Centro Latinoamericano de Demografía
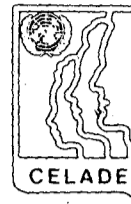
CELADE

TECHNICAL DESCRIPTION OF THE DOCPAL SYSTEM:

Aspects Relevant to Compatibility Among
Population Documentation Systems

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I. INTRODUCTION

A number of existing and planned computerized population documentation systems are now examining the possibilities of achieving some form of compatibility among their systems. Any move towards compatibility among systems must take into account their objectives, their users' needs, and the products and services provided, all of which may be affected. Furthermore, the aspects to be made compatible and the time schedule for achieving compatibility must consider how the existing systems process documents and produce outputs, since the costs involved in a change-over will be clearer and it may be possible to avoid introducing limitations into the existing systems that did not previously exist.

The objectives of this paper are to describe the goals and basic definitions of DOCPAL, to provide an outline of the technical processing procedures and rules followed and to describe the major products, always as may be relevant to the issue of achieving some degree of compatibility with other population documentation systems.

II. DOCPAL SYSTEM GOALS AND DEFINITIONS AND REGIONAL SERVICES

DOCPAL, the Latin American Population Documentation System, was established in 1976 in CELADE, as a permanent regional documentation system to accomplish the following long-term goals:

1. To enable the countries of the Region[1] to maximize the use of population-related information[2] that may be relevant to their economic and social development.

2. Make a major improvement in the flow of this information within the Region taking into account the differing country institution characteristic and needs; and

3. Improve the flow of information between Latin America and the rest of the world through participation in the development of a world population documentation system.

These goals were defined after examining the outstanding characteristics of the Region, as should be done when establishing any documentation system. In Latin America major characteristics are:

1. The existence of both well-endowed and poorly-endowed centers, in which researchers, students, administrators, policy makers, technical assistance consultants and planners work. The first type of center is able to attract and keep the best human resources, and has adequate budgets, to maintain fairly good collections which are organized and managed by professional librarians and documentalists. The other centers, which are in the majority, have very limited financial resources and normally neither documentation facilities nor professional documentalists.

2. Institutions and professionals have very limited possibilities to publish their own work. As a result of this fact, there are few permanent periodicals and series published in the Region and most of them issue only from 500 to 1,000 copies, making such documents almost unobtainable after one year or less. Nevertheless, since researchers always want to have the opinion of their colleagues, and institutions must submit reports and studies, small numbers of typed or mimeographed reports are produced for distribution. Consequently, most documents written in the Region have to be considered "unpublished"[3] or ephimerical. This external condition does not affect the intellectual content of the papers.

1/ The Latin American Region in DOCPAL refers to the Region CEPAL.

2/ It should be noted that DOCPAL is a major component of the Latin American Population Information Systems Area. Hence the work of DOCPAL in facilitating the use of population information is integrated in CELADE with other relevant aspects of population information storage, retrieval and processing.

3/ For example, many of the regular series of CELADE reports are mimeographed, even when produced in runs of 500 or more copies.

3. Much of the Latin American population literature is difficult to locate and to acquire; before trying to obtain a document, people want to know in advance the contents.

In the design of DOCPAL these goals and characteristics were translated into the following decisions:

1. A document is accepted as such, whether published or unpublished, if it contains information on population in Latin America.

2. An informative abstract should be prepared for each document entering the system; where possibly, it should try to replace the document.

3. The data base should be computarized.

4. A master file of hard copies of all items in the system should be maintained.

The scope of DOCPAL was fixed in terms of:
- a) Subject: documents on population and related fields
- b) Geographical: documents produced in the region or about the region
- c) Chronological: from 1970 on
- d) Language: Spanish, even though titles are entered in the language they are originally written followed by a translation into Spanish and English. Summaries and descriptors are always in Spanish.

The goals, user characteristics, decisions and scope designed for DOCPAL may be also found in other documentations systems which could be considered related to DOCPAL, either because they cover the same subject matter in a broader geographical area or because population as a subject is contained in a larger system. This was considered by DOCPAL at the very beginning and it was decided to operate and work in a very flexible way, adapting standards and procedures which could allow the system to share experiences and terms of collaboration with other systems and services. In this respect, special attention has been given to UNISIST technical rules and procedures.

All these considerations have led DOCPAL to provide three basic regional-level services which are presently the major outputs derived from the computarized database, which now has about 5,500 documents and is expanding at approximately 250 documents per month. These regional-level services are:

a) Latin American Population Abstracts, known by its short title in Spanish, DOCPAL Resúmenes. A biannual journal, first published in June 1977, which now contains from 600 to 700 abstracts of documents entered into the system during the last six months. It is entirely produced by computer in camera-ready form. 1500 copies are printed.

b) Interactive searches, upon request, of the database using video terminals.

c) Regional clearinghouse providing full copies of documents on request.

It should be noted that DOCPAL also serves the specific needs of the staff of CELADE and CEPAL[1] and the students participating in the specialized courses given by CELADE. Consequently, DOCPAL maintains an updated collection of relevant bibliographical materials from other regions.

1/ CEPAL (ECLA): Economic Commission for Latin America.

III. TECHNICAL PROCESSING

The technical processing can be divided in three major parts (each step will be explained in detail following the summarized flow diagram, Figure 1):

A) Selection and acquisition of documents.

B) Preparation of already acquired documents.

C) Entry of information contained in documents into the computerized database.

Selection and acquisition of documents

During the first two years of DOCPAL, there has been few problems of acquisition. CELADE has the reputation in the Region as the main center working on population, and people and country institutions want either to receive CELADE's publications through exchange of documents or wish to have the opinion of CELADE's staff about their own work. In addition, the CELADE specialized library, now integrated with DOCPAL, has the largest collection of Latin American population materials of the Region. As result, DOCPAL started entering documents already available in the collection or received through exchange or donation. The obtention of unpublished new materials is based mainly on the collaboration of the technical staff of CELADE, who receive, as part of their work, documents which they pass over to DOCPAL.

The procedures to revise the literature which contains information on documents produced in the Region or related to it, were established in the Library years ago, and they have been maintained with almost no relevant changes. Although they are normal functions in any information system, we will try to list the various sources which are relied upon in this work, because we consider this a time-consuming activity which could be minimized, if compatible databases were established.

1. Establishment, maintenance and follow up of exchange agreements with around 200 institution from the Region and abroad. CELADE's Publications Unit is responsible for the remittance of publications.

2. Revision of lists of recent acquisitions of specialized libraries from the Region.

3. Revision of specialized bibligraphies and acquisition lists produced by United Nations specialized agencies.

Special mention has to be made in the case of CEPAL. The physical location of its library gives DOCPAL a good opportunity to expand the materials included in the database.

4. International journals examined for articles within the DOCPAL scope. The list in Fig. 2 shows that most of the journals are published outside the Region; they are repetitions with the ones examined by Population Index. It could be worthwhile to establish a regular exchange of information and even to be ready to prepare lists of the journals for which each institution will be exclusively responsible.

5. Journals published in the Region. DOCPAL will try to produce an exhaustive list of journals and serials.

6. The maintenance of DOCPAL Resúmenes as an integration media among researchers, students and specialists may result in the spontaneous sending of original papers to CELADE. As this has been just started, no figures can be given.

7. Revision of specialized bibliographies included in books and articles of journals. This has been just started, and no organized procedure have been yet established.

As all this work is done manually, we think it could be easily improved before the end of the year, by using the already available facilities (DOCPAL database system of entry and ISIS). Database compatibility among population documentation systems would also vastly improve the effectiveness of the search for materials and reduce the costs per document entered.

