Counterpoint

Archives, Life Cycles, and Death Wishes: A Helical Model of Record Formation

BRIEN BROTHMAN

RÉSUMÉ Ce texte élabore le modèle d'un concept de création de documents (« record formation »). En partant d'une analyse des qualités temporelles du cycle de vie dans la pratique archivistique, il montre ensuite comment le parler métaphorique et les concepts de vie auxquels les archivistes souscrivent sont venus appuyer la pensée et la pratique archivistique tout en les limitant. À partir de cette critique, le texte propose qu'une figure hélicoïdale, basée sur certaines idées médiévales au sujet de la mort, de la résurrection et de l'identité humaine, nous permet de constituer un modèle temporel capable de mieux disposer les dynamiques complexes relatives à la création de documents. La forme spiralée caractéristique de la figure hélicoïdale permet la représentation de la création de documents comme un acte qui se déroule simultanément de façon linéaire et non-linéaire. Le texte soutient alors que ce concept de la création de documents est plus en mesure d'énoncer les phénomènes documentaires de vie et de mort que les archivistes rencontrent et influencent dans leur travail que ne le font des notions comme « document », « gestion de documents » et « essence du document » (« recordness »).

ABSTRACT This article develops a model of a concept of *record formation*. Beginning with an analysis of the temporal qualities of the life cycle in archival practice, it goes on to show how the metaphorical language and concepts of life to which archivists are beholden, have empowered archival thought and practice, but also imprisoned them. Proceeding from this critique, the article then proposes that a helical figure, developed from certain medieval ideas of death, resurrection, and human identity, enables us to develop a temporal model that better accommodates the complex dynamics of "record formations." The characteristic coiled shape of helical figures permits the depiction of record formation as simultaneously unfolding in a linear and non-linear fashion. The article argues that the concept of record formation better articulates the life-and-death documentary phenomena archivists encounter and influence in their work than do such notions as "record," "record-keeping" and "recordness."

First, then, in my judgment, we must make a distinction and ask, what is that which always is and has no becoming, and what is that which is always becoming and never is?¹

Records are information presented in a static form. The act of recording "sets"

1 Plato, Timaeus.

the information firmly in format on a medium or carrier. This characteristic renders records authentic and is especially important in electronic recordkeeping.²

The life cycle model sees records passing through stages until they eventually "die," except for the "chosen ones" that are *reincarnated* as archives.³

Introduction

The concept of "life" occupies a central place in record-keeping discourse. It is most conspicuous in the profession's descriptions of the life cycle that has remained the dominant model of record-keeping in the archival community since at least the mid-twentieth century. During this time, it has thoroughly permeated the academic and professional literature as well as official institutional policy and guideline documents on record-keeping. This is an impressive tenure, given the contemporary penchant for novelty and the premium placed on innovation, particularly in the often-faddish sub-cultures of the information management, knowledge management, and information technology management professions. Even in the face of creeping doubts about the

- 2 New South Wales, Australia, Government Recordkeeping Manual, available at: http://www.records.nsw.gov.au/publicsector/rk/rrk/01.htm#P134_5591 (accessed on 23 September 2003). We could add many more examples. The InterPARES Authenticity Task Force (p. 5) refers to "fixed documentary form, a stable content, an archival bond with other records ... and an identifiable context." See Authenticity Task Force Report, available at: http://www.interpares.org/book/interpares_book_d_part1.pdf (accessed on 4 March 2006).
- 3 Sue McKemmish, "Yesterday, Today, and Tomorrow: A Continuum of Responsibility," Proceedings of the Records Management Association of Australia, 14th National Convention, 15–17 September 1997, Perth, 1997.
- 4 The ubiquitousness of the life cycle concept in the archives and records management communities hardly needs demonstration. Amongst archivists, the life cycle idea is often traced to Theodore Schellenberg. A small sample of prominent items from the literature on the life cycle includes Jay Atherton, "From Life Cycle to Continuum: Some Thoughts on the Records Management Archives Relationship," Archivaria (Winter 1985-86), pp. 43-51; Ira Penn, "Understanding the Life Cycle Concept of Records Management," Records Management Quarterly (July 1983), pp. 5-8; Yves Perotin, "L'administration et les trois âges des archives," Seine et Paris 20 (1961), pp. 1-4; Society of American Archivists, A Glossary of Archival Terminology, entries on completeness, record continuum, life continuum, life cycle, disposition, and disposal, available at http://www.archivists.org/glossary/index.asp (accessed 6 March 2006); Zawiyah M. Yusof and Robert Chell, "The Records Life Cycle: an Inadequate Concept for Technology-Generated Records," Information Development, vol. 16, no. 3 (2000), pp. 135-41; Philip Bantin, "Strategies for Managing Electronic Records: A New Archival Paradigm? An Affirmation of Our Archival Traditions?" available at: http://www.indiana.edu/ ~libarch/ER/macpaper12.pdf> (accessed 4 March 2006); National Archives and Records Administration, Records Management Guidance for Agencies Implementing Electronic Signature Technologies (Government Paperwork Elimination Act) 3.1 Records Life Cycle vs. System Development Life Cycle, available at: http://www.archives.gov/records-mgmt/faqs/pdf/ electronic-signiture-technology.pdf> (accessed 4 March 2006); John Seely Brown and Paul Duguid, "The Social Life of Documents," First Monday 1 (May 1996), available at: http:// www.firstmonday.dk/issues/issue1/documents/> (accessed 4 March 2006).

validity of the life cycle as a model of record-keeping, the pivotal notion of life continues to flourish. Proponents of the Record Continuum, for example, Australia's important alternative to the life cycle, cannot exorcize it, sometimes referring to their own creation as a life cycle and to the "life span" of records. Thus, "life" remains a powerful metaphor for organizing archival thought and expression about records. Trying to imagine record-keeping outside its terms now seems virtually impossible.

What is the life cycle? The life cycle is a temporal model of record-keeping. Its temporality largely rests on a certain understanding of what "life" means. With life occupying such a prominent place in record-keeping, one might expect death to form part of the story. But it doesn't - at least not in any explicit way. Nevertheless, as will become clear below, the concept of death is omnipresent, and it has profoundly shaped record-keeping discourse and practice. For now, however, it is important to mention that in the record-keeping community the phrase "life cycle" can refer to any one of three distinct but intersecting processes: 1) the life cycle as a metaphor or analogy for the records management life cycle process - the creation, capture, maintenance, use, and disposition of records; 2) the life cycle as encompassing "active" or "business," "inactive" or "dormant," and dead, or retired, or archival phases of the records' life cycle; and, less commonly, 3) the keeping of records as a social means of either emphasizing or mitigating the stark difference between human life and death, mortality and immortality, absence and presence in the human life cycle. Thus, the temporality of the above records/management/life cycles adheres to a metaphor of life as a largely biological phenomenon. A major burden of this essay is to describe, analyze, and critique this triadic relationship.7

This essay shows the power that language and concepts can exert on our practical reasoning. The language and concepts in modern biological descriptions of life – the language of life – have impelled record-keepers toward a particular logic of record-keeping. The idea of "life" that underpins the constructions of the life cycle, however, breaks down at a certain point. Its singular focus fails to adequately represent the multiple sequential possibilities of

⁵ Sue McKemmish et al., "Describing Records in Context in the Continuum: The Australian Record-keeping Metadata Scheme," draft for comment, August 2003.

⁶ This is not to say that record-keepers are unique in resorting to the metaphor of life and life cycles to analyze and explain various phenomena. Apart from the obvious example of the system development life cycle, numerous professions turn to the life cycle to articulate theories, methods, and processes. A recent striking example is architect Neil Harris' recent monograph proposing that conception and birth, growth and maturity, aging and death (as well as many other social milestone events including baby showers, birthdays, life support) are not only important moments in the human life story, but they also correspond to moments in the life of buildings. See Harris' Building Lives. Constructing Rites and Passages (New Haven, 1999).

⁷ See the second and third sections below.

record-keeping. The familiar biological maturation process has unquestionably provided record-keepers with a serviceable template for developing and describing a workable records management and control process, one that has succeeded in gaining wide acceptance and implementation. However, this success has not come without a price: the concepts and language that govern this template gloss over certain temporal and other complexities of record-keeping. Though clearly effective for some purposes, and on some levels, current life cycle models of records and record-keeping have failed to acknowledge the temporal complexity of documentary evolution and, therefore, have lacked the capacity to acknowledge and accommodate any but the simplest accounts of the unfolding of "socio-documentary" eventfulness.

Some archivists would undoubtedly be prepared to agree that explanations of records and records life cycles relying on purely biological accounts of life seem to harbour a forced quality at times. Indeed, this is readily evident in examples, cited below, of a few individuals who have recently made *ad hoc* attempts to overcome the constraints of the biological language that prevail in accounts and models of record-keeping processes. This essay briefly examines these few attempts to use non-biological language, explores the underlying record-keeping problems these deviations reflect, and then proposes a more direct and comprehensive solution of the fundamental logical anomalies they incidentally and implicitly acknowledge. To do this, it is necessary to consider an alternative model – in a way, a supplementary model – of record-keeping. This essay proposes that a helical model best meets the challenges of visualizing and representing the temporal complexities of record-keeping.

One particular painting done in the seventeenth century goes some way in capturing the temporal complexities to which allusion has been made. In 1651, six years before his death, the Flemish artist David Bailly (1584–1657) completed a still life painting titled *Self Portrait with Vanitas Symbols*. It is a curious work. Like most paintings of this genre, it conveys the preoccupation among artists of Bailly's day with mortality and, more generally, with the temporary nature of material existence. In this work, the artist is sitting beside a table littered with several familiar still-life objects, including three portraits (perhaps of deceased family ancestors), a statuette, a candlestick and candle, a vase of flowers, coins, a knife, a clay smoking pipe, books, papers, a human skull, an hourglass, and a glass goblet. Together, these objects convey the standard admonition concerning the vanity of human worship of material possessions, the transience of sensual pleasure, and death's inevitability. What is unusual about this particular painting is that Bailly portrays himself as a

⁸ Indeed, the archival community's selectivity involves what might be called a "politics of after-life," where the lives and identity of the dead, or absent, are at stake. See Armando Petrucci, Writing the Dead: Death and Writing Strategies in the Western Tradition, trans. Michael Sullivan (Stanford, 1998).

young man in his late teen years or early twenties holding a small-framed portrait of himself looking much older, perhaps thirty years later. This work's multiple chronological distortions or reversals (both inside and outside the frame) conjure up a radically different vision of time, a fantastical disengagement from the otherwise conventional rendering of the inescapable natural laws of biological development and the well-established historical laws of temporality.⁹

Bailly's artistic fantasy evokes questions concerning the nature of aging and time. It disturbs our habitual representations of the flow and order of human events and our ordering of the stages of human development. One basic question that arises concerns the identification of time as processes and objects interact. How do records and record-keeping come to mark time? For entities, for living beings and inanimate things, what do the labels "present" and "past" mean, and what is the difference between "old" and "young," or "new"? And what is their relation? Does the past precede or take form in the present? Is it conceivable that an object – a kept or destroyed record, for example – could be said to exist in the present and also to be from the past? Is there such a thing as the past, that is, is it really possible at any moment to say of anything or anyone in the world that they exist outside the present, or that they belong – or belonged - to the past? Or do references to the "past" simply constitute one of several variations on how the living think and talk about, and order information and objects in the present, how the present inevitably colonizes the past? Is the past just another kind of information or data occupying a place in – or occupied by - the present? Is there any such thing as a record of or from an autonomous past?

