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Small cities and the dissemination of the industrial
production mode. A study of regional carácter

Professor Titular Eliseu Savério Sposito

Doutor em Geografia. Universidade Estadual Paulista, Faculdade de Ciências e
Tecnologia, Departamento de Geografia – Address: Rua Roberto Simonsen, 305,
CEP: 19060-900 – Presidente Prudente, São Paulo State, Brazil.

E-mail: [essposito@gmail.com](mailto:ssposito@gmail.com)

Doutor Paulo Fernando Jurado da Silva

Mestre em Geografia. Universidade Estadual Paulista, Faculdade de Ciências e
Tecnologia, Departamento de Geografia – Address: Rua Roberto Simonsen, 305,
CEP: 19060-900 – Presidente Prudente, São Paulo State, Brazil.

E-mail: pfjurado@uol.com.br

RESUMO

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Cidades pequenas e disseminação do modo industrial de produção. Um estudo de caráter regional. A proposta desenvolvida neste texto é a apresentação e análise de uma ideia nova sobre a industrialização no Estado de São Paulo. O recorte, neste caso, é realizado tomando-se como base as cidades pequenas em uma região específica do estado por meio da proposta da disseminação do modo industrial na divisão territorial do trabalho, pela ótica da difusão espacial da produção industrial de caráter não adensado, de disseminação pontual e seletiva, e uma configuração espacial particular do ponto de vista do território. As interações espaciais e os saltos de escalas na formação dos negócios é base para a dinâmica estudada. A disseminação é tomada como palavra seminal porque se trata da gênese, do crescimento e das articulações entre o pequeno capital regional, a presença histórica do capital internacional e as determinações de localização industrial.

KEY-WORDS:
Small cities
Industrialization
São Paulo State

ABSTRACT: The proposal developed in this paper is the presentation and analysis of a new idea on the subject of industrialization in the State of São Paulo. The framework, in this case, is carried out by taking small cities in a specific region of the proposed state as basis by the spread of the industrial mode in their respective territorial division of labor, from the perspective of spatial diffusion of industrial production of non-hardened character, ad hoc and selective dissemination, and a particular spatial configuration from the standpoint of territory. Spatial interactions and "jumps on scales" in shaping the business is the basis for the studied dynamic. The spread is taken as a seminal word since it is the genesis, growth and the articulations between the small regional capital, the historical presence of international capital and determinations of industrial locations.

RESÚMEN:
Petites villes
Industrialisation
L'état de São Paulo

RESÚMEN. Petites villes et la diffusion du mode de production industrielle. Une étude de caractère régional. La proposition développée dans ce papier est la présentation et l'analyse d'une nouvelle idée sur l'industrialisation dans l'État de São Paulo. Le cadre, dans ce cas, est effectuée en prenant pour base les petites villes d'une région spécifique de l'Etat proposé par la propagation de la mode industriel de la division territoriale du travail, du point de vue de la diffusion spatiale de la production industrielle de caractère non-densifié, ad hoc la diffusion ponctuelle et sélective, et une configuration spatiale particulière du point de vue du territoire. Les interactions spatiales et des sauts d'échelles dans l'élaboration de l'entreprise est la base pour l'étude dynamique. La propagation est considérée comme un mot séminal parce que c'est la genèse, la croissance et les articulations entre le petit capital régional, la présence historique du capital international et la détermination de la localisation industrielle.

Introduction

Small cities in Brazil contain 33% of the national population. Municipalities where urban areas are considered small (down to 50,000 inhabitants) make up 53% of that overall percentage. These numbers show a reality that deserves a geographical study.

Presidente Prudente (see Figure 1), which can be considered an intermediate city in the Brazilian urban network, commands a region of 23,953 km² (larger than Slovenia and a bit smaller than Macedonia), fifty-three counties, where

833,120 people live (2.02% of the state of São Paulo), with a gross national product per capita of R\$ 17,212.62 annually (approximately US\$ 8,315 in 2012).

