Mistakes
Misteaks have been made

SWIB 2015
Karen Coyle
circa 1984
When I started programming, we didn't have any of these sissy "icons" and "windows."

All we had were zeros and ones -- and sometimes we didn't even have ones.

I wrote an entire database program using only zeros.

You had zeros? We had to use the letter "0."
Mack, Raymond W


Bibliography: p. 05-06.


Library of Congress

UA927.M23 355.232 61-61605
The occasion instant: The structure of social responses to unanticipated air raid warnings / by Raymond W. Mack, George W. Baker; Foreword by Robin M. Williams, Jr.


xv, 69 p.; 25 cm.

National Research Council (U.S.). Disaster Research Group. Disaster study, no. 15

Includes bibliographical references (p. 65-69).

Civil defense United States.

Air warfare Psychological aspects.

Baker, George W. (George Walter), 1915-

National Research Council (U.S.). Disaster Research Group. Disaster study; no. 15.

Publication (National Research Council (U.S.)) 945.
Incoming uc bib. record
008...1979...
100 $a Cole, John Young $d 1940-
245 $a For Congress and the Nation
260 $b Library of Congress $c 1979
610 $a Library of Congress
610 $a Library of Congress $x history
710 $a Library of Congress

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**KEYTERM FILES**

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UNION CATALOG SYSTEM FILE DESIGN

CALLS FILE
- PE SEARCH TERMS (KEYWORDS, ISSNS, CODENS)

"AT" BIT STRINGS

- LCCNS
- ISBNS
- TITLE KEYS
- ISSNS
- DATES

UX_ISN
- B_ISN
- L_ISN
- TI_ISN
- PA_ISN
- CA_ISN
- UT_ISN
- SE_ISN
- SU_ISN

UX_INDEX CONTROL FILE

UC_INDEX CONTROL FILE

BIBLIOGRAPHIC FILE
- B_ISN
- L_ISN
- A_ISN
- TI_ISN
- PA_ISN
- CA_ISN
- UT_ISN
- SE_ISN
- SU_ISN

LOCAL DATA FILE
- B_ISN
- MAINTENANCE KEYS

AUTHORITY/HEADING FILE
- A_ISN

A/H SORT INDEX
- A_ISN(S)

KEYTERM FILES
- TI_ISN
- PA_ISN
- CA_ISN
- UT_ISN
- SE_ISN
- SU_ISN
- UC KEYTERMS & EXACT KEYS
- NON-UC KEYTERMS & EXACT KEYS

NON-UC INDEX CONTROL FILE
(LC-ONLY BIB RECS, NON-DISPLAY BIB RECS)

* = DESCRIPTORS

- 2 -

LGB 1-14-85
De la Cruz, Melissa
Cervantes Saavedra, Miguel de
Lake Erie, Battle of, 1813
Erie, Lake
Twain, Mark
Twain, Mark
Twain, Jane
Twaib, Fauz
Twagilimana, Aimable
Twaddell, Anna Crawford
Twachtman, David M.
Our Bibliographic Model(s)

or, 135 years without a major change in how we do things
OBJECTS.*

1. To enable a person to find a book of which either
   (A) the author
   (B) the title
   (C) the subject

2. To show what the library has
   (D) by a given author
   (E) on a given subject
   (F) in a given kind of literature.

3. To assist in the choice of a book
   (G) as to its edition (bibliographically).
   (H) as to its character (literary or topical).
2. *Functions of the Catalogue*

   The catalogue should be an efficient instrument for ascertaining
   2.1 whether the library contains a particular book specified by
      (a) its author and title, or
      (b) if the author is not named in the book, its title alone, or
      (c) if author and title are inappropriate or insufficient for identification, a suitable
          substitute for the title; and
   2.2 (a) which works by a particular author and
        (b) which editions of a particular work are in the library.
86 years of progress

OBJECTS.*

1. To enable a person to find a book of which either
   (a) the author
   (b) the title
   (c) the subject
   is known.

2. To show what the library has
   (d) by a given author
   (e) on a given subject
   (f) in a given kind of literature.

3. To assist in the choice of a book
   (g) as to its edition (bibliographically).
   (h) as to its character (literary or topical).

2. Functions of the Catalogue
   The catalogue should be an efficient instrument for ascertaining
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      (b) if the author is not named in the book, its title alone, or
      (c) if author and title are inappropriate or insufficient for identification, a suitable
         substitute for the title; and
   2.2 (a) which works by a particular author and
         (b) which editions of a particular work are in the library.
FRBR-zed ICP

1875

1. To enable a person to find a book of which either
   (a) the author
   (b) the title is known.
   (c) the subject

2. To show what the library has
   (d) by a given author
   (e) on a given subject
   (f) in a given kind of literature.

3. To assist in the choice of a book
   (g) as to its edition (bibliographically).
   (h) as to its character (literary or topical).

1998

- **Find** all manifestations embodying:
  - the works for which a given person or corporate body is responsible
  - the various expressions of a given work
  - works on a given subject
  - works in a given series
- **Find** a particular manifestation:
  - when the name(s) of the person(s) and/or corporate body(ies) responsible for
    the work(s) embodied in the manifestation is (are) known
  - when the title of the manifestation is known
  - when the manifestation identifier is known
- Identify a work
- Identify an expression of a work
- Identify a manifestation
- Select a work
- Select an expression
FRBR – what you should know

Even if you’d rather
not
FRBR – what you should know

Even if you’d rather not
FRBR – what you should know

Even if you’d rather not
Timeline

- 1990 – Stockholm meeting (IFLA)
- 1992 – Terms of reference completed
- 1994 – First draft for comment
- 1998 – Final draft
- 2009 – Current draft
- 2013 – RDA implemented
- 2015 - ??
FRBR Study Goals

