-colonial governments have in the past been instruments of oppression and the construction of a negative view of Indigeneity, in the present and future their integration with oral records and other Indigenous narratives could be a vital process in the production and recovery of Indigenous knowledge, the provision of essential evidence for recovering identity and memory, re-uniting families, seeking redress, reconciling Indigenous and non-Indigenous Australians, and

29 Adele Perry, “The Colonial Archive on Trial: Possession, Dispossession, and History in Delgamuukw vs British Columbia,” in *Archive Stories: Facts, Fictions and the Writing of History*, ed. A. Burton (Durham, NC, and London, UK, 2005), pp. 325–50.

30 Shannon Faulkhead, “Narratives of Koorie Victoria” (PhD diss., Monash University, 2008) and “Connecting Through Records: Narratives of Koorie Victoria,” *Archives and Manuscripts*, vol. 37, no. 2 (2009), pp. 60–88.

31 McKemmish, Faulkhead, and Russell, “Dis-trust in the Archive”; Kelvin White’s PhD thesis explored similar issues relating to oral culture of Mexican communities of African heritage. See Kelvin White, “*Mestizaje* and Remembering in Afro-Mexican Communities of the Costa Chica: Implications for Archival Education in Mexico,” *Archival Science*, vol. 9, nos. 1–2 (2009), pp. 43–55.

32 McKemmish, Faulkhead, and Russell, “Dis-trust in the Archive.”

underpinning Indigenous cultural rights.

The 2007 United Nations *Declaration on the Rights of Indigenous Peoples*, and its recent belated endorsement by Australia, Canada, New Zealand, and the United States (the only countries who initially voted against it), are driving a gathering momentum in the field of human rights – locally and internationally. Indigenous communities are globally recognized as having inherent individual and collective rights to preserve their identity and culture, while participating to the fullest in the mainstream culture. Rights of self-determination and the principles of non-discrimination and free, prior, informed consent provide the foundation for the exercise of cultural rights as human rights, and the involvement of Indigenous peoples as participatory agents in recordkeeping and archiving processes. It is imperative for archival and related professions to become more aware of the relevance of the Indigenous social justice and human rights agenda to their work, and the ways in which recordkeeping and archiving processes have in the past been instruments of human rights abuse and oppressive regimes, but today can play a critical role in redress, and underpin Indigenous human rights, self-determination, non-discrimination, and the exercise of cultural rights as human rights.³³

Historians and other scholars have been grappling with “decolonizing” their methodologies.³⁴ Meanwhile, as captive subjects of the archive, Aboriginal people have been defined and described by the Anglo-Australian normative. What would “decolonizing” archival functionality and professional recordkeeping practice involve? Among other things, the findings of the Trust and Technology and related projects suggest challenging the linked dichotomies of orality-literacy, myth-history, savagery-civilization, and tradition-modernity that the archive tends to embody, undermining the consequent positioning of Indigenous voices and narratives as inferior, and pluralizing archival functionality and professional recordkeeping practice, continuum-style, to support the co-existence and interaction of multiple, diverse evidence paradigms and knowledge systems.

Today in Australia we see oral and written records existing within all communities and flowing from one format to the other, constantly interacting and growing into a living archival continuum. The historically static nature of institutional archives, and their dominant relationship with the discipline of history, can be viewed as antithetical to achieving this vision of what the archive of the future might be. The challenge is to develop systems that can allow the co-existence of multiple knowledge systems and forms of record, enabling records to continue the life they were meant to live, flowing

33 Sue McKemmish, Livia Iacovino, Eric Ketelaar, Melissa Castan, and Lyn Russell, “Re-Setting Relationships: Archives and Indigenous Human Rights,” *Archives and Manuscripts*, vol. 39, no. 2 (2011, in press).

34 See for example: Aileen Moreton-Robinson, *Whitening Race: Essays in Social and Cultural Criticism* (Canberra, 2004); Linda Tuhiwai Smith, *Decolonizing Methodologies: Research and Indigenous Peoples* (London, UK, 1999).

back into people, and then into a recorded form again – be it spoken, written, imagery, music, or song.³⁵

WikiLeaks: Continuum Consciousness – Non-Linear Access
(Barbara Reed)

WikiLeaks can be viewed as a provocative instance of a digital archives existing solely in the evolving environment of online cultures. Using a continuum consciousness, we can interpret and analyze it as an alternate archival space; one that challenges and co-exists with more traditional archival spaces that are still undergoing the processes of slow formation. Somewhere beyond custody, WikiLeaks is constructing a parallel archive to those in which records were originally created and managed – an instance of simultaneous multiple provenance if we choose to observe it from a metaview perspective.

Public access is the rationale for the existence of records in WikiLeaks, but it is not public access as we know it. WikiLeaks represents a jolt from the ordered and routinized processes of public interaction with government information. WikiLeaks hoists (or heists) records out of their normative progression to pluralization, and in the process they are radically recreated anew (1D – Create), framed and recontextualized into new information spaces (2D – Capture and 3D – Organize), and available for re-situation into immediate spheres of action (4D – Pluralize). Recreating the records is undertaken in a new space, which is location-less and beyond jurisdictional boundaries. Capture and organization processes are fundamentally aimed at enabling pluralization.

WikiLeaks is forcing an agenda for greater access to contemporary records as a means by which an informed citizenry can test actions undertaken in their name. Operation of social power generally – in this case embodied in authorized release of records – is challenged on behalf of citizenry newly able to question contemporary actions of those in power. WikiLeaks repositions records as fundamental actors in today's polity – front-page news, not slow news day fodder. Records are recharged as agents of accountability and social justice. In dramatically democratizing access, WikiLeaks directly addresses issues of records and transparency, accountability, and social justice. Elsewhere the impetus for greater democratization of access to decision-based information (records) is being embraced in theory in the open access and transparency agendas of various agencies of power within our society. Yet WikiLeaks demonstrates that this should, or could, entail radical change, rather than piecemeal, uncoordinated, superficial steps that do not begin to envisage what greater immediate engagement with unmediated records involves.

WikiLeaks fundamentally demolishes our current frameworks for access

35 McKemmish, Faulkhead, and Russell, "Dis-trust in the Archive."

and security classification. While many have pointed out that whistle-blowing and leaking are not new things, our models of action are still premised on the rules being defined by those in power – at times and under controls that suit them. Cracks in the access regime of many jurisdictions have been widening over time as emerging information rights, combined with access to records and information, become more critical to operating in any social environment. WikiLeaks throws these cracks into high relief, ensuring that what could be papered over as minor inconveniences now become far too large to be ignored. Where is the logic in making certain records freely available as a result of freedom of information requests, or other exposure mechanisms, only to then close them again to comply with the routinized access controls imposed by norms of archival closed periods such as the thirty-year rule? Why do we need to transfer open records to an archival institution? If they are available publicly, they are available publicly. Access, once only authorized under archival legislation, is now not solely the domain of archival institutions. Access happens at different times and locations as part of current recordkeeping systems, or even from “beyond the grave” as echoes of records are found in back-ups, Internet caches, the Internet archives, or big data stores in the cloud. The more traditional interpretations of access have yet to be broadened to include different audiences and emergent demands for competing controls over access in the new information environment. Alternative renderings of the recordkeeping/archiving role in relation to mediating and negotiating access can be imagined. Access becomes a pivotal enabler in repositioning our role into more active, Janus-like interfaces between past, present, and future.

Sticking to outmoded rules in this new environment creates bizarre responses. The technically correct, time-based, internal control mechanisms invoked during the American government’s attempts to forbid its employees access to cables released by WikiLeaks – on the grounds that they would be in breach of provisions controlling access to classified material on unrated equipment³⁶ – seem quaint. So too does the “opening” of the Pentagon papers forty years after their initial leak and publication.³⁷

Continuum consciousness can provide meta-prescriptions for a radical break with our traditional time-based access regimes and “let the dust settle” approaches to appraisal. WikiLeaks deliberately exposes Internet citizens to

36 Ewen MacAskill, “US Blocks Access to WikiLeaks for Federal Workers,” *The Guardian* (3 December 2010), <http://www.guardian.co.uk/world/2010/dec/03/wikileaks-cables-blocks-access-federal> (accessed on 15 December 2010).