Macrocephaly in the region (please refer to Figure 2 for Presidente Prudente's region of influence) does not eliminate the importance of small cities, mainly because of their role, although a minor one, in industrial production.

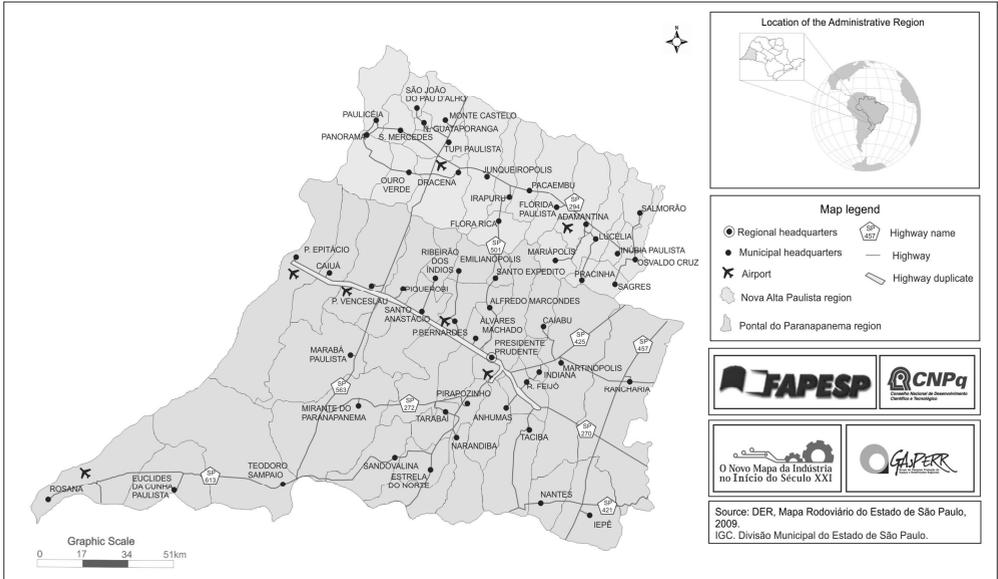


Figure 1. Region of Presidente Prudente, São Paulo, Brazil, 2014.
Source: Jurado da Silva (2014).

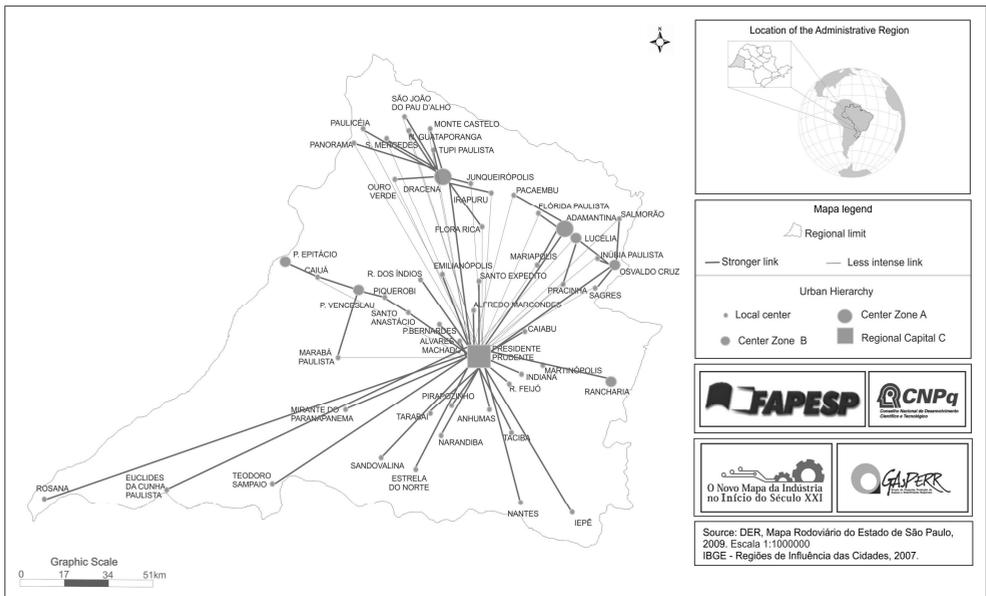


Figure 2. Region of influence, Presidente Prudente, São Paulo, Brazil, 2014.
Source: Jurado da Silva (2014).

