What About Maps?

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About a decade ago the present writer reviewed and summarized the literature on map librarianship. The study revealed two basic facts. First, that most librarians regarded maps as unwanted step-children, and secondly, that there was little agreement among map librarians as to how maps should be processed, filed, and serviced.

Some progress was made during the next five years in coping with certain of the problems which maps pose for librarians. A more optimistic note was apparent, therefore, in Library Journal's "Maps in the Library" number of March 15, 1950, which brought together ideas and experiences of a selected group of map librarians. Several of the contributors still considered it necessary to "sell" librarians on the importance of maps in a well-rounded reference collection.

Developments and accomplishments of the past several years indicate that map librarianship has now come of age, and that maps are being accepted, on a coexistence basis at least, in most libraries. This is not to say that all problems of map librarianship have been solved. Far from it. The encouraging trend today is that librarians, who by choice or of necessity work with maps, are spotlighting and studying those problems and, by united and studied action, are attempting to find reasonable and workable solutions. The reports they are publishing today have a self-assured, confident and optimistic tone.

A number of these studies have been initiated, and carried to completion, under the sponsorship of the Geography and Map Division of the Special Libraries Association. Local and national meetings of the division provide opportunities to discuss mutual problems, exchange ideas, and to report on projects pertaining to various aspects of map librarianship. Many of the reports, as well as descriptions of individual map collections and libraries, are published in the Geography and Map Division Bulletin. Established in 1948, the Bulletin was issued semi-

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annually until October 1953, since which date it has appeared quarterly.

The "new outlook" among map librarians may be attributed to several factors and developments. Certainly World War II, touching as it did all parts of the earth, added to the map and global consciousness of the American people, librarians included. The cold war, U. N. police action in Korea, our new leadership in international politics, and an accelerated emphasis on travel, both for business and pleasure, have served to maintain interest in things geographical and cartographical.

A more compelling influence perhaps, was the depository program of Army Map Service through which a number of libraries acquired some 50,000 surplus war maps. Fifty maps can be easily absorbed in routine processing operations. Some librarians had even devised methods and techniques for "disposing of" as many as 500 maps. Fifty thousand maps could not, however, be disregarded. Something just had to be done about them. And, in most cases, something was done.

Librarians in colleges and universities discussed the problem with geography professors, while those in public libraries sought advice from colleagues in sister institutions where map rooms were already established. By miraculous shifting and rearrangement of existing collections a few square yards of space were cleared for map storage. Budgets were wrung dry to secure funds for purchasing storage cases, and a lower-echelon staff member was assigned the task of organizing and cataloging the map collection. Thus, new map libraries were born, and existing ones greatly expanded.

The number, distribution and size of such collections became a matter of record in 1954 with publication of the directory of Map Collections in the United States and Canada. Compiled by the Map Resources Committee of the Geography and Map Division of the Special Library Association, the directory records map holdings of 497 collections in the United States and 30 in Canada. Twenty-five of the collections have more than 100,000 sheets, and a number of others are in the fifty to one hundred thousand sheet class.

The directory gives only a general indication of subject and area interests. Detailed information on holdings of individual collections fortunately is available in published manuals and guides, or in articles printed in professional journals.

Large governmental collections for which guides are available include those of Army Map Service and the Library of Congress. A Guide to the Cartographic Records in the National Archives is sched-
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uled for publication within the next several months. Meanwhile an approach to the archives collection is provided by several articles, and inventories of selected cartographic record “groups.” An introduction to the geographical and cartographical resources in a number of governmental libraries is provided by Gerlach in an article published in *The Journal of Geography*.9

One of the few map libraries in the United States which has been in existence for more than a century is that of the American Geographical Society. Its growth from a dozen maps in 1852 to approximately a quarter million sheets today is described by Ena L. Yonge in a recently published article.10

The Army Map Service depository program was particularly effective in stimulating the organization and growth of map collections in colleges and universities. In some institutions the map collection is administratively part of the main reference library. On other campuses it may be an adjunct to the geography or geology department. At least twenty-five college and university libraries today have collections of more than 50,000 maps. Especially noteworthy are the map libraries at California, Chicago, Columbia, Dartmouth, Harvard, Illinois, Northwestern, Princeton, Stanford, Yale, and Wisconsin.

