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## **Contributions by Geographers to Latin American Population Studies**

Although comments on various aspects of population date back almost to the beginning of the written record, widespread concern about demographic growth or characteristics is a fairly late development. Indeed, a substantial share of this development has occurred after World War II as accelerating population growth rates prompted widespread concern about the well-being of mankind in the immediate future. The result has been a tremendous increase in research and published works devoted to the growth and characteristics of population especially in the developing areas of the world. Among these published works Latin America has been strongly represented. Citations in *Population Index* of published materials on various aspects of Latin American demography increased sharply from an annual average of less than 150 during the early 1960's to 270 during the first three quarters of 1968. In total, more than 1600 citations, exclusive of references to official governmental publications, were made in the 36 issues of *Population Index* between 1960 and January - March, 1969.<sup>1</sup>

### **Recent geographical literature on Latin American population<sup>2</sup>**

Unfortunately, geographers have not contributed to any significant degree to this growing literature on population in Latin America. Between 1960 and 1969, nearly 100 works dealing with Latin American topics appeared in the five major geographical journals published in the United States.<sup>3</sup> Of these, ten were devoted to studies which involved aspects of population other than migration or frontier settlement. However, several of these papers were general treatments of which population formed a part, such as the studies by White and by Morrison published in the *Journal of Geography*, and the papers by Fonoroff which might be assigned more properly to medical geography. (For the citations of these and other articles by American geographers, see References Cited, Group 2. These articles obviously do not represent the total contribution of American geographers on population studies of Latin America for a number of articles have appeared in geographical journals published in other countries as well as in non-

geographical publications in this country and elsewhere. In addition, research on population characteristics and problems has been presented at meetings and as parts of more general regional studies and in texts. Nevertheless, the judgment must stand that the contribution of American geographers to the understanding of Latin American demography has been slight if publications in the geographical literature is a fair index of their efforts. This conclusion is also supported by the number and nature of research projects reported underway by geographers in the Current Research Inventory of the *Latin American Research Review* since the first issue was published in 1965. Of the 168 projects reported, only nine dealt with population studies exclusive of work in internal migration and colonization. Among these nine projects are included studies of pre-Colonial populations and of medical geography. Nor is the record of the new students entering the field any more encouraging. Between 1960 and 1969, 78 dissertations were completed by geographers on Latin American topics. Only one of these dissertations could be labeled clearly as population geography.

To a very large degree the paucity of published works by American geographers on Latin American demography is a reflection of the scarcity of persons who combine a topical interest in population with a regional interest in Latin America. The 1967 *Directory of the Association of American Geographers* lists 516 members who claimed a Latin American regional specialization. Of these, 26 reported population geography as one of their three main topical interests. However, among these 26 were four geographers associated with foreign universities, four students whose research careers presumably had not really begun, three government employees, and one each in industry, high school teaching, and in the ranks of the retired. Thus, only 12 active academic geographers list the combination of population and Latin America as their special concerns.<sup>4</sup> It is interesting that a number of the papers published in American geographical journals or projects reported in the *Latin American Research Review* which treat population questions in Latin America are by persons who either do not identify themselves as population geographers or as Latin American specialists.

### **Contributions by foreign geographers to Latin American demography**

American geographers are not alone in the neglect of population studies in Latin America. A check of eight geographical journals published in Latin America between 1960 and 1969 turned up over 150 articles on Latin American topics, but only nine on population subjects. Four of the nine authors were not Latin

American nationals. Again, it may be assumed that some research by Latin American geographers on population questions is published elsewhere than in the journals examined. For example, persons associated with the Brazilian Institute of Geography and Statistics (IBGE) have been very active in demographic research, and several studies made by members have been published by the Institute itself. It is not known how many of these members of the IBGE would identify themselves as geographers. One outstanding example of the demographic work undertaken by a Latin American geographer is a recently published regional demography of Jalisco State, Mexico by Dra. Maria Teresa Gutierrez de MacGregor (1968) of the Institute of Geography of the National University of Mexico. This work represents one of the few contributions by a geographer which examines not only distribution and inter-censal change of population, but also such variables as fertility, mortality, age structure, sex ratios, and other population characteristics too often ignored or slighted by geographers. (See References Cited, Group 3).

