Robert N. Thomas

Michigan State University

Osvaldo Muñiz

Universidad del Norte (Chile)

Population Research in Latin America: Retrospect and Prospect

This paper reviews the contributions of geographers and other social scientists to the population literature of Latin America during the decade of the 1970s. Based on a search of major journals, what have we accomplished during the decade? What important insights have come out of the seventies? And, just as important, is it possible to enunciate possible new guidelines for researchers of population studies in the 1980s?

Before launching into a discussion of the major contributions, however, it may prove useful to restate several of the challenges laid down to researchers in our benchmark publication (Thomas 1970). That article presented several key recommendations to serve as guidelines to researchers of the seventies. By reviewing them we can ask several questions: How well has the initial volume served its intended purpose? Were its recommendations followed? And, perhaps just as significantly, where did the original study fail to foresee new trends of the 1970s?

The original survey of population studies relating to Latin America pointed out the need to focus our efforts on more "scientific studies," referring to Edward A. Ackerman's 1963 publication, "Where is a Research Frontier?" (Ackerman, 1963), in which he stressed the need to carry out research that utilized the scientific method of inquiry in order to generate man-land theories. Ackerman further emphasized the role of quantitative techniques in this new direction and suggested the need for geographers to employ a "systems approach" to help solve crucial problems of society. It is quite apparent from a survey of population geographic research of the 1970s that, in general, we have adhered to Ackerman's charge. The majority of the studies that came out of the era are scientifically sound and, as a result, subsequent investigations have been able to build on the findings of previous research. Geographers did ask questions that led to findings that could be replicated and findings that served as a basis from which subsequent research could be launched.

Perception Behavioral Approach

The Conference of Latin Americanist Geographers can rightfully take credit for some of this change. The original 1970 population papers supplied an extensive review of past efforts, enunciated clear, succinct research guidelines, and provided investigators with an extensive bibliography. In fact, the authors of the population papers in this volume represent excellent examples of geographers who met the challenges laid down in the original text. For example, Richard C. Jones and Richard W. Wilkie accepted Ackerman's charge to undertake geographic research from a perceptual/behavioral approach (Jones, 1978; Wilkie, 1974). Ackerman insisted that it was difficult to understand and interpret basic man-land systems without gaining insights into the ways people sort out meaningful aspects of their environment and how this ordering process affects basic geographic decision-making. Although the place and subject matter of Jones and Wilkie differs in focus and direction, both utilize the perception/behavioral approach in their research and each in his own way has made a noteworthy contribution to population literature.

Other authors of the papers to follow have also addressed important considerations outlined in the original charge. The initial volume stressed the importance for professional geographers to use their talents in order to solve significant social and economic problems of Latin America. A considerable amount of the research of the seventies can be included in this category but specifically the work of Alfonso Gonzalez needs to be mentioned (Gonzalez, 1971). His studies of population inputs and relationships to development are noteworthy. He weds his knowledge of the development process with an indepth understanding of population dynamics to make an invaluable contribution to the development literature, thereby strengthening his position as an important leader in the field.

Rural-Urban Migration

Several of the other authors of the population papers have combined an interest in applied research with the overriding effort to describe and analyze what may well be the most significant social process to confront Latin America in the 1970s; rural-urban migration (Aragon, 1975; Jackson, 1973; Skeldon, 1977). The major impact caused by this momentous redistribution of population demanded the attention of population geographers. For example, the likes of Williams,

Griffin, Preston, and Taveras focused on the effects that out-migration have on the rural generating center (Williams and Griffin 1978; Preston and Taveras 1976). Others attempted to unravel the physical process by which people move from the countryside to the city (Thomas and Mulvihill, 1980). Can a central place hierarchy be employed to understand the actual move in space? Did the migrant population adhere to a step-wise or stage migration process?

Urban Receiving Centers

It appears that population geographers have had little interest in researching the impact of the migration process on urban receiving centers. With the exception of the works by Jackson and Mougeot, (Jackson, 1973; Mougeot, 1976) little work has been undertaken in this important area. With more than three out of every four Latins living in a town or city by the year 2000 AD, we. must devote energy to helping solve the problems brought about by this internal shift in population. Not only must solutions be sought to such identifiable spatial units as urban slums and squatter settlements, but additional efforts are required to investigate the seemingly insurmountable problems of traffic congestion and vehicular pollution. The Latin custom, still prevalent in many countries, of returning home at mid-day acts to further compound the journey-to-work problem, especially in the larger cities.