On the other hand, is a pure complete presence possible? Can one imagine a hermetic moment, duration, or continuity that exists entirely unto itself? Is it ever possible to claim for any object – an object appearing "before" us, or one we can touch – that it is entirely present to us (that it is what it is now), and that no present-transcending trace of difference, no trace of past or future, diminishes an unreserved presence to us? Is it even possible to identify, to come to know anything that is not already lodged in the past – that has not yet passed – or that has no future? What determines the boundaries of an occurrence, an

9 Another, perhaps more pertinent example that alters the conventional structuring of temporal reality can be seen in the illustration on the cover of Jacques Derrida's *The Postcard*. There, Plato is seen standing behind and leaning over a seated figure. The figure is Socrates, who is bent over a scribe's desk writing down what Plato is dictating. This presentation, of course, reverses conventional historical wisdom that tells us that Socrates came before Plato, that Socrates was the teacher, and Plato the student. Furthermore, Plato was the writer (since all we know about Socrates is what Plato wrote of him in *The Republic* and other books), and Socrates was known for his (oral) Socratic dialogues described by Plato. Indeed, we are forced to ask here who is sending and who is receiving, who is author and who is reader, who is author and who is scribe? Who comes (came) first, and who second?

event – what marks off the "before" and "after" of an event like the creation, destruction, or use of a record? What do the concepts before and after, beginning and end, active and inactive, creation, and preservation, and destruction signify? Moreover, does the stamping of records with a date or record series with a date span, completely and forever determine the temporal identity of records, as we commonly believe? Or is it possible that record-keeping and subsequent record use, for example, themselves somehow impinge upon the contours, contexts, and rhythms of documentary temporality?

Of several choices that might have been made, one key term and one key phrase in contemporary archival discourse serve to focus discussion of the above issues – the term *completeness* and the phrase *final disposition*. What commitments underlie the claim that a (the) record is *complete*, that all that must be present in it is so? Does bestowing the name "record" on an entity necessarily require completeness? What, in the archival world is completeness, and when does it occur? How does one determine when completeness has occurred? How are the beginning and end, the temporal threshold of a phenomenon, the appearance of an object or event – its context – demarcated, and by what (whose) principles? And in the phrase *final disposition*, to what kind of condition does "disposition" refer, and what, exactly, does "final" signify? Lastly, what is the import of the above questions, first, for the life of material inscriptions, and second, for the life of their intellectual content? These questions loom throughout this essay.

The proposals presented in answer to these questions may well strike some readers as farfetched. To some, the perspectives that follow will seem to defy those intuitive notions of time's unfolding upon which people and communities have long depended to order their understanding of the social world, notions we have lived with, according to historians, since the Renaissance and the Enlightenment. 10 In its simplest and most extreme formulation, the helical model radically diminishes the central significance of records creation and final disposition in the life cycle, leaving neither the accustomed fixed order of phases in the records cycle nor the records management life cycle untouched. These seemingly preposterous proposals challenge what archives and society have taken as self-evident truths about the unfolding of documentary eventfulness and processes in historical time. Yet, the interrelations among people, objects, and time have baffled many scholars for centuries, and this remains no less the case now, especially in the wake of postmodern thought. Thus, the preliminary analysis that prepares the approach to the helical model may seem unduly prolonged, but our explanatory burden seemed to require it. The helical model does not simply replace the familiar life cycle. Rather, the model incor-

¹⁰ See Donald J. Wilcox, The Measure of Times Past: Pre-Newtonian Chronologies and the Rhetoric of Relative Time (Chicago, 1987) and Richard J. Quinones, The Renaissance Discovery of Time (Cambridge, MA, 1972).

porates current ideas of life and cycles into a more subtle appreciation of the interactions and relations among objects, people, and temporal processes. Nevertheless, it is not unfair to say that the helix model does entail a gestalt switch of sorts. For reasons explained later, the process seems to us less like a cycle or a continuum and more like a web – a web of relationships with neither centre nor margin, neither beginning nor end, and no predictable sequence of actions or phases. It is more like a hidden tangled network of rhizomes flourishing beneath a simpler documentary landscape of visible trees and individual blades of grass. ¹¹ The name for the concept that encompasses these nuances and perspectives is *record formation*.

The modelling of record formation will begin with a teasing out of the implications of drawing on terms set by biology to construct the life cycle. The aim is to identify the power and limits of this metaphor's temporal logic by unpacking such familiar dichotomies as permanence and impermanence, identity and change, creation and preservation and destruction and final disposition, continuity and discontinuity and stability and flux in documentary existence. These dichotomies depend upon a peculiar, selective appropriation of a metaphor (of life and death) for their meaning and coherence. The coherence afforded record-keepers by their particular biological adaptation of the idea of life has been seductive. However, it has, in some sense, distorted record-keepers' visions of documentary processes and, thereby, obscured other dimensions of documentary existence. The present inquiry into current ideas of temporality in record-keeping will lead to questions concerning the conventional relations between past and present. This, in turn, will entail a deconstruction of the routine differentiations in the phases that characterize the records management life cycle as well as the standard sequence of the record life cycle and the human life cycle. This inquiry will place under strain the concepts of a beginning (origin, creation, birth), middle (action, activity, life) and ending (inactivity, termination, final disposition, death) that anchor formulations of theory as well as guiding daily practice.¹²

The second part of this essay briefly explores some alternative conceptions of the phenomena of life and death. The record community's metaphorical selectivity exemplifies a modernist time consciousness; it is rooted in a historically structured temporality as well as a largely scientific – a biological – and suitably programmatic understanding of life. However, earlier historical periods cultivated different temporal sensibilities and developed other conceptions

¹¹ Gilles Deleuze and Félix Guattari used the term "rhizome" to describe theory and research that allows for multiple, non-hierarchical entry and exit points in data representation and interpretation. "A rhizome doesn't begin and doesn't end, but is always in the middle, between things, interbeing, intermezzo." Gilles Deleuze and Felix Guattari, A Thousand Plateaus: Capitalism and Schizophrenia (Minnesota, 1987), p. 25.

¹² I will argue below that the identification of records as archival is a kind of death sentence, and claims of permanent preservation a form of destruction.

of life and death, beginning and ending, in their discourse. More specifically, we will take our cue from certain medieval conceptions of life, death, and individual destiny. This exploration provides a conceptual armature for challenging the strictures of contemporary scientific, biological ideas of life, and the assumptions of historicity, all of which significantly inform archival thought. We will then be in a position to pursue other implications and possibilities of the metaphor of life. The modern scientific consciousness may baulk at these seemingly anachronistic medieval perspectives, and find them incredible. Yet, precisely for this reason they hold out fresh, powerful, and arguably more satisfying, ideas about the meaning of (record) life, and language and concepts better suited for describing and envisioning records and record-keeping.

Working through these and other implications will lead to a helical model of record formation. The characteristic coiled shape of helical figures makes it possible to depict record formation as unfolding simultaneously in a linear and non-linear fashion. The helical figure expresses the proposition that records – record formations – embody a multivalent temporality. 13 This plural temporality has four major consequences for our notions of records and record-keeping. First, the helix model of record formation mitigates the simple linear notion that an increasing distance, an irreversible process of distancing, intervenes between past and present as time "passes," giving one the impression that the past's records retain an autonomous objective identity awaiting later historians' discovery and analysis. That this is not necessarily the case leads to a second consequence. Record formation posits that different parts of a record - a single document, or a collection of documents - can possess traces from different historical strata or periods. Notwithstanding the single calendar date or time span that may be fixed for or affixed to them, and despite their presumed fixed content and structure, records and record series can simultaneously harbour multiple, juxtaposed temporal contexts.

Third, the helical model of record formation tends to undermine the hard functional differentiations between, and familiar linear sequencing of, phases in the records management life cycle spanning the distinctive contexts of "creation" and "final disposition." The proverbial phases of the records management life cycle – the phases of records management as opposed to the record – emerge as less rigid, less easily distinguishable, and with a less predictable order than we have recognized. Finally, the model of record formation similarly complicates the classic distinctive stages of the records life cycle – active, inactive, and dead or archival. Together, these four perspectives result in some seemingly paradoxical conclusions about the life and death of records

¹³ The term "multivalent" is an adaptation of the current concept of multivalent documents that regards documents as compositions of intimately related but distinct layers of content and behaviours. "Multivalent temporality," then, refers to the simultaneous presence of multiple chronologies and contexts in a single document or body of documents.

and the temporality of record-keeping. It is these paradoxes that the helix enables us to represent. The modeling of these phenomena of the life and times of record formation draws on Douglas Hofstadter's intriguing notions of *strange loops* and *tangled hierarchies*.¹⁴

The concept of record formation deals with the critical ontological significance of time in claims of "objectness." Ontology concerns justifications for claims that something, a thing, can rightfully be regarded as having existence as an entity. A thing has properties and attributes of being; it has an identity. As we will see, the concept of record formation sidesteps prevalent commonplace notions of identity in record-keeping discourse. The paradoxes of record formation complicate the sameness and difference of records from themselves in time; they blur the boundaries that separate product and process, beginning and ending, past and present, creating or making and keeping, record and recording. Record formation vitiates the clean separation between an entity's completed identity (a record as concrete object, a being, a product, a record) and the "underdetermination" of an entity, something that remains in the making (a record as moment-in-process, a boundary-lacking event, a becoming, an occasion, as *in formation*).