37 Steven Aftergood, “Declassifying the Pentagon Papers, Finally,” *Secrecy News* (15 February 2011), http://www.fas.org/blog/secrecy/2011/02/ndc_papers.html (accessed on 13 March 2011), and more recently (and equally bizarre) rulings relating to access to the material on WikiLeaks on behalf of Guantanamo prisoners from the Department of Justice, http://www.politico.com/static/PPM170_wikiguidance57.html (accessed on 26 April 2011).

the power of records, reverberating continuum-style as instruments of action in situations distant, but contemporaneous, to those of their creation. WikiLeaks is the meeting point, the spiky edge where the open agenda (be that open data, open source software, transparency, or the idealism of the Internet evangelists) encounters the prevailing, antithetical structures of society.

Rather than viewing WikiLeaks as an aberrant occurrence, what happens if we observe it as an experiment in the management of renegotiated rights, with records empowered by availability fundamentally changing the possibilities of social engagement with archives? With a continuum consciousness view, we can grasp the WikiLeaks phenomenon as an opportunity to learn and experiment in renegotiating our professional practice, exploring new ways of defining archival functionality, and providing an emergent structure for managing complexity and plurality.

Archival Functionality and Professional Recordkeeping Practice

Somewhere Beyond Complexity (Frank Upward)

The operation of novelty, change, and the world as process in online cultures is making accelerating complexity a focus again, much as it was when philosophers like Henri Bergson and Samuel Alexander began exploring it in a period when (it can be argued) the Industrial Revolution and colonial expansion had made manifest the spacetime continuum. Accordingly, it is no surprise that Web philosophers are rediscovering a piece of wisdom from jurist Oliver Wendell Holmes: “I would not give a fig for the simplicity on this side of complexity, but I would give my life for the simplicity on the other side of complexity.”³⁸

On this side of complexity, archivists have done many things that cut against the grain of the continuum. We have created major distinctions between personal, business, and government archives, perhaps drawing on an assumption that somehow the governance derivation of the archive (the archive as a keystone) can be equated only with government archives. We have treated time piously as a dividing line between what is archival and what has yet to become archival. We have put end products on shelves and looked at them as our focus (e.g., *archives* administration or *records* management).

On the other side of complexity, we live in a documentary web of relationships between individuals, groups, and communal organizations (including governments). This web of relationships directs, controls, and authorizes what we do. In online cultures, the networking nature of that web is more manifest than ever. The archives cannot be constructed using time-shadow approaches

38 Brian Johnson's philosophers' notes, http://www.philosophersnotes.com/quotes/by_teacher/OliverWendellHolmes (accessed on 25 March 2011).

(e.g., by trying to forensically reconstruct key data for descriptive purposes after agency use of the recorded information has ended), and the physical things we put on our shelves consist of items that are not themselves readable without other aids. Can our discipline re-form itself around sorting out complexity in the world of recorded information by using a continuum approach? Can we build a recordkeeping informatics approach informed by continuum concepts to integrate and manage the complexity of processes and services needed to defend the record across its lifespan in online cultures?

Such an approach would focus on archival functionality defined with reference to how records are captured from our situated actions, how archives are formed, and how records and archives are returned into situated action. In re-organizing our functionality to manage this complexity, we can build on a long history of archival practices directed at the defence of the record across its lifespan in Anglo-American approaches. Names like Margaret Cross Norton, Philip Brooks, and Ian Maclean spring to mind immediately in relation to the first sixty years of the twentieth century.³⁹ More recently, one can consider the pioneering work of David Bearman, Margaret Hedstrom, and John McDonald in electronic recordkeeping, and that of Terry Cook and Tom Nesmith on the postcustodial archive, grounded in Canadian re-conceptualizations of provenance.⁴⁰

Much can be done within a recordkeeping informatics approach to complex lifespan management in which current and historical recordkeeping tasks contextualize and re-contextualize recorded information in accordance with:

- the organizational settings and the technical environment in which activities are undertaken;
- the systems and business architectures, including business analysis processes;
- the methods and techniques available in particular places and times for the storage of recorded information;
- the requirements for archival access to those stores; and
- recordkeeping metadata principles.⁴¹

Recent metadata research and practice is of fundamental importance to this approach.⁴² The need for data structures that can help trace the archival trajec-

39 See Evans, "Archivists and Records Managers" and Maclean, "Australian Experience in Records and Archives Management."

40 See McKemish, Reed, and Upward, "The Records Continuum," pp. 4449–50 for an overview of the influence of Cook, Bearman, Hedstrom, and McDonald on Upward's continuum modelling and the model's relationship with provenance theory.

41 Gillian Oliver, Joanne Evans, Barbara Reed, and Frank Upward, "Achieving the Right Balance," part 1, *Records Management Association of Australia Quarterly*, vol. 25, no. 4 (2009), pp. 18–22, and Part 2, vol. 26, no.1 (2010), pp. 42–45.

42 Significant recent research includes the work of the InterPARES and MoReq projects; those looking for a continuum-filtered perspective should consult the Monash Records Continuum Research group website. See in particular the SPIRT and Clever Recordkeeping Metadata

tory of digital objects of recorded information is increasingly well recognized. Metadata research and practice is already being simplified on the other side of complexity within recordkeeping metadata schemes. The international nature of this research and related innovative practice encourages archivists everywhere to take the continuum seriously as they grapple with problems relating to the need to manage events over the full life history of recorded information.⁴³

That said, we have a long way to go in transforming current and historical recordkeeping processes into recordkeeping informatics, and a few examples can be used to point to the depth of the problem. The administration of the Arlington National Cemetery in the United States was investigated in 2010 for failing to keep accurate burial records, an example of registration-based incompetence of sufficient magnitude to attract global attention. Australians did worse in an episode that eroded Prime Minister Kevin Rudd's credibility and contributed to his resignation. Our example involved a grants scheme for the installation of insulation material. Swamped with applications, the department implementing the scheme was still fiddling around experimentally with online registration processes six months after grants were being distributed. It failed in its monitoring role to the extent that houses by then were burning down and the occasional poorly trained insulation installer was being electrocuted.

These are examples of recordkeeping problems that could be solved if only our records managers (and more senior managers) had a fuller understanding of how registration processes are a first step in managing complexity and the formation of the archive. There is, however, a growing list of problems in the management of things over time that, for those of us who believe in the close relationship between archives formation and societal well-being, is threatening our very life force and is not amenable to simple solutions. Some of the many obvious problems include climate change, environmental damage, the spread of terror, corruption, the decline in confidence in our governments, and the perennial ones of poverty, famine, and economic collapse. In none of these instances are we forming archives in ways that can help our situated action at local or global levels. Our current emphasis on creator-centric archives often ignores the plurality of the continuum, and can be used to suppress change by limiting the range of factors we consider in relation to each problem. It undermines the need to take a multiverse approach to archival formation, which, as we explained at the beginning of this article, involves looking toward the pluralism of evidentiary texts, memory-keeping practices, and the many different institutional, bureaucratic and personal motivations, community perspectives, needs,

projects outlined at <http://www.infotech.monash.edu.au/research/groups/rcrg/projects/> and documented in the many articles by various authors accessible from the project link (accessed on 21 July 2011).

43 See for example, NARA's discussion on the de-classification of documents at <http://blogs.archives.gov/transformingclassification/?p=55> (accessed on 20 March 2011).

and cultural legal constructs that might be connected to the complex variety of causes of such problems⁴⁴ in and through time.

To take the example of climate change, paradoxically it is proving to be easier for a handful of climate change skeptics in Australia to argue their case because they have built a small archive they can draw upon. They can argue the same issues repeatedly this side of complexity, whereas scientists trying to take into account the vast array of potential sources of evidence of climate change are compelled to argue the complexities of the case using a large but fragmented and unstructured archive. As far as I know no coherent plan for the ongoing formation of integrated and complex archives about climate change across the multiplicity of sources has emerged from any of our archival authorities. It is of course a ferocious problem for archives formation (ferocious because of the expanding and indeterminable range of sources that need to be managed) and requires new strategies, tactics, and structures (see below); it is not, however, one that societies can afford to ignore.⁴⁵

My own continuum modelling in its original intent was meant to help establish new rules for a new game, and is still one of the few models working on the other side of complexity. It has focused on the recursivity of the processes involved in the formation of archives. It sets up a singularity, which is defined precisely by its diversity.⁴⁶ The record continuum model's concentric view of situated action and the capture, organization, and pluralization of recorded information in indirect information spaces provide a very different perspective on professional functionality for the new zones of practice.⁴⁷

Archival access, for example, involves layers of functionality relating to the management of how we capture recorded information from situated action, how we form records into archives, and how we return archives and records to situated action.⁴⁸ Appraisal is a recursive action carried out in relation to what data and documents to capture as records, what records to organize within an archive, and what archives and records to pluralize, always with a view to what will be returned into situated action. Classification could be a particularly interesting

44 Pluralizing the Archival Curriculum Group, "Educating for the Archival Multiverse."

45 In a parting interview, the retiring Governor-General of Victoria lamented the lack of a usable web archive on climate change that all citizens could consult (see *The Melbourne Age* [4 April 2011], p. 1); the creation of such an archive, however, is not likely to be formed by traditional creator-centric methods.

