

Mistakes

~~Mistakes~~ have been made

SWIB 2015
Karen Coyle



circa 1984



WHEN I STARTED
PROGRAMMING, WE DIDN'T
HAVE ANY OF THESE
SISSY "ICONS" AND
"WINDOWS."



J. Adams © 1992 United Feature Syndicate, Inc.

ALL WE HAD WERE ZEROS
AND ONES -- AND
SOMETIMES WE DIDN'T
EVEN HAVE ONES.

9-8



I WROTE AN
ENTIRE
DATABASE
PROGRAM
USING ONLY
ZEROS.



YOU HAD
ZEROS? WE
HAD TO USE
THE LETTER
"O."

N.Y.S.P.I.

W

2

N213d

no.15

1961

Mack, Raymond W

The occasion instant; the structure of social responses to unanticipated air raid warnings, by Raymond W. Mack and George W. Baker. Foreword by Robin M. Williams, Jr. Washington, National Academy of Sciences-National Research Council, 1961.

xv, 69 p. 25 cm. (National Research Council, Disaster Research Group. Disaster study, no. 15)

National Research Council. Publication 945.

Bibliography: p. 65-69.

1. U. S. Civilian defense. 2. Air warfare. Psychological aspects. I. Baker, George Walter, 1915- joint author. (Series.) Series: National Research Council. Publication 945

UA927.M23

355.232

61-64605

Library of Congress

101



050 00 |a UA927 |b .M23 1961

100 1_ |a Mack, Raymond W.

245 14 |a The occasion instant : |b the structure of social responses to unanticipated air raid warnings / |c by Raymond W. Mack, George W. Baker ; Foreword by Robin M. Williams, Jr.

260 __ |a Washington, |b National Academy of Sciences-National Research Council, |c 1961.

300 __ |a xv, 69 p. ; |c 25 cm.

490 1_ |a National Research Council (U.S.). Disaster Research Group. Disaster study, |v no. 15

500 __ |a National Research Council. Publication 945.

504 __ |a Includes bibliographical references (p. 65-69).

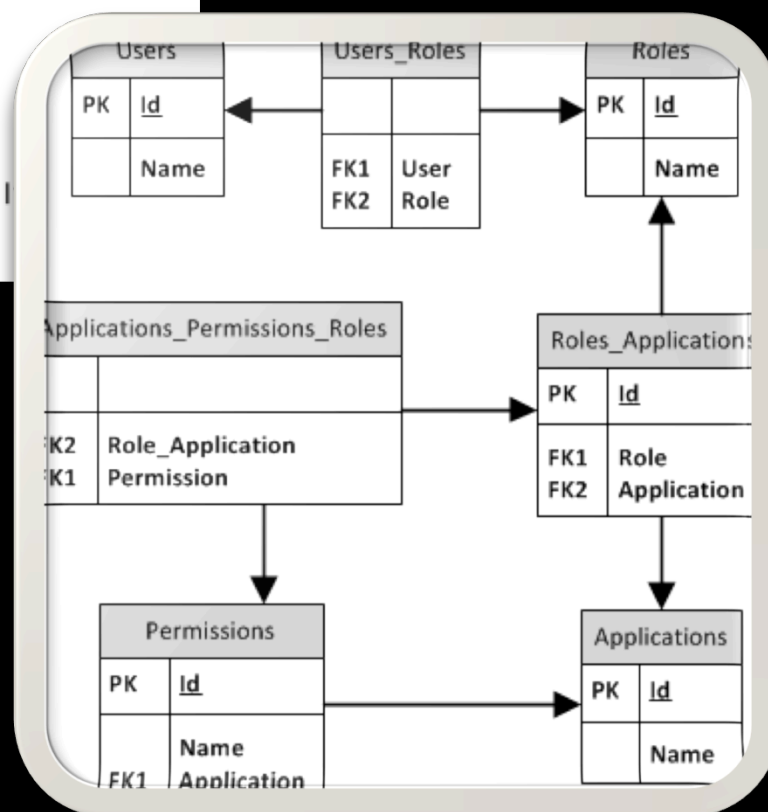
650 _0 |a Civil defense |z United States.

650 _0 |a Air warfare |x Psychological aspects.

700 1_ |a Baker, George W. |q (George Walter), |d 1915- |e joint author.

810 2_ |a National Research Council (U.S.). |b Disaster Research Group. |c Disaster study ; |v no. 15.

830 _0 |a Publication (National Research Council (U.S.)) ; |v 945.



MELVYL FILE DESIGN OVERVIEW - AUTHORITY CONTROL

(KK 1/85)

Incoming uc bib. record

008 ... 1979...
 100 \$a Cole, John Young \$d 1940-
 245 \$a For Congress and the Nation
 260 \$a Washington
 \$b Library of Congress \$c 1979
 610 \$a Library of Congress
 610 \$a Library of Congress \$x history
 710 \$a Library of Congress

Bib.
update

BIBLIOGRAPHIC FILE

ISN = 15	
100	AC # 2, site 1
245	\$a For Congress and the Nation \$a Washington \$b Library of Congress \$c 1979
640	AC # 1, site 1
610	AC # 1, site 4
710	AC # 1, site 1

Incoming LC authority record

110 \$a Library of Congress
 410 \$a United States
 \$b Library of Congress
 410 \$a Congressional Library

AC
up-
date

AUTHORITY FILE

ISN	Site Tag	Text	Keyterm ISN's		
			PA	CA	SU
1	1	110 \$a Library of Congress		11	31
	2	410 \$a United States			
		\$b Library of Congress			
	3	410 \$a Congressional Library			
	4	NAC \$x history			32

INDEX CONTROL FILE

ISN	100
Bib ISN	15
Sort keys	ME COLE JOHN YOUNG 1940
	TI FOR CONGRESS AND THE NATION
	DA 1979
Keyterm ISN's	PA 01
	CA 11
	TI 21
	SU 31, 32

KEYTERM FILES

ISN Keywords & exact keys

PA → 01 COLE JOHN YOUNG

CA → 11 UNITED STATES LIBRARY CONGRESS CONGRESSIONAL
 LIBRARY OF CONGRESS
 UNITED STATES LIBRARY OF CONGRESS
 CONGRESSIONAL LIBRARY

