Bottom up or Top down?

by Ted Gemberling
FRBR Interest Group
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FRBR is presently top-down

The PCC SCS/LDAC Task Group on the Work Entity is studying the complexities of identifying Works and providing access to them in a linked data environment. They recently pointed out this contrast:

"FRBR is a top-down conceptual model.

"Cataloging is a bottom-up process."

I would add that resource creation is a bottom-up process, too.

What triggers a Work record?

- Work is the highest Group 1 entity. Is there a way to create Work records with minimal cataloger effort?
- One attractive visioning of the process would be to allow the cataloger to start at different levels: if he or she knew there were earlier Manifestations of a Work, she could link to preexisting Work and Expression records (author, uniform title, subjects) and then fill in a Manifestation record with elements peculiar to her edition (title page transcription, additional authors, publisher, physical description, series).—<u>Top down</u>
- If she didn't know of earlier Manifestations, she could create the Manifestation record with all bibliographic elements, including author, title, and subjects, and the computer would tell her about possible matches to Works and Expressions.
- If no match were convincing, she could create a Work record for this "singleton" (work published only once), including author, title, and subjects.—<u>Bottom up</u>

An unambiguous example

Morton, Henry H. $q (Henry Holdich), $d 1861-1940

Title: Genito-urinary diseases and syphilis

Subjects: Male Urogenital Diseases

Syphilis

4th edition

This one adds more information on gonorrhea, with a chapter on "Gonorrhea in women" by Albert M. Judd. The discussion of female problems is still quite marginal to the book.

Primary subjects in alphabetical order:

<u>Gonorrhea</u>

<u>Male Urogenital Diseases.</u>

<u>Syphilis</u>

Secondary:

<u>Female Urogenital Diseases.</u>

Where do subjects belong?

- Male Urogenital Diseases and Syphilis appear to be continuous through all editions. The others were added to the 4th (and probably) 5th editions.

- Currently subjects are generally considered to belong to the Work, not the Manifestation. A cataloger who created a Work record upon the publication of the first edition could include those subjects.

- But what do we do with the added 4th edition subjects? Do they need to be added to the Work record later, or should there be some feature on the Work record hinting that additional subjects were added to later Manifestation records? Both are possibilities.

An ambiguous, hypothetical example

- *Crossing boundaries.* A book cataloged as being about race relations in Alabama.
- LCSH: Race relations—Alabama.
- Another book by the same author, with title *Building bridges*, was cataloged as being about human relations in general.
- LCSH: Interpersonal relations (human relations is a See reference for this in LCSH).
- Race relations—Alabama might be relevant to this book, too, but the original cataloger may not have used the subject. Having not seen the other book, he may not have recognized the connection between them or may have underestimated the importance of race relations in Alabama to the book.
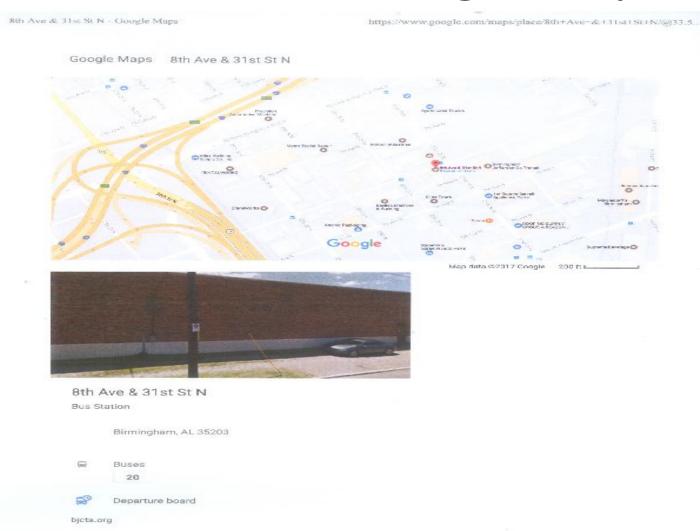
One Work or two?

- It seems to me it depends on which direction the subject developed: if the writer started out with the general topic for his first book and then moved to a specific book on race relations in a particular place, we would probably say it's a different work. He might call it *Crossing boundaries* (or *Building bridges) in Alabama.*
- If he started with something specific and moved towards something more general, there is more potential to say it's the same work. He is bringing out more ramifications of the subject.
- The second, one Work scenario seems more possible if the more general book is later.

How much could the computer help?

- At present in LCSH there is no established hierarchical relationship between Race relations and Interpersonal relations.
- However, it might be possible to create a more faceted understanding of the terms so a computer could recognize them as related. They both include the word "relations," and racial identity could be defined as one aspect of persons.

Excursus on Google Maps

Google Maps address was wrong

- It should be 3105 instead of 3097 8th Avenue North.
- When another member notified me of it, I told the members about the error but also pointed out the incorrect address doesn't matter because when you get there, you will recognize the building!
- Apparently, some Google Maps addresses are actually nonexistent. They are what the addresses *should be,* based on a very systematic analysis of the streets, not what they are.

Why do our brains work differently?

- We can find something if we're close to it. Why can't a computer do the same?
- Anthony Wilden, "Analog and digital communication," in his *System and structure* (1972).
- The digital involves "discrete elements," while the analog models *connections* between things and *patterns*. For example, when we recognize the appearance of a building.
- The analog allows us to deal with ambiguity.

Analog and digital computers

- Our ten fingers were the first digital computer (*digital* from Latin *digitus, finger)*. They are perfect for calculation because we can distinguish them without ambiguity.

- An example of an analog computer is a map, since it models familiar relationships between places and things. Analog comes from *analogos,* "proportionate" in Greek. It models things that are not discrete, but belong to a continuum, such as space, time, or similarity.

- Google Maps is effective because it has both the "brute force" digital power to calculate where millions of things are and gives us maps, the analog element, so we can relate to its results.

Catalogers have to resolve some ambiguities

- Given the ambiguities of the terms Interpersonal relations and Race relations and the uncertainty about the extent to which two books' subjects show a continuity, it may be necessary for a cataloger to compare both books physically before making a judgment about Work records.

- It's possible one cataloger may have incorrectly treated them as two different works, and another will have to correct this later. Sometimes only examination of the tables of contents can settle this.

- For example, I recently created a Work authority record for a medieval book called "Sublime secrets for curing various diseases." Without looking at the tables of contents, one might not realize another book with title "Aids for remedying all diseases, both internal and external" was another edition. Neither had an edition statement.

Conclusion

- The "both bottom up and top down" scenario seems doable, as long as we recognize the need for cataloger judgment and the occasional need to revise and merge Work records.

Thanks

Any comments?

tgemberl@uab.edu

(205)934-2461