Archives & Records, 2013
Vol. 34, No. 2, 235–247, http://dx.doi.org/10.1080/23257962.2013.830066

Routledge
Taylor & Francis Group

Developing descriptive standards: a renewed call to action

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Just over a quarter of a century ago (1987) Canadian archivists published a call to action. More specifically they called for the development of descriptive standards. Moving forward to today, a number of standards are now in existence, information exchange about holdings is commonplace and archivists have not failed to take advantage (although arguably not full advantage) of the opportunities automation offers. This article provides a selective overview of the history of descriptive standards development to propose that despite a long history of such development, there is still no standard for archival description. To support this perspective, it draws a distinction between information exchange and archival description, and suggests that the use of such a distinction will offer a clearer vision of the area to inform future action.

Keywords: standards; archival description; metadata; information exchange

Just over a quarter of a century ago (1987), Canadian archivists published a call to action. More specifically, they called for the development of descriptive standards. In making the case for such standards, they argued (amongst other things) that the existence of standards would 'facilitate the exchange of information about holdings between archives' and allow archivists 'to take full advantage of the opportunities automation offers'.[1] Moving forward to the present day, a number of standards are now in existence, information exchange about holdings is commonplace and archivists have not failed to take advantage (although arguably not full advantage) of the opportunities automation offers. The extent to which this transformation has been dependent on, or caused by, the development of descriptive standards is difficult to judge, nor is it a question that will be addressed here. Rather, this article seeks to examine the past milieu of standards development, information exchange and automation in order to provide a clearer vision for the future and a renewed call to action.[2]

In order to begin to define this milieu, I will provide a selective overview of the history of standards development to indicate the perspective I am taking. This perspective proposes that despite a long history of descriptive standards development, there is still no standard for archival description. To support this perspective, I will seek to draw a distinction between information exchange and archival description, one which is too often overlooked in the narrative of standards development, but which becomes clearer in the debate over metadata versus archival description held by the profession in the 1990s to early 2000s. Through this discussion, a clearer vision of the area will emerge to inform future action.

A selective history of standards development

This history will start 10 years before the 1987 Canadian call to action. In 1977, the Society of American Archivists established the National Information Systems Task Force

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(NISTF), a body that appears to have been flexible with regards to defining its remit. For, as Richard Lytle explains in his history of the work of the Task Force, those involved moved away from a position which focused on 'an information retrieval system to make archival collections widely available to researchers' and 'the notion of establishing a national system', towards an attempt 'to establish the precondition for archival information exchange'.[3] This attempt resulted in a data elements dictionary and a machine readable format for archival information exchange, which became known as USMARC Archives and Manuscripts Control (AMC).

In the UK, British archivists were also working on the development of a data element dictionary of sorts through the work of the Methods of Listing Working Party.[4] Subsequently, an Archival Description Project was established, which led to the publication in 1986 of the first edition of the *Manual of Archival Description* (MAD1).[5] Those developing MAD1 were not unaware of the work of NISTF and they made mention of it within that volume in terms of an attempt 'to construct a library-compatible standard for archival description'.[6] Whether Richard Lytle and the other members of NISTF would have agreed with this characterisation of their work is a moot point. Lytle's own characterisation (outlined in the previous paragraph) is certainly different, and it is with this difference that one of the distinctions under consideration in this article starts to appear. What Lytle thought had resulted from NISTF was a 'machine-readable format for exchange of data about archives and manuscript collections', not 'a library-compatible standard for archival description'.[7] Indeed, Lytle also writes that NISTF had deliberately tried to avoid being 'led into the depths of the descriptive standards problem'.[8]

The descriptive standards problem was soon confronted, however. For example, also in 1986 the Bureau of Canadian Archivists established a Planning Committee on Descriptive Standards (PCDS), to build on the work of an earlier Working Group on Archival Descriptive Standards.[9] In 1988, an Invitational Meeting of Experts on Descriptive Standards was convened by the International Council on Archives (ICA) in Ottawa, and following on from this, the ICA Ad Hoc Commission for the Development of Descriptive Standards (ICA Commission) met in December 1989. Then again, the Fall 1989 issue of *American Archivist* included the report of a (US) Working Group on Standards for Archival Description (WGSAD). This Working Group included a number of individuals who had served on NISTF, and the introduction to their report makes the point again that, at least for some, USMARC AMC was not seen as a standard for archival description, since they write of a

