Maya Medical Tradition Preserved in Chiapas

The Tzeltal and Tzotzil—approximately 400,000 Maya Indians of highland Chiapas, Mexico—have developed one of the most elaborate systems of plant-derived remedies in the New World. From the tremendous variety of vegetation growing around them they prepare treatments for skin and eye infections, diarrhea, gallbladder disease, even madness.

To investigate what the highland Maya know about medicinal plants, a collaborative research project was initiated three years ago between the Chiapas State Department of Public Health and the University of California, Berkeley. Originating from a UC MEXUS Development Grant, the project’s preliminary goals were to identify those plant species that the Tzetal and Tzotzil deem medicinal, to compare the indigenous ethnomedical system with Western biomedicine, to prepare a comparative medical ethnobotanical atlas of Maya medicinal plants, and, eventually, to use this knowledge of plant remedies in the development of a public health program for the native people of Chiapas that incorporates traditional knowledge.

Brent Berlin, professor of anthropology at the University of California, Berkeley, is the principal investigator for the project. He is joined by Elois Ann Berlin, a medical anthropologist, Dennis E. Breedlove and Thomas Duncan,

(continued on page 4)
AIDS at the U.S.-Mexican Border -- A Call for Individual Action

"Poor Mexico, so far away from heaven and so close to the United States." This is a phrase I used to hear when I was in elementary school in Mexico City. I liked to re-peat it, even though I had no idea about its real meaning. But today's AIDS epidemic gives the original phrase poignant meaning. Mexico is back-to-back with the country which has, by far, the greatest number of AIDS cases in the world. While Mexico has approximately 4,000 officially recognized cases, the United States has 130,000; Baja California has 400 cases and California, 40,000. Tijuana, an important city of Baja, contains 250 cases and Los Angeles, 8,000. But there are special implications of the borderline.

Besides differences in power, culture, and the incidence of AIDS, we are dealing with not just two different countries but a borderland, which in itself is totally different from each of the two countries. One can think of the borderland as an "estuary," the place where the sea and the river meet; each body of water has its own chemical composition, temperature, salinity, and ecology -- salt water and fresh water have different flora and fauna. The estuarine zone is a unique place that has a very special ecology, different from the sea or the river. Estuarine organisms are specialized and adapted to environments that cannot live in fresh or salt water; they require special chemical and salinity; Where the sea and the river meet, a new kind of life is created, different from its two original sources. Although we humans can change our environment, borderland people are neither Americans nor Mexicans, but a special kind of people who are looking for their own historical identity.

A virus is a borderland organism -- between living and nonliving things. We can divide a virus into two nonliving substances; proteins and nucleic acid, the minimum requisites for life. However, the creator of the HIV test to detect the presence of the virus has determined that the HIV virus itself is a cause of the disease AIDS. If the disease is present, the virus is always there; but the presence of the virus does not ensure the disease. Thus the virus must exist among other factors to cause an epidemic.

Researchers from Ferson found that when certain psychosocial factors affect the life of a person, abilities of the human immunological system to fight disease are decreased. Some researchers are coming to the conclusion that AIDS is not a disease, but a highly complex syndrome that makes the body more susceptible to certain reactions and diseases. AIDS has many non-biological and nondenotical characteristics highly associated with it: environmental, social, economic, and psychological factors, as well as activities, lifestyle, behaviors, beliefs, and values. Instead of AIDS, we can talk about Socially Acquired Immune Deficiency Syndrome (SAIDS).

At the First International Symposium on AIDS Education, the Director of the World Health Organization associated the AIDS epidemic with problems of social injustice: certain groups of individuals -- homosexuals, prostitutes, drug addicts, bisexuals, Blacks, Chicanos, and the poor -- are being hit hardest by the epidemic. People living at the borderlines of society, for whom the dream of social opportunity has led to drug addiction and/or prostitution, now are dying of AIDS. This clearly describes a sector of people in the U.S.-Mexico border region. The United States-Mexico border is the most visited border in the world, especially in the months of June, July and December, when authorities have counted as many as two million cars crossing. Tijuana is the fastest growing city in the world; it is the working place that pays the highest salaries in Latin America; and it is the closest Mexican city to the economically richest U. S. state.