- Framework for understanding bibliographic record purposes
- Recommend basic level of functionality for national library bibliographic records
- Develop core-level standard to reduce cataloging costs
- Ensure that records meet user needs
Terms of Reference*
Deliverables

- Framework with a range of *entities* and *relationships*
- Define *functions* for *entities*
- Identify *attributes* for *entities*
- Define a national bibliographic record

*Cites Data Analysis; the Key to Database Design, by Richard Perkinson, 1984*
The methodology used in this study is based on an entity analysis technique that is used in the development of conceptual models for relational database systems. Although the study is not intended to serve directly as a basis for the design of bibliographic databases, the technique was chosen as the basis for the methodology because it provides a structured approach to the analysis of data requirements that facilitates the processes of definition and delineation that were set out in the terms of reference for the study.
The entity-relationship analysis technique and the conventions for graphic presentation that are used in this study are based in large part on the methodology developed by James Martin and outlined in his book *Strategic Data-Planning Methodologies* (Prentice-Hall, 1982). Graeme Simsion’s *Data Modeling Essentials* (Van Nostrand Reinhold, 1994), Richard Parkinson’s *Data Analysis: the Key to Data Base Design* (QED Information Sciences, 1984), and Ramez Elmasri and Shamkant Navanthe’s *Fundamentals of Database Systems* (Benjamin/Cummings, 1989) were also used in shaping the methodology for the study. All four books are recommended to those who are interested in additional background and more detail on entity-relationship analysis.

FRBR final report, “Methodology” section
The study results

- 142 pages of text
- 3 diagrams
“FRBR is not a data model. FRBR is not a metadata scheme. FRBR is not a system design structure. It is a conceptual model of the bibliographic universe.” B. Tillett, 2005
Scenario 1: Relational / object-oriented database structure

MANIFESTATION RECORD
- Title proper*
- Variant title*
- Statement of responsibility relating to title proper
- Edition statement
- Publication statement
- Carrier type
- Extent
...

embodies

WORK RECORD
- Preferred title for the work*
- Creator [link]
- Relationship designator
- Form of work
- Related work [link]
...

realized through

EXPRESSION RECORD
- Contributor [link]
- Relationship designator
- Language of expression
...

embodies

ITEM RECORD
- Item-specific carrier characteristic
- Custodial history of item
- Restrictions on access
...

Primary relationship

ACCESS POINT CONTROL RECORD (PERSON)
- Preferred name for the person*
- Variant name for the person*
- Date of birth
- Related person [link]
...

ACCESS POINT CONTROL RECORD (PERSON)
- Preferred name for the person*
- Variant name for the person*
- Title of the person
- Related person [link]
...

ACCESS POINT CONTROL RECORD (PERSON)
- Preferred name for the person*
- Variant name for the person*
- Profession or occupation
- Place of birth
...
Incoming uc bib. record
008 ... 1979...
100 $a Cole, John Young $d 1940-
245 $a For Congress and the Nation
260 $b Library of Congress $c 1979
610 $a Library of Congress
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710 $a Library of Congress

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WORK

is realized through

EXPRESSION

is embodied in

MANIFESTATION

is exemplified by

ITEM
WORK is realized through EXPRESSION, which is embodied in MANIFESTATION and is exemplified by ITEM.
WORK

is realized through

EXPRESSION

is embodied in

MANIFESTATION

is exemplified by

ITEM
Because the notion of a *work* is abstract, it is difficult to define precise boundaries for the entity. The concept of what constitutes a *work* and where the line of demarcation lies between one *work* and another may in fact be viewed differently from one culture to another. Consequently, the bibliographic conventions established by various cultures or national groups may differ in terms of the criteria they use for determining the boundaries between one *work* and another.
expression: the intellectual or artistic realization of a work in the form of alpha-numeric etc.

manifestation: the physical embodiment of an expression of a work.
THE USER IN FRBR
2. Objectives, Scope, and Methodology ................................................................. 7
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  4.2 Attributes of a Work ...................................................................................... 33
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  4.5 Attributes of an Item ...................................................................................... 47
FRBR user tasks

Find → Identify → Select → Obtain
OBJECTS.*

1. To enable a person to find a book of which either
   (A) the author
   (B) the title
   (C) the subject
   is known.
2. To show what the library has
   (D) by a given author
   (E) on a given subject
   (F) in a given kind of literature.
3. To assist in the choice of a book
   (G) as to its edition (bibliographically).
   (H) as to its character (literary or topical).
FRBR user tasks

Find → Identify → Select → Obtain

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<th>Identity Manifestation</th>
<th>Identity Item</th>
<th>Select Work</th>
<th>Select Expression</th>
<th>Select Manifestation</th>
<th>Select Item</th>
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National Level Bibliographic Record

7.3 Basic Level National Bibliographic Record .......................................................... 108

APPENDIX A .............................................................................................................. 115
IN CONTEXT – FRBR, RDA, BIBFRAME
“conceptual”

- Not a technology
- No record design
- Forget the diagrams – they don’t mean anything
- It does not produce significantly different bibliographic data
- RDA is the only implementation, and it isn’t a technology or record design
To Do List
WE NEED A NEW TECHNOLOGY!
WE NEED A NEW TECHNOLOGY!
WE NEED DATA AND TECHNOLOGY THAT WORK TOGETHER
WE NEED DATA AND TECHNOLOGY THAT ARE APPROPRIATE TO OUR GOALS
WE NEED NEW GOALS
Current goals are a list of what we will let them do

GOALS BASED ON WHAT USERS WANT TO DO
Thank you!

kcoyle.net
a272 p.; c25 cm. 0a Discworld (Imaginary place) x Fiction. 7a Fantasy fiction. 2gsafd 7a Humorous fiction. 2gsafd bc-
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