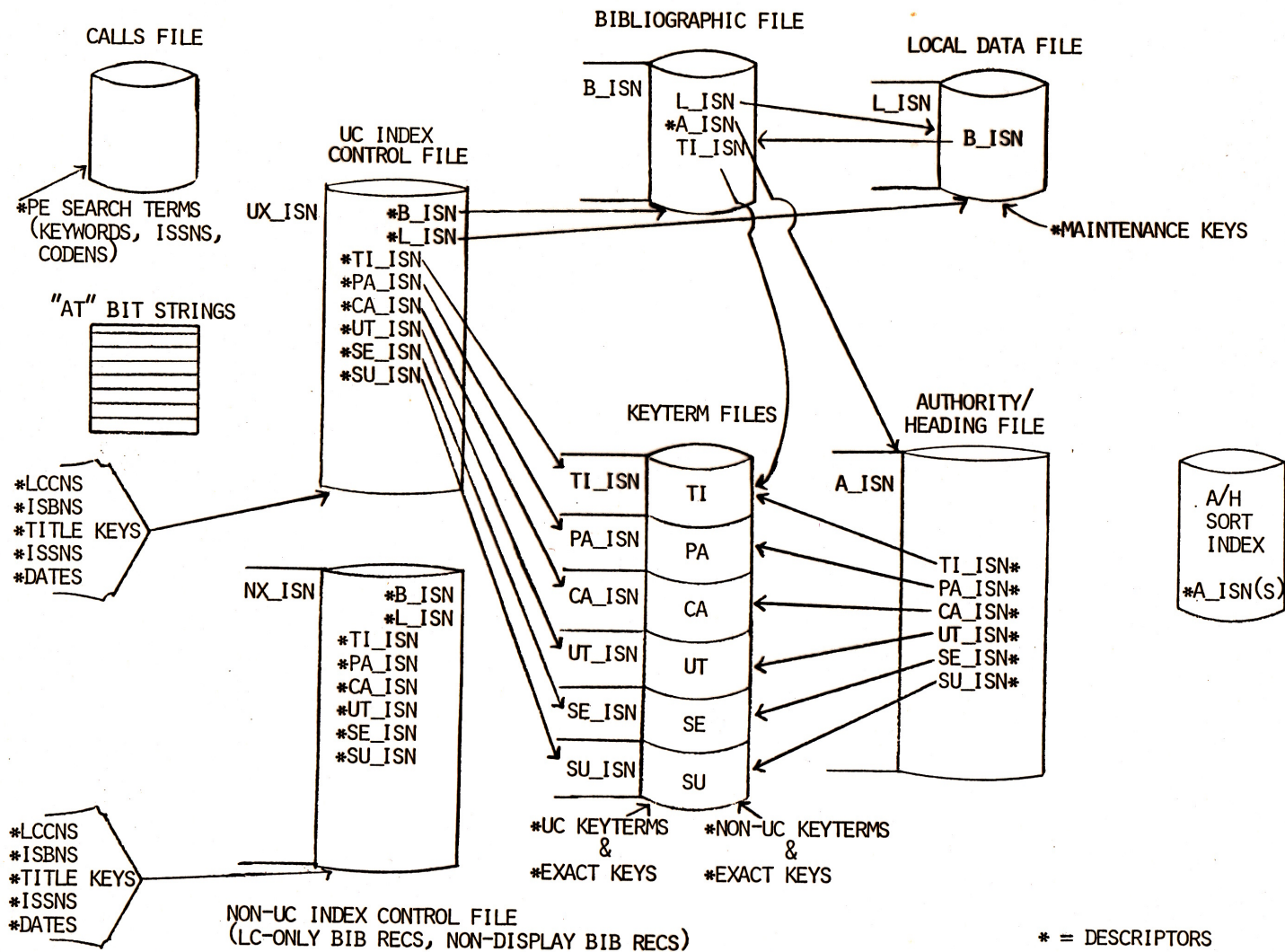
TI → 21 FOR CONGRESS NATION

→ 31 UNITED STATES LIBRARY CONGRESS CONGRESSIONAL
 LIBRARY OF CONGRESS
 UNITED STATES LIBRARY OF CONGRESS
 CONGRESSIONAL LIBRARY

→ 32 UNITED STATES LIBRARY CONGRESS CONGRESSIONAL HISTORY
 LIBRARY OF CONGRESS HISTORY
 UNITED STATES LIBRARY OF CONGRESS HISTORY
 CONGRESSIONAL LIBRARY HISTORY

2	1	100 \$a Cole, John Young \$d 1940-	01		
---	---	---------------------------------------	----	--	--

UNION CATALOG SYSTEM FILE DESIGN



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



1875

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

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 subjectis 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

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.

FRBR-zed ICP

1875

OBJECTS.*

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

1998

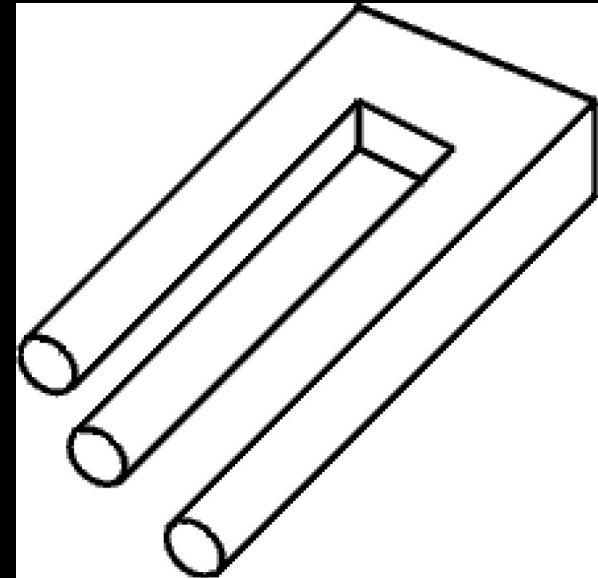
- Find all *manifestations* embodying:
 - the *works* for which a given *person* or *corporate body* is responsible
 - the various *expressions* of a given *work*
 - *works* on a given subject
 - *works* in a given series
- Find a particular *manifestation*:
 - when the name(s) of the *person(s)* and/or *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

