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ABSTRACT

As an American Library Association/USIA International Library Fellow in Argentina from March to September 1989, the author worked with the Argentine National Protective Commission for People's Libraries. Included in her assignment was a charge "to assist in the development of a popular libraries network in Patagonia," the southernmost region of this South American republic. Argentina's current attempt to transform its economy from an inefficient, state-dominated one to a more productive mix in which private enterprise predominates, resembles similar efforts in other South American countries and also in the countries of Eastern Europe. This paper uses the author's experience and observations in working with the "network" of Patagonian people's libraries and with another, more developed network (INTA--the National Institute of Farming Technology) in Argentina--to describe the role libraries and librarians play in this transformation. It touches upon the social, political and economic factors and attitudes at work in this massive task. The barriers which exist in Argentina to effective performance of information's vital role are outlined. Finally, the paper suggests areas for specific international and inter-institutional cooperation to enhance the role of information management in this type of transformational development. (Eleven figures are appended.)
 (Author)

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LIBRARY NETWORKS IN LESS-DEVELOPED COUNTRIES:

TWO ARGENTINE CASES AND SOME OBSERVATIONS

by

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ABSTRACT

As an ALA/USIA International Library Fellow in Argentina from March to September 1989, the author worked with the Argentine National Protective Commission for People's Libraries. Included in her assignment was a charge "to assist in the development of a popular libraries network in Patagonia," the southernmost region of this South American republic. Argentina's current attempt to transform its economy from an inefficient, state-dominated one to a more productive mix in which private enterprise predominates, resembles similar efforts in other South American countries and also in the countries of Eastern Europe. This paper uses the author's experience and observations in working with the "network" of Patagonian people's libraries and with another, more developed network (INTA--the National Institute of Farming Technology) in Argentina to describe the role libraries and librarians play in this transformation. It touches upon the social, political and economic factors and attitudes at work in this massive task. The barriers which exist in Argentina to effective performance of information's vital role are outlined. Finally, the paper suggests areas for specific international and inter-institutional cooperation to enhance the role of information management in this type of transformational development.

In 1989, from March to September, I participated in the American Library Association/United States Information Agency's International Library/Book Fellow Program. The fellowships are designed to send mid-career professionals from the United States to countries all over the world as "information ambassadors." The program began in 1987. Annually since then, from eight to twelve Fellows are sent to work on projects that are proposed and submitted by prospective host countries through the USIA and the U.S. Embassies in the various countries. Many of the projects selected are submitted by less-developed countries, and are designed to assist them in development of their capacity in information management and in delivery of information services.

The assignment for which I applied, and was selected, was located in Argentina. This South American republic requested a Fellow to advise and assist in planning and development of their "net work" of *bibliotecas populares* or "People's Libraries," concentrating especially on a regional network in Patagonia, the mostly rural South of Argentina, which has been the focus of recent development efforts (see Figure 1).

The qualifications which brought me to this assignment were, first of all, that I am bilingual in Spanish and English. Language skill is unavoidably essential for work such as this, because the United States' relatively advanced capacity in communication and information technology makes less-developed countries dealing with us wary and defensive at best, and somewhat resistant to cooperation, at worst. The ability to speak to officials and fellow professionals and library workers in their own language about matters which are of common and vital interest, goes a long way in overcoming this very understandable attitude. Abiola Irele has pointed out, in "Education and Access to Modern Knowledge," an article in *Daedalus* (Winter 1989): "...the development of the new technologies of communication and information has created a new sphere in which the developed world has a virtual monopoly. ...Furthermore, it has tended to dominate the part of humanity less oriented to technology, because its own development has depended on the exploitation of resources (both human and material) and markets outside of its borders." The less-developed world expects, with good reason based on past experience, that the developed world will have a supercilious and unappreciative disregard of their needs and their situation. It's often called "neocolonialism." Language helps to overcome this tendency, on both sides of the equation.

My other qualifications were: nearly twenty years' experience as a public services librarian in a community college, as well as a graduate degree in urban planning, and background in planning and construction of public institutions. Living and working in southern Arizona, which has a strong Spanish colonial heritage, and in an educational institution which has a mission of dedicated service to the people of its community, made me experienced in applying my technical skills to the particular environment that is Patagonia.

Arizona, like Argentina, has a couple of large, modern urban centers, and many "less-developed" communities. The challenge, in both Arizona and Argentina, is to link the urban centers and the rural communities via a vital, useful network of communication and of information providers, and to do it in an environment of limited resources. It is, actually, the reality of limited resources--both for the U.S. as well as other countries of the world--that makes linkages and cooperation so unavoidably necessary. The long range goals of all of our countries will be best achieved by the establishment of international cooperative linkages. These linkages must be vigorously pursued by the active participation of library and information professionals in relevant public policy and planning endeavors, and in development projects of all kinds.

I am calling Argentina a "less-developed country" here. This is a designation that may not be technically correct, according to the United Nations definition, but I think it applies in many features of the country, such as its libraries. It certainly describes the direction of the country, for Argentina is very like the countries of Eastern Europe in that it had reached a high degree of industrialization and development, which devoured and exploited the resources of the country and of its people. It is now burdened to the point of collapse with external and internal debt, capital flight, deteriorating infrastructure, uncontrollable inflation, and dim prospects for discovering a way out of its economic morass. At the beginning of the century, Argentina had one of the highest per capita GNPs in the world. In terms of intellectual resource development, its libraries and universities were considered the greatest in Latin America. Because this development was neither balanced nor sustainable, however, Argentina's economy and resources are now severely strained and developmentally disabled, and it must define another path for a viable future. I propose that its libraries, especially its People's Libraries, have an essentially important role to play in this transformation and in its future. I also propose that this model of the essential role of information and communication in development, via a network of information centers accessible to the general population, would be applicable to the situation in other less-developed, or developmentally disabled, countries.

Argentina's population is served, in terms of libraries, by a very rudimentary system of nationally-supported public libraries called *bibliotecas populares*, which I translate as People's Libraries. There is a parallel, but more recently established, system of Rural Libraries (Figure 2), and there are also in some localities, municipal libraries which resemble our public libraries a little more in terms of financial support.

These municipal libraries are supported by funds from the local municipality, but unlike the People's Libraries they are not required to be staffed with credentialed librarians. As a consequence, the municipal libraries of Buenos Aires, for example, are overwhelmingly staffed by non-librarians, usually as a form of political appointment in return for favors. The director of the Buenos Aires municipal system is almost always a non-librarian. This situation is justified by an occasionally-expressed attitude of disdain for the competence and service orientation of Argentine librarians. I, for one, did not find this attitude to be based in reality, since I found Argentine librarians to be very competent and extremely service-oriented, but there is a poor reputation and a lack of trust there which may produce in the library profession a definite feeling of being under-valued and unappreciated. This is also borne out by the fact that library workers--especially in the public, school, and People's Libraries--are very poorly paid. Public librarianship, therefore, does not always attract the most highly credentialed and qualified people. In addition, while there are several excellent schools of librarianship, at a couple of levels, in Argentina, these are concentrated in Buenos Aires and in the North, and education and training are not easily available to all interested and qualified people.

In terms of libraries in educational institutions, it is important to remember that, although completely supported by public funds (no tuition is charged at the national universities), the university libraries are not open to the public. In addition, their collections are very incompletely and poorly cataloged, and there is absolutely no system in operation now or in the foreseeable future that will allow collection or catalog or--ultimately--resources, to be shared, even among branches or departments of the same institution. The libraries do not adhere to any common cataloging standards, in most cases, nor do they engage substantially in cooperative acquisitions. There is an effort under way, called

RENBU (National Network of University Libraries: see Figure 3), to integrate and automate this information, but it is an ambitious and monumental task which does not have a lot of hope for the future commitment of the necessary resources. During the last academic year, some of the universities were actually closed for failure to pay their utility bills. At the University of Buenos Aires, the largest and most prestigious national university, this project is called SISBI.

Most elementary schools do not have any sort of library, and the People's Libraries, or the municipal libraries where they exist, serve primarily to support the needs of the school age population. There are a large number of special and semi-publicly-supported research entities with their own libraries, such as INTA, for the national agricultural extension network, which I will describe later, but these are all fairly autonomous and their activities do not link in any significant way with the other information providers in the country. They certainly do not offer services to the public as such. CONICET is the main research and development entity in the country, and it is presently threatened with upheaval--in addition to other severe internal problems--by the current government's press for privatization or "rationalization" of all state-supported enterprises except defense. CONICET is the major agency for the Program of Library Development of which RENBU is a part. CONICET and RENBU work closely with UNESCO's PGI, or General Information Program. Much of the fiscal support for their automation efforts comes from the *Fundación Antorchas*, a private foundation, which also provides grants for the automation of some People's Libraries, and to INTA, which will be described below (see Figures 4a and 4b).

