

#2075

C/76-3



**SQUATTER SETTLEMENTS AND THE
INCORPORATION OF MIGRANTS INTO
URBAN LIFE: THE CASE OF LIMA**

David Collier

MIGRATION AND DEVELOPMENT STUDY GROUP

Center for International Studies
Massachusetts Institute of Technology
Cambridge, Massachusetts 02139

MIGRATION AND DEVELOPMENT STUDY GROUP

Jagdish M. Bhagwati

Nazli Choucri

Wayne A. Cornelius

John R. Harris

Michael J. Piore

Rosemarie S. Rogers

Myron Weiner

SQUATTER SETTLEMENTS AND THE INCORPORATION OF MIGRANTS
INTO URBAN LIFE: THE CASE OF LIMA

David Collier

Department of Political Science
Indiana University

and

Center of International Studies
Princeton University

Migration and Development Study Group

Center for International Studies
Massachusetts Institute of Technology
Cambridge, Massachusetts 02139

April 1976

TABLE OF CONTENTS

| | <u>Page</u> |
|---|-------------|
| List of Tables | iii |
| List of Figures | iii |
| | |
| INTRODUCTION | 1 |
| URBANIZATION AND HOUSING | 4 |
| SQUATTER SETTLEMENTS IN LIMA | 7 |
| THE POLITICAL SETTING | 16 |
| COMPARISON OF SQUATTER SETTLEMENTS AND SLUMS | 23 |
| SATISFACTION IN LIMA AND GETTING AHEAD IN LIFE | 30 |
| A TEST OF THE IMPORTANCE OF THE ADVANTAGES OF SQUATTER SETTLEMENTS | 45 |
| CONCLUSION | 50 |
| | |
| APPENDIX: METHOD AND SOURCES OF DATA | 53 |
| | |
| BIBLIOGRAPHY | 59 |

LIST OF TABLES

| <u>Table</u> | | <u>Page</u> |
|--------------|--|-------------|
| 1 | Most Important Problems of District by Residence | 27 |
| 2 | Who Should Solve the Problems of the District by Residence | 29 |
| 3 | Satisfaction in Lima by Residence | 31 |
| 4 | Problem-Solving Orientation by Residence | 34 |
| 5 | Aspirant Index by Residence | 35 |
| 6 | Electoral Participation by Residence | 36 |
| 7 | Associational and Party Participation by Residence | 37 |
| 8 | Attitudes by Participation | 38 |
| 9 | Differences Between Residential Areas in the Association Between Attitudes and Recentness in Lima | 41 |
| 10 | Attitudes and Participation by Residence (Settlements ontrasted with Slums) Controlling for Renting and Intention to Spend | 46 |

LIST OF FIGURES

| <u>Figure</u> | | <u>Page</u> |
|---------------|---|-------------|
| 1 | Squatter Settlements of Metropolitan Lima | 8 |

SQUATTER SETTLEMENTS AND THE INCORPORATION OF MIGRANTS
INTO URBAN LIFE: THE CASE OF LIMA¹

INTRODUCTION

Recent research on cityward migration has taken an increasingly complex view of the political consequences of massive urbanization. It is no longer believed that rapid urban growth necessarily produces a basic disruption of the established social order or that it inevitably creates the preconditions for extremist political movements.² Rather, it appears that various factors prepare the migrant for urban life, ease the transition once he or she is in the city, and inhibit rapid change in attitudes and behavior. These factors include urban experience prior to permanent migration, reliance on extended kinship networks for personal and economic

¹I would like to acknowledge my debt to the Centro de Investigaciones Sociales por Muestreo of the Peruvian Ministry of Labor for providing access to two of the three surveys on which this analysis is based. The research was supported by grants from the Latin American Teaching Fellowship Program and from the Latin American Studies Program at Indiana University. Richard E. Messick wrote the computer program to calculate significance levels for gamma, and he and Margaret D. Hayes provided energetic assistance at one stage of the data analysis. An earlier version of this study appeared as "Los pueblos jóvenes y la adaptación de los migrantes al ambiente urbano limeño," Estudios Andinos, 3: 3 (1973), pp. 25-49.

²For examples of this earlier position, see Louis Wirth, "Urbanism as a Way of Life," The American Journal of Sociology, 44 (July 1938), pp. 1-24; Robert Redfield, "The Folk Society," The American Journal of Sociology, 52 (January 1947), pp. 293-308; Charles M. Haar, "Latin America's Troubled Cities," Foreign Affairs, 41 (April 1963), pp. 536-549; and J. P. Powelson and Anatole A. Solow, "Urban and Rural Development in Latin America," Annals of the American Academy of Political and Social Science, 360 (1965), pp. 48-62.

security, perception of the move to the city as a major step of upward mobility, and the persistence of deferential values learned prior to migration.³

The present study examines the consequences for migrant attitudes and behavior of another of the factors that affect the experience of migrants in cities--the type of neighborhood in which they live. The research tests the hypothesis that squatter settlements provide a supportive residential environment oriented around self-help, which helps to ease the transition to urban life for low-income migrants. The analysis is based on an ecological analysis of survey data on migrants in Lima, Peru.⁴ Migrants who are located

³See Oscar Lewis, "Urbanization without Breakdown: A Case Study," The Scientific Monthly, 75:1 (July 1952); Oscar Lewis, "Further Observations on the Folk-Urban Continuum and Urbanization with Special Reference to Mexico City," in Philip M. Hauser and Leo F. Schnore (eds.), The Study of Urbanization (New York: John Wiley and Sons, 1967), pp. 491-503; Philip M. Hauser, "Observations on the Urban-Folk and Urban-Rural Dichotomies as Forms of Western Ethnocentrism," in Hauser and Schnore, The Study of Urbanization, pp. 503-517; Wayne A. Cornelius, Jr., "Urbanization as an Agent in Latin American Political Instability: The Case of Mexico," American Political Science Review, 63:3 (September 1969), pp. 833-857; Wayne A. Cornelius, Jr., "The Political Sociology of Cityward Migration in Latin America: Toward Empirical Theory," in Francine F. Rabinovitz and Felicity M. Trueblood (eds.), Latin American Urban Research, 1 (Beverly Hills, Calif.: Sage Publications, 1971), pp. 95-147; and Joan M. Nelson, Migrants, Urban Poverty, and Instability in Developing Nations, Occasional Papers in International Affairs 22 (Cambridge, Mass.: Center for International Affairs, Harvard University, 1969).

⁴Juan J. Linz has called attention to the advantages of ecological analysis of survey data in "Ecological Analysis and Survey Research," in Mattei Dogan and Stein Rokkan (eds.), Quantitative Ecological Analysis in the Social Sciences (Cambridge, Mass.: MIT Press, 1969), pp. 91-132.

in squatter settlements are compared with those located in inner-city slums, the principal alternative type of housing available to the poor in Lima. These two populations are contrasted in terms of personal insecurity, attitudes concerning home and community improvement, satisfaction with life in Lima, attitudes about getting ahead in life, certain aspects of political participation, and their tendency as migrants to become disillusioned after longer residence in the city. In addition, an attempt is made to specify which characteristics of settlements are of greatest significance for individual attitudes and participation.

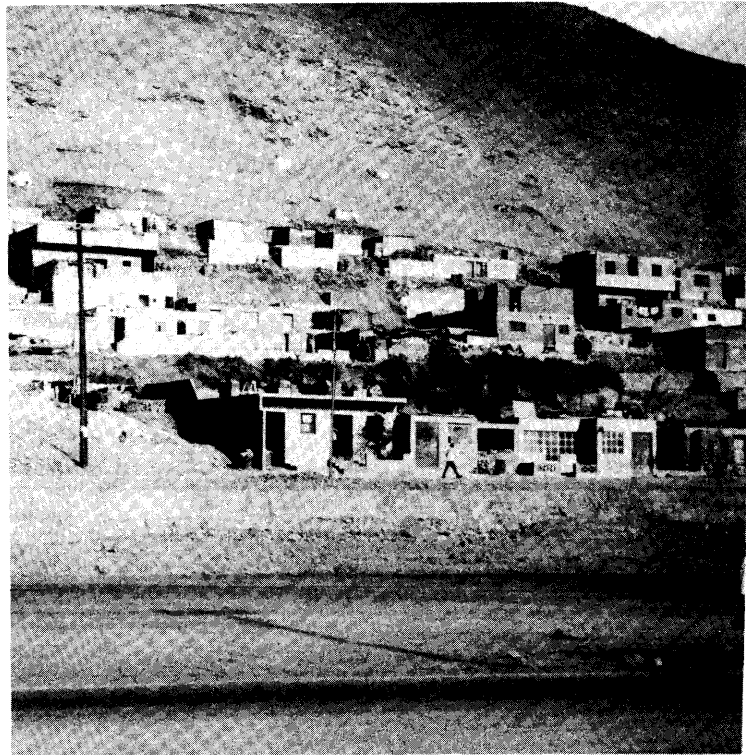
The principal source of data is the Survey of Lima carried out in 1967 by the Centro de Investigaciones Sociales por Muestreo (CISM) of the Peruvian Ministry of Labor. To prove certain issues not covered in this survey, a limited number of questions are also analyzed from another CISM survey and from a survey of community leaders in squatter settlements carried out by the author. These sources of data and the assumptions that are involved in basing the analysis on a comparison of settlements and slums are discussed in the Appendix.