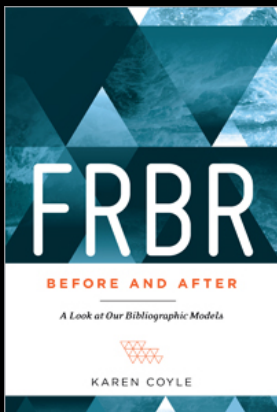
FRBR – what you should know

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

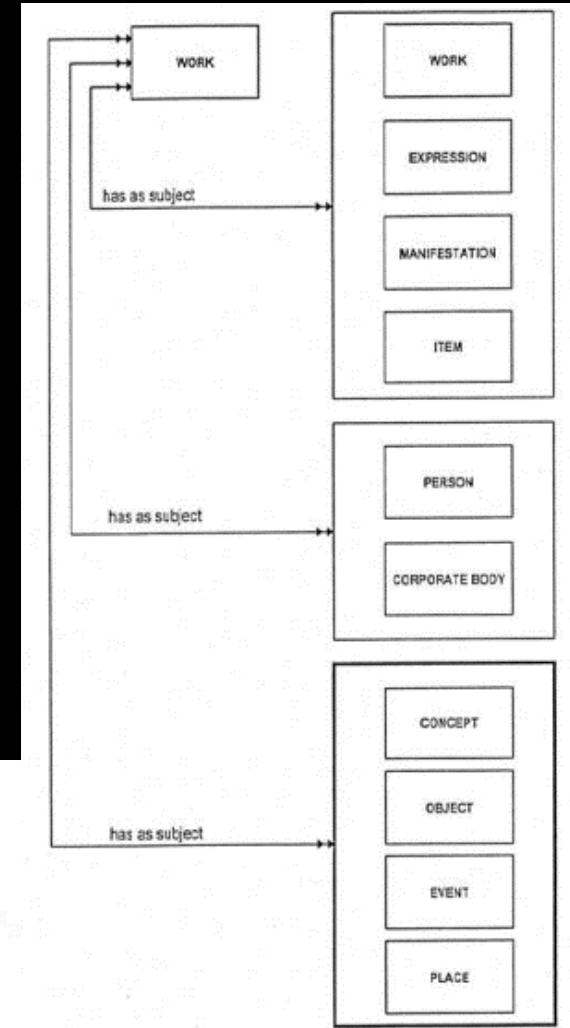
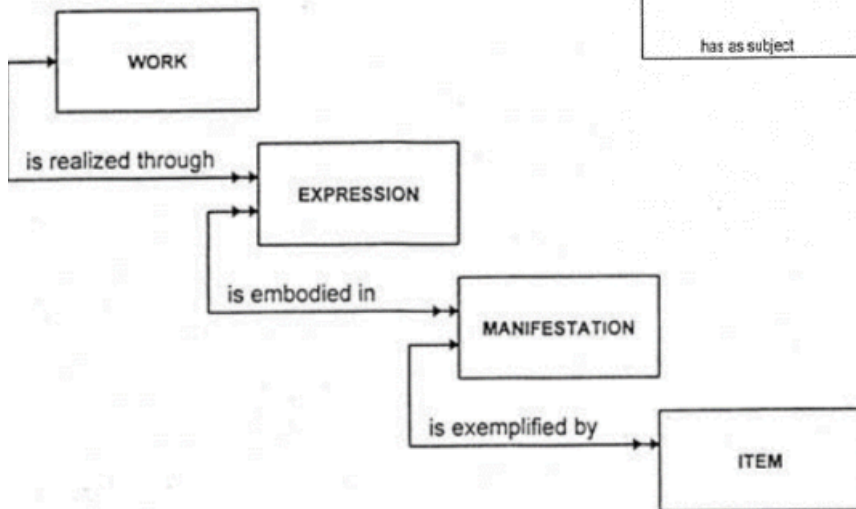
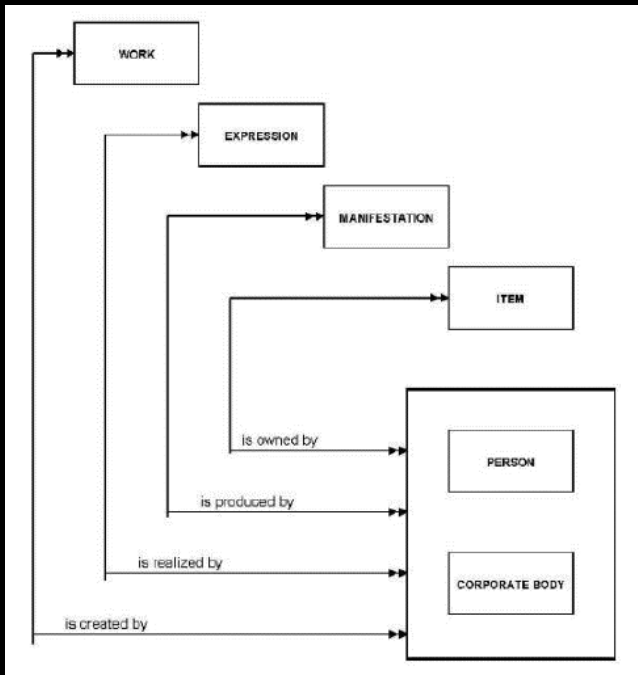
The methodology used in this study is based on an entity analysis technique that is used in the development of conceptual models for relational database systems. Although the study is not intended to serve directly as a basis for the design of bibliographic databases, the technique was chosen as the 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.

FRBR final report, “Methodology” section

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 Perkinson'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.

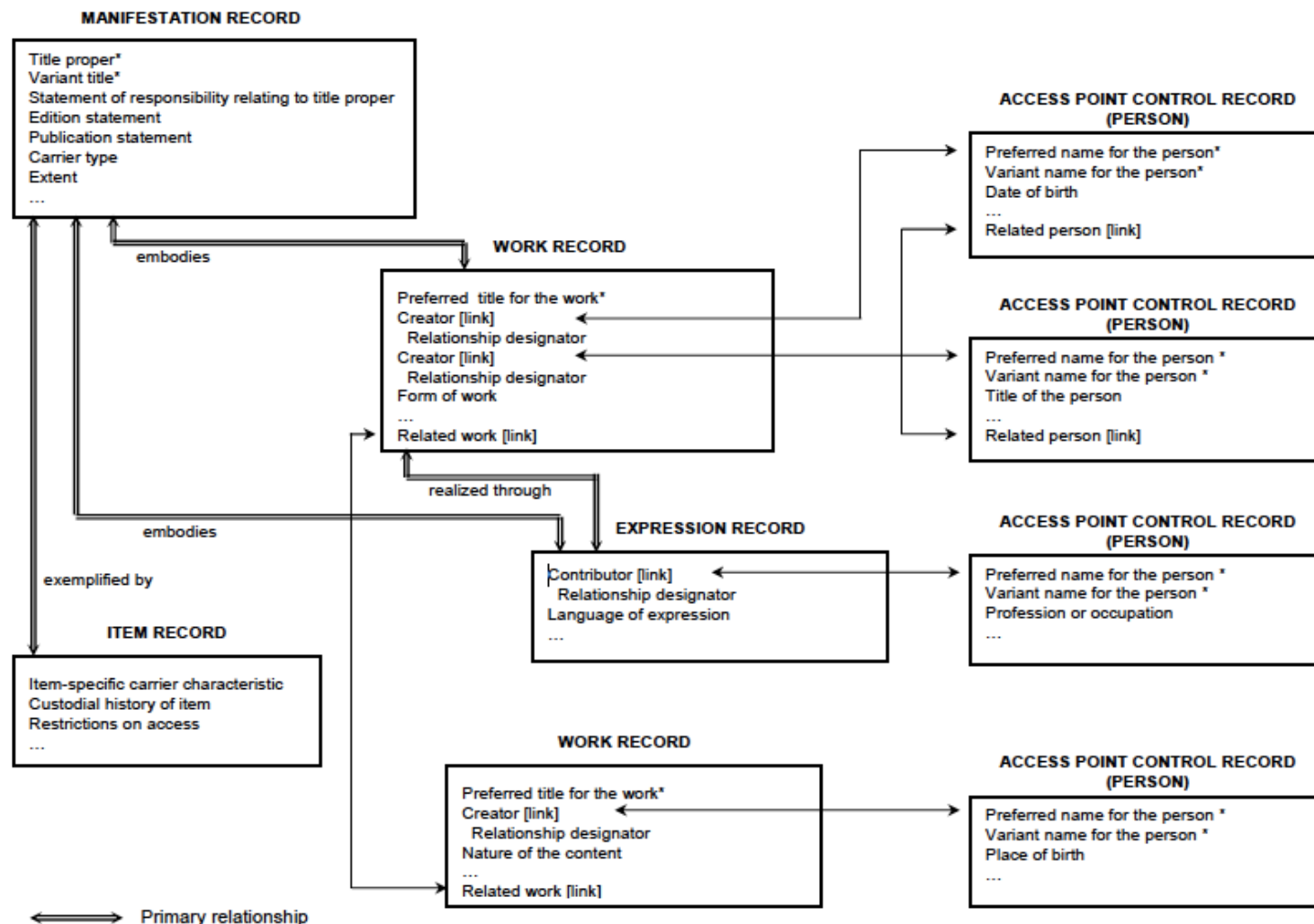
The study results

- 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



MELVYL FILE DESIGN OVERVIEW - AUTHORITY CONTROL

(KK 1/85)

