

Third Meeting on FRBR/CRM Harmonization

(London, 14-16 February 2005)

Minutes



Participants: Trond Aalberg (BIBSYS, Norway), Martin Doerr (ICS-FORTH, Greece; chair), Dolores Iorizzo (The Imperial College, United-Kingdom), Kim Sung-Hyuk (Sookmyung Women's University, South Korea), Faith Lawrence (University of Southampton, United-Kingdom), Patrick Le Bœuf (National Library of France), Dan Matei (Institute of cultural heritage, Romania), Christian Emil Ore (University of Oslo, Norway, and chair of ICOM CIDOC), Stephen Stead (Paveprime Ltd, United-Kingdom), Maja Žumer (National and University Library of Slovenia).

Excused: Caroline Brazier (British Library, United-Kingdom, & ICABS), Nicholas Crofts (Musées d'art et d'histoire de la ville de Genève, Switzerland), Alan Danskin (British Library, United-Kingdom, & ICABS), Mauro Guerrini (University of Florence, Italy), Knut Hegna (University of Oslo, Norway), Siegfried Krause (Germanisches Nationalmuseum, Germany), Karl-Heinz Lampe (Zoologisches Forschungsinstitut & Museum Alexander Koenig, Germany), Glenn Patton (OCLC, USA), Gerhard Riesthuis (University of Amsterdam, The Netherlands), Matthew Stiff (The English Heritage, United-Kingdom), Barbara Tillett (Library of Congress, USA).

14 February 2005

Martin Doerr summed up some of the main conclusions that ensued from Meeting #2.

In order to be consistent with Richard Smiraglia's theory of '*a work*', we will consider that *intellectual continuity* is an identity criterion for the Work notion. The social and intellectual importance of a Work lies in the fact that a Work is a continuing process that has distinct texts as its temporal parts. In that regard, a translation can be said to be a *part* of the Work. A Work can split in as many parts as useful at the same time ("spatial part") or at different times ("temporal parts").

The notion of Self-Contained Expression, which was defined during Meeting #2, has to do with the fact that a creator has an idea of when an expression of his Work is complete, which can normally be verified independently from formal characteristics or be declared by the creator him/herself.

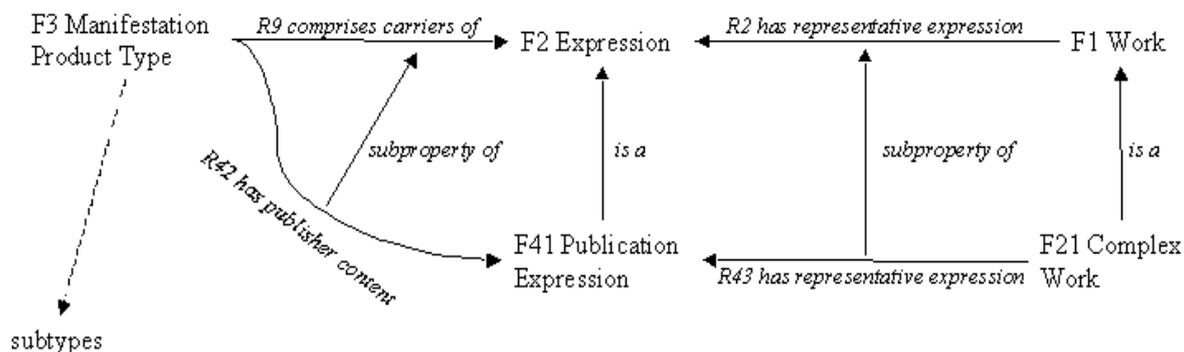
The ontological value of a collection is in the act of collecting, not in the sum of the collected parts. Therefore, the work of a collection of poems makes use of, but does not comprise the poems themselves, nor does it continue the work of the poems.

An Expression is defined to be fixed in time, it cannot evolve over time; only the Work can evolve over time. This is a deliberate ontological choice to substantiate the difference between Work and Expression..

Whenever we speak of "Work", we have actually to discuss 3 distinct notions:

- Work as defined in FRBR (or rather, as interpreted from FRBR, for the definition provided in FRBR is not good);
- Work as we understand the term in daily discourse;
- Class F1 Work as defined in OO_FRBR (result of Meeting #2).