> growing awareness that while USMARC AMC provided guidance for exchanging information in a national database – a very small piece of archival descriptive practice – there was little agreement within the profession about what standards for archival description, if any, might be beneficial.[10]

More fundamentally, they also speak of the realization that 'in truth, most of us were not very sure we really knew what was meant by the term archival description'.[11] Perhaps this was part of the descriptive standards problem NISTF had sought to avoid and to a certain extent WGSAD continued the trend, since they dealt with it by producing a short definition for archival description and then moving on.

The place to which WGSAD moved on was completely different from where the ICA Commission ended up. For, although the ICA Commission sought to develop both a statement of principles regarding archival description and a draft of what was to become the *General International Standard Archival Description* (ISAD(G)), WGSAD eventually produced *Standards for Archival Description: A Handbook*, which detailed the plethora of

'technical standards, conventions and guidelines used by archivists in describing holdings and repositories'.[12] These standards ranged from *ISO 7498-1: 1984 Information processing systems – Open Systems Interconnection – Basic Reference Model* to *The Chicago Manual of Style* and covered areas such as automated systems and network specifications, codes, statistics and labelling and filing. Their multiplicity reflected WGSAD's realization that archival description, that is 'the process of capturing, collating, analysing, and organizing any information that serves to identify, manage, locate, and interpret the holdings of archival institutions and explain the contexts and records systems from which those holdings were selected', took place in a much wider context than they had previously appreciated.[13] As Lawrence Dowler put it,

> once one begins to consider standards for description, and even more, the standards needed to communicate information beyond one's own institutional walls, other people's and other professions' standards necessarily come into play.[14]

By contrast, the work of the ICA Commission did not explicitly act on this expanded consciousness and scope. For example, although the version of *ISAD(G)* published in *Archivaria* in 1992 speaks of the rules being designed to 'facilitate the retrieval and *exchange* of information about archival material' (my emphasis), it also speaks of them making possible 'the integration of descriptions from different repositories into a unified information system'.[15] The underlying assumption, previously questioned and abandoned by NISTF, that 'the object of [. . .] concern was an information retrieval system to make archival collections widely available to researchers' would appear to have been firmly in place in the development of ISAD(G) and contexts falling outside this vision did not get much consideration.[16]

Instead of acting on a recognition that 'other people's and other profession's standards necessarily come into play', the ICA Commission paid more attention to the question of 'what was meant by the term archival description'.[17] To this end, the ICA Commission also came up with its own definition for archival description, but it did so in the context of a much more extensive Statement of Principles.[18] WGSAD's definition of archival description has been quoted above and that of the ICA Commission shows a degree of overlap, whilst differing in a number of ways. It is reproduced below so that readers can undertake their own comparison:

> creation of an accurate representation of the fonds and its component parts by the process of capturing, collating, analyzing, and organizing any information that serves to identify archival material and explain the contexts and records systems which produced it.[19]

As was mentioned earlier, accompanying this definition, the ICA Commission also developed a Statement of Principles and this proved to be very controversial, as this evocative description shows:

> At this congress [the XIIth International Congress on Archives held in September 1992 in Montreal] the Ad Hoc Commission held an open forum on the *Statement* and the Madrid draft of ISAD(G) [. . .]. There was great interest as the room set aside for the forum proved to be too small to accommodate all. There was opposition to some of the principles, from the United States and the UK but mainly from Australia. In particular that of the concept of the fonds and the departure point of application of the standard of description taking place after arrangement and after the archives has taken custody of the material. Right in the middle of the heated discussion, all power in the building went out due to a raging thunderstorm over Montreal and the room went totally dark. This cooled the discussion down somewhat. The end result was that a member from Australia, Chris Hurley, was added to the Commission to represent the divergent views. At the plenary of the Commission in Stockholm in January 1993 it was decided to let the *Statement* stand but not to publish it.[20]