Incoming uc bib. record

008 ... 1979...
 100 \$a Cole, John Young \$d 1940-
 245 \$a For Congress and the Nation
 260 \$a Washington
 \$b Library of Congress \$c 1979
 610 \$a Library of Congress
 610 \$a Library of Congress \$x history
 710 \$a Library of Congress

Bib.
update

BIBLIOGRAPHIC FILE

ISN = 15	
100	AC # 2, site 1
245	\$a For Congress and the Nation \$a Washington \$b Library of Congress \$c 1979
640	AC # 1, site 1
610	AC # 1, site 4
710	AC # 1, site 1

Incoming LC authority record

110 \$a Library of Congress
 410 \$a United States
 \$b Library of Congress
 410 \$a Congressional Library

AC
up-
date

AUTHORITY FILE

ISN	Site Tag	Text	Keyterm ISN's		
			PA	CA	SU
1	1	110 \$a Library of Congress		11	31
	2	410 \$a United States			
		\$b Library of Congress			
	3	410 \$a Congressional Library			
	4	NAC \$x history			32

INDEX CONTROL FILE

ISN	100
Bib ISN	15
Sort keys	ME COLE JOHN YOUNG 1940
	TI FOR CONGRESS AND THE NATION
	DA 1979
Keyterm ISN's	PA 01
	CA 11
	TI 21
	SU 31, 32

KEYTERM FILES

ISN Keywords & exact keys

PA → 01 COLE JOHN YOUNG

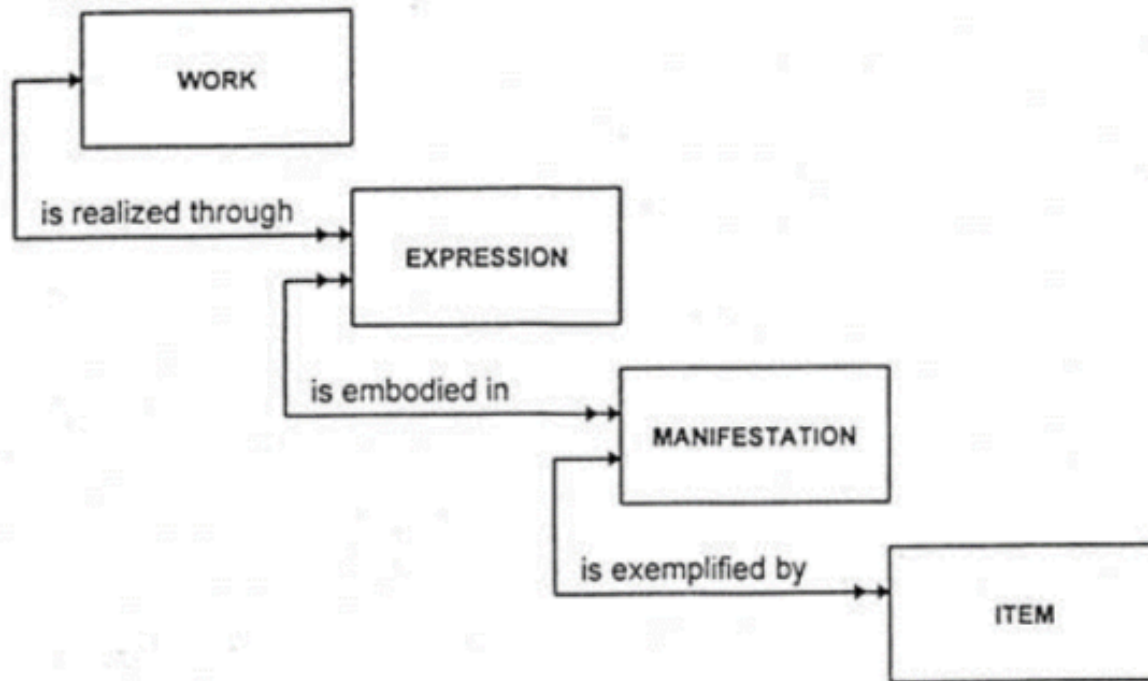
CA → 11 UNITED STATES LIBRARY CONGRESS CONGRESSIONAL
 LIBRARY OF CONGRESS
 UNITED STATES LIBRARY OF CONGRESS
 CONGRESSIONAL LIBRARY

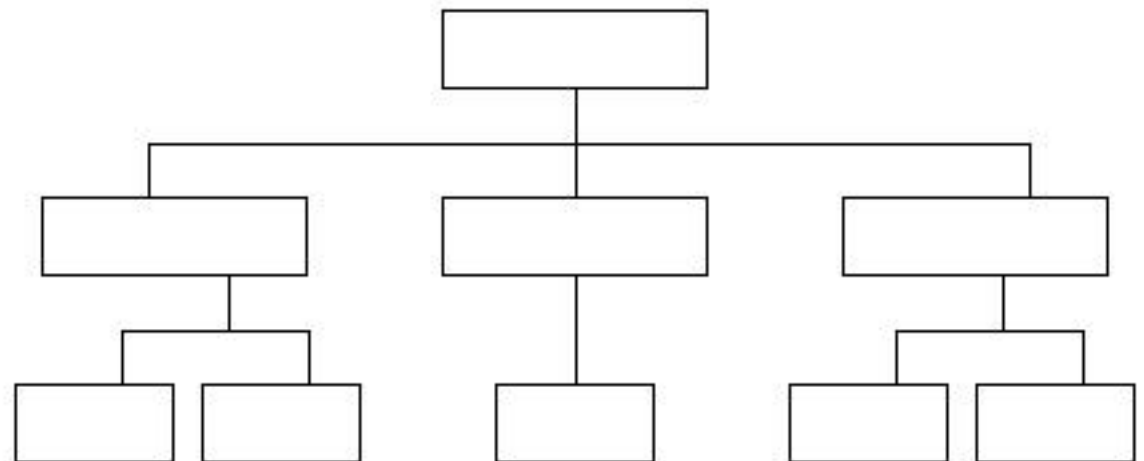
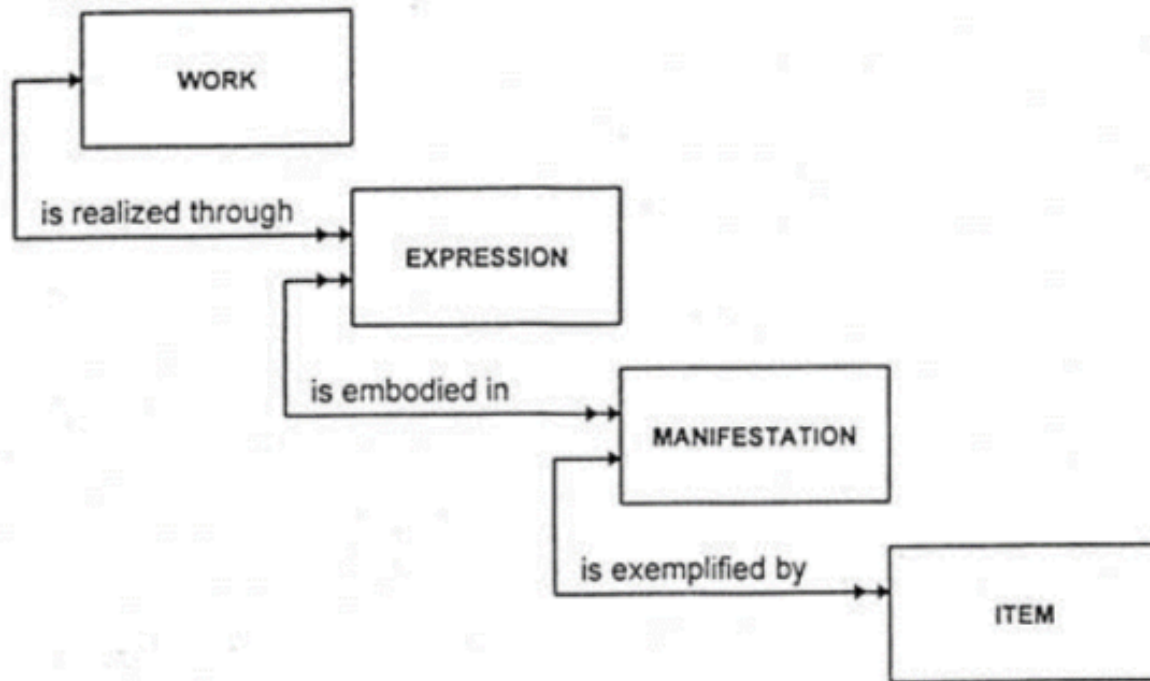
TI → 21 FOR CONGRESS NATION