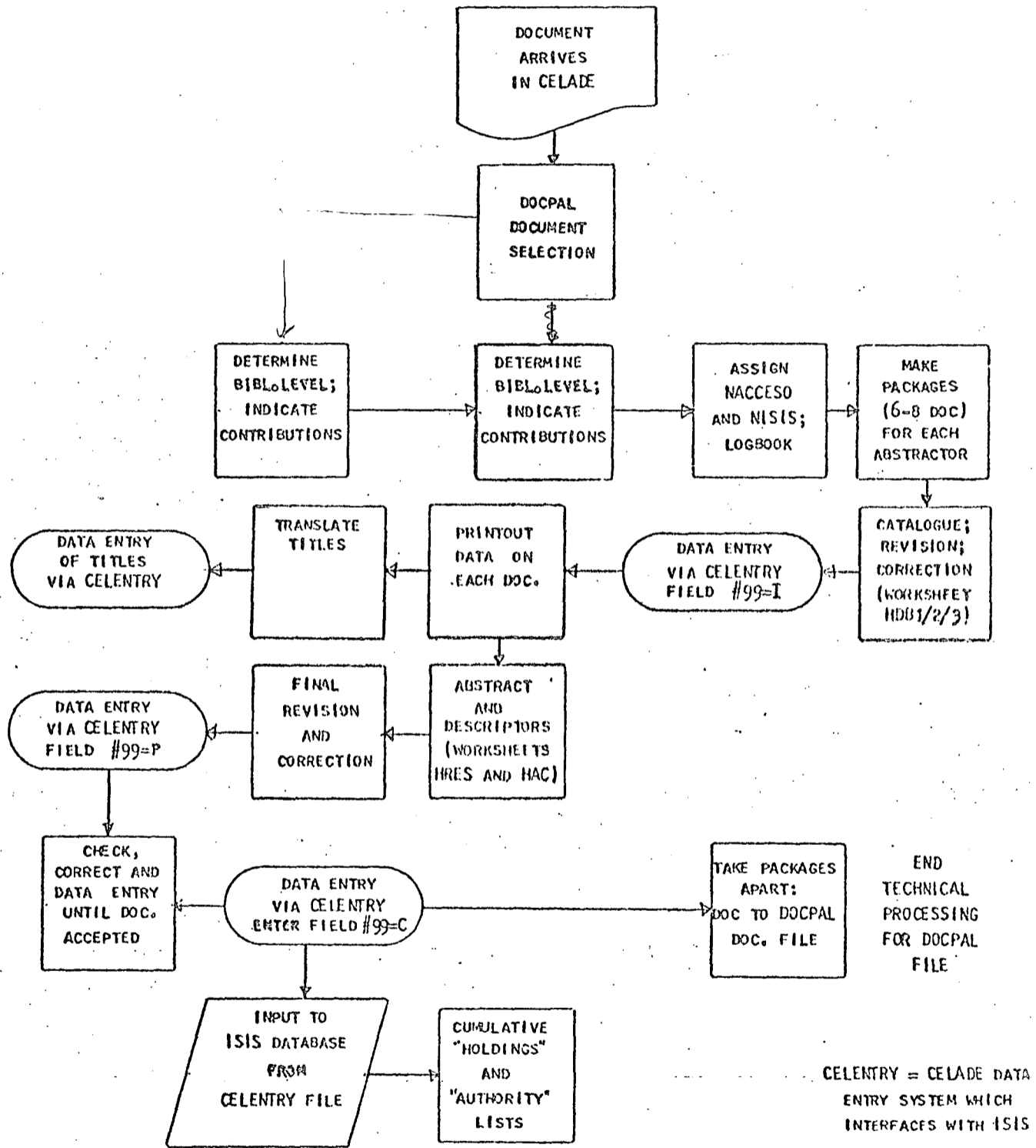Figure 1

DOCPAL TECHNICAL PROCESSING

Figure 2

JOURNAL REVIEWED FOR DOCUMENTS WITHIN DOCPAL SCOPE

América Indígena
América Latina
American Economic Review
American Journal of Sociology
American Sociological Review
Boletín de Análisis Demográfico
Boletín Demográfico (CELADE)
Boletín Instituto Interamericano del Niño
Boletín de la Oficina Sanitaria Panamericana
Boletín de Población
Boletín Paulista de Geografía
Comparative Urban Research
Concerned Demography
Current Sociology
Cuadernos de Economía
Comunicación y Población
El Demográfico
Demografía y Economía
Demography
Desarrollo
Desarrollo Económico
Draper World Population Fund Report
Dualismo
Economía y Desarrollo
Economic Development and Cultural Cahnge
Ensayos ECIEL
Estadística
Estudios de Población
Estudos CEBRAP
Estudios Sociales Centroamericanos

Field Staff Reports: South America
Field Staff Reports: Mexico and Caribbean Area
Field Staff Reports: North America
Human Biology
International Migration
International Migration Review
International Social Science Journal
International Statistical Review (ISI)
The Journal of Human Resources
Journal of Interamerican Studies and World Affairs
Journal of Latin American Studies
Journal of Marriage and the Family
Journal of the American Statistical Association
Latin American Research Review
Migrations News
Migration Today
Notas de Población
People
Populi
Population (Francia)
Population and Development Review
Population Bulletin PRB.
Population Index
Population Studies
Revista Brasileira de Estadistica
Revista Cubana de Administración de Salud
Revista de Administracao Municipal
Revista Latinoamericana de Estudios Urbanos Regionales
Revista Mexicana de Sociología
Revista Paraguaya de Sociología
Revista de Planeación y Desarrollo
Studies in Family Planning

Temas de Población
Tiers Monde
Trinidad y Tobago. CSO. Research Papers
Theoretical Population Biology

Descriptive Cataloguing

To be compatible with any possible future population documentation systems, the DOCPAL bibliographic description is based on the UNISIST Reference Manual for Machine Readable Bibliographic Description (UNISIST),[1] which is also taken as the standard for the DEVSIS System. This description, consistent with the Anglo-American Cataloguing Rules,[2] is placed on the DOCPAL Bibliographic Description Worksheets (HDB1, HDB2, and HDB3) (see Appendix A), consisting of 77 fields, which include all the required fields, some optional ones and some fields added for system control purposes. These bibliographic description fields are used for the purposes specified in UNISIST unless some special DOCPAL need made this impossible or made it necessary to add additional functions. When the UNISIST rules have not been completely followed, these exceptions are indicated in the DOCPAL Worksheet Manual (see below).

The use of a separate field for each detail of the bibliographic description (a result of having followed the UNISIST Reference Manual) has proven to be extremely useful, because it allows total flexibility in the production of formats , the manipulation of lists, etc.

As the ISIS version used by DOCPAL does not allow the use of sub-fields, each of the UNISIST fields and subfields included in the worksheets are given in separate fields. If an interchange of tapes with another documentation systems were to occur, a computer program already developed by CELADE could be used to convent the bilbiographic description from the DOCPAL ISIS format to the UNISIST format.[3]

Appendix B, gives the equivalences between the UNISIST and DOCPAL fields. The DOCPAL Data Elements, in the order of their appearance on the ISIS record, are shown in Appendix C.

To achieve consistency in the use of the worksheet, a DOCPAL Worksheet Manual has been developed. The lates version (December 1976),updated periodically, is for internal use only. It gives detailed information on the required and optional fields for each type of documents as well as a definition and description of the data to be included in each field. The Manual will be rewritten completely during this year to make it a DOCPAL Procedures Manual so that it can be adapted by other institutions for their own purposes.

Documents are entered into the system at the monographic and/or analytic levels (Field 03). To be able to store and retrieve all chapters of, for example, a book, a specially constructed 7-digit Identification number known as NACCESO (field 01) is assigned to each item. The first five digits are common to the entire item treated as a whole and to all documents considered to be part of the bibliographic entity, while the remaining two digits are used to distinguish the individual parts, e.g., the chapters of the book. When the book is treated as a whole (monographic level), these two digits are 00, while for chapters (analytic level) they go 01, 02, 03, etc.

A set of legal combination of literature types (field 02) with bibliographic level have been developed to serve two main purposes: 1) To enable the computer to determine the print format of the citation to be used for each document included in the Abstract Journal; and 2) To permit computer editing to check that all, and only, legal fields for each combination are entered (planned but not implemented yet).

1/ MARTIN, M.D., com.: Reference Manual for machine-readable bibliographic description, prepared by the UNISIST/ICSU-AB Working Group on Bibliographic Description with the assistance of ICSU and ICSU-AB member services. Paris, UNESCO, 1974.