Chris Hurley has subsequently spoken of the decision not to publish the Statement of Principles as 'a manoeuvre to cut off further discussion', which would suggest that he, and presumably also those whose divergent views he represented, did not come to a point where they felt they could agree with it.[21] We shall return to these divergent views at a later stage, but for now, it is enough to point out that a number of archivists have, to a large extent, eschewed ISAD(G) and taken their descriptive standards in a different direction. Thus, it is possible today to discern (at least) two distinct suites of descriptive standards in the archives and records management field. The first of these falls under the aegis of the ICA and consists of, in addition to ISAD(G), International Standard Archival Authority File (corporate bodies, persons and families) ISAAR(CPF), International Standard for Describing Functions (ISDF) and International Standard for Describing Institutions with Archival Holdings (ISDIAH). The second falls under the aegis of the International Organization for Standardization (ISO) and includes ISO 23081-1: 2006 Information and documentation – Records Management processes – Metadata for Records – Part 1: Principles and ISO 23081-2: 2007 Information and documentation – Records Management processes – Metadata for Records – Part 2: Conceptual and implementation issues. The second of these suites has, as Joanne Evans has elaborated, been influenced by prior standards development in an Australian context.[22]

Returning then to the history of standards development, there is still more to be said, for the story is far from complete. As was mentioned earlier, the British developers of MAD1 appear to have seen the work of NISTF as an attempt 'to construct a library-compatible standard for archival description'.[23] Exploring what may have lain beneath this view, it is difficult to escape the conclusion that it was, to some extent at least, the principles later enshrined in the ICA Statement, in particular those inherent in the idea that archival description was the 'creation of an accurate representation of the fonds and its component parts'.[24] Archival description was seen as essentially multi-level, and as such the developers of MAD1 felt that

> In principle [. . .] no international or interdisciplinary standard will be satisfactory for archival description unless it allows for the interchange of data at all levels of description, and using all possible combinations of level.[25]

A question that is worth asking then is whether or not USMARC AMC allowed for the interchange of data at all levels of description. The answer would seem to be that potentially it did. For example, in Jennifer Hogarth and Gillian Martin's 1992 *Survey of Automated Practice in Selected Record Offices and Other Archive Units*, mention is made of the fact that at the Victoria and Albert (V&A) Museum in London, archival listing was done in USMARC format, and that

> The Archivist requested that the software [Dynix database] be customised so that the archival hierarchy [. . .] could be seen on the screen. This was achieved by providing an enhanced analytics function. If necessary five levels of description can be accessed.[26]

In practice though, this potential was rarely realized. After all, USMARC AMC was a MARC format, and the MARC formats and the systems based on them were initially developed in a library context, which did not share the archival practice of multi-level description. Much of the archival use of USMARC AMC during the 1980s and early 1990s resulted in the creation of higher level descriptions of whole collections of material and their incorporation into wider bibliographic databases, such as those managed by Online Computer Library Center (OCLC) and RLIN (Research Libraries Information Network), although at least one system was developed around USMARC AMC in a more specifically archival context, namely MicroMARC:amc.[27] Equally, the majority of the archival use of

USMARC AMC took place in the USA, where the archives and manuscripts tradition meant that there was already a closer association with libraries in place.[28] The V&A example mentioned earlier should be seen then as very much the exception, rather than the norm.

Another reason for the MAD1 view of USMARC AMC as 'library-compatible' came from its association with the library world's Anglo American Cataloguing Rules 2nd edition (AACR2). The developers of MAD1 had found themselves unable 'to find a way of recommending a descriptive system which conforms to AACR2 standards'.[29] This stance was not shared by professionals in North America. For example, in Canada, an early decision had been taken by those charged with overseeing the development of the Canadian descriptive standard, *Rules for Archival Description*, (the PCDS mentioned earlier) to 'base them on the *Anglo-American Cataloguing Rules*, second edition revised'.[30] This decision did cause some issues though, and Hugo Stibbe speaks of how 'with each new chapter, new demands were made on the issue of compatibility with AACR2'.[31]