The phrase "still life" (and especially Bailly's curious exemplification of it) captures well this essay's modelling of the temporal paradoxes of record formation. "Still life" carries a pair of rather contradictory connotations: life in stasis, at rest, at an end, life at a standstill, life stilled, and, simultaneously, a sense of life in its persistence, as continuing vital movement, of life still lived, of continuing becoming. It is important to hear this double meaning of "still" in the phrase "still life." Those objects that present themselves to us as having been preserved or destroyed are not really simply objects; they are occasions. They are occasions in a process, or, alternatively, they are processes transformed (temporarily) into occasions. Record formation as well as most if not all words with "tion" suffixes harbour these paradoxes. 16

- 14 Douglas Hofstadter, Godel, Escher, Bach: An Eternal Golden Braid (New York, 1980).
- 15 It is interesting to note that software developers and information architects have not hesitated to appropriate the concept of ontology from philosophers recently to cope with the issue of object identity in their system designs.
- 16 "Tion" suffixes, in other words, frequently function to transform verbs (action, change, movement, flux) into nouns (stable objects with fixed, immoveable properties). However, the "tion" ending can reflect the frequent indeterminacy of relations between process and final product. "[T]ion" endings often embody the paradox of stasis and transformation. Union, confederation, transformation, production, creation, disposition, and construction, for example, allude simultaneously, and ambiguously, an end result or end product, and also to a project in progress, incompleteness, to an on-going process toward completion (another "tion" word). "Formation," or, for example, a "rock formation" simultaneously conveys the sense of a final state or product in space, but also an on-going process through time. Similarly, in the sense we use it here, "record formation" refers to a final state "recordness," but also to an uncompleted process record creation or record disposition that, of course, raises the same issues.

The Temporal Logic of Life in the Life Cycle Metaphor

The life cycle model aims to describe records as if they behave in accordance with a biological imperative, a set of elementary laws of biological development. Accordingly, records undergo something that is seen to be amenable to description in terms of biological life events. People are born, and they live their lives. As they live their lives, they age, often showing signs of aging. Eventually, they decline physically and their level of intellectual and physical activity diminishes. Ultimately, they retire and then die; they reach a stage of "final disposition." With records, however, the "final" in final disposition connotes more broadly that all records, whether destroyed or retained/preserved, eventually reach an end state, a condition of stasis, of infinite changelessness. Record-keeping has fashioned itself in accordance with this life story, with this narrative archetype. For reasons to be explained shortly, no person, action, or event related to the creation and management of records, is creditable, indeed conceivable, outside this narrative framework.

When looked at closely, the record-keeping process is not necessarily cyclical. Like common descriptions of human life, it is, more often, like a linear aging process taking records from a beginning point "a" to an endpoint "b" (or "z"). Moreover, not only is the record-keeping process linear, it is also unidirectional. Records always move through several stages toward a certain finite future. They move forward from an originating point to some future terminal point, to a destination, never back toward a previous stage or point. The conventional life cycle, in other words, precludes two possibilities: first, records cannot change once having reached a specified final moment, beyond some end, and, second, records cannot return to a point in the past. For example, once created, it is unimaginable that the *same* record could be created again for the first time. Under this formulation all documents named records, including archival records, eventually experience a death of sorts.

What is the significance of the foundational principle that records are documentary creations that are dispatched to a designated final destination with neither possibility of change in the future, nor of return or reversion to a previous stage of record-keeping or history?¹⁷ One way to gain an appreciation of what is at stake in this question is to try to hone in on the meaning of "final disposition." The terms "final" and "disposition" bristle with a sense of an ending. They convey a sense of termination, but of what – a last action at the end of a management and control process, or perhaps a final "statefulness," an irrevocable condition? If disposition refers to a final action, when does that

¹⁷ A deconstruction of the crucial concepts of "sending" and (final) "destination" as it pertains to ideas of records and record-keeping is conducted in Brien Brothman, "The Limit of Limits: Derridean Deconstruction and the Archival Institution," *Archivaria* 36 (Autumn 1993), pp. 205–20.

final action end? How long does it endure? Or can it ever really end after all? (Is a point or time that is situated "after all" really identifiable?) If it refers to a final state, what does this mean? What state, exactly, is it that is final – stable – in "final disposition"? And what kinds of disposition precede final disposition, whether one understands disposition to mean a final action or a final, resting state? What is the relation and difference between preceding (presumably temporary) dispositions and final disposition? And, finally, if one insists that final disposition is indeed "final," is eventfulness after "final disposition" even thinkable? Is it permissible to think of a notion of after life, of disposition and activity – especially in biological terms – after *final* disposition?

To plumb the depths of the meaning of "final" and "disposition," it is necessary to examine in more detail the structure of common narrative accounts of record-keeping practice. Simply put, these accounts crucially depend on a definite beginning and ending. However, a definite beginning – an opening event - itself requires a discernible start point, a beginning, but also an endpoint. Similarly, the narrative also recounts a middle stage or stages, a journey starting at the end of the beginning, which like the beginning similarly reaches completeness. Third, the story needs an end, an end to end all endings. ¹⁸ A belief in clear beginnings and final resolutions enclosing a middle passage pervades the entire edifice of record cycles as well as records management life cycles. Not only are records active (born), then, but also their creation, ¹⁹ like human birth, is traceable to a historically dateable and delimited beginning. Records then mature through several subsequent life phases (active and dormant), eventually crossing a line, entering into an apparent state of inactivity and final disposition, similarly marked by a fixed date. The end (of the end), therefore, must be as clearly discernible as the beginning. Records - and archivists – achieve and need closure, such that records constructed and managed under proper conditions proffer an important promise: they will "contain" - envelop and control - the inscription and the message, certifying the inalterability of the inscription and the finiteness of the message. This promise involves a commitment to the prevention of the formation and emergence of any meaning or significance beyond "the" message. Current schemes of records management hinge on the belief that records necessarily reach a final stage of evolution, final disposition: they are forever "captured" in their singular state, in their changeless, hard-stamped date, place, and meaning. At final disposition, the record is presumed to close on (the creation of) the record.

¹⁸ On time as a narrative structure featuring beginnings, middles, and endings, see David Carr, *Time, Narrative, and History* (Indianapolis, 1991), passim.

¹⁹ It is important to note the emerging ambiguity between a narrow meaning of "record creation" that refers to the initial, actual writing of a document, and a steadily broadening meaning that can encompass everything from creation to classification and capture (filing in a filing system), to metadata wrapping and container placement, system trustworthiness development, and more.

What is most significant about this structuring of eventfulness? A clear, specifiable beginning and a final ending are indispensable to one of the canonical contemporary requirements of record-keeping, namely *completeness*. A record's state of completeness depends on permanent localization in a particular time or span of time as well as a specific place. Without a specific contextual frame of record initiation and closure, how would one be able to establish a record's completeness? It would be impossible. At least, it would be unverifiable. A condition of completeness intrinsically necessitates both an identifiable beginning and a specific end. In other words, without contextual localization, the very idea of achieving completeness would be inconceivable. The current ideal of recordness is unattainable without localization and completeness.²⁰

The identity of each of the successive stages (states) of record-keeping – creation, classification, capture, arrangement and description, maintenance, preservation, and so on – also hinges on the anticipation of an ending, on the belief in a moment of closure and completeness, in which records as entities reach resolution, arrive at some final destination. Indeed, the construction of a final moment, a permanently fixed "presentness," is critical for giving a retrospective coherence and finiteness to each of the cycle's preceding phases. The finality of the end is an indispensable unifying moment of the model of record-keeping. Belief in the existence of a final moment retroactively

20 This archival view of localization, as we will see, is based on a fundamental misconstruction that philosopher Alfred North Whitehead, reminiscent of Roland Barthes' distinction between the "work" (materiality of the object and "text" [methodological field]), called "the fallacy of misplaced concreteness." It fixes on the object - the record, the container, the file - as an ultimate reality instead of heeding the process of flux and transformation over time. In this regard, the record continuum is more in keeping with Whitehead's perspective. In effect, a record is nothing more and nothing less than an occasion in a process, an occasion during which a human agent encounters a document and engages in the document's "first" ever reading. On each of these occasions the record is the same as and different from itself. "There are no brute, self-contained matters of fact, capable of being understood apart from interpretation as an element in a system." Alfred North Whitehead, Process and Reality: An Essay in Cosmology (New York, 1929), Chapter 10. Interestingly, Whitehead uses the term perishing to refer to objects to which individuals ascribe a final, fixed identity. When a subject reaches "satisfaction" - "completion," - the subject ceases being a subject and becomes an "immortal object." Ibid., pp. 50-51. Whitehead's critique of the "creative process" offers striking parallels with some accounts of documentary creation and the attainment of a final state that some record-keepers have hopefully named "recordness." The creative process involves a series of phases starting with "subjective creation" of novelty and ending with "perpetual perishing" and entry into a state of "objective immortality" upon so-called completion and positioning in public time and place. See Ibid., p. 320, passim. See also his critique of the notion of "enduring substances," p. 77. In this frame records are not definable as enduring objects. Rather, they are definable in terms of a series of "occasions" involving continual activity. Whitehead's view is akin to Richard Cox's suggestion that documentary reality is best described as an event, a singular encounter of human and object, and not as an entity.

enables, indeed determines, the order, function, meaning and significance of each of the earlier phases of the story.

Even the Australians' records continuum that effectively disavows much of the temporal orientation of the life cycle, remains wedded to traditional temporal concepts in which the ultimate goal is to "fix" documents in a final form.

Records are "fixed" in time and space from the moment of their creation, but record-keeping regimes carry them forward and enable their use for multiple purposes by delivering them to people in different times and spaces.²¹

This passage, along with the McKemmish article's title, attests to the hardiness of the linear perspective, contextual localization, and the continuing authority of the image of forward movement in time even among those who harbour doubts about the logic of the life cycle.

