# Information Ecology and the Archives of the 1980s

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Stéphane Mallarmé once wrote, "To define is to kill: to suggest is to create," and I hope you will not be disappointed if at the outset I fail to define "ecology of information." Ecology is something of a buzzword these days, but it suggests a non-aggressive stewardship, a sensitive interplay, and an ongoing enrichment of resources in contrast to those exploitive analogies with which we are all so familiar. I therefore make no apologies for using it, for it lies behind much of our work today.

The theme of this issue of Archivaria is "Archives and the Law," and I would remind you that, in the public sector, law as popularly understood generates bureaucracy and bureaucracy creates the record. Law and the evidence of government became locked into forms of words and language, but in preliterate societies it was the poet and the shaman, the Greek mnemon and the Celtic bard, who recalled and rehearsed the customs and traditions of their people "when the memory of men runneth not to the contrary," to use a mediaeval phrase. Words then did not have specific meanings, but were closely related to their context and to actions arising from that context. Speech and action, attested by witnesses if need be, constituted the record to be retained in the memory. With the emergence of writing and the creation of documents, the ancient practice gradually changed, though not without considerable resistance.<sup>1</sup> For the greater part of the scribal age, actions remained a part of transactions; the document was merely the "copy" of the event which might include deeds, gifts of crosses, and symbolic transfers of turf. Vestiges of this still remain in the red spots serving as seals on title deeds, and in ground-breaking or rope-cutting ceremonies. The reality and importance of the signum, the act, over the document may be illustrated by the demand of bank tellers that your cheque be signed in their presence. We need to bear this principle in mind when we seek to answer questions concerning "originals" and "copies" which may involve two different media of record and communication as in machine-readable archives where we speak of the "memory" in which the original is stored over against the paper print-out. These are analogies which must not be pushed too far but, as we shall see, the nature of the record has an important bearing on the role of the archivist and the centrality of that function to the conduct of affairs.

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<sup>1</sup> M.T. Clanchy, From Memory to Written Record: England 1066-1307 (Cambridge, 1979), pp. 231-57.

It is only in comparatively recent times that the document has come to be perceived as the original reality, the "instrument," tangible, concrete, and immensely powerful as evidence in a visually oriented society, the words trapped in the illusion that they have only one meaning — to the delight of lawyers ever since. So valued were these evidences under the law that records of royal administration came to be stored with the royal treasure, and the French *Trésor des chartes* in the *Archives nationales* reminds us of their ancient status. In England during the Middle Ages, the senior royal administrators were never far from their seals and rolls. The keepers of the record remained at the heart of the administration and their scribes developed their own forms of writing, now called "set" hands. The legal value of the material ensured its survival then and for centuries, long after the administration of national affairs had passed into other hands. Canadian land registries are the direct descendants of these rolls, and the term "Crown land" reaches back to the day when all land was deemed to be held of the king.

And so to the age of paper, printing, and extensive literacy. The bureaucracy of the Elizabethan Secretaries would have been quite familiar to us, and they and their successors stored their records in the State Paper Office, which was both a "records centre" and an archives. The mediaeval rolls entered a kind of twilight — still of some value at law, but increasingly the happy territory of the pamphleteer and the antiquary. Nevertheless, they remained within their departments of origin, shadowy though these had become. By the 1780s the records were scattered among hundreds of little repositories, where the keepers levied quite stiff fees and maintained their finding aids (such as they were) as their personal property.

Meanwhile, the "national memory" that was readily retrievable in the administration became much shorter. For the ruling elite, this reality of the English remote past had become distasteful and irrelevant, totally fractured by an age which patterned itself on an idealized classical model. The keeper of the record in many cases had been reduced to a clerical hack or an anomalous predator hired by a political sinecurist.