The paucity of work by geographers on Latin American demography is even more apparent when the examination is extended to geographical journals published elsewhere in the world. (See References Cited, Group 4). The Pennsylvania State University Library has among its periodicals collection 35 other geographical journals in which articles appeared between 1960 and 1969 on Latin American topics. Of the 213 articles represented only seven reported on population studies exclusive of migration and settlement. Table 1 summarizes the amount of literature on Latin American population studies available in the periodical literature of geography.

TABLE 1

Subjects and Areas of Articles in Geographical Journals on Latin American Population, 1960-1969:

	Mex. and Cent. Am.	So. Am.	Caribbean	Total
Intercensal change	2	4	-	6
Distribution and density	1	3	1	5
Relationships, Pop. and econ. dev.	4	1	4	9
Fertility and mortality	1	1	-	2
Ethnic-race contrasts	-	-	2	2
Medical geography	-	-	2	2
Total	8	9	9	26

Not only have few articles on Latin American demography appeared in the geographical periodical literature, but the range of population subjects and regions

covered by these works has also been limited. Most commonly, these articles are concerned primarily with inter-censal population change, distribution, and density patterns, or are general work in which the population impact on the development process is considered. Even among the latter type of investigations, relatively little is reported on fertility and mortality patterns, age and sex structures, or on socio-economic characteristics of populations. With respect to regional coverage, nine articles are restricted to the Caribbean area; eight are concerned with Mexico or with Central American countries; the remaining nine deal with South American areas of which only Brazil, Argentina, and Peru are represented.

The relative failure of geographers to engage in research in Latin American demography is surprising in one sense because research very often tends to expand in the direction of available data. Yet, Latin America of all the developing areas of the world is best provided with recent, reasonably complete and reliable census data and vital statistics. Although research in historical demography of Latin America is handicapped by the irregularity and uncertain quality of earlier census attention nearly all of the Latin American countries participated in both the 1950 and 1960 Censuses of the Americas in which efforts were made to standardize the timing, the questions to appear on census schedules, and the definitions employed in these censuses. (Population Research Center, 1965) Of the 47 sovereign and non-sovereign political entities of Latin America for which data appear in the *Population and Vital Statistics Report* of the United Nations, only Cuba, Haiti, and Bolivia failed to take an enumeration during the 1960 decade. Similarly, data on births and deaths are available in greater abundance and completeness for Latin America than for other developing countries. Twenty-one of the 107 sovereign nations of Asia, Africa, and Latin America reporting to the United Nations have "complete" vital registrations; of these, 11 are in Latin America or the Caribbean.<sup>5</sup> Thus, the lack of studies by geographers on Latin American population questions does not seem to be explained by a deficiency of data.

### **Contributions from other disciplines in Latin America**

In contrast, to the limited contributions by geographers to the study of Latin American demography and the failure of that contribution to increase over time the contributions from other disciplines has been relatively large and has increased considerably in recent years. In the early period after World War II, the bulk of research on Latin American demography came from scholars outside

Latin America, and the research from these sources continues to increase. (For a sample of such work, see References Cited, Group 5).

More recently, however, an increasing volume of demographic research has originated from scholars in Latin America. One very important development in Latin American demography was the establishment of the Centro Latinoamericano de Demografía (CELADE) in 1957 by an agreement between the United Nations and the Government of Chile. In 1966, thirteen of the Western Hemisphere nations agreed to aid in the funding of the center. A sub-center has now been established in San José, Costa Rica. This organization has performed both research and teaching functions; staff members have offered short courses in several Latin American universities and institutes. From its founding until early 1969, about 200 Fellowships have been granted to persons representing 21 of the nations of Latin America and the Caribbean; 81 of these Fellows were from data-gathering institutions, and 56 from universities of Latin America. Many of the persons now teaching demography in Latin American universities received training at CELADE. The only geographer among the Fellowship holders, at least among the earlier group, is Professor Moreno who in 1964 taught at the Catholic University of Ecuador. Keyfitz (1964) identifies 14 universities in Latin America which in 1964 offered courses in demography. In addition to the teaching function, CELADE has also published a large number of research papers prepared by staff and students on population questions, and which include topics in all of the Latin American countries.