Mexican farmworkers, with the help of governmental programs, have developed and supported the agriculture of California for eighty years. The border zone has been a very attractive place to any person looking for a better life or president of San Diego talking about people helping people.

Education is a solution called for all over the world, but we need not only partial success; it is difficult for people to change their behavior or attitudes. We have spent millions of dollars trying to educate people not to smoke, but still we are far from winning this battle. We have created programs to educate female adolescents not to get pregnant, but we have failed. Adolescents do not easily change their behavior after being exposed to AIDS prevention education programs. AIDS education messages are frequently insensitive to the cultures, values, languages, and beliefs of populations that are intended to reach. We pretend to teach social responsibility or moral values. We need to change our educational systems, looking for new frontiers and new approaches: the AIDS virus is challenging our new landscape.

When words are not followed by the intended action, the words are empty; when there is an action either action or behavior, we don't need words. Education should be based more upon example, participation, and action, not empty words. If a change is going to occur, it has to happen through action; if we are going to teach, it must be done in action. When we are going to discover new frontiers, we must start walking.

Mother Teresa is an example: she doesn't talk about how to treat dying persons -- she does it, and people follow her example. The homosexual communities of San Francisco are another example.
systematic botanists, and Robert M. Laughlin, linguist and ethnographer. Collaborators from the Chiaspas Department of Public Health include Victor Jara and Teresa Velasco Castañeda.

The strong interest in traditional medicine on the part of public health officials stems from the formidable task they face. With limited resources, their department must provide health care to people, primarily Indians (the majority of whom do not speak Spanish) who live in highly isolated areas not readily accessible by road. Berlin said that the research promises to supply answers to overcoming these hurdles and improving the health of the Maya of Chiapas. "In the twenty-first century it will be simply impossible to deliver modern biomedicine to the world's population," said Berlin. "Anything that can be done to incorporate as possible traditional medicinal plant species into health care programs is to everyone's advantage." He believes it far wiser to advise people of traditional plant medicinals with documented efficacy rather than send them to a pharmacy to buy expensive patent medicines.

The first fruit of the research project is a short monograph describing the uses of the fifty most commonly used medicinal plant species to be published by the public health department next month. While plant phytochemical and pharmacological studies are still pending, the manual Herboristia módica Tzeltal-Tzotzil en los altos de Chiapas: un ensayo preliminar de las cincuenta especies de uso más frecuente is valuable as a means to promote cultural pride and respect for Maya ethnomedical knowledge. The manual, which will be illustrated with botanical drawings prepared by Tzeltal artist Antonio López Hernandez, will be published in both Tzeltal and Tzotzil, as well as Spanish, and distributed to Maya villages through the highlands for a nominal fee.

The manual represents the state's desire not only to improve health but also to preserve tradition. As is the case almost everywhere, traditional beliefs are eroding in Chiapas. The manual is an attempt, said Berlin, "to give greater value to what Indians know, to show that their traditional knowledge is important and valid."

Part of the effort to recognize Maya knowledge is a movement to create a literature in the Tzeltal and Tzotzil languages. The manual will become part of this Maya literature. At the same time it will be able to relate traditional beliefs to the younger generation because most school-age Maya are learning to read both in the Maya languages and in Spanish.

The research behind the manual began with a huge project for data collection. Forty-one Maya collaborators were trained during a two-month summer workshop in the fundamentals of ethnobotanical plant collecting, linguistic transcription of Tzeltal or Tzotzil, and interviewing techniques.

In the workshop, two standard plant collection notebooks were created, one pertaining to medical ethnobotany and the other to ethnomedicine. The medical ethnobotanical notebook required the collector to give a description of the plant species, locality, altitude, name of collector, collection number, date, and the name of the informant. The collector then had to find out from the Maya informants the native names of the plant, health conditions the plant is said to treat, plant parts used, other substances used with the plant to prepare prescriptions, methods of preparation and administration, quantities of all ingredients, doses, and duration of treatment.