2/ This is described in American Library Association: Anglo-American Cataloguing Rules. Chicago, 1974.

3/ PACKER, Abel and CONNING, Arthur M.: The utilization of the UNISIST Reference Manual in the DOCPAL System and the Computer Conversion from the DOCPAL ISIS Format to the UNISIST Format. Santiago, CELADE, 1978.

Abstracts

For each document, an informative abstract in Spanish is prepared with a maximum of 400 words. They are written by specialists -seven at present- in the areas of formal demography, sociology, economics and statistics, who also index the documents. Since most Latin American users do not have ready access to the documents, an attempt is made to write the abstracts, when possible, to substitute for the document; to this end, they include substantive information including empirical results and cite the page of the original text from which the empirical information was taken.

The abstractors also have to code the type(s) of users for whom each document appears to be written. For this purpose, a set of user categories have been developed: Researchers; Policy makers and their staff; Programme Administrators; Channelers; General Public; and All Users. In the future, this information may be included in the DOCPAL Journal as a guide for the readers; however, the criteria for the assignment of the user codes must be improved first.

Indexing

Spanish language descriptors and geographic codes are assigned to each document to allow convenient manipulation of the information in the abstract journal in searches and other applications using ISIS; categories for organizing the abstracts in the journal are also coded.

Changes to make DOCPAL compatible with other systems must take into account the particular purposes served by each of these three forms of indexing. Fig. 3 summarizes the purposes of each.

Descriptors and Journal Categories

As is evident from Fig. 3, the descriptors and Journal categories have different objectives in the Journal. The Journal categories[1] are designed to help Latin American population specialists keep abreast of the new literature appearing in their specialities or sub-specialities. Hence, the categories were defined to match the specialities of those persons who want to receive each issue and who will be likely to read the abstracts of the new documents appearing in their areas of interest in each issue. In Latin America, these are persons involved in population research and others who have to be (rather than "should") be up to date. Note that the categories are not defined or intended to be used for searches except when drawing up very broad bibliographies.

Very different are the purposes served by the descriptors[2] in the Journal. As with interactive searches of the database, the descriptors are used in the Journal to permit the location of specific information.[3] The Subject Index will be the point of entry for anyone (not only population specialists) requiring such information; many of these users from other fields will have no interest in the Journal until they have to locate something in particular concerning population.

The descriptors are placed in four different fields (76-79); the first two define the content and the second two describe the empirical information used and the existence of a questionnaire, respectively. One of the fields describing the content, lists the variables treated empirically in the document; in practice, this has proven to be more difficult to do systematically and efficiently than expected.

1/ The construction of the categories and the definitions of the components are given in Appendix D. It is evident that the categories were strongly influenced by those used in Population Index.

2/ The descriptors are taken from the POPINS Multilingual Thesaurus. An analysis of the most recent version of the thesaurus from the point of view of Latin America is given in: Acuña, Conning and Johnson, 1978. The POPINS Multilingual Thesaurus for Latin America. CELADE, Santiago, DC/16.

3/ Until recently the indexing in DOCPAL tended to be relatively broad, because the POPINS thesaurus did not yet have the hierarchical relationships established; as this is now available, the indexing should be more specific.

Figure 3 — 5a —

TYPES OF INDEXING IN DOCPAL AND THEIR PURPOSES

Type of Indexing	Purposes (present or planned)	
	In Journal "DOCPAL Resúmenes"	Other
1. THESAURUS DESCRIPTORS[a] Fields: 76,77,78,79[b]	a) Location of specific information via the Subject Index. b) Rapid determination of the content of a document in the Literature Review Index (Visual post-coordin.)	a) Interactive searches b) Rapid determination of the content of a document located in an interactive search. (Visual post-coordin.) c) Complete subject index for local users. (Planned).
2. JOURNAL CATEGORIES[c] Field: 85	a) Organization of documents to permit population specialists to keep up to date in the literature in their fields. b) Organization of documents under each country in the Geographic Index.	a) None.
3. COUNTRY CODES[d] A. Principal Country/Region/ Theoretical e/ (Only one country per document) Field: 01	a) Ordination of documents within a "speciality" to permit specialists to keep up to date on the literature within their speciality and country. b) Ordination of documents within the Subject Index to permit rapid location of specific information on an indivudual country.	a) Interactive searches. b) Production of statistics on holdings for each country.
B. Primary countries/Regions[f] Field: 87	a) Entries in the Geographic Index.	a) Interactive searches (location of comparative studies)
C. Secondary countries/ Regions g/ Field: 88	a) Not used in the Journal.	a) Interactive searches

a/ Spanish language descriptors from the POPINS Multilingual Thesaurus.

b/ The descriptors to be used in the Journal (normally no more than 3 per document) are marked with an asterisk when entered on the Worksheet; these are always pre-coordinated descriptors. Additional descriptors are entered without asterisks; these may require post-coordination. Both descriptors with and without asterisks are used in interactive searches.

c/ See Appendix D for a list of these categories and their definitions.

d/ The two-letter codes used for the countries and regions are the same as those proposed for DEVSIS (ISO 3166-1974).

e/ Principal countries (or Regions) are always from the Latin American or Caribbean Region (which is defined as the scope of DOCPAL). Otherwise the code for "World" is used. If the document does not treat a country (i.e., is theoretical), the code used is "ZZ", which automatically puts the theoretical documents at the end of any list ordered by country.

f/ Primary countries (or Region), which are those treated in some detail in the document, must be from Latin America, "World" or theoretical. If the study is comparative, all the countries treated in detail are indexed. The principal country/region is always included in the list of primary countries.

g/ May be specific countries from other Regions as well as Latin America.

Data Entry, Correction and Updating of the ISIS Master File

DOCPAL started entering information in September 1976. Unfortunately, it was found that the ISIS entry program was not very convenient for DOCPAL purposes, mainly because of the overall record length of each document (an average of 3,000 characters), the very long abstract field, and because the ISIS version used in Santiago permitted only the employment of the slow IBM 2741 typewriter terminal. Consequently, a new entry program was written to interface with ISIS. This entry program, known as CELENTRY, is manipulated from an IBM 3277.

Some characteristics of this program, used since February 1977, are: Recall of a previously entered document for correction, etc.; automatic posting of the ISIS number (optional); entry field by field, in any order; automatic saving of data; copying fields from a previously entered document to a new document; manipulation of texts on the screen; printed copy of documents (optional).

In a near future, the CELENTRY programme will incorporate editing routines which will eliminate logical error, saving manual checking and correction time. In addition to the usual checks such as field·length, these routines will check that the proper fields for a given combination of Literature Type and Bibliographic Level have been entered, that the relationships between various dates are logical, that corporate authors, publisher names, journal short titles and descriptors are legal; etc.

At periodic intervals the ISIS Master file is updated with the CELENTRY file, leaving the CELENTRY file empty. Until recently, all documents had to be kept in the CELENTRY file until they were fully corrected, because there was no way to recall a document from ISIS. Now it is routinely possible to store the documents in the ISIS Master file and recall them via a simple command, to CELENTRY at any time for correction, additions, etc. Further details on CELENTRY and the updating procedure will be found in Appendix F.

Checks and Controls

Processing Flow Control

Documents entering the system are organized in terms of "packages", a group of around 5-8 documents assigned to a single abstractor and ordered by the NACCESO, which is the unit of work during the input processing. Each package, which contains the physical documents and their worksheets, has an identification number which consists of a number (the week of the year in which the package was formed) and a letter. This information is recorded in the Technical Processing Control Sheet (see Appendix A), which travels with the package and is used to record each of the steps of the technical processing and checks done to all the documents in the package (a process which takes five weeks). ·

Data Entry Clerk

Once the documents have gone through the descriptive cataloguing process, they undergo a series of checks. At this stage, it is verified that all the fields are present which correspond to the specific combination of Literature Type and Bibliographic Level shown in fields 2 and 3, respectively (in the future this will be checked by an Edit routine associated with the CELENTRY program), and that the cataloguing has been done according to the DOCPAL Worksheet Manual rules.