46 This might seem to be an example of opaque vocabulary; in philosophy, however, probably the most basic descriptive way of tagging continuum thinking is to point to its monistic diversity. One cannot begin to think with any rigour about continuum philosophies unless the notion of defining singularity by its diversity is understood to be a significant characteristic.

47 See McKemmish, Reed, and Upward, "The Records Continuum."

48 An alternative view of that cycle is to think of it – as sociologist Anthony Giddens did – in terms of the way we represent, disseminate, and recall stored information. See Anthony Giddens, *The Constitution of Society: An Outline of the Theory of Structuration* (Cambridge, UK, 1984), p. 26.

example if we start by discarding hierarchical models and adopt an approach constructed out of the ideas of the great early American continuum thinkers, Charles Peirce and William James. We could combine Peirce's "firstness" (registration), "secondness" (indexicality), and "thirdness" (interpretative schemes) with James's aforementioned concept of the multiverse as "fourthness."⁴⁹

Continuum theory in its more recent manifestations has produced metaphors like the butterfly flapping its wings in one part of the globe and affecting the climate elsewhere; in other words, minor events have ripple effects across spacetime. The ripple effect of the theories of continuum mathematicians Imre Lakatos and Benoît Mandelbrot touches on our understandings of archival functionality beyond complexity.⁵⁰

Lakatos argues that too much specialization protects discourses from necessary corrections from related specializations. Might his critique of the atomization of the mathematics discipline into specializations inspire us to create new transdisciplinary structures for archival action? Mandelbrot's set theory and proof that complex structures reveal fractal properties of recessive similarity provide insights into the nature of complexity, the recursive nature of shapes for sets of relationships, and their simple rules of formation, suggesting how the simple shorthand of 1D Create, 2D Capture, 3D Organize, and 4D Pluralize might give rise to very complex structures.

How will archival functionality operate in the new zones of practice? Can we develop a multiplicity of routes for archival access into indirect information storage spaces in different places, from the desktop to the clouds, and into many variations on the physical archives and records offices of old?⁵¹ Many questions like these could be raised here, none of which will be able to be answered from this side of complexity; however, if we can identify some relevant simple rules within that complexity, we might still be able to manage it.

49 See William James, *The Will to Believe, and Other Essays in Popular Philosophy* (New York, NY, 1896), p. 42ff. C.S. Peirce's tripartite approach to a semiotic continuum is difficult to cite. In a sense he is still a living writer. His writings are constantly being reorganized, re-presented, and reinterpreted for new spaces and times. The information-based interpretation of his concepts of firstness, secondness, and thirdness was provided to me by a research student at Monash, Frances Morrissey, who discussed Peirce's work in "Introduction to a Semiotic of Scientific Meaning, and Its Implications for Access to Scientific Works on the Web," *Cataloging & Classification Quarterly*, vol. 33, nos. 3/4 (2002), pp. 67–97. The difficulty of accessing Peirce's work is discussed in the *Stanford Encyclopedia of Philosophy*, <http://plato.stanford.edu/entries/peirce/#access> (accessed on 25 July 2011).

50 Imre Lakatos, *Proofs and Refutations* (Cambridge, UK, 1976). My knowledge of Mandelbrot is confined to Web sources, e.g., wikipedia.org/wiki/Mandelbrot_set (accessed on 27 June 2011).

51 See Livia Iacovino's conference paper "Beyond Distributed Networks: Participatory Governance of Digital Memory" in the proceedings of the conference *The Future of Memory: The Digital Archival Heritage* [Seminaro internacional O futuro da memoria: o patrimonio arquivístico dixital], Santiago de Compostela, Spain, November 2010, n.p.

Transforming Archival Functionality and Professional Recordkeeping Practice to Better Engage with Plurality (Sue McKemmish)

McKemmish, Faulkhead, and Russell have argued that:

Australia's mainstream discourse and collective memory relating to Indigenous Australia have largely been built on the actions of a violent past, utilizing systems of remembering and forgetting that have supported a negative construction of Indigeneity within that collective memory. There is a pressing need for Australia's collective knowledge spaces to be reconfigured to be representative of all cultural voices, but as a whole Australia is not yet at a place to recognize all that reconciliation can achieve, let alone share the spaces and decolonize them for the benefit of all.⁵²

Faulkhead has concluded that Koorie collective knowledge can only coexist within, or alongside, Victoria's collective knowledge if there is acknowledgement of equal, but different world views and knowledge systems, as well as understanding and respect for the different processes and protocols involved in creating, validating, authenticating, transmitting, and accessing narratives created in different knowledge systems.⁵³

Decolonizing archival functionality and professional recordkeeping practice can be envisaged as a collaborative, co-creative journey involving Indigenous and archival communities (encompassing archival institutions, organizational recordkeeping programs, the profession, and individual recordkeeping professionals/archivists). It would begin with an acknowledgement of the continuing impacts of colonialism and post-colonial recordkeeping and archival structures; strategies and tactics on Indigenous communities; recognition that Indigenous communities rely on sources of knowledge, evidence paradigms and methods of transmission that differ in some significant respects from those of the wider community; and acceptance of differing constructs of ownership of records, privacy, access, and what constitutes secret and sacred material in different space-times. It would involve respectful and carefully negotiated partnerships between Indigenous and archival communities, and a sharing of governance and control, allowing multiple voices to contribute to the decision-making about current and historical recordkeeping, and joint exploration of how archival functionality and professional recordkeeping practice could be pluralized so that they can embrace and better support multiple ways of knowing, recordkeeping and archiving, and multiple forms of records.

The findings of the Trust and Technology and related projects suggest that continuum concepts of co-creatorship (as developed by Chris Hurley, Eric Ketelaar, and Sue McKemmish) and records as social entities (as explored by

52 McKemmish, Faulkhead, and Russell, "Dis-trust in the Archive."

53 Faulkhead, "Narratives of Koorie Victoria."

Ketelaar), together with Hurley's conceptualization of multiple simultaneous and parallel provenance, and Iacovino's participatory models of recordkeeping and the archive, might be highly relevant to transforming archival functionality and professional recordkeeping practice to support the participation of Indigenous peoples in recordkeeping and archiving programs and processes.⁵⁴ They also have great potential as frameworks and models for the exercise of Indigenous human and cultural rights in recordkeeping and archiving as they reposition Indigenous peoples who have hitherto been the "captives of the archives,"⁵⁵ the subjects of records, and the objects of the archival gaze as active participatory agents in archival and recordkeeping programs, and system design and implementation.