Army surplus maps also swelled map holdings in a number of public libraries, mainly those in which there were already well-established map rooms or departments. Regrettably, public libraries have lagged behind colleges and universities in making proper provision for maps. Less than ten public libraries, as reported in *Map Collections*, have in excess of 40,000 maps. Separate map rooms have been maintained for many years at public libraries in Baltimore (Enoch Pratt), Boston, Buffalo, Chicago, Cincinnati, Cleveland, Detroit, Los Angeles, Milwaukee, Newark, New York, Oakland, Philadelphia, and St. Louis.

European librarians, too, have prepared inventories or directories of their cartographic resources. Some twenty map libraries in the London area are briefly described in a recent Library Association publication.16 Except for the British Museum and the Royal Geographical Society, the collections are small. Few of the others, the compiler notes, “have considered it necessary to provide anything more ambitious than a world atlas and a set of Ordnance Survey 1-inch sheets; and many have not even added to their local collection a comprehensive range of maps of their own area.” Brief listings of the more significant map collections in Germany and Switzerland have also been prepared.

In wrestling with selection and acquisition problems, map librarians
have perhaps experienced their greatest frustrations. The disorganized nature of map publishing, the non-existence of international and national map bibliographies, the large percentage of maps prepared by official mapping agencies, the varying quality of cartographic publications, the high cost of some maps and atlases, and the lack of manuals or guides on map acquisition have constituted formidable deterrents to even the best-intentioned librarian. Little wonder, therefore, that many libraries have been content to acquire only such maps that drift, unbeckoned, into their accessions channels.

The situation, unfortunately, is still far from ideal. Various finding lists and acquisitions aids, published in recent years have, however, eased appreciably the burdens of the map librarian. Most comprehensive in the international field is Bibliographie Cartographique Internationale, which lists, in its latest edition, some 30,000 official and non-official map publications of twenty countries. Included also is a list of catalogs of official mapping agencies in participating countries.

World Cartography, a United Nations publication, gives promise of serving as an international clearinghouse for cartographical information. Although separate maps are not described, the two numbers published thus far contain summary reports on cartographic activities in selected countries, with emphasis on the work of official mapping agencies.

“Distinctive Recent Maps,” a regular feature in Surveying and Mapping, describes some twenty or twenty-five noteworthy maps in each quarterly issue of the journal. The Geography and Map Division Bulletin and The Professional Geographer also regularly devote several pages to listing new maps and atlases.

The Library of Congress Map Division’s annual report on acquisitions contains descriptions of selected maps and atlases, and general information pertaining to sources and techniques for procuring cartographic publications. Significant gifts and collections received by the Map Division are also described in articles published in the Quarterly Journal.

The Catalog of Copyright Entries, Part 6 lists maps, atlases, and globes which are registered in the U. S. Copyright Office. Published semi-annually since 1947, each issue includes titles for some 1,200 or more maps, atlases, and globes published, for the most part, by American commercial and private map makers.

More than 20 agencies of the U. S. government publish maps. Most of these publications are described in lists issued annually, monthly or
periodically by individual departments, bureaus, or agencies. Price List 53, available from the Superintendent of Documents, U. S. Government Printing Office, includes a selected group of map publications. Most official maps, however, are sold directly by the publishing agencies, and are, therefore, not included in Price List 53. Information on where and how to obtain such maps is given in a recent article prepared by Nellie M. Bowman. Many large libraries are official depositories and receive certain government map series on automatic deposit.

General advice on acquiring cartographic publications is offered in several articles. At least three of the papers in the “Maps in the Library” number of Library Journal deal specifically with acquisitions. How to build a map collection in the college library is outlined by Espenshade in two papers. The intent in both is “to introduce the librarian to the types of map sources, their nature, and the peculiar problems related to them, and to current bibliographic aids and methods by which he can keep abreast of map publications.”