URBANIZATION AND HOUSING

Among the many problems associated with rapid urbanization, that of housing is one of the most spectacular. Overcrowding, spreading slums, declining quality of housing, rapid growth of squatter settlements, widespread street sleeping in many cities, and the lack of basic city services in a large portion of poorer residential areas are among the most important aspects of housing problems.⁵

The picture of housing that has been presented in the literature on rapid urbanization is not entirely despairing, however. Various writers have noted that the appearance of squatter settlements--residential communities formed by low-income families through unauthorized, or sometimes partially authorized, occupation of unused land--offers to many poor migrants a type

⁵See Charles Abrams, Man's Struggle for Shelter in an Urbanizing World (Cambridge, Mass.: MIT Press, 1964), Chapter 1; Charles M. Haar, "Latin America's Troubled Cities," Foreign Affairs, 41:3 (April 1963), pp. 536-549; Marcia N. Koth, Julio G. Silva, and Albert G. H. Dietz, Housing in Latin America (Cambridge, Mass.: MIT Press, 1965), Chapter 2. William Mangin, in his "Latin American Squatter Settlements: A Problem and a Solution," Latin American Research Review 2:3 (Summer 1967), pp. 65-67, cites and quotes a number of writers who take a more extreme alarmist position with regard to these problems.



A Lima squatter settlement with dwellings ranging from straw huts (above) to houses with nicely decorated facades and incipient second stories (below).

of housing that is greatly preferable to inner-city slums, the main alternative housing available to them in the city.⁶

⁶ John F.C. Turner, "Barriers and Channels for Housing Development in Modernizing Countries," Journal of the American Institute of Planners, 32:3 (May 1967), pp. 167-181; and "Uncontrolled Urban Settlement: Problems and Policies," International Social Development Review (United Nations, 1968), pp. 107-130; Mangin, "Latin American Squatter Settlements," and "Squatter Settlements," Scientific American, 217:4 (October 1967), pp. 21-29; Richard M. Morse, "Recent Research on Latin American Urbanization: A Selective Survey with Commentary," Latin American Research Review, 1:1 (Spring 1966), pp. 35-74; Joan M. Nelson, "Urban Growth and Politics in Developing Nations: Prospects for the 1970's" (Paper presented at the Conference on International Economic Development, Columbia University, 1970); and Henry A. Dietz, "Urban Squatter Settlements in Peru: A Case History and Analysis," Journal of Inter-American Studies, XI: 3 (July 1969), pp. 353-370.

It has been argued that these settlements substantially reduce the shortage of low-cost housing, provide rent-free housing for many poor families, and offer opportunities for improvement of housing by the residents and for community projects that both improve the community physically and contribute to a sense of identification with the community. This theme of community development through self-help is of particular importance in the arguments regarding the advantages of settlements. There is, of course, considerable variation in the extent to which these characteristics are present in different settlements. Overall, however, settlements offer important advantages in comparison with other kinds of housing available to the urban poor.

SQUATTER SETTLEMENTS IN LIMA

The appearance of squatter settlements in Lima has occurred during a period of rapid growth of the city's population. Though a few settlements were formed before 1940 they have developed primarily since that date; at the same time metropolitan Lima has grown from 520,528 inhabitants in 1940 to 1,578,298 in 1961 and an estimated 3,317,000 in 1972. This represents a total population increase for the urban area of 537% for this 32-year period, with an annual rate of increase of 5.4% per year for 1940 to 1961 and 7.0% per year for 1961 to 1972.⁷

During this period of urban growth the growth of the population living in settlements has been rapid. Beginning from a negligible level before 1940, the settlement population rose to 318,262 in 1961, representing 20% of Lima's population,

⁷The definition of metropolitan Lima used here includes the port area of Callao. The figure for 1940 is from the Censo Nacional de Población de 1940, Volume 5 (Lima: Dirección Nacional de Estadística), p. 5. That for 1961 is from the Sexto Censo Nacional de Población, Volume 3 (Lima: Dirección Nacional de Estadística y Censos, 1966), p. 187. Criteria for defining metropolitan Lima, as well as the formula for calculating annual rates of increase, were provided by Carl Herbold. The figure for 1972 is a preliminary estimate of the results of the 1972 census released by the Oficina Nacional de Estadística y Censos as reported in La Prensa, September 23, 1972, p. 1.

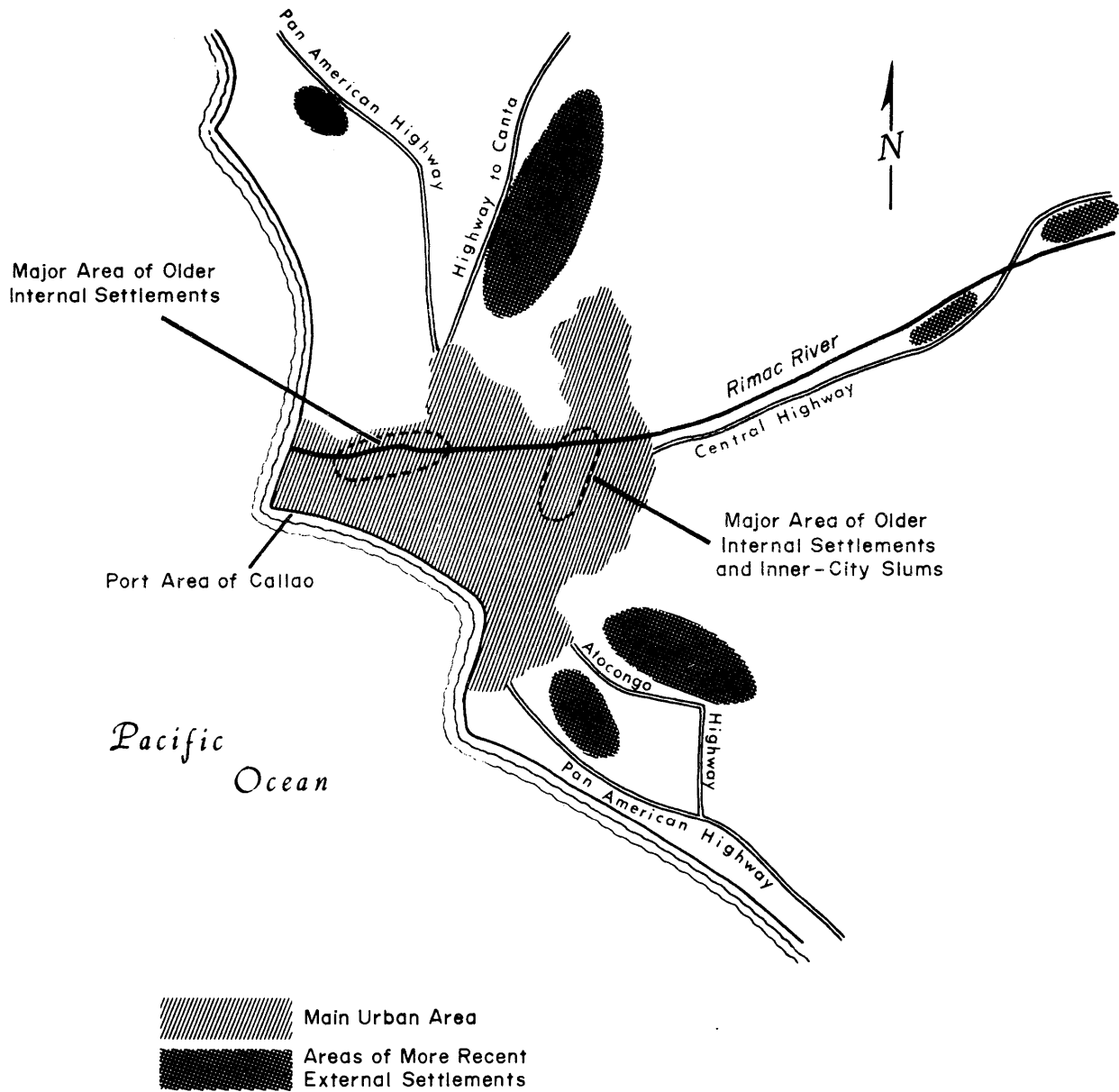


Fig. 1 Squatter Settlements of Metropolitan Lima

and 903,394 in 1972, representing 28% of the population of the metropolitan area.⁸ There has been substantial growth since 1972.

In assessing the development of settlements in Lima it is useful to note that the rate of urban growth of Lima is roughly typical of third-world cities. Lima's rate of growth placed Peru tenth among the 20 countries conventionally defined as Latin America in the rate of growth of urban centers of 100,000 or more from 1950 to 1960, and fourth from the top for 1960 to 1970. Compared with other third-world regions the rate for Peru during these two decades was below that for Africa, but equal to or somewhat above that for Asia and

⁸The figure for 1961 is from the national census of that year, cited above. The figure for 1972 is based on the estimate published in the Informe Preliminar del Censo, 1970 (Lima: Oficina Nacional de Desarrollo de Pueblos Jovenes, 1971), with the following modifications: 1) 217,050 was added to the figure as an estimate of the population of the settlements formed in 1971 and 1972; 2) a number of settlements were removed from the calculation because they were originally formed by renting, having been included in official definitions for political reasons; and 3) a few others were added which are not included in official definitions, but which were clearly settlements in their pattern of formation. The figure thus arrived at may be a low estimate since the main source used is two years out of date. However, it seems likely that a great many of the residents of the settlements formed during those two years came from the older settlements--hence reducing the size of this error.

the Middle East.⁹

On the other hand, Lima offers a highly favorable geographical and climatic setting for settlement formation that is not typical of third-world cities. The virtual absence of rain on the Peruvian coast means that the minimal straw houses that first appear when settlements form are far more adequate than they would be in less favorable climates. The absence of rain also simplifies basic drainage problems of these communities. The disaster of settlements being washed down hillsides after heavy rains is unlikely to occur in Lima. Likewise, the climate does not present the hardships of cold winters found in cities such as Santiago or Buenos Aires. Finally, because Lima is surrounded largely by unused desert, large areas of land are available for the formation of new settlements. The implications of these special features of Lima for the generalizability of the findings presented in this study are discussed in the Appendix.