The national public policy makers are clearly cognizant of the importance of communications and information in development, and several systematic efforts to formulate information policy linked to development and productivity have been attempted, both at the national and provincial level. Computerization of information, or *informática*, is an important element in these plans. The connection between libraries and information technology, however, is almost totally unknown and neglected. In fact, one official expressed surprise to me when I asked about this. "What do libraries have to do with *informática*?" he asked, clearly astonished that I was even interested. Part of this attitude stems from the fact that in Argentina, as in much of the world, libraries are affiliated functionally and intellectually with culture and not with education, as they are in the United States. There are certain advantages, politically and popularly, that accrue from this association, but there are great disadvantages as well. The one great disadvantage, of course, is the belief that Culture is not a necessity but a luxury, and it falls fairly far down in the list of priorities for government spending when resources are so severely limited. The People's Libraries, therefore, have traditionally gotten only a very small allotment of funds, even during the best of Argentina's economic times.

There are presently 1,226 of these institutions in the country (Figure 5). The "system" is deliberately intended to function as a decentralized organism, so that there is more independence and autonomy for the individual libraries, and less bureaucracy for them to deal with.

Argentine political history is a story of constant tension between local autonomy and centralization (in Buenos Aires). Centralization has dominated for many years, with the concomitant evils of too much direction from an unresponsive, controlling, and distant central authority. The People's Libraries, which "arise from a common agreement among a group of citizens of a community," have a very strong tradition of local autonomy and responsiveness to local concerns. This tradition has also been extremely important in helping

the libraries maintain freedom of thought against severe censorship during dictatorships, such as the one which ruled from 1976 to 1983. The head of the neighborhood coalition that founded the *Biblioteca Popular "Crecer"* in General Roca said proudly to me, "We are constructing this by ourselves, for ourselves." He also expressed resentment that they didn't get more support from the State. He stated to me a concept that I heard expressed several times in Argentina and also in Uruguay: the hope that the People's Libraries might develop into "intermediate structures" in the civil, social and political process. They wanted the libraries to be a means by which the people might communicate with the central government. ■

The system was founded in 1870 by Domingo Faustino Sarmiento, an educator, writer, and thinker who was President of Argentina from 1868 to 1874. He spent some time in exile in the United States during the dictatorship of Rosas, and became friends with the American educator Horace Mann and with Mann's wife. While in the U.S., Sarmiento was very impressed by the libraries which he observed here at that time, and by the fact that they were open to all--"workers' libraries," he called them. He believed firmly in the civilizing effect of education and culture, and that "civilization" as he defined it, was responsible for the strength and energy of the U.S. He considered "civilization" (as opposed to "barbarism," which Rosas and his gaucho followers exemplified) the fundamental necessity for the new Argentine republic. When he returned to Argentina and became president, he established a system of libraries similar to the ones he had admired in the U.S., which--if you remember American library history--were private subscription libraries. The Argentine public libraries, however, based on an 1840s North American model, have not been subject to the same evolutionary forces as the American libraries have. A major difference is the absence, in Argentina, of anyone like Andrew Carnegie. Another difference is the absence of Melvil Dewey and the emergence of a strong, cohesive library profession with clear standards and a supportive and influential national association. Although we don't have a national "system" of libraries as such, our clear sense of a common mission and common standards serves to keep us working together and communicating. The profession has established Networks as well as networking. It has made us visible and respected. Our interaction with our public, while it could be more active and more integrated with non-librarianship, has given our public a vehicle for effective support and respect.

There are seventy-four officially-recognized People's Libraries in the six provinces of Patagonia, serving a population of around 800,000. There are, in addition, many *de facto* and embryonic libraries in schools, neighborhoods, and other communities. Each province has a Minister of Culture, or of Culture and Education, who is responsible for the Department of Libraries, if there is one. The Ministers of Culture have a Patagonian Council of Culture, which meets at least a couple of times a year to share reports and to discuss common concerns. The Minister of Culture is responsible for implementing in his or her province the National Plan for Reading (a literacy program), which is administered by the national Directorate of the Books, a part of the Secretariat of Culture, in the Ministry of Education and Justice (Figure 6). The Directorate of the Book is also responsible for, and makes appointments to, the National Protective Commission of People's Libraries, which is the group responsible for the People's Libraries nationally. The National Plan for Reading, therefore, is usually implemented through the Department of Libraries in each province, and its programs and workshops take place in the local People's Libraries (Figure 7).

This apparently well-organized formal structure, however, is disrupted by several factors. One is that, as I have mentioned, there is not always a Department of Libraries in every province. Another is that there is not always a local People's Library, of course. The most damaging factor, however, is the lack of competent and trained personnel, from the local library to the administration of the Department of Libraries. The problem is also complicated by the fact that every time the government changes, personnel change, all the way down to the local level. Since these jobs are all political appointments, there is also a tendency (especially in Culture) for non-librarians to get these jobs.

As I have mentioned, there is good historical cause for the People's Libraries to want to maintain their independence from the State. The National Protective Commission, which has a majority of positions designated to go to representatives from the Provinces, sets standards, but cannot direct. The libraries are governmentally subsidized only to an amount equal to the support given by the members. Most of this subsidy in the past has consisted of books that are distributed to the libraries which are recognized as part of the system. There is also some money for buildings. Technical services, however, are not centralized. Each library does its own complete original cataloging. It acquires and receives, independently, all materials not supplied by the National Commission. It also re-binds books, and compiles its own indexes of periodical articles. As Ana Dobra de Lesta--the Director of the *Biblioteca Popular "Julio A. Roca"* in General Roca--describes them: a People's Library is "an autonomous civil association, created by neighbors and directed by members, which possesses a general collection, open to the whole public. It is a democratic institution of teaching, information, culture and recreation. Moreover, in our country--in the majority of cases--the State protects and even may supervise it, but it is not subordinate to the State like the public library. The public library is similar to the People's Library in many of its features, but the public library depends administratively and hierarchically on the State."

During my work in Patagonia, I had my base of operations in the city of General Roca, in the province of Río Negro. General Roca has traditionally been considered the cultural center of northern Patagonia. It presently has about 70,000 inhabitants, and has been obscured in importance and size by Neuquén, the capital of the neighboring province of Neuquén (Figure 8). Factors influencing and affecting the very rapid population growth and relatively advanced economic development of this region have been: the proposal, by former President Raúl Alfonsín, to move the national capital from Buenos Aires to Viedma, in Río Negro; the intensified exploration and exploitation of oil and gas resources in the region; the construction of large hydroelectric dams and plants; and the economic diversification of Neuquén, which allowed it to surmount the 1976-83 crisis in farming, which affected Río Negro much more adversely. Neuquén, more than any other Argentine province, furthermore, has an efficient and effective process of centralized rational planning, which gives great importance to social and environmental, as well as economic, programs of development. Río Negro and Neuquén are the only Patagonian provinces with a structure for administration of libraries. Both provincial Directors of Libraries (Liliana Mercado in Río Negro, and Luis Omar Perata in Neuquén) report to the Office of Culture for the province. Neither is a librarian, but both were personally sensitive, sympathetic and supportive of the goals and mission of public libraries, and they relied very greatly upon the dedication and advice of the librarians of their provinces.

In Río Negro (Figure 9), for instance, under the Department of Libraries, there is a formal structure which designates a Department of Administration, a

Department of People's Libraries, a Department of Supervision (with area sub-supervisors), and a Department of Training and Education. Each department has a Chief, who is a librarian. None of these people, however, receive a salary for this work. They have no direct authority, no control of resources, and no budget. The seat of the respective Departments is wherever the Chief happens to be located, and her (they are all women) scope of authority is restricted to coordination only. I will attest to the fact that they did very good work, holding together this "network" and exerting a great deal of energy to communicate and coordinate among themselves. There was no budget for anything, even postage, and most of the libraries in the system did not have a telephone.

It was also by means of the Library Associations of Río Negro and Neuquén (which, unlike the national library association of Argentina, admit non-librarians such as trustees, friends, and library supporters), that the Directors of the Department of Libraries transmitted and received direction of the libraries. There is also a Federation of Patagonian People's Libraries. In general, the most severe problems of Patagonian libraries lie in the lack of continuity caused by changing political appointments and the "burnout" experienced when dedicated but poorly paid people stop doing whatever they've been doing to keep libraries going. The spirit of volunteerism goes only so far! I was told that there are no funds or mechanisms for paying appropriate and just salaries to these people. Those who work well do it out of sheer love and dedication, and they're usually unique. When they're gone, the work is not continued, and often the library with which they were associated disintegrates.

When I arrived in Patagonia, there was some defensiveness expressed about what I would think of their "network" in comparison with U.S. library networks which they imagined to be totally computerized and functioning absolutely smoothly. After I had told them some of my experiences as director of a medium-sized library in a large and complex institution, and in an unevenly-developed state, they felt much better. They were especially gratified to be assured that they had a true network, for they communicated regularly among themselves (by whatever means was at hand--sometimes the back fence) and they worked together for a common goal and with a common vision of serving their communities. What they were doing was truly an inspiration to me. The inspiring dimension, however, held the seeds of deterioration, because it was completely informal and completely voluntary.