Hurley has explored how the concepts of co-creatorship, and simultaneous and multiple provenance might be applied retrospectively in the context of historical recordkeeping to archival records relating to the Stolen Generations. From 1910 to 1970, up to fifty thousand Australian Aboriginal and Torres Strait Islander children – the Stolen Generations – were forcibly taken from their families by state governments around Australia. Governments labelled their actions "child removal" for "child protection" purposes, but they were linked to policies aimed at the assimilation of "half-caste" children into white society and the "breeding out" of Aboriginality. Indigenous people experienced these actions as "child stealing" and human rights abuse. As the concept of the singular record creator is the guiding principle in defining provenance in archival science, traditional archival theories privilege the singular records creator and treat other participants in the transaction/event as subjects of the records. This singular and therefore partial view is embodied in historical and contemporaneous recordkeeping practices. The contemporaneous recordkeeping systems were instrumental in "child removal." In historical recordkeeping settings, appraisal and description processes have privileged the context in which the "records creator" operated and is blind to the contexts of others who participated in the activities or events documented in the record. In archival descriptive practices, the voices of these others are silenced:

54 Eric Ketelaar, "Archives as Spaces of Memory," *Journal of the Society of Archivists*, vol. 29, no. 1 (2008), pp. 9–27; Chris Hurley, "Parallel Provenance: (1) What, if Anything, is Archival Description?" *Archives and Manuscripts*, vol. 33, no. 1 (2005), pp. 110–45, <http://www.infotech.monash.edu.au/research/groups/rcrg/publications/parallel-provenance-combined.pdf> (accessed on 21 July 2011); Chris Hurley "Parallel Provenance: (2) When Something is *not* Related to Everything Else," *Archives and Manuscripts*, vol. 33, no. 2 (2005), pp. 52–91, <http://www.infotech.monash.edu.au/research/groups/rcrg/publications/parallel-provenance-combined.pdf> (accessed on 21 July 2011); Sue McKemmish "Evidence of Me ... In a Digital World," in *I, Digital*, ed. Cal Lee (Chicago, in press). Livia Iacovino, "Rethinking Archival, Ethical, and Legal Frameworks for Records of Indigenous Australian Communities: A Participant Relationship Model of Rights and Responsibilities," *Archival Science* 10 (2010), pp. 353–72.

55 Fourmile, "Who Owns the Past?"

Archival description tells a story about the formation of records and the activity they document. The stories we tell about provenance reflect a necessary choice to exclude contested narratives. We justify that choice by legitimizing our point of view (inherent in any statement of ownership) according to archival principles we claim mandate taking a single view of provenance ... [but] records are linked to a dynamic set of diverse and changing relationships that cannot be properly described under that mandate ...⁵⁶

Postmodern thinking and Indigenous ways of knowing challenge this tradition of provenance based on the concept of a singular records creator. The limited, enduring view of the archive as end product, discussed earlier in the paper, freezes Indigenous peoples as “captives of the archives” and subjects of the archival gaze as defined by the singular records creator – the colonial invader and post-colonial administrator. A perduring perspective frees former captives of the archives to participate in the forming and re-forming of the archive through time, for example as active agents and decision makers in appraisal, description and access policy making, systems development, and implementation. Addressing the challenge this poses to current archival descriptive systems, Hurley proposes two interrelated continuum-based concepts.

The first, simultaneous multiple provenance, involves two or more creators who coexist as part of a broader context or ambience. It can only be implemented in archival practice within a meta-system that supports the description of records from the multiple perspectives of the “co-creators” of the records with reference to their different purposes and functions, recognizes contested views, and does not allow one perspective to subsume another. The second, parallel provenance, refers to situations in which different perspectives are described in parallel systems when there is no meta-system in place in which simultaneous multiple provenances can co-exist. As long as the concept of the singular record creator is the guiding principle in defining provenance, the view of post-colonial Australian governments of their child removal policies and related processes – as currently represented in the archival systems of Australia’s national and state archives, cannot be reconciled with the “parallel” view of Indigenous communities that the children and their families were participants in acts of child stealing and human rights violation.

Hurley argues that related Australian state government records simultaneously exist in the contexts of those governments’ policies and actions, and of the individual and collective experience of Indigenous Australians. He maintains that archival systems should be able to acknowledge and describe these simultaneous multiple provenances.

Continuum approaches to embedding Indigenous human rights in archival functionality could deploy the concepts of co-creatorship and simultaneous multiple provenance into current recordkeeping settings within frameworks

56 Hurley, “Parallel Provenance: (1),” p. 110.

provided by participatory models of recordkeeping and archiving. Participatory recordkeeping models involve repositioning “records subjects” as “records agents”: co-participants in the act of records creation. Expansion of the definition of record creators to include everyone who has contributed to a record’s creative process and has been affected by its action, would support the enforcement of a broader spectrum of rights and obligations. In a fully implemented model, all co-creators would have legal and moral rights and responsibilities in relation to ownership, access, and privacy of records in and through time:

The Trust and Technology Project found that acknowledgement by archival institutions of Indigenous rights of self-determination and facilitation of the exercise of cultural rights as human rights, linked to the principle of non-discrimination, involves moving beyond the current focus on individual access rights to involve individuals and communities in decisions about appraisal, access and management of records relating to them, including non-Indigenous archival sources of Indigenous knowledge.⁵⁷

Speakers at the 2010 Archives and Indigenous Human Rights Workshop⁵⁸ emphasized that the principle of free, prior, and informed consent – an essential component of self-determination – means that Aboriginal and Torres Strait Islander peoples need to be involved in the design, development, implementation, monitoring, and evaluation of all current and historical recordkeeping programs, policies, and legislation that affect them.

Postmodern and continuum ideas, coupled with new digital and social technologies, and Indigenous ways of knowing, open up exciting possibilities for pluralizing archival functionality, acknowledging parallel recordkeeping universes, or even realizing an archival multiverse, and building shared recordkeeping and archiving spaces that enable the co-existence of different and contested narratives. As yet, however, there is little evidence that these understandings are being translated into professional recordkeeping practice.

Although some mainstream archives and collecting institutions are increasingly sensitive to the cultural issues associated with service provision and the accessibility of records to marginalized communities, the more fundamental issues canvassed in the literature – the existence of different memory and evidence paradigms, the concept of “parallel provenance,” the implications of acknowledging communities as co-creators of official or anthropological records about them, and the web of mutual obligations and rights this would entail – have not yet impacted on practice.⁵⁹

57 McKemmish, Iacovino, Ketelaar, Castan, and Russell, “Re-Setting Relationships.”

58 See footnote 9.

59 Anne Gilliland, Andrew Lau, Yang Lu, Sue McKemmish, Shipa Rele, and Kelvin White, “Pluralizing the Archival Paradigm through Education: Critical Discussions Around the Pacific Rim,” *Archives and Manuscripts*, vol. 35, no. 2 (2007), p. 16.

The kinds of structures, strategies, and tactics needed to transform professional recordkeeping practice to address the plurality of the archival multiverse are discussed later in this paper.

WikiLeaks: Professionally or Unprofessionally Plural? (Barbara Reed)

How can our profession successfully address rampant complexity in the online environment? WikiLeaks provides an instance in which to explore how the continuum meta-perspective can support a transformation in professional practice to better address plurality and complexity. Unfettered by professional archival practices, WikiLeaks appropriates our long-held mission of social accountability, albeit with twists. Involving a mix of diverse source materials framed for their potential to expose injustice (perceived or real), WikiLeaks consciously operates in a vast, pluralized domain of conflicting interests, highlighted by the immediacy of issues addressed in the records, contrasting with the rather abstract interest records might garner when “released” many years after the events that generated them. In doing so, WikiLeaks is facing the complexities we are also grappling with: Who contributes to, and constitutes, the archives? How do we contextualize interpretation? How do we negotiate conflicting rights in records formation, organization, and pluralization? How do we manage technology for social inclusion? What governance practices are essential and what can be dispensed with?

Views on WikiLeaks will differ widely. Conceptualizing these views as interpretations from the multiverse enables legitimate simultaneous coexistence of quite diverse views. The American government’s view of the diplomatic cables released by WikiLeaks is very different from that of (say) Tunisians or Egyptians presented with evidence of the corruption of their American-supported governments. The views of WikiLeaks founder Julian Assange with his political agenda, and those of the named (or redacted) American collaborators (in the war logs sequences) will be different. The view of those “old media” players (such as *The New York Times*, *The Guardian*, and other print newspapers) invited to participate in the profiling of war logs or cables of specific interest to their jurisdiction is likely to be very different from those at the heart of the WikiLeaks organization. The impact and views of named players will be vastly different – from shrugged dismissal of an unflattering analysis of his character by Australia’s Foreign Minister, to the United Nations’s shock and outrage over evidence of American diplomats being asked to collect personal information on UN officials. The view from 2011 is quite different from the view of other material emerging from WikiLeaks prior to 2008. The view looking back from the future to events of 2011 is guaranteed to be different to those of today. At the centre of this, with its reverberating ripples of response, impact, interpretation, and effect, is the resource itself – the record. Refracted reflections of the records, seen from differing time periods, differing politics, dif-

ferent roles, all simultaneously co-exist as actual or potential interpretations of records, each valid in its own discrete or overlapping frame of reference.