A symposium on “Map Procurement” was a feature of the Geography and Map Division program at the Special Libraries Association convention in New York, May 29, 1952. Three of the papers presented at the meeting were published in the May-June 1953 number of Special Libraries. DeWald calls attention, in his paper, to the success of cooperative map acquisitions by a number of Federal map libraries during the past seven or eight years. Operating through an informal Joint Procurement Committee, some eight or more “government agencies pool their resources and consolidate their requirements to effect a united bargaining power in mapping markets.” This has resulted in systematic and active procurement in contrast to the disorganized and ineffectual map acquisition which characterized the years between the two world wars.

At the same symposium, R. E. Harrison, considering the “Evaluation of Modern Maps,” noted that, “The accurate appraisal of a modern map is extremely difficult for the layman and not too easy for the professional.” He suggested that maps be evaluated on the basis of (a) source material used in their compilation, (b) design (i.e. projection, scale and presentation of source material), and (c) execution, as expressed by drafting, engraving, and printing.

Two other papers on map evaluation, presented at the meeting, were published in multilith brochure by the Geography and Map Division. Woods observes that the real value of school maps “is to present visually certain significant physical, political, economic, or other feat-
ures of an area. Therefore, to be useful the school map must be large enough to be seen from all parts of a classroom which may seat fifty students or possibly double that number.”

The evaluation of historical maps, Mrs. LeGear states “may be on the basis of (1) importance to a given collection; (2) historical significance as a link in the chain of cartographic development; or (3) monetary value. Closely allied with evaluation is correct identification, namely that a map is actually what it is represented to be.” She concludes her paper by affirming that “the pleasure of collecting the best available cartographic materials is the reward of being able to recognize and evaluate old maps.”

Hints on acquiring old and rare maps are also provided in articles by L. A. Brown and A. B. Carlson in Library Journal’s “Maps in the Library” feature and in the chapter on “Old Maps” in Storm and Peckham’s delightful Invitation to Book Collecting. “Intelligent evaluation of maps and charts,” writes Brown, “is the first and most important factor in the administration and preservation of the material. Such an obvious statement of fact would not be worth repeating except that the true value of cartographic material has gained recognition only by slow and painful degrees.”

Closely related to evaluation is the question of weeding. With most libraries pre-occupied in building up the map collection, only casual thought has been given to disposing of unwanted items. The larger and older map libraries are primarily concerned with this problem. In a previously-cited paper Miss Yonge states that “a judicious pruning or weeding from time to time helps to keep the collection from getting too cumbersome and congested.”

A number of federal map libraries find it expedient to transfer older editions of maps to the Library of Congress. While recognizing its responsibility for maintaining as comprehensive and complete a cartographic collection as possible, the Library of Congress Map Division has also taken some steps to weed its files. Discarding duplicate copies of large-scale set maps, and older second copies of maps deposited for copyright are thinning projects currently in process or under consideration. The growth in number and size of map collections, both governmental and non-governmental, minimizes the need for retaining second copies. The current high cost of storage equipment and limited floor space are also important considerations in the decision to reduce the number of duplicates.

Surplus maps are made available, through the Library’s Exchange and Gift Division, to other libraries. During the past several summers
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the Map Division has conducted "Map Sorting Projects" to process a backlog of maps acquired by transfer from other governmental map libraries in the immediate post-war years. Graduate students from various college and university geography departments, as well as map librarians from other institutions, have participated in this program. Some have been employed, on a temporary basis, by the Library of Congress. Others, sent at the expense of their own institutions, assist in sorting and processing maps for the privilege of selecting duplicates. Between fifty and one hundred thousand surplus map sheets have been distributed annually by the Library of Congress during the past five years. There are still hundreds of thousands of sheets in the unprocessed backlog. Inasmuch as upwards of fifty per cent of the maps may be expected to duplicate items already in the Library of Congress collections, this constitutes, for other map libraries, a significant cartographic acquisition source, particularly for non-current and out-of-print items.

Among cartographic reference materials, atlases most nearly resemble books and in many libraries they are accorded normal processing treatment. Descriptive cataloging is most often in accordance with Rules for Descriptive Cataloging in the Library of Congress.32 Printed Library of Congress catalog cards for atlases are available from the Library's Card Division.