The second notebook was set up to record an inventory of all valued health problems known to the informant, the part of the body each condition affects, and the names of all plant species said to be used in the treatment of each condition. After the workshop, the collaborators returned to their respective municipios, collection notebooks in hand, to conduct a survey of the medicinal plants used there. They interviewed traditional healers as well as other locals knowledgeable in medicinal plant lore. The results show that at least 150 families from about 150 families are said to be of medicinal use—approximately one third of the total flora of highland Chiapas, according to Berlin. "It is likely that a much smaller number of these species will be found to possess active chemical properties that would lead them to be of importance pharmacologically. Nonetheless, we were surprised to find so large an initial inventory of potentially medicinally important plant species."

This preliminary finding supports the claim that traditional medicinals has been and remains a major component of Highland Mayan culture and is of central importance in the treatment of recognized afflictions." Another revelation is that the Maya have a system of botanical classification "almost identical" to the Western, according to Berlin. "When there are discrepancies," Berlin said, "they can be predicted. For example, the Maya name used for sycamore is different than the Western, a fact that indicates that the differences in important agricultural crops because these are of greater cultural importance." On the other hand, a Western academically trained specialist in ferns would differentiate most particularly between ferns, which are not as important to the Maya.

While the two cultures' systems of classification are similar, their concepts of disease vary considerably. Elise Ann Berlin said that, "without a detailed understanding of native perceptions of health and named categories of illness, one can never fully understand the relative efficacy of a particular medicinal plant species. Furthermore, most modern work in ethnomedicine demonstrates that one cannot assume a simple one-to-one correspondence between a particular folk illness and a recognized condition in the modern biomedical system. One of the major goals of the project involves a greater understanding of Maya health conditions with the subsequent compilation of a comparative atlas of Maya and Western notions of disease.

Through the course of the research, Berlin and his collaborators have run into several interesting puzzles. The first appears when the investigator simply does not know what the condition is that the informant describes. Berlin offered the example of 'chawach' or "aggressive madness" as an example. "What is 'aggressive madness'?" Berlin asked rhetorically. "We just don't know."

A second obstacle arises because many conditions, such as skin diseases or infections, have many different named varieties. The informants must see numerous cases of a particular condition before they can determine exactly what it is.
The University of Chiaspas (UNACH) has signed a research agreement with the University of California and will take part in future research with UCB and the Chiaspas State Department of Public Health. UNACH is promoting the work in several significant ways. With the strong support of the director of the university, Antonio García Sánchez, it will collaborate in publishing the comparative, multilingual illustrated encyclopedia on highland Maya medical ethnohistory. Furthermore, García Sánchez has offered permanent quarters in San Cristóbal de Las Casas to house the project's collection of medicinal plant species, thus creating the first Maya Medicinal Plants Herbarium in southern Mexico.

All levels of government in Chiaspas—starting as high up as Governor Patricio González Garrido and Chief of the Public Health Services Oscar Cuevas Granell—proudly back the project. The Desarrollo Integral de la Familia (DIF), a government program in all Mexican states and run by the wives of government officials, also has offered a building for the project offices: An old colonial home in San Cristóbal de las Casas. The house has a central garden where medicinal plants will be grown. State President of DIF Patri
cio Ortiz de Gonzalez Garrido and Mercedes de María Pedroso de Setzer, DIF regional delegate, and State Congressional Deputy Elmar Setzer M. were instrumental in obtaining these quarters for the project's activities.

Such support indicates the great interest and pride with which the people of Chiaspas regard Maya tradition and knowledge. As the modern state seeks to meet the health and cultural needs of the population by publishing the project's first manual, it also demonstrates a commitment to using traditional knowledge to improve the welfare of the people to whom the tradition belongs. ■

Dr. Jack Fisher, Director, UCSD International Surgery Program

The twenty-three year old woman who entered the plastic surgery clinic in La Piedad that day had a hard growing out of the middle of her back. It had only three fingers. It was not functional, but it had been there all her life. At the free clinic run by Mexican and U.S. doctors, the hand was surgically removed.

The clinic was one of many UCSD International Surgical Programs conducted in Mexico. Doctors, nurses, residents from UCSD, and members of the community take weekends to travel to La Paz, Guadalajara, and Mexico City. At local hospitals and with Mexican doctors, they set up free plastic surgery clinics. Poor people—many are Indians from remote villages—hear of the clinic through word of mouth and radio or newspaper announcements, and often travel miles to be seen. Many of the patients are children with cleft lips and/or cleft palates. Others may have different kinds of birth deformities or severe burn scars. Up to fifty surgeries may take place over the course of two to three days.