Formation of the archive in WikiLeaks is non-traditional. The records were formed within the particular business being undertaken – in the case of the diplomatic cables, routine reporting from embassies and diplomats. That context of creation continues to exist and to be managed according to the recordkeeping protocols governing the transaction of that business. The Secret Internet Protocol Router Network [SIPRnet] system used by the US Departments of Defense and State for the creation and transmission of these communications presumably has extensive recordkeeping processes in place, and the archive is being formed quite routinely within the systems in place. WikiLeaks thrusts this material out into a pluralized space in spectacular fashion, radically unsettling the routine.

WikiLeaks is, of course, much greater than the leaks of American war logs and diplomatic cables. A hotchpotch of randomly received material constitutes the WikiLeaks archive, presented as a whole through the specific lens of exposing corruption, misdeeds, and falsehoods. There is little coherence in this broad collection. And it is indeed a collection – a set of documents filtered through a lens of a particular collecting intent. Processes of formation are not revealed. Records are ripped, unconnected, from their contexts of creation. Re-creation of the context of individual record objects was initially to be supplied through the wiki part of the endeavour, where interested parties could interpret, add to, and supply context for the specific object – a radical democratization of our traditional descriptive practices that take place well after the creation of the record. This initial intent was abandoned quite early as it proved difficult to focus sufficient attention, even that of the investigative journalism media, onto the revealed records. The partnership with “old media” followed. The exposure of the American leaks, tense and controversial as it was, provided multiple jurisdictionally based and multilingual filters to present the material of most relevance to specific audiences; telling the story was necessary for the revelations to achieve their intent. Early versions of the website (prior to the 2010 close down) provided links to articles based on the WikiLeaks content – connecting to interpretative sources in a constantly evolving contextualization, perhaps akin to archival institutions that publish articles on research based on their holdings.

Indexing and interpretive schemas are back-filled onto the WikiLeaks material. As the social and political agenda of both WikiLeaks and the material became more obvious, increasing numbers of interpretative tools have been created as adjuncts to the material supplied by WikiLeaks. Initial indexing of the war logs and diplomatic cables by reasonably blunt attributes (geographical location, security classification) have been buttressed post-release by evolving tools (e.g., Google maps showing war engagements, translations into multiple languages, cable-viewer tools on the WikiLeaks site, and tools constructed by third parties such as media partners).

Material received by WikiLeaks is not going through the professionally ro-

bust routine transfer process that protects and preserves the chain of custody – a critical professional archival building block. But do its transfer and other processes point to possible elements in a transformed archival functionality? A transfer process there is – through the tightly encrypted and protected “drop-box” or anonymous deposit mechanism. The process of deposit, or ingest, or transfer is not the trusted point of the transaction; it is, however, a trusted component of the relationship between the leaker and the WikiLeaks organization. Rather, the process of authentication follows, with an editorial and publication process, finally supported by a distribution process. While undoubtedly a journalistic mechanism governs the internal dimensions, just how different is this process from our Open Access Information System (OAIS) models of ingest? On the other hand, at this level of generality does it matter? The intent of the processes may be the differentiator. The processes to transfer to WikiLeaks are designed to be robust, encrypted, and anonymous.

WikiLeaks is not too concerned about authenticity, with initial statements about the “wisdom of the crowd” determining this. However, increasing attention on the part of WikiLeaks to questions of authenticity seems to have evolved with greater experience in leak releases, relying more on a non-transparent, internal checking process. But authenticity is conferred on many records by reactions of those impacted. In the case of the leaked American diplomatic cables, reactions of both the US government and the State Department confer authenticity. Authenticity is attributed by this triangulation effect. But care is needed here. At some point this technique may prove an instrument of disinformation – erroneous or misleading material deliberately leaked by intent, and subsequently authenticated by triangulated reaction, a potentially perverse misuse of the technique. Where does this leave archival practice? If the old chain of custody notion breaks down in this⁶⁰ – and potentially other instances – does this impact on one of our core archival assertions as the authenticator of records, or does it conversely make that role within a re-invented archival functionality more critical for the resources that we manage?

Are WikiLeaks records original? In one sense, they are clearly not. They are, at best, authentic copies of originals, which may or may not still reside in their creating organization and creating sequence. The WikiLeaks site contains a large number of PDF documents – copies of scanned original documents. And the diplomatic cables received (presumably) in digital form appear to be a rendition of the digital files. But does any of this matter? What is an original in the digital world? When bits can be replicated identically and rendered in various displaying devices, the notion of original becomes moot. As far as we

60 “While a secure chain of custody cannot be established for anonymous leaks, these leaks can lead to successful court cases.” *WikiLeaks: FAQ December 2007*, <http://web.archive.org/web/20071217015201/wikileaks.org/wiki/Wiki> (accessed on 9 February 2011).

know, the originals remain in place in their creating systems. Perhaps somewhere beyond complexity, the notion of archive is actually predicated *not* on physical possession but on many different communities linking and documenting multiple, ever-changing relationships to material located somewhere or anywhere in the multiverse.⁶¹

WikiLeaks is a virtual organization with few physical manifestations. The original server storage in Sweden is now less relevant with the mass mirroring of sites across the Internet following various attempts in December 2010 to disable the organization. It provides an irrefutable case study of why a centralized location is undesirable and unnecessary in the digital age. A physical location provides a single point of attack, or at least a single point of vulnerability. A distributed service works equally well and is safer from external attack – particularly relevant in the circumstances of WikiLeaks facing concerted attempts to close it down. Of course, this is distribution of storage, rather than the more radical distribution of content, for WikiLeaks is in control of the packaging of the whole of its site.

At a social level the case study raises questions of what constitutes an archives and archiving functionality in online cultures. Clearer, experiential-based articulation of distinctions would be useful in this space. Is this a status to be accorded, earned, or self-designated? What characteristics does an archives need? One of the major components is the capacity to be a trusted organization. WikiLeaks probably fails this test, but we do not really have definitive criteria by which to judge. On grounds of stability, robustness, longevity, transparency of operations, and neutrality (whatever this is), WikiLeaks would not qualify as a trusted organization, as we know very little about its internal workings.

As an organization, its credibility is diminished substantially by the contradiction that WikiLeaks is about transparency for others but not for itself, no matter how well justified by the confidential nature of relationships with leakers – and solidarity with these leakers in anonymity. On the other hand, if we really shone a bright light onto our traditional archival practices and institutions, how well would they stand up to external scrutiny of their processes and outcomes from a transparency perspective?

WikiLeaks exposes the complexity involved in explicitly enabling massive global plurality. As a provocative digital archive positioned to operate in the global online environment, it illuminates our professional challenge to create and sustain records in multiple, perhaps conflicting contexts of creation, interpretation, and reuse. Continuum consciousness provides a mechanism for analysis and a potential means of abstracting new professional practices to operate in this world of inexorable complexity.

61 Perhaps the Mandela Archive and the Australian Science Archives Project in the 1980s and 1990s can be seen as early examples of this approach.

Strategies, Tactics, and Structures

A Continuum of Projects (Frank Upward)

We live in a world where the expansion of the continuum of recorded information has been made manifest by the marriage of Internet and Web technologies, and in which community groups everywhere are learning to love the archive.⁶² Why, then, is the archival profession marginalized in many parts of the world? The simple answer is that we were too committed to the symbolic order of the custodial archives. Instead, we should have put our energies into replacing physical storage with logical models, and integrating historical and current recordkeeping processes within our archiving processes.⁶³

The problem, however, runs deeper. We have failed to engage with the continuum, with the world as process, change, and novelty because we operate from a base in which so many archival practices have been dominated by the things we store rather than by the recordkeeping and archiving processes. Recordkeeping (not recordkeeping events) and archives administration (not archives formation) have been the focus of the development of our strategies, tactics, and structures. Consequently, our past approaches of controlling what we do make no practical contact with ways of dealing with the massive expansion in our information and communication apparatuses.

In their simple linear forms, the records life cycle models separating archives and records management did not help us, and indeed obscured the realization that the “archival front-end” was itself changing to one that included knowledge and information management.⁶⁴ Right across the information universes there is a legacy of practices and thinking based on finite objects.