Before we started to discuss Manifestation attributes, we recognised the existence of a new class: Publisher-Level Expression (which we later renamed F41 Publication Expression). We first understood that new class as representing the complete "textual" (in the broad sense) content intended by a publisher (i.e., the sum of the Expression embodied in the Manifestation plus everything that a publisher decides should be in the Manifestation, including text found on the title page, logo, etc.), but Stephen Stead objected that this would imply that we model every published item as an "anthology", therefore as a distinct work, which in turn would imply that we could just use the class Complex Work, without needing any additional class. We then redefined F41 Publication Expression as consisting solely of the specific paratextual input by the publisher (title page, logo or imprint, cover text, advertisements, etc.). Martin Doerr drew a figure that shows how this new class fits in the overall architecture:



Then we examined the Manifestation attributes, for the class we identify as F3 Manifestation Product Type. (After that process, we went through the Manifestation attributes again, this time having the class F4 Manifestation-Singleton in mind).

Examination of the Manifestation attributes, having F3 Manifestation Product Type in mind.

4.4.1. Title of the Manifestation

In all cases, this maps to:

F3 Manifestation Product Type P102 has title 4.4.1. = E35 Title
P102.1 has type...

In addition, in such cases when that title was actually found on a copy of the publication (e.g., title proper; excluding key title and supplied title), this also maps to:

F41 Publication Expression P106 is composed of 4.4.1. = E35 Title

(P106 being inherited from E73 Information Object, as both F41 and E35 are subclasses of E73 and P106 has E73 for both its domain and range).

4.4.2. Statement of Responsibility

This was first mapped to:

F41 Publication Expression P106 is composed of E34 Inscription
E34 Inscription P3 has note E62 String
P3.1 has type E55 Type
E34 Inscription P129 is about E39 Actor
E39 Actor P14B performed E65 Creation Event
E65 Creation Event etc.

Later during the Meeting, it was recognised that E34 Inscription is not the appropriate class for that (E34 Inscription is literally meant as a text attached in some way to an object), and that it would be more relevant to use E33 Linguistic Object, which is a superclass of E34. As a consequence, the UNIMARC-to-CRM mapping that Patrick Le Bœuf has begun to prepare for the SCULPTEUR Project will have to be reviewed.

→ For the CRM-SIG: the scope note for E33 Linguistic Object should explicitly state that the actual text of an instance of E33 Linguistic Object may be introduced as a description through P3 has note, following the same mechanisms as for E34 Inscription.

At this point, Stephen Stead asked what the relationship is between F41 Publication Expression and F20 Self-Contained Expression. Martin Doerr answered that this would have to be discussed and clarified later on ###.

There was some debate about whether the conceptual model that we strive to build should account for such information elements as Statement of Responsibility as found on a title-page or not. Maja Žumer felt it as too old-fashioned and too much bound to current ISBD practice; future catalogues should focus only on the actual relationship between the content of a publication and contributors to that content, not on the way that relationship is stated on a title-page. Patrick Le Bœuf argued that it can be interesting, under some circumstances, to record the possible discrepancy between that relationship and the statement found on a publication. Martin Doerr agreed that Statement of Responsibility (as found on the document) can be a useful device for the identification of a given publication (part of F25 Expression Identifier ?).

4.4.3. Edition/Issue Designation

This maps to:

F41 Publication Expression P106 is composed of E33 Linguistic Object (specialised as 4.4.3.) P3 has note E62 String

Besides,

4.4.3. (IsA E33 Linguistic Object) P106B forms part of F25 Expression Identifier

which means that 4.4.3. relates to the Work shared by other Expressions, without making it necessary to explicate that indirect relationship to sibling Expressions. (For the CRM SIG: should the composition of identifiers by meaningful parts be described in the CRM?)

It was recognised that it can happen that an instance of Edition Designation pertains to the manifestation level rather than to the expression level (e.g., “large print edition”), which makes it difficult to state once and for all what 4.4.3. maps to. On the whole however, it seems appropriate to state that 4.4.3. forms part of an Expression Identifier.

4.4.4. Place of Publication/Distribution

These are actually two distinct information elements, with very different meanings. We focussed on Place of Publication only, postponing Place of Distribution to further discussion.