The foremost purpose of the clinics is to aid those Mexicans who have little access to sophisticated medicine, whether from lack of funds, or because they live so far from cities. But the clinics are also a forum for Mexican and American doctors to learn from each other.

Program Coordinator Ellen Cherin explains the Program's "...more...then taking a group of American health professionals into a country, setting up operating tables and then leaving after the surgeries are done..." Because people have different cultural backgrounds, Americans who participate in the clinics return to San Diego with a greater understanding of the cultural heritage of Mexicans they treat in the United States after working with Mexican doctors and caring for Mexican patients in Mexico. She believes the Program "helps people become interested in their own culture...as opposed to provincial or regional."

Jack Fisher, Head of Plastic Surgery at UCSD and Director of the UCSD International Surgical Program, offers another reason why he feels the clinics are valuable training for the Americans. The Program "represents a kind of activity I believe is important for physicians in this prosperous nation of ours—that is the challenge under certain conditions to be efficient and cost effective."

Actual medical training is more concrete, though, than the increasing of receptivity to cultural nuances and learning to practice medicine on a budget. Residents from UCSD take part in the weekend clinics and assist with surgeries, although they do not perform any procedures from which they are restricted in the United States. Because many of the patients come from extremely isolated areas, deformities which could be remedied at very early ages—such as the young woman's third hand mentioned above—are not repaired till later in life. To see such problems in the United States is rare, but at the clinics, medical residents have the chance to observe different technical niques for and become skilled in these kinds of surgeries. In La Paz, U.S. doctors and residents assist with particularly challenging cases: The hospital there regularly conducts cleft lip and palate surgeries for indigent people. Thus, only the most difficult cases are postponed until the UCSD Program and the Hospital Salvatierra can join forces. Such collaboration—and the sense of mutual benefit—is crucial to the clinics' success. In Mexico, at a small Red Cross Hospital, plastic surgeon Manuel Bello Roch, assists with operations and performs follow-up care. The Rotarians of Mexicali help publicize the clinics, translate, and provide refreshments. At the Hospital Salvatierra (SSA) in La Paz, plastic surgeons José Luis Zuniga and Fabio Casirro, anesthetist Maria Soto, geneticians, and speech pathologists Hod their efforts. At the Institute of Reconstructive Plastic Surgery in Guadalajara (SSA), José Guerrero-Acosta, a world renowned plastic surgeon, collaborates with the International Surgical Program. The Mexicans' enthusiasm stems partly from desire to aid the indigenous people, and, as Fisher explains, also from "the interest of colleagues in developing nations for professional linkages, for contacts and to continue their education in the United States, and for raising funds to improve technology in their clinics, hospitals, and institutions."

In this spirit, the Program endeavors and in some instances financially sponsors Mexican doctors traveling to the United States to attend symposiums, to see the facilities at UCSD, and to observe surgeries. Several have voluntary, part-
UCSD Center Sponsors Summer Institute

Few Latin Americans have emigrated to the United States as an academic discipline even though many have attended school or conducted research in the United States. Wayne Cornelius, director of the Center for U.S.-Mexican Studies at UCSD, said, "It is striking that U.S. studies is far more advanced as a field of study and research in places like the Soviet Union and Japan than it is in Mexico and Canada." According to Cornelius, many Latin American institutions depend upon faculty from the United States, such as Fulbright scholars, to teach U.S. studies classes. Even then, not many such courses are offered. In Mexico, for example, fewer than twelve classes on the United States are held regularly.

In response to the dearth of U.S. studies programs in Latin America, the Center for U.S.-Mexican Studies and the American Political Institutions Program and its Graduate School of International Relations and Pacific Studies launched last summer its first six-week "Annual Summer Seminar in U.S. Studies for Latin American Social Scientists and Non-Academic Professionals." The seminar is funded by a $757,000 grant from the Ford Foundation, and a UCSD grant.