Among the recent additions to the demographic literature originating in Latin America is a detailed text on demographic principles and techniques as well as monographs or books on general demographic characteristics, now available for nearly every country in Latin America. (See References Cited, Group 6). As valuable as this enlarged literature is, the geographer remains somewhat dissatisfied; missing from this material is an appreciation of the spatial component of demography. With but few exceptions, the available literature fails to answer most of the questions geographers would commonly ask.

### **Suggestions for further study**

The study of the population geography of Latin America, therefore, remains an open field in which research of virtually every type is urgently needed. However, before specific studies can be produced, much needs to be done to enhance the training in demography and population studies available to American students in

geography. As late as 1964, the *Directory of College Geography of the United States* listed only 16 colleges and universities which offered a course in population geography. (Schwendeman, 1964). At this date (academic year 1963-1964) the combined enrollment of courses in population geography was 297 students. Two years later the same source again listed 16 geography departments offering work in population with a slight enrollment increase of 319 students. In the last several years, however, offerings in population geography have sharply increased. The 1969 *Directory* listed 39 colleges or universities with a geography course in population with a combined enrollment of 1020 students. A very great share of this enrollment was in undergraduate or combined undergraduate-graduate courses, and the number of graduate majors in population geography remained small. The 1967 *Directory of the Association of American Geographers* listed only four graduate student members who identified themselves as having an interest in both population studies and Latin America (Association of American Geographers, 1967) A further indication of the scarcity of graduate students preparing for research in Latin American population studies is in the subjects of Ph.D.'s in progress reported in *The Professional Geographer*, November, 1969. Of the 239 dissertations in progress listed, 24 were on Latin American topics but only one of these was related directly to population -- a study of the change in population composition in the West Indies.

The types of research questions largely left unanswered in the population geography of Latin America are not greatly different from a list of potential topics of this nature for no subject has received sufficient attention. Detailed maps of population distribution and density are available for only a few countries, and maps of other demographic variables a minor civil division scale are almost non-existent.<sup>6</sup> Until we achieve greater knowledge of the basic demographic distribution we will remain ignorant of many important questions we should be asking.<sup>7</sup>

The whole concept of the demographic transition needs to be examined most carefully in the Latin American context. It is generally assumed from the earlier European experience that fertility reductions appear first in the larger cities and among the higher socio-economic groups and diffuse outward through the urban hierarchy and downward through the social classes to the poor. The generalization, however, must admit of many departures in Europe and much more work needs to be done in Latin America to determine the degree to which this generalization describes the recent Latin American experience. Geographers

interested in the diffusion process could make a very important contribution by examining the rate, direction, and intensity of the diffusion of the small family mod in Latin America and the variables which seem to control that diffusion. Not only would this information be of great theoretical value but it would also be of immediate worth to those planners now engaged in attempts to assess likely future population growth and to plan satisfactorily for that growth.

We have as yet been unable to define satisfactorily the concept of population pressure, nor can we suggest how best this pressure can be measured. However, the particular training and inclination of a geographer in both the human and physical realms would seem to equip him uniquely for the task of unraveling the complex interconnections involved in population pressure and for the search for possible remedies to such pressure. Particularly rewarding would be studies of how individuals and groups perceive population pressure and the factors that condition the kinds of response they make.