Considered to be an articulated complementary region (JURADO DA SILVA, 2011), it has its industrial production defined by the following characteristics:

1) industrial branches are different (mainly food, fuel, beverages, electronic elements, ceramics and chemicals);

2) markets for which it intends to produce for are not restricted to the region; on the contrary, their markets are distant, both within the country, as in Latin America, Europe and Asia;

3) the provenance of feedstock is not restricted to regional boundaries, but contains domestic and foreign sources;

4) information flows, based on information and communication technologies, benefits both large and small sized companies, articulating them beyond regional boundaries and, in some cases, national ones;

5) composition of the final product contains elements of domestic and imported production - in this case, namely the electronics and fine chemical components, for example;

6) there are companies with branch offices in small cities in the region with strong technological development and products geared primarily for export;

7) branches with production of low added-value fight this aspect with large-scale production and the use of new materials;

8) traditional branches, with little added-value and great competition at various scales – such as drinks and food - have a regional scale scope but in some cases the movement of products reaches a national scale.

Considering this contextualization, this work has as its main goal, to understand small cities in the context of industrial production in São Paulo state, adopting as its analytical focus the Tenth Administrative Region of Presidente Prudente.

From the point of view of regional cohesion as a basis for local development, we find that there are few ways for research and development, but the presence of computers and internet usage are common events in different industrial branches.

The *savoir-faire*, more tacit than technological innovation, provides added-value through association with big brands who engage in products and minimum reformulations by delegating the entire production process for industrial companies that take on the character of outsourcing activities.

For that reason, we do not talk about industrialization in broader conceptual terms, in the region of Presidente Prudente. The term we adopted to incorporate both prevalent aspects in the region (industrial branches, predominantly with low technological need on the one hand, and companies jumping local and regional scales in terms of consumer market and feedstock markets on the other) is the dissemination of the industrial production mode. This expression is different from the Brazilian industrialization process, and a more appropriate one to explain the role of the secondary sector in the macro-metropolis of São Paulo for example, rather than, say, the diffusion of industrialization; an expression which reminds us of business organization in reticular form. The word dissemination

was chosen because it refers to the origin of a process; in order to remind us that in the end it is the seed of the basis of the process.

The dissemination of industrial production is an essential process for understanding the territorial division of labor and territorial strategies present in the business practices of small, medium and large industries, when considered on a regional scale (in terms of location).

Thus, we can initially conclude that the dissemination of the industrial mode of production is the predominant face of the secondary sector in the region of Presidente Prudente, going beyond its main city, spreading on through several small cities, articulated in different scales with major national metropolises, but also with foreign ones. So it is possible to identify that there was a spread of industrial practices, understood in its broadest sense, and not a process of industrialization in its restricted sense. There were no spatial effects in the form of urbanization or agglomeration economies nor any major changes in the landscape. In other words, we can say that there was a spread of industrial fact, in a strict sense, i.e., a non-diffusion hardened character of the industry, but the location of businesses and industrial establishments through a punctual and selective way.

Finally, industrial production in the regional context has been marked by the unconcentrated nature of the industry, as well as by a widespread rollout of branches in a broad relationship with the scale of globalization and for a network of multiple spatial and corporate contacts.

Small cities in São Paulo State

Considering the diverse nature of small cities and their expressiveness in the worldwide urban phenomenon, it is not suitable to establish definitive criteria for analysis. Therefore, when we typify them, we end up implying choices and this interferes with the conceptual universe of the review, but this effort is also valid for having at least some notion of the dimensions that can the urban reality be.

