We can describe only what we understand. There are many ways to understand records. This is one of them.

THE DOCUMENT

The documentary object carries the information or content that comprises the record. It is writing, it is data, it may be a sound or image, it may be a memory or an object to which meaning attaches. It is lasting evidence of an event or circumstance in the form of words, a document, an item, a series, a fonds, or a record group – in short, a record.

THE DEED

Content must be linked to some timebound event or circumstance in order to be a record. The deed must be particular, contingent, evidential. Deeds are acts, actions, processes, activities, or functions. When the meaning of a document derives from the deed or when the document is evidence of the deed, we have a record.

THE DOER

Deeds are purposeful and directed. Someone who is the actor undertakes the deed. A person, family, corporation, or other entity embodying purpose and action does, says or thinks the thing that the record is about.

THE ENTITY

The word comes from the Latin “esse” (to be). It means an existing thing – especially an independent, separate, or self-contained existence as contrasted with its attributes\(^1\). “An entity exists and that's all it needs to do to be an entity … In programming, engineering, and probably many other contexts, the word is used to identify units, whether concrete things or abstract ideas, that have no ready name or label.”\(^2\)

AND ITS ATTRIBUTES

An attribute is “a changeable property or characteristic … that can be set to different values” (Whatis?com).

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\(^1\) Merriam-Webster Online at [http://www.m-w.com/](http://www.m-w.com/)

\(^2\) Whatis?com at [http://whatis.techtarget.com/whome/0,289825,sid9,00.html](http://whatis.techtarget.com/whome/0,289825,sid9,00.html)
RELATIONSHIPS

Recordkeeping entities are bound by relationships that tell us when the entities are/were related and how they are/were related. The relationships are reciprocal. “John is married to Mary” is reciprocal because, if it is true, Mary must also be married to John. “John loves Mary” is not reciprocal because it does not mean that Mary loves John also. If John’s love for Mary is unreciprocated, it’s only an attribute.

THE REFERENCE MODEL : (1) FOR ENTITIES

The three entities set out above relate to each other like this:\n\[ 
\begin{array}{c}
\text{BUSINESS} \\
\text{PEOPLE (AGENTS)} \\
\text{RECORDS}
\end{array} \]

In this diagram, The Document is shown as “Records”, The Deed is shown as “Business” and The Doer is shown as “People(Agents)”. The ICA descriptive standards correspond as follows:
- ISAAR(CPF) deals more or less with Doers;
- ISDF deals more or less with Deeds;
- ISAD(G) deals more or less with Documents.\n
SCALEABILITY

These so-called entities are actually entity-types. The Reference Model can apply to a situation in which a single actor (Doer) writes a letter (Document) to propose insuring his life (Deed). Ultimately, that may become part of a series of files (Document) maintained by the insurance company (Doer) dealing with its life insurance business (Deed). The same model applies whether we are dealing with a discrete transaction or

4 But only when used in conjunction with ISAAR and ISAF. Originally, ISAD(G) was conceived as wrapping up descriptions of Deeds and Doers inside descriptions of Documents.
an entire fonds comprising the whole aggregation of documentary materials for an entire business enterprise. Whatever the level of aggregation, the same entity model applies.

**EXTENSIBILITY**

Because they are entity-types, the actual entities for each type may have somewhat different attributes to each other. All entities of the same entity-type will have a common set of attributes that they share but some will have additional attributes that only they have. The common set of attributes can be extended so that different entities of the same entity-type have attributes belonging to them alone. Some “telephones”, for example, have a common set of attributes having to do with the transmission of sound but nowadays some allow you to see who you are talking to as well.

**THE REFERENCE MODEL : (2) FOR ATTRIBUTES**

In this way, it is possible to show how attributes too can be arranged within the framework of the entity model set out above.

[URO : Universal Recordkeeping Super-Type]

Here, all of the entity-types are actually sub-types of the super type. There will be no real world applications of the super type. It exists only to contain attributes common to all entities. Real world descriptions will be RUROs, AUROs, and FUROs. The URO is simply a device to facilitate system design.

