

# RE-MEMBERING THE FUTURE: ORGANIZATIONAL CHANGE, TECHNOLOGY, AND THE ROLE OF THE ARCHIVIST<sup>1</sup>

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*Progress, far from consisting in change, depends on retentiveness . . . .  
Those who cannot remember the past are condemned to fulfill it.*

—George Santayana, in *Life of Reason*, 1905–6

**ABSTRACT:** A nonarchivist, one with background as a computer systems designer and business management consultant, views the choices facing the archival profession in the computer age. Archivists are challenged to embrace change but to avoid the trap of believing that embracing technology per se is the correct transformation. Rather, it is archivists' skills as interpreters and communicators that are the foundation of our work. Our work is not, the article argues, founded in the ability to classify records or to design systems that store, locate, retrieve, and deliver records. Our critical skills lies, rather, in our ability to listen to the needs of our clients, to mediate between their needs and the resources available to us, and to help our clients navigate in the world they are making by categorizing and guiding them to records and distinctions that will make them better leaders.

My task is to discuss change. For nearly 20 years I have worked as a senior member of a team studying the ways that transformations come about in enterprises, articulating theory about how that occurs, and supporting large public and private organizations in making major changes in how they work and serve their clients. The theoretical foundations of our work, while rigorous and based in solid traditions, are nevertheless novel and have only rarely appeared in any but the most specialized literature. The background from which I write is, itself, a change from the traditions in which people talk about change. The current popular discourses of change in organizations are built in several traditions of management practice, systems theory, and psychology. The view of change I will present in this article is built from different traditions: biology, philosophy, and computer science.<sup>2</sup>

If you try to monitor your own reactions to this article as you read it, you can notice here, in a kind of live demonstration, some of the more important characteristics of change. It always comes with new language. The newness and new language trigger emotions: "This doesn't belong to me"; "It is foreign"; "I don't belong to it"; "It could be dangerous." When we first encounter a domain of changes, parts are unclear. If we are wise, we will pay close attention to those parts. All of us suffer from the habit of listening only to what we already understand. What is new makes people in the West uncomfortable, even anxious, because it is warning us that the world in which we have learned to navigate and cope is changing, and we will not be as competent (or as powerful) as we have been if we don't learn new ways of navigating and coping.

I have spent some 30 years helping organizations change to stay relevant and competitive in their fields. A little over a year ago I began to pay close attention to the field in which you work. The changes I will focus on in this article are *your* changes, and they are going to affect your role as archival professionals and you, personally. The changes coming—I believe that what you have seen so far is but the tip of the iceberg—are going to victimize you unless you develop your professional competence to help shape those changes. There will be no way for you to stand on the sidelines for this dance. One of the things I saw almost immediately is the way that computers are pressing in on your role. It appears to many people both inside and outside your profession that you are on a collision course with one of the great forces in the world today: that many of your roles and functions are slated for replacement by computers and software, and that soon you will be good candidates for downsizing. Neither of these outcomes is inevitable, but you do have formidable opponents.

One opponent is the shallow common sense of our time about what you do, and another is the enormous resources of the information industry that claims that it can handle "all the data" more efficiently. You must become active in the struggle to define the language and distinctions that set the story line—the identities and standards in which we interpret the value of what you do. Archivists are competing with the computer industry to define the stories that determine how money, prestige, and the power to act are going to be allocated to your discipline. The computer industry is insisting that the key terms have to do with the capture, storage, transmission, and retrieval of data and information. The story that comes from those distinctions says that the essence of your work is the classifying, tagging, and storing of information for efficient, timely retrieval.

In fact, from reviewing some of your literature, and from what I see happening in many other fields today as well, I believe you have begun to think of yourselves in terms of the machinery you use, as storage and retrieval machines, instead of designing your practices and machinery from a rich historical interpretation of your work. For example, take a look at this definition from RMS, the Records Management Society:

All organisations use information. Information is an asset, a valuable resource, if it is available at the right time, in the right place, at the lowest cost. Records management is the systematic control, organisation, access to and protection of an organisation's information, whether it be on tape, disk, paper or film, from its creation, through its use, to its permanent retention or legal destruction.<sup>3</sup>

The proposition that information is an asset looks absolutely sound, but in fact is the opposite. The great unanswered question of information technology is, "What's the value here?" More seriously, this is a job description for a computer program, not for a person. Accepting the RMS definition, or one like it, joins you with the great mass of people today who have surrendered to the temptation of thinking of themselves as so-called information workers, thinking of themselves as people who "process information" for a living.<sup>4</sup>

In a world conceived as being constituted of bits of data, the computer does, in fact, offer awesome possibilities for storage and retrieval. And if that were to become the substance of the winning story about your work, then it would spell an end to the future of your discipline as you know it. A profession with some similarities to yours is that of pharmacists. On the one hand, recent surveys still put theirs as one of the most trusted professions in the country. On the other, their profession is evolving largely in the interpretation that the most important thing they do is put the right pills into the right bottles. The medical insurance industry wants to have less expensive people put cheaper pills into the bottles. Jerry Seinfeld did a skit about pharmacists recently. He asked, "Why do they have to stand two feet higher than us?" Then, assuming the voice of a pharmacist, he called out, "Get back, I need space here. I'm doing important things. I'm putting these pills into these bottles. If you'll just be patient, I'll have your prescription filled in an hour or so." In that interpretation, soon many pharmacists are going to be replaced by "put the pills into the bottles" machines.

I have the impression that archivists are making a potentially serious mistake in how you, as a community, interpret what it is that you take care of. As a community, you may have "bought" the story that your job is fundamentally about the storage and retrieval of *things* and of *information*. You may have accepted the languages of industrial engineering and information sciences as the language for talking about your field.

The first challenge that I invite you to consider, then, is to construct another story, based in language other than that of the information industry. I don't believe that your essential role can be replaced by computers because, for example, inventing the future, listening to concerns, and making and fulfilling promises do not fall within the capabilities of computers. In the new story, the historical contributions that your discipline has made must take center stage away from the notions of storing and retrieving information. Your new story must take account of the historical role your discipline plays and has played in the making of history.