This done, the corrected descriptive cataloguing is entered into the data base via the CELENTRY on-line video terminal program (see Data Entry). The entry of the cataloguing, before the abstracting and indexing is completed, serves various control purposes:

    a) Complete information is available on the documents given to the abstractors who work in their homes.

    b) The Authority and Holdings computer printouts are closer to being complete at any given time.

    c) Searches on new titles often can be made various weeks before the indexing is entered.

Once the abstractors return the packages with the abstracts and indexing for the documents, their work is edited by the documentalists and then the abstract and indexing is entered via CELENTRY. The data entered on each document is printed in hard copy form (as it appears in CELENTRY on the screen) and connected to the worksheets to facilitate checking.

At this point, when all the cataloguing, abstracting and indexing are stored in the data base, a final editing and correction via CELENTRY takes place to assure that no typing or other errors remain. If the document is not in the CELENTRY file but was transferred to the Master ISIS file, it is recalled immediately via a CELENTRY command for correction in CELENTRY.

A control field (N° 99) is used to keep track of the state of input of each document. At present three stages are defined: entry of descriptive cataloguing, completion of the rest of the entry and final acceptance. When all documents in a package have achieved final acceptance, the package is unmade, and the documents and worksheets stored.

System Controls

There are also a series of system controls which are entered to permit the production of system statistics: for example, how many documents are in each of the different stages (according to field 99); how many are available for the journal, etc. At present, statistics are generated by taking an output file of ISIS, and feeding it into a standard survey statistics package (SPSS), which permits recording and the production of various types of tabulations.

IV. DOCPAL PRODUCTS

The Production of the DOCPAL Abstract Journal

DOCPAL Latin American Population Abstracts (DOCPAL Resúmenes, for short) is the major output of the database since it is the only means of keeping the vast majority of potential users in the Region up to date on the Latin American population literature and of facilitating their searches for specific information.

Because many of the potential users of the journal have not used a tool like this before and they might reject it even before testing its usefulness, DOCPAL Resúmenes includes user-oriented features, such as all information in Spanish with titles and explanatory text translated into English; informative abstracts with chapters of books individually abstracted; a Literature Review Index aimed to aid population specialists to keep up to date in their own fields; and index designed to permit users to locate documents with the specific information they require, etc.[1] Great attention has been devoted to trying to make it unnecessary for users of the various indices to turn back to the abstracts of documents that are unlikely to be of interest. Appendix E gives examples of pages of the Journal from the Literature Review Index, Subject Index, Author Index and Geographic Index. In addition, there are less detailed indices of books, publishers, conferences and journals. All documents which can be copied are available through the clearinghouse.

DOCPAL Resúmenes is produced entirely from camera-ready computer printouts and with no additional composition done during photography. Its production begins with the items in the ISIS data base, passes through various specialized programs to adjust the ordering and formats, assign the abstract numbers, and produce the various complex indices. Finally, the text is placed in double column pages with the left margins adjusted, section titles set off by boxes, etc., via the text-editing program, SCRIPT, made available by Waterloo University. A small amount of additional text editing is done on the video screens. Appendix F provides more technical details on the computer processing of the Journal.

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[1] For more details on these features see: CONNING, Arthur M.: The Journal DOCPAL Latin American Population Abstracts: The design of user-oriented features. Santiago, CELADE, 1977, 41 p.

On-line searches

The on-line search service has been available to users in CELADE since July 1977 and was officially announced to the Region in the December issue of DOCPAL Abstracts. Interactive searches using the Ottawa ISIS-DOS are made using the IBM 3277 video terminal. A special version of the DOS operating system was implemented to permit the use of the terminal without excessive computer memory.

The fields inverted are: those which contain descriptors; authors; titles; date of publication and countries.

It is possible to display the information on a given document in more than one format. At present, the citation and descriptors can be shown in one display and the abstract in another.

Although on-line searches are normally made and printed copies may be obtained of what is on the video screen, in those cases in which a large amount of documents are retrieved, they are printed in batch.

Clearinghouse

The clearinghouse is one of the key services offered since a vast majority of users do not have access in their countries to documents identified through the Journal or searches. A system that was unable to provide such backing service would not be of much use in the Region.

A reasonable amount of documents are provided free of charge to users from the Latin American Region. Other users have to pay the copying and shipping costs fixed at US$ 0.15 per page.

Although most documents are not copyrighted, there is a potentially serious problem. DOCPAL wishes to receive all documents within its scope and hopes that institutions, seeing the Journal as a way of advertisening their work free, will send their publications to DOCPAL. Since many Latin American institutions sell mimeographed publications, they might be less willing to cooperate with DOCPAL, if the latter supplies documents are free on request. The same person would have had to pay if the document had to be requested from the producer organization. If major objections are received, some procedures will have to be developed to deal with this possible problem since, without a clearinghouse, DOCPAL will not really be able to meet the needs of users in the Region.

APPENDIX B

UNISIST-DOCPAL DATA ELEMENT EQUIVALENCES

RM sbfld = subfield(UNSIST) ind = indicator

RM FIELD NAME	TAC	RM SBFLD	IND	DOCPAL ISIS TAG	COMMENTS
ISSN	A01	0	00	30	Equivalents
CODEN	A02	.	.	-	Not used
Short title of Serial	A03	0	00	29	Not checked against the ISDS list
Series designations	A04	0	00	-	Not used
Volume number	A05	1	00	31	First part of field 31 (before first blank)
		2		31	Second part of field 31 (between second and third blank)
		6		31	Last part of field 31 (after third blank, if applies)
Issue or Part Number	A06	1	00	32	First part of field 32
		2		32	Second part of field 32
		3		32	Third part of field 32
Other identification of issue or part	A07	0	00	-	Not used
Title of contribution	A08	1	01	09	Equivalent
		2		61	Equivalent, considering that 61 is repeatable in DOCPAL
	A08	1	04	10	Equivalent
		2		-	"SPANISH" (translated where 09 is not in Spanish)
	A08	1	04	11	Equivalent
		2		-	"ENGLISH" (translated when 09 is not in English)
Title of volume, monograph, or Patent Document	A09	1	01	19	Equivalent
		2		61	Equivalent, considering that 61 is repeatable in DOCPAL
	A09	1	04	20	Equivalent
		2		-	"SPANISH" (translated when 19 is not in Spanish)
	A09	1	04	21	Equivalent
		2		-	"ENGLISH (translated when 19 is not in English)
Title of Collection	A10	1	01	53	Equivalent
		2		61	Equivalent, considering that 61 is repeatable in DOCPAL)
	A10	1	04	54	Equivalent
		2		-	"SPANISH" (translated when 53 is not in Spanish)
	A10	1	04	55	Equivalent
		2		-	"ENGLISH" (translated when 53 is not in English)
Person associated with a contribution	A11	2	01	04	Equivalent - The authority is determined by first entry
Person associated with a monograph	A12	2	?	13	Equivalent - exact indicators are obtained from field 14
	A12	9	?	14	Equivalent
Person associated with a collection	A13	2	?	47	Equivalent - exact indicators are obtained from field 14
	A13	9		48	Equivalent
Affiliation - Contribution	A14	1	00	05	Equivalent
		2		07	Equivalent
		3		08	Equivalent
Affiliation - Monograph	A15	1	00	15	Equivalent
		2		17	Equivalent
		3		18	Equivalent
Affiliation - Collection	A16	1	00	49	Equivalent
		2		51	Equivalent
		3		52	Equivalent
Corporate Author - Contribution	A17	1	00	06	Equivalent
		2		07	Equivalent
		9		08	Equivalent
Corporate Author - Monograph	A18	1	00	16	Equivalent
		2		17	Equivalent
		9		18	Equivalent
Corporate Author - Collection	A19	1	00	50	Equivalent
		2		51	Equivalent
		9		18	Equivalent
Page Numbers	A20	1	00	12	Equivalent
Date of Issue or Imprint	A21	1	00	33	Equivalent
		8		34	Equivalent
		9		35	Equivalent
Dates of Publication	A22			-	Not used
Language (s) of text	A23	0	00	61	Equivalent, but in DOCPAL 61 is repeatable
Language (s) of summaries	A24	0	00	62	Equivalent, but in DOCPAL 62 is repeatable
Publisher: Name & Location	A25	1	00	26	Equivalent
		2		27	Equivalent
		3		28	Equivalent
ISBN	A26	0	00	22	Equivalent
Edition	A27	0	00	23	Equivalent
Collation: Description of non-social collation	A28	1	00	56	Equivalent
Collation: Description of Monograph	A29	1	00	24	Equivalent
		2		25	Equivalent
Name of Meeting	A30	1	01	41	Equivalent
Location of Meeting	A31	1	00	42	Equivalent
		2		43	Equivalent
Date of Meeting	A32	1	00	44	Equivalent
		2		45	Equivalent
		3		46	Equivalent
(Patent Fields)	A33				Not used
	A38				Not used
Report Number	A39	0	00	36	Only when code I is present in Literature Type (Field 36 is used in DOCPAL to record number or code of a serie to which a book belongs to)
Name of Performing Organization	A40			-	Not used
University (or other Educational Institution)	A41	1	00	37	Equivalent
		2		38	Equivalent
		3		39	Equivalent
Degree Level	A42	0	00	40	Equivalent
Availability of Document	A43	0	00	58	Fields A43 is obtained by composition of 58 (where obtained document), 59 (Price of the original) and 60 (Distribution)
Source of Abstract	A44			-	Not used; all abstracts stored in Data Bank are done in CELADE
Number of References	A45	0	00	73	Equivalent
"Summary only" Note	A46			-	Not used; the information can be obtained from Literature Type
Abstract Number(s)	A47	0	00	97	Equivalent
Ancillary data	A99	0	00	67	Equivalent