As a rule, Place of Publication maps to:

F41 Publication Expression P94B was created by E65 Creation Event P14 carried out by E39 Actor P74 has current or former residence E53 Place P87 is identified by E44 Place Appellation

Patrick Le Bœuf suggested that, for hand-press materials, Place of Publication could also map to E51 Contact Point; but after checking on ISBD(A) while drafting the present minutes, he recognised that this is untrue.

In addition, as Place of Publication is normally copied after the information such as found on the publication, this information element also maps to (unless the field begins with a square bracket):

F41 Publication Expression P106 is composed of E33 Linguistic Object (specialised as 4.4.4.) P3 has note E62 String

4.4.5. Publisher/Distributor

We focussed on Publisher; Distributor will be discussed later.

Basically, this information element is about the following relationship:

F41 Publication Expression P94B was created by E65 Creation Event P14 carried out by E39 Actor P131 is identified by E82 Actor Appellation

[a relationship that is also expressed in FRBR 5.2.2. (p. 61-62) as the “produced by” relationship.]

Typically, that information element is stated such as found on a copy of the publication, which also implies the following mapping (again, provided the field does not begin with a square bracket):

F41 Publication Expression P106 is composed of E33 Linguistic Object (specialised as 4.4.5.) P3 has note E62 String

4.4.6. Date of Publication/Distribution

We focussed on Date of Publication, postponing Date of Distribution.

In FRBR, Date of Publication can apply to the date of publication such as found on a copy of the publication, as well as to a normalised expression of that date that enables mathematical processing, and retrieval.

If we are talking about the Date of Publication such as found on a copy of the publication (e.g., “M.D.L.I.V.”, or “die visitationis Beatae Virginis Mariae 1497”), 4.4.6. is nothing more than a mere Time Appellation and maps to:

F41 Publication Expression P106 is composed of E33 Linguistic Object (specialised as 4.4.6.) P3 has note E62 String

and

F41 Publication Expression P94B was created by E65 Creation Event P4 has time-span E52 Time-Span P78 is identified by E49 Time Appellation

But a normalised formulation of the Date of Publication will make it possible to make assumptions about a terminus ante quem for the Creation Event of the Publication Expression:

F41 Publication Expression P94B was created by E65 Creation Event P4 has time-span E52 Time-Span P82 at some time within E61 Time Primitive (instance = [infinity : value of 4.4.6.]

4.4.7. Fabricator/Manufacturer

To be discussed later. [The Manufacturer is subject (“carried out by”) of open number of production events of instances of instances of F3 Manifestation Product Type i.e. following the characteristics defined by the F3. It seems that MetaCRM would be helpful here. Should we use F40 Carrier Production Event, or define a metaproperty F3 Manifestation Product Type CLP108B should have been produced by E12 Production Event? Or perhaps both devices: F3 Manifestation Product Type CLP108B should have been produced by F40 Carrier Production Event?]

4.4.8. Series Statement

It was recognised that a series is a specialisation of F21 Complex Work.

In cataloguing practice, there is a distinction between the mere series statement as found on a copy of the publication (Manifestation attribute 4.4.8.) and the actual relationship between the monograph and the series it belongs to (as shown in FRBR 5.3.1.1., Table 5.2.). It can be interesting, for identification purposes, to record the possible discrepancy between the title of a series as found on a document and the more frequent title under which that series is known.

Series Statement contains actually two distinct information elements:

- identifying elements for the series (title and also, although FRBR does not make the point, ISSN);
- a number designating the sequential position of the monograph within the series.

The identifying elements of Series Statement map to both:

F41 Publication Expression P106 is composed of E33 Linguistic Object (specialised as 4.4.8.) P3 has note E62 String

and

F41 Publication Expression P106B is part of F?? Edition Series (subclass of F21 Complex Work)

The numbering element is part of the F25 Expression Identifier for the F41 Publication Expression through the newly defined property R44 has identification element:

F41 Publication Expression R44 has identification element E62 String (instance = the numbering element of 4.4.8.)