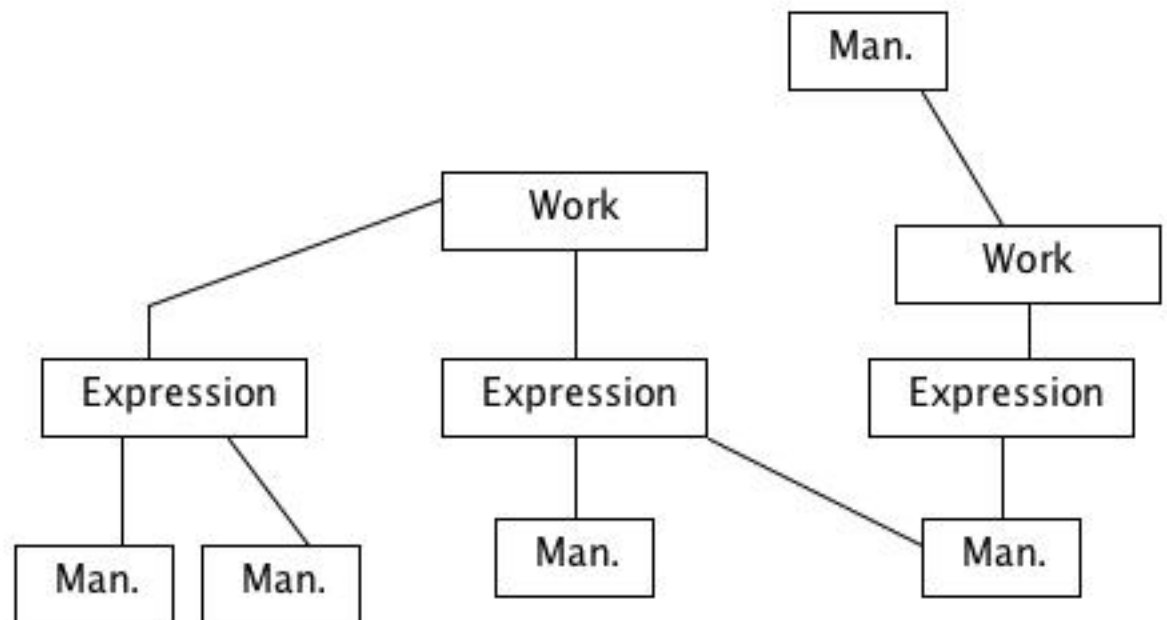
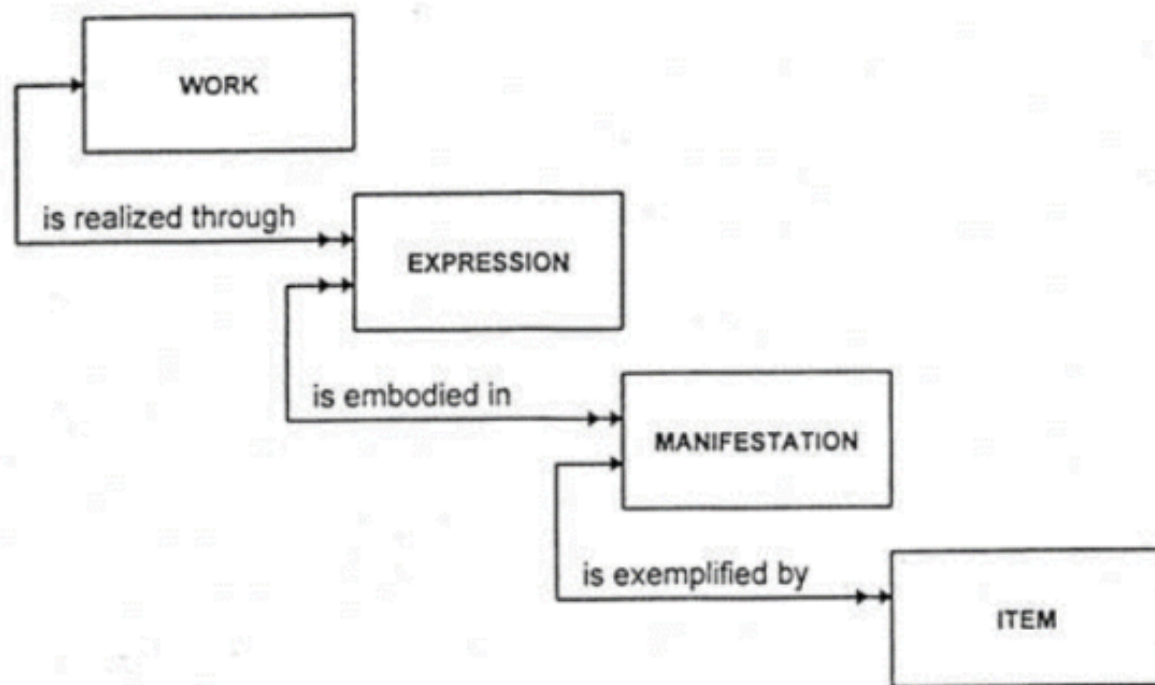
→ 31 UNITED STATES LIBRARY CONGRESS CONGRESSIONAL
 LIBRARY OF CONGRESS
 UNITED STATES LIBRARY OF CONGRESS
 CONGRESSIONAL LIBRARY

