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## Memorandum

**To :** ASA Descriptive Standards Committee  
**Subject :** The Scaleability Principle under the "Australian" System

**From :** Chris Hurley  
**Date :** 13 October, 2002

This memorandum is written at the request of the Committee at its meeting of 9 Oct., 2002.

Scaleability is the method we use to document one recordkeeping "system" by means of another. All archival description uses it to a greater or lesser extent, providing us with the means to fulfil the primary purpose of all recordkeeping - documentation of business (rather than discovery of content).

In the Australian ("Series") System, scaleability enables us to unpackage the archival *fonds* into its component entities without violating fundamental principles for the preservation of evidence. Without scaleability, we would be unable to document a *sous fonds*, for example, without reference to a superior *fonds* which is itself locked into the same co-ordinates of time and space. It is this principle, therefore, which enables us to operate in the way which most distinguishes the Australian System from other approaches.

Peter Scott made two key contributions :

- First, he proposed that archival description should itself be managed as a recordkeeping process – essentially by applying registry methods to the task of describing registry systems. This represents the unique contribution which we have made to descriptive practice. It is our way of applying scaleability to archival description.
- Second, he proposed that principles of synchronisation, borrowed from linguistics, should be used to solve the problem of changing relationships between entities. This is what enables the Australian ("Series") System, uniquely, to deal with asynchronicity and to document live recordkeeping systems concurrently, and not just to document the detritus of dead recordkeeping processes as other archival descriptive methods must do.

It is these two contributions which differentiate the Australian System from other methods of archival description. Scaleability is not unique to the Australian System, all archival descriptive practice employs it. What distinguishes the System is not the fact that it uses scaleability, but the way in which it is used.

As we know, archival documentation is unlike its bibliographical cousins, which seek merely to profile information resources. Archival description is, rather, a contribution by the archivist to the process of making and keeping a particular kind of information resource – viz. the evidential record. It is the capacity of archival documentation to enter into the process of making and keeping the information resource (in traditional terms, its "preservation") and not merely to describe it which makes it a preservation system or (if preferred) a recordkeeping system.

I am not using the term "recordkeeping system" here in the sense that David Roberts is urging us to sponsor. Indeed, I think that term should probably be discarded in the discussion of scaleability altogether. I would prefer to say "process". Recordkeeping involves a variety of processes connected (or not) by a recordkeeping system (or systems). Traditionally, for example, the record-making process (the registry) and the record-keeping process (archiving) were not connected until after the registry process had ceased and the archiving process had cut in (following transfer). A connection was then established between the two processes by systematically connecting the two processes into a single system.

Traditionally, the archivist treated the remains of a registry process as a corpse and simply used scaleability to enshroud it with archival data. The Australian System, on the other hand, has the potential to join a living archiving process to a living registry process into a single recordkeeping system which remains animate in all respects. Regrettably, this potential has been largely lost amongst practitioners of the Australian System who have increasingly (post-Scott) used it for collection management purposes merely.

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Archival documentation systems were devised in the paper world in response to a specific problem in archival management – how to keep alive the evidential meaning of records wrenched out of the context in which they were created. Traditional methods dealt with this problem by preserving the physical integrity of the *fonds* once it had passed out of the environment of creation into the archives. This method assumed that the physical *fonds* contained all of the meaning needed to preserve its evidential value. The Australian System was devised primarily to meet the difficulty that the physical *fonds* did not always represent a single, coherent residual context, but could, instead, represent the detritus of a sequence of contextual transformations which could not descriptively be dealt with using traditional methods.

(We now see that, even without the complications of synchronic alignment, the *fonds* lacks comprehensive documented contextual meaning in any case – viz. parallel provenance).

Conceptually, there was always a need for archival description to enfold the *fonds* with an overlay of contextual meaning in a way which invokes the scalability principle. Even the most traditional finding aids envelope the *fonds* with an additional layer of contextual meaning designed to preserve evidence. When a *fonds* is transferred into an archives it simply enters a new contextual environment in which it must be given additional contextual description in order to preserve it within the domain of the archives – which usually contains other *fonds*. Even critics of the System now mostly acknowledge that transfer to archives is often not the first time many *fonds* have this experience, though they might not understand it in this way. The record-keeping process which the *fonds* itself embodies can no longer preserve the evidential meaning of the constituent records when transferred into the archival environment because it will no longer be distinguishable from other record-keeping processes within that environment – unless the archives integrates all the *fonds* it holds into the archives' own recordkeeping process, designed to maintain the integrity of the constituent records by documenting and preserving the context of each *fonds* it maintains.