Other aspects of urban life should attract the attention of the population geographer as well. Can the urban village concept be applied to Latin American cities? Do newly arrived migrants tend to cluster with their own kind in an attempt to gain assistance in the general assimilation process? Are there spatial expressions that result from this process and if so, do these identifiable units tend to remain intact through time?

Although the quality of urban life most concerns the urban geographer, the population specialist also has a profound impact on urban environments. The deterioration of the quality of life precipitated by the ever-increasing flood of migrants of Latin American cities must be addressed by geographers from many systematic areas. Herein lies perhaps the most significant challenge of the 1980s.

Colonization Projects

Most population redistribution studies have focused on rural generating centers or urban receiving areas where the investigator attempts to understand the

complex fabric of the migration system. This focus is natural since the vast majority of population shifts have taken place from the farm to the city. However, geographers also have directed their efforts toward another dimension of the general population movement which occurs in Latin America: the shift of people from cities, towns, villages, and rural areas to regions of expanding frontier settlement. Authors such as Eidt and Stewart initiated this type of research, particularly in the Andean countries (Eidt 1962; Stewart 1965). Today these investigators have been followed by another group of geographers interested in how people seek out rural frontier regions and whether or not these apparently unoccupied areas serve as viable alternatives to the teeming cities of Latin America (Wesche, 1974; Aragon, 1975). Although Wesche has published research on several countries, his major contributions have focused on Brazil's Amazonian region where his description and analysis of the Brazilian government's implementation of a central place system of towns and villages to support colonization efforts along the Trans-Amazonian highway is a true milestone. His forthright interpretation of the degree of success of the development scheme is must reading for anyone interested in this or similar planning efforts. Fortunately for our discipline, others have followed Wesche's lead and undertaken research in frontier areas during the 1970s. These more recent studies not only discuss demographic aspects of movements to, from, and within frontier regions, but also key-in on social and economic mobility as an important component of the process (Aragon, 1978; Mougeot, 1980).

Nucleo de Altos Estudios Amazónicos

Although most of the colonization research in Latin America has been carried out on an ad hoc basis, an organized effort has been undertaken at the Universidade do Pará, in Belem, Brazil, to initiate and coordinate frontier migration research in Amazonia. At the Nucleo de Altos Estudos Amazónicos (The Center for Amazonic Studies) a group of sociologists, economists, political scientists, and geographers has combined its talents to address a wide range of issues that confront this last major frontier of Latin America. The administration and faculty at the center welcome future contacts with those of us interested in development problems of the region. That geographers have and continue to play a vital role in the success of the center is indeed encouraging.

International Migration

In the post World War II era, numerous works have discussed the importance of international migration as a component of general population studies. These investigations present a variety of themes, but most stress the contribution of various ethnic groups to the general economic and social fiber of specific countries. The immigration of Italians to Argentina and Uruguay is well documented, as are attempts by the Brazilian government to encourage Japanese migrants to settle in Amazonia. Other studies reveal the importance of seasonal international migrants to assist with a variety of agricultural harvests, including the sugar cane of Northwest Argentina and the Dominican Republic, the coffee harvests of Mexico, El Salvador, and Nicaragua, as well as the demand for foreign labor by specialty farms in the United States.

However, one of the most recent international population movements to impact on Latin America is the migration of United States retirees to Mexico and Central American countries. While Holder, (1977) has reported on the United States retiree in Mexico and attempted to glean general statements from the process, Allman (1977) discusses site selection, the adjustment process, and return migration of United States military retirees in Central America within the context of migration theory. If this international movement maintains or increases its rate of growth on the 1980s, geographers and other social scientists will want to address key questions that relate to the system. What incentives do host countries provide in order to attract retirees? Is return migration an important part of the process, implying a rapid turnover of the retiree population? Could it be that the appeal of this type of retirement lessens with time and that most retirees return to their home country after a short stay abroad?