All of the branches of your work—administrative, legal, and societal archives—are today involved in what I am calling history making. The administrative records may look like they are being kept only for operational purposes, but I urge you to look again. The cycle of history may have been 50 years in Queen Victoria's time, and 10 years in Kennedy's time. Today the cycle of reinvention is shorter. Our present institutions of health and welfare, for example, are not recognizable from 10 years ago, and the "operational" records are where responsible managers need to go today to observe how next year's and next month's history will be built. Those archives that you speak about as being kept only because they are required by law are in fact required because of questions of trust, oversight, and other concerns that those laws were attempting to take care of. If the concerns embedded in the laws are still valid, then managers are con-

cerned with them in the present; if not, then the laws and their effects are social waste that can be brought to the attention of lawmakers.

Your job is not about storing and sorting information. It is about appraising and keeping records of history-making events and the acts spoken by history makers, and doing that in a way that allows you to be effective partners for those history makers in their remembering of the past. Such a story will make clear that your job is not to compete with computers, software, and emerging computer networks in the categorization, storage, and retrieval of data. Santayana did not say that those who could not retrieve the information were condemned to be unhappy or to produce more of the same information. He said that those who could not re-member—i.e., assemble an effective interpretation of the past—would repeat that past.

### *Changes All Around*

We are surrounded by and enmeshed in changes today in many domains of our lives. We are beset by changes in our workplaces, in how employers interact with employees, in the tools we use, and in the way we talk to each other. One important feature of many of these changes is the way that networks and computers figure in emerging new ways of being and working. Computers and networks increasingly mediate our interactions with each other and our environment. They are emerging as the eventual dominant medium for commerce and the invention of identities. It is clear that they will shortly surpass television in that regard.

Now, my interpretation is that in some domains of life we in the United States don't fully experience our own relationship to change. True, for some changes, we are old hands, comfortable, sometimes amused, occasionally willing to expose our awe even if we do think that awe is childish. In the world of our work today, where changes in relationships, computers, and networks are dancing together so powerfully, too often we are still raw, frightened immigrants, living in the interpretation that we are not going to succeed with all this new "stuff." To make matters worse, we often attempt to appear as if we are competent and know what we are doing when we are, in fact, ignorant. Too often we allow ourselves to remain confused, cynical, and overwhelmed or cowed by the continuous newness that surrounds us. We fail to notice that our trepidation, resistance, or resentment is the result of our attempt to enter a new era with the emotions and skills of an old one.

It matters how we are predisposed to change, and how we choose to orient ourselves to change. Our emotional predisposition comes first—our bodies making an interpretation about the future that is coming to us—and that predisposition shapes the way that we listen to what is coming and get ready to participate in the emerging world. Some emotional predispositions are helpful. Awe, curiosity, playfulness, and openness, for example, prepare us to listen well to emerging possibilities and changes. Other predispositions block our capacity to listen, think, and participate. For example, resignation, resentment, despair, and cynicism slow or stop our listening to the concerns of others and to the opening of new opportunities and possibilities in front of us.

## *What is Changing and What is Stable?*

If you listen to Tom Peters, he will tell you that *everything* is changing and that, as a consequence, we have entered a chaotic, hit-or-miss world.<sup>5</sup> Although I can see why he thinks that, I heartily disagree. What appears to be changing depends upon where you stand to look (consider the weather). In the recent past we have changed how we produce local records of language from typewriters to word processors to networked word processors. The range of these transformations has been quite broad; for example, with a word processor at a certain point we find ourselves not only “writing” but also preparing our document with special typefaces in ways that used to be the exclusive domain of typesetters. More recently, we hear that newspaper, magazine, and book publishing, as well as television and advertising, are being transformed or damaged by what is happening with the Internet.

I want to present some distinctions for thinking about what is stable in the midst of this whirlwind of changes.

1. Concerns for taking care of the future are at the center.
2. How action happens is stable, and it does not happen from information.
3. Trust and mistrust are foundational, and they are not changing.

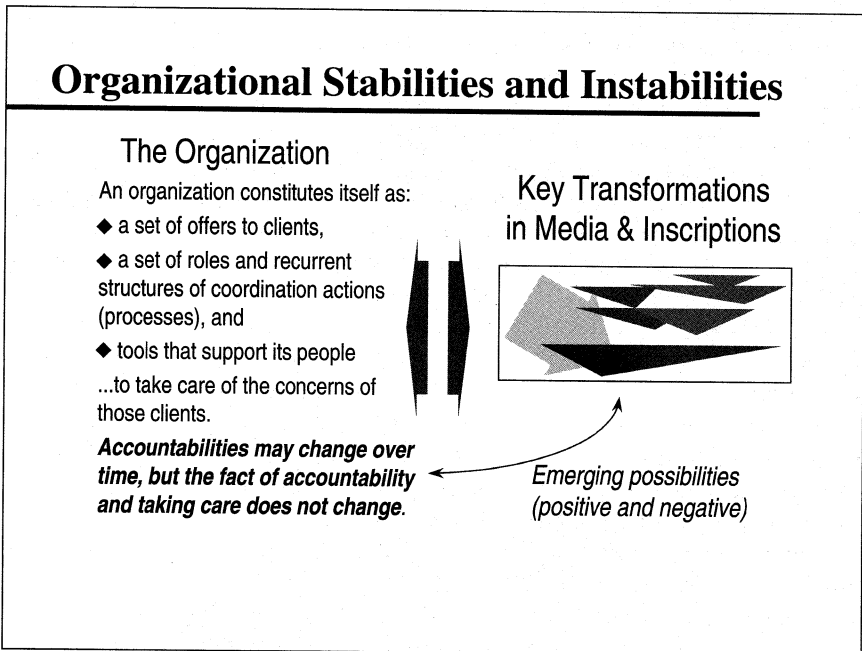
For several thousand years people have made marks on fixed and transportable media to record commitments between people, draw maps, create art, and otherwise make inscriptions to support their conversations. The essential practices of making inscriptions have stood without major change—until we started using computers and networks—since the time when Egyptians, Chinese, Aztecs, and others first made notations on stone, clay, or paper about the declarations of kings and the members of their courts; about conquests, defeats, and accomplishments; and about promises made and fulfilled in the midst of exchanges. We tell stories and report events and facts about who we are, where we have been, and where we are going and as we do that—or immediately after—we inscribe the speaking. Modern societies are built on top of such practices for making inscriptions. We do not have the capacity to build adaptive, trusting communities of action without inscriptions.