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4.4.9. Form of Carrier

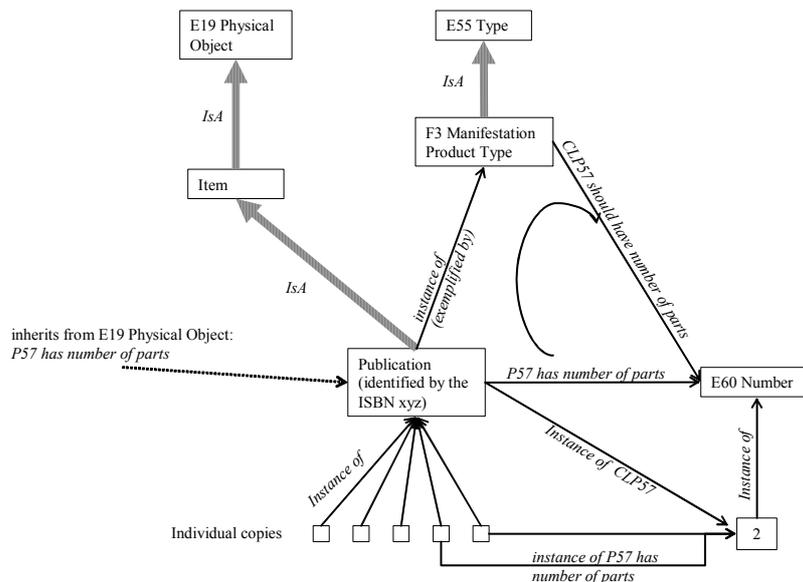
This was recognised as a Type:

F3 Manifestation Product Type P2 has type 4.4.9. = E55 Type

[Should it not be a Class Property: CLP2 has type? See next attribute 4.4.10.]

4.4.10. Extent of the Carrier

For this attribute MetaCRM is required. Martin Doerr drew a figure showing that F3 Manifestation Product Type is actually a metaclass, which is only instantiated/exemplified by classes (individual publications) which in turn are instantiated/exemplified by physical objects (individual copies). In that sense, each individual publication, viewed as a set of copies, can be said to be a subclass (IsA relationship) of Item:



This construct allows us to define the following Class Property: CLP57 “should have” number of parts (domain: F3 Manifestation Product Type, range: E60 Number), through which it is possible to express the relationship between a Manifestation Product Type and the Number of parts that all carriers produced according to a F39 Production Plan based on that Manifestation Product Type are, as a principle, supposed to have (at least at the time of production):

F3 Manifestation Product Type CLP57 “should have” number of parts E60 Number

Similarly, MetaCRM allows us to define another Class Property: CLP128 should carry: F3 Manifestation Product Type CLP128 should carry F41 Publication Expression. As F3 is a subclass of E55 Type, it cannot be the domain of property: P128 carries, which expresses the relationship between something physical and an immaterial content infixed on it; but the Class Property: CLP128 should carry expresses the fact that all physical copies produced according to a F39 Production Plan based on an instance of F3 Manifestation Product Type are supposed to carry the same instance of F41 Publication Expression (even though the title page may have been torn or in some way altered on a given subset of copies, and even though some accident may have occurred during the production process, leaving, for instance, the title page blank on a given subset of copies).

4.4.11. Physical Medium

Once again we have to define a Class Property, that makes it possible to express cross-categorical reasoning between a metaclass and a class:

F3 Manifestation Product Type CLP45 should consist of E57 Material

4.4.12. Capture Mode

That is a Type:

F3 Manifestation Product Type P2 has type 4.4.12. = E55 Type

[Should it be a Class Property: CLP2 has type? or CLP2 “should” have type? or CLP2 “is supposed to” have type? or CLP2 “usually” has type?]

4.4.13. Dimensions of the Carrier

Once again Class Properties as defined in MetaCRM are helpful, as a “Type” cannot have physical dimensions:

F3 Manifestation Product Type CLP43 should have dimension E54 Dimension P3 has note E62 String

4.4.14. Manifestation Identifier

The class to which this attribute maps is clearly E75 Conceptual Object Appellation, but in the CIDOC CRM there is no specialisation of P1 is identified by for E28 Conceptual Object.

→ Question for the CRM-SIG: Should we define a specialisation of P1 is identified by, the domain of which would be E28 Conceptual Object, and the range of which would be E75 Conceptual Object Appellation?