For the poor of Lima, settlements offer an important alternative to the more crowded slums of the center city. One of the major advantages is that settlement residents generally do not pay rent, though there is some subletting in settlements. The absence of rent is, of course, a great advantage for poor families, particularly in periods of unemployment or

⁹See Kingsley Davis, World Urbanization 1950-1970, Volume I: Basic Data for Cities, Countries, and Regions (Population Monograph Series No. 4, Institute of International Studies, University of California, Berkeley, 1969).

sickness of the wage earner and in old age.

Settlements offer other advantages as well. Though migrants lack the skills needed for many urban occupations, one skill that they may bring with them is the ability to build their own homes. The settlements provide an environment in which this ability is relevant. In most settlements the residents have space to keep a few animals--chickens, ducks and perhaps a pig--which provide a source of food and may help a family to make it through periods of little or no income. Because groups of relatives, friends, or people from the same province often join together in the formation of settlements, and because new arrivals often come to join relatives or friends in the settlement after the initial formation, the settlement resident tends to be surrounded by a network of friends and real and ritual kinsmen, forming a supportive social environment. The existence of this environment, and the presence of many opportunities for improvement of individual homes and community facilities through self-help, leads to a high degree of cooperation among neighbors and to an ideology of self-improvement which is commonly expressed by leaders of settlements and actively encouraged by the government agencies that work in settlements. This ideology emphasizes the ways in which settlements are a world in which people can get ahead through cooperation among neighbors and self-help, and perhaps diverts attention from some of the more underlying problems of the poor of Lima--such as employment and

income.

In any discussion of the advantages of settlements two points of caution must be noted. First, in contrasting the characteristics of settlements with the characteristics of inner-city slums, it is obviously possible to overstate the differences. An important tradition of research, beginning with William F. Whyte's Street Corner Society, has emphasized that the social structure in slums may be supportive.¹⁰ Likewise, Charles Stokes' distinction between slums of hope and slums of despair and the process that Jane Jacobs has described of slumming and unslumming suggest the existence of a variety of types of slums, some of which may be self-improving communities.¹¹ However, even in a setting in which such differences are important, there may at the same time be major, overall differences between slums and other types of neighborhoods. It is the purpose of this research to explore the extent to which such differences, as reflected in migrant attitudes and orientations, are present in Lima.

The second point of caution involves important variations among squatter settlements. Just as there are slums of despair and slums of hope, so one may note Delgado's distinction

¹⁰William Foote Whyte, Street Corner Society (Chicago: University of Chicago Press, 1943).

¹¹Charles Stokes, "A Theory of Slums," Land Economics, 38: 3 (August 1962), pp. 187-197, and Jane Jacobs, The Death and Life of Great American Cities (New York: Vintage Books, 1961), Chapter 15.

between internal settlements, which are initially formed near commercial areas or have since been surrounded by such areas as cities, and external settlements, which are outside the industrial and commercial zones of the city.¹² Though complex typologies or dimensions of different types of settlements can obviously be developed, this simple distinction provides a convenient summary for present purposes of certain important differences among settlements.

Delgado suggests that the external settlements are more likely to develop than the internal settlements. One factor explaining this difference is the availability near many external settlements of land to which relatives and friends of residents who come into the settlements as lodgers can move. This helps to limit crowding in external settlements. In addition, though industrial and commercial centers are practical places to live from the point of view of proximity to employment, they are usually considered less desirable in esthetic terms, and hence residents are less apt to invest in home improvement.

Aside from these ecological differences, however, the external settlements have three built-in advantages. First of all, they are newer. Any housing deteriorates with age, and

¹²Carlos Delgado, Tres Planteamientos en Torno a Problemas de Urbanizacion Acelerada en Areas Metropolitanas: El Caso de Lima (Lima: Cuadernos Plandemet, Serie Anaranjada, Asuntos Sociales, No. 1, 1968).

settlement housing, which in many cases never reaches the level of development of conventional neighborhoods, probably deteriorates more rapidly once new investment ceases. Thus, the fact that the external settlements are not as old means that they are less likely to have reached this stage of deterioration. Secondly, because of the accumulation of experience with settlements in Lima, and because of the influence of the government housing agency, settlements that have been formed since the mid-fifties--generally external--have tended to be laid out more carefully, with a regular arrangement of lots, wide streets, and free areas for plazas, schools, and community centers. This makes them more pleasant places to live and makes it more likely that the residents will feel that home improvement is a good investment. Finally, the well-ordered lots and streets of the external settlements bring still another advantage. In the 1960's the principal government housing agency, operating with limited resources and anxious to produce the greatest possible impact with these resources, concentrated its aid programs in the external settlements, whose problems were more readily soluble. It is thus clear that the higher rates of improvement in external settlements are not due only to differences in the immediate ecological setting.

For most of the analysis that follows, separating settlements according to the internal-external distinction does not significantly affect the findings regarding differences between

settlements and slums. However, in the more complex relationships presented at the end of the analysis, this distinction among types of settlements becomes important, and the appropriate differences are presented.

THE POLITICAL SETTING

It is important to emphasize that in adopting an ecological perspective in analyzing the experience of migrants--that is, one which compares the consequences of living in different ecological settings within the city--one is also implicitly adopting a political perspective. It is political because of the massive involvement of the Peruvian government in the initial formation and subsequent development of squatter settlements in Lima.

In many countries, including Peru, there has been extensive support from governments and political parties for the ostensibly illegal land invasions through which settlements are formed.¹³ In Lima the role of the government in settlement formation has been so extensive that in many periods there has in effect been a systematic government policy of supporting the formation of squatter settlements. This government involvement has ranged from secret approval of squatter invasions which occurred at night to open, public support for the formation of new settlements. In some cases future squatters have even been transported in government or army trucks to the land at the periphery of the city where they

¹³With regard to Venezuela and Chile, see Talton F. Ray, The Politics of the Barrios of Venezuela (Berkeley and Los Angeles: University of California Press, 1969), and Peter S. Cleaves, Bureaucratic Politics and Administration in Chile (Berkeley and Los Angeles: University of California Press, 1974).

form their new communities.¹⁴

Settlement formation became a large-scale movement in Lima with the support of the government of General Odría (1948-1956), who sought to substitute a paternalistic style of elite-mass relations for the pattern of class politics which was emerging in Peru in the late 1940's. Squatter settlements were thus used as part of a broader strategy for inhibiting radical political change in Peru. Odría promoted settlement formation as an inexpensive form of aid to the poor, at the same time using this aid as a means of getting political support. Following the precedent of Odría there has been substantial government support for settlement formation in subsequent periods.¹⁵ It should be emphasized that settlements would have unquestionably played an important role in the growth of Lima without government intervention. However, their appearance was unquestionably accelerated and facilitated by the Peruvian government.

In addition to the government role in the initial formation of settlements there has also been massive government support for the development of settlements once they have formed. This aid, combined with the aid programs of a number of private organizations which assist settlements, has been

¹⁴ See my Squatters and Oligarchs: Public Policy and Authoritarian Modernization in Peru (forthcoming, Baltimore, Md.: The Johns Hopkins University Press, 1976), Chapter 3.

¹⁵ Ibid., Chapters 4-7.

so extensive as to lead a recent study to suggest that these communities which were initially formed in part by squatter invasions had in turn been "invaded" by government and private agencies.¹⁶

Government assistance in the development of settlements first appeared roughly in the mid-1950's and has continued to be an important feature of government policy in the period of military rule which began in 1968. There are, of course, many factors other than government policy which have affected patterns of physical development, and there have certainly been instances in which misguided policy may have inhibited, rather than facilitated, the physical development of settlements. Overall, however, it has clearly encouraged it.

There is thus substantial evidence that both the initial appearance of settlements around Lima and their subsequent patterns of development are in part a consequence of public policy. To the extent that migrant attitudes examined in this research differ between settlements and slums, it may therefore be argued that this difference is at least in part a consequence of public policy. We would therefore have a partially political explanation of the social and political consequences of

¹⁶ Alfredo Rodriguez, Gustavo Riofrio, and Eileen Welsh, De Invasores a Invadidos (Lima: Cuadernos de DESCO, 1971).

urbanization. Studies of urbanization, like many other areas of social science research, have often neglected political explanations, and it is obviously important to add this dimension to the analysis of the consequences of urbanization.¹⁷

In addition to noting that the distinctive consequences of living in a settlement may be treated as being, in part, a consequence of public policy, one may also ask whether consequences of settlement life are congruent with the goals of public policy. An extended and surprisingly candid statement of some of the goals which have guided settlement policy is found in The Report on Housing in Peru, prepared by a major Peruvian housing commission.¹⁸

¹⁷The tendency toward a bias against political explanations in political analysis--against treating politics as an independent variable--is interestingly discussed in Glenn D. Paige, "The Rediscovery of Politics," in John D. Montgomery and William J. Siffin (eds.), Approaches to the Study of Development: Politics, Administration, and Change (New York: McGraw-Hill, 1966). Joan Nelson in Migrants, Urban Poverty, and Instability, p. 69, and Wayne Cornelius in "Political Sociology of Cityward Migration," pp. 115-116, have called for more attention to such political explanations in research on urbanization.

