ACCESS POINTS AND AUTHORITY CONTROL FOR CARTOGRAPHIC MATERIAL

By Rosa Martin y de laVega

As today of our working environments are automated, I would like to present, or perhaps better suggest, some plans or projects for work and research on data input and interchange formats adpated to the peculiarities or cartographic materials and allow records to be controlled by the authority files like any other library and documentation materials. My report will, therefore, concentrate above all on access points for records containing cartographic information,

1. Access points for cartographic materials.

There has been much discussion on which should be the main access point for cartographic materials. The experts are divided between those who opt to follow the general rules applicable to other print and non-print materials, using the author or corporate body heading, if any, - irrespective of the problems in derter-mining the authorship of many of these materials - and those who favour use of the geographic area covered, this being the most characteristic feature of a map or individual plan.

Differences arise among the latter when it comes to deciding which data elements are constitute the heading to label each bibliographic item. Some experts think that the geographic area is sufficient. Others include additional elements: the subject of the document, the date of contents, the scale and/or projection used, the date published and even the size. However, even those who come out in favour of the same elements do not always agree on the order in which they ought to be structured.[1]

Without going into a discussion of which is the best option - it depends very much on the centre or library, the type of users ... -, I would merely like to put forward a series of considerations.

1. When we talk about the geographic area covered by a map, for example, what we are really saying is that the map "deals with" or "contains information on". In other words, it is exactly the same as saying that any physical geography manual deals with a physical description of Spain or Europe or a video con-

tains information on a given region. The same information on a geographic area can be supplied in different ways: book, video, map, illustration, ...

Furthermore, not only do cartographic materials reflect geographic areas, they also - and increasingly so - deal with very varied subjects, depicting them graphically as books do textually.

2. Why if other materials - for example, official publications - are not processed differently from other printed publications, using the author or title as the main heading even if they are better known by their contents or subject than by their author, can this be done with maps?

3. In the automated environments in which most of us work, is there any sense in arguing about main entries and added entries? Wouldn't it be better to just talk about labelling access points so that the user can search for and locate what he is really looking for and classify and order the documents retrieved as he sees fit - geographic area, author, ...?

2. Data Input Formats

Let us consider automated environments. To work in an automated environment, we need a data input format that includes all the data elements required to label each bibliographic item and to be able to access it. The ideal thing would be for this format to facilitate data interchange with other institutions, either because the computer system's input and interchange formats are the same or because, irrespective of how the data are entered and stored locally, they can be obtained in standard format on interchange tapes.

Moving on to the big family of MARC formats, and especially USMARC, on which our most recent IBERMARCs are based and which is both the interchange and the data input format used by many of our institutions, it is possible to write in even the most specific data on cartographic materials, such as scale, projection and coordinates, either textually (fields 255 and 507) or in code (different positions of 008 and 034), for them to serve as special access points. As with other print and non-print materials, the traditional author, other responsibilities and title access points, whether main entries (1XX, that is, fields 100, 110, 111, 130 and 245 with the first indicator at 1) or added entries (7XX, that is, 700, 710, 711, 730 and 740), obviously do not cause any documentary or format problems. But what happens when we try to "translate" the geographical area entry to these MARC formats?

There is no 1XX field with its respective 7XX in USMARC to give account of such a heading. This, however, does not lead to majot problems provided we

consider it as a subject added entry by geographiname place and use a field 651, although it wouldn't be possible to write in all the data outlined in view of the present structure of this field.[2]

Field 651 is not a type or "category" of field different form 600, 610, 611, 630 or 650 entries, for example. It is like any other subject added entry.

Now, what happens if we want to convert that geographic area entry into a 1XX? What's more, if we need to write two entries for one and the same map, which 7XX fields are to be completed?

Several solutions have been found to date. I will concentrate on some of the cases with which I am most familiar, involving institutions in Madrid. Up to very recently, a 151 field has h'generally been used, not always with its respective 751s, even though this field does not appear in Formato MARC para materiales cartográficos (MARC format for cartographic materials), published by Sauco Excudero, Llorent Gil and Anglada i Ferrer in 1987. For example, up to last spring, the Centro de Documentación del Ministerio de Defensa was working on its CARHIBE database - a separate data bank for the Centrés collection with over 52,000 documents - in the BASIS environment, with a data input format based on MARC, but not strictly speaking IBERMARC, using a 151 field and 4 subfields: geographic area ($a), subject ($x), scale ($g) and contents date ($y). These were associated to another two display-linked fields: $c, for any explanations of the geographic area, and $f, for the date of map publication.

Additionally, a 152 was used for any specifications of the geographic area in 151 $a. If any geographic area added entries were required, the appropriate 651s were completed.
These access points were controlled manually because they were not integrated into the computer authority control system.

There was no lack of proposals for similarly structures 151s: geographic name ($a), subject ($t), subject subdivision ($p), scale ($g), dates associated with the geographic name ($d) and date of the work ($f).

In other cases, as in Bibliografía española.. Suplemento de cartografía (Spanish Bibliography, Cartography supplement), for example, geographic name added entries for "inserts" or "with note" have appeared in ISBD descriptions with their respective geographic main entries as provided in our Reglas de catalogación (Cataloguing rules), which would be equivalent to an author added entry, preceded by an Arabic numeral as if they were subject added entries.