As is well known, the French Revolution had a profound effect on the perception of early records which, up to that time, had still been viewed as the evidences and records of the offices of origin and still been maintained by them — still, at least in theory, "active." At one stroke, the creation of the *Archives nationales* sundered the ancient records from their roots, placed them in common archives, and, in effect, labelled them "historical." The modern archivist was born and the historical archives emerged, essentially as a repository of raw material for the historian who, using von Ranke's model as a prototype, would mine their rich veins of documentary evidence and found one of the most awesome heavy industries to come out of the age of steam!

The English approach reflected a totally different set of circumstances, but the results were virtually the same. Insofar as there was renewed interest in the early records during the Augustan age, it was to illustrate the evolution of an incomparable British Constitution. David Hume's immensely influential *History of England*, first published in 1752, became the ancestor of the German historical school, and Whiggish constitutional history was to preponderate in England for almost a century. It was this kind of pressure which led to the passing of the Public Records Act in 1838 and the establishment of the Public Record Office (PRO).

In the best tradition of legal fictions, a seemly appearance of continuity was maintained under the Act; the old Chancery repository, The Rolls Chapel, was first absorbed and then demolished; the earlier contents of the State Paper Office were also deposited in the Public Record Office; the Master of the Rolls, as Keeper, presided over the new institution whose administrator remained only Deputy Keeper until 1958. Certainly the ancient rolls continued to maintain their legal value, and Jenkinson was quite right later to stress unbroken custody in this context as a cornerstone of archives administration. It must be remembered, however, that for many years the deposit of departmental records remained voluntary and, until the Grigg Report of the 1950s and subsequent legislation, largely at the mercy of the administrations concerned.

Thus, the documentary record became central to the writing of history; the multifaceted, rich life of the so-called Middle Ages stood revealed; something akin to a scientific approach to the methodology of history developed, resulting from time to time in a marvellous union with literature and creative writing. The partnership of archivist and historian helped to advance our knowledge of the complexity of human affairs and the uniqueness of the individual, whatever else might be discerned in the broader sweep of events. Yet we have always remained deceptively far from the reality of "what actually happened," as we always will if we continue to ask this kind of question.

Perhaps it was the apparent impartiality of this new history which traduced the old keepers of the records and their masters into believing that in some way they, the historians, would make the past once and for all as intelligible and interconnected as the present appeared to be, and that all would be elegantly revealed without perhaps any further recourse to the records save on points of detail. Was "scientific" history seen by some of the emerging new archivists of the nineteenth century as a kind of integrated "finding aid" to the past, developed on historical principles, much as we dream today of that great data bank in the sky where all is recorded and retrievable to reveal ultimate synthesis and wisdom as a kind of mythopoeic counterpart?

I suggest that in Britain, across Europe, and so to in the United States and Canada, the old record keepers were caught up in a vast "historical shunt" during which the best curatorial minds and intellects were devoted to scholarship and the historian. The results, as we have seen, were as valuable as they were inevitable.

In England, the Public Records Act legitimized the divorce of the mainstream of records administration from the historical legal records which, as "the people's evidences," were generally regarded as the only "public records," in contrast almost to what might be called the "private" records of government officials which were notoriously inaccessible, and it is interesting that Jenkinson used not only the phrase "in their own custody" but also the phrase "for their own reference" in his famous definition of archives. Government records were for the business of ministers and bureaucrats and for their eyes only.

Departments were, however, permitted to deposit material in the PRO and there were signs that they used the new buildings as a convenient warehouse, but the Master of the Rolls never ordered departmental records into his custody even when they were in the PRO since he could not exercise authority over ministers of the Crown. This was still true in 1954. There was even a move afoot to reserve the PRO for legal records only and place the rest in the British Museum.