¹⁸The English edition of the Report was published by the Comision para la Reforma Agraria y la Vivienda as the Report on Housing in Peru (Mexico: Regional Technical Aids Center, International Cooperation Administration, 1959). In certain ways, the Beltrán Commission Report reflects an approach to settlements which is peculiar to Beltrán. At the same time, the quotations from the Report quoted below reflect themes which have been of broad importance in the development of settlement policy in Lima. For a discussion of both the peculiarities of Beltrán's approach and the extent to which it has been central to settlement policy in Peru, see my Squatters and Oligarchs, Chapters 4-7.

The Beltrán Report discusses in great detail the political consequences of a desirable home environment and self-help housing development, as well as the political goals of settlement policy. It emphasizes the advantages of

a healthy and normal family life within a propitious environment, consisting primarily of the home, the neighborhood, and the local community....Family life under these circumstances not only strengthens the moral fiber of the members... but is conducive to emotional stability,...and minimizes social conflict.... All these factors contribute to the country's security and stability....¹⁹

At another point, the Report emphasizes that the goal of housing policy should be not only

to place a decent dwelling at the disposal of families who cannot afford one but to provide a social education as well.... [T]he educational effort should inculcate in the people the conviction that only through their own efforts to raise their economic level will they be able...to achieve a better life.²⁰

¹⁹ Report on Housing in Peru, p. 33. Emphasis added.

²⁰ Ibid., p. 77. Emphasis added.

This theme of self-help receives central attention in the Report:

[O]ne of the best ways to form an active and responsible citizenry is to organize community work methods in such a way as to promote individual initiative and insure the participation of all members of the community in the analysis and solution of their own problems. Through this process of self-education, conscientious and progressive communities are formed which seek to attend to their own affairs, making use of whatever resources they have at hand and not waiting for everything to be provided by the government or some other authority.²¹

With regard to the importance of small-scale property ownership, a potential feature of settlement life which the Report said should be encouraged by government policy, it was argued that

property...serves the purpose of securing for the man and his family economic autonomy in the face of renewed and growing needs, and independence with respect to the state. Hence, any housing...program has a substantive personal and social significance which should be taken into account. The development of responsible individuals...[is] an essential complement to any program for the increase of ownership.²²

²¹ Ibid., p. 41. Emphasis added.

²² Ibid., p. 206. Emphasis added.

Beltrán, like Odría before him, was interested in settlements as an inexpensive form of aid to the urban poor and as an environment which would help to insulate the poor from radical political appeals and would teach them to take care of themselves. There is clear evidence that these have been central goals of settlement policy during the Velasco period, since 1968, as well.²³

These quotations from the Report suggest a sophisticated and complex perception of the possible consequences of living in a squatter settlement for the urban poor. They represent a useful elaboration of hypotheses presented in social science literature regarding the consequences of settlement life and also suggest an important set of policy goals with which the reality of settlement life can be compared.

²³ See my Squatters and Oligarchs, Chapter 7, and Alfred Stepan, State and Society: Peru in Comparative Perspective (unpublished manuscript, Yale University, 1975).

COMPARISON OF SQUATTER SETTLEMENTS AND SLUMS

PERSONAL INSECURITY

A basic, underlying difference between settlements and slums from which many of the differences in attitudes examined in this study appear to flow involves a fundamental contrast in the security and stability of human life. Lima slums have been described as areas of great distrust and hostility among neighbors, with a much weaker, less supportive associational life than settlements.²⁴ Considerable differences in crime rates have been reported by Caravedo²⁵ and are commonly referred to by social workers and others who have had experience working in both settlements and slums.

According to the CISM Survey of Lima there is an important difference between settlements and slums in terms of a standard measure of "family stability," with only 11% of the homes in settlements, as opposed to 18% in slums, lacking a male head of household. The widely discussed difference in patterns of renting is also confirmed by the

²⁴Patch, "Life in a Callejon: A Study of Urban Disorganization"; Hugo Gutierrez Vidalón, Tugarío: Estudio de Casos (Lima: Plandemet, Oficina de Relaciones Públicas, 1969); Baltazar Caravedo, Humberto Rotondo, and Javier Mariategui, Estudios de Psiquiatría Social en el Peru (Lima: Ediciones del Sol, 1963); and Mangin, "Latin American Squatter Settlements."

²⁵Caravedo, et al., Estudios de Psiquiatría Social en el Peru, pp. 85-93.

Survey, with 4% of the settlement residents, as opposed to 80% of the slum residents, saying that they rent the dwellings in which they live. It is likely that there is some under-reporting of renting in settlements since according to government regulation there is not supposed to be any renting of houses in settlements and sometimes people will not admit they are renting. Nonetheless, it is clear that there is an overwhelming difference between settlements and slums in the proportion of people who rent their homes.

Some of the important consequences of this difference between renting, as opposed to being an owner or de facto owner, of one's home, are reflected in the survey of settlement leaders. Individuals who had been community leaders at the time of the formation of each settlement were asked to give the three principal reasons which led the families who founded the settlement to leave their earlier housing. Most of the families had come from slum housing in the center of Lima. Among the 66 leaders from slum areas for whom appropriate data were available, 58% mention high rent as a reason for leaving. Fifteen percent mention unemployment as a reason, meaning that they had to leave their rented housing for lack of income. Thirty-five percent mention the desire to own their own homes, and 20% mention crowding in previous housing. Twenty-nine percent report

that the group which formed the settlement was made up primarily of people who were being evicted from a particular area of slum housing, generally because it was being eradicated to make way for a highway, a public building, or a new housing development. An additional 6% indicate that the group was made up of people who were being evicted from two or more different areas of slum housing. It thus appears that these families left the slums in order to escape a variety of different kinds of insecurity which are far less prevalent in settlements.

ATTITUDES CONCERNING HOME AND COMMUNITY IMPROVEMENT

One of the presumed consequences of the greater security of settlement life is to foster an orientation toward self-help in developing individual dwellings and community facilities. Three questions in the Survey of Lima related to self-help and problem solving may be used to test the idea that residents of settlements are more oriented toward self-help than residents of slums.

The survey revealed important differences between settlement and slum residents in plans for home improvement. Sixty-two percent of the respondents in settlements, as opposed to 21% in slums (out of a total of 263 respondents), plan some improvement in their homes. The average amount

that settlement residents intend to spend on home improvements is four-and-a-half times as great as in slums. The intention to spend will not always result in spending, but even when it does not, it does represent a commitment to the idea of home improvement and an attitude of optimism regarding the future that is much less common in slums.

It might be objected that these differences are due to the fact that settlement residents have higher income or live in houses that are more in need of improvement. However, the houses in settlements and slums that are represented in the sample do not differ in terms of an overall measure of the extent of their development, and controlling for income does not alter the relationship. Hence, this difference in intended spending suggests that settlements do tend to encourage home improvement more than slums.

Respondents were asked to identify the principal problems of the area where they lived. Though almost all respondents report some problems, there is a larger proportion of respondents in slums, 7.2%, who say there are no problems, as opposed to 1.6% in settlements (Table 1). Though the absolute size of this difference is small, in relative terms the proportion of respondents in slums who say there are no problems is four-and-a-half times as big as in squatter settlements. The explanation of this difference may lie in the fact that the

Table 1

MOST IMPORTANT PROBLEMS OF DISTRICT BY RESIDENCE

| Most Important Problems of District | Residence | |
|--|------------------------|-------------------------------|
| | Squatter Settlement | Slum |
| Responses naming specific problems | 121 (98.4%) | 141 (92.8%) |
| There are no problems | <u>2 (1.6%)</u> | <u>11 (7.2%)</u> |
| Total | 123 (100%) | 152 (100%) ^{N = 275} |

Gamma = .65, $p < .05^a$

^aIn order to present the findings in the simplest possible form the data in the tables are, whenever appropriate, summarized in the text in terms of percentage differences. In addition, the value of the statistic gamma is presented for all tables. Though gamma must be used with care because it tends to assume higher values than certain other standard measures of association, it has an important property which makes it appropriate here: in tables in which the effect or outcome being analyzed occurs in a relatively small percentage of the cases, small percentage differences between subgroups often involve large proportional differences, as is the case in many of the findings presented here. These large proportional differences are more clearly reflected by gamma. Another reason for caution in the use of gamma is that in situations of large numbers of ties for pairs of cases, as in Tables 1 and 2, the measure is calculated on the basis of a substantially reduced number of pairs (only the untied pairs). However, the test of significance used here considers only untied pairs, so that the respectable significance levels provide a further basis for confidence in these findings.

ability to solve problems and the tendency to identify problems go together.²⁶ An environment such as that of slums in which people feel less able to solve problems is also one in which they are less likely to identify them.

The respondents who did identify a problem were asked who should solve it. In terms of the present analysis, the most interesting response was that the residents of the district should solve it themselves: 7.3% of the settlement residents, as opposed to only 1.3% of the slum residents, give this self-help response (Table 2). Here again, though the percentages are both small, settlement residents are nearly six times as likely to believe that they can, or should, solve their own problems.