The language of the above text, however, also betrays an unusual, and perhaps not entirely intended, effort to deal with a record-keeping conundrum that has long cast a shadow over archival thought - the relation between the crucial original, finite context, that is, the localization of record creation, and the transcendence of that context, no less intrinsic to "recordness." How does one square the above explanation that records "fixed" in time are delivered to "different times," with a statement appearing later in the same text that records remain in a protective "time-bound (emphasis added), evidential cocoon of meaning"? These expressions undoubtedly betoken widespread linguistically generated confusion or diffidence among record-keepers about temporality in the face of the time-bound and timeless aspects of documentary existence.²² Note, too, the scare quotes surrounding *fixed* as well as the quotation marks around die in the third epigraph to this article. These markings convey an underlying ambiguity, engendered by life cycle terminology, respecting the accommodation of finality and persistence with change in record objects. If records are fixed, then what, precisely, is "reincarnated" (see third epigraph) meant to signify? Can "time-bound" records really survive? Can they even be conceived to exist? How does one deal with the paradox that the identity of records seems to be tightly bound up with their secure anchoring in bygone contextual specificity (provenance) and even material inscription and storage

²¹ McKemmish, "Yesterday, Today, and Tomorrow," p. 4. Scare quotes appearing around the word "frozen" later in the same article reveal a similar perplexity. Records are "frozen" yet, as with the linearity of the life cycle, they are carried "forward."

²² Elsewhere, McKemmish similarly places frozen in quotation marks, and, again, depicts records as moving forward. "Managing documents as evidence of social and business activity involves developing records and archives systems that can carry them forward with their "fixed" content ..." McKemmish et al., "Describing Records in Context in the Continuum," p. 4.

(the principle of simple location) and yet get their record-like properties – their "recordness" – precisely from a transcendence of, or preservation from, that very localization, from the historical circumstances of their authentic, original realization? It is doubtful whether a linear account of record-keeping and a singular context of record creation location are really supple enough to explain the dimensions of this process.²³

These puzzles notwithstanding, the linear, unidirectional picture of records cycles and records management life cycle as movement forward through a number of phases that are irreversible and whose sequence is unchangeable continues to preside over the formulation of record-keeping processes. Why is this?

Like Newton's laws, the life cycle is a serviceable, manageable abstraction. It effectively accommodates the administrative, engineering, and organizational need for unidirectional machine-like linear production processes schedules, workflows, production lines, and procedures. As it has come down to us, the "records (management) life cycle" is not an archival theory; it is part and parcel of a records management control strategy that has prompted the construction of a simplified documentary reality amenable to instruments of control. The postulation that records are fixed objects, identifiable propertyladen final products, makes them manageable, purportedly fuels organizational knowledge, and makes possible the assignment of responsibility and accountability for appropriate documentary and evidentiary outcomes. The staying power of the life cycle resides in its compatibility with the demands of a pervasive legal hermeneutic, as well as an industrially conditioned bureaucratic rationality. Law and industrial culture equally require that records stay put as evidence *products* coming off an assembly line as if they were final, durable, and measurable outcomes of scheduled, well-engineered linear, unidirectional manufacturing processes. This legal hermeneutic and bureaucratic-industrial rationality have underwritten the heavy investment in linear

²³ Again, this brings to mind Whitehead's "fallacy of misplaced concreteness," the belief that the identity of objects and events is simply bound to a single spatial and temporal context. It has also been referred to as the perspective of "simple location." Wilcox, *Measure of Times Past*, p. 49. Record creators and subsequent users, however, may each place the time and place of record creation and other events in radically differing temporal and spatial positions. See David Carr, "Place and Time: On the Interplay of Historical Points of View," *History and Theory* 40 (December 2001), pp. 153–67. Similarly, Cornelius Castoriadis addresses "authentic" temporality's introduction of otherness, difference, and alterity into being. Thus, the "unity and unicity of being is fragmented and stratified." This leads to the conclusion that the identification of "one temporality as the only originary and authentic one" is illusory. See Castoriadis, "Time and Creation," in John Bender and David Wellbery, eds., *Chronotypes: The Construction of Time* (Stanford, 1991), pp. 62–64. On the issue of judging temporal distance and the problems associated with the establishment of an absolute conception of temporal distance, see Mark Salter Phillips, "Histories, Micro- and Literary: Problems of Genre and Distance," *New Literary History*, vol. 34, no. 2 (Spring 2002), pp. 216–18.

temporal order, hierarchical structures, finite processes, and (quality controlled) final products.²⁴

Moreover, the temporality and hermeneutics of the life cycle rest on a sort of God-Creator complex: individuals and organizations leave records behind; or, like the verticality of the hierarchical biblical scene of the Ten Commandments, they hand them down. Properly controlled, record products carry forward (down) their Creator's (Governor's) "source" texts, whose final word, that is, whose single, germinal meaning and evidential significance, subsequent readers – any appropriately trained reader, at least – will later divine, faithfully repeat, and reproduce with perfect accuracy even in the Creator's absence or death. Indeed, record-keepers imagine that the Creator's voice and intentions will remain infinitely present, real, and recoverable – and the reader infinitely silent. In fact, the readings of subsequent readers will be tantamount to reenactments of the initial, not to say original, act of authorship. It is this abstraction that has made records manageably stable - and made archives institutional centres of effective reproductive technology, and, therefore, seeming executors of a form of death sentence²⁵ imposed upon records at their creation (and preservation). The development of precise techniques of meaning and inscription reproduction entails a drive toward death.

This death sentence – the presumptive final, closing sentence or disposition – constitutes a repression of the temporal and hermeneutic dynamics of record formation. This becomes obvious when we acknowledge that records *leave their mortal makers behind*. After all, physically, and by definition, archival records – external memory systems as opposed to biological memory systems – *outlive* their creators. ²⁶ This being the case, one might contend that "preserved" records virtually return behind to their point of origin to haunt, to interpret, to remake or create, their departed makers – their creators. The claim that *records create or preserve their (absent) makers* seems just as plausible as the temporally truncated view that authors actually see "their" record creations to the end. Thus, the differentiation of authorship, creation, and provenance from the ostensibly post-creative moments and phases of the records process is more

- 24 The twentieth century is replete with examples of the use of organic, biological models and mechanisms to buttress industrial, engineering, management, and organizational process development. The ideas of cybernetics and systems theory are among the best known examples. The works of William Cannon, Stafford Beer, Ludwig von Bertalanffy, and Norbert Wiener are particularly noteworthy. Of course, there is also evidence that the "business" direction of records management theory is partially determined by strategies for professional advancement. See Ira Penn, "Records Management: Still Hazy After All These Years," in *Records Management Quarterly* 27 (January 1993), p. 3.
- 25 "Sentence" and "sentencing" are terms some Australian archival institutions use to refer to the establishment of records retention conditions. See National Archives of Australia, at http://www.naa.gov.au/record-keeping/disposal/disposal.html>.
- 26 Merlin Donald, Origins of the Modern Mind: Three Stages in the Evolution of Culture and Cognition (London, 1991).



Figure 1: E.S.C. Escher, Drawing Hands, 1948

complicated than it seems. The idea that record creation simply denotes original authorship, the beginning of a process, and that record classifying, keeping, using, and destroying comprise an unalterable sequence of subsequent actions is unsustainable. E.S.C. Escher's *Drawing Hands* (Figure 1) expresses nicely this point: Simple distinctions between creation, as a beginning point, and "subsequent" actions at later or end points in a linear process obscure the complex temporal dynamics at work in record formation.

The entire discussion so far has really been circling around an underlying philosophical issue. Stated simply, the issue concerns the concept of identity. More specifically, the above conundrums and paradoxes are traceable to the intractable problem of object identity in time and place.²⁷ How does passing time affect the identity of objects – say, of records? Does the passing of time

27 Archivists and record-keepers have remained oblivious to the issues of the constitution of object identity. For the most part, they remain mired in legal perspectives on object – records and people – identity. It is individuals outside the profession who have been showing the way, most interestingly, software designers and information modelers. Individuals in these fields have turned to such philosophical notions as "ontology" and "mereology" to develop a more sophisticated understanding of such concepts as "object," "document," and "context," and part—whole relationships. Among the few records professionals who have at least glimpsed the ontology of information objects, though without benefit of philosophical perspectives, are

change them, or does object identity persist? More precisely, the question that needs asking is: persistence of what? The record-keeping community's contemporary concepts of record and "recordness" and its language of record "keeping," record maintenance and preservation, persistent objects and permanence, record retention and record destruction, as well as record classification, along with the notions of metadata encapsulation, wrapping, packaging, and containing - each one of these terms variously embodies an aspiration to establish what it means for something like a record to possess and keep, and also to lose, identity – in other words, to exist, or to have existed. Translated into more familiar terms, the issue concerns what attributes an object must retain in order to remain eligible as a record "thing"? This concern has impelled researchers to search for the proper concept of "record." Recordkeepers have taken up the ironic challenge of trying to fix, to freeze, to archive, to preserve a concept, record, that itself has long epitomized stability and persistence. Archivists have placed their chips on a project whose success would seem to hinge on keeping still the sense of the term "record." The word "recordness" embodies this kind of aspiration.

The question of identity as a major puzzle of records and record formation, then, leads us straight into a thicket of problematical phenomena: these include the apparent opposition of continuity and change, fixity and fluidity, sameness and difference, creation and destruction, completeness and deferral of completion, permanence and transformation, beginnings and endings, process and product, life and death.

The record-keeping community's adaptation of the life cycle metaphor is not innocent. It has much intellectual, strategic, professional, political, and now technological capital vested in this paradigm, one that ultimately rests on a particular construction put upon the metaphor of life and death. This has profoundly shaped the enabling temporality, that is, the temporal framework, in which the working meanings of record-keeping and record have taken shape. Like all metaphors, however, the life cycle's discourse of life and death, creation, preservation, and destruction arrives already connected to a network or assemblage of terms and concepts whose scope and potential significance extend beyond the awareness, designs, and specifications of its users.

David Bearman, "Reality and Chimera in the Preservation of Electronic Records," *D-Lib Magazine*, vol. 5, no. 4 (April 1999); Terry Cook, "Mind Over Matter: Towards A New Theory of Archival Appraisal," in Barbara L. Craig, ed., *The Archival Imagination: Essays in Honour of Hugh A. Taylor* (Ottawa, 1992), pp. 38–70; Richard Cox, "The Record: Is It Evolving?," *The Records and Retrieval Report: The Newsletter of the Information Managers*, vol. 10, no. 3 (March 1994), pp. 1–16; Sue McKemmish, "Are Records Ever Actual?," in Sue McKemmish and Michael Piggott, eds., *The Records Continuum: Ian Maclean and Australian Archives' First Fifty Years*, Monash Occasional Papers in Librarianship, Record-keeping and Bibliography No. 5 (Melbourne, 1994), pp. 187–203; James M. O'Toole, "On the Idea of Permanence," *American Archivist*, vol. 52, no. 1 (Winter 1989), pp. 10–25.

