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Modernization and Change in Latin American Towns: Geographical Research from the 1970s

This paper is a review of academic research by geographers on urban spatial organization during the period from 1970 to 1980, with special emphasis on the role of development in shaping Latin American urban geography.

At the first meeting of the Conference of Latin Americanist Geographers it was noted that the definition of development is highly subjective (McNulty, 1971, 343). Thus, in order to establish a common ground for the purpose of this paper, development is defined as "the general social, economic and political transformations which are affecting Latin America and many other parts of the world" (Gilbert, 1974, 11-12). Modernization and change are the tangible products of these transformations.

In a review article Parsons noted the comparative lack of attention paid by geographers to the cities of Latin America (Parsons, 1973, 40). If the meeting for which this paper is written is representative of the directions of Latin America geographical research, the absence of a session devoted exclusively to the work of urban geographers is supportive of Parsons' position. That geographers have been relatively slow to discover the cities and towns of what has been the most rapidly urbanizing region of the world seems paradoxical. The explanation for this bias in the research of North American geographers probably lies in two principal factors: 1) there is a strong tendency for geographers working in Latin America to frame their research in the context of human impacts on rural landscapes, causing them to overlook questions associated with urban centers, and 2) an historical stereotype of Latin Americans as primarily rural folk has led geographers as well as other social scientists to ignore the past and contemporary importance of towns in the region. A notable exception among geographers to the latter tendency is the work of Stanislawski in Michoacán (Stanislawski, 1950).

There are indications that these patterns are beginning to change and that geographers, especially those who have come into the field in the past decade, are devoting more effort to examination of the Latin American urban scene. For example, a perusal of a listing of dissertations on Latin America indicates nearly as many by geographers on urban themes in the 1970-1976 period (18) as in the

previous two decades (19) (Deal, n.d.).

Ten years ago, the editors of *Geographic Research on Latin America, Benchmark 1970* called for research which would "apply and modify existing models in Latin American contexts," and which would "derive new theory and models from the Latin American experience" (Lentnek, Carmin, and Martinson, 1971, iii). Several of the geographers who have investigated questions on urban spatial structure in the last ten years heeded this advice, and there is a decided theoretical orientation to some of the research reported here (Belisle and Hoy, 1980; Clarke, 1975; Collins, 1974; Briggs and Conway, 1975; Morris and Pyle, 1971; Pyle, 1970; Sargent, 1974). However, much of the work by Latin Americanist geographers still falls into the category of the descriptive and often ideographic, offering generalizations only in broad contexts and failing to relate findings to any specific body of theory on urban spatial structure or to develop models or theoretical constructs from the research they report (Caviedes, 1975; Crowley, 1972; Droubay, 1972; Elbow, 1973; Eyre, 1979; Hudman, 1973; Schill, 1973; and Stadel, 1976). Much of this work is implicitly policy oriented, pointing out problems and occasionally offering suggestions for their solution. Unfortunately, there does not seem to be a satisfactory way available yet to bridge the gap between researchers making unsolicited recommendations and the policy makers whose job it is to find ways of implementing them.

In order to simplify the presentation of research that covers a wide range of topics the works under review have been classified into five groups, each representing a general area of common interest. These categories are: 1) theoretical studies of urban spatial development, 2) descriptive studies of urban development, 3) commercial and market orientation, 4) patterns of residential organization, and 5) changing functions of central plazas. Each of these categories is discussed separately below.

Theoretical Studies of Urban Spatial Development

The 1970s produced two monographs on the evolution of spatial structure of cities in Latin America.¹ Perhaps the best recognized example of theoretically oriented research on the development of urban spatial structure treats Buenos Aires (Sargent, 1974). Sargent developed a theory to account for the evolution of the physical arrangement of Buenos Aires. According to this theory, the city developed within a series of nested spatial frameworks. The transportation frame, which forms the outer limits of the city's spatial development, was shaped by the

development of transportation routes, especially rail lines, in Buenos Aires. Within the transportation frame lies the speculative realm, in which land in the transportation corridors was selectively subdivided for development. The final element in the nested hierarchy is the settlement frame, made up of discrete residential areas which derive their spatial character as a result of individual decisions on residential location. Sargent indicated that his theory is suitable for cities like Buenos Aires, which grew rapidly at the time when urban rail systems were coming into being, and compares the growth and spatial arrangement of the Argentine city with Chicago. Unfortunately, as the author points out, the applicability of his theory to other Latin American cities, many of which are only now entering a stage of development comparable with Buenos Aires at the turn of the century, cannot be tested until more geographical research is available.