Administrative historians are largely silent about the effectiveness of departmental record-keeping systems from the sixteenth century, although there have of course been descriptions of their process. Ministers conducted their affairs in a highly personal way and many of their papers returned to their private estates. I rather suspect that, as the state business grew, paper became less and less retrievable, policies were based on less accrued evidence, and the useful life of records decreased sharply. In time, ministers came to leave a great deal of general administration to their clerks and, with their increase in education and executive skills, the "mandarins" emerged who had sat at the feet of historians, who had in turn used the European archives in the service of the diplomatic history of earlier courts and periods and who coloured their students' thinking accordingly with preconceptions of what diplomacy should be like. As William Irwin Thompson has reminded us:

History, by definition, is a civilized, literate record of events; it is a conscious self-image of a society projected by an elite. In a sense, history is the self-image of a culture, the ego of a culture. History is controlled through education and tradition, and is monitored, if not manipulated, by elitist institutions, whether these are temples, academies, or universities. History is the story told by the elite in power and is a way of articulating human time so that it reinforces the institutional power of the elite. One of the ways the British maintained Ireland as a colony was through the writing of history. The actual role of the Irish monks and the Irish centers of learning in maintaining knowledge in the Dark Ages was blanked out, and on that blank slate even brilliant men like David Hume wrote that there was no culture in Ireland until it was brought in by the conquering Normans in the twelfth century. So historical consciousness is closely related to power and the ego of a society. For these reasons, Voltaire said that 'history is the lie commonly agreed upon.'<sup>2</sup>

Meanwhile, the record keeping in government departments seems to have remained generally adequate, though no studies have been made as to how effective this was. Policy and administration were based on the limited, fragmented, and classified information available and the registry system which thus developed was to make a sharp impact on archival theory. The records were preserved when the system worked effectively, but to what extent was the information contained in the records retrievable by the administrator? This limitation would have had its effect on policy formation and the whole bureaucratic structure.

It might be argued that, of course, records management as conceived in the United States and elsewhere was the answer. Yet records management emerged more as an economical measure, linked with efficiency, often at the cost of effectiveness. The system dealt admirably with housekeeping records and operational records at the series level, but failed to secure control of deputy ministers' correspondence and those files which lived with the administrators and died when they left office, if not long before — perhaps after only two years. Not surprisingly, the wheel was constantly reinvented as new ground had to be broken. Many planning documents lacked sufficient depth to make them realistic.

<sup>2</sup> William Irwin Thompson, Darkness and Scattered Light: Four Talks on the Future (New York, 1978), p. 107.

The capture or initiation of control over records management by archival institutions did not solve this problem, because all that was added was a component called "historically" (or more recently "permanently") valuable material being scheduled for preservation for research purposes once it arrived in the archives. There was no way in which archivists could enhance the record's effectiveness while it was still active with the administrations, beyond ensuring that appropriate filing systems were in place through records management. Archivists were clearly viewed by everyone as being at the far end of the continuum, as "historical research officers" or whatever the term might be. In an age when present and past could be clearly distinguished, no one expected the bulk of records to yield more than a limited amount of information without a vast amount of research, only possible when the records become historical; at best, the system works tolerably well.

The electronic revolution and, in particular, automation is rapidly changing all this as we move out of the hard-edged sequential and linear visual space to once more the much older acoustic space of preliterate man. Barrington Nevitt has written:

Visual and acoustic space structures not only represent contradictory aspects of existence, but also opposite psychic preferences of literate and non-literate people. Visual space is a sanctum created by civilized man, just as acoustic space is a habitat inherited by natural man. For example, when a preliterate Eskimo draws a picture, he draws not only what he can see, but also what he knows is there. When asked which side of his drawing is up, he will laugh. For preliterate people have inclusive awareness, but no exclusive point of view. When a Canadian geologist accompanying a band of Indians on a survey once remarked 'We're lost,' they burst out laughing and said, 'We not lost. Wigwam lost.' Although the geologist got lost by losing his bearings, tribal people are never lost in their own environment. The pre-school child has similar space perception, even in strange environments, as did the little girl who was crying because she had lost her parents while wandering about in city streets. When asked by a sympathetic adult: 'Are you lost, little one?', she insisted, 'I'm not lost, I'm here.'3

This is not for a moment to suggest that we will somehow dispense with reading, writing, and print, but rather that we will become truly *literati*, that is "learned," in our perception and understanding of other media of communication and recover those insights lost to us through an emphasis on textual literacy.