Despite a massive relocation of population in Latin America the great bulk of the people never migrate. Yet the migration streams are differentially selective for people with particular characteristics and this movement alters the composition of the population in both the sending and receiving areas. The effect of migration on the demographic characteristics of areas of origin has been little studied. A much larger literature is available on the migration impact in areas of destination but still too little is known of the urban demography of Latin America. It is possible that the selectivity of the migration stream alters among destinations at different levels in the urban hierarchy. Were this to be the case, such differential migration could have a significant effect in producing demographic variations among cities of different size class.

The study of interrelationships between demographic and other variables has received much attention from demographers and a sizable body of generalizations exist upon which geographers could draw. However, comparatively little work has been done with respect to the ways in which these relationships vary spatially within and among countries. Particularly important would be work which concentrated on the impact of modernization on the presence and strength of these relationships. Since nearly all stages of the development continuum are displayed in Latin America it would seem an ideal laboratory for the development and testing of generalizations about spatial changes in population characteristics and socioeconomic correlates during the modernization process.

## Conclusions

Although a comprehensive search of the literature by geographers on Latin American population questions remains to be done, an examination of publications by geographical associations reveals little work in population relative to other systematic fields of geographical inquiry. Particularly lacking are contributions by geographers of the more "demographic" aspects of the subject – fertility, mortality, age, sex, and the like. Yet these and other features of population lie at the core of many of the serious dilemmas of Latin America. It is strongly urged that geographers be encouraged to do, and thoroughly trained to handle, studies of the population phenomenon of Latin America. There are few other challenges and opportunities potentially so rewarding for geographers.

## Notes

1. These calculations were made of counts of citations in the "Geographical Index" and include an unknown number of duplications. An article comparing fertility rates of Mexico and Brazil, for example, would be listed for both countries.
2. The discussion which follows is based almost exclusively on works by geographers appearing in geographical journals. The time available for this report did not permit the identification by academic specialty of the authors of publications appearing in journals of other disciplines. Thus, articles such as the paper by Gonzalez, "Some effects of population growth on Latin America's Economy," published in the *Journal of Inter-American Studies* in January, 1967, are not represented. Nor was there an attempt to compile a listing of papers and addresses given at meetings of societies or special study groups such as the Symposium on the Geography of Population Pressure on Physical and Social Resources held at The Pennsylvania State University in September, 1967. It is assumed that paper published in geographical periodicals fairly reflect the volume and nature of the work being done by geographers on population problems in Latin America.
3. The journals examined were: *Journal of Geography*, *The Professional Geographer*, *Economic Geography*, *Geographical Review*, and *The Annals of the Association of American Geographers*.

4. It is recognized that several geographers who share these interests either were not listed in this directory or did not identify their areas of specialization, but to carry the above to the extreme, only two university-based geographers in the United States list population as their first topical specialty and Latin America as their chief regional interest.
5. The definition of "complete" signifies that the national statistical services claim "virtually complete coverage of the events occurring each year." Three of the countries with "complete" registrations, Tunisia, Jordan, and Panama have birth registration only. Japan and Israel are among the eight countries of Asia with complete registrations and are included in the 21 countries above.
6. It is interesting that the Pan American Institute of Geography and History has committees on urban geography, regional geography, geomorphology, and the like, but the group for population studies is concerned with population mapping.
7. It should be noted in fairness that many of these questions remain unanswered if not unasked even for developed countries. It is not suggested that Latin American population studies alone are being ignored; rather, the basic problem is that the fields of demography in general, and population geography in particular are relatively new and that much remains to be done on all topics and in all areas

## REFERENCES CITED

### Group 1

Association of American Geographers. *Directory of the Association of American Geographers, 1967*. (Washington: Association of American Geographers, 1967).

Keyfitz, N. "Assessment of Teaching and Training Programs in the Universities of Latin America," *Milbank Memorial Fund Quarterly*, Vol. 42, (2), (1964), pp. 236-246.

Population Research Center, Department of Sociology, *International Population Census Bibliography: Latin America and the Caribbean*. (Austin, Texas: Bureau of Business Research, The University of Texas, 1965).

Schwendeman, J. R. (comp.) *Directory of College Geography of the United States*.