4.4.15. Source for Acquisition/Access Authorization

This matches the CRM notion of E30 Right:

F3 Manifestation Product Type CLP104 is subject to E30 Right P3 has note E62 String
and

F3 Manifestation Product Type CLP105 right held by E39 Actor P131 is identified by E82 Actor Appellation

4.4.16. Terms of Availability

F3 Manifestation Product Type CLP104 is subject to E30 Right P3 has note E62 String

[Besides, as 4.4.16. is said in the *FRBR Final Report* to also cover the notion of price, should we map it to:

F3 Manifestation Product Type CLP43 has dimension E54 Dimension P3 has note E62 String

as well?]

4.4.17. Access Restrictions

F3 Manifestation Product Type CLP104 is subject to E30 Right P3 has note E62 String

→ Question for the CRM-SIG: maybe the notion of E30 Right in CIDOC CRM might need a generalization.

4.4.18. Typeface (Printed Book)

This is a mere note:

F3 Manifestation Product Type P3 has note E62 String

[Perhaps it could also be modelled as a Type?:

F3 Manifestation Product Type CLP2 “should have” type 4.4.18. = E55 Type]

4.4.19. Type Size (Printed Book)

When this attribute corresponds to a note, it maps to E62 String; when it corresponds to a coded value (as in fixed length fields of MARC formats, for instance), it maps to a E55 Type:

F3 Manifestation Product Type P3 has note E62 String

or

F3 Manifestation Product Type CLP2 “should have” type 4.4.19. = E55 Type

4.4.20. Foliation (Hand-Printed Book)

In the context of FRBR reviewing, Gunilla Jonsson had suggested that this attribute is misnamed; the definition for this attribute makes it clear that the attribute that was really intended by the FRBR originators was actually “Format (Hand-Printed Book)”.

When this attribute corresponds to a note, it maps to E62 String; when it corresponds to a coded value (as in fixed length fields of MARC formats, for instance), it maps to a E55 Type:

F3 Manifestation Product Type P3 has note E62 String

or

F3 Manifestation Product Type CLP2 “should have” type 4.4.20. = E55 Type

4.4.21. Collation (Hand-Printed Book)

This attribute corresponds to a mere note:

F3 Manifestation Product Type P3 has note E62 String

4.4.22. Publication Status (Serial)

This attribute means that a statement is made of whether the serial as Work is completed or not, at the date the statement was made.

Serials are regarded as *Works with temporal parts*, sequences of manifestations with common features; the Group decided that serials are *not by themselves manifestations* (“publications”), but *only* Works – Works that consist of manifestations, but that have no Manifestation by themselves. Only a Work can be said to be “ongoing” or not; neither an Expression nor a Manifestation can be said to be “ongoing”. An Expression and a Manifestation exist once and for all.

As a consequence, 4.4.2. Publication Status should be modelled as a E55 Type of F21 Complex Work.

That view should change many things in the way librarians traditionally deal with serials. It also matches difficulties encountered by implementers of the FRBR model.

Besides, it also poses an interesting question for the CRM-SIG:

→ How should we model the “end” of a Work? In CIDOC CRM we do not regard E70 Stuff as having temporal parts. Or, is this end only an expectation, because the work may nevertheless be resumed?

4.4.23. Numbering (Serial)

Once again, this attribute should be modelled at the Work level – or more specifically, at the level of a new class that should be defined: F?? Publication Work (i.e., a subclass of F21 Complex Work that is defined as consisting exclusively of publications, such as series and periodicals are).

4.4.24. through 4.4.34.

All of those attributes can be modelled as follows: when they correspond to notes, they map to E62 String; when they correspond to coded values (as in fixed length fields of MARC formats, for instance), they map to E55 Type:

F3 Manifestation Product Type P3 has note E62 String
or
F3 Manifestation Product Type CLP2 “should have” type 4.4.20. = E55 Type

Dolores Iorizzo asked that a note be made about all of those types, as they can be useful for TEI, EAD, and MPEG as well.

Martin Doerr replied that those attributes have to be dealt with separately, as they are an overspecialisation in a conceptual model; there is no further relationship between them and any other relevant entity in the same model.