There is less consistency with reference to classification. Smaller libraries, in general, classify atlases according to Dewey, while larger institutions fit such works into their own schedules. While provision had been made for atlases in Class G of the Library of Congress schedule, (published in 1910, second edition 1928), the classification was never used for atlases in the custody of the Map Division. The atlas schedule was revised several years ago to accord with the map schedule, which was issued in preliminary form in 1946. Both are included in the third edition of the Library of Congress Classification, Class G, published in 1954.33 Since 1951, atlases acquired by the Library of Congress have been classified in accordance with this schedule. Several years ago a project was initiated to convert the Map Division's area classed atlas catalog to a dictionary catalog.34

Loose map sheets must be sorted and arranged in some logical or prescribed order before they can be cataloged, classified or filed. The nature and extent of such preliminary processing depends upon the condition in which the maps are received, the number involved, the complexities of the cataloging and classification systems employed, and the type of map or chart.
Multiple-sheet topographic sets and nautical and aeronautical charts published by official mapping agencies require a great deal of sorting and arranging. A topographic set for a single country may include several thousand sheets. Moreover, the separate maps are published over a long period of years. As new sheets appear they must be sorted, arranged in sequence, and integrated with maps previously acquired.

Various techniques and procedures are followed in sorting and arranging maps, and all entail a certain amount of monotony, routine, and drudgery. Low-level employees ordinarily perform these tasks, and consequently few studies have been made to devise methods for speeding up the operations. Brief descriptions of the steps involved in such preliminary processing of maps in the Library are included in the Library of Congress Map Division's Manual and in Mrs. LeGear's Maps, Their Care, Repair and Preservation in Libraries. Certain problems in processing and cataloging large scale maps were considered by Miss Yonge in a recent paper. She points out that "almost every country has its own topographic survey, each with a different method of indexing and numbering the sheets, some extremely complicated and maddening, and different ways of giving the date of publication."

An approach to the separate maps in a "set" is provided by an index map overprinted with a grid giving the location of each sheet. Shelflist sheets, on which names of each map with edition date or dates are entered, provide further control. One catalog card may suffice for an entire set.

Single maps, i.e. those presenting a specific area on one sheet (which may or may not have several parts), on the other hand, must be separately cataloged and classified. No map cataloging and classification systems have as yet been generally accepted, and there is little new to add to Ottília C. Anderson's excellent summarization published in 1950.

Most United States map libraries catalog and classify maps according to the Boggs-Lewis or Library of Congress systems. From its publication in 1945 to about 1949, the Boggs-Lewis manual exerted a major influence on libraries which were organizing or expanding their map collections. College and institutional libraries, in particular, adopted Boggs-Lewis or adapted the system to fit their own particular needs.

During the past five or six years Library of Congress cataloging methods and procedures as outlined in Rules for Descriptive Cataloging and the map classification set forth in the revised edition of the Library's Class G have been gaining supporters. This stems in part
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from the fact that the Library of Congress prepared printed catalog cards for maps distributed in the Army Map Service depository program. Printed L.C. cards are also available, on a continuing basis, for all atlases and for a selected number of maps received by the Library.

Because of staff limitations, only a small percentage of maps acquired by the Library of Congress are cataloged and classified. The remainder are "titled" (i.e. identified by a typed slip bearing authority, title, subject, scale and date of the map, which is pasted to the back of the map sheet) and filed in an area-subject-date sequence.

While Library of Congress practices dominate map cataloging today, they are not without their critics. Shortly after publication of the preliminary edition of Rules for Descriptive Cataloging, the Special Libraries Association's Geography and Map Division established a committee to review the chapter pertaining to maps, atlases, and globes. In a preliminary report issued in December 1948,40 and a final report published in October 1953,41 the committee strongly opposed the L.C. Rules. It took issue especially with the use of an authority heading for the main card, and proposed that an area-date-subject heading be substituted. The committee felt "that the A.D.S. heading and tracings alone would provide simply and economically an adequate key to many small map collections. For a larger collection, the transcription could be added to identify each map."

Each of the large governmental map libraries continues to employ its hand-tailored cataloging and classification system. The Army Map Service's "Modified Williams Classification System," with essential data recorded on Remington-Rand "machine" cards is described in A Researcher's Guide to the Army Map Service.6 A new edition of the Guide is in preparation at present.