Another series of questions may involve additional relationships of the retirees to their new environment. Once settled in the host country, do the migrants establish a social network with other retirees? Do they "ghettoize" sectors of their host cities? And, just as important, how does the native population view this influx of foreigners? The entire issue of United States retirees in Latin America presents a fascinating array of research problems for the population geographer in the 1980s.

The Female Migrant

To date most studies view the migration process through male eyes, either

consciously or unconsciously. Most studies generate data on migration histories by asking a series of questions of the "family head." In the Latin American context, frequently this person is a male. The investigator proceeds to analyze the information and construct generalizations pertaining to migration perception and behavior. Only in those instances where a widow, female divorcee, or unmarried female is included in the survey does the study view the migration process from a woman's perspective.

However, the late seventies did produce a series of studies that undertook to investigate internal migration from a specifically female viewpoint. These efforts pointed out the growing importance of women as active rather than passive participants in the migration process from decision-making, to the actual move, and through the adjustment process (Hess Buechler, 1976; Melville, 1978; Whiteford, 1978). These studies focus on a wide range of women's topics including such issues as the role that the move to the city plays in the female liberation process, female adjustment problems and mental stress, and women's changing role in Latin American society. Undoubtedly studies of this kind will increase as women's place in society changes and as more enter the ranks of professional geography.

Fertility and Mortality Research

By far the major thrust of population geography research in Latin America during the 1970s focused on the varied aspects of internal migration. Few studies dealt specifically with the two other key components of demography, namely fertility and mortality. However, Fuller's work on the diffusion of birth control devices in Chile (Fuller, 1974) and the study of mortality in Mexico City (Fox, 1972) represent important contributions by geographers. However, most fertility and mortality research continues to be conducted by sociologists. They have addressed a wide range of topics and most of their findings appear in such journals as Demography, Population Studies, and Social and Economic Studies. The paucity of fertility and mortality research, however, should not be signal for geographers to abandon these vital components of the life process. To the contrary, there are many aspects of fertility and mortality that raise key research questions for population geography. For example, what are the geographic implications of the pronounced decline in fertility which has occurred in many Latin American countries during the past decade? Will family size continue to fall, thereby mirroring the Anglo-American model or will the social commitment

of Latin American society toward the family unit prevent a reoccurrence of the Anglo experience? Furthermore, the crowding of Latins into major urban centers may generate health environments that could create health disasters such as those found in other parts of the developing world. The idea that such an impending catastrophe would lack spatial implications is ludicrous. Geographers must lend their efforts to investigate the myriad of research questions regarding sickness and death in the Latin American context.

Theory to Policy

There is a major body of population theory reinforced by numerous empirical studies. Most of the specifics as to who migrates, where they will go, and why they migrate there are well known. Indeed, we are successfully able to predict what will happen. However, if geography is to have social utility it needs to offer alternatives to existing systems. But how do we get there?

Critical studies are missing which could offer viable spatial alternatives to existing migration processes. Gauthier's article, "Migration Theory and the Brazilian Experience" (1975) is an example of the type of research needed to span this void. Such studies must look at why processes function as they do, taking into account social, political, and economic considerations. But more importantly they must reveal how such processes can be influenced and changed.

After all, if one is able to predict what will occur under a given set of circumstances, one should be able ultimately to conceptualize how to generate orderly change. Isn't that the goal of science? Historically the role of outside researchers has been debated. One major school of thought holds that foreign investigators should be dispassionate analysts who report their findings primarily for the benefit of colleagues within their home country. A second school holds that researchers have a moral obligation to report their findings for the benefit of the group being studied. Given this latter responsibility, it is imperative that these investigators work while maintaining a humanistic point of view. Specifically, geographers attempting to move from population theory to population policy must take into consideration how their conclusions and recommendations will influence questions of social equity and improvements in quality of life for the masses.