It also appears that successful problem solving increases satisfaction with the community and creates optimism about the possibility of further improvements. The relationship between perceived rates of community improvements and future improvements is reflected in the survey of settlement leaders. There is a clear association between the amount of improvement that 82 settlement leaders report as having occurred over the preceding five years in their settlements and the amount of improvement they anticipate over the next

²⁶ Albert O. Hirschman, Journeys Toward Progress (Garden City, N.Y.: Doubleday and Company, Inc., 1965), p. 312.

Table 2

WHO SHOULD SOLVE THE PROBLEMS OF THE
DISTRICT BY RESIDENCE

| Who Should Solve Problems | Residence | |
|---------------------------|---------------------|-------------------------------|
| | Squatter Settlement | Slum |
| The residents themselves | 9 (7.3%) | 2 (1.3%) |
| All other responses | 114 (92.7%) | 150 (98.7%) |
| Total | 123 (100%) | 152 (100%) ^{N = 275} |

Gamma = .71, $p < .05$

five years (gamma equals .46, $p < .01$).

A similar relationship is reflected in responses to a question from the second CISM survey. A four-category question concerning the degree to which people like the zone in which they live is positively associated with a measure of the rate of community improvement which was developed by the author (gamma equals .38, $p < .01$). Though these two findings include respondents who are not migrants, they clearly support the argument that is being made here.

SATISFACTION IN LIMA AND GETTING AHEAD IN LIFE

In addition to the attitudes that are directly linked to the opportunities offered by settlements, the Survey of Lima also contains a series of questions regarding satisfaction with life in Lima and attitudes about getting ahead in life. Though many of these are rather "soft" attitude questions, they merit some attention since they involve the type of attitudes that the Beltrán Commission Report (see above) and social science literature on Peruvian squatter settlements have suggested are produced by the opportunity to live in a settlement. For instance, Mangin argues that settlement families "work hard and aspire to get ahead legitimately" and that they are "less alienated from the national state and more involved with each other than are residents of center-city slums."²⁷

It may be hypothesized that the residents of settlements are more satisfied, more oriented toward making an effort to get ahead in life, more oriented toward cooperation, and more positively disposed toward the existing political system than residents of slums. On the basis of the questions in the CISM study, these hypotheses receive moderate confirmation. A question about satisfaction in Lima among migrants revealed

²⁷Mangin, "Latin American Squatter Settlements," pp. 71 and 73-74.

that residents of settlements are more satisfied with life in Lima, as opposed to life in their home province, than are residents of slums (Table 3). Only 15.4% of the settlement

Table 3

SATISFACTION IN LIMA BY RESIDENCE

| Life in Lima Compared with Home Province | Residence | |
|---|------------------------|---------------------------------|
| | Squatter Settlement | Slum |
| Better | 88 (84.6%) | 98 (73.7%) |
| Same | 15 (14.4%) | 30 (22.6%) |
| Worse | <u>1 (1.0%)</u> | <u>5 (3.8%)</u> |
| Total | 104 (100%) | 133 (100.1%) ^{N = 237} |

Gamma = .33 p < .05

residents, as opposed to 26.4% of the slum residents, found life in Lima to be either the same as or worse than life in their home province. In this and other relationships reported below, the introduction of standard statistical controls

did not significantly alter the findings.²⁸

The questions concerning the means considered most appropriate for getting ahead in life may be grouped into two additive indices. One, which is based on questions concerning who should solve the problems of the district where the respondent lived, the best means of getting a good job, and belief about the appropriateness of strikes to settle labor disputes, might be called a measure of problem-solving orientation. Since the responses selected by respondents who fell at one end of the index consistently involved identifying means of solving problems which were more supportive of the established system, the index was interpreted as a measure of a system-supporting, as contrasted with a system-opposing, mode of problem solving. The three questions in the index form a Guttman scale (coefficient of reproducibility

²⁸ Both sex and education were used as controls, since the composition of the settlement and slum populations differs on both variables and both are associated with most of the attitude questions under consideration. For the question concerning satisfaction in Lima, controlling for sex weakens the association slightly, and controlling for education strengthens it slightly. Introducing both controls at the same time would yield such small case bases in the partial tables as to produce meaningless results, but presumably their combined effects would cancel one another out.

equals .98 and coefficient of scalability equals .74).²⁹

Another index was developed which includes two additional questions, the question mentioned earlier concerning the identification of problems in the respondent's district and one concerning the level of education desired for the respondent's children. Those who desired higher levels of education and those who identified community problems are more oriented toward system-supporting solutions on the earlier scale. The average association among all five questions is gamma equals .51, and if the five questions are combined in an additive index, the average of the associations of each question with the index is .95.

These two additional questions involve other aspects of being oriented toward getting ahead within the norms of the system.³⁰ Hence, when combined with the other three

²⁹This index and the others presented below were formed by assigning consecutive numerical values to the response categories for each question and summing the resulting scores for each respondent--giving equal weight to each question. Factor analysis was also tried as a data-reduction technique, but the result was so similar to the additive index that it seemed preferable to use the additive index, which requires many fewer assumptions about the characteristics of the data. For a fuller discussion of the substantive meaning of these questions and of their relation to the experience of settlement residents, see my Squatter Settlement Formation, pp. 132 ff.

³⁰See footnote 26 and related discussion for why this is the case for the ability to identify community problems.

questions, they form what might be called an "aspirant" dimension, following Ray's discussion of a subgroup of settlement residents in Venezuela whom he called the aspirant group who were strongly oriented toward getting ahead in life within the norms of the established political system.³¹ The aspirant index has the advantage of having more categories and of being based on more questions. However, the index of problem-solving orientation also has advantages--specifically the fact that it forms a Guttman Scale--and hence it is also used.

On the basis of these two indices, we find that respondents in settlements are notably less oriented toward system-opposing solutions to problems than respondents in slums (Table 4). Only 12.2% of the settlement residents,

Table 4

PROBLEM-SOLVING ORIENTATION BY RESIDENCE

| Residence | <u>Problem-Solving Orientation</u> | | | | Total |
|---------------------|------------------------------------|-------------|------------|----------|-------------|
| | Supporting | | Opposing | | |
| Squatter Settlement | 8 (6.5%) | 100 (81.3%) | 13 (10.6%) | 2 (1.6%) | 123 (100%) |
| Slum | 2 (1.3%) | 113 (74.3%) | 31 (20.4%) | 6 (3.9%) | 152 (99.9%) |

Gamma = .43 p < .01 N = 275

³¹Ray, The Politics of the Barrios of Venezuela, pp. 51 ff.

as opposed to 24.3% of the slum residents, fell in the two categories at the system-opposing end of the scale. Settlement residents likewise have higher scores on the aspirant index than those in slums (Table 5). Only 6.5% of the settlement residents, as opposed to 15.1% of the slum residents, fell in the bottom three categories on this scale. These findings

Table 5
ASPIRANT INDEX BY RESIDENCE

| Residence | Aspirant Index | | | | | | Total |
|------------|----------------|---------|---------|---------|--------|--------|--------|
| | High | | | | Low | | |
| Squatter | 6 | 85 | 24 | 6 | 2 | 0 | 123 |
| Settlement | (4.9%) | (69.1%) | (19.5%) | (4.9%) | (1.6%) | (0%) | (100%) |
| Slum | 2 | 96 | 31 | 18 | 4 | 1 | 152 |
| | (1.3%) | (63.2%) | (20.4%) | (11.8%) | (2.6%) | (0.7%) | (100%) |

Gamma = .26 p < .05 N = 275

provide a basis for concluding that the experience of living in settlements makes individuals more oriented toward getting ahead within the established system.

POLITICAL PARTICIPATION

It may be hypothesized that political participation, like satisfaction and orientation toward getting ahead within

the system, will be more pronounced in settlements than in slums. The data suggest that residents of settlements are notably more likely to participate in politics than residents of slums. Though in general most respondents are registered to vote and have voted in the previous election, only 14.8% of the settlement residents, as opposed to 25.2% of the slum residents, either failed to register, or failed to vote (Table 6). Similarly, 44.8% of respondents in settlements,

Table 6

ELECTORAL PARTICIPATION BY RESIDENCE

| Electoral Participation | Residence | |
|------------------------------|---------------------|----------------|
| | Squatter Settlement | Slum |
| Registered and voted | 104 (85.2%) | 113 (74.8%) |
| Registered but did not vote | 4 (3.3%) | 9 (6.0%) |
| Neither registered nor voted | 14 (11.5%) | 29 (19.2%) |
| Total | 122 (100%) | 151 (100%) |

N = 273

Gamma = .31 p < .05

as opposed to only 28.0% in slums, had medium to high levels of associational and party participation (Table 7).³²

Table 7

ASSOCIATIONAL AND PARTY PARTICIPATION BY RESIDENCE

| Associational and Party Participation | Residence | |
|---|------------------------|----------------|
| | Squatter Settlement | Slum |
| High | 5 (4.1%) | 4 (2.7%) |
| | 50 (40.7%) | 38 (25.3%) |
| Low | 68 (55.3%) | 108 (72.0%) |
| Total | 123 (100%) | 150 (100%) |

N = 273

Gamma = .33 p < .01

³²In these data, electoral and associational participation appear to be distinct in a way that partially resembles distinctions suggested in Sidney Verba, Norman H. Nie, and Jae-On Kim, The Modes of Democratic Participation: A Cross-National Comparison (Sage Professional Papers in Comparative Politics, No. 01-13 Beverly Hills, Calif. Sage Publications, 1971). Voting and being registered to vote are necessarily highly related (gamma equals 1.0, since the combination of voting without being registered is legally impossible, leaving an empty cell in the table). However, registration and voting were both weakly related to a two category variable which indicated whether or not the respondent participated in any kind of association or club (gamma equals .02 for voting and .14 for being registered), and voting was relatively weakly related to party membership (gamma equals .24). The association between the associational membership variable and party membership is higher (gamma equals .42, p < .01), and these two elements were combined through addition into a

The fact that these two aspects of participation are moderately associated with the problem-solving and aspirant indices (Table 8) suggests that they are part of the syndrome of getting ahead within the system.