In 1986 the Sarmiento Law establishing the People's Libraries was revised. Its regulations and appropriations were being written and their adoption pressed while I was in Argentina. Through the indefatigable efforts of Dr. Juan Carlos Secondi, the President of the National Protective Commission at the time, the regulations were the last piece of legislation that President Alfonsín signed before stepping down in July 1989, four months before the actual end of his term. Among other things, the law provides for the support of the People's Libraries through the allocation of a portion of the tax revenues from horse racing and the national soccer pool. By this means, the libraries can expect more regular budgetary resources than they have ever had before. They have, up to now, had to rely greatly on the membership fees they charge users, or on other self-generated sources of revenue. In Río Negro and Neuquén, provincial enabling legislation (including standards for levels of service and levels of fiscal support) were also being written to reticulate with the national legislation and appropriations. In my final report to the Commission, I commended their organization and colossal efforts, but I also recommended the formulation of a global purpose or plan to counteract the fragmentation which was obvious, and to make the library system more future-oriented. What was also needed, I told them, was some plan for dealing with the human resource

problems: training and education, placement of qualified people in the provinces, and adequate and just salaries.

I also pointed out that decentralization of library technical processing is a terrible waste of resources. Without common standards and compatible bibliographic information, the libraries could never hope to form a system or network in the fullest sense. Unfortunately, the leadership for such an effort must come from an institution like the national Library. In Argentina, the National Library has been basically non-functional for nearly forty years (Figure 10). When I was there, there were only three professional librarians employed, and the library had not had a budget for collection development for twenty years. No cataloging was being done at all. The physical symbol of this travesty, which President Carlos Saúl Menem himself recently called "a thirty year embarrassment," is their unfinished new building which has been under construction since 1972. Menem has made completion of the building a major goal of his presidency. The focus on the building, however, does not acknowledge what is the National Library's greatest failure and shame--the lack of a national bibliography, and bibliographic standard-setting which would enable Argentine libraries to cooperate internationally as well as nationally.

The second Argentine case I describe shows that the prospects and the foundations for modern network development in Argentina are not entirely bleak. It illustrates what impressive results can be obtained by addressing the main barriers to progress in this area. These barriers were identified in an article in the 28 April 1989 issue of Clarín, one of Buenos Aires' leading daily newspapers. The article, entitled "Failures in the State System of Information," quoted a report by the Argentine Council of Engineers, which said that the computerization of public institutions in Argentina had had strong investment, but poor results. The first cause of these failures was the investment of too much in hardware and not enough in software designed for management processes, like planning. The second cause was the lack of harmony between the existing information sources and among their organizations, and an inadequate interaction between the different institutions involved, not only in the organization of their information systems, but in the lack of compatibility and common protocols. The report also cited the lack of adequate training at all levels, from end-users to technicians. It decried the absence of a "culture of information" in public administration.

All of these problems were being addressed with impressive results, on a limited scale, in the National Institute of Farming Technology (INTA) in Buenos Aires. INTA has a Department of Diffusion, in its Division of Information and Documentation headquartered in Buenos Aires. The head of this department is a librarian. INTA is a governmental agency established thirty-six years ago to support Argentina's very important agriculture and livestock breeding industry. Through research and development, and the publication of information, as well as through searches to find information published elsewhere, INTA has long recognized the vital importance of information to practitioners in this field. There are thirty-eight experimental stations throughout the country, as well as sub-stations, experimental farms, and extension agencies (Figure 11). All of the experimental stations have libraries, and all are linked by telephone and mail to the central office in Buenos Aires. The North American organisms which they most resemble are the Agricultural Extension Services associated with land-grant colleges and universities in the U.S. They are, however, more centrally organized, since Argentina's governmental structure is much less federalist than our own. This centralization has served them well, for it works with the existing government structure and maximizes results. The Director, Lidia Revelo, outlined to me the major features of the INTA information network:

- ongoing education and training of all personnel, and of the final users of the services of the Department.
- indexing and dissemination of all information found and produced.
- on-demand searches for researchers and clients, using DIALOG (Figure 12). These searches are also indexed and a list is disseminated regularly.
- adherence to format and standards, such as AACR2 in cataloging.
- UNESCO software for library use ("Microisis") utilized for information and database management.
- cooperation with regional international networks and programs, such as PROCESUR, the Cooperative Farming Technology Program of the Southern Cone, which includes Brazil, Argentina, Bolivia, Paraguay, Uruguay and Chile. INTA also participates in CCPPAA, which is the cooperative cataloging of periodical publications.

INTA, however, recently became a private research foundation as part of the push by President Menem to privatize governmental agencies and entities. CONICET, mentioned above, also became privatized. It remains to be seen

what effect this change will have on the operations, budget, and mission of INTA, and on any possibility that it might serve a more general public purpose.

As a result of study and of the firsthand experiences described here, I feel qualified and obliged to make the following comments and observations about information management and information networks in less-developed countries. First of all, the fundamental need of any network is an infrastructure for regular and easy communication. Any network will be limited by the barriers that exist to this kind of communication. In less-developed countries, these barriers can be severe, since regular mail service and reliable telephone and other telecommunication services are often non-existent. Furthermore, the "fleshware"--the human resources--has to be there at all key points in the network. Like a chain, a network is only as strong as its weakest link, and everyone involved in a network in any way must be educated and trained at least to the degree required by their function. This requirement includes public officials, whose consciousness and political support are necessary for the funding and creation of networks.

The basic ingredient of the required training and education is communication of a common purpose or global plan, or at least a shared sense of direction, for the cooperative entity. As the Council of Engineers of Argentina stated, a "culture of information" needs to be fostered, and an appreciation and acknowledgement of the role of information in development and especially of libraries' connection to information, must be cultivated.

Finally, there must be an acknowledgement and adherence to common standards and protocols, which should be international in scope, so that less-developed countries are equipped with the language of collaboration and can share and receive information across borders.

In this context, I need to mention the use of UNESCO software for libraries. This textual database management tool was developed in 1986, and has a toggle for English, French, or Spanish prompts. It is available free of charge to libraries in the third world, and is extremely popular. Almost every small library in Latin America which has "automated" has done so with Microsis. All that is required is a PC-compatible microcomputer, and an agreement that the software will not be used for commercial purposes. There is also a mini-computer version. In Argentina alone, at the end of 1990, there were more than five hundred users, according to the newspaper, Página/12. It is used, as mentioned, by INTA, as well as by RENBU, and by several People's Libraries. The largest user in Argentina is the Argentine Film Archive, with 80,000 records. The difficulty with UNESCO software, however, is that it encourages stand-alone systems that do not communicate and do not conform to any standards. Standard subject headings or a controlled vocabulary do not need to be used. Search capability is very limited, also. The version I saw in 1989 did not have subject access to the records. I understand there is a new version, but I don't believe it has full boolean searching, and if it did, the question of training would again be key. Microsis is specifically designed for users with absolutely no computer experience or knowledge. This is one of the features that makes it so desirable. The other is that it's free. Most libraries in the third world have no other option for computerization. In the above-mentioned article in Página/12's Future Supplement of 29 December 1990, Alejandra Nardi of the Information Center of CNEA says, "Information is power, and we want information to flow. For that reason our library is open to anyone. One of the causes of why this country works the way it does is the lack of information, and sometimes those in charge don't understand that and don't want to understand. It's suspicious that information about information doesn't exist."

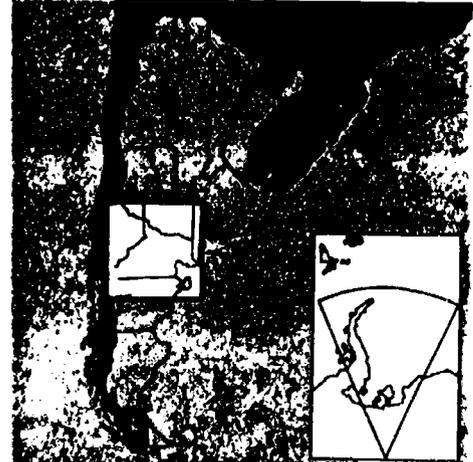
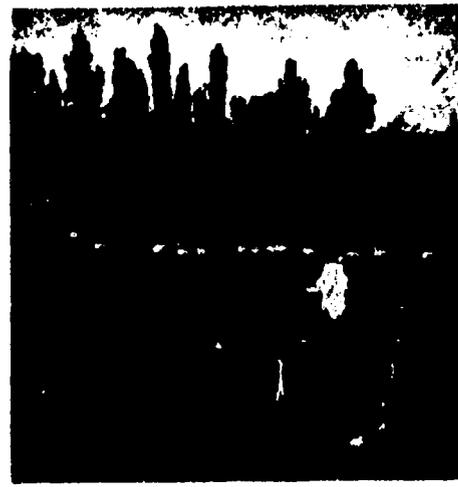
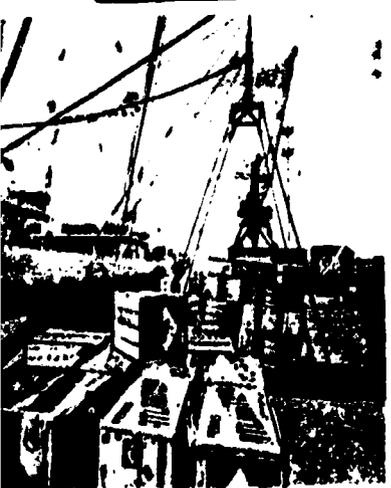
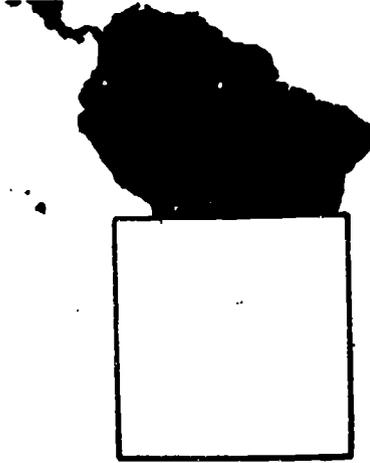
There exists in Argentina the will and the basic structures for networked cooperation nationally and internationally. It would be possible, with leadership and organization, to build very quickly on what already exists. It would also be a very wise investment of funds, in the long term, for development of the country's international competitiveness. It only remains to convince the decision-makers that libraries do have a vital role to play in this arena. Models of the social communications theory of development acknowledge this role. Librarians must be aware of this themselves, and publicize it.