Last summer's program was first announced four months before the seminar commenced. Eighty-eight students from Latin American countries applied. Wayne Cornelius said, "This is a rather dramatic demonstration of the need and demand for this kind of training among Mexicans and other Latin Americans who have a real need to know about developments in the United States." Twenty students were accepted, eighteen were from Mexico. Three of the Mexicans are advisors to Mexican government officials: Luis Ugalde Ramirez, chief planning office of the President; Leon Rodriguez Zahar, advisor to the Minister of Foreign Affairs; and Virginia Belmonte Aceves, executive assistant to the President. "In the first six weeks, Mendox Ayala, director of political training for PRI, also attended," Mendoza Ayala said. The program was held in a family hotel in Mexico City; the roundtables of the Los Angeles Times, among other newspapers. Ramon Menees reported that the annual conference of the North American desk of the International Relations Directors for the Latin American government in Nicaragua, discussed the first roundtable while U.S. state officials wrestled with whether or not to grant him a visa. Another noteworthy student was Jami Mathius, a presidential candidate in Ecuador.

The goal of the seminar is essentially to build on the foundation of U.S. studies programs in Latin America and to expand existing ones. For this reason, applicants who are involved in U.S. studies programs or research at their home institutions were given extra consideration. The seminar coordinator believes, however, that all Latin Americans can benefit from more in-depth knowledge about the society and politics of the United States. Hence, journalists and government officials—those most involved in negotiations with the United States are expected to provide a wealth of information about that country—also were accepted. Last summer's seminar was attended by 15 academicians, 4 government officials, 2 political party staff members, 1 journalist, 1 state bank official, 1 professor, 2 researchers from private "think tanks." Just as the students hailed from diverse areas, so did the faculty. The 21 experts on the United States and the Pacific Rim from UCSD and five other institutions came from such diverse disciplines as sociol- ogy, political science, history, and economics. Visiting lecturers from Northwestern University, the University of Texas at Austin, Los Alamos National Laboratories, the Los Angeles City Board of Education, and a U.S. Congress- man also participated. Samuel Kernell, from the UCSD Political Science department, was the faculty coordinator for the seminar. Next summer, the Center plans to invite more nonacademic faculty, such as government officials, professional lobbyists, or bank officers.

The necessity for additional seminars and courses has increased, as the seminar's organizers have decided to continue their U.S. studies and apply for U.S. graduate programs. Another 1989 participant of the seminar is organizing a certificate program in U.S. studies at the Instituto Tecnológico Autónomo de México (ITAM). CALL FOR APPLICATIONS

Applications for the Second Annual Summer Seminar in U.S. Studies at UCSD, to be held from June 24-August 5, 1990, are now being received. Applicants must be citizens of Mexico or another Latin American country, and be proficient in English. The deadline for applications, including letters of recommendation, is March 15, 1990. Further information can be obtained from the Program Coordinator, Department of Political Science, San Diego, La Jolla, CA 92039, USA. Further information can be obtained from Michael E. Haurer, Department of Political Science, 525th South, San Diego, CA 92182. Further information can be obtained from Michael E. Haurer, Department of Political Science, 525th South, San Diego, CA 92182. Further information can be obtained from Michael E. Haurer, Department of Political Science, 525th South, San Diego, CA 92182. Further information can be obtained from Michael E. Haurer, Department of Political Science, 525th South, San Diego, CA 92182.
**Announcements**

**PHOTO EXHIBIT OF ETHNOGRAPHIC RESEARCH IN QUERÉTARO**

A photographic exhibit entitled, "Peasants and the Land in Querétaro, Mexico: An Anthropological Perspective," will be on display between March 1, 1990 and June 30, 1990 on the first floor of the UCSB Library, which is open from 8:00 a.m. to 11:00 p.m. daily (except holidays). The exhibit includes 85 color photographs, ethnographic artifacts, assorted maps and diagrams, and examples of ethnographic data collection materials, documents, newspapers, clippings, and books. This exhibit is part of a larger collaborative research project being conducted by the Center for Chicano Studies and the Anthropology Department at UCSB and the Graduate Program in Anthropology and History of the Autonomous University of Querétaro, Mexico. The photographs were selected from over 4,000 slides taken by Manuel Luis Carlos, professor of anthropology at UCSB, and six students who have worked on the research project since it began in the summer of 1987. The photographs were chosen for their scientific content and aesthetic value. The themes include religion (altars and processions), agricultural techniques (plow, agricultural tools, etc.), contrasting land forms and ecological life, and household material possessions, food preparation and diet, and public life in communities.

