

Metropolitan dynamics and socio-spatial segregation in the emerging metropolitan areas in São Paulo, Brazil: Campinas and Santos

Problem:

The "metropolitan question" is a topic of great importance in Brazil, both for the agenda of socio-demographic, urban and environmental research, and for the implementation of public policies. A number of questions related to this phenomenon call for serious debate and solutions, including employment, housing, education, public safety, sociability, citizenship, etc. Considering the metropolitan areas existing at the time when the Census of 2000 was taken, about 50% of the country's demographic growth of approximately 11 million persons took place in these areas. During the 1990s they increased their relative share in the country's population by almost 1.3 percentile points (from 38.6% to 39.9%). This growth is even higher if Greater São Paulo and Greater Rio de Janeiro are not included in the calculations. It can therefore be concluded that the deconcentration of the metropolitan regions is relative: it is restricted to only a part of the Southeastern Region of the country.

In this context, it would seem opportune to investigate two smaller metropolitan areas in the State of São Paulo that clearly synthesize these problems. The urban growth and problematic of the Greater São Paulo Area has been the subject of recent studies, but there has been very little systematic research on the problems of the two other metropolitan areas in the state, namely, Campinas and Santos. Especially needed are studies that seek to relate these areas' demographic data with their socioeconomic and spatial dynamics and characteristics.

The choice of these two areas as objects of study is based on their economic importance in the state, as well as on the significance of the populations involved: Campinas with 19 municipalities and approximately 2.4 million inhabitants, and Santos with 9 municipalities and over 1.5 million inhabitants. The choice is also based on the fact that these regions can be characterized as *emerging metropolitan areas* whose processes of urban expansion show specific aspects that have not been sufficiently analyzed. In addition, since these two areas are of sizes that can be considered "manageable" in terms of sustainable solutions for development, they can be seen as interesting laboratories for studies, such as that proposed here, designed to provide data for the establishment of public policies focused on social inclusion.

The pattern of urbanization of the Greater Campinas Area was very similar to what occurred in other metropolitan regions in Brazil, characterized by high rates of demographic growth and by the peripherization of the physical-territorial expansion. The formation of the immediate periphery of Campinas, which began in the 1970s, is closely related to the intense migratory flows that left the more central areas of the municipality. The physical-territorial expansion that spread out from Campinas was based on a dynamic of horizontal expansion that produced non-continuous spaces with rarefied occupation, especially toward the southwest, through the occupation of areas in the municipality that had not yet been urbanized. The occupation of the periphery was strengthened by this dynamic, consolidating a type of occupation characterized by precarious urbanization and sub-standard living conditions of the population. Several

factors have contributed to the configuration of the space in the peripheral areas of the Campinas Metropolitan Region. Some municipal governments exercise very weak controls over the subdivision, use and occupation of the land, compared to more rigid controls in others, especially the municipality of Campinas itself. In addition, the price of urban land rose considerably through processes of speculative retention, where patterns of very substandard living conditions are the rule.

A similar situation can be seen in the Santos Metropolitan Area, which underwent precocious urbanization together with intense activities related to industry, the Port of Santos, and tourism. Through processes that were not always exactly the same, this area has shown patterns of exclusion and vulnerability similar to those seen in Campinas. The significant demographic growth in Santos since the 1960s resulted in a process of urban agglomeration with industrial activities overflowing to other nearby coastal municipalities, especially São Vicente and Cubatão. The main determinants of the urban growth in the region were the configuration of the street and highway system, the location of housing complexes, the implementation of industrial and port areas, and the installation of certain types of urban equipment, especially in the more densely occupied and more dynamic areas.

The slowing down of the pace of urban expansion and demographic growth in the Santos region as of the 1980s is stressed here, due to the restrictions caused by the physical environment, the stricter environmental control exercised by the state of São Paulo – which limited the expansion of chemical and petrochemical activities in the region – and the reduction in the number of jobs as a consequence of the fall in public and private investments caused by the economic crisis.