How can archivists play a stronger role in evidence formation and use across the accelerating complexity of events throughout the lifespan of records? This paper aims to brainstorm ideas, rather than set out precise agendas or resolve the central continuum and informatics issues of when, where, why, and how to provide adequate processes and services across that lifespan. However, as someone who has used a continuum metaview as both practitioner and academic, and in activity-based learning projects, I believe there are things that can

62 For an article dealing with the way people are coming to love the archive, see Kate Eichorn, “Archival Genres: Gathering Texts and Reading Spaces, in Invisible Culture,” *An Electronic Journal for Visual Culture*, Issue 12: “The Archive of the Future/The Future of the Archive” (May 2008), <http://www.rochester.edu/invisibleculture/Issue12/eichhorn/index.htm> (accessed on 25 July 2011).

63 See for example Frank Upward, “The Archival Document,” in *Archival Documents: Providing Accountability Through Recordkeeping*, eds. Sue McKemmish and Frank Upward (Melbourne, 1993), pp. 41–54.

64 Although it must be noted that the fields of knowledge and information management have not mastered the transition from things to processes either.

be said with some confidence about strategies, tactics, and structures for these new zones of practice.⁶⁵

First, as was pointed out above, recordkeeping informatics can provide a continuum of integrated recordkeeping and archiving processes, as well as tools to analyze new organizational settings, technical environments, and system and business architectures. New recordkeeping methods and techniques are evolving, building on a growing knowledge and understanding of recordkeeping metadata. We have many of the bits and pieces for assembling recordkeeping informatics, but still lack the coordination to make it a reality.

Recordkeeping informatics needs the plural vision of the archivist provided by transcendental continuum theory as long as it is not to be used in repressive fashion by tyrants, dictators and spin-doctors, or avoided by agents of corruption. It is too easy to keep only records that reflect a particular distorted view of things. Pluralization is needed to provide the kind of archival neutrality that can be achieved through the coexistence of different viewpoints. The fourth dimension of the continuum of recorded information can become little more than wishful thinking if divorced from the other three dimensions, and without it they in turn are potentially pernicious. We used to say that archival neutrality meant preserving records after the creators had finished with them for business purposes. Archivists could then step in and defend the record. In this century, archival neutrality could be reconceptualized to focus on ensuring that recordkeeping processes have opened themselves up appropriately to the plural rights that exist in records, have done so in a timely fashion, and have been maintained by agents that have co-operated with emerging access regimes for transparency and accountability. Archivists might come to see one of their core functions as issuing “archivally approved” certificates for applications and systems that respect collective rights in records.

To get to that stage we need to build understandings of what it means to issue ratings for applications, processes, and systems that capture, organize, and pluralize recorded information, and return it into situated action. Are Facebook; Twitter; a licensing system for x, y, or z; an emissions trading scheme document bank; or an archival information system within a climate change memory bank worthy of a rating of zero, or one to five? Such a ratings technique would be a learning experience for any and all of us, would have commercial value, and would foster knowledge and skills transfer.

How can we build infrastructures that can underpin flexible strategies, tactics, and structures as well as a new archival functionality? Can we involve archival communities of practice and the communities we serve, locally and globally, in a never-ending continuum of projects to develop and codify our

65 Frank Upward and Sue McKemish, “Teaching Recordkeeping and Archiving Continuum Style,” *Archival Science*, vol. 6, no. 2 (2006), pp. 219–30.

skills and knowledge in recordkeeping informatics in a coordinated way? We need projects to help us to understand what sorts of recordkeeping interventions work, when to bring them to bear, and how to do so. Perhaps in this endeavour, we will discover the equivalent of our own Mandelbrot sets, relationships that apply across many instances and at many different depths of analysis. We need to focus on the world of “tailorable” and modular applications that operate on human scales of action in response to individual, group, and organizational requirements, and (if archivists can have the necessary influence) respecting our collective rights in recorded information. At the same time, we also need to grapple with the changing trends in mega-system approaches, larger information architecture issues, and application platforms. Our continuum of projects should have a particular focus on the development of flexible and modular Web-based applications that have the agility to be plugged in and replaced as changes occur. And the projects and their findings will need to be registered, indexed, and interpreted in such a way that our experience can be built up within what can be a global form of evolutionary feedback. The technical challenges are still great. Forming the archive, for example, becomes a matter of juggling massive diversity across a singular formation with many applications feeding into it. But solutions must be grounded in the contingencies of situated action.

A continuum of projects as a structure for building frameworks, knowledge, skills, strategies, and tactics in recordkeeping informatics is a radical proposition, although it has some smaller-scale precedents in international collaborations involving national government archives, International Council on Archives (ICA) and International Organization for Standardization (ISO) committees and working groups, and research partnerships like InterPARES that bring together multidisciplinary teams of researchers and communities of practice. What role might national and state archival institutions, organizational recordkeeping programs, professional associations, individual archivists, archival educators and researchers, and partnership communities play in this continuum of projects? What kinds of hubs and nodes might we need in our networking structures for managing, retrieving, and disseminating our findings? Even though some of our existing institutions might lack the necessary independence from their employers to be true hubs (for example, if they are not willing or able to put collective rights ahead of those of creating agents), they might still play a vital role as nodes. One possible new form of hub could be Archiving and Evidence Commissions. Imagine, for example, a United Nations Archiving and Evidence Commission on climate change (or any other major global problem). On a smaller scale, imagine governmental- or community-based commissions that could send out Recordkeeping Examiners (including Recordkeeping Coroners) or, better still, send out Recordkeeping Auditors in an effort to prevent recordkeeping disasters before they occur.

In whatever structures they are trained and employed, archivists will need to be active stewards for the better management of archival access if their

professional significance is not to dwindle. They will have expertise, both clinical and forensic, in how recorded information about situated action is recursively captured, organized, and pluralized within our complex and diverse memory spaces. Their knowledge and skills will be invaluable for managing recordkeeping events and related archiving processes across the complex settings in which records come into being, and they can assist in returning records back into action.

Addressing Plurality: Reconciling Recordkeeping and Archival Structures, Strategies, and Tactics (Sue McKemmish)

I want to tell a different story. It's about how Aboriginal people can be the authors of our stories and not the passive and powerless subjects of stories told and written by others. It is the role of government and others, including archivists and recordkeepers, to position themselves to enable Aboriginal and Torres Strait Islanders to move from passive and powerless subjects to active participatory agents. I hope my insights assist in pushing towards an archive and recordkeeping system that facilitates the active participation of Aboriginal and Torres Strait Island peoples ... It is critical that Aboriginal and Torres Strait Islander peoples are substantive and major stakeholders in determining appropriate archival and record keeping processes for Indigenous culture, cultural property and knowledge systems.⁶⁶

Archival institutions throughout Australia are engaged in efforts to build long-term, trusted relationships with Indigenous communities as users of archival services, particularly through the provision of better access. As yet, there is little evidence of similar developments in current recordkeeping settings, for example in organizations that are creating and managing records. Aboriginal and Torres Strait Islander Social Justice Commissioner Mick Gooda and other speakers at the 2010 Archives and Indigenous Human Rights Workshop, highlighted the need to re-set existing relationships between Indigenous peoples and the archival community, as well as establish new relationships based on equal partnership; mutual respect for different ways of knowing; building trust through participatory rather than consultative models; and active participation in the design, development, implementation, monitoring, and evaluation of archives and records laws, and current and historical recordkeeping policies and programs. The foundation component of an action agenda for re-setting relationships would involve the Australian archival and records community working in partnership with Indigenous communities to develop coherent national frameworks and participatory models for engagement in the governance and operation of recordkeeping and archival programs.

66 Mick Gooda, Aboriginal and Torres Strait Islander Social Justice Commissioner, speaking at the 2010 AIHR Workshop (see footnote 9).

Emerging continuum-based research and theory building points to ways of re-inventing recordkeeping and archiving structures, strategies, and tactics to better accord with postmodern societal needs and expectations, and better support recordkeeping and archiving in online cultures – particularly when coupled with new technologies.

Social software, including annotation systems, wikis, blogs, social networks, social recommender systems and a host of other Web 2.0 based applications are drastically changing cultural practices of record creation and record keeping. Government 2.0 implies that records are created in an interactive dialogue between the government organization and the citizen, requiring the customer or citizen to become a party to the business function[,] which created the record, a co-creator ...