The exhibit will be inaugurated by Chancelor Barbara Uehling of UCSB and Chancelor Jesús Pérez Hermsillo and Vice Chancelor Alejandro Obregon Alvarez of the Autonomous University of Querétaro, Mexico. A brochure about the exhibit is available by writing the organizer, Manuel Luis Carlos, Department of Anthropology, University of California, Santa Barbara, CA 93106.

**ARTS OF MEXICO**

During the fall of 1990, Friends of Mexico is sponsoring the "Arts of Mexico" at the Metropolitan Museum of Art in New York. This major exhibit will be the most comprehensive display of Mexican art to be shown in the United States in fifty years. It will be organized chronologically, encompassing the main periods of Mexican history: pre-Columbian, colonial, 19th Century and Modern. In addition to this exhibit, and also in conjunction with the Metropolitan Museum of Art, Friends of Mexico is planning additional activities for this major cultural event. The exhibit will later travel to the San Antonio Museum and the Los Angeles County Museum of Art. For further information contact Friends of Mexico, 2121 Avenue of the Stars, Suite 3300, Los Angeles, CA 90067; (213) 266-0132.

**NEW DIRECTOR AND GRANT FOR CLAS**

Peter H. Smith was made director of UCSB’s Center for Iberian and Latin American Studies (CLAS), effective Fall 1989. Smith is professor of political science and Simón Bolívar Professor of Latin American Studies at UCSB, and was Executive Co-Director of the Bilateral Commission on the Future of U.S.-Mexican Relations. CLAS has received a grant for $850,000 from the Andrew W. Mellon Foundation to promote the study of Latin America from a global and comparative perspective. Funds from the five-year grant will be allocated for field research and travel grants for UCSD scholars and students, fellowships for visiting scholars from Latin America and around the world, and for research workshops, special seminars and publications.

**Funding Opportunities**

**WORKSHOP FOR LATIN SOCIOL SCIENTISTS**

The Inter-University Program for Latino Research and the Social Science Research Council are sponsoring a 1990 Summer Workshop on Statistical Research Methods for Latino Social Scientists. The workshop provides Latino faculty, researchers, and graduate students with the opportunity to develop in-depth knowledge of national data sets relevant to the study of Latino populations and to improve their knowledge of statistical research methods through participation in established courses of the Inter-University Consortium for Political and Social Research. Grants will be awarded to cover transportation and living expenses for one summer session (July 2-27 July) at the University of Michigan, Ann Arbor. Additional funds are available for the second session (July 30-August 24) for grantees who choose to continue. For more information and applications contact Henry Heltot, Latino Statistical Workshop, c/o ICPSR, P.O. Box 1528, Ann Arbor, Michigan 48106; (313) 764-5892.

**FOREIGN STUDENT AND STUDY ABROAD PROGRAM FUNDING**

The National Association for Foreign Student Affairs supports grants to encourage the development of foreign students’ projects to enhance the experience of foreign students attending U.S. colleges and universities and U.S. students participating in study abroad programs, helping them to understand aspects of the host culture and community. There is no deadline for application for mini-grants (under $1,000). The deadline for preliminary proposals for the Cooperative Grants Program ($6000) is April 2, 1990. For more information and preliminary proposal form contact National Association for Foreign Student Affairs, Cooperative Grants Program, 1860 16th Street, N.W., Washington, D.C. 20009; Tel: (202) 482-4811.

**U.S.-MEXICO COOPERATIVE SCIENCE GRANTS**

The NSF is offering U.S.-Mexico Cooperative Science Grants. Proposals for cooperative research (partial support) bilateral workshops and scientific visits are due May 1, 1990. Mexican collaborator must submit a parallel proposal to counterpart agency. For more information contact Dr. Harold Stolzen and Dr. David Keeland, tel. (202) 357-9564.

**Colonial, 19th Century and Modern.** In addition to this exhibit, and also in conjunction with the Metropolitan Museum of Art, Friends of Mexico is planning additional activities for this major cultural event. The exhibit will later travel to the San Antonio Museum and the Los Angeles County Museum of Art. For further information contact Friends of Mexico, 2121 Avenue of the Stars, Suite 3300, Los Angeles, CA 90067; (213) 266-0132.