A world which is exchanging relatively static centres and margins for centres everywhere and margins nowhere, has also become very dangerous as vast issues, such as national sovereignty and security through force and threat of force in the nuclear age, are called into question. To return to our own field of interest, archivists are not faced with cooperation or annihilation in the physical sense (though this may be true professionally if we are not careful): we see all our comfortable verities dissolving: the autocratic (or just fatherly) national archives with its preponderant resources staking out national perspectives, to some extent in competition with a welter of little fiefdoms in the provinces going it alone with all that vigorous

<sup>3</sup> Barrington Nevitt, The Communication Ecology (Toronto, 1982), p. 12.

independence which we once so much enjoyed; our delightfully idiosyncratic and persistently incompatible finding aids, and even our notion that all our records are in every sense "unique" in contrast to printed books; our self-satisfaction with our service to the user without really being aware that users (who are a patient and grateful lot by and large) get what they want or know what they can get despite our finding aids which barely scratch the surface of the potentially retrievable and valuable information in our custody. Instead, the Wilson Report reveals beleaguered whales and stranded minnows struggling to survive in a new environment where national archives are only first among equals (depending where you stand), networks are replacing sturdy independence, information cries out to be moved and merged, and the popular emphasis is no longer on history but on heritage with all its multi-media implications. Meanwhile, automation continues its inroads into government, industry, and even the home; rapid and accurate information is essential and the competition to provide increasingly cost-effective hardware and software is fierce. What is the archivist's role in all this?

It seems to me that this is our opportunity to enter once more the mainstream of record keeping and move out of the "historical shunt." We will always have to care for and service our inheritance of permanently valuable documents which will continue to be used in a greater or lesser degree for the writing of history as we know it, and there must always be what I will call "scholar archivists" to meet this demand and carry out research in such areas as modern diplomatic in support of both archivists and historians.<sup>4</sup>

At the same time, we must be prepared to abandon the concept of archives as bodies of "historical" records over against so-called active records which are put to sleep during their dormant years prior to salvation or extinction. Records are active in direct proportion to the relevant information that can be retrieved from them, and dormancy is closely related to the inability to retrieve information. This is particularly true of correspondence files, case papers, and of many separate routine transactions incapable of an aggregation which might enhance their value. On the other hand, machine-readable records can be analyzed by administrators, historians, and other academics with equal facility and on equal terms. The archivist as intermediary preparing intractable historical records, long since abandoned by administrators, for painstaking and protracted research by the scholar with the help of manual retrieval systems, is no longer required for the automated record. (Although, of course, data archivists have to appraise, validate, and document the automated record among their duties.) Now is the time for archivists to be present at the creation of documents, to ensure that they are designed not only to serve immediate administrative ends, but also administrative/historical research for policy planning and development.

It may be necessary from time to time to recognize quasi-archival functions within administrative departments of government where the nature of the records resists public access over long periods or where there is prolonged administrative use *in situ*, often as a result of effective retrieval systems. This becomes increasingly true where machine-readable archives are concerned and presents challenges to traditional

<sup>4</sup> For an excellent article on this role, see Tom Nesmith, "Archives from the Bottom Up: Social History and Archival Scholarship," Archivaria 14 (Summer 1982), pp. 5-26.

archival concepts which have to be carefully examined. In all these circumstances, the archivist should play a creative and supportive role close to the administration.

I would like to give an example of what I mean by examining archival values at the time of creation, although in this particular case archivists were not involved. In the early years of medicare in Saskatchewan, doctors were able to claim expenses dating back to the beginning of the scheme, with no cut-off date for submitting their accounts. In consequence, the automated record had to be kept "on record" and a valuable resource for the pattern of medical treatment of all kinds could be aggregated and analyzed for years to come. I do not know whether these tapes are still preserved. When I later raised this question in Nova Scotia, no such regulations were in force and consequently the tapes were erased.