In response to the new opportunities for communication that the computer and network technologies are opening up, people are inventing new ways of taking care of old concerns and inventing new concerns. The computers and networks offer a new kind of capacity to speak, listen, read and write, comment, request, purchase, promise, and at the same time to automatically make inscriptions recording any act of speaking that happens across the network. These new infrastructures for communication are giving us the capacity to generate coordination tools like ATMs, cellular telephones, fax and interactive television, computer-aided design and computer-aided manufacturing, and the scanners at supermarket checkout counters. Altogether new kinds of offers and coordination are appearing. Credit cards and credit card readers register identities and promises in worldwide networks that allow banks and airlines, for example, to shape offers in which fliers get commercial and personal services at the same time (frequent flyer programs). As a consequence of their participation in these networks, banks and airlines are able to enter into new marketing relationships with their customers; the

infrastructure allows them to interact with their customers in much richer ways than were possible before.

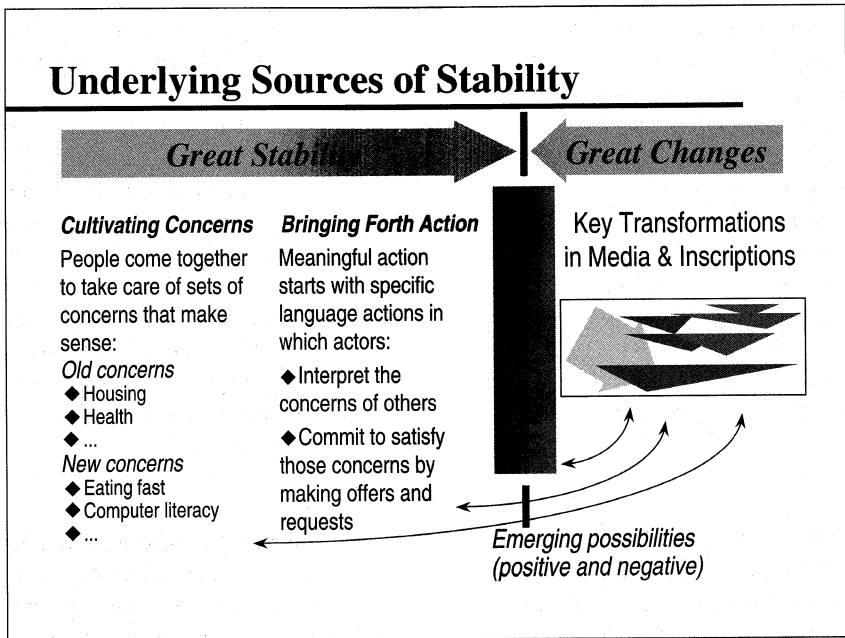
Colleagues of mine estimate that the new generation of tools now coming available on the Internet has reduced the cost of building and deploying networked computer tools by a factor of 80. That kind of improvement produces an irresistible provocation or impetus to make changes in tools supporting important kinds of actions. Importantly for archivists and records administrators, these new tools have radically different kinds of capabilities for making and retrieving inscriptions than have the previous generations of tools.

There are a lot of changes. Yet, if we look from the right perspective, a great deal is also stable. Figure 1 begins to show where the world is more stable. Every organization constitutes itself with declarations about a regular set of structures. Managers continuously adjust the offers of the institution, and adjust the technologies it uses and its division of labor (roles and processes) to keep "tuned" to clients. Regardless of those changes, as the exhibit emphasizes, the fact of accountabilities to take care of client concerns does not change.



**Figure 1**

There are great underlying sources for this stability, shown on the left in Figure 2. Over the last years, the "information technology interpretation" of the role and responsibilities of archivists and records managers has dominated, and with that domination you have been drifting towards the interpretation that your essential role lives fully in the areas of changes. I insist that is a serious mistake. The core of your role needs to be understood in the stabilities.



**Figure 2**

Santayana was right. To enter the future well, we must pay considerable attention to those aspects of life that are stable. At the same time we must be open to the possibility that some of our historical interpretations are invalid and we must declare, carefully, what we will carry with us from the past into the future.

### *Concerns at the Center*

People gather in institutions and enterprises to take care of collections of concerns that make sense in their culture at a moment in time. Without the commitment to take care of concerns that matter to people, there is no meaningful action. Some of our concerns are permanent: food, shelter, clothing where it is cold, companionship, family, health, community, spirituality, and so forth. Others shift as we cultivate different ways of being. Today in the U.S. we are concerned about being able to eat fast, having our children literate with computers, being physically fit, and staying youthful. *Even when these concerns are shifting, which they do, they tend to shift relatively slowly. If we are watching, and listening to our clients, we can normally track their changes.*

Another stable feature of our institutions and enterprises is that people's emotional reactions to their worlds and the moods in which we find them are connected deeply to these concerns. For example, the moods and emotions of people being laid off from an institution in which they had understood they had permanent employment will show (or hide) certain indignation, outrage, or resentment from the betrayal. The listened-to promise of permanent employment, which had been taking care of the person's need to take care of family and future, was broken. When our concerns are taken care of, we are

more or less tranquil; when we take care of our own concerns we are proud. When our concerns are in danger, we are alert and in action or, if we think that nothing can be done, fearful, resigned and/or resentful.

In the world of inscriptions, listening to/for concerns is fundamental to the process of creation, appraisal, and management of records. The criteria for these actions are devised in the practice of listening. Information technology cannot replace this aspect of your work. Information technology can help you to listen better, because you can be available in more places, or more of the time, or more quickly, or can offer you better ways of connecting with others, but information technology cannot listen. It can record noises, but it cannot re-member the past or produce interpretations about its implications for the future. This is what you have been working to accomplish, and you are necessary. I urge you not to surrender your opportunity to define how all of us will interpret your discipline to the shallow stories offered by information technology.