4.4.35. System Requirements (Electronic Resource)

That attribute such as it stands was deemed irrelevant; Faith Lawrence made the point that some of the elements it contains would be better described as format of compatibility, i.e. a E55 Type – an issue for the ISBD Review Group.

Patrick Le Bœuf argued that it should also map to E62 String as it is a part of F41 Publication Expression. A long discussion ensued, as to whether the fact that an information element was copied after the resource described or found in another source is relevant or not. Martin Doerr made the point that the main thing is to make an assertion about the resource described, whatever the source on which that assertion is resides. The whole debate has to do with the notion of “reification”: any information can be said to reside on a given source; that source is not necessarily always stated, in particular at the conceptual level of CIDOC CRM, where the main thing is to make propositions about the real world, not to state on what source those propositions reside. In library practice, there is a traditional, strong distinction between information “as found on the item in hand”, and information supplied through authority control; is it relevant to model that traditional distinction in a conceptual model? Is it wise to ignore it, as it permeates all the cataloguing theory and practice? Should it be regarded as old-fashioned and to be abandoned in future cataloguing rules, or should it be reaffirmed and accounted for in an integrated conceptual level? Martin Doerr opined that the distinction should be reflected in a conceptual model only inasmuch as the information “as found on the item in hand” is relevant for the purpose of identifying a given resource (i.e., Statement of Responsibility, Place of Publication, Statement of Series, etc. are relevant, but not such notes as System Requirements). General assertions about where the information was taken from apply equally to any class and property instance of the model. As such, these mechanisms can be described in a model independent from the model about the perceived or conceived reality.

4.4.36. File characteristics (Electronic Resource)

That attribute is regarded as a E55 Type.

4.4.37. Mode of Access (Remote Access Electronic Resource)

The Group had some difficulty in understanding what that attribute covers at all. Is it the notion of “protocol” that is actually meant?

4.4.38. Access Address (Remote Access Electronic Resource)

There was a long debate about that attribute. We came to the conclusion that an electronic resource downloaded on a user’s hard disk should always be regarded as an Item. Christian Emil Ore made the point that there is a legal issue in there: copyright is broken when you access a file through a URL. As far as I can remember, however, there was no final conclusion as to what 4.4.38 actually maps to.

Examination of the Manifestation attributes, this time, having F4 Manifestation-Singleton in mind.

Two cases should be considered: either they capture the very first Expression, or they are more or less derivatives.

4.4.1. through 4.4.3.

No difference for these attributes between F3 Manifestation Product Type and F4 Manifestation-Singleton. For 4.4.3. Edition/Issue Designation: this attribute has to do with a version statement; *Versioning should be modelled.*

4.4.4. Place of Publication/Distribution

This attribute is not valid for a F4 Manifestation-Singleton. However, we should model the Place of the Production Event for a Manifestation-Singleton. A F31 Expression Creation is always co-occurring with the E12 Production Event of a F4 Manifestation-Singleton (i.e.: when you scribble the first draft of a poem on a sheet of paper, you produce a manifestation; when Milton dictated his poems to his secretary, the process resulted in the modification of the secretary's mind and in the production of a new manifestation; even when you keep your draft poem for yourself, your memory becomes a new manifestation-singleton); it seems therefore relevant to make F31 Expression Creation a subclass of E12 Production Event: the place where the expression is created is necessarily the place where the manifestation-singleton is produced.

This would map to:

F4 Manifestation-Singleton was produced by F31 Expression Creation P7 took place at E53 Place

Probably we should better create a subproperty of "was produced by", such as "manifestated"?

4.4.5. Publisher/Distributor

The notion of publication – and therefore of publisher – is incompatible with the notion of F4 Manifestation-Singleton.

4.4.6. Date of Publication/Distribution

This attribute as such is incompatible with the notion of F4 Manifestation-Singleton, but we should consider:

F4 Manifestation-Singleton was produced by F31 Expression Creation P4 has time-span E52 Time-Span P82 at some time within E61 Time Primitive

4.4.7. Fabricator/Manufacturer

F4 Manifestation-Singleton was produced by F31 Expression Creation P14 carried out by E39 Actor P131 is identified by E82 Actor Appellation

4.4.8. Series Statement

This attribute is incompatible with the notion of F4 Manifestation-Singleton.

