

# The 34nd joined meeting of the CIDOC CRM SIG and ISO/TC46/SC4/WG9 and the 27th FRBR - CIDOC CRM Harmonization meeting

6-9 October 2015

FORTH, Heraklion, Crete

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**Tuesday 6/10/2015**

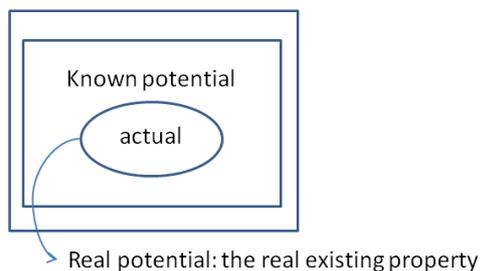
## FOL presentation by Carlo Meghini

Carlo presented the proposed formalization of CIDOC in First Order Logic.

Martin commented on

$(\forall xy)[P88(x,y) \supset E53(x)]$

$(\forall xy)[P88(x,y) \supset E53(y)]$



It should be defined in the scope note of the property if it is compatible with the bottom up evolution of the model. ( My intentional properties should be independent).

All the birds are flying but Tweety doesn't fly! This property doesn't hold for all instances.

This is more complicated and it cannot be represented by FOL.

The problem arises with potential properties. Then we discussed about strong and necessary we referred to P41.

Martin asked the group, if proposed FOL formulation by Carlo is approved by the group. The CRM-SIG decided that it is approved as a correct logical formulation.

## **Inconsistent KBs**

Then we discussed about the inconsistencies in databases and particular in knowledge databases. We agreed that we need ways( algorithms) to isolate minimal subsets that create inconsistencies (multiple fathers) in a particular KB. Carlo will define requirements for a KB IT service.

Pat Riva will send us potential duplicates from ViaF. Martin summarized the discussion about inconsistencies:

- Things are known and distinct
- things that must exist, but not necessarily distinct.
- properties that may contradict.
- properties that must not contradict.
- standard names need an epistemological definition

Finally we conclude that we should describe the methodology of an ontology definition as an empirical method as a way to compare reality or a part of the reality it describes.

We need an epistemological definition what are the ways of falsify

We need a way to decide against reality

## **Issue 276:**

The crm-sig discussed the proposals about shortcuts made the following comments

***P2:***

The proposed text about knowledge creation process has been accepted.

***P48:***

This is not a shortcut. There is Cardinality conflict! Martin and CEO will check the FOL for shortcut Logic

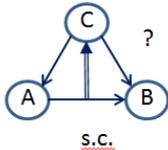
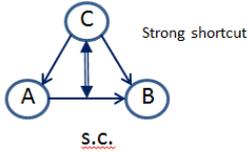
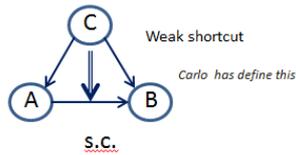
***P49:***

The scope note is changed..

***P53***

It should be discussed. The discussion should take into account the discussion in Nuremberg.

*The inverse is weak because create the shortcut from the link and not from the whole path.*



**P130**

It is a conditional shortcut. The scope note is revised.

**Comment accepted:** features of the used objects appear in the product: P73i to correct the label of inverse property

**Issue 281:**

We examined the transitivity of properties

P5 is transitive, (if we regard the feature where the association is based)

P69 is not transitive (?), an example is needed

P130 is not transitive

P148 methodology remark:

P150 is not transitive: it deserves an example in the scope note

P1,P48,P102,P2,P137 they are all recursive

P105 it could be transitive but it is not

P165 It is transitive, we should make a note about transitivity in the scope note.

P27 it is not transitive and it is not even recursive

P46 we should add to the table

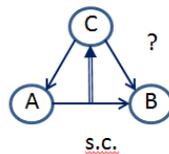
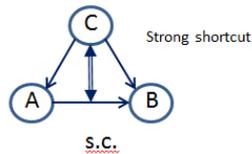
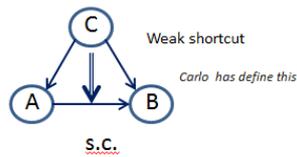
CEO will update the scope notes

The next version will be 6.2.1

P48 the cardinality by CEO by tomorrow

P53: Carlo will do the action noted in P53 figure on previous minutes

The inverse is weak because create the shortcut from the link and not from the whole path. It should be discussed.