Argentine librarians and public must also overcome their distrust of centralization, and realize that networks represent cooperation and not control. In Argentina, as in many other countries of the world, if the cooperation is dictated by the State it will be suspect, and potentially dangerous. There must be a grass-roots type of movement demanding that national institutions take the leadership, but not the control, in this, much as the Library of Congress has done in the United States. It must be structured in such a way that it is to everyone's advantage to cooperate, and to centralize resource-intensive and duplicative library processes.

The effect of the increasing impetus to privatize state-supported enterprises, however, may be detrimental to the effort of getting networks started. The concept of the library as a **public good** must be emphasized, so that the swing to privatization does not remove libraries from their proper sphere. They exist to serve the public, not specific sectors of the public (like business and industry), nor special interest groups, no matter where their support comes from. The libraries of Argentina are already far more "private" than any North American public library, and they need to have the resources to serve their public adequately. While privatization may make local libraries more responsive to their immediate communities, it may encourage further fragmentation and autonomy, and discourage the development of strong networks. It is really the **networks** that libraries and the people whom they serve will need in the future. The problems, like the preservation of the environment, that we all need to address are becoming increasingly global and international, and we must have the means to share information supra-nationally in order to solve them.

Less-developed countries can move much more quickly than developed countries toward effective information networks, because they can benefit from the lessons we've learned and the insights we've gained. They can only do this, however, if the knowledge of our experience is available to them in usable and convenient form. They also must be sure that this knowledge is conveyed to everyone involved by a thorough, active education and training program at all levels. We must collaborate with them to ensure that this happens.

FIGURE 1





**Solamente la cultura permitirá
la transformación argentina.**

Bibliotecas Rurales Argentinas,
movimiento pluralista de política educativa,
nacido en 1963 para colaborar en el cambio
de las condiciones de vida de sectores
relegados, ya ha fundado 500 bibliotecas
populares en sus 25 años de vida.

Ahora en su nueva etapa, mediante
convenios con gobiernos provinciales,
organismos nacionales y asociaciones
civiles, se propone seguir aumentando el
número de sus filiales y llevar adelante
nuevos proyectos.

**Construyamos juntos el país que
todos queremos!**

**Unase
como voluntario
y participe**
en la creación de:

- Bibliotecas populares
- Centros de Formación Técnica
- Bibliotecas escolares

Lo esperamos en
Godoy Cruz 2087.
Capital Federal

BIBLIOTECAS
RURALES 
ARGENTINAS

CULTURA PARA UN PUEBLO MEJOR

FIGURE 3

PROGRAMA
DE DESARROLLO
DE BIBLIOTECAS
CONICET / PNUD
PROYECTO ARG 85/014

ORGANISMO DE EJECUCION: RED NACIONAL DE
BIBLIOTECAS
UNIVERSITARIAS (RENU)

Listado Alfabético de
Publicaciones
Suscripción 1988/1989
con
Bibliotecas
Depositarias

INIA,
Division de Informacion y Documentacion,
Chile 480,
(1098) Buenos Aires
Tel : 361-8122/7643/8527

INTI,
Parque Tecnologico Migueleres,
Av. Gral. Paz y Constituyentes,
(1650) San Martin
Tel : 752-5151, 755-6161; interno 393

Fundacion Campomar,
Av. Patricias Argentinas 455,
(1105) Buenos Aires
Tel : 88-4016 al 19
Fax: (051) 1-88-4010

Facultad de Ciencias Exactas y Naturales (UBA),
Biblioteca Central
Ciudad Universitaria Nunez,
Int. Ricardo Guiraldes s/a,
(1439) Buenos Aires,
Tel : 782-0610

REDICSA,
Pueyrredon 510, Piso 7º,
(1032) Buenos Aires
Tel : 961-2496

Universidad Nacional de Cordoba,
Obispo Trejo 242,
(5000) Cordoba
Tel : (051) 22-6452/2908

CERIDE,
Guemes 3450
(3000) Tucuman
Tel : (042) 5-295/37678

CRICYL,
C.C. 151,
(5000) Mendoza
Tel : (061) 248756
HX : 55438 CYLME

FLAPIQUE,
12 de octubre 1842,
(8000) Bahia Blanca
Tel : (091) 29138
Fax : (091) 27876

Fundacion Miguel Lillo,
Miguel Lillo 251,
(1000) San Miguel de Tucuman
Tel : (081) 25-9868/9960/9723

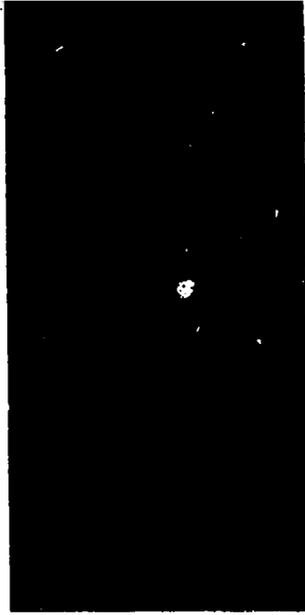


*información
científica
actualizada y
comunicación
por medios
electrónicos*

CIEN 1987 49

Grafiir - Sergio Mancera

Chile 300
(1098) Buenos Aires - Argentina
Casilla de Correo 5295
(1000) Correo Central
Tel : 331-9905
Telex: 25025 FUANTO AR
Fax: 331-5673



17
FIGURE 16

Los estudiosos o investigadores que deseen participar en el programa deben hacerlo por intermedio de la entidad -- pública o privada -- en que se desempeñen, la cual, a su vez, tiene que ponerse en contacto con el portón que le corresponda por tema o por domicilio. Cada portón está en condiciones de brindar asesoramiento sobre las técnicas de búsqueda de información y de uso del correo electrónico y, además, en consulta con las instituciones interesadas, definir qué pedidos pueden recibir curso favorable, según los criterios que siguen:

- que las investigaciones en cuestión reúnan los requisitos de valor científico y cuenten con la aprobación de las autoridades de los centros en que se realicen;
- que se carezca en el país de la información necesaria para llevarlas a cabo; y
- que se cuente con recursos para terminarlas.

El programa de 1989 representa la culminación de un esfuerzo conjunto de la FUNDACION ANTORCHAS y de numerosos centros de estudios superiores y de investigación. Su objetivo es ayudar a la comunidad científica a familiarizarse con las últimas técnicas de comunicación que le permitan mantener sus vínculos con el mundo intelectual moderno. El programa no es permanente. Se espera que los interesados, una vez hecha esta experiencia, tengan la capacidad y se procuren la financiación para incorporar normalmente a su labor estos medios avanzados.

Para conocer más sobre el programa, dirijase al portón que crea más afin con el centro en el cual trabaja o, por correo, a: Raúl Spina, Casilla de Correo 5295, (1000) Buenos Aires.

Foto de portada: Centro de Investigaciones del INTA en Castelar.

Las computadoras y las telecomunicaciones están cambiando la forma de procesar y difundir el conocimiento científico, e influyendo sobre las modalidades de su creación. Para ayudar a incorporar al país estas nuevas técnicas, y facilitar que mejore la calidad del trabajo de los investigadores que actúan en nuestras universidades e institutos, la FUNDACION ANTORCHAS ha establecido un programa de apoyo a la búsqueda de información científica actualizada y a la comunicación interacadémica por medios electrónicos.