### *How Action Happens*

Often, the computer industry leads our culture in its tendency to confuse communication and information, as if they were the same things. This confusion has a lot to do with the confusion in your role. "You are hired" or "You are fired" is not information when it first appears, whether orally, on paper, or electronically. Each is an invention, brought forth in language, in which a new set of future possibilities appears. Communication and information are different phenomena. Information has to do with what is present and can be asserted. Communication has to do with our successful living together, through the intentional coordination of actions. We human beings bring action, and coordinate that action in language, more specifically in speech acts. We listen to each other's concerns, and we make requests and offers, promises and assessments, declarations and assertions. Not coincidentally, the earliest recorded work of archivists was concerned centrally with making and maintaining records of exactly these speech acts as they were made by royalty and the ruling and priestly classes.

It turns out that, when we turn our attention from the collection of symbols that are language to the *way that we do things with language*, there are only a few major classes of things that we do as we speak with each other, as illustrated in Figure 3.

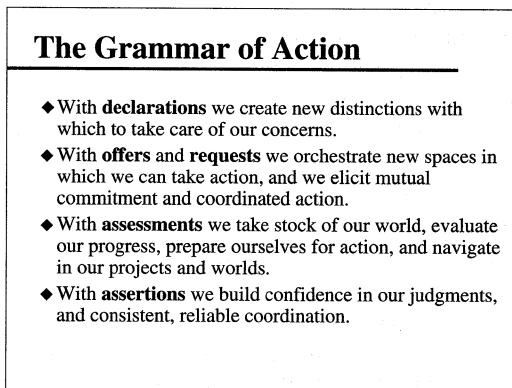


Figure 3

We have all been doing these things since we were small children, despite the fact that we had poor distinctions for understanding what we were doing. For example, I have a 10-year-old daughter. She spent most of her first six years working on how to make effective requests. I can report that she has achieved a high level of competence. With some people, she gets almost everything for which she asks.<sup>6</sup>

Archivists are being seduced—in your behavior if not in your hearts—to the interpretation that the technologies of your work are at the center of your role. At the same time, you have relegated what you call the “content” of your work to, at best, a status equal to your technologies. I say this to be polite. I believe that in terms of your attention, you give less attention to the nature of the content of your work than to the nature of computer systems you will use to help you with that content. The structure of speech acts I am now introducing to you can help you bring the “content” of your work back to the center. It is in this structure of action in language that we human beings live together, bring about things that give meaning to life, produce historic events, and “make history.”

Let me give you an example of the direct relevance of this interpretation to action in your field by looking at one of the great historical documents: our Declaration of Independence. Put in your mind’s eye a recently naturalized mother, standing with her child in front of the declaration in its hermetically sealed case in Washington. She is weeping, filled with awe and gratitude at the new future that she and her child now have, brought about by the speaking of a group of people so long ago, and by the commitment of a nation of people over two centuries to keep the commitments of those original speakers alive and vigorous. The existence of the artifact is helpful to keeping that commitment alive and affords the moment of invention. The money and care with which the artifact has been kept are emblematic of the strength of the commitment of that nation of people to keep alive that original declaration. However, the artifact is only a token of what produced the action and of the source of the power involved: the speaking, the interpretation, and the commitment of those who have listened to the declaration over the years.

To produce Figure 4, I typed the Declaration of Independence on one page and then color coded its text in three component parts:

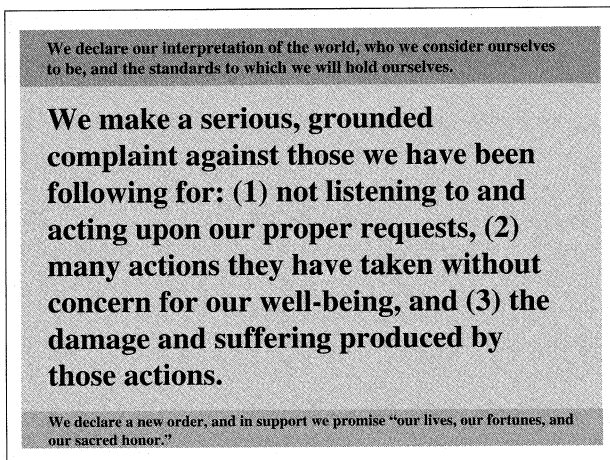


Figure 4

- In the grey section, our ancestors *declared* the set of interpretations and standards by which they would assess behaviors and situations.
- In the black section, they *assessed* behaviors of King George and Britain that were wholly inconsistent with the interpretations and standards in which they had committed to live, and *asserted* facts to back up those assessments.
- In the white section, they *declared* the program—the new order—and *promised* to bring that future, committing their lives, fortunes, and honor to the success of their program.

When I show this to commercial organizations in the process of shifting their direction and transforming themselves, one of the things I like to point out is that this extraordinarily powerful event, which we can see through this document, did not consist of an exercise of envisioning a new future, setting objectives, and producing a plan. Those activities can be useful components in an overall scheme of changes, but the place where human action comes from is deeper and simpler than that. We build our future in declarations, assessments, requests, and promises. This is where the content that matters comes from. This is obvious if we are looking with the right distinctions, and invisible if we are not.

If you go to the country's schools of management and ask how action happens in enterprises, you will get many different answers, but none of them will address directly the palpable truth of the matter that we human beings bring forth action in our speaking and listening together. Listening and speaking in ways that support the invention of new futures is creative and not mechanical work, and it is a stable competence that is going to be enriched, not replaced, by the emerging technologies.

### *Trust and Mistrust*

We have entered an era in which every single inscription is potentially a fake. We can see all around us an epidemic of mistrust in government institutions. "Trust" is becoming a popular word, but if you listen carefully, people speaking about trust are speaking about a phenomenon that, while we can identify with its sentiment, is "soft," vague, and mental or psychological. While it is true that there are historical, cultural, and "purely" emotional aspects of trust, that is not where I want to start here. I invite you to notice another, more central and concrete dimension of trust. Trust is the assessment we make that someone is sincere and competent for taking care of some world of action.