The other book length urban study by a geographer published in the 1970s focuses on Kingston, Jamaica (Clarke, 1975). Much more concerned with social patterns than Sargent, Clarke relates the spatial differentiation of Kingston to the models of Burgess, Hoyt, and Sjoberg. Clark concludes that Kingston corresponds in certain ways with each as it applies to specific stages in the development of the city. He also notes that the changes in urban social and physical structure that relate to the developmental stages of the city have occurred in response to the pressures of social and economic change, including transportation, introduced from Europe. Less theoretically rigorous than Sargent's study of Buenos Aires, Clarke's work nevertheless provides a valuable source of information on the development of a city smaller than Buenos Aires and one that underwent much of its growth in a more overtly colonial context than Argentina.

Two other theoretical studies, both of article length, were also produced by geographers in the 1970s (Briggs and Conway, 1975; Morse and Pyle, 1971). Both studies utilize factor analysis to reveal the social ecological structure of a city, Port of Spain, Trinidad in the former case and Rio de Janeiro in the latter. Briggs and Conway use their analysis of Port of Spain as a case study to support a general theory of the development of urban ecological structure. While the empirical analysis fails to support completely the hypotheses advanced regarding the development of urban ecology, the authors attribute this to the great cultural variation of the city's population and suggest that this problem could be solved by adding an additional category, plural city, to their typology.

Morse and Pyle, using data from the 1960 census, apply factor analysis to Rio de Janeiro in an effort to map the social geography of the city. The factor analysis

reveals that Rio's *favelas* are not integrated into the general structure of the city, existing instead as entities superimposed over the urban social structure. The authors relate the social structure of Rio to the Sjoberg model, concluding that the city tends to fit the pre-industrial model, although there are indications of a shift toward a more industrial stage.

Descriptive Studies of Urban Development

Several geographers have turned their attention to describing the impact of development on urban centers, especially in Central America (Caviedes, 1975; Crowley, 1972; Droubay, 1972; Elbow, 1973; Stadel, 1976). Each of these studies focuses on a single city, Chimbote, Peru; San Pedro Sula, Honduras; and the Guatemalan cities of Escuintla, Amatitlán, and the capital, Guatemala City. They share a common applied interest, paying particular attention to inadequacies in planning, both physical and social. The case of Chimbote is especially interesting since it was suffering an economic decline at the time of Caviedes' research because of the collapse of the Peruvian fishing industry. Despite the precarious situation of the extractive industries upon which Chimbote's economy was based, the city has an urban plan that projected a quadrupling of population by 1990 but paid no attention to the question of employment for the additional population nor for financing of the ambitious physical development plan (Caviedes, 1975) .

The problems of the Central American cities, which were undergoing rapid industrial expansion as a result of the import substitution policies of the Central American Common Market, are credited more to a lack of planning than to unrealistic projections of physical development. Nowhere is development controlled and there is a lack of conscious planning except in Guatemala City, where the city government has the legal right to enforce an urban plan. The ability of these cities to function for the present in the absence of controlled development is unquestioned, but lack of foresight will create serious problems in the future.

These studies make note of problems and, in some cases, suggest remedies. However, there seems to be little input from these academic publications to the policy makers in Latin America. Until some way is found to actually influence those individuals, research with an applied focus will not result in meaningful improvements.

Commercial and Market Orientation

Despite a considerable interest among geographers in periodic markets in rural areas, relatively little attention has been paid to urban markets, which were studied in only two cities in Latin America, Quito and Mexico City (Bromley, 1974; Pyle, 1970). Bromley found that the location and periodicity of Quito's markets fit the same general pattern as would be expected with rural markets. He also noted the persistence of periodic vendors selling in competition with the operators of permanent stalls, despite the efforts of municipal officials to limit their activities. In a separate paper, Bromley noted a similar effort by municipal officials to restrict the activities of street vendors in Cali, Colombia (Bromley, 1978). The organization of markets in Quito is explained by a combination of policies of municipal government, socio-economic characteristics of the city's population, and the nature of the urban development process.

Pyle's study of the location of Mexico City markets is an attempt to relate distribution by size to central place theory. She finds that the actual distribution does not fit that predicted by theory and concludes, much like Bromley, that the size distribution of markets reflects a combination of economic, social, historical, and political factors.

Three other studies examine the commercial structure of Latin American towns (Belisle and Hoy, 1980; Birbeck, 1978; and Hudman, 1973). Belisle and Hoy apply already developed models from advanced economies to the Ecuadorian town of Sangolquí in an attempt to explain its commercial structure. They find general correspondence with predicted patterns but, unable to generalize from a single Latin American example, call for additional research to establish a general model of urban commercial development for Latin America.