Thus, in order to have better understanding of the differences between cities of the same size and to illustrate the spatial dynamics of small cities, we elected the state of São Paulo as a territorial scale for a geographical reading.

Next, we will focus on the case of the Presidente Prudente's region in more detail. First of all, it is necessary to point out that this is done not merely based on statistical data, but presented as part of the demographic dimension of the same sample because the focus in this work is the methodological routing which we call critical/qualitative/analytical.

With this intention, we aim not to reduce the analysis of the city to a numeric expression and purely demographic object, but to present and discuss population issues, industrial location and the roles that cities are taking on the state territory in recent years. We must, therefore, establish the criteria for starting and the hallmarks of our study.

The first point of the criteria is grounded in certain benchmarks such as Corrêa (1999), who says that the maximum number of 50,000 inhabitants for which a municipality may be part of the research sample. Upon such a scenario we may, initially, talk about a framework of analysis and discussion we intend to unleash

in this challenge, as “[...] in the world economy which includes the city, it is elevated to be the subject. Popular cities, especially the smaller ones, with more residual insertion, shall become economic - real productive complexes [...]. (DAMIANI, 2006, p. 144)”. Thus, small cities gain an increasingly important economic role in the territory, housing several industries and large scale enterprises, boosting social and economic relations that produce the territory and its spatial articulations.

To illustrate this proposition, one must simply pay attention to the action of large cooperatives found in Inúbia Paulista and Adamantina respectively, with the Consumer Cooperative of Inúbia Paulista (COCIPA) and the Agricultural Mixed Cooperative Adamantina (CAMDA), in the region of Presidente Prudente.

In 2008, according to data obtained from SEADE, the state of São Paulo resulted in 645 municipalities. In this amount, approximately 522 contained less than fifty thousand inhabitants, i.e., 80.9% of the total, and the remaining calculated population in 123 municipalities was of approximately 19.1% of the total. We do not argue that all these municipalities contain small cities around their perimeter, but a big portion of them should have such specificity, due to the dynamics of the paulista urban network.

If we analyse this data spatially, by means of Figure 3, we could highlight the relative importance of municipalities with their respective population in this ratio throughout the fraction of the state's space.

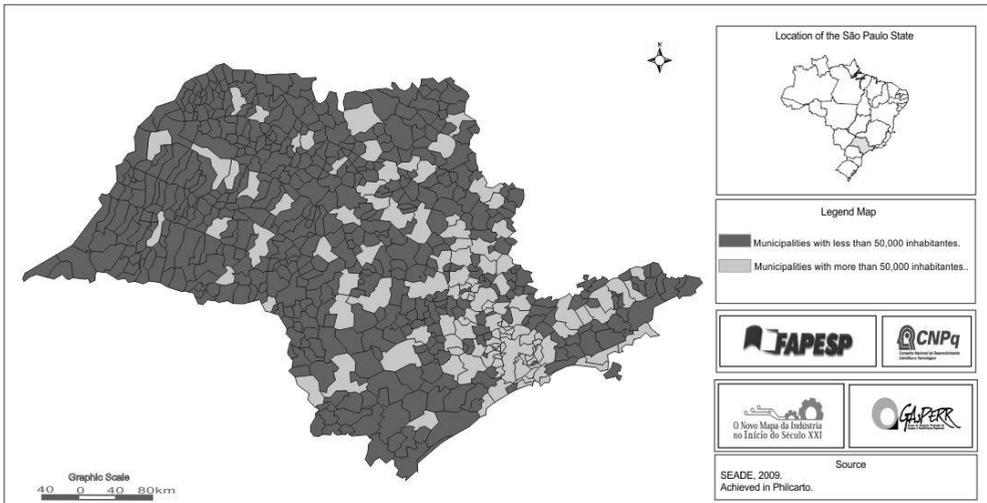


Figure 3. Spatial scope of municipalities with less than 50,000 inhabitants in São Paulo State, 2008.