Methods and Materials:

This article presents the dynamics of these two metropolitan areas over a period of three decades (1970/2000), encompassing two distinct phases in the development of the country. The first was a period of economic growth and intense urbanization – with almost full employment – and the second saw broad social changes and modifications in the production systems, especially in terms of the labor market and poverty in the late 1980s and the 1990s. Although we intend to give greater emphasis to the analysis of the transformations that occurred during the 1990s, in order to better clarify an understanding of the current situation, the study also discusses the trends and continuity of the processes in more recent decades.

The intrametropolitan analysis involves the study of the trends of demographic growth in each municipality and the role of the components (vegetative and migratory) of this growth. Emphasis is given to an analysis of intrametropolitan mobility and of the profile of the respective populations and their changes over time. In regard to intrametropolitan migration (or mobility), special attention will be given to analyzing the intermunicipal migratory flows in order to determine the main municipalities of attraction and expulsion within the metropolitan areas studied. Their relationships in terms of demographic changes will also be studied, as will the impact of the phenomenon of

migration on the demographic growth of these areas. In addition, certain socio-economic and demographic characteristics of the migrants involved are studied in relation to the economic, social and political processes that could condition metropolitan expansion. Pendular mobility will be considered not only a major consequence of intrametropolitan migration, but also as a way to empirically appraise the degree of interaction and integration among the municipalities in the area and the motivations for and profiles of these displacements.

The analysis at the intramunicipal level will also be carried out in order to detect the relationships among the trends of metropolitan expansion and the distribution of the population within the various municipalities, especially Campinas, which is the central municipality in the area. Therefore, not only demographic growth will be appraised, but also the process of socio-spatial segmentation (or segregation) of smaller spaces within the municipalities.

Initial Results:

Although they have distinct economic activities, the two regions showed similar patterns of urban expansion. The peripheral municipalities have seen greater growth, while the respective central municipalities have undergone demographic deconcentration. These central municipalities have therefore grown more slowly than the other municipalities in each region, especially since the 1980s (the growth in Santos was almost null during the 1990s).

This paper will show that the processes involved in the urban expansion of the region have local intra-urban characteristics, a fact that contributes to the socio-spatial segregation of certain groups of the population. This phenomenon can be clearly seen from the data derived at a more disaggregated level, such as census tracts.

In regard to intrametropolitan demographic mobility, between 1995 and 2000 the respective central municipalities (Campinas and Santos) sent more than 40% of the total number of intrametropolitan migrants, but received only about 15%. Compared to the period between 1986 and 1991, it can be seen that they sent fewer and received approximately five percentile points more of the intrametropolitan migrants.

As was to be expected, in terms of pendular mobility, the central municipalities of the metropolitan areas were seen to be the main destination of commuters who work in municipalities different from where they live: almost 50% in the case of Campinas and 64% in the case of Santos in 2000, both with a growth of 10 percentile points as compared to 1980.

As for the municipalities that send these workers, the neighboring municipalities – Sumaré and Hortolândia, in the case of Campinas, and São Vicente in the case of Santos – showed the highest concentrations of these workers in both 1980 and 2000. In 2000 these municipalities accounted for over 45% of the workers who commute daily to work within the respective metropolitan regions, a percentage that has grown with time.

It can be seen, therefore, that both metropolitan areas, at the same time that they

continue to undergo processes of demographic deconcentration, increased the number of workers who commute inside their territories. These results are an indication, on the one hand, of the serious housing problems (lack of dwellings and difficulties in access to and ownership of the land) that the poorer and weaker "citizens of the cities" must face. The results also indicate the clear gap that exists between the location of this population and the economic activities in the space. In this regard, at the same time that the central municipalities appear as great senders of migrants, they also receive thousands of commuters every day, most of whom must travel ever greater distances between home and work. This problem is aggravated by the questionable quality and organization of the public transportation systems in both areas. No less interesting are the new trends of "peripherization" of the higher-income population. According to a new logic of preferences and supply of housing, these sectors have begun moving into so-called "closed condominiums," most of which are located far from the busy and dangerous centers. As a consequence of these trends, the cities show clearly delineated socio-spatial segregation, a phenomenon that can be seen inside the central municipalities but that, in terms of "expansion vectors," is projected toward the neighboring municipalities, which, jointly, constitute large urban sprawls that can be aptly called "large metropolitan cities."