We should then, by the nature of our training, be thoroughly equipped not so much with a knowledge of academic history as with a knowledge of automation, communication theory, records management, diplomatic, and the use of records in administration — a vast and little-explored intellectual field with historical dimensions of great importance. Good archivists are not, and never have been, limited to those with extensive historical training. I suspect this may become increasingly true.

If there are to be archivists within departments, what then is the role of the central archival repository and how will the user be affected? First, departments should be prepared to hire persons with archival training to function primarily as communicators of the record and its contents to administrators in need of information, even on a long-term basis. When such records cease to have even this extended use in departments, they would be transferred directly to the central archival repository and the departmental finding aids (far more sophisticated than at present) would be shared with the repository if this was not already the case. Housekeeping records and those with small research value, which have to be retained for a term, would continue to go to the Records Centre. The head of the repository would retain a veto on all destruction as is usual at present.

The object of this arrangement would be to prevent information potentially useful to the department from lying dormant, and at the same time in ultimate danger of destruction for want of a thorough understanding of its subsequent value, both short and long term, which departmental archivists would perceive.

Records received at the central repository would be for general public use, but researchers might well have improved access to records still in departments where archivists rather than clerical personnel would be in a better position to serve them perhaps under more liberal freedom of information guidelines. There would have to be a very close relationship between all archivists within such a network; departmental loyalties and priorities would have to be respected, but resources to aid research for both academic pursuits and government policy-making could be considerably enriched. Is this an impossible dream?

Given the changed information environment, we should increasingly encourage major institutions in the private sector to make use of the archivist not just as resident historian and custodian of the historical records, but as one versed in the whole nature of documentation and its implications, capable of supervising archives and records management, forms analysis (which is a modern concept of diplomatic)

and information management generally, or working closely enough with others in these fields to achieve the desired results whereby legal, administrative, and historical values are enhanced.

If we can become overarching information generalists with an archival emphasis, we will be able to bring to bear what should be a deep and thorough knowledge of the documentary life-cycle theory to which we now perhaps rather glibly assent. It may be our most important asset in relation to (I do not say in competition with) our colleagues, the librarians and other information specialists, who in time are likely to become not so much separate professions as special skills within a larger and more encompassing occupational group which, in fact, may cease to be a "profession" as we understand the term. Centres, margins, and other demarcations will become a problem here as elsewhere.

This is not the place for a lengthy discussion of the heritage phenomenon, but suffice it to say that here is a grassroots movement having much in common with other groups involved with the environment, participatory democracy, and personal identity. It embraces far more than literary history and, at its most perceptive, transcends genealogy and antiquarianism. It certainly requires of the archivist a more holistic approach to the past and a new relationship with museums and art galleries, which again is a move away from the traditional role of an archivist in the local context.

These grassroots movements are closely dependent on freedom of information and they have helped materially in extending the boundaries of "public records," which should be accessible to the public long before they reach the archives. The monopoly over certain information by government is being vigorously and quite properly challenged by interest groups who wish to join in well-informed debate requiring political decisions. Much of this information has been gathered at public expense and should be seen as the "people's evidences" of today but, if it is to be accessible, it must also be retrievable by the government as (if you like) the historical records of the most immediate past, which are no longer so easily distinguished from traditional (and older) historical records. For these first kinds of records are also the records upon which the public policies are formulated, and yet the information is not as retrievable as it should be.

To return to the public service administration, I would like to offer three quotations taken from *Optimum* and, therefore, having a Canadian context and relevance. Berliner and Bork wrote in 1977:

Historically, little information has been available for making policy decisions. Therefore, the question might be asked—is this information *really* essential? Since policies are the vehicles through which individuals and governments try to achieve selected objectives and, since good policies are almost always based on accurate and complete information, the answer to this question must be a resounding 'yes.' Policies not based on this type of information often result in the implementation of decisions quite different from those desired. Policies based on incorrect, incomplete or disjointed data result in the wrong information being communicated to the wrong person at the wrong time.... Good

information does not make good executives, but the contribution is enormous. With good information, they at least have a fighting chance; without it, they are reduced to exclusively depending upon luck.<sup>5</sup>