Source: Jurado da Silva, 2013.

The existence of municipalities with head-small-cities is marked in almost all regions, especially in the western and southern parts of the state. However, when we analyse the metropolitan region of Sao Paulo and the Campinas area, it shows the relevance of larger centers and thus the configuration of other demographic and statistical overviews. In this context, it is possible to remark that some small cities can be functionally specialized to stand out in economic terms in the whole

map of the São Paulo State industry. In this case, it is possible to say that small cities are in the range of fifty to sixty thousand inhabitants, such as Porto Ferreira and its pottery production, Mirassol and its important furniture industry, etc.

Moreover, in the universe of municipalities with less than fifty thousand inhabitants, various centers with an important industrial role in the whole state of São Paulo could be cited, as shown in Table 1; organized from information available in the Demographic Census (IBGE – Instituto Brasileiro de Geografia e Estatística, 2010) and RAIS (Annual Information) of MTE (Ministério do Emprego e do Trabalho).

Branch	Municipality
Non metallic minerals	Panorama, Pedreira, Socorro
Mechanical industry	Espírito Santo do Pinhal
Metallurgical industry	Pompéia, Boituva, Monte Alto
Electric and communications	Pederneiras, Garça
Wood and furniture	Dois Córregos, Olímpia
Paper and printing	Cachoeira Paulista
Rubber, tobacco and leather	Campina do Monte Alegre, Bocaina, Guararema
Textile	Joanópolis, Auriflora, Borborema, Tabatinga, Conchas, Águas de Lindoia, Serra Negra, José Bonifácio,
Shoes	Barra Bonita, Santa Cruz do Rio Pardo
Foods and drinks	Espírito Santo do Pinhal

Table 1. Municipalities with less than 50,000 inhabitants. Emphasis to the industrial production in São Paulo State, according to IBGE branches, 2011.

Source: Demographic Census Database (2010) and RAIS (2011). Organized by Jurado da Silva (2013).

Therefore, the importance of small cities such as Panorama in the west of São Paulo State is evident, with emphasis on the production of tiles and bricks in the subsector of non-metallic minerals, Cachoeira Paulista prominent in paper and printing industry, Garça with its electrical and communication industry, among other examples.

Thus, the framework of industries in the small cities of São Paulo State (through Figures 4 and 5) which show that the distribution of establishments and active links (jobs) of transformation industries in the municipalities with less than fifty thousand inhabitants is evident.

We can also see that although there is a huge spread of industrial establishments in these municipalities, the active links in terms of manufacturing jobs are more concentrated.