The parallels with recordkeeping in cyberspace are obvious.

In this way, the archival process (maintained by the archives) and the recordkeeping process(es) maintained by the creator of the *fonds* become integrated and mutually supportive, notwithstanding their different genesis into a recordkeeping system (or process). The scalability principle is what permits the archival description to embrace and document (and preserve) the record-keeping process which underpins the evidential integrity of the component parts of the *fonds* in the first place. It does not do this by integrating the components of the *fonds* into a collection, but rather by preserving the functionality of the "dead" record-keeping process inside the functionality of the archival record-keeping process. Under traditional archival practice, the record-keeping process of the registry had to be "dead" for descriptive process to be effective. What is distinctive about the "Australian" System is the way it uses the scalability principle to document both dead and live recordkeeping systems (in David's sense). Indeed, the logic of the Australian System (in theory, if not always in practice) is that recordkeeping systems never die. Our purpose is life-support, not obituary.

It will be seen, therefore, that while scalability is a component of all archival description which is true to fundamental principles, its application in the Australian System is more innovative. The significance of this is twofold, in:

1. suggesting the correct approach to be taken when linking archival documentation programmes
2. providing a theoretical basis for documenting electronic recordkeeping.

It will not be feasible to undertake networking or electronic recordkeeping by transforming record-kept resources using systems designed purely (or even principally) for preservation or distribution. The methods implicit in the Australian System (as originally conceived) do not lead in that way. The resources required would be prohibitive in terms of the limited goals of collection management and discovery. Moreover, the results would violate our recordkeeping purposes, which are to preserve evidential meaning.

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Mere metadata alone will not do it either. What we need is contextualising (recordkeeping) metadata. We used to preserve evidence in physical space by contextualising recordkeeping systems in archival finding aids. In cyberspace, it will be necessary to contextualise recordkeeping processes using metadata management systems which, like finding aids, have to incorporate the scalability principle (if they are to preserve evidence). We do not yet know how to do this outside of the fairly primitive archival processes which are used to accession stuff into archival repositories and to network descriptions of those collections, so much work remains to be done.

In relation to (1), it will be seen that it is the scalability principle (as applied within the Australian System) which enables a single archival documentation programme to engulf many *fonds* without disturbing or destroying the evidential integrity of the recordkeeping systems which they preserve and without any need to redocument the constituent parts of the component *fonds*. Using the same theoretical construct, it will be possible for many archival documentation programmes (being themselves just a form of recordkeeping system) to be enfolded within a larger context or another dimension, without any need for disturbing or redocumenting the constituent programmes. In my 1986 Report on Standardisation to ACA, I suggested this could be done using a documentation strategy. It is now more likely to be accomplished using a metadata strategy.

In relation to (2), it will be seen that the elimination (conceptually, if not actually) of the custodial barrier will require the integration of electronic recordkeeping systems and with some kind of contextualising metadata management system, employing the Australian application of the scalability principle. This will be necessary to preserve evidence in cyberspace just as it was once necessary to preserve evidence passing out of the home environment and into an alien archival environment. Archives programmes, given their current preoccupations with collection management, seem unlikely to rise to the challenge of providing such systems. Whether or not they do hardly matters. Whomsoever emerges to undertake this work will be the real archivists anyway.

Further in relation to (2), at the other end of the granularity axis, scalability (as practiced within the Australian System) provides a method of integrating diverse and otherwise unrelated processes in record-making (starting, I suppose, with a re-integration of business processes and recordkeeping processes). This is the whole area of micro-functions, usually comprehended within RMS by that gloriously all-embracing term "business rules". Using an extension of the methodology deployed in the System (based on scalability) to integrate record-making and record-keeping processes into a single recordkeeping system when records are transferred into an archives, we can (with very little imagination) see how a registry/business processes can be joined to a work-flow process in a business operation to make an integrated recordkeeping system. This is why I say it is the "solution" to the problem of e/records. Ten years ago I would have said confidently that we would be there by now. Now, I'm not so sure we're going to make it (sigh).

Both these issues are examples of the same problem : how to contextualise information in cyberspace by reference to circumstance, rather than knowledge or imagination. The answer has been known for thousands of years – put it in an archives. Scalability (as applied in the Australian System) is simply the methodological part of that answer.

Chris Hurley  
13 October, 2002.