Two years later, Allan Cahoon wrote:

The consensus of persons attempting to understand the environment of public administrators today is the recognition of an increasingly complex organizational and administrative environment. A rational approach to policy making under these conditions requires the building of administrative machinery capable of using up-to-date methods for the collection, computation, analysis and dissemination of information. Public administrators need to be capable of forecasting and projecting the requirements of government. Government can no longer function as a close-knit, in-house decision group; instead it requires an eclectic approach to public-policy management. There is an increasing concern for issue analysis, as opposed to the more traditional specific program analysis. This produces a philosophical conflict between the public administrator's professional discipline orientation, and the need for system-wide organizational integration in decision making....

Because of the demand for more open government, public servants may very well be required to appear before parliamentary committees on a continuing and systematic basis. A main concern is that public servants, in trying to explain the relationship between the programs they are administering and the stated objectives of those programs, will simply not have a reasonable amount of relevant information arranged in a disciplined manner to discuss with parliamentarians. This could be disastrous.<sup>6</sup>

But the Treasury Board in a pilot project for the Task Force on Privacy and Access to Information found that:

One of the major problems identified from the project was the difficulty in associating groups of records with those administrators who have primary interest in their content. For accessibility to be effective, clear information linkages must be established. This difficulty with linkages raises a serious question as to *the inherent ability of government to respond to its own information needs, much less to external access requests.* Agencies with linkage difficulties will be required to spend significant resources to correct problems in and neglect of their information systems, policies and practices. These required expenditures do not result from ATI; rather, the problem has been forcibly highlighted in preparing for the access legislation.<sup>7</sup>

<sup>5</sup> Thomas H. Berliner and Cloene Bork, "The Role of Information in Public Sector Policy Making," Optimum 8, no. 2 (1977), p. 58.

<sup>6</sup> Allan R. Cahoon, "The Modern Professional Public Administrator: From Monitor to Integrator," Optimum 10, no. 1 (1979), p. 54.

<sup>7</sup> Timothy H. Reid, "The Failure of PPBS: Real Incentives for the 1980s (The past is not prologue)," Optimum 10, no. 5 (1979), p. 53.

Surely this problem of "linkages" is familiar to archivists?

I would like to suggest that there is in reality no break between the "current" and "archival" record and that this is a fiction of the historical method. There is a pressing need by government and public alike for more effective retrieval and for an archival training which recognizes this continuum and which could provide information specialists of appropriate calibre to work both in departments and in archives. This principle would equally apply to large institutions in the private sector. This action would take the profession out of the "historical shunt" and back into the administrative levels of departmental record keeping and among the policy makers where we belong.

As we become more secure in our perceived role, this would be a good time to examine the nature of the problems facing our colleagues, the librarians and information specialists, since some of them may have a commonality that deserves joint study. Certainly, we both administer (along with art museums) common media in printed maps and some aspects of audio-visual materials, such as paintings, drawings, prints, photographs, and film. Librarians are concerned to increase levels of retrieval in monographs beyond bibliographical authorities and a few limited subject headings. Retrieval from full text descriptive abstracts in the manner of scientific serials or from chapter headings is being discussed. As David Bearman has pointed out, library catalogues deal with authorities rather than subject content, and so does much archival description. Does the scope and content note of the so-called manuscript curator and the administrative/descriptive summary of the records archivist offer a parallel? Is this all too impressionistic, and do we need a hierarchical approach based on arrangement and carefully identified subgroups implying much subject content from their titles, as Richard Berner maintains? We may well have to seek formats which accommodate both approaches since the greater proportion of our descriptions is of the former kind. In any case, librarians and archivists should learn to speak a common language on this, even if solutions are widely different as we become increasingly literate in automation, and we must avoid disdaining this kind of literacy as jargon. Likewise, Estelle Jussim has drawn attention to her fellow librarians' failure to convey visual information through textual description, a problem which also faces us as archivists.