APPENDIX C

DOCPAL DATA ELEMENTS

RM=UNISIST

(see the Worksheets in Appendix A)

DOCPAL ISIS TAG	RM TAG	Field Name
01	-	NDOCPAL Identification Number (principal country; NACCESO)
02	-	Literature type
03	-	Bibliographic level
04	11	Contribution: Author
05	14/1;	" : Afiliation of first author: institution
06	17/1	" : Corporate author
07	14/2; 17/2	" : Afiliation: city
08	14/3 17/3	" : Afiliation: country code
09	08	" : Title in original language if not Spanish or English
10	08	" : Title in Spanish (orig. lang. or trans.)
11	08	" : Title in English (orig. language or trans.)
12	20	" : Page number
13	12	Monograph : Author
14	12/9	" : Role (Author, Editor or compiler)
15	15/1	" : Afiliation of first author: Institution
16	18/1	" : Corporate author
17	15/2 18/2	" : Afiliation: city
18	15	" : Afiliation: country code
19	09	" : Title in orig. lang. if not Spanish or English
20	09	" : Title in Spanish (orig. or translation)
21	09	" : Title in English (orig. or translation)
22	26	" : ISBN (International Standard Book N)
23	27	" : Edition
24	29/1	" : Collation: Number of pages (total number)
25	29/2	" : Collation: Other descrip. info (phys. aspects)
26	25/1	" : Publisher: Name
27	25/2	" : First publisher: city
28	25/3	" : First publisher: country code
29	03	Serial : Short title
30	01	Serial : ISSN (International Standard Serial N)
31	05/1	Volume Number : "Caption"
31	05/2	" " : Volume N°
31	05/4	" " : Subdivision of Volume
32	06/1	Issue Number : Issue of part number: "Caption"
32	06/2	" " : Issue N°
32	06/4	" " : Subdivision of issue.
33	21/1	Date of issue or imprint: normalized
34	21/2	" " " : date part
35	21/3	" " " : date written in full
36	39	Report number (It is also used to record a code of a serie to which a book belongs
37	41/1	Thesis: university, etc.: name
38	41/2	" : " : city
39	41/3	" : " : country code
40	42	Thesis: degree level
41	30	Conference: name
42	31/1	" : city
43	31/2	" : country code
44	32/1	" : date of meeting: normalized
45	32/2	" : date of meeting: date part
46	32/3	" : date of meeting: date in full

DOCPAL DATA ELEMENTS (continued)

DOCPAL ISIS TAG	RM TAG	Field Name
47	13	Collection: Author
48	13/9	" : role (author, editor, or compiler).
49	16/1	" : afiliation or first author: Institution
50	19/1	" : corporate author
51	16/2	" : afiliation: city
52	16/3 19/3	" : afiliation: country code
53	10	" : title in orig. lang. (if not Spanish or English)
54	10	" : title in Spanish (orig. or translation)
55	10	" : title in English (orig. or tanslation)
56	28/1	" : Collation: N° of pieces
57	28/2	" : Collation: other descr. info (phys. aspects)
58	43	From where can the full text be obtained?
59	43	Price of original text (country code and price in that currency)
60	–	Distribution of the document (general, restricted, etc.).
61	23	Language(s) of text
62	24	Language(s) of abstract(s) in the original text
63	–	CELADE Library Number
64	–	N° of pages to copy if supplied by DOCPAL
65	–	Form of printing or original document (code)
66	–	Availability of translations and languages
67	99	Notes
69	–	Control of the Technical Processing
70	–	Users (order of priority) of doc. (max. 4 codes)
71	–	Abstract: objective (free text)
72	–	Abstract: remainder (free text)
73	45	Number of references
74	–	Data treated in the document begins in what year?
75	–	Data treated in the document finishes in what year?
76	–	Descriptors: Topics treated
77	–	Descriptors: variables studied with empirical data
78	–	Descriptors: data sources
79	–	Descriptors: existence and type of questionnaire
80	–	Projects, data, etc. of CELADE cited
81	–	Journal collection control
85	–	Abstract journal categories (speciality-topics)
87	–	Geogr. codes: Primary (only Latin America)
88	–	Geogr. codes: Secundary (Latin America and others)
89	–	Other related documents (using NDOCPAL if possible)
90	–	Name of Abstractor (HRES-); Analyst (HAC –)
92	–	Normalized date: First information received (1–)
92	–	Normalized date: Doc. requested (2–)
92	–	Normalized date: Doc. confirmed; closed (3–)
92	–	Normalized date: HDB filled in (4–)
92	–	Normalized date: Abstract and HRES completed (5–)
92	–	Normalized date: HAC filled in (6–)
93	–	From where was first information obtained
95	–	Source of document received by DOCPAL
96	–	Amount paid by DOCPAL (US$)
97	–	N° of abstract in Journal (automatically entered)
98	–	Status of input by worksheet and date of input
99	–	Stage of processing; date final listing accepted

APPENDIX D

THE JOURNAL CATEGORIES

As the function of the journal categories is to organize the abstracts in the Literature Review Index of DOCPAL Resúmenes to permit Latin American population specialists to keep to date on the literature in their particular specialities, the major specialities and interests of population workers in Latin America were defined. Fig. D-1 shows the Population Specialities and Sub-specialities, which are explained in Fig. D-2.

However, since specialists tend to be interested in particular aspects of a field, for example, in measurement, or social and economic relationships, or policy, etc., it is desireable to present the literature of each Speciality under the appropriate aspect treated. The "Aspects" considered in the Journal, which can be utilized with any of the Specialities, are shown in Fig. D-1, and are defined in Fig. D-3.

The location of each abstract in the Journal is indicated on the worksheet in Field 85 in the form:

$\langle$S:A$\rangle$ where: S = code for the Speciality

A = code for the Aspect

For example, using the abbreviations shown in Table A-1, a document on the measurement of mortality would be coded:

$\langle$MORTGEN:MEDICION$\rangle$

up to three categories can be coded for a document. In the Journal, the full reference and abstract of a document are given under the first category; later cross-references under other categories, contain only sufficient information to indicate whether the document is likely to be of enough interest to refer back to the abstract.

Figure D-1

THE CATEGORIES USED IN "DOCPAL RESUMENES" TO ORGANIZE THE ABSTRACTS

(A category consists of a Population Speciality and an Aspect; for example,
in coded form: NUPC:RECOL . Definitions are given in Figs. D-2 and D-3).