This social and cultural phenomenon of co-creatorship entails a shift of the traditional paradigm that locates the agency of a record solely in its author.⁶⁷

The Trust and Technology Project found that current archival and recordkeeping frameworks, rights management protocols, metadata schemas, and access policies do not readily accommodate the high-priority evidence, identity, social justice, and human rights needs of Indigenous communities and individuals. The findings point in particular to the vital role that metadata systems and tools can play. Recordkeeping metadata schema and archival descriptive systems built within frameworks that privilege traditional archival science definitions of records creators and records subjects do not currently support representation of multiple, simultaneous provenance or co-creatorship involving the exercise of mutual rights and responsibilities in records by all participants in the transactions they document. They do not support annotation of the records to represent multiple perspectives. Metadata elements and archival descriptors designed to manage ownership, custody, privacy, and access – as defined in western legal systems – can deal with individual but not collective rights in records; they can express national security requirements, but not the cultural requirements associated with the handling of secret and sacred material. Classification systems, thesauri, and other metadata encoding schemes developed within one worldview do not include the concepts and terms needed to classify and name entities within another. Metadata standards built within continuum frameworks have been designed to support a perduring view of records and their contexts, capturing the dynamic and changing relationships between the multiple entities in the recordkeeping and archiving landscape.

There is also a range of innovative solutions being pioneered in digital repatriation projects in the Northern Territory and Australia. As yet there has been little formalization or standardization, and no integration of their metadata approaches into mainstream frameworks and standards, an expressed aim

67 McKemmish, Iacovino, Ketelaar, Castan, and Russell, “Re-Setting Relationships.”

of those involved.⁶⁸ Addressing these challenging issues will involve building meta-systems that build on the potential of continuum-based metadata schema to accommodate multiple and plural perspectives on the record and its context, support participatory management models, and enable people and communities – once considered the subjects of the records – to add their perspectives and stories.

In the historical recordkeeping space, Indigenous cultural institutions and knowledge centres, as well as partnership research and development initiatives, are pioneering structures, strategies, and tactics in online environments that address the evolving and dynamic archival requirements of Indigenous communities, their epistemologies and ontologies, cultural protocols, constructs of collective ownership and privacy, ways of expressing traditional knowledge, and needs for differential access.

An exemplar grassroots project is the Mukurtu Wumpurrarni-kari Archive of the Warumungu community in Tennant Creek in the Northern Territory. The platform includes customizable features so that it can be adapted to meet the diverse needs of Indigenous communities elsewhere; for example, the Plateau Peoples Web Portal used by five tribes from the Pacific northwest in the United States.⁶⁹ Another pioneering project is the Koorie Archiving System (KAS), intended as “a demonstrator of a socially inclusive approach to archiving, showing how government and alternate views can be presented in a harmonious environment, while demonstrating how community organizations can integrate current and historical government and other organizational records into their own knowledge and records systems.”⁷⁰ KAS is extending open-source wiki technologies by building in levels of security and layered, differentiated access mechanisms to meet the needs of Koorie communities as identified in the Trust and Technology Project. Funded by a Victorian government grant scheme that aims to promote collaborative, innovative Internet initiatives, KAS is being built through a co-operation between the Victorian Koorie communities, the Koorie Heritage Trust, the Public Record Office of Victoria, and Monash University. It will link recordings of oral narratives and memories to other current

68 Martin Nakata, Vicky Nakata, Gabrielle Gardiner, Jill McKeough, Alex Byrne, and Jason Gibson, “Indigenous Digital Collections: An Early Look at the Organization and Culture Interface,” *Australian Academic & Research Libraries*, vol. 39, no. 4 (2008), pp. 223–36; Martin Nakata, Alex Byrne, Vicky Nakata, and Gabrielle Gardiner, “Indigenous Knowledge, the Library and Information Service Sector, and Protocols,” in *Australian Indigenous Knowledge and Libraries*, eds. Martin Nakata and Marcia Langton (Sydney, 2006), pp. 7–20.

69 For more information see <http://www.mukurtuarchive.org> (accessed on 21 July 2011).

70 Public Record Office Victoria, Koorie Heritage Trust, and Monash University, *Koorie Archiving System*, Application to the Victorian Government’s Collaborative Internet Innovation Fund, prepared by Andrew Waugh (Public Record Office Victoria), Shannon Faulkhead (Centre for Australian Indigenous Studies, Monash University), and Sue McKemmish (Monash University) (2009).

and historical records of Koorie people (including government records), and provide family or community-centred alternative views to current and historical accounts of Victoria's present and past.⁷¹

Re-setting relationships between archival and Indigenous communities involves the reinvention of recordkeeping and archiving structures, strategies, and tactics so that they can play a critical role as a part of a broader reconciliation between Indigenous and non-Indigenous Australia. Digital technologies and social networking can support continuum-based frameworks for implementing participatory recordkeeping and archival models (globally and locally); the negotiation of appraisal by records co-creators; the development of meta-metadata schemes capable of dealing with multiple and parallel provenance, and related rights and responsibilities management in current and historical recordkeeping settings; the building of shared, collaborative recordkeeping and archival spaces configured to respect the rights in records and protocols of all parties involved; the coexistence of contested views and multiple perspectives; and the provision of differentiated access in online cultures.

WikiLeaks: An Emergent Structure for Managing Complexity and Plurality? (Barbara Reed)⁷²

WikiLeaks provides a vastly novel environment in which to probe the structures, strategies, and tactics for our professional practice. It is fundamentally about applying a continuum perspective to recognizing and realizing the power of records as agents of change, and about launching records into new environments of situated action from a pluralized domain.

WikiLeaks certainly provides an arena in which to further challenge our access rules – an instance of our time-based current practices, which are already under substantial challenge. Access is socially constructed, and is in a very dynamic and fluid process of negotiation at present, which we as archivists ignore at our peril; our existing access frameworks are clearly not keeping pace with social expectations for access to government information, even without the example of WikiLeaks. Where access to government information was once a privilege granted to the public in archival legislation, we find that the rules governing access are now being introduced and modified in multiple pieces

71 McKemmish, "Evidence of me"; Monash University Caulfield School of Information Technology and Centre for Australian Indigenous Studies, the Public Record Office of Victoria, the Koorie Heritage Trust Inc., the Victorian Koorie Records Taskforce, and the Australian Society of Archivists Indigenous Issues Special Interest Group (2009), *Trust and Technology*.

72 I am grateful, as always, to Frank Upward and Sue McKemmish for reviewing and contributing to this section. Frank's voice is clearly heard in the inclusion of Quentin Gibson's discussion on the topic of exploring philosophical perplexity.

of legislation, each one addressing a real or perceived flaw in the fabric as they arise. So we have different legislation encompassing access rights and protections for personal information, and for medical or health information. Freedom of information legislation supposedly dovetails with archival access rules, each dealing with records of different age, but they do not always make for a close fit, and, administered by different agencies, often come with different and competing perspectives on the release of information. Different jurisdictions have different rules in each of these areas, adding vast complexity to transactions occurring in multiple jurisdictions. Recent reviews in freedom of information legislation in Australia⁷³ and open-data initiatives in the UK, have highlighted some of these flaws.⁷⁴ Similarly, both these jurisdictions have recently reviewed the previous default “thirty-year closed period,” during which only exceptions can be made for archival access. If nothing else, WikiLeaks has created a wide social questioning of the validity of our previous norms of fixed closed periods. As we write, it is Sunshine Week in the United States, an annual initiative to promote a dialogue about the importance of open government and freedom of information, and ironically the success of the apparently liberalized access regimes is subject to considerable social criticism.⁷⁵

Individuals as data subjects are demanding greater access and other controls over what they see as *their* records. Communities that have a different worldview, which cannot be accommodated in the prevailing archival and recordkeeping control environments, are engaging in the subversion of Anglo-American access norms. Problems with the overuse of security classification of records, problems inherent in allowing more than half a million people to access to classified material on SIPRnet (the source system for the cables leak),⁷⁶ and problems with the declassification process are clear. President Obama’s recent initiative to establish the National Declassification Centre to “make declassification secure, but routine, efficient, and cost effective,”⁷⁷ is a clear indication of the issue.

73 For example, “The Right to Information. Reviewing Queensland’s *Freedom of Information Act*. The Report by the FOI Independent Review Panel” (June 2008), http://www.foireview.qld.gov.au/documents_for_download/FOI-review-report-10062008.pdf (accessed on 21 July 2011).