Durante los últimos tres años, el programa ha contribuido a que 2.000 proyectos de investigación, realizados por 150 instituciones de diversos lugares del país, recibieran subsidios por el equivalente de 150.000 dólares para acceder a bases de datos ubicadas en el extranjero, comunicarse con redes académicas de correo electrónico, y obtener bibliografía no disponible localmente.

El programa de la FUNDACION ANTORCHAS opera a través de las siguientes entidades:

- Instituto Nacional de Tecnología Agropecuaria (INTA).
- Instituto Nacional de Tecnología Industrial (INTI).
- Fundación Campomar.
- Facultad de Ciencias Exactas y Naturales, Universidad de Buenos Aires.
- Red de Información para Ciencias Sociales (REDICSA).
- Universidad Nacional de Córdoba.
- Centro Regional de Investigación y Desarrollo (CERIDE) de Santa Fe.
- Centro Regional de Investigaciones Científicas y Tecnológicas (CRICYT), de Mendoza.
- Planta Piloto de Ingeniería Química (PLAPIQUI), de Bahía Blanca.
- Fundación Miguel Lillo, de Tucumán.

Este grupo de instituciones proporciona medios de acceso a base de datos bibliográficos o factuales -- por ejemplo, *Dialog*, en los Estados Unidos, *Dimdi*, en Alemania, *Questel*, en Francia, *British Library*, en el Reino Unido, *CIC/UNAM*, en México, u otras -- y a las redes de correo electrónico más difundidas en el mundo académico de diversos países. Constituyen, de esta manera, los "portones de acceso" a los servicios ofrecidos por el programa. Cada portón atiende a las universidades y centros de investigación de su área temática o geográfica, y se ha programado que, en el transcurso de 1989, el conjunto de ellos ayude a unos 1.700 proyectos de investigación realizados en todo el país.

El programa va dirigido a apoyar el esfuerzo intelectual creativo en las ciencias, las humanidades y la tecnología, realizado dentro del sistema académico o científico institucionalizado. Los costos mayores del programa -- tarifa de la base de datos y comunicación vía satélite -- son cubiertos por la FUNDACION ANTORCHAS, pero ciertos gastos administrativos de cada portón deben ser pagados por el solicitante de los datos. En promedio, dichos costos suelen ser del orden de unos U\$S 80 los primeros, y del equivalente de U\$S 15 los segundos.

FIGURES

LA BIBLIOTECA POPULAR ARGENTINA Y LA COMISIÓN PROTECTORA DE BIBLIOTECAS POPULARES DE LA NACIÓN

BIBLIOTECAS POPULARES:		Total 1.226					
Bcas. 1º Categ.							259
Bcas. 2º Categ.							346
Bcas. 3º Categ.							360
Bcas Escolares							248
Bcas. Técnicas							13
JURISDICCION	1º Cat.	2º Cat.	3º Cat.	Escolares	Técnicas	Lis.Esp.	Totales
Buenos Aires	129	107	74	25	4		339
Capital Federal	29	29	3	4		5	70
Catamarca	1	6	19	2	1		29
Cordoba	16	25	59	15	1		116
Corrientes	4	13	13	18	1		49
Chaco	3	3	7	9	1		23
Chubut	1	1	7				9
Entre Ríos	14	28	20	74			136
Formosa	1		9	2			12
Jujuy	2	4	3				9
La Pampa	2	9	17	6			34
La Rioja	1	4	7	1	1		14
Mendoza	1	4	4	2	1		12
Misiones	1	2	6	14			23
Neuquén	1	3	4				8
Río Negro	6	6	6	1			19
Salta	1	5	3		1		10
San Juan	3	4	9	4			20
San Luis	2	5	3	3	1		14
Santa Cruz	1		1				2
Santa Fe	26	69	64	65	1	1	226
Santiago del Estero	7	10	11	1			29
Tierra del Fuego		2					2
Tucuman	7	7	12	2			28
Totales . . .	259	346	360	248	13	6	1.232*

(*) Estos totales incluyen las seis bibliotecas clasificadas en Lista especial excluidas del cuadro que antecede.

FIGURE 6

PLAN DE LECTURA

"LEER ES CRECER"



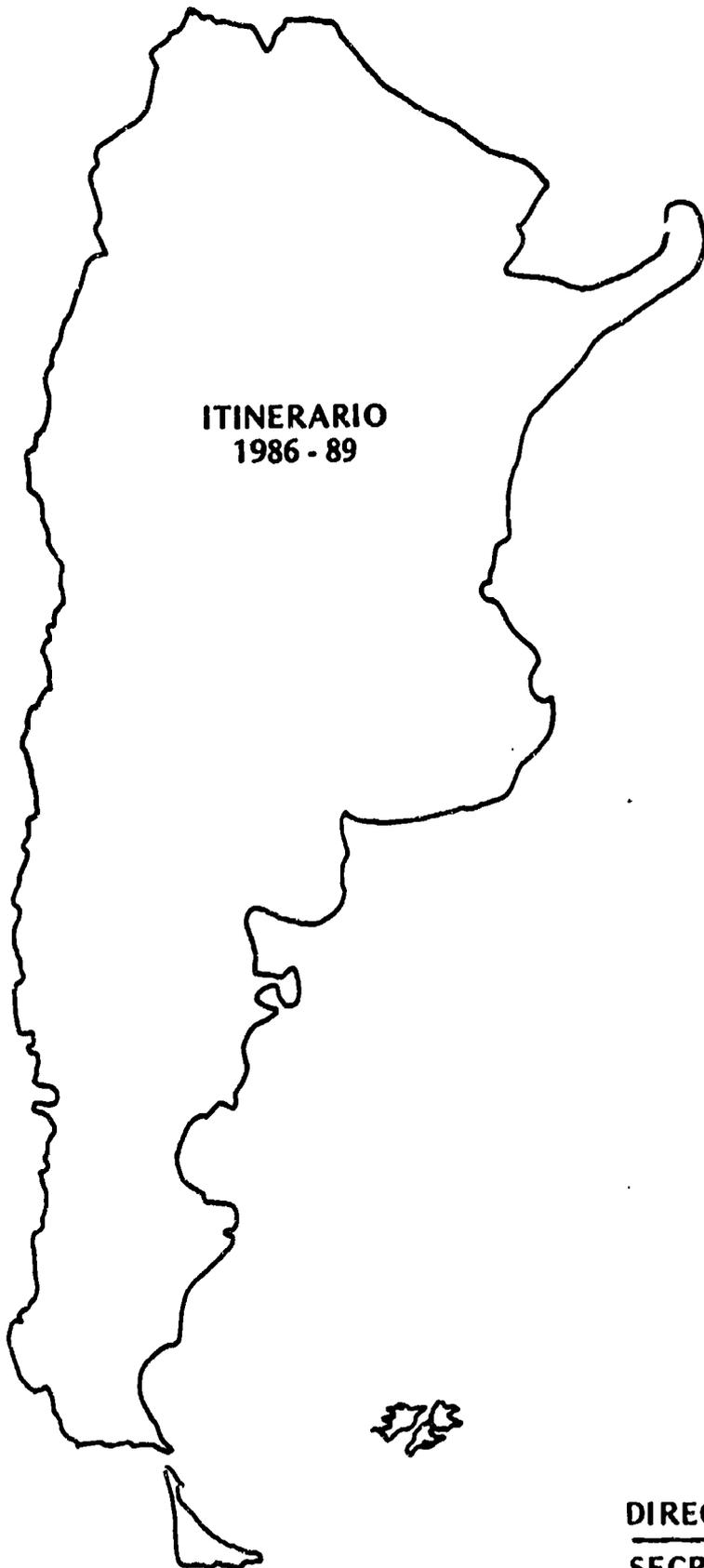
MINISTERIO DE EDUCACION Y JUSTICIA
SECRETARIA DE CULTURA

Dirección Nacional del Libro

FIGURE 7

PLAN NACIONAL DE LECTURA

"LEER ES CRECER"



ITINERARIO
1986 - 89

DIRECCION NACIONAL DEL LIBRO

SECRETARIA DE CULTURA
MINISTERIO DE EDUCACION Y JUSTICIA

(From Napuensky, Cesar & Rantelides. La Formación de una
 área metropolitana en la Patagonia. Buenos Aires: CEUR, 1987.)