The map library, which includes the former State Department and Office of Strategic Services collections, uses the check card cataloging system and the classification scheme which were devised by O.S.S. during the war.42 Maps (i.e. cartographic records) deposited in the National Archives are filed by "record groups" rather than by geographic area. This system is described in a leaflet published by the General Services Administration 43 and in previously-cited articles.7

Map cataloging and classification problems are of concern also to librarians in other countries. A draft of rules for cataloging maps, designed to furnish the basis for discussion by the Belgian Documentation Association was published in 1951.44 Classifications used in several Italian libraries were reviewed by Barbieri in a paper published in 1952.45

At its Seventeenth Congress held in Washington in August, 1952,
the International Geographical Union established a Commission on the Classification of Books and Maps in Libraries. Dr. Andre Libault of France is chairman and Dr. Arch C. Gerlach of the Library of Congress is the United States representative. As its first task, the Commission compiled a list of existing classification methods. A preliminary report was published in 1954. A more complete report, prepared following a meeting of the Commission in London in September 1954 was published in the May 1955 issue of the *International Geographical Union Newsletter.*

With few exceptions map rooms occupy library space that was not planned for storing and serving such non-book materials. Probably fewer than a dozen library buildings in the United States included cartographic departments in their original plans. Preoccupied with justifying their existence, and in formulating and devising procedures for processing and servicing their collections, map librarians have been able to give little time and study to the question of the ideal map room. Mrs. LeGear devoted several pages to this topic in her pamphlet on *Maps, Their Care, Repair, and Preservation in Libraries.* The question was also briefly considered by Whitmarsh in Fussler's *Library Buildings.*

Two of the world's largest map collections, it is interesting to note, have recently been re-established in new quarters. In 1952 the Library of Congress Map Division, after 55 years in the Library's Main Building, began a move to the Annex which was completed early in 1955. Although some adjustments have had to be made to accommodate map storage cases on book decks, the new quarters are on the whole quite satisfactory. The Map Reading Room has been completely re-furnished with natural-finish birch tables, chairs, and book shelves. New map and atlas cases are being added, within budgetary limits, to replace obsolete equipment which was discarded. As for the second, new installations of the Department of Maps and Plans of the Bibliothèque Nationale in Paris are discussed in a recent report. The article also describes storage and preservation methods and equipment.

Map librarians in the United States are almost unanimous today in favoring large metal cases with shallow, horizontal drawers for map storage. A number of equipment companies manufacture acceptable cases. Most are made in units of five drawers which can be stacked two, three or four high, depending upon the size of the collection, available floor space, location of the cases (i.e. in reading room or in deck area), or preference of staff members. With a two-unit arrange-
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ment the tops of cases can be used as a counter on which maps may be spread out for consultation. When stacked in tiers of four, portable steps may be required to remove maps from top drawers.

Unfortunately, there are a multitude of drawer sizes no one of which can claim to be "standard." Drawers with inside measurements approximating 32 x 43 x 2 inches seem to be most practical. In large collections it may be convenient to have a few oversize drawers as well as some smaller units in which to store multi-sheet sets of large-scale topographic maps. Maps on sticks or rollers constitute a particularly difficult storage problem. Perhaps because of the challenge they present, almost every map librarian has devised his own pet method and equipment for handling rolled maps.\(^{49-51}\)

In map preservation the most significant trend is the increasing use of laminating procedures and the consequent decreased dependence upon hand mounting. With the exception of the large custom-built flat-bed press at the National Archives, laminators previously available could handle sheets only up to 20 by 25 inches. Within the past several years, however, W. J. Barrow has constructed laminators for the Library of Congress and the Army Map Service which will take maps up to 30 by 40 inches and 32 by 42 inches respectively.\(^ {52}\) While the cost per map is appreciably less than for hand mounting, the initial price for such a machine is perhaps beyond the means of small libraries.

Maps, like other library holdings, are meant to be used. And they are being consulted more and more by library users today, as witness the increased number of map libraries and map librarians. But to most people a map has not yet become "as an open book to be read and thoroughly comprehended."\(^ {53}\) Their potentialities as basic reference and research aids have been realized only to a very limited extent.

