Implicature of Attributes in the FRBR Model

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Functional Requirements for
Bibliographic Records outlines
“a framework that identifies and clearly defines the entities of interest to
users of bibliographic records, the attributes of each entity, and the types of
relationships that operate between entities.” Of particular interest is what at
first appears to be a hierarchy bibliographic entities defined as “group 1”: work,
expression, manifestation, and item. The report aims to
rethink library catalogs in a way that will better serve the needs of users,
and it gives a clear disclaimer that the conceptual model “does not carry the
analysis to the level that would be required for a fully developed data model”
[IFLA 1998: 3].

Nevertheless, it is clear
that the conceptual model will lay the groundwork for an ontology of the
bibliographic universe that could be used by software agents, such as those in
Semantic Web applications. Indeed, work is underway to reconcile the FRBR model
with the CIDOC Conceptual Reference Model (CRM) [ICOM/CIDOC 2007], an ontology
developed by the museum community. The result is a harmonized model called FRBROO
[International 2008], one more promising as a true ontology than the original
FRBR model. It refines the FRBR model’s entities, attributes, and relationships
to give an “object-oriented definition of FRBR” [International 2008: 7]. This
includes the introduction of temporal entities, events, and time processes and
an analysis of the creation and production processes [International 2008:
11–15].

However, neither the FRBR
model nor FRBROO specifies how an attribute comes to be assigned to
its entity. For example, how does a work, expression, or manifestation
acquire its title? Can any of these titles change? How are access
restrictions on an item related to access restrictions on a manifestation?
Using for simplicity the original FRBR model rather than FRBROO,
this paper proposes a revised FRBR model in which certain attributes of
entities in group 1 are inherited by default, first up and then back down the “hierarchy”
of group-1 entities. Such an approach yields many inferred attributes missing
from the original FRBR model.

This system of implicature
could prove useful for machine learning about bibliographic entities, whereby
software agents would be able to infer attributes of a group-1 entity based on
its relationships to other entities. Furthermore, considering such implicature
helps clarify our assumptions about textual versions central to the study of
textual heritage.

References

ICOM/CIDOC 2007 – ICOM/CIDOC Documentation Standards Group.

Definition of the CIDOC Conceptual Reference Model [Ýëåêòðîííûé ðåñóðñ] / produced by the ICOM/CIDOC Documentation Standards
Group, continued by the CIDOC CRM Special Interest Group. – Version 4.2.2. –
2007. – Ðåæèì äîñòóïà: http://cidoc.ics.forth.gr/docs/cidoc_crm_version_4.2.2.pdf, ñâîáîäíûé. – Çàãë. ñ òèòóë. ñòðàíèöû.

IFLA 1998 – IFLA Study Group on the Functional Requirements for
Bibliographic Records. Functional requirements for bibliographic records :
final report [Ýëåêòðîííûé ðåñóðñ] / IFLA Study
Group on the Functional Requirements for Bibliographic Records. – München :
K.G. Saur, 1998. – Ðåæèì
äîñòóïà: http://www.ifla.org/VII/s13/frbr/frbr_2008.pdf, ñâîáîäíûé. – Çàãë. ñ
òèòóë. ñòðàíèöû.

International 2008 – International Working Group on FRBR and CIDOC
CRM Harmonisation. FRBR object-oriented definition and mapping to FRBRER
(version 0.9 draft) [Ýëåêòðîííûé ðåñóðñ] / International
Working Group on FRBR and CIDOC CRM Harmonisation supported by Delos NoE ;
editors Chryssoula Bekiari, Martin Doerr, Patrick Le Bœuf ; contributors Trond
Aalberg … [et al.] – 2008. Ðåæèì äîñòóïà:
http://cidoc.ics.forth.gr/docs/frbr_oo/frbr_docs/FRBR_oo_V0.9.pdf, ñâîáîäíûé. – Çàãë. ñ òèòóë. ñòðàíèöû.

Èìïëåìåíòàöèîííàÿ ìîäåëü «Ôóíêöèîíàëüíûõ òðåáîâàíèé ê áèáëèîãðàôè÷åñêèì çàïèñÿì»

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