(Lexington, Kentucky: Association of American Geographers, 1964).

## Group 2

Selected Articles by American Geographers on Latin American Population Topics

Augelli, John P. and Taylor, H. W., "Race and Population Patterns in Trinidad," *Annals of the Association of American Geographers*, Vol. 50, (1960), pp. 123-138.

Ball, J. M. "Some Comments on Mexico's Population," *Journal of Geography*, Vol. 61, (1962), pp. 296-301.

Dyer, D. R. "Growth of Brazil's Population," *Journal of Geography*, Vol. 65, (1966), pp. 417-428.

\_\_\_\_\_. "Population and Elevation in Peru," *Northwestern University, Department of Geography. Studies in Geography. No. 6*, (1962), pp. 13-27.

\_\_\_\_\_. "Population of the Quechua Region of Peru," *The Geographical Review*, Vol. 52, (1962), pp. 337-345.

Fonaroff, L. S., "Geographic Notes on the Barbados Malaria Epidemic," *The Professional Geographer*, Vol. 18, (1966), pp. 155-163.

\_\_\_\_\_. "Man and Malaria in Trinidad: Ecological Perspectives of a Changing Health Hazard." *Annals of the Association of American Geographers*, Vol. 58, (1968), pp. 526-556.

González, A. "El Problema del Crecimiento de la Población y del Desarrollo Económico en America Latina," in *La Geografía y los Problemas de Población, Soc. Mex. de Geog. y Estad.*, Vol. 1, (1966).

\_\_\_\_\_. "Some Effects of Population Growth on Latin America's Economy," *Journal of Inter American Studies*, Vol. 9, (1967), pp. 22-42.

Horst, Oscar H. "The Specter of Death in a Guatemalan Highland Community," *The Geographical Review*, Vol. 57, (1967), pp. 151-167.

James, P. E. "Implications of the Race Between Economics and Population in Latin America," *Annals of American Academy of Political and Social Science*, Vol. 330, (1960), pp. 95-102.

Lowenthal, D. "Population Contrasts in the Guianas," *The Geographical Review*, Vol. 50, (1960), pp. 41-58.

Morrison, P. C. "Middle America: Land Of Too Many and Too Little," *Journal of Geography*, Vol. 60, (1961), pp. 112-119.

\_\_\_\_\_. "Population Changes in Mexico." *Revista Geográfica*, (Rio), Vol. 59, (1963), pp. 79-92.

\_\_\_\_\_. "Population Changes in Mexico, 1950-1960," *Papers of the Michigan Academy of Science Arts and Letters*, (1964), pp. 351-366.

Nunley, Robert E. *The Distribution of Population in Costa Rica*, (Washington: National Academy of Sciences-National Research Council 1960).

\_\_\_\_\_. "Population Densities Using a New Approach: A Preliminary Report," *Revista Geográfica*, (Rio), (1967), pp. 55-93.

Pearson, R. "Mapping Population Change in Argentina," *Revista Geográfica*, (1963), pp. 63-77.

\_\_\_\_\_. "Recent Changes in the Distribution of Population in Argentina," *Papers of the Michigan Academy of Science, Arts and Letters*, (1963), pp. 367-381.

White, C. "Whither South America: Population and Natural Resources," *Journal of Geography*, Vol. 60, (1961), pp. 103-112.

Zelinsky, W. "Population Growth in Central America and the West Indies; Problems and Prospects," *Mineral Industries*, Vol. 35, (March, 1966), pp. 1-2, 4-7.

### Group 3

#### Selected Articles by Latin American Geographers on Latin American Population Topics

Alves de Soriza, S. "Distribuc o da populac o de regi o centro-oeste 1960," *Rev. Brasil. de Geog.*, Vol. 27, (1965), pp. 515-521.

Guti rrez de MacGregor, M. T. "Algunas aspectos demogr ficos de M xico", *Anuario de Geog.*, Vol. 5, (1965), pp. 243-267.