Recently other solutions have been found, above all for internal operation, such as considering the geographic area entry as a kind of uniform title (130, 730), prepared by the cataloguer on the basis of the contents, and I stress, the contents of the document, which differentiates or removes these uniform titles from what has traditionally been considered as such in cataloguing, that is, "any title taken to catalogue a work known under several titles". Thus, the subject fields 650 and 651 do not need to be completed and the respective data pass to the appropriate 730s.

This solution gets round the problem of proper correspondence between the authorioty data input formats and the bibliographic file access point fields, which must have an equivalent or parallel structure to be consistent with each other.

Neither the USMARC for authority data nor the planned IBERMARC for authority data provide for controlling a 151, or the respective 751s, for cartographic material entered by geographic area in bibliographic files. Moreover, even if we wanted to use the bibliographic 651s to reflect the geographic area access data elements - as we looked at beforehand -, their structure would be incomplete, because authorities format 151 is "incomplete". If it is "doctored", however, authority field 130 can be used to control bibliographic fields 130 and 730 for cartographic materials, as is being done at some institutions today, including, to my knowledge, the Centro de Documentación del Ministerio de Defensa and the Spanish National Library.[3]

However, this solution does not avoid other problems. If an institution with different materials opts, in practice, for a single authorities file in the interests of simplification, how are such different 130s as pure uniform and cartographic titles to coexist? If if elects to separate the cartography 130s, is it worthwhile controlling one and the same form for a geographic area in a general authorities file 151 and in a uniform titles 130 $a for geographic area entries. If we exit the authorities file, what facility are we going to give the user for retrieving information on, for example, the street of Madrid, whether in a monographic book on the subject (651 $a Madrid $x Streets) or in the shape of a map (130 $a Madrid $t - or $k - Streets)? Obviously, we could tell the computer system to search both subfields of these two fields in such cases.

The solution, however, could perhaps be much easier and more straightforward. If we insist on maintaining the geographic area entry as the main entry for cartographic material, it might be more logical to continue with and respect the MARC philosophy as regards the harmony of field and subfield structure and/or names for the same data elements and add optional subfields for recording the date of publication ($f, for example) or scale ($G, miscellaneous information) to authorities field 151. Obviously, we still face the problem of which punctuation to employ

to separate these different elements - a full-stop (.), being the usual practice in map cataloguing -, or the hyphen typical of subject headings (-), but this would be, in my opinion, the least of it.

The important thing, as I see it, is to:

1. Maintain the logic of the data input formats;
2. Have cartographic materials controlled by authority files;
3. Make data input and interchange formats for geographic area authorities flexible enough for each institution to be able to establish "how far" is wishes its authority to go - geographic area only, area and subject ... - or to incorporate any other data elements it sees fit - optional subfields.

Notes

1. Let us consider, for example:

   Cataloguing Rules (Spain)

   (Reglas de catalogación. II, Materiales especiales. -- Madrid: Dirección General del Libro y Bibliotecas, 1988)

   Geographical area. Subject. Document date (Date published) N.B.: The date of publication is optional.

   AFNOR (Z 44-068) : Catalogues de documents cartographiques: présentation de la notice cartographique. Paris: AFNOR 1982)

   Geographic area. Subject. Scale. Date.
   N.B.: Both the document contents date and date of publication can be considered.

   See also the overview given on this subject by Mary Lynett Larsgaard (Map librarianship: an introduction. -- 2nd ed. -- Littleton, Colorado: Libraries Unlimited 1987), from which the following practices can be singled out:

   S. Miller (1971):
   Area

   Boggs and Lewis (1945):
   Area. Subject. Date

   Drazniowsky / American Geographical Society (1969):
   Area. Date. Subject.

Special Libraries Association (1956):
Area. Date. Subject: Scale. Size

Gerlach (1961):
Area. Subject. Date. Scale. Projection

2. Correspondence between the data elements of a geographic area entry and MARC field 651

GEOGRAPHIC AREA ENTRY	FIELD 651 (Repeatable)
Geographic area	$a Geographic name
Subject	$x Subject subdivision (general subdivision for USMARC format)
Scale	
Time period of content	$y Chronological subdivision
Date of publication	
	$j Form subdivision (IBERMARC subfield)
	$z geographic subdivision

3. Field 130 of the draft IBERMARC format for cartographic materials*:

FIELD 130
Main Heading - Uniform title (NR)

Subfields:

$a	Uniform title (or geographic name)	NR
$d	Date of treaty signature (or content for maps)	R
$f	Date of the work	NR
$g	Miscellaneous information (map scale)	NR
$h	Material type	NR
$k	Form term (subject for maps)	R
$l	Language	NR
$n	Part or section number	R
$p	Part or section name	R
$s	Version	R

* Information supplied by the National Library (Madrid).

The present format for CARHIBE database also contains fields X30, divided into five subfields ($a, $d, $f, $g, $k) with the same value as indicated for IBERMARC.

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