

One way to verify topical headings

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The following examples describe in moderate detail the procedure that a program could use to determine whether or not a topical subject heading containing subfields \$x, \$y and/or \$z was constructed properly. I've left off as many details as I thought was safe.

Let me emphasize several important points before I get carried away:

- * There are no doubt other ways to do the same thing
- * I am using as much of the classification/notation scheme distributed earlier as seems necessary for each example, but no more.
- * I am not suggesting that the classification/notation scheme is the best one to use, but am simply using it for the purposes of illustration.

Example 1

Heading to be verified:

650 0 \$a Sex discrimination in employment \$x Law and legislation \$x Case studies \$x Bibliography.

The program starts by searching for an authority record for the entire string. Not finding such a record, it throws off the rightmost subdivision, and tries again. Not finding such a record, it throws off the rightmost remaining subdivision, and tries again. The program finds this record, which declares that the heading represents a "legal topic:"

072 \$a 4 /le
150 0 \$a Sex discrimination in employment \$x Law and legislation

The program takes the remaining string of subdivisions (\$x Case studies \$x Bibliography) and looks for an authority record for the string. Not finding one, the program throws away the rightmost subdivision in the remaining string, and tries again. It finds this record:

073 \$a 4 /le
180 \$x Case studies

The program compares the notation in the authority record for the main heading against the notation in the authority record for "Case studies" and finds them identical. Therefore, the heading is OK so far. Because there is no coded instruction in the 073 field in the "Case studies" record to the contrary, the program degrades the category of the heading-so-far from "legal topic" to just "topic." (This is a basic rule: the program allows the addition of up to one subdivision (or subdivision group) from a specialized list; after the first subdivision has been added to anything, barring instruction to the contrary, the heading becomes a "topic.")

The program looks for an authority record for the remaining subdivision (\$x Bibliography); the program finds this:

073 \$a 4
180 \$x Bibliography

The program then compares notation for the heading-as-verified-so-far against the notation in this subdivision record. Since the subdivision "Bibliography" may be used under topics, and

since "\$a Sex discrimination in employment \$x Law and legislation \$x Case studies" is a topic, the program can declare that the full original bibliographic heading was constructed correctly.

Example 2

Heading to be verified:

650 0 \$a Cytomegalovirus infections \$x Patients \$z France \$x Diaries.

The program proceeds as above; not finding an authority record for the entire heading, it discards subdivisions from the right until it finds an authority record. In this case, there is only a record for the main heading by itself:

072 \$a 4,638,3
150 0 \$a Cytomegalovirus infections

The program then attempts to find an authority record for the entire string of subdivisions. Not finding one, it discards subdivisions from the right until it ends up at the authority record for the subdivision "Patients":

008/06: i
073 \$a 4,638,3 \$g 4,74,3,1
180 0 \$x Patients

The program compares the notations assigned the main heading and subdivision; since the heading is for a "disease" and the subdivision may be used under "diseases," the program decides that the heading is OK so far. The notation in the subdivision record indicates that the addition of this subdivision to a heading changes the heading's category; so instead of becoming a "topic" (as happened to the first heading), the heading-so-far becomes a member of the "class of persons" family-- specifically, afflicted persons. (Without this coded instruction, the addition of the first subdivision would have converted this into a plain "topic," as in the first example.)

The program again takes the remaining string of subdivisions ("\$z France \$x Diaries") and tries to find an authority record for the whole thing; not finding one, it throws away the rightmost one and finds itself confronted with a geographic subdivision. The program notes that the heading-so-far (as indicated in the "Patients" record) is capable of geographic subdivision at this point, so the program provisionally approves the addition of the geographic subdivision at this point. (A properly-constructed heading would be designed to work with indirect geographic subdivision; it would also determine that "France" is actually an OK thing to appear in subfield \$z. Let's ignore this nest of vipers for now!)

Finally, the program finds the authority record for the subdivision "Diaries":

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073 \$a 4,74
180 0 \$x Diaries

This record tells the program that the subdivision may be used under any class-of-persons heading. Since the notation in the 073 is "broader" than the notation in subfield \$g of the 073 field for "Patients," the program decides that the subdivision is applied correctly.

Finally, since the geographic subdivision "France" falls at the rightmost point in the heading at which geographic subdivision is allowed ("Diaries" not being susceptible to geographic subdivision), the program can declare that the entire string is well-constructed.

Example 3

Heading to be verified:

650 0 \$a Handicapped-owned business enterprises \$x Services for \$z Illinois \$x Directories.

The program proceeds to break apart the heading and look for authority records in the manner described above; if it needs them, it has at its disposal the following authority records (there are no authority records for clusters of any of these parts). If you want, you can try to work this one out for yourself before you get to the explanation at the end.

008/06: i

072 \$a 4,9,5,3,2

150 0 \$a Handicapped-owned business enterprises

008/06: i

073 \$a 4,74

073 \$a 4,74,3,3

073 \$a 4,22

073 \$a 4,95,3,4

180 0 \$x Services for

072 \$a 5,5,6

151 0 \$a Illinois

008/06: <blank>

073 \$a 4,95,3,3

073 \$a 4,95

073 \$a 4,74

073 \$a 4,74,3,3

073 \$a 4,95,3

073 \$a 1,6

073 \$a 1,5

073 \$a 4,66

073 \$a 5

073 \$a 2

073 \$a 1,3

073 \$a 4

180 0 \$x Directories

The program retrieves the authority record for the main heading, notes the indirect subdivision practice, and retains the notation from the 072 field (which puts the heading in to the class "types of businesses").

The program next retrieves the authority record for the topical subdivision "Services for," notes the indirect subdivision practice, and saves the subdivision's notation (which indicates that the subdivision may be used under "classes of persons," "ethnic groups," "animals" and "types of educational institutions"). Because none of the notations assigned to the subdivision corresponds to the notation for the main heading, the program declares the heading to have been constructed improperly. The program stops all work on the heading. The program never actually looks at the authority records for "Illinois" or "Directories"