P107 it is not transitive : everything that it is current cannot be a strong shortcut.

- Carlo said that “ a strong shortcut means that you introduce more knowledge”
- **Comment accepted:** To the current ownership there is no inverse because you cannot reconstruct the chain. **Comment accepted:** We never modify ownership but we add another ownership
- **Comment accepted:** current ownership comes from close world. This property may not be useful in to information integration

The sig decided that in the introduction to CRM it should be stated that someone before read and use CRM, should read certain documents. It should be written an introduction for RDF and OWL representation of CRM. (Mark Fichtner will prepare such documents) this was a homework by Mark Fichtner)

## Space time issues (195,234,235,275,243,271)

E93: we postponed. It will be more elaborated by GB

P132 : the example is correct

P133: we made changes. An example will be provided by MD

P7: Christian will describe in words the shortcut in the scope note

P161: MD will describe in words the shortcut in the scope note

P166, P167: MD will add the scope notes

P164: examples are needed. Also it is accepted that P164 isA P160.

## Issue 270

It is still pending the name of collection. A proposal was to be “E78 to "Curated Holdings” and the members should vote by email

**Wednesday 7/10/2015**

### *Issue 281:*

Erlagen will present to the next meeting the properties that Erlagen have implemented as symmetric, in order to be approved by CRM-SIG.

Mark presented the proposed symmetric properties:

*Comment accepted:* when a property is symmetric there are implications to super and sub properties of this property.

In FOL we have no assumptions about symmetric / assymmetric

We need a definition of a “directed property”

Symmetric properties are P69, P130, 139

We need to change the symmetry statement in FOL

*Comment accepted:* In official release we will keep things backwards compatible. (Compatible at least in instance level)

HW: Mark will distribute to crm-sig the respective owl versions with compatible statements.

### **Presentation by Maurizio Lana about an ontology of geographical knowledge**

*Comments accepted:* the distinction is crucial between anthropic entity and artifact

### **Presentation by Achille about “Organising Geographical Knowledge”**

To be discussed in the next meeting. Carlo, CEO, Maurizio Lana Øyind will review the proposed ontology?

MD proposed to slightly remove the Allen stuff from CRM.

Then we discussed how the scholars used to describe reality. It is a question of discourse how people, river, place behave in reality and what is the reality.

HW: A text should be written about this discussion by philosophers MDa, GB, Carlo, Thanassis, Achille

### **Bussiness transactions**

The crm-sig decided to put the model in the CIDOC CRM core. see issue 273

### **Issue 281**

Martin will change the assymetrical to directed P69, P139

### **Issue 285**

CEO and MD will find a better formulation

### **Thursday 8/10/2015**

Discussion o CRMarcheo and CRMba

### **Issue 243**

Achille proposed to add to along with (a) E55 Type.PXX objects of a type appear in: E4

Period. The property “E55 Type.PXX object of a type define: E4 Period” (Issue 243) P159 should be updated in CRM<sub>BA</sub>

During the presentation of CRM<sub>BA</sub>, comments were made about the use of B4 and B1. Then we decided a discussion group to be formed for elaborating a text about function. Achille, Paola, Carlo, MDa, GB, CEO are the members of this group.

## **World wide Review of FRBRoo version 2.2.**

The FRBR- CRM group discussed the comments received from the British Library (Alan Danskin), Die Deutsche Nationalbibliothek (Lars G. Svensson), and the Joint Steering Committee (JSC) for Development of RDA (Gordon Dunsire), on the occasion of the world-wide review of FRBR<sub>oo</sub> version 2.2 in Spring 2015. They decided to produce new version 2.4 following the comments received.