	Code	Population Specialities	Code	Aspects
A.	POBL	General Population	PROF	Development of the Speciality
B.	TAMCREC	Population Size and Growth	GENERAL	General Discussions and Studies
C.	MORTGEN	General Mortality	RECOL	Data Sources and Collection
	MORTINF	Infant Mortality		
			MEDICION	Measurements, Trends and Projections
D.	FECGEN	General Fertility		
	FECONTRL	General Fertility Control	SOC	Social and Economic Relationships
	ANTICON	Contraception and Induced Abortion		
	FECPROG	Family Planning Programmes	SALUD	Biological and Health Relationships
E.	MIGRIN	General Internal Migration	POLITICAS	General Policies, Plans and Programmes
	MIGRU	Rural-Urban Migration		
	MIGINAC	International Migration	COMUNIC	Programme Communication and Education
F.	ESPACIAL	General Geographic Distribution	ADMIN	Programme Administration, Operation
	URBAN	Urban Geographic Distribution		and Resources
	RURAL	Rural Geographic Distribution		
			NUMERICO	Statistical Data
G.	PEA	Economically Active Population		
H.	FAMILIA	Family		
I.	NUP	Nuptiality		
J.	COMPOS	Composition of the Population		
K.	ESTINEC	Estimation of Necessities		

Figure D-2

DEFINITIONS OF THE "POPULATION SPECIALITIES" IN THE LITERATURE REVIEW INDEX OF THE JOURNAL
"DOCPAL ABSTRACTS"

Notes: 1) To be within the subject scope of DOCPAL, a document must fit in at least one
of the population Specialities.

2) A document may be entered in the Literature Review Index of the Journal under
more than one Speciality.

3) "General" Specialities always are residual categories which apply if more
specific Specialities do not apply.

A. GENERAL POPULATION

A residual category used when no other Speciality applies because the document treats
population in general without further specifications or treats many different population
variables. Includes documents referring to the historical development and present state of
demography and population studies; general activities of institutions in the field of
population. Also regional or country studies touching on a variety of population variables;
general theoretical treatments of population; aspects of population censuses such as the
organizations of the census, general evaluations of the results, etc.

B. POPULATION SIZE AND GROWTH

Documents which treat estimations of and/or changes in population size; bases for the
estimation of population size and growth and the evaluation of data for such estimations;
projections; stable population theory; sex and age structure and the evaluation of such
data. Items concerning urban or rural population size and growth are placed under the
appropriate Geographic Distribution Speciality (F).

C. MORTALITY

C1. General Mortality

Documents which treat quantitative data referring to mortality, such as life tables.
Socio-economic determinants and/or consequences of mortality. Public health measures and
morbidity are included if they are considered in relation to mortality. Clinical studies
are excluded.

C2. Infant Mortality

Documents which treat mortality under one year; and those considering childhood mortality.

D. FERTILITY

D1. General Fertility

Documents treating birth data, reproduction rates and general studies of fertility; socio-
biological aspects of fertility (involuntary sterility, spontaneous abortion, lactation
(unless used explicitly as a control method, etc.). Studies of age of marriage, per se,
are found under Nuptiality (I), unless they are concerned with the effect on fertility,
in which case they normally will be located under this and Nuptiality.

D2. Fertility Control

D2a. General Fertility Control

Documents treating demographic, socio-economic, cultural and psychological aspects of fertility control and family planning; results of KAP studies; studies of family size preferences; etc. If the document treats fertility control in terms of specific contraceptives or induced abortion or in relation to a family planning programme, the appropriate specific categories D2b and D2c, are used.

D2b. Contraception and Induced Abortion

Documents treating contraceptives, voluntary sterilization, induced abortion and studies concerning the use and effectiveness of contraceptive methods. Clinical or biological studies concerning how a contraceptive operates are not considered; however, social studies of side effects are included.

D2c. Family Planning Programs

Documents treating the coverage, evaluation (demographic impact and other), administration, financing, operation, etc.,of governmental and private programs; communication and education directed by programs to target populations.

E. MIGRATION

E1. Internal Migration

E1a. General Internal Migration

Documents treating demographic, socio-economic and psychological aspects of local movements and internal migration whether temporary, seasonal or permanent; includes rural-rural migration and urban-urban but not rural-urban or urban-rural migration. General discussions of migration which do not specify whether the migration is internal or international are also considered.

E1b. Rural-urban Migration

Documents treating rural-urban or reverse movements, whether temporary or permanent; studies of the assimilation or acculturation of rural migrants in cities, etc.

E2. International Migration

Documents treating movements across national borders; refugees; the settlement and resettlement of internation migrants; etc.

F. GEOGRAPHIC DISTRIBUTION

F1. General Geographic Distribution

Documents treating the distribution and redistribution of population within regions or nations and not referring in detail to rural or urban distribution. Documents considering migration affecting geographic distribution are placed under the appropriate migration category (if the geographic distribution aspect is of importance in the document, it is also placed under the appropriate F category).

F2. Urban Geographic Distribution

Documents treating urbanization; studies of metropolitan, suburban and semi-urban areas; primacy; the definition of urban areas and boundary changes; etc. Studies concerning rural-urban migration are placed under Rural-Urban Migration (E1b).

F3. Rural Geographic Distribution

Documents treating rural settlements and dispersion; the distribution of agricultural populations; etc. Studies involving rural-rural migration are located in Internal Migration (E1a).

G. ECONOMICALLY ACTIVE POPULATION

Documents treating employment, unemployment and labor force statistics; employment status, occupation and industry; labor force participation. Theoretical economic studies of employment and unemployment are normally excluded unless they explicitly introduce population variables.

H. FAMILY

Documents treating household and family size (but not in relation to fertility) and composition, etc. Documents concerned with non-statistical sociological and psychological aspects of the family are excluded unless they deal with the determinants or consequences of population variables. Family size preferences are located under General Fertility Control (D2a). Marriage, and divorce and separation are under Nuptiality (I).

I. NUPTIALITY

Documents treating statistical aspects of marriage, separation and divorce; marriage duration, age of marriage; etc. If these are considered in relation to fertility, the appropriate Fertility (D) as well as Nuptiality is used.

J. POPULATION COMPOSITION

Documents statistically treating population characteristics as literary, education, ethnic, language or national origin group. Documents considering civil status are placed in Nuptiality (I); residence in the appropriate Geographic Distribution (F) category; and sex and age studies in Population Size and Growth (B).

K. ESTIMATION OF NECESSITIES

Documents statistically treating the necessities of the population as housing, schools and hospitals, which take into account population size and/or growth.

DEFINITIONS OF THE "ASPECTS" OF THE POPULATION SPECIALITIES IN THE LITERATURE REVIEW INDEX OF THE JOURNAL "DOCPAL ABSTRACTS"

Notes: 1) Documents within a given Speciality (see Fig.D-2) are grouped according to the "Aspect" of the Speciality treated.

2) Each "Aspect" defined below may be used with any population Speciality.

3) Documents may be entered under more than one Aspect within a given Speciality or under different Speciality-Aspects.

(1). Development of the Speciality

Discussions of the historical and future development of the Speciality or of the persons working in the Speciality; education of professionals and other working in the Speciality; relations with other disciplines (substantive studies involving interrelationships between population and other variables are located under the appropriate Interrelationships Aspects (5).

(2). General Discussions and Studies

A residual category when a more specific Aspect does not apply. If a document refers to specific countries or regions, this Aspect is used when general demographic descriptions are given without emphasis on specific measurements or analysis (otherwise, Measurement, Trends and Projections (4) is used). General non-mathematical theoretical discussions of demographic variables are included.

(3). Data Sources and Collection

Techniques for the collection of data (within the given Speciality); data processing; evaluation of the quality of data; etc. (Note that general discussions of popultion census data collection and processing, are located in the Speciality General Population under this Aspect). Also included are discussions of data sources; documentation; etc.

(4). Measurement, Trends and Projections

Theoretical documents treating methodology, techniques, models, mathematics and statistics associated with the measurement or analysis of the population variables within the given Speciality. Discussions of stable population theory are located in the Speciality Population Size and Growth, under this Aspect. Includes empirical documents treating the measurement or analysis of the population variables within the given Speciality (measurements of non-demographic variables are placed under the appropriate Interrelationships Aspect (5). Also used for the demographic evaluation within the Speciality Family Planning Programs.