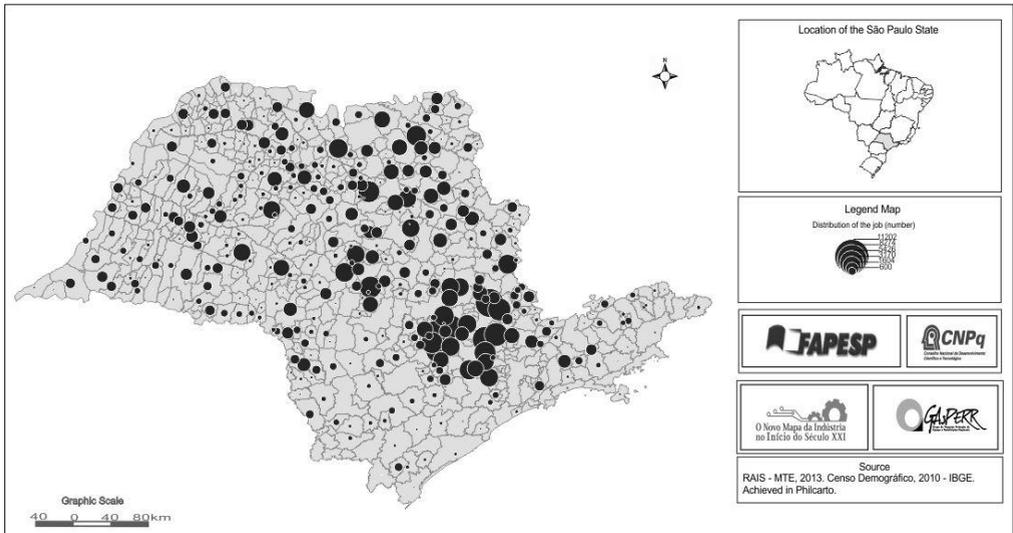


Figure 4. Distribution of jobs in the transformation industry branch in the State of São Paulo. Municipalities with less than 50,000 inhabitants, 2011. Source: Jurado da Silva (2011).

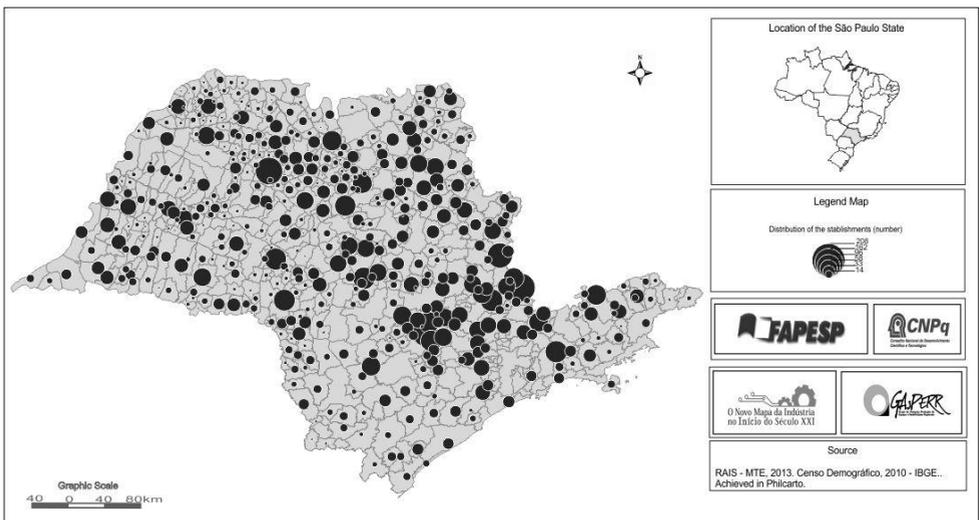


Figure 5. Distribution of establishments in the transformation industry sectors in São Paulo State. Municipalities with less than 50,000 inhabitants, 2011. Source: Jurado da Silva (2011).

There is not necessarily a direct and proportional correlation between numbers of establishments and employments, as the case in the industrial ring of small cities, in terms of industrial establishments, near the metropolis that loses its intensity when viewed from the perspective of employment. This is because industrial modernization requires, in many cases, cuts in jobs since they, in turn, are being replaced by machines in the flexible model of industrial and economic production which affected the country in the last decade, among other aspects and

variables that give to the industrial fact a large complexity for its study and geographic unveiling.

In other words, a high number of establishments in a particular center does not mean necessarily an increasing number of employment contracts. This is because certain segments of the industry are more receptive to the use of intensive human labor and others, in turn, merely require intensive capital, reducing the need to hire professionals in different geographical scales (in this case, emphasizing the distances of displacement of people).

Now, when going to examine the spatial concentration of industrial establishments in the state of São Paulo, it was observed that the highest concentration occurs from the capital towards the Paraíba Valley (region located in proximity to the São Paulo coast region and served by the Presidente Dutra highway that connects São Paulo to Rio de Janeiro) and in another sense, encompassing the regions of Campinas, São Carlos, Araraquara and Ribeirão Preto, linked by Anhanguera and Bandeirantes highways.

The other portions of the state are witnessing lower industrial presence. However, we have to highlight certain important inland cities that manage the territory and industrial capital, as is the case in municipalities such as São José do Rio Preto and Marília.