Table 8

ATTITUDES BY PARTICIPATION
(Numbers in the cells are gammas)

| Participation | Attitudes | |
|-------------------------|--------------------------------|----------|
| | Problem-Solving Orientation | Aspirant |
| Electoral | .37 | .26 |
| Associational and party | .16 | .36 |

RECENTNESS OF MIGRATION TO LIMA

Research on migration has shown that migrants tend to become increasingly disillusioned the longer they live in cities. This literature has been usefully reviewed by Nelson, who finds that there is consistent evidence of a tendency toward reduced satisfaction and greater radicalism with longer

32 (cont.)
three-category index. The relatively modest association between the two indices (gamma equals .24, $p < .01$) further suggests that the electoral and associational aspects of participation are somewhat distinct.

urban residence.³³ Soares notes that the tendency among unskilled workers in Brazil to vote for the more left-oriented of two parties was substantially higher among migrants who had been in the city longer.³⁴ Briones and Mejía have reported a similar relationship in Lima, finding that leftist political orientations are more common among migrants who have been in the city for some time than among recent arrivals.³⁵

Since settlements provide a more desirable neighborhood environment for low-income migrants than do slums, it may be hypothesized that the association between attitudes and longer residence in Lima will be less pronounced in settlements than in slum areas.³⁶ Apart from the general advantages of

³³Nelson, Migrants, Urban Poverty, and Instability, pp. 26-67.

³⁴Glaucio Soares, "The Politics of Uneven Development: The Case of Brazil," in Seymour M. Lipset and Stein Rokkan (eds.), Party Systems and Voter Alignments: Cross National Perspectives (New York: The Free Press, 1967), p. 489.

³⁵Guillermo Briones and José Mejía Valera, El Obrero Industrial (Lima: Universidad Nacional Mayor de San Marcos, Instituto de Investigaciones Sociológicas, 1964), p. 88.

³⁶It is obvious that this analysis suffers from the same limitation that is present in virtually all research on this question--the limitation of attempting to analyze a process that occurs through time on the basis of cross-sectional data. The results presented here should be interpreted with the same caution that must be taken with all such analyses.

settlements, there are certain special advantages that are relevant here. Longer residence in Lima is associated with aging, and hence with a greater tendency to be ill and unemployed. The fact that settlements provide rent-free housing from which the aged, the sick, and the unemployed do not get evicted when they cannot pay rent is therefore particularly important.

The expected relationship between disillusionment and longer residence in Lima among migrants is not confirmed if one considers the entire sample. Most of the associations for the measures we are considering are close to zero, with a larger proportion of the associations slightly negative (the opposite of the predicted direction) than slightly positive. However, our concern is not with the relationship in the entire sample, but rather with variation in the relationship in different residential areas. Associations between attitudes and recentness of arrival in Lima were therefore calculated within residential areas and then compared between residential areas to see if they differ in the predicted direction. For instance, the association between length of residence in Lima and satisfaction with life in Lima is reflected in a gamma of .10 in settlements and -.18 in slums. There is thus a slight tendency for longer residence to be associated with greater satisfaction in settlements and with less satisfaction in slums. The difference between

these two associations, which is .28, is in the predicted direction. The left-hand column in Table 9 presents this comparison for each of the attitude questions. For the index

Table 9

DIFFERENCES BETWEEN RESIDENTIAL AREAS IN
THE ASSOCIATION BETWEEN ATTITUDES AND
RECENTNESS OF ARRIVAL IN LIMA
(Numbers represent differences between gammas.
Positive gammas are in predicted direction)

| | Settle- ments Compared with Slums | External Settle- ments Compared with Slums | External Settlements Compared with Internal Settlements |
|---|--|--|---|
| Satisfaction | .28 | .30 | -.01 |
| Problem-solving orientation | .03 | .11 | .34 |
| Aspirant index | -.08 | .07 | .37 |
| Electoral participation | -.15 | -.29 | - |
| Associational and party participation | -.10 | -.12 | -.12 |
| Intention to spend on home improvement | .15 | .20 | .16 |

of problem-solving orientation the difference was .03 in the predicted direction, for the aspirant index -.08, in the opposite from predicted direction, and for the question on intention to spend .15 in the predicted direction. The two measures of participation are in the direction opposite from

that predicted. Thus, with the important exception of the satisfaction question, it does not appear that the tendency toward disillusionment is more pronounced in slums than in settlements.

In order to pursue this hypothesis further, it may be useful to return to the distinction between external and internal settlements. Though separating these two subtypes of settlements does not significantly alter the results of bi-variate tabulations of residence by attitudes presented earlier, it may be more relevant in the analysis of the tendency toward disillusionment with longer residence in the city. The comparison of the extent of disillusionment in external settlements and slums is presented in the second column of Table 9. With the exception of the questions on participation, all of the differences show at least a moderate tendency in the predicted direction.³⁷

³⁷ A close inspection of the tabulation of electoral participation by recentness of arrival in Lima for external settlements suggests an explanation for why the difference for electoral participation is so clearly contrary to the hypothesis. The relationship does not involve an even trend toward less participation with less recent arrival in Lima. Rather, the respondents who had been in Lima the longest, and hence are much older, showed a pronounced tendency toward not even being registered to vote. This may involve a simple problem of physical mobility since until very recently there have not been many voting places in the more distant settlements. Older respondents may simply not get around as much and hence have a much harder time maintaining their registration and voting when they are in an external settlement.

A somewhat different pattern appears if we compare the extent of disillusionment in external as opposed to internal settlements. For this comparison there is no difference for the satisfaction question. However, the index of problem-solving orientation differs by .34, the aspirant index by .37. The size of the difference for intention to spend for home improvement remains about the same as that between all settlements and slums, and only associational participation is in the opposite from predicted direction. There were not enough cases for a meaningful comparison of electoral participation.

It is interesting that the largest differences in Table 9 are those between external and internal settlements for the problem-solving orientation and aspirant indices. This may be due to the fact that, in a sense, migrants in internal settlements experience a double process of disillusionment--disillusionment with longer residence in Lima and disillusionment that occurs as the initial promise of their communities is eroded as the communities begin to stagnate in their development with the passage of time. It may be the case that if settlements do stagnate, the subsequent disillusionment will be more intense than it would be among individuals who had never experienced the advantages of a settlement.

Overall, the findings lend moderate support to the hypothesis that settlements offer an environment that helps reduce the extent of disillusionment with longer residence in the city. In addition,

for certain attitudes this relationship may be sharply reversed in internal settlements that do not follow a pattern of consistent development.

A TEST OF THE IMPORTANCE OF THE ADVANTAGES
OF SQUATTER SETTLEMENTS

In order to increase the certainty that the differences in migrant orientations between settlements and slums really are the result of the advantages of settlements, the advantages of settlements may be introduced as controls in the association between residence and orientations. If controlling for them reduces the strength of the associations, this will provide more direct evidence that the advantages of settlements are a source of the differences in migrant orientations.³⁸ Because of the form of the data and the number of cases, it is unfortunately not possible to subject the data to full-scale multivariate analysis. However, these tests with control variables will provide at least a first approximation of some of the underlying relationships which are present.

This procedure will be applied to the question concerning satisfaction in Lima, the problem-solving and aspirant indices, and the measures of electoral and associational participation. Two obvious control variables are whether or not the respondents rent their dwellings and their intentions about spending for home improvements. These intentions are of course not themselves

³⁸We are following here the statistical procedure called "interpretation." See Paul F. Lazarsfeld, "Interpretation of Statistical Relations as a Research Operation," in Paul F. Lazarsfeld and Morris Rosenberg (eds.), The Language of Social Research (New York: The Free Press, 1955), p. 124.

an advantage of settlements, but they reflect so closely the opportunities for home improvement offered by settlements that they may be used in the analysis as a substitute measure for these opportunities. Housing density was also considered as a control, but it showed virtually no association with the dependent variables, and was therefore not used.

Beginning with the association between satisfaction in Lima and residence, we find that controlling for renting produces a remarkable reduction in the association, from .33 to -.01 (Table 10). Literally interpreted, this means that all of the

Table 10

ATTITUDES AND PARTICIPATION BY RESIDENCE
(SETTLEMENTS CONTRASTED WITH SLUMS)
CONTROLLING FOR RENTING AND
INTENTION TO SPEND

| Attitudes and Participation | Original Association | Controls | |
|-----------------------------|----------------------|----------|--------------------|
| | | Renting | Intention to Spend |
| Satisfaction | .33 | -.01 | .18 |
| Problem-solving orientation | .43 | .14 | .46 |
| Aspirant | .26 | .11 | .20 |
| Associational participation | .33 | .29 | .25 |
| Electoral participation | .31 | - | .25 |

original difference in satisfaction can be explained by the fact that there is a much larger proportion of renters in slums than in settlements. While it is unlikely that the difference in the proportion renting is the only cause of the difference in satisfaction, it is clear that it is an important cause. Controlling for the intention to spend for home improvement reduces the association between satisfaction and residence to .18, suggesting that the intention to spend for home improvement is an important intervening variable, though less important than renting.