Trust, understood in this way, can be built or rebuilt systematically. How? We gain trust when we assess that other people are listening well to our concerns, when they repeatedly demonstrate a competence to successfully address those concerns, and when they participate in articulating and creating a future in which we share. What we call "commitment processes" are successions of transactions among people in organizations in which requests and promises are articulated and fulfilled or not. It is in the "commitment processes" of an organization that trust is built or trust is lost. A person, a

group, an institution, or a work community builds an identity of trustworthiness over time. When identities change, suspicion and lessening of trust can also occur.

How is trust lost? Inevitably there occur breakdowns in human coordination, and with each breakdown a loss of trust is a possibility. Most obviously, you lose trust when someone fails to fulfill a promise. You lose trust when you interpret that someone is not listening well to your requests. You lose trust when you interpret that the other person is “going through the motions” of listening—responding only to your words, and not to the concerns that lie behind them.

Loss of trust works like an avalanche, building momentum with each successive loss. Mistrust is expensive. When we mistrust, we change suppliers, we follow up every promise in the expectation that it is not likely to be fulfilled, we do the work ourselves, or we do without it. Without trust, the capacity of a community to coordinate action, to make promises, and to build futures together breaks down.

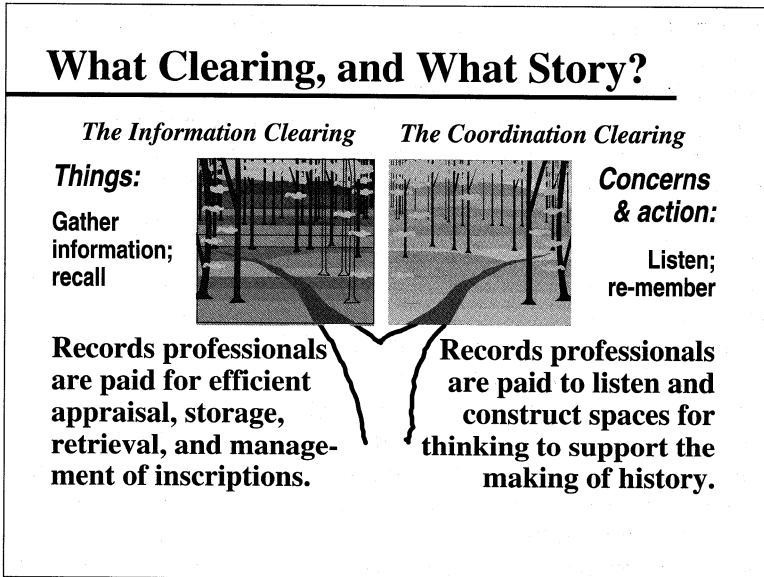
Inscriptions play a fundamental role in the constitution of trust. We know that we cannot trust our memories for reliable reportage about what has been requested, promised, and fulfilled, what remains to be fulfilled, and what promises are pending. To trust a community of people to take care of concerns that matter to us, we must see that the community is competent in making and taking care of inscriptions. One of the main contributions of the archivist to the constitution of trust in the community is the way that, by judicious design and management of archives, the role of a fair and reliable witness is available in the community.

The phenomena of trust and mistrust are stable, as are the roles that they play in our ability to effectively coordinate action in every community. However, the size and number of communities with which we are interacting are growing, which daily gives us greater opportunities to form trusting and/or mistrusting relationships.

### ***What Will Happen to Archivists and Records Administrators?***

The past several hundred years have given us the industrial revolution, mass production, radical changes in transportation and communication around the world, the computer, software, and network industry, globalization, and downsizing. I am speculating here with you that in the era coming to us next we will see the Internet producing a vast transformation in the worlds of commerce and inscriptions, among other things. What is going to happen to the archival field, to its people and practices in the midst of these changes? What is going to happen to you?

You have arrived at a branch in the road (see Figure 5). The tradition in which your discipline has been moving has been recently shaped in powerful ways by the language and thinking of what I call “The Cartesian Information Clearing”—and has led to the interpretation that records professionals are paid for doing things that overlap with the jobs of computers. This is much deeper than a question of semantics. It is a question of interpretation, jobs, and livelihoods and, from my point of view, that means that members of your discipline should be well prepared to deal with this question.



**Figure 5**

It is time for you to invent and tell a new story about yourselves, a story you can “sing around the fires” at night that tells of your past accomplishments and the future you are bringing. To be seductive, your story must show how you take care of things that matter to people. It must be a story in which you and your clients together can thrive, a story that builds your identity for the future. It must be a story that recognizes and utilizes change while building on what is stable and central to organizations and society.

To put it to you directly: You need to apply the best traditions of your work to preparing the space for interpreting where your discipline is headed, or else it is likely to end up where it *is* headed, and many or most of you *will* find yourselves replaced by computers. True, the computers will do certain important mechanical parts of your jobs with more speed and reliability (and fewer complaints) than you are able to do them now. On the other hand, the real center of your work could be damaged or lost for some period, and that would be a tragedy for all of us.

Once you produce a new interpretation and build a new story, then the job is to cultivate practices of living and working that give the people in your field the opportunity to invent meaningful lives for themselves. People who are in tune with the age in which they live and act do not resist or hold back change; they invite it, in the right moment, and shape how it appears.

Living with, adapting to, inviting, bringing, leading and/or resisting changes present a series of challenges. I have been suggesting directly and indirectly throughout this article that it is up to *you* to bring the future that is coming to you. If you want a prediction about the future, the smart money is on the information technology story about

your job: You capture, store, and retrieve information and for many of you, your jobs as you now understand them will shortly disappear. If you don't like that outcome, it is time to move into another path of action for the future in which you invent your own story. To invent that story, to make it stick, and to mobilize a set of communities around action to make that story the basis of a new and different future is what leadership and bringing and managing change are all about. From our work I offer you four recommendations.