What then should we be doing at this time of scarce and sometimes shrinking financial resources? Some recent publications offer us admirable insights and guidelines: the Wilson Report which is familiar to all Canadian archivists, and those reports issued by the National Information Systems Task Force of the Society of American Archivists written by David Bearman and Robert Lytle, together with the draft Data Elements Dictionary produced by the same Task Force. Both these bodies are notable for their clearly defined if sometimes controversial priorities and both deserve our careful study. NISTF wisely moved away from its original mandate of trying to decide on one national system as between either the NARS/SPINDEX or the NUCMC model to consider the nature of the problem, the role of networks, and the need for standard communication formats between a multiplication of data bases. Bearman points out that networks (not necessarily automated) may be of value for sharing common needs, such as authority lists, in the first instance, rather than documentary content. In any case, the final step must be to define standard data elements and with this we may well agree. I remember how we set up just such a task force for the Archives Branch in the PAC and struggled with AACR2. Is there some

further experience there to be shared? Certainly, Canadian archivists should grapple with standards of arrangement and description *now* if we are to fulfill our role in the electronic information environment.

I hope that the user is seen to be present in all that has been said so far. Whatever we may contend about custody, the other polarity of the archival dialectic is access and use, which makes for creative stresses and tensions as we seek resolution and synthesis. The move on the part of many archivists to distance themselves from any special relationship with historians has caused much concern to historians and "historian archivists"<sup>8</sup> and may be another sign that we are moving out of the "historical shunt." When Sir Hilary Jenkinson and Dr. Felix Hull declared that an archivist should not be an historian, they certainly did not mean that most archivists should avoid the study of history as part of their professional preparation. Most archivists have, and new recruits will continue to have, a background in history; few would agree, however, that it is exclusively essential.<sup>9</sup> The English Public Record Office has in the past recruited many classics graduates (Sir Hilary himself being an example) as an admirable preparation for the study of mediaeval records and diplomatic. What Jenkinson, Hull, North, and others are saying is that there are professional archivists and professional historians with a profound difference of outlook which does not turn on techniques, but on the relationship to the record. The archivist is primarily concerned with the communication of the record to the user through preservation and all the subsequent processes with which users have become familiar. The historian (among other users of archives) exploits and interprets the evidence of the record for the user. The archivist must become aware of the documentary context of the record, both administrative and in terms of its form, which requires a study of diplomatic, ancient and modern, set within the larger frame of culture and society. Archivists have their time cut out performing these functions and their scholarly background, historical or otherwise, will help them in this task. Substantial historical writing should generally be restricted to the amateur part of their lives.

I do not deny that the first-class scholar archivist or "historian archivist" may bring a great deal of weight and insight to the record which we can all value, but I believe that the average professional archivist requires a "good second class" degree with evidence of skill in "archive administration" (to use an English term) which should not be confused with bureaucratic "management," although they are to some extent related. Experience with the *specific* records of an institution can be gained on the job. This is not an academic pursuit, but nor is it a job for records managers or insensitive bureaucrats.

From time to time I have stressed my reluctance to "professionalize" the archivist because I believe certain forms of professionalism can be excessively conservative

<sup>8</sup> For example, see George Bolotenko, "Archivists and Historians: Keepers of the Well," Archivaria 16 (Summer 1983), pp. 5-25.

<sup>9</sup> Michael Cook has also stressed this point: "A variety of first degrees provides a valuable base for a student group, and the expanding needs for archival management in specialist areas, particularly in science and research institutes, may mean that there will be some demand for archivists with a grounding in the natural sciences. More generally, it is an important requirement that archivists must emerge from their training able and confident in undertaking research which uses documentary evidence." Michael Cook, Guidelines for Curriculum Development in Records Management and the Administration of Modern Archives, a RAMP Study (Paris, 1982), p. 31.

and restrictive. This should not be confused with standards of excellence towards which we quite properly strive. I must reiterate that the archivist, as keeper of the record, administers and communicates by means of insights which are not limited to those of the historian, and as time goes by the historical approach may itself seem more and more restrictive. This is no more crucial than in the field of documentary appraisal for preservation, which does not depend solely on historical principles.