→ 32 UNITED STATES LIBRARY CONGRESS CONGRESSIONAL HISTORY
 LIBRARY OF CONGRESS HISTORY
 UNITED STATES LIBRARY OF CONGRESS HISTORY
 CONGRESSIONAL LIBRARY HISTORY

2	1	100 \$a Cole, John Young \$d 1940-	01		
---	---	---------------------------------------	----	--	--







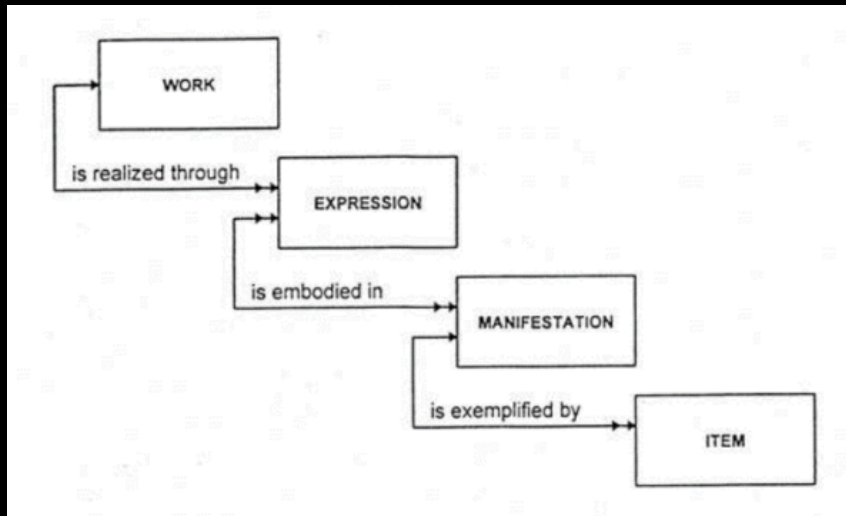
Work-ness

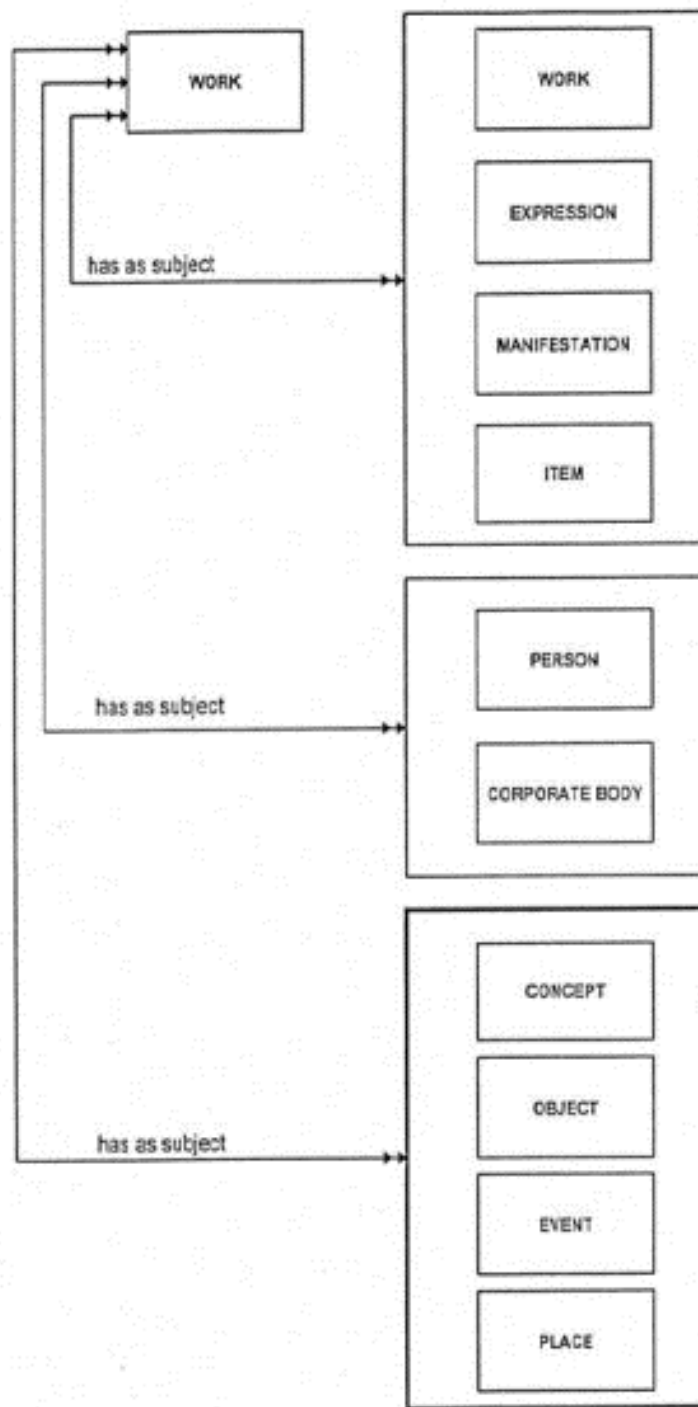
Because the notion of a *work* is abstract, it is difficult to define precise boundaries for the entity. The concept of what constitutes a *work* and where the line of demarcation lies between one *work* and another may in fact be viewed differently from one culture to another. Consequently the bibliographic 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.

WEMI

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*.





GROUP 1

GROUP 2

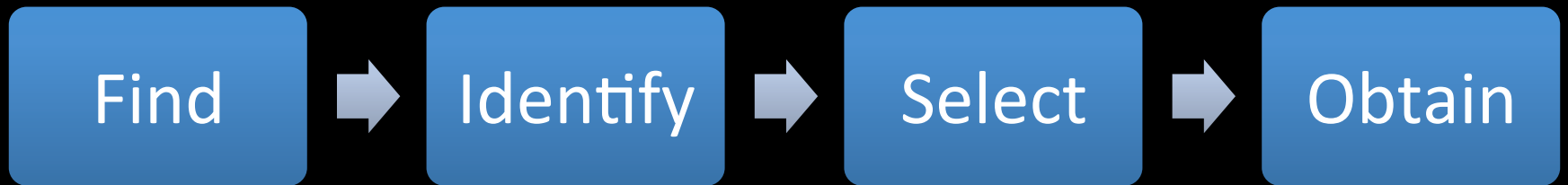
GROUP 3

THE USER IN FRBR

2. Objectives, Scope, and Methodology.....	7
2.1 Objectives of the Study.....	7
2.2 Scope.....	7
2.3 Methodology	9
2.4 Components of the Study	10
3. ENTITIES.....	13
3.1 Overview	13
3.2 The Entities.....	17
3.3 Aggregate and Component Entities	29
4. ATTRIBUTES.....	31
4.1 Attributes of Entities.....	31
4.2 Attributes of a Work.....	33
4.3 Attributes of an Expression.....	35
4.4 Attributes of a Manifestation	40
4.5 Attributes of an Item	47