Turning to the association between problem-solving orientation and residence, we find that the original association drops from .43 to .14 if we control for renting. It thus appears that one of the aspects of settlement life that contributes most to the development of system-supporting attitudes toward problem solving is being at least the de facto owner of one's house. Controlling for intended spending on home improvement, on the other hand, leaves the association virtually unchanged. Apparently this intervening attitude, which is much more common in settlements, is not related to the development of the system-supporting orientation. Similar results appear for the aspirant index. Controlling for renting reduces the association from .26 to .11, whereas controlling for intended spending reduces it only to .20. The findings for all three variables--satisfaction, problem-solving orientation, and the aspirant

index--are thus quite similar.

By contrast, intended spending is a slightly more important control for associational participation. It reduced the original association from .33 to .25, whereas renting only reduced it to .29. In the case of electoral participation the result of controlling for renting is not reported because the combination of uneven marginals on the electoral participation question and the renting question rendered it virtually meaningless. The control for intended spending reduced the association between residence and electoral participation by only .06, from .31 to .25. It thus appears that the absence of rent paying is the most important advantage of settlements in terms of its impact on attitudes and participation. The intention to spend on home improvement is considerably less important.

It is not possible to introduce rates of community development as a control in the relation between attitudes and residence in the same way because there are no improvement data on slums. However, we may look at the impact of rates of improvement on attitudes among settlements. In the earlier section on attitudes directly linked to the opportunities offered by settlements, it was reported that respondents in communities with higher rates of improvement tended to express more satisfaction with the community (γ equals .38, $p < .01$). Satisfaction with the community is also higher among respondents

in external than internal settlements (gamma equals .45, $p < .01$). If we introduce rate of improvement as a control, this association between satisfaction and residence drops from .45 to .30. Hence rate of community improvement appears also to be an intervening variable that helps to explain the association between residence and attitudes.

We have thus found that the advantage of rent-free housing, and also to a lesser degree the rate of community improvement and the anticipation of future spending on home improvement, are qualities of settlement life that contribute to the differences in attitudes that have been observed between settlements and slums.

CONCLUSION

This research has examined differences between migrant residents of squatter settlements and slums in Lima with regard to attitudes concerning home and community improvement, satisfaction in Lima and attitudes about getting ahead in life, certain aspects of political participation, and the tendency to become disillusioned after longer residence in Lima. In addition, an attempt was made to specify which of the advantages of settlements are of greatest significance for individual orientations. The findings consistently provide moderate support for the hypothesis that migrants in settlements are somewhat more satisfied and more oriented toward getting ahead within the existing system. It appears that characteristics of settlements such as rent-free housing and the opportunity to invest one's own resources in improvement of housing are to some degree responsible for these differences.

However, there is also some evidence that these effects of living in a settlement can be eroded if settlements fail to fulfill their promise as self-improving communities. Though the comparison of external and internal settlements presented at the end of the analysis provides only a very preliminary basis for reaching this conclusion, the possibility must be recognized that many of the presumed consequences of living in settlements may be sharply and dramatically reversed.

The political and policy implications of these findings thus point in two directions. On the one hand, there is a clear correspondence between the goal of government settlement policy of promoting self-help and a system-supporting approach to problem solving which was spelled out in the Beltrán Commission Report quoted above and the findings which emerged from the present analysis of survey data. Since these have been the goals during other periods of settlement policy as well, it may be argued that the government policy of accelerating the formation and facilitating the physical development of settlements is indeed achieving its goals.

At the same time, the findings regarding disillusionment and the contrast between external and internal settlements suggest that once the process of settlement formation has been set in motion, the government may have to become more and more involved in supporting further improvements in settlement life in order to avoid a dramatic reversal in the attitudes and orientations fostered by the settlements. This involves a process which Albert O. Hirschman has labeled a "sorcerer's apprentice dynamic" in which the initial offering of moderate benefits stimulates an ever greater need to supply further benefits.³⁹ The contradictions of this "dynamic" are clearly

³⁹See Albert O. Hirschman, "Policy-Making and Policy Analysis in Latin America--A Return Journey" (paper presented at a Conference on The Study of Public Policy and Its Impacts, Buenos Aires, Argentina, 1974), p. 11.

one of the problems faced by contemporary policy makers in Peru as they attempt to deal with the opportunities and challenges posed by the squatter settlements of Lima.

APPENDIX

METHOD AND SOURCES OF DATA

COMPARING SETTLEMENTS AND SLUMS

In assessing the consequences of the existence of settlements for the experience of migrants, one would ideally like to compare orientations and attitudes of migrants in today's Lima with those in a hypothetical Lima in which settlement formation did not occur.¹ Realistically, however, we must be satisfied with the comparison between migrants in settlements and those in the slums of present-day Lima. This is an appropriate comparison because the slum housing in the center of Lima is the main alternative housing available to the poor. Hence, the comparison with slums is a comparison with the kind of environment in which settlement residents would be living if settlements had not formed. It is of course possible that in the absence of settlement formation, the housing shortage in Lima would have been so severe that some of the present settlement residents who are migrants would not

¹In the field of econometric history there is an important tradition of research involving the reconstruction of counterfactual situations as a means of testing the importance of a causal factor (see Robert W. Fogel, Railroads and American Economic Growth: Essays in Econometric History (Baltimore, Md.: Johns Hopkins Press, 1964). Unfortunately, the amount of data and the sophistication of theory required for such an analysis is far beyond that presently available for Lima.

have come to Lima, but the focus here will be on the more immediate alternative of living in a slum.

An important limitation of using this comparison of settlements and slums as a means of assessing the impact of settlement formation should be noted. An alternative interpretation of differences between these groups could be that individuals who have a certain set of attitudes are more likely to move to a settlement, and hence that the move to the settlement is the consequence, rather than the cause, of the difference in attitudes. In their discussion of research based on static-group comparison Campbell and Stanley have described this as the problem of selection.² The best way to deal with this problem is of course to have data on the same respondents before and after the move to a settlement, but this is not available. However, certain findings that will be presented, such as the effect of introducing the advantages of settlements as control variable in the relationship between attitudes and residence, are harder to interpret if we assume that the difference in attitudes is a result, rather than a cause, of the move to a settlement. This fact provides a basis for somewhat greater confidence that appropriate inferences are being made on the basis of available data.

²See Donald T. Campbell and Julian C. Stanley, Experimental and Quasi-Experimental Designs for Research (Chicago: Rand McNally and Co., 1963), p. 12.

LIMA SETTLEMENTS AS A SPECIAL CASE

In assessing the comparative significance of the findings reported here, it is appropriate to keep in mind the fact discussed above that the settlements that have appeared in Lima are not typical of those found in most third-world cities. This lack of comparability does not pose a serious problem if one is concerned only with explaining the consequences of urbanization in Lima. However, if the purpose is to gain more general insights about urbanization, this may reduce the relevance of the present findings to an understanding of urbanization in countries other than Peru.

It is because of this limitation that the concluding portion of the analysis attempts to go beyond the comparison of settlements and slums to a specification of the particular characteristics of settlements that are of greatest significance for individual attitudes. This is parallel to the practice recommended by Przeworski and Teune of replacing proper names of social systems with relevant variables.³ The settlement-slum distinction is replaced with variables that refer to the specific advantages of residential areas that make the settlement-slum distinction an interesting one to study. Needless

³ Adam Przeworski and Henry Teune, The Logic of Comparative Social Inquiry (New York: Wiley-Interscience, 1970), pp. 26-30.

to say, findings in which the advantages of settlements are the explanatory variables are far more generalizable beyond Lima than findings in which the settlement-slum distinction is the explanatory variable.

SOURCES OF DATA

The principal source of data used in this analysis is the Survey of Lima carried out in 1967 by the Centro de Investigaciones Sociales por Muestreo (CISM) of the Peruvian Ministry of Labor. The questions from the Survey of Lima which are analyzed here were asked of 123 heads of households in settlements and 152 in slums.⁴ In the present analysis, migrants were defined as respondents who had been born outside the Lima metropolitan area and who were at least six years old when they moved to Lima. Alternative definitions, such as using a cut-off point of 16 years of age produced very similar findings. The original code did not indicate which respondents were settlement residents, and this was done by the author with the aid of detailed sampling maps. The code did identify, however, certain other types of neighborhoods, including corralones

⁴In all of the households sampled, additional questions were asked of all individuals of 12 years of age or more. However, these questions were less relevant for present purposes and hence the larger sample is not examined in this analysis.

and callajones, two basic kinds of slum housing.⁵ The respondents in these areas were treated as the slum respondents in the analysis.

Though this survey provides a smaller sample of settlement and slum residents than one might like, an important advantage of these data should be noted. The survey is based on a carefully drawn, multi-stage cluster sample of the entire population of Lima. Every household in settlements and slums had initially an equal chance of being sampled. In many other studies of attitudes in settlements, by contrast, selected settlements have commonly been sampled intensively in a way that provides an excellent basis for making inferences about the populations of these settlements but makes it more difficult to generalize from the sample to the characteristics of the city's settlement population.⁶ Since the purpose of this research is to assess the overall consequences of settlement formation for settlement

⁵These two types of housing are discussed by Richard Patch, "Life in a Callejon: A Study of Urban Disorganization," American Universities Field Staff Report, West Coast South America Series 8:6 (June 1961), and John F. C. Turner, "Lima's Barriadas and Corralones: Suburbs vs. Slums," Ekistics (Greece) 19:112 (1965), pp. 152-156.