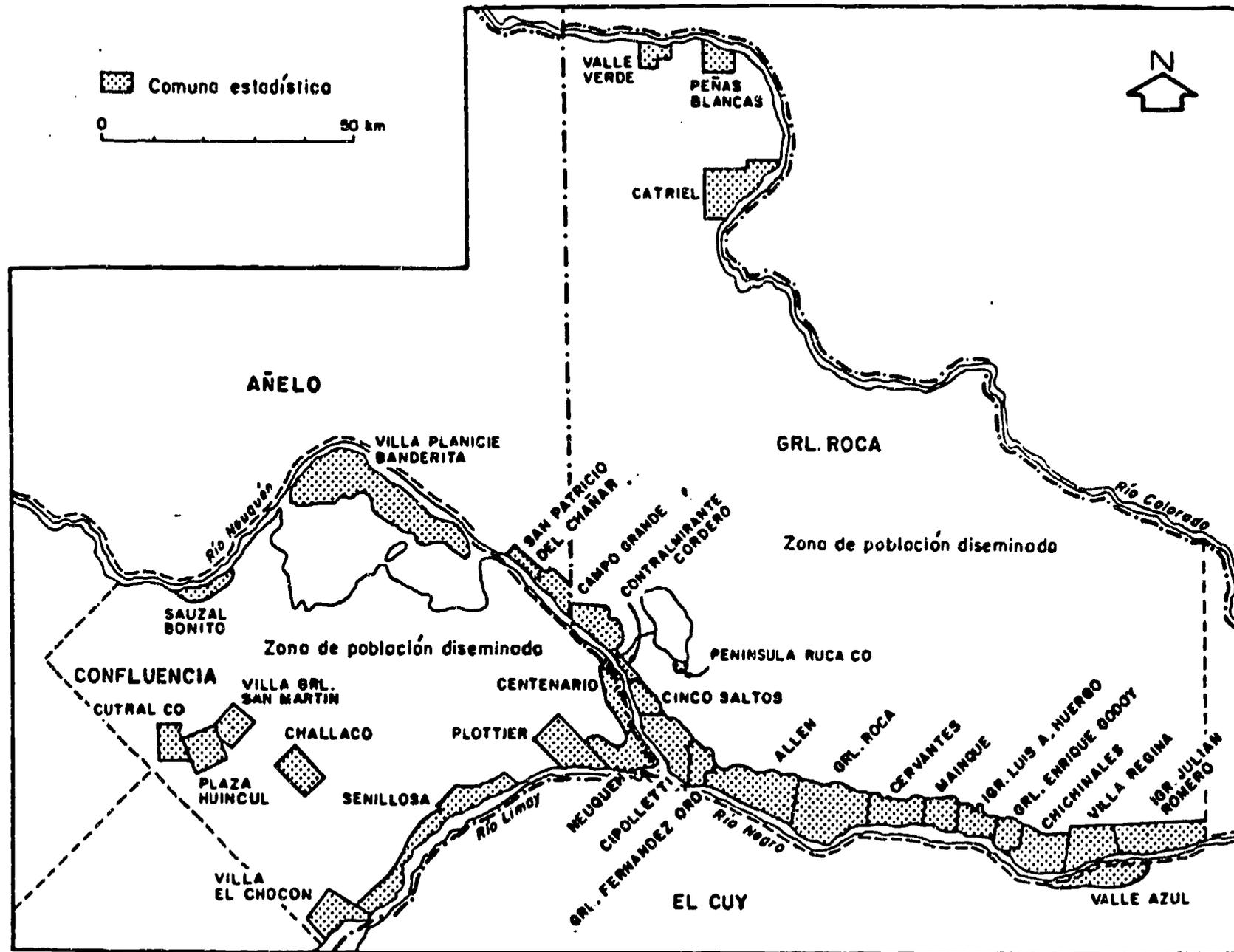


Figura 5. División ad hoc adoptada en comunas estadísticas del Alto Valle de Río Negro y Neuquén y la Periferia del Alto Valle.

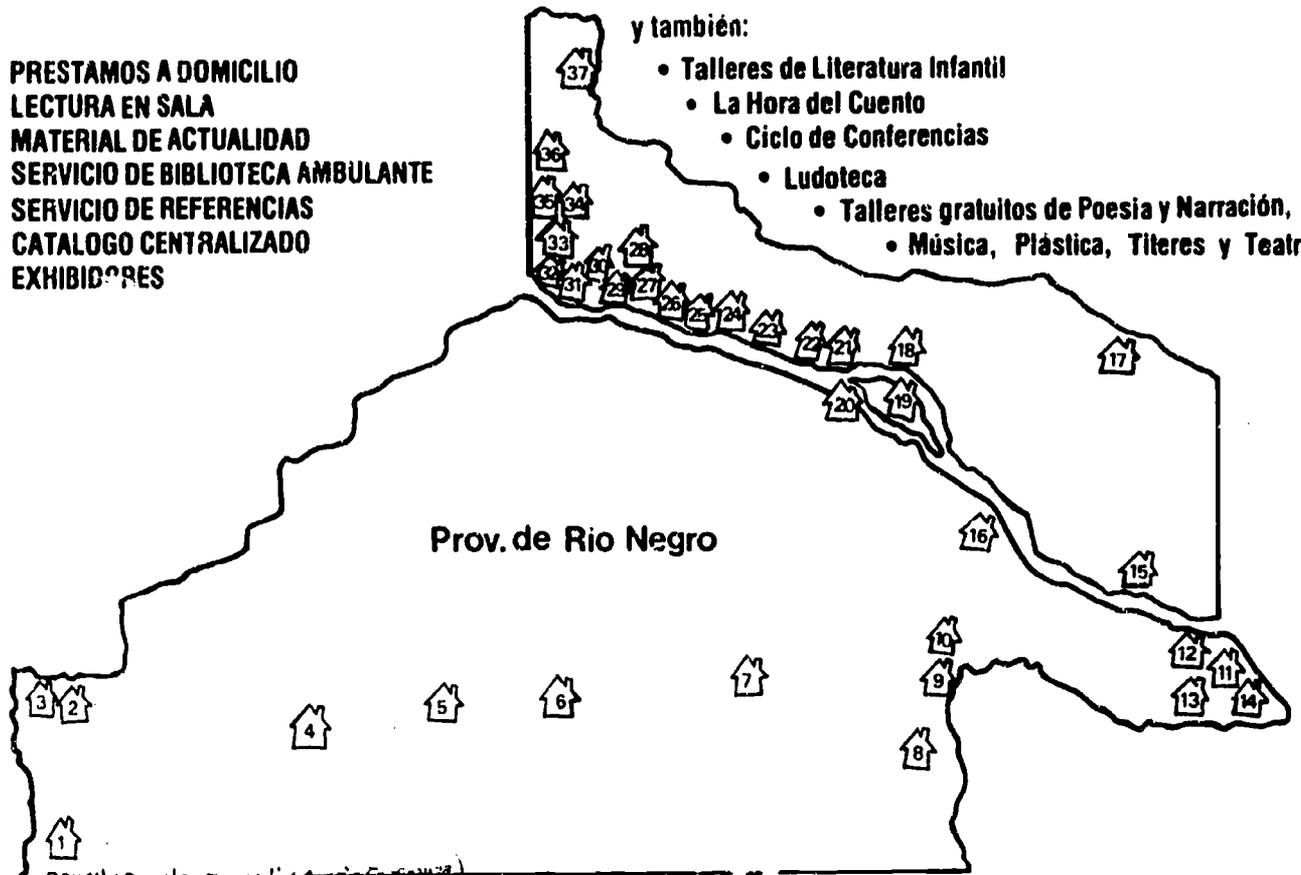


UTILICE LOS SERVICIOS DEL SISTEMA BIBLIOTECARIO PROVINCIAL

- PRESTAMOS A DOMICILIO
- LECTURA EN SALA
- MATERIAL DE ACTUALIDAD
- SERVICIO DE BIBLIOTECA AMBULANTE
- SERVICIO DE REFERENCIAS
- CATALOGO CENTRALIZADO
- EXHIBIDORES

y también:

- Talleres de Literatura Infantil
- La Hora del Cuento
- Ciclo de Conferencias
- Ludoteca
- Talleres gratuitos de Poesía y Narración, Música, Plástica, Titeres y Teatro.



- | | | |
|---|---|--|
| 1 EL BOLSON "Domingo F. Sarmiento" | 14 VIEDMA - Biblioteca de la Subsecretaria de Cultura | 26 GODOY "20 de Junio" |
| 2 SAN CARLOS DE BARILOCHE "Asociación Sarmiento" | 15 GUAROIA MITRE "Juan Bautista Campastro" | 27 GRAL. ROCA "Julio A. Roca" |
| 3 PUERTO MORENO - (BARILOCHE) "Francisco P. Moreno" | 16 GENERAL CONESA "General Lonasa" | 28 J. J. GOMEZ "G. G. M. T. N." |
| 4 ING. JACOBACCI "Bernardino Rivadavia" | 17 RIO COLORADO "Domingo Faustino Sarmiento" | 29 C. GUERRICO "Hogar del Lector" |
| 5 MAQUINCHAO "Raul Entraigas" | 18 CHOELE CHOEL "Nicolás Avellaneda" | 30 ALLEN "Naciones Americanas" |
| 6 LOS MENUÇOS "Virina Toledo" | 19 LAMARQUE "Dr. Victor Molina" | 31 FERNANDEZ ORO "Amigos del Libro" |
| 7 VALCHETA "Celerino Namuncurá" | 20 LUIS BELTRAN "Pablo P. Pizumo" | 32 CIPOLLETTI "Bernardino Rivadavia" |
| 8 SIERRA GRANDE "Manuel F. Novillo" | 21 DARWIN "El Arte es realidad" | 33 CINCO ALTOS "Carlos Guido y Spano" |
| 9 LAS GRUTAS "Cmte. Luis Piedrabuena" | 22 BELISLE "Coronel Beliste" | 34 BARRIO DEL NIÑO "Florentino Ameghino" |
| 10 SAN ANTONIO OESTE "Cincuentenario" | 23 CHIMPAY "Pedro Garro Vidal" | 35 ... "Raul Entraigas" |
| 11 VIEDMA "Bartolome Mitre" | 24 CHICHINALES "Felisa P. de Porcel" | 36 VILLA MAZANO "Alborada Mapuche" ? |
| 12 VIEDMA - IOEVI "Don Segundo Sombra" | 25 VILLA REGINA "Bernardino Rivadavia" | 37 CATRIEL "Jose Hernandez" |
| 13 VIEDMA - IPPV "Pablo Neruda" | | |