\_\_\_\_\_. "El mapa de población de Mexico, 1960." *Anuario de Geog.*, Vol (1964), pp. 165-168.

\_\_\_\_\_. *Geodemografía del Estado de Jalisco México*. (Mexico City: Universidad Nacional Autónoma de Mexico, Instituto de Geografía, 1968).

\_\_\_\_\_. "Some Demographic Developments in Mexico from 1900-1960." *Oriental Geography*, Vol. 12, (1968), pp. 33-40.

Kloster, E. "Distribución de la Población de México por Grupos de Edad," *Anuario de Geog.*, Vol. 6, (1966), pp. 103-116.

Lago, P. F. "Aspectos Demográficos de Sta. Catarina," *Rev. Brasil. de Geog.*, Vol. 28, (1966), pp. 206-231.

Lopez, J. E. "La Expansión Demográfica de Venezuela," *Revista Geográfica* (Mérida). Vol. 3, (1961-62), pp. 195-275.

\_\_\_\_\_. "Tendencias Recientes de la Población Venezolana," *Revista Geográfica* (Mérida). Vol. 6, (1965), pp. 5-44.

Magnanini, R. Geografía de Populacão: Potencial Humano do Nordeste Brasileiro," *Revista Geográfica*, Vol. 56, (1962), pp. 43-50.

Magrassi de Sá, J. "Natalidade e desenvolvimento," *Rev. Brasil. de Geog.*, Vol. 27, (1965), pp. 137-144.

México, Instituto de Geografía, *Distribución Geográfica de la Población en la República Mexicana*. Mexico. Universidad Nacional Autónoma de México, 1962).

Orbegaso Rodreguez, R. *Contribución al Estudio de la Población Peruana*. (Lima: Universidad Nac. Federico Villarreal, 1966).

Santo Mayor, A. S. et al. "Crescimento Medio Anual da Población do Nordeste, Periodos de 1920 de 1950 a 1960," *Rev. Brasil. de Geog.*, Vol. 27, (1965), pp. 294-304.

Group 4

Selected Articles by other Geographers on Latin American Population Topics

- Beaujeu-Garnier, J. "La Population de Mexico," *Bulletin de L'Association de Geographie Francais*, Vol. 355-356, (1967), pp. 2-15
- Clarke, C. "Population Pressure in Kingston, Jamaica: A Study of Unemployment and Overcrowding " *Trans. Papers Inst. Brit. Geog.*, Vol. 38, (1966), pp. 165-182
- Dale, E. "The Demographic Problem of the British West Indies," *Scot. Geog. Mag.*, Vol. 79, (1963), pp. 23-31.
- Dyson, A. "Population Trends in the Eastern Caribbean," in Steel and Lawton (eds.) *Liverpool Essays in Geography*. (London: Longman's, 1967), pp. 380-405.
- Helbig, K. "Eine Bevolkerungskarte von Zentralamerika," *Petermanns Geog. Mitteil.* Vol. 109, (1965), pp. 225-229.
- Henshall, D. "The Demographic Factor in the Structure of Agriculture in the Barbados." *Trans. Papers Inst. Brit. Geog.*, Vol. 38, (1966), pp. 183-196.
- Marchand, B. "Etude Geographique de la Population du Venezuela," *An. Geog.*, Vol. 72, (1963), pp. 734-745.
- Niddrie, D. "Land Use and Population in Tobago," *World Land Use Survey Regional Monograph No 3*. (Bude: Cornwall Geog. Public., 1961).
- \_\_\_\_\_. "The Problems of Population Growth in Puerto Rico," *J. Trop. Geog.*, Vol. 20, (1965), pp. 26-33.
- Steinberg, F. "Wachstumsprobleme in Mexiko," *Geog. Rundschau*, Vol. 2 (1968), pp. 334-342.
- Tricart, J. "Aspects de la Geographie de la Population au Salvador," *Revista Geografica*, Vol. 60, (1964), pp. 33-58.
- Volkova, Ye. D. "Basic Trends in the Population Geography of Contemporary Cuba," *Soviet Geog. Rev. Trans.*, Vol. 10, (1969), pp. 612-617.