I do not believe that historians now or in the future will have any more reason to be disappointed with archivists than we may be with our friends the historians. We all have our limitations. We will not have preserved all that their hearts and minds desire, but as always we will provide some surprises which may compensate as a result of an essentially extra-professional approach! Most archivists learn to be generalists, and their skill and judgement lies here as we deal with the whole spectrum of document survival. There will also be specialists in media or content (including historians with Ph.D's). Our effectiveness will depend on a reasonable mix.

Perhaps the use of the term "ecology of information" in my title is now clearer. Both the records and the information they contain must be husbanded with the greatest of care if there is to be a fertile crop of knowledge and wisdom forthcoming. Last year I attended an absorbing lecture by Dr. Wes Jackson, one of the pioneers of sustainable agriculture. He spoke about the impact of agriculture on society as a form of quasi-industrial exploitation of the soil which is as old as civilization, and how the monoculture of highly specialized annual cereals, with the aid of chemicals as fertilizer and insecticide, destroyed and eroded the soil and may end by destroying us through starvation. In contrast, he described the marvelously variegated, flexible, mutually dependant, and self-sustaining grasses of the old prairie from which food crops were being bred to live and thrive together, in a similar way, to give a heavy perennial yield partly through a complex interchange of organic chemical and genetic "information." Specialized monoculture, fragile, vulnerable, and heavily dependent on external energy, Jackson described as "information poor." The sustainable counterpart was, in his words, "information rich." Are not archives, according to Jenkinson, the secretions of an organism? I cannot think of a better analogy to justify my title.

Other articles in this volume will develop the theme "Archives and the Law," and we use "the Law" in this way to mean the regulation of social practices by statute. We are quite right to concern ourselves with such matters, but we should remember that we are subject to laws of quite another order. We are part of all life on earth, subject to mysteries, rhythms, and cycles about which scientific discovery may be silent or misleading, but whose meaning may be revealed by the great myths distilled from human experience. This is the law beyond our control, but not necessarily beyond our understanding, which the archivist as shaman should seek to reflect and recognize in that which we preserve for the post-literate future:

Forms of knowledge change as society changes. Sometimes these changes are small and incremental; at other times the changes are transformations of the 'structures' of knowledge and not merely the 'contents.' From religion to philosophy, from alchemy to chemistry, from legend to history, the social organization of knowledge changes as a new elite comes in to challenge the old authorities. But this movement is not simply a linear and one-directional shift toward increasing rationalization and demystification; when the rational historian has come in to take away the authority from the mystical and tribal bard, the artist has returned to create new forms of expression to resacralize, re-enchant, remythologize.<sup>10</sup>

Perhaps "record keeping in a mythopoeic age" would be a good theme for a future conference of the Association of Canadian Archivists or a future issue of the journal.<sup>11</sup> I suspect it will be after my time.

<sup>10</sup> William Irwin Thompson, The Time Falling Bodies Take to Light: Mythology, Sexuality and the Origins of Culture (New York, 1981), pp. 3-4.

<sup>11 &</sup>quot;Myth is not an early level of human development, but an imaginative description of reality in which the known is related to the unknown through a system of correspondence in which mind and matter, self, society, and cosmos are integrally expressed in an esoteric language of poetry and number which is itself a performance of the reality it seeks to describe. Myth expresses the deep correspondence between 'the universal grammar' of the mind and the universal grammar of events in space-time. A hunk of words does not create a language, and a hunk of matter does not create a cosmos. The structures by which and through which man realizes the intellectual resonance between himself and the universe of which he is a part are his mathematical, musical, and verbal creations. Mediating between Nous and Cosmos is the Logos." William Irwin Thompson, At the Edge of History (New York, 1972), p. 191.