MANQUE - "Ruca Quimilú"

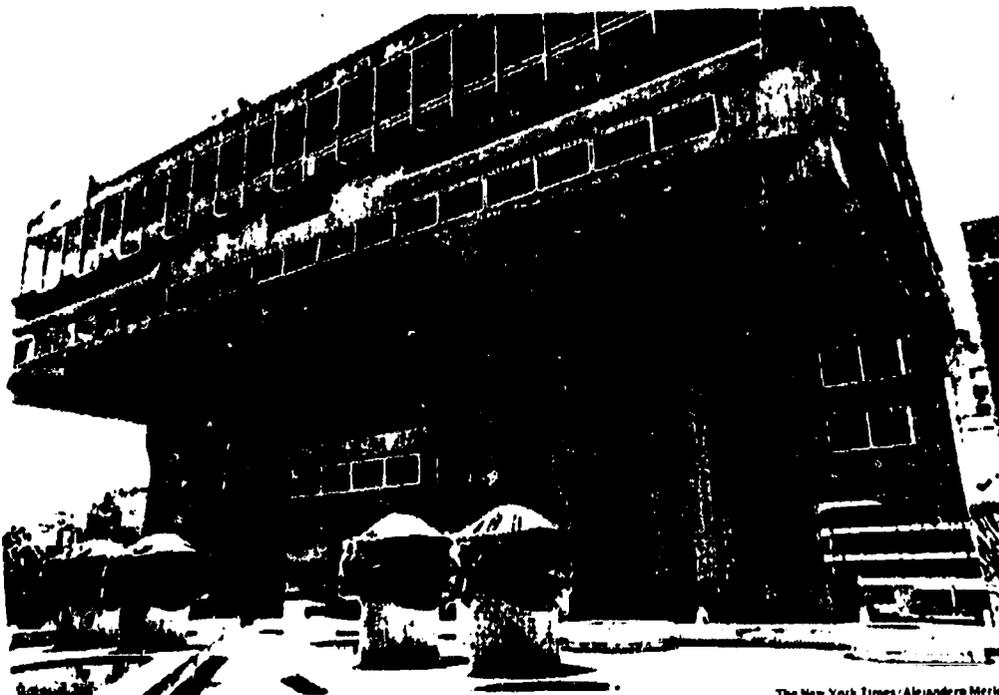
• TODA LA FAMILIA PUEDE UTILIZAR LA BIBLIOTECA •

CERVANTES
GENERAL ROCA "Cervantes"
ING. HUERGO "Jose Velasco"

La Biblioteca de su pueblo le pertenece ASOCIASE

Ministerio de Educación y Cultura -- Subsecretaria de Cultura -- Dirección Pcial. de Bibliotecas
Federación de Bibliotecas Populares de Rio Negro -- Centro de Bibliotecarios y Documentalistas

FIGURE 9



The Argentine national library, conceived in a time of grandiose national dreams three decades ago, stands incompleting and threatens to become a relic for future archeologists to ponder.

The New York Times/Alexandero Merle

At Perón Site, Monumental Inertia

By SHIRLEY CHRISTIAN
Special to The New York Times

Buenos Aires, Jan. 17 — From its commanding location overlooking the estuary of the Rio de la Plata, the immense shell of Argentina's unfinished national library threatens to become a relic for future archeologists to ponder over.

"A friend of mine calls it a ruin of the modern monument," said Martha Levisman Clusellas, an architect trying to determine what has to be done to rescue the project conceived in a time of grandiose national dreams three decades ago.

If it is never completed, she said as she gazed up at the 430,000-square-foot structure from the surrounding undergrowth, researchers may someday wonder what they have stumbled across on the site, which previously held the home of Juan D. Perón and his second wife, Eva.

Julio Bárbaro, the Secretary of Culture, said he thought of the library building "as a symbol of the great things we Argentines have attempted, and of the small things that stop from finishing them."

Private Citizens Enrolled

Like countless governments before it, the Government of President Carlos Saúl Menem wants to finish the library. But having no illusions that the destitute state treasury could pay for the work, it has put the matter into the hands of private citizens.

Soon after Mr. Menem took office in July, one of his chief advisers raised the question of the unfinished library with Paul Hirsch, president of the Antorchas Foundation, which manages the proceeds from the sale of an international business empire that Mr. Hirsch once headed.

"My reaction was that I didn't know — and still don't know — how expert the original plan was," Mr. Hirsch said in an interview. "I suggested we should find out two things — first, from an architectural state of affairs, how much is missing, and two, whether, from a librarian's point of view, it is beyond saving."

Mr. Hirsch asked Mrs. Clusellas, who has done several previous projects financed by Antorchas, to look at it from the architectural view and obtained a library expert from Unesco in Paris to come to determine whether the layout and space allotments could be adapted to modern library needs.

'The Verdict Is Yes'

Although Mrs. Clusellas is still putting the findings together, he said: "The verdict is yes, this library can be used. Changes have to be made, but they are not terribly far-reaching."

Mr. Hirsch, who moved to South America from Germany in 1938 and has dual Argentine-German citizenship, said the Government wants a private entity, like a foundation, to fi-

nance the completion of the library and then to run it.

Although Antorchas is, by his acknowledgment, tremendously well endowed — it and its sister foundations in Brazil and Chile gave \$8.5 million for education, culture and social work last year — he said he did not want to dedicate its resources to the library, beyond the relatively modest sum invested in the diagnosis.

Mr. Bárbaro said the Spanish Government had promised \$5 million in credits toward completion of the library and that several other wealthy Argentines were in the process of forming a library foundation to collect additional money. Estimates of what it will cost to finish the library vary widely, with Mr. Bárbaro saying \$10 million to \$14 million and Mrs. Clusellas \$25 million.

Argentina already has a functioning national library, a structure with classical columns in the San Telmo art neighborhood not far from the headquarters of Antorchas. But frustrated historians and other library users as well as Government officials tell horror stories of inadequate storage, books covered with mildew and a cataloguing system so antiquated that no one can guess, within the range of a million or so, how many books the library has.

Wiping Out the Past

Aside from the obvious need, the new library originated as part of an effort to wipe out a part of the Argentine past — the Perón era. When the armed forces overthrew the right-wing populist leader in 1955 and sent him into exile, they had his mansion overlooking the river and Avenida del Libertador destroyed.

Within a short time, there was talk of using the site for the library. In 1963, planning began. An architectural competition was held to choose the plans. Construction began in 1971.

No one is certain just when construction was halted, but both Mr. Bárbaro and Mrs. Clusellas believe

that money problems were not the main reason.

"Various governments did things on the library," Mr. Bárbaro said, "but no one was able to finish it. I think no government gave great political significance to the library."

Mrs. Clusellas believes there were conflicts for control of the project between the Ministry of Education and the Secretariat of Culture, coupled with a lack of coordination and differences over objectives.

A Contract Runs Out

She said that when she moved into the architect's office on the site in August she found none of the original plans and that "no one involved could remember anything and they were not speaking to each other." Although the construction company keeps seven men on the site, mainly as watchmen, she said the contract of the architects had run out.

Although Mrs. Clusellas is not enchanted with what she calls "the monumental style of the building — typical of the sixties," the vast spaces inside offer panoramic views of the surrounding neighborhood of elegant town houses and apartment buildings as well as the river's unimpeded path to the open Atlantic.