Life and Death: Pursuing a Record-keeping Metaphor

The limits that the conventional biological life cycle metaphor and modern historical chronology place on record-keeping appear clearly when compared to medieval discourses on human mortality. Viewed superficially, no discourse might seem more antiquated, and none more remote from the world of modern record-keeping. Yet, it is precisely from a vast historical constellation of concepts and language on life and death that record-keepers have decided to deploy certain terms and images that seem most congenial to their purposes. These choices have shaped their language, thought, and practices in virtually every detail. However, language has the power, we are arguing, to deliver alternative meanings, more meaning (or less) than its users intend or acknowledge. The appropriations of language and concepts by one field from another field never come without excess baggage. Such borrowed language comes to authors and theorists with referential connections and associations, both historical and etymological, that either escape their users' notice, or that users may specifically exclude in consequence of their assumptions, categories, and reasoning. ²⁸ The

28 On the pervasiveness of metaphor and multivalent plural meaning in ordinary language use, see George Lakoff and Mark Johnson, Metaphors We Live By (Chicago, 1980); George Lakoff and Mark Turner, More Than Cool Reason: A Field Guide to Poetic Metaphor (Chicago, 1989). Even writing that is meant to be more ordinary than poetic, more literal than figurative, and more scientific and rational than literary and stylized, propels texts along paths of meaning that often remain hidden to unsuspecting authors, to individuals whose intention it is to set up simple relations between word and world. To be sure, people also deliberately use tropes, for they offer rhetorical power, freshness of perception, and manageable abstraction, in other words, a means of persuasive communication, innovative thinking, and effective instruction. However, consciously chosen metaphorical figures, too, harbor an excessive content, a network of associations that can draw texts along pathways their authors never knowingly or willingly would have wished them to go. Indeed, it has been suggested that "rhetoric is integral to the very structure of discourse, that the displacement of ordinary language by rhetoric and metaphor is integral to any intellectual act such that there is no pure sense datum." Emmanuel Levinas, "Everyday Language and Rhetoric Without Eloquence," in Levinas, Outside the Subject, trans. Michael B. Smith (Stanford, 1994), p. 135. Louis Marin, "On the Interpretation of Ordinary Language: A Parable of Pascal," in Josue V. Harari, ed., Textual Strategies: Perspectives in Post-Structuralist Criticism (Ithaca, NY, 1979).

Other individuals, however, believe that all everyday conventional language is literal, and none is metaphorical. Literalists believe that: 1) all subject matter can be comprehended literally, without metaphor; 2) only literal language can be contingently true or false; 3) all definitions given in the lexicon of a language are literal, not metaphorical; and 4) the concepts used in the grammar of a language are all literal; none are metaphorical. Continuing in the Platonic and Hobbesian tradition of suspicion of metaphor's deceptiveness and lapse into irrationality, Dutch professor of archivistics Eric Ketelaar briefly alludes to the "risks" of importing into archival science metaphors from other domains, and cites the life cycle as a prime example of a misleading metaphor. See "The Difference Best Postponed: Cultures and Comparative Archival Science," *Archivaria* 44 (Fall 1997), pp. 21–27. Unlike some literary theorists, then, Ketelaar appears to believe it is possible for writers and readers to neatly distinguish and choose between ordinary, literal language and literary or metaphorical tropes, and to control or eliminate the deleterious effects of the latter.

examination of this medieval discourse, therefore, is necessary in order to excavate certain meanings and the record-keeping community's deep-seated reasoning out and application of a metaphor of cycles of life and death.

Discourses on life and mortality reach back at least to ancient societies. Some of the best-known thinkers in the Western tradition have confronted the nature of life, the concepts of time, immortality and mortality, and the problem of identity and change. One can find a plenitude of analyses, concepts, and language whose purpose is to account for the relationship between the material body and the intellectual and spiritual condition of human existence. In the memory and mythology of Western civilization, the phenomena of life, death, and knowledge, along with the human–technology relationship, have been closely intertwined.

In the West, the most famous episode in this history is undoubtedly the biblical story of Adam and Eve. This story highlights an exchange of immortality for knowledge. It was thirst for knowledge that "brought death into the world," John Milton opined in the first book of *Paradise Lost*. The human fall into mortality, into biological existence, gave rise to the notions of finitude, mutability, and time. Thus, humanity's story about itself is intimately tied to time's first appearance - indeed the emergence of firstness itself -inside (that is, outside) the immutable, timeless Garden of Eden. Time is born and becomes manifest as life stories with beginnings and ends – all arising from the (sinful) reaching after knowledge and information. The Fall represents humanity's catastrophic descent into history. History's telling, in other words, requires corporeal existence, material production (labour and technology), and material degradation over time to death. The forfeiture of a condition that transcends time is the price of knowledge and pleasure in acquiring it. With mortality, the phenomena of beginning and ending, growth, change, and decay and transformation emerge.²⁹ As with records, the identification and interpretation of human life as human being has meaning only with the knowledge that it ends, that it reaches a state of completion. Conversely, and ironically, the birth of knowledge required the birth of mortality. Expansive as the notion of omniscience may sound, a sense of finiteness seems indispensable to the possibility of knowledge and interpretability. The concept of completeness implies a notion of finiteness.

Since that fateful moment – the foundation scene of birth and death, beginnings and endings, humans have wrestled with their (knowledge of) mortality. Over the course of history they have devised various means for coping with, or for suppressing, their consignment to a state of "life," to finitude. Frequently, humans have searched for ways to recapture the lost paradisiacal condition of timelessness, agelessness and contentment (though Milton opined in

²⁹ Heidegger talks about "falling" to describe being as man's "groundedness" in day-to-day anxieties, caring, preoccupations, and "historicality." See Martin Heidegger, *Being and Time*, trans. John MacQuarrie and Edward Robinson (San Francisco, 1962), pp. 320–30.

Paradise Lost that there is no way back). In the land of paradise lost, paradigms gained, so to speak, humans have creatively resorted to mythical, religious, intellectual, and most recently, scientific and technological knowledge and strategies to overcome their consignment to secular time. Seemingly sentenced to live in time and, therefore, to die, humans have continued in myriad stories to dream of a path leading them out from their imprisonment, their envelopment, in history – in their state of mortal affliction – back to the primordial state of Edenic immortality.³⁰

Contemplation of the relationship between body and soul, between man's physical and spiritual condition, figures among the most significant responses to mortality.³¹ In late antiquity and early medieval writings, these concerns emerge prominently in discussions of the concepts of resurrection and reincarnation. What is striking and unexpected about these discussions is how much they parallel contemporary terms of discussions of the identity of records, where authenticity, integrity, origins, uniqueness, preservation, persistence, permanence, copy, virtuality, and "continuity" figure so prominently. Yet, it should not surprise us. After all, both discourses grapple with matters of identity and existence, life and death. Preoccupations with the afterlife and resurrection recall archival discussion of the fate of records. A preoccupation with human identity drove theologians and philosophers to try to work through the notions of persistence and change, material embodiment, and spiritual and intellectual persistence and transformation. It is worth pausing briefly, therefore, to consider some of these parallels.

During the Middle Ages, people were certainly apprehensive about death. The horrific images of the *Ars Moriendi*, the horrors of war, the dread of deadly plague, the frequent threat of famine, for example, attest to this. Yet acknowledgement of death's finality did not prevent some medieval societies from developing an outlook on mortality and the status of the dead that differed markedly from our own. As numerous scholars have shown, the relations between the living and the dead were in many ways much closer then, for medieval communities often reserved an active role for the dead in the social order. The relations between the living and the dead, both physical and social, were much more intimate than today.³² Not only did medieval commu-

³⁰ Thierry Hentsch, Raconter et mourir: Aux Sources de l'imaginaire narratif en occident (Montreal, 2002). Along with the story of Adam and Eve, numerous ancient epics of gods and heroes pondered the relationship between the quality of life and the nature of mortality. To live heroically was to risk death in exchange for an honourable life and legacy. At least, this is what one often finds in Homer, Virgil, and the Epic of Gilgamesh, among many others. One might also mention the Egyptian Book of the Dead.

³¹ One immediately thinks of the Socratic dialogues in Plato's *Phaedo* and Aristotle's *De Anima*, that have served to channel much subsequent thought about these issues.

³² Patrick Geary, Living with the Dead in the Middle Ages (Ithaca, NY, 1994); Philip Aries, The Hour of Our Death (New York, 1981).

nities often inter the dead in much closer proximity to the concourses of the living, but also greater continuity and interaction between the two realms marked this relationship. The belief existed that the dead could intercede on behalf of the living. Death was, in many respects, a collective arrangement.³³ The transition from one world to the next appeared less abrupt, the finality and separation, less distinct than it does today. The end of life in the medieval period, the finality of the terminal point of the life cycle, was in a way more ambiguous, and, therefore, more subtle, for a number of important religious and spiritual beliefs mitigated the finality of human mortality.

The medieval Platonic preoccupation with the differentiation between the body and the soul, spirit and matter, made the finiteness of human existence as complicated a question as modern science has made the definition of life in our times.³⁴ Ideas of resurrection occupied a central position in discussions of the nature of individual identity and were marshalled to address the challenge of how to account for human fate after death. Belief in the possibility of an afterlife tendered the prospect of a surviving or returning body and soul. A major question that arose, however, was what form this continued identity or renewed existence takes? In what stage of their development, at what time in their lives, do resurrected individuals reappear? Is it as fully developed adults, as adolescents, or as infants? Are resurrected individuals whose limbs had been damaged or severed, restored to them in working order, or is the loss of function permanently preserved? Is the perishable body even necessary to the eternal survival of the soul? Or can the soul survive independent of its material embodiment? Indeed, is material embodiment - the earthly flesh - superfluous, of ephemeral importance in the constitution and continuity of human identity? Are questions about the physical a mere distraction from essential issues about human existence?