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5 Chris Hurley (2004), “Relationships in Records : Part 6 (Everything is an Episode in the Life of Something Else)”, *New Zealand Archivist* (Autumn, 2004), especially para. 6.12ff. The URO was previously known as the HERO (Hurley’s Enduring Recordkeeping Object). This has been changed in the service of modesty.
DATA IN & DESCRIPTIONS OUT

Entities are not packages for delivering descriptions. They are used to structure descriptive data and to enable its systematic processing by recordkeepers to produce descriptions for real people to use. Real people need not know that they are seeing recordkeeping entities. All they see is combinations of data from one or more entities we bring together as a report or view generated for them. We organise the descriptive data in an orderly way so that the systems we manage can reproduce it in wanted combinations predictably and repeatedly according to the design solution we have adopted.

HOW TO PRESENT THE DATA

We can present our data anyhow we like and we can exchange it with each other so long as we catch it using the same standards even if some of us choose to present it in a different way. One way of presenting descriptive data is the ICA’s multi-level model:

but this is a presentation model, not a data capture model and some of us do not want to use it. Some people fear that if descriptive standards are revised work already done will be invalidated. This is not true. They can go on presenting their data as before and the rest of us can present it another way. We can use the same standards to do different things. For another way of presenting the data see Describing Archives in Context: A Guide to Australasian Practice (Australian Society of Archivists, 2007).
ALIGNING THE ATTRIBUTES

The Appendix shows how data in the ICA descriptive standards can be “normalised” using the three entity-types and a super-type (URO). When modelling the data, there is no need to repeat attributes in each entity-type when the same attribute is common to all entity-types. It is better dealt with as an attribute of the super-type which is inherited by each of the entity-types. The only attributes the standards need to show at the entity-type level are those which it does not share with all of the others. ICA should adopt a single reference model for descriptive standards. A new super-type should be developed based on attributes common to ISAD(G), ISAAR(CPF), and ISDF. All work thereafter should bring the three entity-types into alignment with the super-type and with each other. A separate piece of work should be commenced to develop a standardised approach to relationships at the super-type level.

METADATA STANDARDS

Metadata standards are just another way of setting out frameworks for descriptive data. Metadata standards and descriptive standards badly need to be better aligned. An example of one of these standards (from the Metadata Standard issued by the Queensland State Archives) is used in the Appendix to show how metadata elements can be incorporated into the attribute analysis described above.

THE ESSENTIAL MINIMUM : ENTITIES

You can have more than three entity-types. Some people prefer four or five. You can also have as few as one. ISAD(G) was originally presented as a one-entity type standard, later augmented by ISAAR(CPF) and ISDF. It is the view of this author that no fewer than three are needed to do effective work in the documentation of archives and other records.\(^6\)

THE ESSENTIAL MINIMUM : ATTRIBUTES

Setters of standards like telling other people what to do. One way is to stipulate what is mandatory and what is optional. Both metadata and descriptive standards do this. A lot of what they make mandatory simply borrows from other information management standards. It is a mistake to think that these attributes are essential for recordkeeping. A name, for example, is very useful for information resources (records too) but it is not essential for managing a record. In this author’s view, there are three

\(^6\) Except for special purposes such as a Directory of Archives Institutions for which only an AURO would be needed.
essential attributes of a record and three only: Identity, Dates, and Relationships. When writers of recordkeeping standards understand why this is so they will write better recordkeeping standards.

MORE WORK NEEDED ON RELATIONSHIPS

We have two duties towards the records: moral defence and physical defence. The latter is the realm of repository management and preservation (both physical and digital). Moral defence we do through description and the description of relationships is central to that. We have scarcely begun to understand how to document and manage them. We need to identify a lot more types of relationships between recordkeeping entities. Some people try to manage them as attributes and others as entities. Neither approach is very convincing because however they are dealt with they won’t be just another attribute or just another entity. Relationships are special.