4.7	Attributes of a Corporate Body	50
4.8	Attributes of a Concept	51
4.9	Attributes of an Object.....	52
4.10	Attributes of an Event	52
4.11	Attributes of a Place.....	52
5.	RELATIONSHIPS.....	55
5.1	Bibliographic Relationships in the Context of the Model	55
5.2	Relationships Depicted in the High Level Diagrams	56
5.3	Other Relationships Between Group 1 Entities	61
6.	USER TASKS.....	79
6.1	Mapping Attributes and Relationships to User Tasks.....	79
6.2	Assessing Value Relative to User Tasks	79
7.	BASIC REQUIREMENTS FOR NATIONAL BIBLIOGRAPHIC RECORDS.....	93
7.1	Basic Level of Functionality	93
7.2	Basic Data Requirements	94
7.3	Basic Level National Bibliographic Record.....	108
	APPENDIX A.....	115

FRBR user tasks



OBJECTS.*

1. To enable a person to find a book of which either

Find

- (A) the author
 - (B) the title
 - (C) the subject
- } is known.

2. To show what the library has

Identify

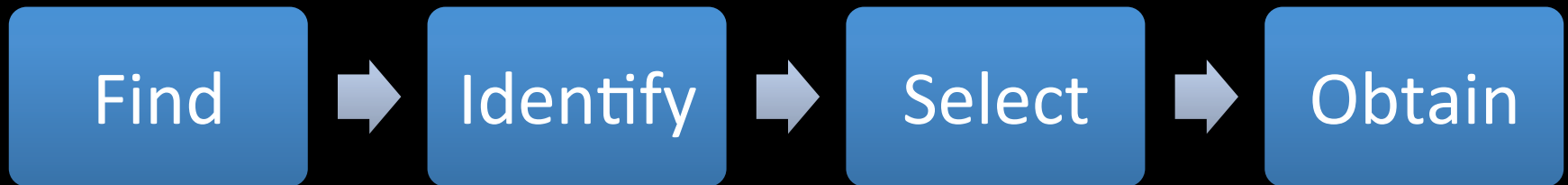
- (D) by a given author
- (E) on a given subject
- (F) in a given kind of literature.

3. To assist in the choice of a book .

Select

- (G) as to its edition (bibliographically).
- (H) as to its character (literary or topical).

FRBR user tasks



Publishing History [Reset chart](#) or continue zooming in.

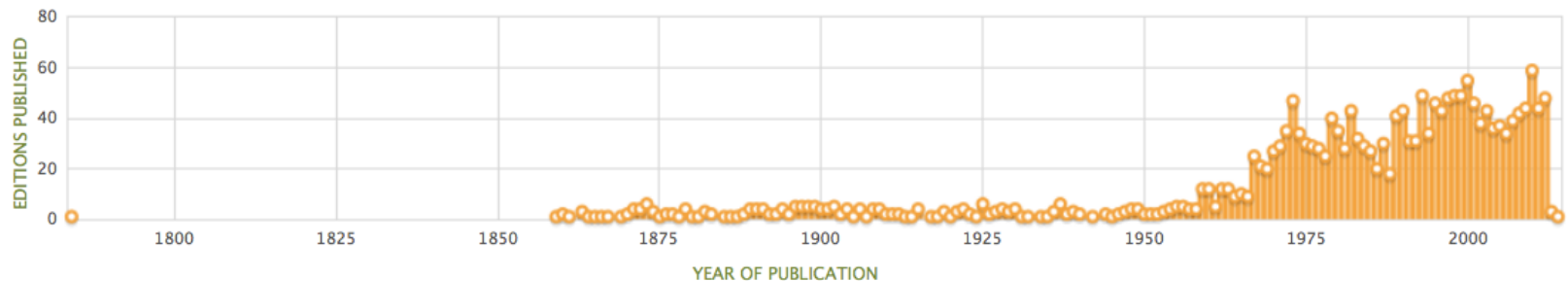


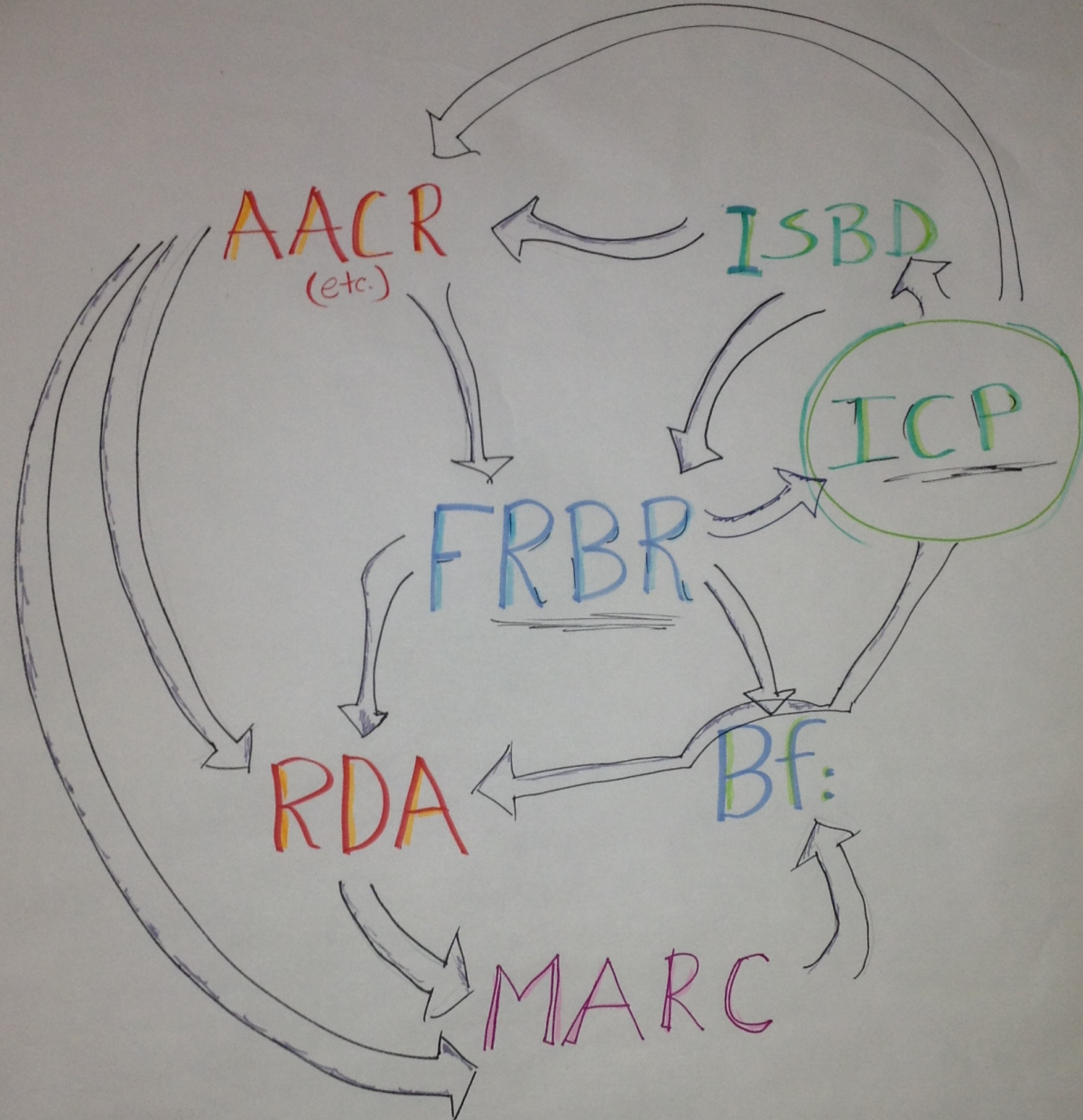
Table 6.3 Attributes and Relationships of Manifestations