74 Government of the United Kingdom, “Power of Information Taskforce Report” (June 2009), <http://webarchive.nationalarchives.gov.uk/20100413152047/http://poit.cabinetoffice.gov.uk/poit/wp-content/uploads/2009/03/poit-report-final-pdf.pdf> (accessed on 21 July 2011).

75 For example, Government of the United Kingdom, 30 Year Rule Review Committee, “Review of the 30 Year Rule” (January 2009), <http://webarchive.nationalarchives.gov.uk/20090516124148/http://www2.nationalarchives.gov.uk/30yrr/30-year-rule-report.pdf> (accessed on 13 March 2011) or Australia’s amendment to the *Archives Act 1983* in May 2010 reducing the closed access period from thirty to twenty years.

76 Sharon Weinberger, “What is SIPRNet,” *Popular Mechanics* (1 December 2010), <http://www.popularmechanics.com/technology/how-to/computer-security/what-is-siprnet-and-wikileaks-4085507> (accessed on 13 March 2011).

77 “Over the next 25 years [US] Federal agencies are facing a massive volume (1.7 billion pages)

The slow processes of our traditional practices can no longer govern sites of recordkeeping and archiving intervention.

Opportunities to engage with, and fundamentally reinterpret, our current access regimes are emerging; perhaps the failure to change our recordkeeping processes in response to cases that radically challenge our norms (such as the case of the Pentagon papers) merely submerge the issues, causing them to resurface in new ways. Perplexing problems do not go away by ignoring them – they break out in new instances and remain perplexing until addressed, as the Australian philosopher Quentin Gibson discovered in exploring philosophical perplexity. He argued that such perplexity could be regarded as a mental disorder that cannot be solved in a logical, positivist manner because the disease will always break out within a new, more sophisticated idiom.⁷⁸ In relation to the notion of archival access, the disease of perplexity is now one that archivists will have to deal with in relation to their very *raison d'être*. No sooner do we think we understand what it means to leak recorded information than an even more sophisticated and challenging idiom “breaks out.”

As professional recordkeepers, we are concerned with the formation of the archive, the ever-expanding connections and linkages revealed and yet to be revealed in archives and records, and the dissemination of the archive. Are archives about being trusted organizations or authenticating organizations – are these one and the same? How can we manage our ever-expanding mandate to ensure perduring records of the present if we need to do so? WikiLeaks struggled with approximately 250,000 cables, a mere bagatelle compared with the quantities of potentially powerful records being created in organizations and managed in archives.

In a continuum perspective, does it matter if the WikiLeaks archive will survive? It is illustrative of an instance of the archival impulse. The archive may have achieved its purpose; it has precipitated change and revitalized appreciation of the phenomenal impact of records on society. Perhaps we need to change our perspectives of archives as immutable and fixed, and refocus on perspectives of formation and dissemination to value the “flicker” or “shiver” that constantly begins again, continuously seeking to serve outcomes of identity, social justice, transparency, and accountability.

It is the community that constitutes and empowers the archives. Exploring this within a continuum consciousness empowers non-traditional views of archives. How should we define our communities? How should differently

of classified textual records that, based on 2008 review statistics, will take over 33 years to complete initial review.... These figures will continue grow [sic] each year as more records become 25 years old and require review before the automatic declassification deadline.” “A Concept of Operations for a National Declassification Center,” revised 8 July 2009, pp. 3–4, <http://www.fas.org/sgp/othergov/ndc-coo.pdf> (accessed on 13 March 2011).

78 Quentin Gibson, *Facing Philosophical Problems*, rev. ed. (Melbourne, 1961), p. 62.

defined communities act? If one community is valid, so too is a community that holds diametrically opposed views. How and where does this intersect with social norms? If this multiple, simultaneous community empowerment is the future of archives, we will need to substantially alter our concepts of trust. Where will trust reside? Perhaps not in the institution “archives” but in multiple sites of implementation within process-oriented views of formation, dissemination, and empowerment. We may have to manage different concepts of trust arising from different ways of knowing and value systems. We may have criteria of trust for the general public different from those that contribute to the archive. We may well be striving to distinguish different characteristics of trust that may be appropriate to different types of archives in the future.

WikiLeaks epitomizes a community asserting control of material defined to be of concern to them – at odds with the legitimate views of others. For recordkeeping, this is going to be an increasingly complex and arresting question. Multiple views, often in competition with each other, must be allowed in the archival multiverse. In the past we have had formalized “boundaries” around responsibilities and rights of ownership or custody. Now we have an environment that fundamentally challenges those strict hierarchical and boundary-protected notions of organization and work that drove our practices. The Internet, social media, and Web 2.0 all provide a new environment and offer technologies that empower and enable individuals and communities to become drivers of information democratization, at odds with the previous norms of bounded spheres of operation – work/home, personal/professional, and so on. With this technology comes enormous opportunity for individual or directed experimentation, and beyond that new methods of exploring records for those ahead of the curve. The new information environment empowered by emerging technology is driving these changes – pushing potential uses and capacity beyond the known and routinized. Operating effectively to ensure robust, defensible, and useable archives requires developing a continuum consciousness.

Conclusion

In this article, we have aimed to promote “rhizoid” (weed-like) thinking, which is not simply a form of horizontal or lateral thinking, but also spreads across the terrain temporally, changing and altering as it goes, compatible with the digital rhizome that is spreading around us. There is a need for the archival profession to operate in more coordinated fashion across the massive breadth of change and novelty involved in digital recordkeeping in online cultures. Archivists should be part of the expanding and diverse world of recorded information. More than ever, societies need archives to help them study and manage change, novelty, and the world as process, while addressing transparency, accountability, social justice, and diversity.

As a profession, we need to brainstorm the breadth of the impact that digital

recordkeeping in online cultures is having – and will continue to have – on our training, development, and operational needs, as well as the demands it places on archival functionality. In that spirit, this article puts forth a number of ideas.

1. Our dominant forms of business and social transactionality are online. This means that we need to steer a course into new zones of practice for which the infinite perspectives of the continuum and an emphasis on recordkeeping events across the lifespan of information objects is more relevant than the finite views of records or archives as end products of action.
2. Operating in the new zones of practice takes a collective, coordinated effort involving the continuing invention and application of purposive forms of social networking, working in hubs and nodes, rather than within the atomized points of traditional workplaces.
3. Operating in online cultures could enable a re-setting of relationships between archival and other communities to support plurality. As the case study relating to Indigenous communities illustrates, within continuum consciousness, technologies and social networking can be employed to implement participatory recordkeeping and archival models (globally and locally), and negotiate appraisal by records co-creators. Meta-metadata schemes can deal with multiple and parallel provenance, and related rights and responsibilities management in current and historical recordkeeping settings. Shared, collaborative recordkeeping and archival spaces can be configured to respect the rights in records and protocols of all parties involved, allowing contested views and multiple perspectives to coexist, and providing for differentiated access.
4. From a continuum consciousness view, “aberrant” archival phenomena like WikiLeaks, that jolt traditional understandings of fundamental concepts like archival access and archival authenticity, provide us with an opportunity to learn and experiment with renegotiating our professional practice, exploring new ways of defining archival functionality, and providing emergent structures for managing complexity and plurality.
5. Our professionalism and our strategies, tactics, and structures need to be coordinated in a creative and evolutionary fashion in ways that have some hope of matching the galloping evolution of the technologies that are shaping our societies. A continuum-based approach to recordkeeping informatics is proposed as one such mechanism, supported by a never-ending continuum of projects in collaboration with all the communities we serve.
6. Our efforts need to focus much more on providing stewardship for archival access no matter how old the recorded information might be, combining a pluralistic respect for rights in records with contingently

developed approaches to the way we capture information as a record, form it into the archive, and make it available as widely as can be managed.

In pursuing this stronger, continuum-based role for archivists in evidence formation, archival access, and ensuring the rights of all in records, we should also be brainstorming helpful signs and trends. The butterfly wings that are flapping in many places across the globe may create ripple effects that might change our future. Finally, we should be brainstorming whether archivists are well placed to harness the emerging trend toward “glocalism,” that apt and idealistic continuum-oriented term that covers localized diversity and global singularity. Operating in partnership with our local communities, we can address a vast range of smaller-scale projects that can help us identify the patterns by which we can organize recordkeeping informatics – including, of course, historical recordkeeping processes. Operating globally, we should be tackling the formation of archives relating to humanity’s grandest challenges.