Then again, in the USA, archivists were more likely (than they were in the UK) to work in environments where they had to conform to AACR2 standards and so, at roughly the same time as NISTF were undertaking the development of what would become USMARC AMC, others were seeking to devise a manual to support those in this situation. The result of these efforts was *Archives, Personal Papers and Manuscripts* (APPM), which was first published in 1983.[32] The manual aimed, according to its author Steven Hensen, 'to offer archivists and manuscript curators a set of standards for the description of archival and manuscript materials that is faithful to archival principles while remaining within the general approach and structure of library cataloguing as embodied in AACR2'.[33] As we have seen, one of these principles concerned the need for multi-level description, and one particular rule within APPM set out 'three recommended levels of description and the elements necessary to each level'.[34] The separate development of USMARC AMC and APPM was not planned to connect, but they did and this facilitated much information about archival resources being placed in large bibliographic networks.[35]

Ultimately though, it is not the issue of AACR2, so much as that of multi-level description that leads to the next stage in this story, the development of Encoded Archival Description (EAD). In 1993, a project was initiated at the University of California, Berkeley to develop a machine readable encoding standard not for archival description per se, but rather for finding aids. In this, it reflected the archival environment in which its developers were operating, whereby, as Daniel Pitti explained:

> The generalized descriptions found in AMC records can only lead the researcher to a collection which may have individual relevant items. The researcher must next consult the assortment of inventories, registers, indexes and guides, generally referred to as finding aids, with which libraries and archives have achieved administrative and intellectual control of archival materials in the form of in-depth, detailed descriptions of their collections.[36]

The advent of USMARC AMC and APPM had led to a situation in the USA where some limited information about archival resources was being exchanged and made more widely available, but the developers of EAD wanted more and, with the beginnings of the Internet, what more might entail was even more than could have been conceived of previously. They wanted to provide 'universal access to primary sources' and 'union Internet access to the nation's finding aids for archives and manuscripts'.[37]

NISTF had already established that a vital 'precondition for archival information exchange' was a machine readable encoding standard and they had based theirs on MARC.[38] However, times had changed by 1993 and the developers of EAD had a whole

new field of mark-up languages to play in. Ultimately they chose, not MARC, but Standard Generalized Markup Language (SGML) (and later Extensible Markup Language (XML)). Their reasons for doing so are as worth stating today as they were back in 1997:

> First, like MARC, SGML is a standard (ISO 8879). It comprises a formal set of conventions in the public domain, and thus is not owned by and thereby dependent on any hardware or software producer. Second, unlike MARC, SGML accommodates hierarchically interrelated information at as many levels as needed. Third there are no inherent size restrictions on SGML-based documents. Finally, the SGML marketplace is much, much larger than MARC's.[39]

As far back as the early 1990s then, the developers of EAD were thinking in terms of open source solutions and also ones which recognized the advantage in using an underpinning technology which was not just used by the library/archive community. Equally though, they were not maintaining, as NISTF had before them, an agnostic position with regards to the 'descriptive standards problem', but rather they were placing themselves very much in that tradition of archival description which led to the creation of finding aids of a certain form.[40]

The above history of descriptive standards development is not intended to be comprehensive. For example, it does not say much about recent (from about the mid-1990s) developments, nor does it focus in any detail on exploring or elaborating the differences in contexts and trajectories of standards development in the countries mentioned (Canada, Australia, UK and USA). Then again, on standards development outside those countries, or in other related fields, it is completely silent. It is rather, and self-avowedly so, a selective history, and these selections have been made to introduce the idea that there is a distinction to be made between information exchange and archival description. It is to this distinction that we now turn.