ATTRIBUTES THAT ARE REALLY RELATIONSHIPS

The ICA standards were developed seriatim and more-or-less independently of each other. This shows in the drafting. Many of the attributes can also be shown as relationships, for example

- 3.2.1 ISAD(G) Name of creator(s) can be dealt with as an attribute of a RURO or as a relationship indicator with an AURO and 3.2.2 Administrative/Biographical history [of the Creator] is data that can be held as an attribute of the RURO or as an attribute of a related AURO.
- 5.2.5 ISAAR(CPF) Functions, occupations and activities can be shown either as an attribute of an AURO or as a relationship with a FURO.

The data model needs to sort this out and, for those who wish to use fewer entities and show such things as attributes, an extension needs to be provided for the appropriate entity-type as a variant on standard practice.

A LAST WORD FOR DUMMIES

If you feel thick and stupid, don’t worry. It’s not that hard and the standard setters, even if they sound confident, have still got lots to learn and lots to do. You don’t have to do very much to catch up with them.

Chris Hurley
July, 2008
### APPENDIX

#### TABLE OF ATTRIBUTES ALIGNING ICA DESCRIPTIVE STANDARDS
**(INCORPORATING QSA METADATA STANDARD)**

<table>
<thead>
<tr>
<th>URO</th>
<th>ISAD(G)</th>
<th>ISAAR(CPF)</th>
<th>ISDF</th>
<th>QSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entity Type</td>
<td>&lt;missing&gt;</td>
<td>5.1.1</td>
<td>5.1.1</td>
<td>Category Type</td>
</tr>
<tr>
<td>Identifier</td>
<td>3.1.1</td>
<td>5.1.6; 5.4.1; 5.4.2</td>
<td>5.4.1; 5.4.2</td>
<td>Identifier</td>
</tr>
<tr>
<td>Name</td>
<td>3.1.2</td>
<td>5.1.2; 5.1.3; 5.1.4</td>
<td>5.1.2; 5.1.3; 5.1.4</td>
<td>Title</td>
</tr>
<tr>
<td>Date(s)</td>
<td>3.1.3</td>
<td>5.2.1</td>
<td>5.2.1</td>
<td>Date</td>
</tr>
<tr>
<td>Level</td>
<td>3.1.4</td>
<td>5.4.5</td>
<td>5.4.5</td>
<td></td>
</tr>
<tr>
<td>Relationships</td>
<td>3.5.1; 3.5.2; 3.5.3</td>
<td>5.3.1; 5.3.2; 5.3.3; 5.3.4</td>
<td>5.3.1; 5.3.2; 5.3.3; 5.3.4</td>
<td>Relation</td>
</tr>
<tr>
<td>Language</td>
<td>3.4.3</td>
<td>5.4.7</td>
<td>5.4.7</td>
<td>Record only</td>
</tr>
<tr>
<td>Description &amp; History</td>
<td>3.3.1; 3.3.4; 3.6.1</td>
<td>5.2.2; 5.2.7</td>
<td>5.2.2; 5.2.3</td>
<td>Description (record; function)</td>
</tr>
<tr>
<td>Control Data</td>
<td>3.5.4; 3.7.1; 3.7.2; 3.7.3</td>
<td>5.4.3; 5.4.4; 5.4.6; 5.4.8; 5.4.9</td>
<td>5.4.3; 5.4.4; 5.4.6; 5.4.8; 5.4.9</td>
<td>Event History</td>
</tr>
<tr>
<td>Provenance</td>
<td>3.2.1; 3.2.2; 3.2.3; 3.2.4</td>
<td>Context 5.2.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantity 3.1.5; Accruals 3.3.3</td>
<td>Legal Status 5.2.4; Functions 5.2.5; Mandate 5.2.6</td>
<td>Legislation 5.2.4</td>
<td>Mandate (function)</td>
<td></td>
</tr>
<tr>
<td>Physical Characteristics &amp; Technical Requirements 3.4.4</td>
<td>Access (record; function)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rights 3.4.1; 3.4.2</td>
<td>Appraisal 3.3.2</td>
<td>Disposal (record)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appraisal 3.3.2</td>
<td>Finding Aids 3.4.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finding Aids 3.4.5</td>
<td>Places 5.2.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Places 5.2.3</td>
<td>Classification 5.1.5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The URO column shows only those attributes actually in common with all three ICA standards except for Entity Type which is missing from ISAD(G) and must clearly be at the URO level.