1. **Become involved.** Competence in life, the capacity to do the right kinds of prioritization in modern life, to decline what we will not do, and serenity and satisfaction with life come from involvement in it. We involve ourselves in and make declarations about what we care about. Get involved in what you care about and become competent in taking care of what matters to you.<sup>7</sup>
2. **Appropriate a role that works and learn to thrive in it.** I suggest that you adopt and develop yourself in constructive roles that allow you to construct a meaningful life in the midst of whatever changes come. You may elect to lead, act as a responsible follower, or be a judicious observer. Successful leaders and followers learn to talk with each other, to seduce people into their stories, and develop competence at cultivating the kinds of emotions that are needed to move into a future different from the past we recently inhabited.<sup>8</sup> When changes come, if you have not chosen one of these roles, you will find yourself in the role of victim or excluded or cynical onlooker.
3. **Become competent to bring and coordinate action.** Archivists today lack a rigorous, grounded language for observing the way that action happens in human enterprises, even though it is certain that some of you have significant experience and competence in that regard. As a result of this lack, some in your profession are adopting the language of the computer and information industries. I am offering archivists a new interpretation about how action is brought, universally. People make requests and promises and constitute networks of commitment among themselves. That is where intentional, recurrent action always starts. I recommend that you go to work, and begin to reinterpret and rearticulate how action happens in your organizations and within your profession.
4. **Games and Scoreboards.** It is always easier to bring a change in practices if the process of getting there is structured as a set of games in which employees win when customers get taken care of. Also, scoreboards need to be constructed to show everyone how they are doing in the games.

In my experience there are two great impediments to successfully bringing a new practice to any organization, public or private, and to any profession.

1. **Misleading common sense about how change is brought in organizations.** Nearly everyone carries around in their background a strong, taken-for-granted interpretation about how people bring change. In Western countries today, most

of those interpretations are misleading or worse. People operating from these common senses often wait when they should get moving, misjudge resignation as opposition, and make other important mistakes. Let me give you a few examples.

- One of the most widespread notions is what I call **consensus**. The notion is that changes happen when a community comes to agreement that it will move in a particular direction and not before. This approach *never* works for bringing important changes. Whole communities, and even majorities, almost never agree to change direction in a unified way until everyone else in the world has already decided to go in that direction. In our fast-changing world, by the time the majority is headed in one direction, it is often the wrong direction.
- Another common notion is that the only way important changes happen is if the **people at the top** become convinced that certain actions must happen and, once they are convinced, they will give the right orders. Today, ironically, often the opposite is the case. Important changes come far more often from initiatives begun by people who are in direct daily contact with clients of the organization. If you ask most senior executives and managers, they will tell you how frustrated they are with their lack of capacity to bring effective changes.
- Another pernicious commonsense idea is that changes really come when **someone outside the organization** brings them. Ask around and see how effective most organizations feel their consultants have been in bringing effective change and you will see again that committed people inside the organization usually can lead more ably than can consultants. Further, no consultant will ever know your operations, your “business,” or your clients the way you will.
- Another related and equally wrongheaded commonsense idea is that there are two jobs: coming up with **great ideas** and **implementing them**. In the first place, in any organization of any size at all you can find lots of people with great ideas about what is wrong and needs to be changed. They may not be speaking, or they may be resigned, but there is no lack of ideas. Great ideas are the ones that all but implement themselves, and they don’t come from the heads of geniuses, but from the conversations of concerned people in the middle of the organization.
- The most widely read article on the subject of “reengineering,” Michael Hammer’s “Don’t Automate, Obliterate” from *The Harvard Business Review*, sings the praises of two more false dreams: the **blank slate** and **benchmarking**.<sup>9</sup> The first notion, that for real change you first wipe the slate clean, is a long-disproven idea, although the words continue to come out of people’s mouths every day. Even “Chainsaw Al Dunlap,” the king of the downsizers, doesn’t do that. An organization changes by evolving, adapting, shifting. It’s like a garden: Even when you change all the plants and planting in it (its processes), you still have the same soil, weather, chemistry, and local animals (equivalent to its people, culture, traditions, habits, etc.). Benchmarking, the second notion, means that you compare your processes to those of other organizations. This can be a good way to wake up the people of an organization that has been completely asleep. It can be shocking to

discover that where it takes 28 days in your organization to resolve the loss of a document, archivists in Dallas do the same thing in four hours, and that shock may give you the provocation you need to spring into action. On the other hand, it might not. The first Americans to visit the Japanese auto manufacturing plants that had begun to operate without inventories came back wondering why the Japanese had gone to all the trouble of hiding all their inventories just to confuse their American visitors; everyone knew you couldn't run a plant without inventory.

2. **Rigid historical styles and persistent moods of resignation and resentment.**

The second major impediment is the persistence of the kinds of moods and emotional constructions in which people cannot listen to the possibility of doing something new and then commit themselves to that. The people of a very large client of ours were convinced that they were big enough and diverse enough that everything worth thinking had been thought there. They did not notice that *how* you think something matters and how you *talk about it among yourselves and with others* also matters. They had developed a style of communication in which almost nothing new was ever done well enough to pass all the committees. Also, they had adopted a way of talking and listening to each other in which any show of emotion indicated a lack of proper reason. As a result, there was very little room in the company to show essential emotions: indignation about the mistreatment of customers, passion about something new that warrants fresh attention, or shame over broken promises.

On the other hand, I count four key elements for a successful implementation of a new practice:

1. **Listening.** The first ingredient is that some people in the organization must commit to developing a capacity to listen to the concerns of others sensitively and in a fresh way. Without that, no new possibilities really show up.
2. **Commitment (promises).** The critical ingredient is always a serious commitment by a few people who are convinced that by making some change they will be better able to take care of the concerns of others. Those few then show the opportunity to others. By some moment in the process before the change is complete, a critical mass of people in the organization—but never all the people and frequently not even a majority—have been convinced and commit themselves to support and bring about the change. The commitments in which an important change is brought have other important dimensions as well. The participants commit to grow leadership and leaders. They make serious promises among themselves to support each other in bringing these changes in a way that is analogous to the closing lines of the U.S. Declaration of Independence: Its signers wrote, “. . . we mutually pledge to each other our Lives, our Fortunes, and our sacred Honor.”