Contrary to popular belief, the utility of maps is not restricted to geographers and historians. In this complex and interesting world almost every field of human enterprise and activity has problems which are best solved by information presented on maps. Library readers, for the most part, however, are neither aware of the existence of cartographic reference tools nor do they have the essential training and skills to read and interpret maps with understanding. To unearth these treasures and to facilitate their use is the challenging responsibility and opportunity of the map reference librarian.

The literature of cartography is quite rich and comprehensive—almost overwhelmingly so to the initiate. The Bibliography of Cartography\(^ {54}\) card catalog in the Library of Congress Map Division includes
some 50,000 entries, and it is far from exhaustive. Bibliographic guides to this storehouse of information are, unfortunately, few in number and limited in scope. With the hope of remedying this situation, Special Libraries Association's Geography and Map Division established at its 1954 annual meeting, a Committee to Select Reference Materials for a Map Library. The objective of the committee is to compile a comprehensive but concise guide to cartographic research.

Selected periodical references, relating to maps and map making, are listed regularly in Surveying and Mapping, Geography and Map Division Bulletin, and The Professional Geographer. Imago Mundi, an annual serial devoted to the history of cartography, includes listings of periodical works in this field.

The Library of Congress Map Division has been, since its establishment in 1897, the primary producer in this country of cartobibliographical publications. Phillips' Maps of America and List of Geographical Atlases are classics among cartographical reference works, despite their age. Librarians and students of cartography are, therefore, eagerly awaiting publication of Volume V of the List of Geographical Atlases which is currently being compiled by Mrs. LeGear. Currently in production at the press, the LeGear supplement to Phillips' will list all world atlases (approximately 2,200) acquired by the Library of Congress since 1920. A projected Volume VI, still in the preliminary planning stage, would include regional atlases added to the collections since that date. Titles of American atlases dating from 1776 to 1953 are listed in Mrs. LeGear's two volume bibliography of United States Atlases. The first volume is limited to Library of Congress holdings, while the second includes also titles contributed by some 130 cooperating libraries.

With the exception of the above-cited works, Library of Congress cartobibliographical publications in recent years have been of more limited scope. They include lists of special purpose maps, bibliographies on specialized aspects of cartography, and procedural manuals.

Some general suggestions on providing map reference service in libraries are offered by Woods in a paper presented before the Geography and Map Division at the Special Libraries Association convention in Toronto in June 1953. The contributions of exhibits to cartographical and geographical reference work in libraries were considered, at the same meeting, in papers presented by Dalphin and English and Ristow.

A number of libraries and museums, it is interesting to note, have
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featured map exhibits in recent years. Most elaborate was the display of rare historical maps, entitled *The World Encompassed*, which was sponsored by four Baltimore institutions and held at the Baltimore Museum of Art in 1952. The catalog of the exhibit includes valuable notes on historical cartography as well as reproductions of a number of the rarities which were on view.67

Map librarianship is a branch of library science which has been almost completely disregarded by library schools. Only at the University of Illinois is specialized training available to the prospective map librarian.68 In addition to offering a regular course on Maps and Cartobibliographical Aids, Illinois conducted a map workshop for two weeks in the summer of 1952, and another was held this past summer. Lectures and discussions on the making, reading, bibliography, care, classification, cataloging, and use of maps, atlases, and aerial photographs were conducted by faculty of the Library School, the Library, and the Department of Geography.69

A number of map librarians, as well as graduate students of geography, have received practical experience in processing and filing maps by participation in the Summer Projects of the Library of Congress Map Division, described previously. Provision has been made each year for participants in the project also to visit other cartographic libraries and map producing agencies in the Washington area.

Librarians abroad are also endeavoring to learn more about handling and servicing maps. Many visiting librarians specifically request that a tour of the Map Division be included as part of their orientation in the Library of Congress. A Polish course in cartography for librarians is described by Dr. Stefan Kotarski in the January-March 1952 issue of *Przeglad Biblioteczny*.70

In summary, it is gratifying to report that the foundations of map librarianship have been greatly strengthened during the past ten years, largely as a result of the energetic and enthusiastic work of a small group of specialists. Continued cooperative action should result in further progress toward standardization of processes, techniques, and equipment and in the compilation of additional reference tools and aids.

References


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