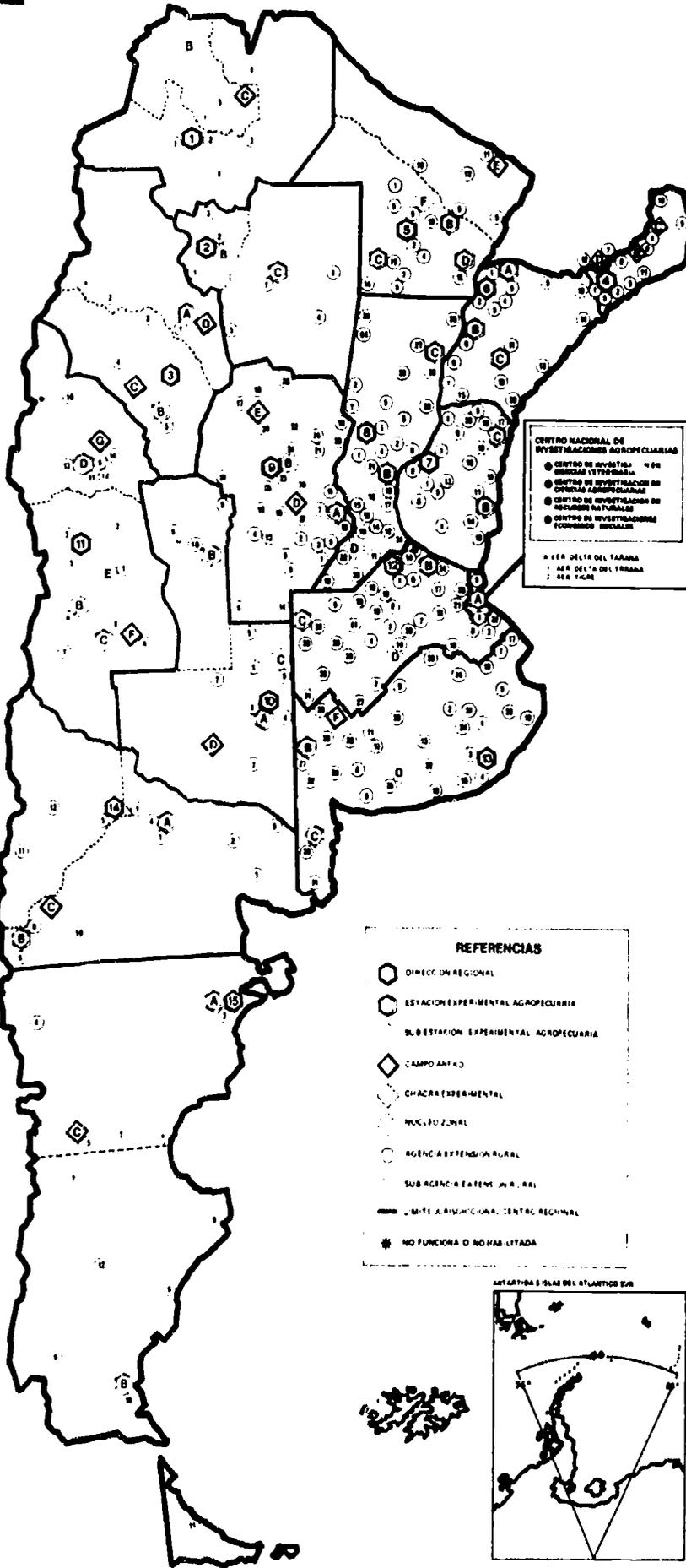
Set on four giant legs that she says make it look like "a cow on the pampas," the library has six floors above ground and five below, which extend into the old riverbed. The below-ground area is supposed to hold all of the books and other materials, which would be raised, when people request them, to the top floor reading area with a system similar to dumbwaiters.

Despite her reservations about the style, she said finishing it will be "like waking a sleeping beauty in the forest."

Mr. Bárbaro expressed cautious optimism that the library could be finished before the end of Mr. Menem's six-year term, but said, "We're not going to celebrate until we finish."

The New York Times, January 18, 1990

FIGURE 10



CENTROS REGIONALES

UBICACION DE ESTACIONES
EXPERIMENTALES AGROPECUARIAS
Y AGENCIAS DE EXTENSION RURAL

<p>1 CENTRO REGIONAL SALTA AJAYU DIRECCION REGIONAL SALTA AJAYU (SALTA)</p> <p>A ESTACION PERICO B AER GENERAL SUÑEZ C AER LAS LANTAS D AER SAN PEDRO DE AJAYU E AER SAN RAMON DE LOS RIOS GRAN F AER VALLE DE LA FIERA G BUENOS AIRES FUTO H CAMPO AMEJO FUTO</p>	<p>1 AER DIAMANTE 2 AER FELICIANO 3 AER SAN JOSE 4 AER SAN JUAN 5 AER CAUCETE 6 AER MACHAL 7 AER BARRIO MACHAL 8 AER RIOJO 9 AER SAN JUAN CAPITAL 10 AER SAN MARTIN 11 CAMPO AMEJO ALTO DE BERRA</p>	<p>2 CENTRO REGIONAL BUENOS AIRES NORTE DIRECCION REG. BUENOS AIRES NORTE (BUENOS AIRES)</p> <p>A ESTACION PERICO B AER GENERAL SUÑEZ C AER LAS LANTAS D AER SAN PEDRO DE AJAYU E AER SAN RAMON DE LOS RIOS GRAN F AER VALLE DE LA FIERA G BUENOS AIRES FUTO H CAMPO AMEJO FUTO</p>	<p>3 CENTRO REGIONAL LA RIOJA CATAMARCA DIRECCION REGIONAL LA RIOJA CATAMARCA (LA RIOJA)</p> <p>A ESTACION PERICO B AER GENERAL SUÑEZ C AER LAS LANTAS D AER SAN PEDRO DE AJAYU E AER SAN RAMON DE LOS RIOS GRAN F AER VALLE DE LA FIERA G BUENOS AIRES FUTO H CAMPO AMEJO FUTO</p>	<p>4 CENTRO REGIONAL MISIONES DIRECCION REGIONAL MISIONES (MISIONES)</p> <p>A ESTACION PERICO B AER GENERAL SUÑEZ C AER LAS LANTAS D AER SAN PEDRO DE AJAYU E AER SAN RAMON DE LOS RIOS GRAN F AER VALLE DE LA FIERA G BUENOS AIRES FUTO H CAMPO AMEJO FUTO</p>	<p>5 CENTRO REGIONAL CHACO FORMOSA DIRECCION REGIONAL CHACO FORMOSA (CHACO)</p> <p>A ESTACION PERICO B AER GENERAL SUÑEZ C AER LAS LANTAS D AER SAN PEDRO DE AJAYU E AER SAN RAMON DE LOS RIOS GRAN F AER VALLE DE LA FIERA G BUENOS AIRES FUTO H CAMPO AMEJO FUTO</p>	<p>6 CENTRO REGIONAL ENTRE RIOS DIRECCION REGIONAL ENTRE RIOS (ENTRE RIOS)</p> <p>A ESTACION PERICO B AER GENERAL SUÑEZ C AER LAS LANTAS D AER SAN PEDRO DE AJAYU E AER SAN RAMON DE LOS RIOS GRAN F AER VALLE DE LA FIERA G BUENOS AIRES FUTO H CAMPO AMEJO FUTO</p>	<p>7 CENTRO REGIONAL SANTA FE DIRECCION REGIONAL SANTA FE (SANTA FE)</p> <p>A ESTACION PERICO B AER GENERAL SUÑEZ C AER LAS LANTAS D AER SAN PEDRO DE AJAYU E AER SAN RAMON DE LOS RIOS GRAN F AER VALLE DE LA FIERA G BUENOS AIRES FUTO H CAMPO AMEJO FUTO</p>	<p>8 CENTRO REGIONAL SANTA FE DIRECCION REGIONAL SANTA FE (SANTA FE)</p> <p>A ESTACION PERICO B AER GENERAL SUÑEZ C AER LAS LANTAS D AER SAN PEDRO DE AJAYU E AER SAN RAMON DE LOS RIOS GRAN F AER VALLE DE LA FIERA G BUENOS AIRES FUTO H CAMPO AMEJO FUTO</p>	<p>9 CENTRO REGIONAL RIO NEGRO DIRECCION REGIONAL RIO NEGRO (RIO NEGRO)</p> <p>A ESTACION PERICO B AER GENERAL SUÑEZ C AER LAS LANTAS D AER SAN PEDRO DE AJAYU E AER SAN RAMON DE LOS RIOS GRAN F AER VALLE DE LA FIERA G BUENOS AIRES FUTO H CAMPO AMEJO FUTO</p>	<p>10 CENTRO REGIONAL PATAGONIA SUR DIRECCION REGIONAL PATAGONIA SUR (PATAGONIA SUR)</p> <p>A ESTACION PERICO B AER GENERAL SUÑEZ C AER LAS LANTAS D AER SAN PEDRO DE AJAYU E AER SAN RAMON DE LOS RIOS GRAN F AER VALLE DE LA FIERA G BUENOS AIRES FUTO H CAMPO AMEJO FUTO</p>	<p>11 CENTRO REGIONAL PATAGONIA NORTE DIRECCION REGIONAL PATAGONIA NORTE (PATAGONIA NORTE)</p> <p>A ESTACION PERICO B AER GENERAL SUÑEZ C AER LAS LANTAS D AER SAN PEDRO DE AJAYU E AER SAN RAMON DE LOS RIOS GRAN F AER VALLE DE LA FIERA G BUENOS AIRES FUTO H CAMPO AMEJO FUTO</p>
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FIGURE 11

FIGURE 12



INSTITUTO NACIONAL DE TECNOLOGIA AGROPECUARIA

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