4.4.9. through 4.4.13.

Everything that was modelled as a Class Property (CLP) for F3 Manifestation Product Type can be modelled as a Property (P) for F4 Manifestation-Singleton.

4.4.14. Manifestation Identifier

This attribute does not apply to F4 Manifestation-Singleton. E42 Object Identifier suffices.

4.4.15. Source for Acquisition/Access Authorization; 4.4.16. Terms of Availability; 4.4.17. Access Restrictions

Those attributes can be modelled through P104 is subject to E30 Right, P105 right held by E39 Actor, P49 has former or current keeper E39 Actor, P51 has former or current owner E39 Actor.

4.4.18. Typeface

This maps to E55 Type. In the case of F4 Manifestation-Singleton, the attribute can also cover the script type of a manuscript (handwriting), e.g. Gothic cursive, Humanistic cursive, Caroline minuscule...: a feature that was not accounted for in FRBR, as 4.4.18. Typeface was unduly restricted to printed books.

4.4.19. through 4.4.21.

No difference for these attributes between F3 Manifestation Product Type and F4 Manifestation-Singleton.

4.4.22. Publication Status (Serial); 4.4.23. Numbering (Serial)

Those attributes do not apply to F4 Manifestation-Singleton.

4.4.24. through 4.4.30.

Those attributes map to E55 Type.

4.4.31. Reduction Ratio (Microform)

This attribute does not apply to F4 Manifestation-Singleton. [Although I would be unable to explain why]

4.4.32. through 4.4.38.

??? [nothing in my notes]

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The third day of our meeting began with a resumption of the debate on the issue of redundancy between information “as found on the document” and as elaborated and re-structured by cataloguers through bibliographic and authority control. Maja Žumer opined that that redundancy is old-fashioned and pointless and should be abandoned in future catalogues. Stephen Stead, who had been absent the day before, expressed the thought, on the contrary, that it can be helpful, e.g. in order to retrieve all documents that their publishers claimed, for purposes of prestige, were published in a place where they actually had not been published.

There was also a debate around the notion of “copying”: what are the properties of the activity of copying? What does it produce? Can we have the same approach to photocopying of printed materials and downloading and copying of electronic resources?

Stephen Stead did not agree that all copies of an electronic file are necessarily instances of F4 Manifestation-Singleton. A debate ensued, at the end of which we agreed that any electronic resource, as it resides on a physical carrier, is an Item, but not necessarily a F4 Manifestation-Singleton. Downloading results in the creation of a new Item. But there are electronic files that *are* instances of F4 Manifestation-Singleton (the original). Stephen Stead asked: Do they become instances of F3 Manifestation Product Type from the moment they are copied? Martin Doerr replied: No; the problem is actually more general and goes beyond electronic resources. Everything can be copied more or less mechanically, and the “alike” quality is to be found between and among the copies themselves, not between the copies and the original. Eventually, we decided to create a new class: F?? Reproduction Event. That new class makes it possible to account for the legal distinction between private copying for the purpose of “fair use”, and mass production for the purpose of dissemination. There was some debate in order to determine where to draw the line between the newly created Reproduction Event and the CIDOC CRM class E12 Production Event, and whether that distinction was needed at all. According to Martin Doerr, there is a continuum; it may prove difficult to draw the line between “production” and “reproduction”, which would tend to lead us to have only one class; but on the other hand, there are situations that can be described as either extremity of that continuum: some situations are frankly cases of production, some others are frankly cases of reproduction, which would advocate a clear distinction between those classes. We can create them, without having to declare them as disjoint: that way, we can account for such situations that could be regarded as instances of both Production Event and Reproduction Event.

Do we regard F41 Publication Expression as a special case of F20 Self Contained Expression? The answer is yes; it implies that F41 Publication Expression also represents a Publisher Work.

Before we examined the Item attributes, we strove to define how we understand respectively the Item notion and the Manifestation-Singleton notion:

– An F5 Item is an E84 Information Carrier that carries an F2 Expression and was produced by an industrial process. Note about E84 Information Carrier in CIDOC CRM: an instance of E84 Information Carrier can be empty (e.g.: an empty diskette, a canvass before a painter paints anything on it), whilst an F5 Item must necessarily carry information; on the other hand, any instance of E24 Physical Man-Made Stuff can carry information without being an instance of Information Carrier (e.g.: a window-pane on which somebody writes a poem and draws a picture with a lipstick; a rock in a prehistoric cave on which a prehistoric man carved a figure).