**HEWLETT GRANT AWARDED TO UCLA PROGRAM ON MEXICO**

The William and Flora Hewlett Foundation has awarded a major three-year grant to the UCLA Program on Mexico. The grant supports conferences, scholarly exchange, and outreach activities with Mexican universities related to the project, "Economic and Social Trends in Twentieth-Century Mexico."
Review


The difficulty of obtaining updated, reliable, and complete data on Mexico is frequently cited as one of the major handicaps in academic research, as well as in the decision-making process in both public and private sectors of Mexico. Although the Instituto Nacional de Estadística y Geografía (INEGI) (National Institute of Statistics and Geography) has considerably improved the quality and availability of information on Mexico in the last few years, it still is difficult to obtain complete and updated data on many important issues. For example, data from the 1960 national census were not available until 1989 and then not for all variables.

Another problem is that data are often scattered in a wide variety of sources, some of which are not always easy to obtain. Hence the compilation of data on a broad scope of socioeconomic issues relevant to Mexico's growth is, unquestionably, the best achievement of The Atlas of Mexico.

The Atlas is a significant resource for those of us involved in research on Mexico. The Atlas is one of the best updated compilations of basic data on Mexico published lately.

The Atlas is organized in ten chapters covering topics from basic population to voter participation in the 1988 Mexican presidential election. Chapter one is a brief overview of The Atlas and the methodology used for the presentation of data. Chapters two, three, four, and five present basic demographic data (population and urbanization, fertility, migration, and mortality). Chapter six is dedicated to the major social characteristics (literacy, education, indigenous languages, religion, crime, and housing). Chapters seven and eight deal with the economy (production by sectors and economically active population). Chapter nine summarizes the major characteristics of transportation and communication, and chapter ten mostly deals with political issues (voter participation in the 1988 presidential election, and the 1986 state elections in Sonora and Chihuahua).

The authors' efforts to update their compilation as far as possible and their perseverance in working with such a broad scope of information sources is commendable. This explains the discrepancy of years for which the different data are presented. For instance, most of the demographic data are available to 1986. Other economic and social variables are updated to 1983 or 1985, and political variables are updated to 1986 and 1988.

Data are displayed in a very accessible form to any reader. Each variable is first described and then presented graphically in maps and tables. There are 17 figures, 135 maps, and 92 tables in the Atlas (the tables include basic descriptive statistics). The user-friendly approach employed by the authors and the explanation of each variable enhance significantly the value and management of The Atlas, particularly for the occasional user.

The weakest point of The Atlas is the lack of balance between issues. While considerable attention is given to demographic data, less mention is given to economic and social variables. Industrial production is barely mentioned and data for the trade and services sectors are not included in The Atlas.

Nevertheless, the structure of the Atlas in computerized data banks facilitates future updates and improvements. This represents another important contribution of The Atlas; i.e., the creation of a compilation of relevant information on Mexico that is easy to update and enhance periodically.

—Roberto A. Sánchez

International Guide to Research on Mexico
Guía Internacional de Investigaciones sobre México
1989 Edition

The Center for U.S.-Mexican Studies
El Colegio de la Frontera Norte
El Colegio de México

Published jointly by the Center for U.S.-Mexican Studies, El Colegio de la Frontera Norte, and El Colegio de México, the International Guide to Research on Mexico is the only truly comprehensive, interdisciplinary inventory of ongoing, still-to-be-published research on Mexico. This bilingual compendium has proven to be a valuable reference tool not only for academicians, but for public officials, private corporations, publishers, and other nonacademic users as well. Project abstracts are indexed by subject matter, researcher, and institution where the research is being conducted. Beginning in 1989, the Guide will be published biennially.

The 1989 edition of the Guide reports on 930 Mexico-related research projects being conducted by 1,101 individuals at institutions in more than a dozen countries. It covers all aspects of Mexican culture, politics, history, and economy. Mexico's foreign economic and political relations, migration, border issues, and environmental issues.

Among the many specific topics included in the 1989 edition are:
- international trade
- industrial competitiveness
- international capital flows
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- labor migration and socio-economic integration of immigrants
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- social movements
- energy and natural resource problems
- drug production and trafficking
- nutrition and health care
- political change in Mexico


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New Publications

The Center for U.S.-Mexican Studies at the University of California, San Diego has announced new publications. These may be ordered from the Center through the University of California Press, 2050 Center Drive, Suite 105, Los Angeles, CA 90095. 