Studies of trends of the population variables of a given Speciality; projections of population (used within the Speciality Population Size and Growth). Historical studies with long time series are located under this Aspect although other Aspects may also be used.

(5). Interrelationships

(5a). Social and Economic Interrelationships

Social, cultural, psychological, etc. (e.g. non-economic and non-biological/Health); determinants or consequences of the population variables of a given Speciality; discussions from a sociological, psychological, etc., point of view.

Economic determinants and/or consequences of the population variables of a given

Speciality; discussions from an economic point of view. Econometric models and development planning involving population variables of a given Speciality.

(5b). Biological and Health Interrelationships

Biological and health determinants and/or consequences of the population variables of a given Speciality. Causes of mortality are included under this Aspect.

(6). Policies, Plans and Programs

(6a). General Policies, Plans and Programs

General discussions of policies, plans and programs affecting or affected by the population variables of a given Speciality; also relevant legislation. Documents with general discussions of population policy without reference to specific variables, or considering a wide variety of demographic variables, are placed under this Aspect in the Speciality General Population. Discussions of general fertility policies normally are under this Aspect in the Speciality General Fertility Control; if the document refers to Family Planning Programs in general, it is under the Speciality, Family Planning Programs and this Aspect.

(6b). Program Communication and Education

Communication or education carried out by a program to influence acceptance of the program. Discussions of the training of professionals to work within a program is located under the Aspect Development of the Profession (1).

(6c). Program Administration and Operation

Administration or operation of programs. Administrative evaluation of programs. Studies and discussions of the human and financial resources required or employed in a program (including technical assistance).

(7). Statistical Data

Documents consisting primarily of statistical data relevant to the given Speciality. However, projections are always located under the appropriate Speciality and the Aspect Measurement Trends and Projections (4).