Additional the group decided that

(a) any form in xml will be regarded compatible to rdf. The purpose is the interoperability and not proposing particular representation

(b) to look for examples from museums about FRBR<sub>oo</sub> (i.e. papyrus interpretations)

(c) to identify in the scope notes of FRBR<sub>oo</sub> the identity criteria (PLB)

(d) regarding the RDA’s comment about “italics” (pg. 30 ) it is decided to be an issue for CIDOC CRM too.

(e) regarding the RDA’s comment about the E27 site (pg. 49), it is decided that we could extend the scope note of E27 site, saying why an E27 Site is not a place

(f) an explanatory text for FOL representation should be added in the terminology section of CIDOC CRM.

Then Pat Riva presented PRESS<sub>oo</sub>

## **Friday 9/10/2015**

### **Issue 276:**

P2-knowledge creation process

We started discussing the homework of George Bruseker about “knowledge creation process”. We decided to add this text to the introduction of CRM. Also we decided that we need a statement about “What a knowledge base is.”, this text will be elaborated by Carlo.

### **CIDOC BOARD meeting**

Then we discuss about CIDOC conference. Christian Emil informed the group about the CIDOC Board meeting.

We decided that it is needed to be noted in the text of CRM that we have ‘no claims to ISO’ CEO will write a statement about contributors by next meeting.

Also FORTH will ask the law department about the formulation of a statement about the rights of the community drafts text.

## **New issue about changes 5.0.5 and 5.0.4**

Discussing the issue 237, PLB presented the differences between the ISO 2014 and 5.0.4 version. In previous meeting we have taken the decision of creating a 5.0.5 version. In this version, we decided to exempt the things that we have semantic concern. We will accept the rest and we will make issues all the differences. The discussed differences are the followings:

P14: we accept the change in the name of the property

P16: We accept the deletion of raw materials. We will introduce this change to the text

P28,P29, P30: we accept label change

P50: ISO version deviates. We will keep our scope note.

P56: We accept

P82: we accept

P88: ??

P92: the example is accepted

P93: accepted

P129: we accept and it is proposed to be introduced in the introduction an explanation for “aboutness”

P138: we accept

P139: we retain the version 5.0.4.

P147: we accept the examples but not the scope note.

## **Didactic material**

Then we started to discuss about the didactic methodology.

Then we decided to form a group of formulating how the empirical method of modelling that we have developed building CRM can be justified theoretically. Source to this issue will be the Achilles’ project and will include examples and exercises. Oeyind, Velios and Siegfried have expressed an interest about this. Martin asked about who is interested in teaching philosophical aspects.

## **EDM and CIDOC CRM**

ISSUE: Europeana claims that EDM is CIDOC compliant. It is not compliant with 5.0.4. It is needed to be checked with ISO. MD will send a message to Europeana.

## **Issue 255**

Martin’s FAQ proposal about “what is color” is accepted.

## **Issue 268**

*Comment accepted:* We regard that actors may have rights to produce instances of this type. This is regarded to be a kind of right to type itself. Since F3 isA E72 legal Object then an instance of F3 is an instance of E72. Also we don’t regard that the scope note of F3 excludes stamps. The proposal: “to introduce a new class in CRM “Exx Production Type “ which

*should be a subclass of E55 Type only and F3 Manifestation Product Type will be a subclass of this new class” is accepted.*

### **Issue 274**

It is decided that Thanasis Velios will work on this

### **Issue 278**

To be discussed between CEO and PLB

### **Issue 280**

The proposal : “the R64 used name (was name used by) to be subproperty of P16” is accepted.

### **Issue 287**

The crm-sig decided a guideline (FAQ)t o be produced for modelling visual works <http://vocab.getty.edu/aat/300041273> with FRBRoo. It is assigned to Pat.

### **Issue 288**

If the two inner bounds are not known, we should give the outer bounds. It is decided a good practice guide to be written by MD and CEO. MD will write about negative inner bounds

### **Issue 289**

The scope note of P150 defines typical parts of has been revised. The issue is closed

### **Issue 236**

The crm-sig decided that this issue is referred to how we accept and testify the compatibility

### **Next meeting**

Proposals made for Prato and Amsterdam. It is decided the meeting place and time to be decided by using doodle.