Or is physical mediation indispensable for the preservation of the soul's continuity? Is the initial physical body, the original body, ultimately a necessary medium for the preservation of the migrating soul's authentic, transcendent identity? Would human souls bereft of their material embodiment become hopelessly – blandly – indistinguishable, lose their uniqueness? Is supposedly changeable material substance a necessary component of the individual identity of immortal souls? How are persistent form and continuing function related? In these debates, individuals grappled with the problem of materiality and spirituality, sameness and difference, the phenomenon of departure from, and return to, a state of being, and their significance for

³³ Joshua Schuster, "Death Reckoning in the Thinking of Heidegger, Foucault, and Derrida," *Other Voices*, vol. 1, no. 1 (March 1997).

³⁴ For example, religious and social values, and technology and scientific knowledge have given rise to pro-life and pro-choice abortion debates concerning the beginning of life, and debates on euthanasia and the withdrawal of medical life support have centred on how best to define life, and its end. Notions of quality of life have complicated the issue.

human destiny. The underlying stakes of these discussions, however, concerned the persistence and essential properties of individual human identity.³⁵

Like modern archival preoccupations with (electronic) documentary destiny, medieval discussions of human destiny concerned the fundamental paradoxes of material and non-material identity, and change over time.³⁶ The question that dogged so many intellectuals of the time was the relationship of the original person and the resurrected body – the elements of sameness and difference, and the implications for the prospects of the retention of individual identity.³⁷ Also troubling to those for whom resurrection presupposes the persistence of individual identity, were questions about the process by which the body was reassembled – retrieved or reconstructed – following its disintegration and fragmentation into particles of dust, the relational nature of parts and wholes, objects and their component entities.³⁸ What happens to people who die? What happens after life, after death, *after the* end? For medieval thinkers the description of life's beginning and the specification of its end did not always seem obvious.³⁹

By the nineteenth century, the subtlety and mitigation of death's finality had largely disappeared. Scientific method and empirical description brought a certain precision to the notions of birth and death. Ironically, "life" scientists, hard at work to understand, sustain, and prolong life and postpone death, have also coincidentally mounted, if not always intentionally, seemingly incontrovertible proofs of the utter finality of its end when it finally comes. Various objective measurements began to assume that a concrete, tangible definition of life and its termination (as elusive as it may be proving to be) is available

³⁵ See Fernando Vidal, "Brains, Bodies, Selves, and Science: Anthropologies of Identity and the Resurrection of the Body," *Critical Inquiry*, vol. 28, no. 4 (Summer 2002), pp. 930–74.

³⁶ For example, we have seen Sue McKemmish's choice of language to describe the life cycle: "The life cycle model sees records passing through stages until they eventually 'die', except for the 'chosen ones' that are *reincarnated* as archives' (see footnote 3).

³⁷ Caroline Walker Bynum, *The Resurrection of the Body in Western Christianity*, 200–1336 (New York, 1995), passim; Jonathan Strauss, "Preface: The State of Death," *Diacritics*, vol. 30, no. 3 (2000), pp. 3–11. Another study that explores the medieval view of mortal transience and change is Joseph J. Mogan, Jr., *Chaucer and the Theme of Mutability* (Paris, 1969). One might also mention, in passing, the significance of changing attitudes to the dissection of the human body. During the Middle Ages, the Church frowned on the study of anatomy, and especially the performance of autopsies. The Renaissance evinced a more permissive attitude, as both artists and physicians performed dissections on cadavers to gain anatomical knowledge. However, this same permissive attitude to the use of corpses to advance medical knowledge and artistic acumen also served to affirm a scientific, material view of human existence.

³⁸ Bynum, Resurrection of the Body, p. 137.

³⁹ Applying Gilles Deleuze's insights, Jeffrey Cohen suggests that thinking of humans in biological terms is unsatisfactory for understanding the medieval construction of human identity. See Cohen, *Medieval Identity Machines* (Minneapolis, 2003). See also Giovanna Borradori, "The Temporalization of Difference: Reflections on Deleuze's Interpretation of Bergson," *Continental Philosophy Review*, vol. 34, no. 1 (March 2001), pp. 1–20.

for discovery. This has signified the emergence of a scientific attitude to death. It is this view that took hold of modern intelligence and consciousness. For the first time, people began to accept – and fear – death's finality insofar as mortality had become transformed in the imagination from a nuanced condition between two different states into an absolute material finality. Death lost its status as a transitional state and became infinite and sublime, nothingness, a non-existence.

Meanwhile, as with the identity of records, a fair assessment of individual human identity and the writing of biography require a sense of infinite and unalterable completeness. Before the full and proper measure of their lives can be taken, individuals must not only be born, they must die, they must reach completion. Only in retrospect is identity truly discernible. Only as finished projects and products, with dated births and deaths, are individuals really knowable. Now, confronted with mounting scientific evidence of, and myriad cultural emphases on, the inescapable material condition of their existence – their now-common description as human "resources" of states or corporations, or (and I make no judgments here) as body parts available for medical transplantation – most individuals in modern society get their immortality not from a belief in resurrection but from social consciousness, from inscription into the public annals of history, the collective memory. The "we" – the evidence of "us" of history – replaces the medieval afterlife of individual resurrection. Archival records have replaced resurrection.

The construction of the life cycle is beholden to a culturally conditioned system of concepts and associated linguistic usages. First, documentary finality and completeness are crucial to the structural integrity of existing models of record-keeping. Thus, record-keeping institutions embody a profound commitment to relentless linear progress toward completeness, a drive toward death. To adopt Whitehead's terms, records, almost by definition, must move

- 40 The seventeenth-century Vanitas paintings (that the Dutch called Still Leven and the French, Nature Morte) were done precisely during the epoch of the Scientific Revolution and the rising prosperity of Holland, and expressed the transience of earthly pleasures and depicted the ephemeral quality of accumulated material objects. As we have seen, artists of the time drew on a standard inventory of symbols to express this. Among the best-known artists are Frans Hals, Hans Holbein, Pieter Claecz, and Barthel Bruyn. Today Audrey Flack and a number of other artists have revived Vanitas painting.
- 41 Jonathan Strauss, "The State of Death," *Diacritics*, vol. 30, no. 3 (Fall 2000), p. 3. See also Aries, *Hour of Our Death*.
- 42 On this notion, see Brien Brothman, "Making Up People: The State, Records, and Bureaucracy in Jose Saramago's *All the Names*," *Archives and Manuscripts*, vol. 30, no. 2 (November 2002), p. 124. Jacques Derrida examines the relationship between *individual men's end* (finite existence) and the infinitude implicit in *man's "ends."* Derrida denies the end, maintaining that the End is an open-ended question. See Jacques Derrida, *The Margins of Philosophy* (Chicago, 1989), pp. 123–25. "The closer we get to the end," one interpreter of Derrida remarks, "the closer we get to the beginning." See Schuster, "Death Reckoning."

toward a moment in which they "perish" in a moment of "satisfaction," of completeness. 43 Under this description, then, the identity of records depends on a discernible moment of creation, a *principle of provenance*. Of equal importance, however, is a conjoint *principle of destination* that has emerged as a thoroughly modern notion of "final disposition" and completeness. The model of "history," and its calendrical ordering, operates under the principle that a "life's" meaning and interpretability hinge on eventual death. This propels us toward a linear, unidirectional narrative of final resolution. Similarly, under this regime, records, almost by definition, hinge on finiteness, stasis, and death. Narratives of records management, record life, and human life, only seem to make sense today within the terms of identifiable beginnings and endings. Without finitude, without a final disposition, no narrative of development and culmination, no beginning and closure, and, therefore, no form of being, in the form of "recordness," is possible. 44

The principles of order and immobility are inadequate for dealing with records and record-keeping processes. New or supplementary principles of provenance and destination seem necessary, ones that fundamentally revise modern ideas of fixed beginnings, endings, and dispositions. Such revisions require the injection of a principle of movement into the terms of still life and death. Current theories assume that record formation has a definite moment and place of birth and eventually culminates in one kind of specifiable perishing or another, perishing in a moment of satisfaction that the term recordness seeks to capture. Recordness occurs when a document reaches some final, definitive state of satisfaction, whether on a trash heap or in an archives. It is not so difficult to understand, then, why the greater subtlety and complexity of medieval perceptions of, and writings about, life and death seem better suited to modelling records and record-keeping than do modern beliefs about human life and death. The helical model of record formation takes its cue from these medieval conceptions of life and death to offer a subtler reading of records and record-keeping.

⁴³ See note 20.

⁴⁴ Heidegger's thoroughly modern assessment of death reflects this perspective: "Death is Dasein's ownmost possibility. Being towards this possibility discloses to Dasein its ownmost potentiality-for-Being, in which its very Being is the issue." Dasein entails "Being-toward-the-end." Heidegger, *Being and Time*, pp. 307, 425. "Somewhat paradoxically, then, death must be postulated as the imaginary end point, the final event, of the story of my life. If there were no death (i.e., the annihilation of my self) to be expected, I could not even realize that I am leading a specific, spatio-temporally discernible human life. The fact that death is awaiting me, even if I cannot fully understand what it is all about, enables me to think about my life as a coherent whole with a beginning and an end. Only with respect to such a life can the question of 'meaning' or 'significance' arise." See Sami Pihlstrom, "Narrativity, Modernity, and Tragedy: How Pragmatism Educates Humanity," Twentieth World Congress of Philosophy, Boston, Massachusetts, 10-15 August 1998, available at: http://www.bu.edu/wcp/Papers/Amer/AmerPihl.htm (accessed 4 March 2006).

A Helical Model of Record Formation

The development of the helix model arises from a critique of the life cycle logic that is discernible in a number of important life and death metaphors and concepts that have become deeply rooted in record-keeping thinking and practice. The primary targets of this critique include several specific notions that have exerted a strong grip on our profession: these include linear thinking, unidirectional images of history and time, hard notions of beginning, birth, and creation along with an abiding faith in finality, completeness, and death, that is, documentary "stillness." The helix and the concept of record formation seek to loosen this grip, and to place before record-keepers other perspectives on these complexes of archival thought and practice.

The medieval terms of discussion of life, death, and resurrection provide some options for rethinking the temporal concepts and language of life and death in record-keeping. The medieval vision of the relationship between life and death is more nuanced than the stark two-state differentiation that modern scientific accounts of life have inculcated in the modern consciousness. Modern categorical notions of life and death, differentiations between beginning and ending, creation and destruction (and preservation and destruction), and time's irreversibility often lack the subtlety and suppleness necessary to accommodate the complex dynamics of documentary existence. The modern differentiation between the conditions of life and death lacks the capacity to address the complex phenomena of recurring sameness and difference in documentary transformation, all of which figure implicitly in various discussions of preservation strategies, including copying, digitization, migration, emulation, versioning, virtual documents, and the idea of a record copy, to name a few issues.