Information exchange versus archival description

Looking at the many projects mentioned earlier, a few, with NISTF as the prime example, were very clear that what they were concerned with was 'archival information exchange' and not archival description as such.[41] Most, however, have not been so clear and this fuzziness finds expression, for example, in the Canadian 1987 call for action which started this article and in which there was discussion both of how 'the arrangement and description of archives lies at the very heart of archival work' and also of 'the exchange of information about holdings between archives'.[42] Similarly, the version of ISAD(G) published in *Archivaria* in 1992 is both overtly a 'set of general rules for archival description' and designed to 'facilitate the retrieval and exchange of information about archival material'.[43]

One reason why I am seeking to highlight a difference between information exchange and archival description is that it may help the profession to negotiate more successfully the distinction between an outward and an inward looking focus. Being clear in the focus on information exchange means that it is a lot easier to see the benefit and not the betrayal of professional principles in the adoption of standards from outside the profession. Those involved in NISTF, focussed as they were on information exchange, did not see the adoption of a standard (the MARC format) from the library world as a problem. However, for those, like the developers of MAD1, whose focus was more firmly directed towards archival description, it was a problem. After all, a focus on archival description is a focus on what 'lies at the very heart of archival work'.[44] It is an inwards focus that necessarily implies a boundary between those doing its 'archival work' and those not doing it, such

as librarians and the sort of IT specialists who created SGML and other mark-up languages.

It is, of course, important for the profession to be both outwards and inwards looking, but I would suggest that it is quite difficult to be both at the same time. Indeed I think that, despite the fuzziness discussed earlier, most of the projects outlined earlier have not managed to focus on both information exchange (outwards looking) and archival description (inwards looking) and have, either explicitly or implicitly, always favoured one or the other. For example, WGSAD was in action, if not in title, concerned less with archival description, and more with information exchange, recognizing the fact that information about archival resources was starting to escape into the wider world and that, as such, 'other people's and other professions' standards necessarily come into play'.[45] Then again, and perhaps more controversially, I would also argue that the development of ISAD(G), for all that it seems to be focussed on archival description, was increasingly focussed on information exchange and has ultimately led to a standard for just that.

In my opinion then, there is still no standard for archival description. Why else would the profession have failed to agree on the 'Statement of Principles Regarding Archival Description' developed under the aegis of the ICA? Why else would there be in existence today two seemingly opposed sets of standards; those also developed under the aegis of the ICA and those developed under that of the ISO?

Metadata versus archival description

It should be clear by now then, that I do not see in the history of archival descriptive standards development much in the way of a focus on answering the question of what archival description is, what 'it' is that lies at the very heart of archival work. Rather to see this, I turn to another history, that of the metadata versus archival description debate.

It was at the beginning of the 1990s, in the context of early attempts to get to grips with the challenges presented by electronic records that writers such as David Bearman, Charles Dollar, David Wallace and Margaret Hedstrom started to raise the issue of metadata.[46] They sought, amongst other things, to draw connections between the data held in data directories and dictionaries and the descriptive data required by archivists. Eventually in 1995, Wendy Duff asked the question 'Will Metadata replace Archival Description?', but she concluded that the difference contested was not so much that between metadata and archival description, but rather one of a 'differing emphasis on the impartiality of records'.[47] This seemed to relate to a difference of opinion about the extent to which archivists should intervene in the earlier stages of the record life cycle and, consequently, the extent to which archival description should be seen as an activity that takes place only at the end of that life cycle. The point at issue then seemed to be, as Hedstrom and Wallace had pointed out two years earlier, that electronic records archivists 'challenged the timing of description that occurs after records are selected for permanent preservation, transferred to an archival repository, and arranged' and 'were adamant in their determination to reorient archival intervention to the earliest stage of the life cycle: system development'.[48]

With the benefit of hindsight, the metadata versus archival description debate can be seen as connected to the debate we now conceive of in terms of the life cycle versus records continuum models. And so, looking back to the divergence of standards outlined earlier, it is not surprising then that there is a connection between standards for metadata for records and the Australian tradition that spawned the continuum model, and standards for

archival description and those more versed in the life cycle model. Care should be taken, however, not to dismiss the metadata versus archival description debate as being simply about the difference between continuum and life cycle models without examining it more closely.