Group 5

Selected works on Latin American Population Topics by non-Geographers

Arriaga, E. *New Life Tables for Latin American Populations in the Nineteenth and Twentieth Centuries*. (Berkeley: University of California 1968). Institute of International Studies Population Monograph Series No. 3.

Arriaga, E., and Davis, K. "The Pattern of Mortality Change in Latin America," *Demography*, Vol. 6, (1969), pp. 223-242.

Collver, O. A. *Birth Rates in Latin America: New Estimates of Historical Trends and Fluctuations*. (Berkeley: University of California, 1965). Institute of International Studies Research Series No. 7.

Davis, K. "The Place of Latin America in World Demographic History." *Milbank Memorial Fund Quarterly*, Vol. 42, (1964), pp. 19-47.

Gabaldon, A. "Leading Causes of Death in Latin America," in Components of Population Change in Latin America. *Milbank Memorial Fund Quarterly*, Vol. 42 (4), Part 2, (1965), pp. 242-262.

Gendell, M. "Fertility and Development in Brazil," *Demography*, Vol. (1967), pp. 143-157.

"Geographic Redistribution of the Population of Latin America and Region Development Priorities," *Economic Bulletin for Latin America*, Vol. 8, (1963), pp. 51-64.

Gordon, J. "Labor Mobility and Economic Growth: The Central American Experience -- Costa Rica and El Salvador," *Economic Development and Cultural Change*, Vol. 17, (1969), pp. 319-337.

Harewood, J. "Overpopulation and Underemployment in the West Indies," *International Labour Review*, Vol. 82, (1960), pp. 103-137.

Heer, D. "Fertility Differences Between Indian and Spanish Speaking Parts of Andean countries," *Population Studies*, Vol. 18, (1964), pp. 71-84.

Heer, D. and Turner, E. "Areal Differences in Latin American Fertility," *Population Studies*, Vol. 18, (1965), pp. 279-292.

Hutchinson, B. "Colour, Social Status, and Fertility in Brazil," *America Latina*, Vol. 8, (1965), pp. 3-25.

- Jones, G. "Underutilization of Manpower and Demographic Trends in Latin America," *International Labour Review*, Vol. 98, (1968), pp. 451-469.
- Miro, C. "The Population of Latin America," *Demography*, Vol. 1, (1964), pp. 15-41.
- Miro, C. and Mertons, W. "Influences Affecting Fertility in Urban and Rural Latin America," *Milbank Memorial Fund Quarterly*, Vol. 46, (1968), pp. 89-117.
- Mortara, G. *Characteristics of the Demographic Structure of the American Countries*. (Washington: Pan American Union, 1964).
- Pan American Health Organization. *Health Conditions in the Americas 1961-1962*. (Washington: Pan American Union, 1964). Science Pub. No. 104.
- Puffer, R. and Griffith, G. *Patterns of Urban Mortality*. (Washington: Pan American Union, 1967). Science Publication No. 151.
- Requena B. M. "The Problem of Induced Abortion in Latin America," *Demography*, Vol. 5, (1968), pp. 785-799.
- Schultz, T. *Demographic Conditions of Economic Development in Latin America*. (Santa Monica, California: Rand Corporation, 1968).
- Smith, R. "Population and Economic Growth in Central America," *Econ. Dev. and Cult. Change*, Vol. 10, (1962), pp. 134-149.
- Somoza, J. "Trends of mortality and expectation of life in Latin America," in *Components of Population Change in Latin America. Proceedings of the 60th Anniversary Conference of the Milbank Memorial Fund Quarterly*, (1965), pp. 219-241.
- Stolnitz, G. "Recent Mortality Trends in Latin America, Asia, and Africa," *Population Studies*, Vol. 19, (1965), pp. 117-138.
- Stycos, J. "Culture and Differential Fertility in Peru," *Population Studies*, Vol. 16, (1963), pp. 257-270.
- Stycos, J. and Arias, J. *Population Dilemma in Latin America*. (Washington: Potomac Books, 1966).
- "The Demographic Situation in Latin America. *Economic Bulletin for Latin America*,

Vol. 6, (1961), pp. 13-52.