The helical model illustrates how record-keeping exhibits the temporal paradoxes in Bailly's painting that overturns seemingly obvious, programmatic ideas about what events occur first, about the sequence of events in life.⁴⁵ This holds for the phases of the records management life cycle, the stages records go through in the records life cycle, and, in a way, the concepts of mortality and immortality in the human life cycle.⁴⁶ Record formation is an open-ended

- 45 This essay, then, shifts our attention from the records management life cycle and its focus on the actions people take with respect to products (documents) to a focus on the interaction between people and documents. Arjun Appadurai explains: "... even though from a *theoretical* point of view human actors encode things with significance, from a *methodological* point of view it is things-in-motion that illuminate their human and social context." Arjun Appadurai, "Introduction: Commodities and the Politics of Value," in Arjun Appadurai, ed., *The Social Life of Things: Commodities in Cultural Perspective.* (Cambridge, 1998), p. 5.
- 46 In his history of communication, John Durham Peters dwells at length on the relationship between the concepts of media and communication, and the dead. Communication media "put us in a circuit of communication with the absent." "Communication with the dead," Peters later observes, "is the paradigm case of hermeneutics. In fact, all communication is ultimately indistinguishable from communication with the dead." Communication is, he says, the transcendence of mortal form. Peters, Speaking Into The Air: A History of the Idea of Communication (Chicago, 1999), pp. 158, 177, 229, and passim.

process. Sameness and difference play out in documentary objects over time – and time unfolds in surprising ways. Record formation,⁴⁷ as we will see, also embodies a process of *recurrence* rather than one of simple *occurrence* in which a final fixed product or object emerges from an assembly process. Grasping record formation requires tolerance for the counterintuitive notion of multivalent temporality. Neither is the making of records simply reducible to an original context or singular creative moment and nor do records simply reach a final state or condition. Rather, objects and processes are enmeshed in a dynamic of departure and return, emerging sameness and difference, repetition and recursion along with distancing and differentiation. In time, a *record is an object that occurs as something that is the same as and different from itself*.

In record formation, then, no single perspective is adequate under all circumstances. The scheduled unidirectional phases spanning record creation and final disposition succumbs to a deflective influence. Rather than merely appearing like a stream flowing in a single direction from a generative source of documentary life toward a final destination, record formation temporality might look more like a whirling eddy, a complex "system of dispersion" in which "continuity, return, and repression" can work their effects alongside the traditional historical hallmarks of forward temporal change - "movement, flux, and evolution." Record formation exhibits the commingling of persistent and recurring traces of past and present. Depending on purpose and interest, records and record-keeping can seem to move forward, but also show signs of remaining in, or returning back, to the past of history. No record is ever merely the documentation of, by, or from a present or past moment. No records stage or records management phase is merely what – or when – it seems to be. Any one of them may be connected to any other rather than following a fixed order.

In a radically different way, the late Gilles Deleuze's exploration of Henri Bergson's notion of "duration" explains how linguistic expression, preserved writing, and record-keeping open up the possibility for humans to think beyond the human condition. For Deleuze, writing lends humans a potentially superhuman power to overcome their mortal physical condition. His inquiry into how language use might vitiate our biologically anchored conception of the beginning and end of human existence raises questions concerning the temporal limits of the meaning of "human." See Keith Ansell Pearson, *Germinal Life: The Difference and Repetition of Deleuze* (London, 1999). See also Borradori, "Temporalization of Difference."

⁴⁷ On the significance of "tion" suffixes, see note 16.

⁴⁸ Michel Foucault, *The Archaeology of Knowledge*, trans. A.M. Sheridan Smith (New York, 1972), pp. 172–73. Foucault differentiates between *change*, which is taken as a law of historical process, and the archeological notion of *transformation*, which accommodates the coexistence of continuity and change. On the notion of the existence of "different dates and speeds" in a single information object, see Deleuze and Guattari, *A Thousand Plateaus*, pp. 3–4, 107–10, and chap. 10 passim.

Accordingly, the helix model represents documentary temporal existence as involving departure from, and circling back toward, a point on a time line. Record formation allows that any one of the phases of the conventional records management life cycle can occur at multiple points in time and place. Records, as formations, can either "end" during a moment of creation or begin in a moment of "final" disposition. Record formation, therefore, exhibits traces of movement forward from apparent context of beginnings - from the scene of provenance; however, having reached what seems like a later stage in the process, or having apparently reached its assigned final destination, a record somehow turns up in a phase that may very much bear a resemblance to a scene of creation or authorship. In other words, any phase can seem like a return to creation or like the enactment of final disposition. It is a perspective of records and record-keeping that, like waves and particles, admits the possible alternating co-existence or complementarities of apparently incongruous phenomena – object and process, sameness and difference, origins and repetition, final meaning and deferral of meaning, preservation and interpretation, context and transcendence of context, being and becoming. The spiral shape enables us to imagine and model these strange events. It enables us to represent the rich temporality of records, or rather, of record formations.

The helical structuring of life cycle events, then, rests on a different understanding of life, death, and documentary temporality. Fresh beginnings and "final disposition" in archival record-keeping currently support pragmatic designs or constructions, but they also distort documentary life and death. The conventional life cycle is a shorthand device, resting on simple truths built to accommodate very particular functional specifications. The "firstness" of original creation, the emergence of a typical record's properties as the embodiment of absolute, radical, unique, different, on object with a fixed set of attributes, is a records management conceit. Commensurately, the "lastness" or finality of final disposition, the fixing of an infinite identity (a final point, a final destination or purpose), appears to be the terminal stage of a production process only from the narrow perspective of legalistic requirements and a bureaucratic management framework. Final disposition might mark an ending, but it does not mark the end, for it might just as well mark a return to the beginning, or a "second" beginning. This is certainly the case for archival records. The life

⁴⁹ The term "firstness" is taken from Charles Sanders Pierce, father of the American philosophy of pragmatism.

⁵⁰ See James O'Toole, "On the Idea of Uniqueness," *American Archivist*, vol. 57, no. 4 (Fall 1994), pp. 632–58.

⁵¹ It can also be argued, however, that even records that have been destroyed (especially institutional records) always fall short of complete disappearance. Records destroyed in accordance with currently recommended procedures leave, or should leave, a lingering documentary residue. This residue that describes the record, and justifies and even attests to its utter elimination, also has an opposite effect: it gives birth to a lingering documentary record of its "non-existence."

cycle's conventional rendering of life is incapable of accommodating these complexities. The creation of uniqueness and difference is not the exclusive prerogative of the so-called record creation phase; nor do record destruction and preservation alone necessarily punctuate the record-keeping process. Creation and destruction can be seen as beginnings and endings without end. This is because records exist through time rather than in (scheduled) time.⁵²

We come finally to the helical model. How can a helix help to elucidate record formation? To answer this question it is necessary to begin with a potted sketch of the current records management life cycle. It is common to visualize record-keeping as a linear process involving several stages of action. This representation can be termed the "classical view:"

Time 1	Time 2	Time 3	Time 4	Time 5	Time 6
Creation	Capture	Classification	Maintenance	Use	Final Disposition

Figure 2: The Classical Life Cycle as Linear Process

Record-keepers might have quibbles about certain elements of this representation of the record-keeping cycle process, but this is generally how many of them would explain the record-keeping process to a novice. In its circular, cyclical form, the life cycle might look like this:

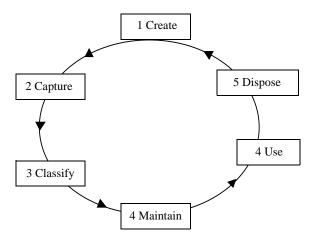


Figure 3: The Life Cycle as Cycle

⁵² On the difference between "through time" and "in time," see Borradori, "Temporalization of Difference"

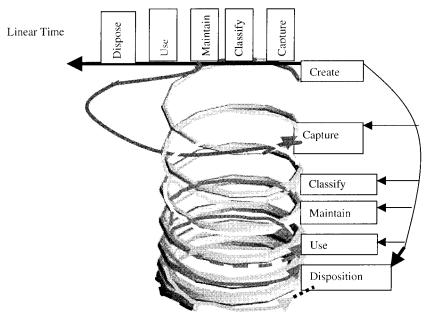


Figure 4: A Helical Model of Record Formation

What if the above flat two-dimensional image of a cycle were to turn out to have been an illusion? What if the cycle we know so well turns out to have been a misleading top view of what a side view would reveal to have been a hidden vertical three dimensional (3-D), single stranded helix? Or what if the familiar straight-line process were twisted around a central axis to form a 3-D helix? How would this affect the linear staging of record-keeping? We can offer only a quick overview of the array of possible consequences. In this kind of three-dimensional visualization "Record Use" or "Final Disposition," for example, might appear to arise, in a linear fashion, away from a point of origin, but then, strangely somehow return to occupy the same or virtually identical temporal plane as the "Create Record" stage. "Classify" or "Capture" might similarly appear to take place – in the same time and place – as "Create" or, possibly, "Dispose." In other words, "Capture" and "Classify" might equally be considered moments of creation or destruction, and conversely "Create" might also be a form of "Classify." In fact, even "Dispose" might appear along the same vertical plane as "Create," for the destruction of a record is conceivable as a form of record creation just as surely as the preservation of a record is, or is part of, an act of creation. Before trying to justify these claims, let's try to model these phenomena. This is where the helix becomes useful.

There are a number of ways to read this illustration of record formation. First, read horizontally, the first coil shows that "Capture" and the other stages occur some time after the "Create" stage and end with the "Dispose" stage, as the classical view has led us to expect. Yet the helix possesses both linear and circular movement; its movement seems to involve more than a simple, unidirectional process encompassing a moment of creation or beginnings followed by subsequent phases. Nor, however, is it a simple cyclical return to a point of origin. Instead, record formation simultaneously traces a linear path away from (departure) and a circling back toward (return to) a moment of creation. This kind of figure complicates the questions of the context of creation – the localization of origins and creation or authorship in time and space. The helix encompasses creation in such a manner as to show that record formation can simultaneously embody two or more moments, two or more contexts that are the same yet different. The moment or context of "origins" and "final disposition" become less easily specifiable. Moreover, each of the apparently subsequent record-keeping phases similarly embodies a moment at several removes from the supposedly original creative moment and yet also seems to return within proximity of that moment as well, not to mention the other phases involved in a dual movement of distancing and return. This is the sameness and difference, repetition and difference, of record formation. The concept of record formation disrupts the linear master narrative of records management and record life cycle. It belies the notion that singular moments or climatic contexts of creation and final disposition exhaust the temporal possibilities, for such plotted developments represent only one of an array of equally interesting dynamics involving multiple contexts of creation, classification, use, destruction, and so on.