⁶For preliminary reports on two outstanding studies which have adopted this approach, see Wayne A. Cornelius, "Urbanization and Political Demand Making: Political Participation Among the Migrant Poor in Latin American Cities," American Political Science Review, 68:3 (September 1974), pp. 1125-1146, and Henry A. Dietz, "Becoming a Poblador: Political Adjustment to the Urban Environment in Lima, Peru" (Ph.D. dissertation, Department of Political Science, Stanford University, 1974).

residents, it is important to be able to make this generalization. Another ground for confidence in the findings is the fact that the same analysis based on a larger sample that included nonmigrants produced closely similar results for virtually every table.⁷

In addition to the Survey of Lima a limited amount of additional data is used from another CISM survey, the Survey of Squatter Settlements (Estudio de Barrios Marginales) carried out in 1967, and from a survey of community leaders in settlements carried out by the author. This second CISM study employed the same sampling frame and sampling procedures as the Survey of Lima, but involved only households in squatter settlements. The survey of settlement leaders was carried out primarily as a means of collecting data on the history of the formation of a number of settlements from individuals who had close familiarity with the early history of each settlement. It was therefore based on a nonrandom sample in which community leaders were selected who would have the greatest likelihood of being familiar with this early period.

⁷See my "Squatter Settlement Formation and the Politics of Co-optation in Peru" (Ph. D. Dissertation, Department of Political Science, University of Chicago, 1971), Chapters 5 and 6.

BIBLIOGRAPHY

- Abrams, Charles. Man's Struggle for Shelter in an Urbanizing World. Cambridge: M.I.T. Press, 1964.
- Briones, Guillermo, and José Mejía Valera. El Obrero Industrial. Lima: Universidad Nacional Mayor de San Marcos, Instituto de Investigaciones Sociológicas, 1964.
- Caravedo, Baltazar, Humberto Rotondo, and Javier Mariategui. Estudios de Psiquiatría Social en el Perú. Lima: Ediciones del Sol, 1963.
- Cleaves, Peter S. Bureaucratic Politics and Administration in Chile. Berkeley and Los Angeles: University of California Press, 1974.
- Collier, David. "Squatter Settlement Formation and the Politics of Co-optation in Peru." Ph.D. Dissertation, Department of Political Science, University of Chicago, 1971.
- _____. Squatters and Oligarchs: Public Policy and Authoritarian Modernization in Peru. Baltimore, Md.: The Johns Hopkins University Press, forthcoming.
- Comisión para la Reforma Agraria y la Vivienda. Report on Housing in Peru. Mexico City, Regional Technical Aids Center, International Cooperation Administration, 1959.
- Cornelius, Wayne A., Jr. "Urbanization as an Agent in Latin American Political Instability: The Case of Mexico." American Political Science Review, 63:3 (September 1969), pp. 833-857.
- _____. "The Political Sociology of Cityward Migration in Latin America: Toward Empirical Theory." pp. 95-147, in Francine F. Rabinovitz and Felicity M. Trueblood (eds.). Latin American Urban Research, Vol. I. Beverly Hills, Calif.: Sage Publications, 1971.
- _____. "Urbanization and Political Demand Making: Political Participation Among the Migrant Poor in Latin American Cities." American Political Science Review, 68:3 (September 1974), pp. 1125-1146.

- _____ and Henry A. Dietz. "Urbanization, Demand-Making, and Political System Overload: Political Participation among the Urban Poor in Latin American Cities." Paper presented at the 1973 annual meeting of the American Political Science Association, New Orleans.
- Delgado, Carlos. Tres planteamientos en torno a problemas de urbanizacion acelerada en areas metropolitanas: El caso de Lima. Lima: Cuadernos Plandemet, Serie Anaranjada, Asuntos Sociales, No. 1, 1968.
- Dietz, Henry A. "Urban Squatter Settlements in Peru: A Case History and Analysis." Journal of Inter-American Studies, 11:3 (July 1969), pp. 353-370.
- _____. "Becoming a Poblador: Political Adjustment to the Urban Environment in Lima, Peru." Ph.D. Dissertation, Department of Political Science, Stanford University, 1974.
- Fogel, Robert W. Railroads and American Economic Growth: Essays in Econometric History. Baltimore, Md.: The Johns Hopkins University Press, 1964.
- Gutierrez Vidalon, Hugo. Tugurio: Estudio de Casos. Lima: Plandemet Oficina de Relaciones Publicas, 1969.
- Haar, Charles M. "Latin America's Troubled Cities." Foreign Affairs, 41:3 (April 1963), pp. 536-549.
- Hauser, Philip M. "Observations on the Urban-Folk and Urban-Rural Dichotomies as Forms of Western Ethnocentrism." pp. 503-517 in Philip M. Hauser and Leo F. Schnore (eds.). The Study of Urbanization. New York: John Wiley and Sons, 1967.
- Hirschman, Albert O. Journeys Toward Progress. Garden City, N.Y.: Doubleday and Co., Inc., 1965.
- Jacobs, Jane. The Death and Life of Great American Cities. New York: Vintage Books, 1961.
- Lazarsfeld, Paul F. "Interpretation of Statistical Relations as a Research Operation." pp.115-124 in The Language of Social Research. Paul F. Lazarsfeld and Morris Rosenberg. New York: The Free Press, 1955.
- Lewis, Oscar. "Urbanization without Breakdown: A Case Study." Scientific Monthly, 75:1 (July 1952).

- _____. "Further Observations on the Folk-Urban Continuum and Urbanization with Special Reference to Mexico City." pp. 491-503 in Philip M. Hauser and Leo F. Schnore (eds.). The Study of Urbanization. New York: John Wiley and Sons, 1967.
- Linz, Juan J. "Ecological Analysis and Survey Research." pp. 91-132 in Mattei Dogan and Stein Rokkan (eds.). Quantitative Ecological Analysis in the Social Sciences. Cambridge, Mass.: M.I.T. Press, 1969.
- Mangin, William. "Latin American Squatter Settlements: A Problem and a Solution." Latin American Research Review, 2:3 (Summer 1967), pp. 65-98.
- _____. "Squatter Settlements." Scientific American, 217:4 (October 1967), pp. 21-29.
- Morse, Richard M. "Recent Research on Latin American Urbanization: A Selective Survey with Commentary." Latin American Research Review, 1:1 (Spring 1966), pp. 35-74.
- Nelson, Joan M. Migrants, Urban Poverty, and Instability in Developing Nations. Cambridge, Mass.: Center for International Affairs, Harvard University, Occasional Papers in International Affairs No. 22, 1969.
- _____. "Urban Growth and Politics in Developing Nations: Prospects for the 1970's." Paper presented at the Conference on International Economic Development, Columbia University, 1970.
- Paige, Glenn D. "The Rediscovery of Politics." pp. 49-58 in John D. Montgomery and William J. Siffin (eds.). Approaches to Development: Politics, Administration, and Change. New York: McGraw-Hill, 1966.
- Patch, Richard. "Life in a Callejon: A Study of Urban Disorganization." American Universities Field Staff Reports, West Coast South America Series, 8:6 (June 1961).
- Powelson, J. P., and Anatole A. Solow. "Urban and Rural Development in Latin America." Annals of the American Academy of Political and Social Science, 360 (1965), pp. 48-62.
- Przeworski, Adam, and Henry Teune. The Logic of Comparative Social Inquiry. New York: John Wiley and Sons, 1970.

- Ray, Talton F. The Politics of the Barrios of Venezuela. Berkeley: University of California Press, 1969.
- Redfield, Robert. "The Folk Society." American Journal of Sociology, 52 (January 1947), pp. 293-308.
- Rodriguez, Alfredo, Gustavo Riofrio, and Eileen Welsh. De invasores a invadidos. Lima: Cuadernos de DESCO, 1971.
- Rotondo, Humberto. "Psychological and Mental Health Problems of Urbanization Based on Case Studies in Peru." pp. 249-257 in Philip M. Hauser (ed.). Urbanization in Latin America (New York: Columbia University Press, International Documents Service, 1961).
- Soares, Glaucio. "The Politics of Uneven Development: The Case of Brazil." In Seymour M. Lipset and Stein Rokkan (eds.). Party Systems and Voter Alignments: Cross National Perspectives. New York: The Free Press, 1967.
- Stokes, Charles. "A Theory of Slums." Land Economics, 38:3 (August 1962), pp. 187-197.
- Turner, John F. C. "Lima's Barriadas and Corralones: Suburbs vs. Slums." Ekistics 19:112 (1965), pp. 152-156.
- _____. "Barriers and Channels for Housing Development in Modernizing Countries." Journal of the American Institute of Planners 32:3 (May 1967), pp. 167-181.
- _____. "Uncontrolled Urban Settlement: Problems and Policies." International Social Development Review, 1 (1968), pp. 107-130.
- Verba, Sidney, Norman H. Hie, and Jae-On Kim. The Modes of Democratic Participation: A Cross-National Comparison. Sage Professional Papers in Comparative Politics No. 01-13. Beverly Hills, Calif.: Sage Publications, 1971.
- Whyte, William Foote. Street Corner Society. Chicago: University of Chicago Press, 1943.
- Wirth, Louis. "Urbanism as a Way of Life," American Journal of Sociology. 44 (July 1938), pp. 1-24.