Voices of Haunted Journey. By Elia Martínez. (Bilingual Review/Press, Hispanic Research Center, Arizona State University, Tempe, Arizona 85287, 1990, pp. 254, cloth $20.00, paper $12.00.) First novel of a projected trilogy that treats the lives of five generations of a Mexican family in the United States. 

Mexican and Central American Population and U.S. Immigration Policy. Edited by Frank D. Bean, Jurgen Schmied, and Sidney Weintraub. (Center for Mexican American Studies, University of Texas at Austin, P.O. Box 7717, Austin, TX 78717-7817, 1989, 200 pp., cloth $25.00, paper $11.75.) 

Moya Resistance to Spanish Rule: Time and History on a Colonial Frontier. By Grant D. Jones. (University of New Mexico Press, Albuquerque, NM 87131, 1989, 200 pp., cloth $30.00.) 


La sierra de la laguna de Baja California Sur. Edited by Laura Arriaga and Alfredo Ortega. (Instituto de Investigaciones Biológicas de Baja California Sur, AP 129, La Paz, Baja California Sur 23000, 1988, pp. 237, cloth, in Spanish.) 


The Bellagio Draft Treaty. Revised and updated by Robert D. Hayton and Albert E. Utton. (International Transboundary Resources Center, University of New Mexico, 1775 San Francisco NE, Albuquerque, NM 87131, 1990, 250 pp., cloth $25.00, paper $12.00.) 


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Opening and Closing the Doors: Evaluating Immigration Reform and Control. By Frank D. Bean, Georges Vernez, and Charles B. Keely. (The RAND Corporation, 1700 Main Street, PO Box 2138, Santa Monica, CA 90406-2138, and The Urban Institute, 1989, pp. 139, paper) Provides a comprehensive examination of the 1986 Immigration Reform and Control Act (IRCA)—the broadest revision of U.S. immigration law since 1964—as well as useful background and information about U.S. immigration trends and policies. The first in a series that will examine ongoing issues of immigration and immigrant policies.

Literatura de la Frontera Mexico-Norteamericana: Cuentos. Edited by José Manuel Di-Bella, Rogelio Reyes, Gabriel Trujillo Muñoz, and Harry Polkinhorn. (Universidad Autónoma de Baja California and San Diego State University, Binational Press, San Diego State University, Imperial Valley Campus, 720 Heber Avenue, Calexico, CA 92231, (619) 357-3721, 1989, pp. 144, paper, $10.00) Eight stories, each presented in both Spanish and English, by U.S. and Mexican fiction authors writing about border experiences.

Loving in the War Years: Lo que nunca pasó por sus labios. By Cherie Moraga. (Southend Press, 116 Saint Botolph Street, Boston, MA 02111, (800) 533-8478, (617) 266-6154, 1989, pp. 153, paper $9.00, cloth $20.00) Explores the political and personal meaning of being both a Chicana and a lesbian in the United States today. Stories, essays, and poetry address the relationships of race, culture, gender, and sexuality through in-depth personal reflection and political analysis.

Riot, Rebellion, and Revolution: Rural Social Conflict in Mexico. Edited by Friedrich Katz. (Princeton University Press, 3715 Princeton Pike, Lawrenceville, NJ 08648, 800) 777-4726, 1989, pp. 594, paper $16.50, cloth $65.00) Since the Mexican Revolution of 1910-1920, Mexico's rebellious peasant has become a subject of not only history but also literature, film, and paintings. Scholars contributing to this volume address the subject of the peasant as one of the motive forces of Mexican history through agrarian revolts from the pre-Columbian period through the twentieth century.

Canal Irrigation in Prehistoric Mexico: The Sequence of Technological Change. By William E. Doolittle. (University of Texas Press, P.O. Box 7819, Austin, TX 78713-7819, (800) 252-3206, pp. 224, $30.00) Synthesizes and extensively analyzes all that is currently known about the development and use of irrigation technology in prehistoric Mexico from about 1200 B.C. until the Spanish conquest in the sixteenth century A.D.