Birbeck examines the relationship of transportation modes in Cali, Colombia to market locations and neighborhood character. He finds that the municipal government controls the activities of informal modes of transportation (three-wheeled light trucks, wagons, and hand carts), limiting their access to the central city and restricting them to poor neighborhoods, in which they comprise the primary means of moving goods. In noting the role of political leaders in controlling this informal transportation, Birbeck draws attention again to the ability of government to shape the spatial patterns of urbanization.

Hudman, in a case study of Guatemala City, points out the emergence of shopping centers, within, peripheral to, and away from the CBD. He finds

Guatemala City to be a typical example of the Latin American retail model.

Patterns of Residential Organization

Research on housing patterns is an important aspect of urban social geography that is just beginning to be applied to Latin American cities (Clarke, 1971; Collins, 1974; Eyre, 1972; Eyre, 1979; and Schill, 1973). Clarke and Collins, working in San Fernando, Trinidad and Mexico City, respectively, determined that residential patterns reflect economic factors more than other conditions (ethnic affiliation, amenities, or public services). Collins notes that lower-class residential patterns in Mexico City are influenced by availability of low-cost land; that is, poor land that is left vacant, land of questionable title, or land controlled by politically influential speculators. Clarke finds for San Fernando that residential patterns show uniformity of economic status but are mixed ethnically. Patterns of social interaction within the mixed neighborhoods do, however, reflect ethnic affiliation.

Eyre focuses his attention on squatter settlements in the 1972 article, reminding the reader that such areas, contrary to common misconceptions, are not slums and, rather than indicating urban decline, may reflect urban growth and vitality. He continues to note the stability and upward mobility of the residents of the Montego Bay shantytowns, concluding with a caution against policies calling for their wholesale removal. In a later article, the same author identifies a new type of urban occupance, peri-urban *melange* settlements (Eyre, 1979). Unlike shantytowns, these settlements tend to lack integrated community structure, are unstable, and represent an undesirable trend in urban development. Created by the indiscriminate mixing of a variety of residential types (Eyre notes nine), peri-urban *melange* settlements transfer the problems of the declining central city slums to the formerly rural urban fringes where provision of services and control of social problems is perhaps even more difficult. Eyre suggests that existing settlements may be salvaged by efforts to break down differences among the various factions, creating a sense of community.

Schill, in a dissertation examining the development of middle-class housing in San Salvador, traces United States influences in residential mortgage policies, house styles, and residential expansion. He finds that tract housing financed by a United States style savings and loan system takes on a decidedly non-latin aspect with setbacks from the street, lawns, carports, and street oriented windows. Residential location preferences are for projects situated in areas identified with the upper middle class.

Function of Central Plazas

Three researchers addressed themselves to the changing nature of central plazas (Elbow, 1976; Gade, 1976; and Robertson, 1978). Elbow, writing on Guatemalan examples, notes a trend from market functions to formal space for the plazas of that country and relates this transition to the dual pressure of cultural change (*ladinoization*) and the demands of government planners that permanent indoor market facilities be established. Gade generalizes for all of Latin America, developing a functional typology of plazas of increasing complexity and sophistication as cities grow. Gade cites the value plazas as traditional centers for human activity and notes the threat to their survival that derives from the invasion of the city center by automobile traffic. Robertson examines the plaza of Guadalajara as a social space, concluding that the abandonment of the plaza by the middle-class and its new identification with working class population may lead to its eventual decline as a focal point for the social activities of the city.

Conclusion

The conventional way to conclude a review of research is with suggestions for future investigations. Space limitations preclude a detailed examination of prospects, but I will address some of the more striking needs.

Geographers have made some headway in applying existing theory on urban spatial organization in Latin American cities. However, aside from the work of Sargent, no theories have been developed specifically from Latin American cases. Theoretically oriented studies from highland cities just emerging from the pre-industrial stage would be especially welcome.

Another area of potentially fruitful urban geographical research is the role of government in shaping the spatial organization of cities. Latin America has probably been the recipient of more attention from international government and quasi-government agencies than any other part of the world and would be an excellent site for testing hypotheses about the impact of the policies of these agencies as well as national and local government agencies.

A final area of interest that might be profitably attacked by urban geographers in Latin America is the distribution and mix of urban functions. To what extent does development alter pre-existing patterns of commercial, industrial, and service

functions, and how is the mix changed? Is it possible to develop a theory that will adequately account for changes in the proportion and distribution of urban functions in Latin American cities at varying stages of development?

If Latin Americanist geographers address themselves to these and other significant issues related to the cities of the region, they should be the beneficiaries of increased recognition from outside of the discipline as well as within it. The research of the past decade is a promising beginning.

Note

1. For the purposes of this paper the Caribbean is considered to be part of Latin America.

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