In 2000, a working meeting was held at the Netherlands Institute for Archival Education and Research which dealt once again with 'Metadata versus archival description'.[49] The meeting recognized that there was still confusion about the relationship between the two, but the point at issue was not framed as being about the life cycle versus continuum models. For example, in drawing up a definition of recordkeeping metadata as 'structured or semi-structured information which enables the creation, management and use of records through time and within and across domains in which they are created', the participants also agreed that the definition should 'encompass the active recordkeeping and archival environments'.[50] Then again, in the third working session, the participants divided into two groups to look at the issue explicitly through either a life cycle or a continuum lens and concluded that they did not want to focus on 'how to draw distinctions between these two outlooks'.[51]

Rather, what emerged as concerns during the meeting included the so-called 'domain and time issues', which encompassed the more practical question of how to maintain metadata over time, as well as the more theoretical idea that 'what may make the recordkeeping community unique is the intersection of interest in cross-domain and over time transfers of records'.[52] And it was in the shift of focus to this last aspect that the distinction between life cycle and continuum approaches appears to have finally been outgrown; for the third working session concluded that what should replace the focus on drawing that distinction was an understanding of 'how responsibility for recordkeeping shifts across [...] time and domains'.[53] Moreover, it was in this context that Margaret Hedstrom noted that 'the records continuum model is especially useful because of its sensitivity to cross domain transfers of records and the life cycle model is valuable for its notions of transfer of responsibility that coincide with points on the records life cycle'.[54]

Another concern that emerged during the meeting was the need to connect with other communities and yet identify what is different about the recordkeeping community's particular metadata requirements. As David Wallace put it, 'how can recordkeeping professionals exploit existing metadata standards outside of the profession and how can we represent our metadata approaches to other domains?'[55] In this way, Wallace was explicit about both the need to be and the difficulty in being both outwards and inwards looking, discussed earlier. Ultimately though, I would contend that the metadata versus archival description debate was an inwards looking one. For what interested those involved in it was more, as David Wallace chose to phrase it, 'what are we describing with metadata?'[56] They were concerned with what had always lain at the heart of the matter for the metadata pioneers struggling with the challenges of electronic records: an interest in what it meant and how it was possible to have and preserve authentic records in and over time; an interest in what lay at the heart of archival work.

Following the working party on metadata versus archival description, a seminar was held. At this seminar, Duff presented a paper (later published) in which she sought to compare ISAD(G), mentioned earlier, and the Business Acceptable Communication (BAC) model, which had been developed at the University of Pittsburgh in the early 1990s.[57] This model arose from a project, which was funded by a grant from the National Historical Publications and Records Commission to look at the issues raised by electronic records. Many of the electronic records archivists, who are discussed earlier, such as David Wallace and David Bearman, worked on this project.[58] In making her comparison, Duff

sought to argue that 'different archival views guided the work'[59] and that, whereas those developing BAC were interested in 'identifying metadata needed for electronic records to serve as evidence', those developing ISAD(G) were 'interested in exchanging data about their holdings'.[60]

Duff's work then helps to illustrate further what the distinction between information exchange and archival description being posited in this article actually means. As she points out, '*ISAD (G)* does not specifically discuss the authenticity of records'.[61] I believe it is an inescapable fact that the authenticity or record-ness of the material being described is to a large extent implied or assumed in *ISAD(G)* and many other standards for archival description. That is not to suggest that those developing such standards were completely uninterested in authenticity, but for them, as Duff points out in respect of ISAD(G), 'authenticity was linked to preserving provenance, and therefore to representing the fonds and its parts in a multi-level description'.[62] The question of authenticity was one which was already dealt with through the arrangement and sorting processes that made up, and the theory (of provenance and original order) underpinning, the existing archival description which it sought to standardize in the pursuit of effective digital information exchange.