3. **Emotions and Moods.** To lead successfully a process of designing and bringing a change to an organization you must learn to observe and help shape the moods and emotions that appear in the people. Emotions and moods are not details, but the background in which we encounter the world. Typically, the two biggest hurdles are anxiety and resignation. Every change that brings new practices is accompanied by anxiety. Anxiety is a necessary ingredient in any change. If no one is anxious, nothing is happening. On the other hand, people's first reaction to anxiety is usually to flee from anxiety back into old habits and patterns, so the anxiety must be anticipated and taken care of. Resignation is the assessment that nothing can be done to improve a situation. Governments and old institutions are full of it, like bacteria that live there permanently. It is possible to successfully intervene in resignation, but takes skill, determination, and experience. If you want to make a big change, you must overcome the interpretation that it is not possible to do anything new that is important.
  
4. **Learn to listen to anomalies and be astute about innovation.** My fourth recommendation is that you learn how to separate the wheat from the chaff—to discern the changes that are just beginning, or are about to begin, that spell new opportunities. Anomalies are the small, sometimes annoying and sometimes nearly invisible ways in which the future shows up in the present. Innovation is not about genius, but about listening well and having the right conversations about the cares of others. At the heart of the matter is again the critical competence of "concernful listening." Federal Express is a business built upon the recognition that no one was promising the delivery of the package. When the company started, airfreight companies engaged their customers in long conversations about the difficulties of being in the airfreight business. Federal Express stopped all that conversation and made a simple promise. "Your package will arrive tomorrow morning, period. How we do it is our problem. Anxious about where it is? OK, then call us and we'll tell you where it is." If we look carefully, Federal Express offers us a textbook example of inventing the future out of listening to everyday practices and concernful conversations with clients and technologists. After you take the promise seriously, everything else about Federal Express is simple. Try to understand the company from its routes and technologies and you will never get to the end.

### *Defining the Future*

We cannot know exactly what your jobs will be like in 10 years. One thing is certain: Your job is not to be a more sophisticated computer, but to assist in coinventing the new world we are already entering. As you have seen happening in other disciplines and professions, some of your roles are going to change or even disappear, and the lines may blur between your roles and the roles of librarians, historians, and even information professionals and computer programmers. What can anchor you in the future is a strong sense of identity and purpose—what I have been calling a "story."

To have a powerful story, we must begin with the clear interpretation that the technology we are observing and the practices that it enters and transforms all serve stable, deep, and abiding human concerns. As we watch the tools we must keep our attention on those concerns and how the tools assist us in interpreting, taking care of, and even clarifying and evolving those concerns. To think well about the complex of changes and stabilities of which we are speaking, you need the proclivities of an amateur historian, which after all was another part of what our friend Santayana was urging upon us, was he not?

This moment is like the one in which we changed from seeing ourselves as planters of seeds and managers of animals to the moment in which we began to see ourselves as controllers of machinery and tools. What roles will be available to archivists and records administrators? The new technologies do much more than eliminate or reallocate much of the work we know. They change the space in which we make relationships with each other and bring new possibilities for action. We are in the midst of a change in our way of being. Most of today's managers and most of the current body of management practices and theory are at a loss to cope with multiple emerging worlds of relationships and action. They need your help. We are the kinds of animals who become what we are through the interpretations we build of ourselves—that's the secret center of your profession—and in computers and networks we have invented a new medium through which we will interpret ourselves.

In some parts of the world it is still possible to observe the old style of retail transactions: One person shows the product, a second writes up the order, and a third takes the money. That style is very old and its roots have to do with mistrust of people handling money and records. Handling the product, making the record, and handling the money are separated so that it is more difficult for theft and other mismanagement of product and money to occur. Today, when we are buying a product, especially with a credit card, that old style looks anachronistic. But go into almost any of your offices and you will encounter work structures essentially unchanged since medieval treasury officials invented them: waiting in lines and queues, threading through phone mazes to find responsible people, different paths for filling in different forms, and yet another line for paying fees. We haven't yet grasped how anachronistic these essentially feudal structures of organizing work are, invented in part to make the grandest county sheriff tremble in his boots. We still organize many of our great organizations, including government departments, universities, and libraries, in similar styles. The new generation of technologies will accelerate the rate at which these old styles are undermined, challenged, and transformed. With computer networks now encircling the globe, we have the possibility of an inscription—a record—that can receive instructions, consult its own clock and other references, and at a programmed time, speak to us in a way it has been instructed to speak.

We know a different future is inevitable. The central job of leaders is to invent the narratives and emotional structures that give shape to that future and allow the rest of us to participate in it. To produce the best future for you, you will need exceptional faculties for manipulating inscriptions and records *and* for collaborating with others to make history (see Figure 6). Important parts of your traditional work will be taken over reliably by computers and software and will disappear into the networks. Which parts will

be taken over? Computers and software will permanently take over those parts in which the work really can be reliably described by algorithms. Over the next decade or so we will see extensive automation in those parts of your work that are composed of mechanistic repetition of activities that do not require human listening, judgment, or commitment for their successful completion. For the parts of your work that have to do with manipulating inscriptions, a tremendous number of people are available and eager to help you develop those faculties. For the latter area, I suggest you apply your own discipline to the question and that you seek new help.

## Faculties for the Future

### Faculties for Manipulating Inscriptions

**Standardized, widely-available and readily-customizable skills and tools for handling data and things.**

**Appraise records and design systems to store, locate, retrieve, and deliver them to people.**

### Faculties for Collaborating With Others to Make History

**Competences for listening, bringing action, and constructing spaces of interpretation in conversations with others.**

**Listen to concerns, emotions, and moods, and declare, offer, request, assess, and assert.**

**Figure 6**

One of your key practices that computers can never do is to listen to the concerns of human beings. Computers can give you tools for listening better, but they cannot listen for you. Appraisal is the result of a careful, measured listening to the concerns embodied in content, context, and structure. This is where your criteria for classification, storage, preservation, and retrieval are developed, because listening for concerns is listening for relations; it is communication, not information. Concerns are not fixed facts; they shift and adjust, depending upon who is listening, when they listen, and what kind of world they listen in. The worlds we inhabit are ceaselessly changing and the work of listening is never complete. If you in your role as archivists and records managers were to assist in the development of a computer algorithm incorporating all of the sensibilities necessary for effective listening today (assuming such sensibilities could be incorporated into algorithms in the first place), you would find it necessary to repeat the work next year or even next week as the world of concerns and possibilities will have shifted. Listening is ongoing sensitivity, or attunement, to the world and the historical

identities and action that constitute and are constituted by it. In the process, you and I are co-inventing our own future.