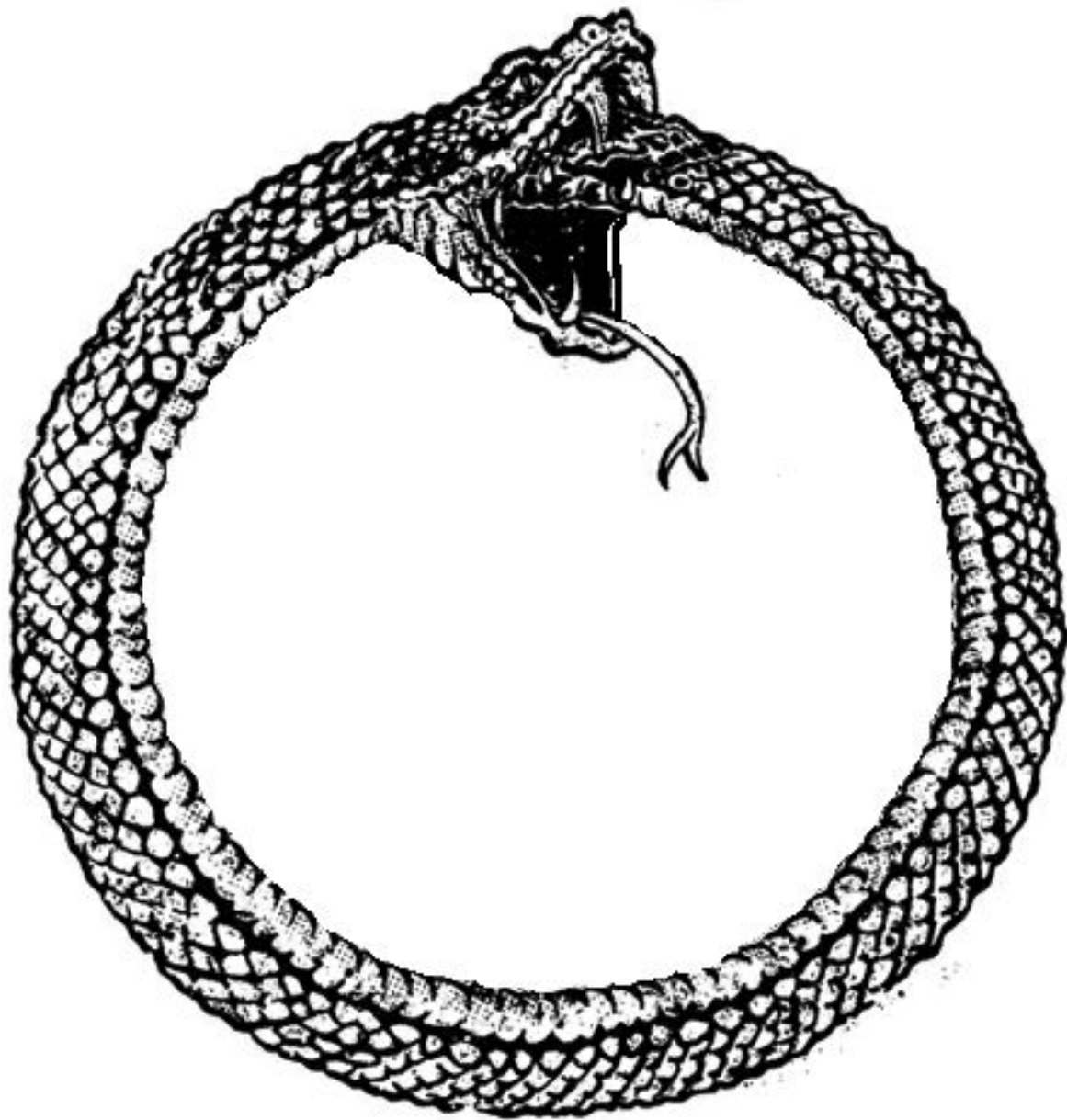
[illegible]

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

~1K

00942cam a2200265 a

4500001000800000000500170000800800410002503500210006690
600450008795501100013201000170024202000250025904000250
028405000250030908200170033410000220035124500590037325
000170043226000430044930000210049265000420051365500280
0555655002900583991006400612299696020021115113056.0930
519r1992 nyu 000 1 eng 9(DLC) 93025127
a7bcbccorignewd1eocipf19gy-gencatlg apc20 to la00 05-19-93;
lh05 05-20-93; lh06 05-20-93; lk46 05-21-93; aa21 05-24-93; CIP
ver. pv08 02-03-94 a 93025127 a0060177500 :c\$20.00
aDLCcDLCdDLCdOCoLC00aPR6066.R34bS63 199200a823/.9142201
aPratchett, Terry.10aSmall gods :ba novel of Discworld /cTerry
Pratchett. a1st U.S. ed. aNew York, NY :bHarperCollins,cc1992.
a272 p. ;c25 cm. 0aDiscworld (Imaginary place)xFiction. 7aFantasy
fiction.2gsafd 7aHumorous fiction.2gsafd bc-
GenCollhPR6066.R34iS63 1992p00019006281tCopy 1wBOOKS

~1K

kc:myBook ex:MARC

 "00942cam a2200265 a
45000010008000000050017000080080041000250350021000669060
04500087955011000132010001700242020002500259040002500284
05000250030908200170033410000220035124500590037325000170
04322600043004493000021004926500042005136550028005556550
02900583991006400612299696020021115113056.0930519r1992
nyu 000 1 eng 9(DLC) 93025127
a7bcbccorignewdleocipf19gy-gencatlg apc20 to la00
05-19-93; lh05 05-20-93; lh06 05-20-93; lk46 05-21-93;
aa21 05-24-93; CIP ver. pv08 02-03-94 a 93025127
a0060177500 :c\$20.00
aDLCcDLCdDLCdOCoLC00aPR6066.R34bS63 199200a823/.9142201
aPratchett, Terry.10aSmall gods :ba novel of Discworld /
cTerry Pratchett. a1st U.S. ed. aNew York,
NY :bHarperCollins,cc1992. a272 p. ;c25 cm. 0aDiscworld
(Imaginary place)xFiction. 7aFantasy fiction.2gsafd
7aHumorous fiction.2gsafd bc-GenCollhPR6066.R34iS63
1992p00019006281tCopy 1wBOOKS" .