To my mind then, the standard that has shown the most continued and consistent attention to and focus on archival description in its development is ISO 23081, a standard not for archival description, but for metadata for records. For, it is not interested, as ISAD(G) is, with making 'possible the integration of descriptions from different repositories into a unified information system' and facilitating 'the retrieval and exchange of information about archival material', rather it is interested in 'the creation, registration, classification, access, preservation and disposition of records through time and within and across domains'.[63]

Developing descriptive standards: a renewed call for action

At the beginning of this article, I set myself the aim of providing a clearer vision for the future. This vision I have now started to construct through drawing a distinction primarily between a focus on information exchange and one on archival description. This distinction has been further defined through consideration of the metadata versus archival description debate and the work of Wendy Duff and others, to be resolved as a difference between an inwards looking focus on what lies at the heart of archival work and an outwards looking focus on facilitating the exchange of information about archival material. It is important to note this distinction because the vision it creates is one in which the 'descriptive standards problem' is far from being solved.[64]

Archival description is about much, much more than exchanging information. It is about enabling us to maintain meaningful and authentic records over time and across domains; it is about the communication of meaning and the very 'domain and time issues' that were discussed in the context of the metadata versus archival description debate described earlier.[65] I propose that the fuzziness over focus that I have perceived in much of the standards development to date has allowed us to fool ourselves into thinking that the following of standards, such as ISAD(G) and EAD, means that we are dealing with something much, much more, and not just with information exchange (albeit information which has been structured in a particular way).

This is not to say, however, that there is anything wrong with information exchange. On the contrary, it is a good thing and, although it has not been properly investigated, a valid hypothesis would seem to be that the development and adoption of ISAD(G) and

EAD has greatly furthered the exchange of information about the holdings of archives in the UK. After all, these standards are certainly at the heart of many of the existing portals, such as Archives Hub, AIM25, SCAN and Archives Network Wales, etc. What these standards have not done, however, has furthered the original aims of archival description, to address the issues of authenticity and meaning and to carry over time and across domains the essential quality of records. As such they are becoming, to my mind, not so much standards for archival description as straitjackets. Worse still, they are increasingly at risk of becoming straitjackets for information exchange as well, given developments in the technologies underpinning global information exchange (such as the Semantic Web).

Many individuals have already managed to throw off these straitjackets and, as can be seen from the above narrative, I am to a large extent merely reiterating what others have said before me. Then again, I do not mean to disparage the efforts of those involved in the development of descriptive standards to date. Rather, I wish to issue a renewed call to action for activity in this area, one which is informed by the thoughts outlined in this article and in particular the explicit recognition that

(a) A distinction can usefully be drawn between a focus on information exchange and one on archival description (seen as being that which lies at the heart of archival work).
(b) Creating and exchanging multi-level description does not mean we have dealt with the question of preserving meaning and context in respect of records, particularly in an electronic environment.
(c) ISAD(G) and its underpinning principles (as stated in the accompanying but abandoned statement of principles) are not the last word on either information exchange or archival description.

What form this renewed action might take is not for me alone to say, but I would suggest the following possible avenues for further exploration of the 'descriptive standards problem'. First, I would like to suggest that an investigation has to be made into which 'standards' are being used, and how they are being used, within archives, records management and other related fields today. Then again, we might also want to pay increased attention to the relationships between standards such as ISO 23081 and guidelines such as MoReq2010, traditionally thought of as of interest to records managers, those such as Preservation Metadata: Implementation Strategies (PREMIS) which come from digital preservation, and those which are more concerned with resource discovery, such as Metadata Object Description Schema (MODS) and Dublin Core.

Finally, and more theoretically, I think it would be worth exploring the emerging concept of interoperability as a possible way of both transcending the distinction between information exchange and archival description and furthering common ground between the archival world and that of technology specialists. Joanne Evans, for one, has already made a good start in this direction, but I think more could still be said.[66] In particular, I am intrigued by the idea of 'conceptual interoperability', which comes from a model developed within the discipline of Modelling and Simulation (M&S).[67] This model has seven levels, ranging from level 0 – no interoperability to level 6 – conceptual interoperability and, at this last level, we are told that interoperating systems 'are completely aware of each others information, processes, contexts and modelling assumptions' and have 'a shared understanding of the conceptual model of a system (exposing its information, processes, states and operations).[68] The language is not that familiar, but I see a decided parallel between this and the archival desire to convey,

between archival description and the records themselves, a sense of the entire operations and contexts of, say, a company or an individual or wider society.

There are of course many other potential actions that could be taken, but concerted and collaborative action is, in my opinion, needed now if we are not to let our standards (as discussed above) undermine our standards (professional integrity).