This listening is what you have done in the past; it has been at the core of all your practices, albeit often invisible to all but the most tenacious of observers. When many of the visible aspects of your practices have disappeared into networks, listening will remain. In remembering this (and other aspects as well), you re-member yourselves for the future that is coming. And you re-member more than only yourselves. By being archivists and records managers and thinking about your work in this way, you will help to re-mind the rest of us of the centrality of listening to concerns in the handling of inscriptions, in the turning of inscriptions into records, and of the importance of records to the making of history—ours.

I can say a few more things about the story you must invent:

- It must be connected to a careful interpretation about how people make history. You must pay a lot more attention to the question of your “content.”
- You must give up the fiction that you are neutral, transparent instruments without opinions or interpretations as you do your work. Your work is all about interpretation and we depend upon you for your sensibility.
- You must stop hiding from and behind the historians, political actors, journalists, and others who depend upon your work and instead come forward as their partners in the exercise of articulating and grounding the stories upon which the rest of us will build our political agendas. I think that in these difficult times many of us shy away from the responsibility inherent in our actions. Children sometimes become paralyzed as they discover, growing up, that their actions really do matter. Originally, my wife was appalled when she first discovered that one of my blessings for my children was that they might have the opportunity to become politicians. *I consider that there is no higher calling in troubled times like ours than that of taking responsibility for articulating the public agenda and helping lead us into an uncertain future.*
- The activities of your discipline (like those of accounting and auditing, for example) have always been oriented to the past and that orients you to the past. For the challenge of reinventing your discipline, this is a serious weakness that you must overcome. You must be at least equally oriented to bringing a new and, until it arrives, unknowable future.
- In the future that I am painting for you, your old friends comfort and tranquillity have already betrayed you. In times of turbulent change, you cannot trust them to tell you when you are doing well. In fact, if they tell you that you are doing well, you are probably no longer relevant. Your new friend in this context is a new interpretation of the old nemesis *anxiety*. I suggest you learn to embrace and learn from the anxiety that all of our bodies produce as we interpret the changes going on around us. This is a good example of how the future that is coming demands that we build new languages of interpretation and new interpretations of familiar emotions.

In the end, we are observing the emergence of a new, global way of being. That is one more reason I ask you to resist being co-opted by information technology and to take responsibility as a community for directing the invention of a rich new, enlarged interpretation of the role of your venerable profession: We need your help.

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Coordinator, a highly regarded early “groupware” product for networked personal computers used by over 300,000 people worldwide. He has been awarded several U.S. patents for methods of designing and constructing software for coordinating the action of people and tools in digital networks. More recently, Bell was Senior Vice President, Design, for Business Design Associates, Inc., a distinctive team of academics and practitioners developing new theory and practices for management, education, entrepreneurship, innovation, trusting commercial relationships, and tools for coordination.

## NOTES

1. This article is a revision of two keynote addresses, the first to the Annual Meeting of the National Association of Government Archives and Records Administrators (Sacramento, California, July 17, 1997) and the second to the Annual Meeting of the Society of California Archivists (Pasadena, California, May 1, 1998). The texts of both addresses are available at <<http://www.rbarry.com>>, one under the “guest authors” section and one under the “org change” section.
2. Because I am often critical in this article of certain facets of technology, some readers may be tempted to take away that I am an enemy of computers. It is not true. One major part of my work is the design of computer systems to help my clients do their work. I hold several patents on the operation of computer software for coordinating action in digital networks and in the past I have headed a computer software company.
3. The quotation is the first paragraph of the feature “About RMS” printed in every *Records Management Bulletin* of the Records Management Society of Great Britain from at least 1992 to the present (October 2000).
4. Archivists are not alone in this and that is why you face such a formidable opponent. Managers and so-called information or knowledge workers, for example, today often think of themselves as people who “process information.”
5. See, for example, Tom Peters, *Thriving On Chaos: Handbook for a Management Revolution* (New York: Perennial Library, 1987).
6. A careful experiential introduction to this interpretation would take far more space than is available here. The first observation of the *performative* structure in our language, the structure in which we bring forth and shape action and realities in our worlds, appeared in the 1950s in the work of a philosopher named John Austin at Oxford University in England. See J. L. Austin, *How to Do Things with Words* (Cambridge: Harvard University Press, 1962). The main figures responsible for developing Austin’s ideas since his first discoveries are Dr. Fernando Flores, who founded the company with which I worked for many years, and his professor, John Searle, of the University of California at Berkeley, who was a student of Austin. In 2001, Fernando Flores was elected a Senator in his native Chile. John Searle, *Speech Acts: An Essay in the Philosophy of Language* (New York: Cambridge University Press, 1969) and *Expression and Meaning: Studies in the Theory of Speech Acts* (New York: Cambridge University Press, 1979). Please see the select bibliography following this article for citations to several of Flores’s major publications.
7. For an illustration of involvement and commitment as effective ingredients for change (as well as of how listening, communication, and action can effect change in seemingly ossified organizations), see Thomas Petzinger Jr., “The Front Lines: Mexican Cement Firm Decides to Mix Chaos Into Company Strategy,” *Wall Street Journal*, December 13, 1996, and Thomas Petzinger Jr., “The Front Lines: For This Chilean Firm, Commitment is What Creates Real Change,” *Wall Street Journal*, May 30, 1997.
8. As an example of the intersection of leaders, followers, and constructive criticsizers in creating change, see the discussion of Mothers Against Drunk Driving in Charles Spinosa, Fernando Flores, and Hubert L. Dreyfus, *Disclosing New Worlds: Entrepreneurship, Democratic Action, and the Cultivation of Solidarity* (Cambridge: MIT Press, 1997): 89ff.
9. Michael Hammer, “Reengineering Work: Don’t Automate, Obliterate,” *Harvard Business Review* (July–August 1990): 104–112.