References Cited

- Ackerman, E.A. "Where is a Research Frontier?" *Annals of the Association of American Geographers*, Vol. 53 (1963),429-439.
- Allman, P.H. Military Retirees: Settlement in Foreign Lands. (Cambridge, MA: Schenkman Publishing Co., 1980).
- Aragon, L.E. "Migration to Northern Goias: Geographical and Occupational Mobility in Southeastern Amazonia, Brasil" (Doctoral Dissertation, Michigan State University, 1978).
- Aragon, L.E. "Mlgración Fronteriza: Implicaciones Espaciales en ia Cultura Kwayker, Colombia," Revista Geográfica (Mexico), Vol. 83 (1975), 87-93.
- Eidt, R.C. "Pioneer Settlement in Eastern Peru," Annals of the Association of American Geographers, Vol. 52 (1962), 255-278.
- Fox, D.J. "Patterns of Morbidity and Mortality in Mexico City," *The Geographical Review*, Vol. 62 (1972), 151-185.
- Fuller, G. "On the Spatial Diffusion of Fertility Decline: The Distance to Clinic Variable in a Chilean Community," *Economic Geography*, Vol. 50 (1974), 324-332.
- Gauthier, H.L. "Migration Theory and the Brazilian Experience," Revista Geográfica, Vol. 82 (1975), 51-62.
- Gonzalez, A.A. "Population Growth and Socio-Economic Development: The Latin American Experience," *Journal of Geography*, Vol. 70 (1971), 36-46.
- Hess Buechler, J.M. "Something Funny Happened on the Way to the Agora: A Comparison of Bolivian and Spanish Galacian Female Migrants," *Anthropological Quarterly*, Vol. 49 (1976), 62-68.
- Holder, V.H. "The Migration of Retirees to Mexico: A Survey and Case Study of Guadalajara, Mexico." (Doctoral Dissertation, University of Minnesota, 1976).
- Jackson, H.E. "Intra-Urban Migration of Mexico City's Poor." (Doctoral Dissertation, University of Colorado, 1973).
- Jones, R.C. "Myth Maps and Migration in Venezuela," *Economic Geography*, Vol. 54 (1978), 75-91.

Melville, M.B. "Mexican Women Adapt to Migration," *International Migration Review*, Vol. 12 (1978), 225-235.

Mougeot, L.J.A. "De la Marginalite a l'integration: les migrants du bidonville Siloe, Cali, Colombie." (Master's Thesis, University of Ottawa, 1976).

Mougeot, L.J.A. "Socio-Economic Mobility and Frontier Urban Migration: A Case from Central Brazil Amazonia." (Doctoral Dissertation, Michigan State University, forthcoming).

Preston, D.A. and G.A. Taveras. "Characteristics de la Emigración Rural en la Sierra Ecuatoriana," Revista Geográfica (Mexico), Vol. 84 (1976), 23-31.

Skeldon, R. "The Evolution of Migration Patterns During Urbanization in Peru," *The Geographical Review*, Vol. 67 (1977), 394-411.

Stewart, N.R. "Migration and Settlement in the Peruvian Montana: The Apurimac Valley," *The Geographical Review*, Vol. 55 (1965), 143-157.

Thomas, R.N. "Internal Migration in Latin America: An Analysis of Recent Literature," Geographic Research on Latin America, Benchmark 1980; Proceedings of the Conference of Latin Americanist Geographers, Vol. 1. (Muncie: Ball State University, 1971), 104-118.

Thomas, R.N. and J.L. Mulvihill. "Temporal Attributes of Stage Migration in Guatemala," in *Internal Migration Systems in Developing Countries*. (Boston: G.K. Hall, 1980).

Wesche, R. "Planned Rainforest Family Farming on Brazil's Transamazonic Highway," Revista Geográfica (Mexico), Vol. 81 (1974), 105-114.

Whiteford, M.B. "Women, Migration and Social Change: A Colombian Case Study," *International Migration Review*, Vol. 12 (1978), 236-247.

Wilkie, R.V. "The Process Method Versus the Hypothesis Method: A Nonlinear Example of Peasant Spatial Perception and Behavior," in M. Yeates (ed.) Proceedings of the 1972 Meeting of the International Geographical Union Commission on Quantitative Geography. (Montreal and London: McGill-Queen's University Press, 1974). 1-31.

Williams, L.S. and E.C. Griffin. "Rural and Small Town Depopulation in Colombia," *The Geographical Review*, Vol. 68 (1978), 13-30.