Notes

1. Dryden and Haworth, *Developing Descriptive Standards*, 3.
2. This article was presented in a much abbreviated form at the UK Archives Discovery Forum held at The National Archives in Kew, London on 7 March 2013.
3. Lytle, "Analysis of the Work of NISTF," 360.
4. Cook, "Description Standards," 52.
5. Cook and Grant, *Manual of Archival Description*.
6. Ibid., 25.
7. Lytle, "Analysis of the Work of NISTF," 362–3 and Cook and Grant, *Manual of Archival Description*, 25.
8. See note 3 above.
9. Haworth, "Development of Descriptive Standards," 75–90.
10. Dowler, "Introduction," 432.
11. Ibid.
12. Walch, *Standards for Archival Description*, ii.
13. Working Group on Standards for Archival Description, "Report of the Working Group," 442.
14. Dowler, "Introduction," 435.
15. International Council on Archives, "ISAD(G)," 17, 18.
16. See note 3 above.
17. Dowler, "Introduction," 435, 432.
18. International Council on Archives, "Statement of Principles," 8–16.
19. Ibid., 12.
20. International Council on Archives Committee on Descriptive Standards, "History of ICA/CDS."
21. Hurley, "Parallel Provenance," 78.
22. Evans, "Building Capacities," 43.
23. Cook and Grant, *Manual of Archival Description*, 25. Please note that the position taken in later editions of MAD was revised considerably from that taken in the first one.
24. See note 19 above.
25. Cook and Grant, *Manual of Archival Description*, 26.
26. Hogarth and Martin, *Survey of Automated Practice*, 96.
27. Honhart, "MicroMARC:amc," 80–6.
28. A survey of the use of USMARC AMC in academic archives in the USA in 1992 was reported in Martin, "Viewing the Field," 482–97. Of the 80 respondents who reported using USMARC AMC, 56 also reported using either OCLC or RLIN, 12 reported using MicroMARC:amc.
29. See note 25 above.
30. Stibbe, "Archival Descriptive Standards," 262.
31. Ibid., 262–3.
32. Hensen, *Archives Personal Papers and Manuscripts*.
33. Hensen, "Standards in the Application of the AMC Format," 34.
34. Hensen, *Archives Personal Papers and Manuscripts*, 9.
35. Hensen, "NISTF II and EAD," 291.
36. Pitti, "Encoded Archival Description," 272.
37. Ibid., 273.
38. See note 3 above.
39. Pitti, "Encoded Archival Description," 276.
40. See note 3 above.
41. See note 3 above.
42. Dryden and Haworth, *Developing Descriptive Standards*, 1, 3.
43. International Council on Archives, "ISAD(G)," 17.

44. Dryden and Haworth, *Developing Descriptive Standards*, 1.
45. See note 14 above.
46. See, for example, Wallace, "Metadata and the Archival Management," 87–110 and Hedstrom, "Descriptive Practices for Electronic Records," 53–63.
47. Duff, "Metadata Replace Archival Description," 34.
48. Hedstrom, "Descriptive Practices," 55 and Wallace, "Metadata and the Archival Management," 92.
49. Wallace, "Archiving Metadata Forum," 254–5.
50. Ibid., 255–6.
51. Ibid., 257–60.
52. Hedstrom, "Recordkeeping Metadata," 245.
53. Wallace, "Archiving Metadata Forum," 260.
54. See note 52 above.
55. See note 53 above.
56. Ibid., 254.
57. Duff, "Evaluating Metadata," 285–94.
58. Duff, "Preservation of Reliable Evidence," 28–45.
59. Duff, "Evaluating Metadata," 285.
60. Ibid., 290, 291.
61. Ibid., 291.
62. Ibid.
63. International Council on Archives, "ISAD(G)," 17–18 and International Standards Organisation, *ISO 23081-1,* 2.
64. See note 3 above.
65. See note 52 above.
66. Evans, "Building Capacities."
67. Wang, Tolk and Wang, "Levels of Conceptual Interoperability Model."
68. Ibid.

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