E.S.C. Escher captures this idea graphically in his famous work, *Ascending and Descending* (see Figure 5), where the figures seem to be climbing higher and higher, moving steadily up and away from some original time or point of departure, only to somehow return to it. Something like this can happen during record formation. Temporality can take on radically different aspects. Beginnings and endpoints, moments of creation and disposition no longer serve as immobile polestars of initiation and completeness; they are merely part of what Douglas Hofstadter has termed "strange loops." Strange loops convey a sense of paradox, capturing a dynamic of conflict between the finite and the infinite. Like an endlessly rising musical canon, wandering farther and farther from a starting point, the tune is on track to find itself suddenly back. Similarly, a tangled hierarchy involves ascending or descending through a hierarchy or temporal scale only to find oneself back at the place, the moment that was left "behind." Accordingly, the question of

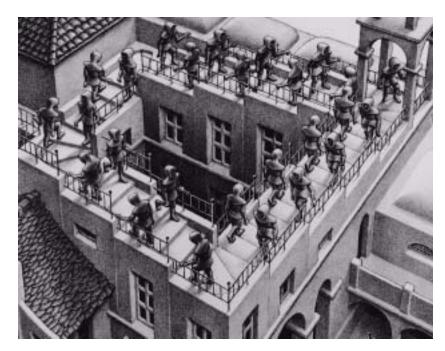


Figure 5: E.S.C. Escher, Ascending and Descending (Detail), 1960.

leaving records behind becomes more complex.⁵⁴ Record destruction could be describable as a return to record creation, as could classification, preservation, and so on.

54 I hasten to add that recursion and strange loops are not the equivalent of tracing the history of the record. The helical model stresses the illusory or partial view of linear perspectives on record-keeping. The process is not simply one that involves records accumulating histories of their own. The simultaneity of record phases is not explicable within a simple linear framework. Rather, records are temporally multivalent. They reside simultaneously in multiple "time zones," at once occupying a place in a linear framework but then also caught in a helical process where beginning and ending, creation and destruction for example, depart from the usual linear sequence. Even as it seems to emerge at a distance from the moment of creation along the horizontal axis, use constitutes or re-occupies a point of origin, and embodies a sameness with, and difference from, the original record. But then, the original record is not original until a moment of return occurs. In an historical time frame the records life cycle is a linear process that puts distance between a beginning point and an end point. Here, however, the end point of record-keeping somehow ends up as a point of origin and completion, even as it distances itself from that starting point.

The principle of recursion might help us to elucidate what is happening here.

Recursion is based on the "same" thing happening on several different levels at once. But the events on different levels aren't exactly the same – rather, we find some invariant feature in them, despite the many ways in which they differ."55

Recursion refers to a process that simultaneously preserves sameness and difference, and that accommodates notions of sameness within difference, and difference within sameness. Take the idea of classification. Classification's construal as a moment of creation signifies that it affirms or encapsulates the "original" creation of the record. That is, the presumption behind "classification" is that it symbolizes, stands in for, and represents the essential content of the record, as does description. And yet classification isn't identical with creation. Classification appears outside the record, but it forms part of the record: it is both a part of, and apart from, the act of record creation. The same is true of the other phases of the records management life cycle. Record use similarly encompasses an occasion of creation that encapsulates both "creation" and classification; it can also be regarded as an act of destruction. Creation is inherent in the process of record use. In effect, each of these phases – each moment – is describable as both encompassing and standing apart from the others. Record creation entails the creation of many records that also form part of the creation of the original record. Finally, final disposition is final in only one particular context. On another reading, final disposition is not the categorical opposite of record creation. Perspective and occasion, in other words, determine the meaning and significance of record as well as of each phase of record-keeping.

The traditional life cycle has misled us into believing that only one order of documentary objects and events exists. The principle of recursion applies to all three levels of the life cycle mentioned at the outset of this essay: record-keeping, record cycles and, in a sense, human cycles all involve a looping process. (The significance of this principle is most evident in electronic environments, where the creation of records documenting the creation of organizational records has never been more important.) The two figures below (see Figures 6 and 7) show how indeterminate the notion of creation and final disposition can be.

We create records, and then dispose of them, as the story goes. But we know that this is not enough. There must be some authentication of the "original" record. For a second record to serve as a record of the making/destroying of the first, ⁵⁶ however, it must encompass the same kinds of record outcomes,

⁵⁵ Hofstadter, Godel, Escher, Bach, p. 148.

⁵⁶ Without being explicit, an early proposal by David Bearman opens up these issues in "Documenting Documentation," *Electronic Evidence: Strategies for Managing Records in Contemporary Organizations* (Pittsburgh, 1994).

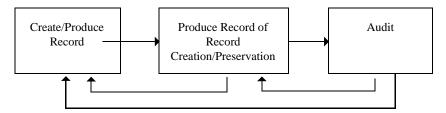


Figure 6: Record Formation and the Principle of Recursion

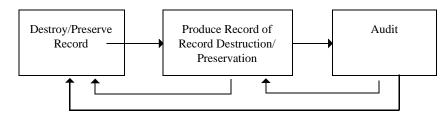


Figure 7: Record Formation and the Principle of Recursion

including isomorphic content, as is deemed necessary for the first. At the same time another paradoxical situation emerges: the creation/destruction of the "first" record lacks *completeness* until the system has produced a record of the "first" record's creation. Finally, in a similar fashion, the trustworthiness of the records creation/destruction program, the records production or representation system, and documentation of both, may hinge on the performance of audits of all these components. Audits, too, however, must meet the identical requirements of record creation/destruction in order to underwrite the creation. Just as Escher's *Drawing Hands* expresses the complexity of creation, so does this example of recursion complicate the question of which hand is "creating," and when.

Similarly, each of the phases in the classical view – for example, "classify record," "describe record," "use record," "dispose of record" – embody a kind of recursion of "create record." Each is both inside and outside, the same as and different from, both removed from and occupying the beginning or end point, the point of origin, in the process. Conversely, creation is describable as a form of destruction or death, as might be a moment of classification, or use. Creation can mark an endpoint just as easily as a beginning point. This being the case, classification as well as archival descriptions and metadata encapsulation may seem to be positioned within as well as beyond the original text. So

viewed, classifying the record is somehow both the same as and different from record creation and destruction.

Is it true, then, that there is an absolute categorical temporal distinction between "Create Record" and "Classify Record"? Is it true that "Create Record" (Birth) and "Final Disposition" (Death, Stasis) – are polar opposites? Or how can one maintain that the original record and the copied record – the digitized record – are the same record, the identical record – or that they are different? How can one insist, on the other hand, that having reached the supposed end of the record-keeping process, the moment of final disposition, we may well find ourselves back at the so-called beginning – at the stage of creation in the form of recursion? And what meaning does a moment of origin or destination possess now? What does permanent mean? To what does permanent refer? How precise, and how useful, is the description of a record as "created," "permanent," "fixed," or "complete," or undergoing "final disposition"? Yes. These terms are crucial to our craft, to our work. And yet, they prevent us from seeing a great deal, effectively obscuring several dimensions of record formation.

The record life cycle most record-keepers imagine and know is an instrument of simplification. Its representation in flat, two-dimensional space limits its explanatory and representational power. It provides us with a view of a single constellation, a universe of operationally manageable truths and controllable realities. However, this is merely a single keyhole view of one constellation among a galaxy of constellations. The helical model attempts to provide a glimpse of this galaxy. It incorporates the familiar life cycle into a richer realm of multiple descriptive possibilities, and a multi-dimensional, multi-level model of records as formations, as ever in formation (or deformation). Record formation offers an example of the duplicity of "still life." It embodies recursive processes tracing strange cycles and tangled hierarchies. The helix figure is useful for the representation of these processes of record formation in all their complex temporal articulations of sameness, recursion, repetition, and return that occur simultaneously with departures, difference, and distancing. Neither conventional differentiations between "pastness" and presence, nor master narratives telling simple stories of moving forward from origins, creations, beginnings, and first provenance to completeness, final disposition, ultimate endings, and last destinations; nor categorical distinctions between objects, entities, and products and occasions, projects, and processes exhaust the temporal convolutions of record formation. Archival work involves encounters with record formations, that is, records in formation, and not simply with records.

The traditional life cycle, embodying a desire for "satisfaction," for "perishing," is equally describable as a death cycle, as embracing a death wish. This desire is manifest in principles of completeness and resolution that are enunciated in terms of provenance and final disposition – final destination. The life

cycle, as it has emerged, has responded to legal requirements for fixed evidence, while also incorporating industrial engineering precepts of products, production scheduling, and productivity into its discourse. These two gestures have had the effect of sheltering us from perhaps less easily controllable or manageable documentary phenomena. The helical figure that record formation traces is one such phenomenon. The helix describes a complex documentary drama in the life cycle of records and records management. The coiled figure describes multiple, unfolding, temporal processes in a way that belies our confidence in what seem like complete, immutable, captured objects that we have been complacently calling "records."

The recent introduction of such terms as "recordness," "capture," "persistence," "wrap," "fixity," and "encapsulation" into the record-keeper's lexicon signals an understandable concern that what we have long recognized as "records" may be withering on the cyber vine. The recent spate of visual representations of well-ordered, predictable, and finite record-keeping cycles and continuums may similarly be serving as a soothing reaffirmation of longstanding principles in the face of an emerging web of potentially unruly, indeed threatening, documentary existences. These interpretive efforts, however – and that is what they are - reflect a long-established belief that the records management life cycle and records life cycle, such as they are, provide a safe haven from informational disorder. Beyond these cycles' ultimately necrophilic principles of documentary stillness, completeness, and final disposition, however, lies a rich and dynamic socio-documentary realm of phenomena. Within this realm of rhizomes, in the helical curves of time, documents can simultaneously dwell or move along multiple pathways tracing numerous chronologies. For reasons detailed above, the expression that best approximates these socio-documentary phenomena is record formation.