APPENDIX E

INDICE DE RESUMENES

LITERATURE REVIEW INDEX

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┌─────────────────────────────────────────┐
│                                         │
│    A. POBLACION GENERAL/                │
│       GENERAL POPULATION                │
│                                         │
└─────────────────────────────────────────┘
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┌─────────────────────────────────────────┐
│  Poblacion General-                     │
│    Desarrollo de la Especialidad        │
│  General Population-                     │
│    Development of the Speciality        │
└─────────────────────────────────────────┘
```

12-001
01341.01   1977   Es General Mimeo
XL   BACCIO, Guillermo; MIRO, Carmen A.
Avances teoricos y metodologicos de la
investigacion demografica en America Latina y su
relacion con otras disciplinas / Theoretical and
methodological advances of demographic research in
Latin America and their relationship with other
disciplines. s.l., s.e., 1977. 46 pags. Presentado
en: Reunion Nacional sobre Investigacion Demografica
en Mexico, Mexico, MX, 14-18 Junio 1977. 50 ref.

*Los progresos se vienen dando en forma dispar segun
el plano de que se trate y como una consecuencia obvia
de los distintos caminos que recorre la investigacion.
Asi, las mayores contribuciones se concentran en el
nivel intermedio, aquel concerniente a las tecnicas y
metodos de analisis. Como todavia existen problemas no
resueltos relativos a los datos y su calidad, la
cuantificacion de variables y la deteccion de sus
diferenciales es una linea de trabajo llamada a dar
nuevas contribuciones y que esta en condiciones de
moverse en una direccion bastante definida e
independiente. Menos claro es el cuadro para el plano
de los conceptos, las interrelaciones y la teoria, ya
que la complejidad intrinseca del asunto y el hecho de
tener que compartir el objeto de interes con otras
ciencias sociales, impone una serie de restricciones.
Por otra parte, se percibe un esfuerzo por acercarse a
situaciones concretas geograficas e historicas;
ademas, hay indicios que apuntan a una mayor cautela y
una reticencia creciente a recurrir a grandes
concepciones generalizadoras y universales.
<INVESTIGACION DEMOGRAFICA>

12-002
01377.00   1976   Es General Mimeo
ZZ   DIERCKXSENS, Wim.
La demografia y la dialectica de su objeto y
metodo / Demography and the dialectics of its
objective and methodology. San Jose, UNIVERSIDAD DE
COSTA RICA. FACULTAD DE CIENCIAS SOCIALES. INSTITUTO
DE INVESTIGACIONES SOCIALES, 1976. 28 pags.
(Avances de Investigaciones, 11). 26 ref.

*Al criticar el objeto de la Demografia, se realiza
un breve analisis sobre las definiciones burguesas de
la Demografia, sus consecuencias y los principales
errores que ello implica. Para construir una
concepcion unitaria y objetiva del hombre, que lo
represente en la totalidad de su existencia concreta,
se acepta como punto de partida que la realidad
demografica es una realidad historica y concreta
producida por el hombre, el cual posee la capacidad de
organizarse para la produccion de los medios de
subsistencia. Entonces, es la produccion la base del
fenomeno demografico, ya que en ella los hombres se
hallan en interaccion con la naturaleza y entre si
mismos. Respecto al metodo de la Demografia, se
analiza: como la burguesia (clase dominante)
determina, por consenso o mayoria, la veracidad de sus
teorias y dispone, por el criterio de la mayoria, de

INDICE TEMATICO

SUBJECT INDEX

INDICE GEOGRAFICO

GEOGRAPHIC INDEX

INDICE POR AUTOR

AUTHOR INDEX

LISTA DE CONFERENCIAS

CONFERENCE LIST

(The Book, Publisher and Journal
Lists have formats similar
to the Conference List.)

Airlie, US. Conferencia sobre Tendencias Actuales de la Regulacion de la Fertilidad (28-30 Marzo 1976). 12-110 12-144 12-238 12-245 12-248 12-249 12-250 12-251 12-252 12-253

Atlanta, US. Annual Conference of the Southern Economic Association, 46th (17-19 November 1976). 12-366

Caracas, VE. Conferencia Regional Preparatoria HABITAT (30 Junio-4 Julio 1975). 12-399

Chapel Hill, US. Conference on the Urban Impact of Internal Migration (18-20 September 1975). 12-350

Gainesville, US. Symposium on Population Growth and Human Productivity (17-20 February 1974). 12-045 12-049 12-055 12-099 12-456 12-461 12-464

Guaruja, BR. Grupo de Trabajo sobre Procesos de Reproduccion de la Poblacion, 5a (11-15 Abril 1977). 12-484

Lima, PE. Comision de Mejoramiento de las Estadisticas Nacionales (COINS), 12a (11-18 Noviembre 1975). 12-017 12-018

Mexico, MX. IUSSP General Conference (8-13 August 1977). 12-003 12-021 12-053 12-230 12-431 12-447 12-476

Mexico, MX. Reunion Nacional sobre Investigacion Demografica en Mexico (14-18 Junio 1977). 12-001

Mexico, MX. Reunion Paralela sobre Poblacion y Desarrollo en America Latina (4-6 Agosto 1977). 12-034 12-043 12-047 12-052 12-065 12-092 12-097 12-098 12-119 12-154 12-185 12-197 12-263 12-264 12-267 12-317 12-347 12-361 12-386 12-397 12-437 12-452 12-497 12-499 12-500

Mexico, MX. Reunion Regional de la Encuesta Mundial de Fecundidad para Latinoamerica, 2a (15-17 Agosto 1977). 12-150 12-151 12-160 12-163 12-164 12-172 12-176 12-183 12-184

Montreal, CA. Population Association of America, Annual Meeting (April 1976). 12-210 12-319 12-883

New Delhi, IN. Interaction between Statistics and Computing, 41st session (5-15 December 1977). 12-029

Palmerston North, NZ. Symposium on Population at Microscale (6-9 December 1974). 12-048

Paris, FR. Seminario de Historia Economica de America Latina (Septiembre 1976). 12-042

Quito, EC. Asamblea General del Instituto Panamericano de Geografia e Historia, 11a (1977). 12-398 12-403 12-444

Rio de Janeiro, BR. Simposio sobre o Progresso da Pesquisa Demografica no Brasil (7-9 Junho 1976). 12-105 12-413

San Jose, CR. Reunion Tecnica de Intercambio entre Organismos Gubernamentales Responsables de las Politicas de Poblacion en America Latina, 1a (8-12 Noviembre 1976). 12-024 12-066 12-067

Santiago, CL. Curso-Taller Regional de Educacion en Poblacion (20 Octubre-14 Noviembre 1975). 12-011

St. Louis, US. Population Association of America Annual Meetings (20-22 April 1977). 12-219

Vancouver, CA. Conferencia de las Naciones Unidas sobre Asentamientos Humanos (HABITAT) (31 Mayo-11 Junio 1976). 12-400 12-405 12-407

Varsovia, PO. Congreso Internacional del ISI, 40o (1-9 Septiembre 1975). 12-027

Washington, US. International Conference of the World Population Society, 3rd (5-7 December 1976). 12-059

Washington, US. Joint Meeting of the POPLHS Interim Committee and the Technical Task Force (20-24 September 1976). 12-022

APPENDIX   F

DOCPAL COMPUTER PROCESSING

Abel Packer[1]

The ISIS system utilized by DOCPAL basically corresponds to the DOS version developed at ILO, Geneva, and modified by IDRC. The records in the DOCPAL database are stored according to the ISIS MARC II modified format. The records are structured following the field definitions given in the UNISIST Reference Manual and, although subfields and indicators are not available, it has been possible to transform the DOCPAL-ISIS records to the Common Exchange Format, as defined in Appendix 3 of the UNISIST Reference Manual (ISO 2703). A program has been written by DOCPAL for this purpose.[2]

DOCPAL data processing is done on the VM/370 instalation at the University of Chile Computer Center, which operates under DOS and CMS; DOCPAL has two CRT located in CELADE and connected to the computer via teleprocessing. When necessary, we use additional terminals in local operation at the Computer Center. DOCPAL has four Virtual Machines: two for data entry under CMS; one for programming development and job preparation under CMS; and one for running DOS jobs. The communication between the CMS and DOS machines is done via VM spooling files or via magnetic tapes.

Data processing in DOCPAL can be divided into three parts: a) data entry; b) database updating; and c) database exploitation. Computer systems development is not considered here, although it has been a very important part of the work in the implementation of DOCPAL during the first two years.

a). Data Entry

Data Entry is in the interactive mode and uses the CMS CELENTRY program developed by CELADE. The development of this program was necessary because the ISIS ENTRY program, in our work environment, made data entry operations extremely slow, since the on-line ISIS entry program runs with the IDRC Monitor program that supports only IBM/2741 typewriter terminals; in remote operation, this permits data transmission at the rate of 240 bits per second, too slow for the long abstracts and many fields used in DOCPAL.

On the other hand, DOCPAL acquired the more advanced remote IBM/3270 display system to facilitate its works (two 3277 CRT, one 3286 printer and a rented 3271 control unit). To use it with the original ISIS on-line program it was necessary to rewrite the ISIS MONITOR program. In this situation, we preferred to design the new CELENTRY program to operate under CMS, incorporating features meeting DOCPAL needs and making use of the CMS facilities in interactive and file manipulations.

CELENTRY is written in IBM/370 ASSEMBLER and runs under CMS with IBM/3277, Model 2, compatible CRT. Documents are treated one by one, fields are entered in any order - field length and repeatable fields are controled by the same FDT as used by ISIS for a given database. Corrections in the actual

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or previously entered documents can be made, and fields can be copied from other documents to a new document. Data entered are stored in the transaction file of each CELENTRY user, with read/write of the file authorized only for one virtual machine; documents can be retrieved directly from a MASTER ISIS File in read-only operation.

The CELENTRY transaction file (file type ENTRY) is a CMS file; each document, structured in ISIS internal storage format, was divided into logical records of length 80 for I/O processing efficiency. Direct access to each document is provided via an index file (filetype INDEX); each time a document is processed, it is rewritten at the actual end of the CELENTRY file and when it is called again via a GET command, the old space remains occupied in the file; to eliminate lost space in disk a COMPRESS command is available. The program is written in such a way that is easy to call special subroutines of users, like automatic prompting, data editing, etc. (these routines are planned, but not yet implemented).

b). Database updating

Database updating involves the use of both CMS and DOS virtual machines. The Master ISIS File has to be made available both in CMS for recalling documents to CELENTRY for correction and on DOS disks for ISIS searches.

The Master ISIS File is updated in CMS. from all the CELENTRY transaction files generated in the individual CELENTRY machines and the new Master File on tape is restored in the DOS files using the CLDRTV09 program. Then, in DOS, the new inverted file is generated to permit ISIS searches. The duplication of the Master ISIS file is neither efficient nor elegant but will not be changed until the future DOCPAL data processing environment is defined in order to avoid costly system redesign that then will be made obsolete by a move to another computer environment.

c). Database exploitation.

The normal use of the database involves: on-line and batch searches, catalog and control lists, statistics and journal production.

On-line searches use an adapted version of the ISIS on-line search (DOS-IDRC). The program was modified to avoid communication with the ISIS monitor; I/O with the terminal is done via read/write to a DOS console, leaving all teleprocessing manipulations to the VM/370 Control Program (CP). To make a search the user must logon to the DOS machine, IPL DOS and load the search program - these operations are done via an easy procedure by using the "program functions" (PF) keys of the terminal. In effect, the user carries out a complex set of operations while loading DOS without knowing it.

The program works exactly as the original ISIS version, with a difference in the "display" command: the user may define different formats for document display. The inversion for the search also can eliminate the asterisks that are used to mark descriptors for printing in the journal.

Searches may be "saved" for batch processing and listing via the CLDRTV01 program.

Periodical catalogs and control lists are produced for local user queries or for manual data editing: examples are the Author Catalog and Authority Lists. These processes are done using CLDRTV16, SORT, CMS programs and CLDRTV04 programs. The processing is complicated by the fact that analytic level documents must be treated differently from monographic ones to avoid repetitions of items on the lists.

Statistics are generated for various purposes. The database frequency distributions of key fields and cross tabulations between fields (for example, the date when a document began to be processed by the stage of processing) is done via the SPSS package (Statistical Package for the Social Sciences) using as input an element file generated with the data fields (now treated as "variables") involved in the statistics. SPSS permits recoding variables, a vast variety of data manipulation, and a wide variety of statistical operations, all easily programmed by the users of the statistics.

Journal Programming involved some complex programming. However, the different steps are now divided in CMS "EXEC procedures" that make the production of the journal easy for a "careful computer operator". The work is reduced to entering the names of the "EXEC procedures" (REVIS01, REVIS02A, REVIS02B, etc...) in proper order and following the indications (attach tape, etc.). The operations go alternatively from CMS to DOS and viceversa.

The basic step in the Journal production is the generation of the elements that are used in the construction of the Literature Review Index. Once the correct order of the documents is defined (as determined by the "Speciality-Aspects" categories assigned to each document), "correction" cards for CLDRTV39 are generated to permit the creation of the abstract number in a field of the Master ISIS File. From this point, all the elements generated for the other indices refer to this abstract number so that all indices are linked to the Literature Review Index containing the abstract.

To produce the indices (see Appendix E), the ISIS methodology is used: element generation (CLDRTV16), SORT and print-out (CLDRTV04). In addition, manipulations of output data are done after CLDRTV16 and after CLDRTV04. CLDRTV16 and CLDRTV04 run on a DOS machine and all other programs and procedures are run under CMS.

For each of the other journal indices the output of CLDRTV16, i.e., elements, are manipulated to generate corrected or transformed sort-keys and to assign to each document the number of the print format that will be used in the CLDRTV04 for printing the document. The print format used is determined for each document, basically by the Literature Type and Bibliographic Level fields (fields 02 and 03).

The output of CLDRTV04 for a given journal index, is sent to the reader of a CMS machine. The file is read, various programs are used to make required transformations of the data and generate commands that guide the final printing, in double columns, via the SCRIPT program (Waterloo Version). The high speed printer, with upper and lower case, produces the camera-ready output; unfortunately it does not give very high quality output.