– F4 Manifestation-Singleton is a subclass of Physical Man-Made Stuff (as such it can carry information) but it is *not* a subclass of Item (as it is not the result of an industrial process and it is by nature unique).

As there are, beyond those ontological differences, a number of similarities between F4 Manifestation-Singleton and F5 Item, we strove to determine, for each attribute defined by FRBR for the Item entity, whether it fitted both F4 and F5 or only F5.

4.5.1. Item Identifier

This attribute maps to P47 is identified by E42 Object Identifier, inherited from E19 Physical Object via E84 Information Carrier.

That property fits both F4 Manifestation-Singleton and F5 Item.

4.5.2. Fingerprint

According to Gunilla Jonsson, this attribute should have been defined at an intermediate level between Manifestation and Item, rather than at the Item level, as it identifies a particular *state* of a Manifestation. We did not discuss it further.

4.5.3. Provenance

This attribute maps to P49 has former or current keeper E39 Actor, P51 has former or current owner E39 Actor.

It fits both F4 Manifestation-Singleton and F5 Item.

4.5.4. Marks/inscriptions

This attribute maps to P65 shows visual item E37 Mark.

It fits both F4 Manifestation-Singleton and F5 Item.

4.5.5. Exhibition History

This attribute maps to P12B was present at E7 Activity P3 has note E62 String.

It fits both F4 Manifestation-Singleton and F5 Item.

4.5.6. Condition of the Item

Such as it is defined in the *FRBR Final Report*, this attribute corresponds to two distinct notions:

- How the item differs from the class features, and
- Result of a E14 Condition Assessment.

On the whole, however, it maps to P44 has condition state E3 Condition State P2 has type E55 Type P3 has note E62 String.

As such, it fits both F4 Manifestation-Singleton and F5 Item (this would not hold true in the first interpretation of the attribute, as an instance of F4 Manifestation-Singleton does not instantiate/exemplify a F3 Manifestation Product Type, and can therefore not “differ from class features”).

4.5.7. Treatment History

This attribute maps to P31B was modified by E11 Modification Event P3 has note E62 String.

It fits both F4 Manifestation-Singleton and F5 Item.

4.5.8. Scheduled Treatment

No construct in CIDOC CRM currently makes it possible to account for an event that has not happened yet. We can just model that attribute as an E7 Activity that P3 has a note E62 String attached to it.

→ Martin Doerr thought that it would be interesting to introduce future events in the CIDOC CRM. Stephen Stead had objections against that. Martin Doerr replied that E30 Rights imply certain future activities as possible futures and that this needs to be further developed. Besides, future activities were declared as out of the scope of the CIDOC CRM as long as it was under development, but now that the model is considered to be stabilised, nothing prevents the CRM-SIG from considering modelling future events.

4.5.9. Access Restrictions

??? [Nothing in my notes; P104 is subject to E30 Right?]

Before the meeting ended, we had a debate about Web publications, and the notion of “intentional electronic publishing processes”. Making an electronic file available on a physical carrier equvalates to enabling a production process (copies on demand). We should therefore declare a new class, which has most of the properties of F3 Manifestation Product Type: F?? Electronic Publishing (a subclass of F39 Production Plan). Is an Electronic Publication just the naked Expression contained in an electronic file? After a somewhat lengthy debate we came to the conclusion that F?? Electronic Publishing implies a F41 Publication Expression, but *lacks* a F3 Manifestation Product Type.

Follow-up and plans for the future

Patrick Le Bœuf is charged to draft a first preparatory draft of draft minutes of the meeting (the present document), which shall be completed with other participants’ notes, and to provide a first draft sketch of a draft document that will draft scope notes for the classes we have declared so far.

The next meeting will combine a CRM Workshop and a FRBR/CRM Harmonisation meeting and will, accordingly, last 5 days, on July 4th-July 8th. Venue: either Norway (Oslo or Trondheim) if funding is possible from the DELOS Project, or Crete if DELOS cannot fund that meeting.