United Nations. *Guanabara Demographic Pilot Study*. (New York: United Nations, 1964). Population Studies No. 35.

\_\_\_\_\_. *Some Aspects of Population Growth in Colombia*. (New York: E.C.L.A., 1962). (E/CN. 12/618) .

Vasquez, J. "Fertility Decline in Puerto Rico: Extent and Causes," *Demography*, Vol. 5, (1968), pp. 855-865.

Zarate, A. "Differential Fertility in Monterrey, Mexico: Prelude to Transition?" *Milbank Memorial Fund Quarterly*, Vol. 45, (1967), pp. 213-229.

## Group 6

Selected Works on Latin American Population Topics Published in Latin America

Arias, B. J. *La Población de Centroamerica y sus Perspectivas*. (Guatemala: Univer. de San Carlos de Guat. Fac. de Ingenieria, 1966).

Benitez Zenteno, R. *Análisis Demográfico de México*. (México: Univ. Nac. Anton. Mex., 1961).

Benitez Zenteno R. and Cabrera Acevedo, G. *Proyecciones de Población de México, 1960-1980*. (México: Banco de México Estudio de Recursos Humanos de Mexico, 1966).

Carillo Batalla, T. E. *Análisis Cuantitativo y Cualitativo de la Economía de la Población Venezolana*. (Caracas: Ediciones del Cuatricentenario de Caracas, n.d.).

Carvalho, Alcen Vicente W. de. *A População Brasileira*. (Rio de Janeiro: Conselho Nac. de Estatistica, 1960).

Hubner Gallo, J. *El Mito de la Explosión Demográfica*. (Buenos Aires: Joaquin Almendros Editor., 1968).

Lannoy, J. L. and G. Perez. *Estructuras Demográficos y Sociales de Colombia*. (Bogotá: Centro de Investigación y Acción Social, 1961).

Lopez, J. E. *La Expansión Demográfica de Venezuela*. (Merida: Univ. de los Andes,

1963).

Lopez Toro, A. *Análisis Demográfico de los Censos Colombianos: 1951 y 1954*. (Bogotá: Univ. de Los Andes Centro de Estudios sobre Desarrollo Económico, 1968).

Loyo, G. *Población y Desarrollo Económico*. (México: Publicaciones Especializadas, 1963).

Mattelart, A. *Manual de Análisis Demográfico*. (Santiago: Univ. Católica de Chile, 1964).

Pereira, J. and Trajtenberg, R. *Evolución de la Población Total y Activa en el Uruguay, 1908-1957*. (Montevideo: Univ. de la Rep. Inst. de Economía, 1966).

Perez-Ramirez, G. *Aspectos Sociológicos y Económicos del Problema de Población en Colombia*. (Bogotá: Inst. Col. de Desarrollo Social, 1966).

Rivarola, D. M. and Heisecke, G. (eds.) *Población, Urbanización, y Asunción: Recursos Humanos en el Paraguay*. (Asunción: Centro Parag. de Estudios Sociológicos, 1969).

Sánchez-Albarnoz, N. and Moreno, J. *La Población de América Latina: Bosquejo Histórico*. (Buenos Aires: Paidós, n.d.).

Schaedel, R. *La Demografía y los Recursos Humanos del Sur del Perú*. (México: Inst. Indivienista Interamericano, 1967).

Tovar, R. *La Población de Venezuela*. (Caracas: Univ. Central de Venez. Fac. de Ciencias Econ. y Soc. Inst. de Investig., 1968).

Troncoso, M. *La Explosión Demográfica en América Latina*. (Buenos Aires: Editorial Schapire, 1967).

Viel, V. B. *La Explosión Demográfica*. (Santiago: Ediciones de la Univ. de Chile, 1966).