The southern region of São Paulo (known as the Ribeira Valley), still remains economically fragile, having the lowest gross state product (and hence lower per capita income), low presence of establishments in the secondary sector, and reduced generation of jobs. Thus, the closest regions to the capital have benefited from the localization of new businesses and the provision of infrastructure for the expansion of economic flows among several major cities, which differentiates this part of the territory in relation to western, midwestern and northwestern portions of the state.

This way, we may speak about a capital which is - constantly - redefined as manager of the national territory and the Paulista hinterland (with its particularities and complexities) which recently became the area for the location of industrial production activities, obeying the principle of productive disjunction (separation between capital management and manufacturing unit), strengthening the leading role of the metropolis and the productive capacity of different regions in the state.

Furthermore, it is important to note in this context that the hinterland provides a particular economic relief, powered by different logics of industrial production and industrial location. Therefore, each region carries certain characteristics that ultimately affect the spatiality of the economy and their degree of integration, facing new challenges that are imposed by the dynamics of the globalization process. Therefore, taking this observation as a starting point we will discuss, in the next topic, the case study of the Presidente Prudente region, whilst trying to propose for such a reading, the idea of spatial dissemination of the industrial mode of production with timely, selective and not dense characteristics, as a thesis for understanding industrial facts in that region.

Spatial dissemination of the industrial mode of production in small cities: a case study of the Tenth Administrative Region of Presidente Prudente in the state of São Paulo

Industrial establishments in the region of Presidente Prudente came about with the advent of the coffee economy and from the processes deployed by this important economic phenomenon from the construction of several railways, the foundation of townships, construction of houses both in the countryside and in the cities, cutting down the forest for the use of wood, agricultural production based primarily on coffee etc., occurring (before and after, after and before) the impulse given by the process of industrialization of São Paulo.

The industrial initiatives, for the most part, were marginal and gave support to the agricultural economy and the most basic needs for the population who lived in small cities and in Presidente Prudente, in the early and mid-twentieth century. Activities were linked to sawmills, the beneficiation machinery and garment segment.

This dynamic cannot be decontextualized from the process of formation of the region in question and the incorporation to the productive capitalist sphere in Paulista hinterland, considering that the coffee complex was introduced into territory which was gradually occupied for agricultural activities by deploying cities mainly through the trade of land portions. Based on reading several authors, the first segments of the industry installed referred to the traditional branches of industry. Activities were largely founded from the initiative of local capital, accumulated in the field and in urban areas such as trade (warehouses, workshops, bakeries etc.).

The marginal nature of this kind of industry was already known from the beginning of its activity in the industrial park, which is constituted in the state capital and other areas of the country, but at the same time complementary to the fact bound to the industrialization of São Paulo, in conjunction with capital. While not central, it did not enjoy better payment, big market, high technological support, greater availability of credit and capital, government support as the areas close to São Paulo (state capital) had already untied the knots of the industrialization process with greater force, since the late nineteenth century, unlike the region of Presidente Prudente that tried to enter into this scenario after half a century, compared to state capital.

This process had consequences in the intensity of the industrial installation process, focused on small-scale and its fragilities, unlike the magnitude of São Paulo industrialization which would supplant it gradually, differently of all experiences in Brazil.

Thus we could not generically refer to an industrialization spread process throughout the territory (taken in a broad sense as spatial transformations and the process of changes in society, with the expansion of urbanization, economic growth, etc.), but a spatial diffusion of industrial production (JURADO DA SILVA, 2011); i.e., a process of industrialization understood as a dynamic spread (in the sense of dissemination) of the industrial mode of production in space in order to produce new landscapes, but with less intensity than the fast process that happened in the state capital (and closest cities) and worked as a propellant to

urbanization, population and economic growth and, finally, a dense industrialization process.

So it is understood that industrialization generates profound socio-spatial transformations, especially in regards to economies of urbanization with an increasing number and size of cities, expansion of the population, as well as bringing out big changes in the labor market, which implicated changes in forms of the consumption of society with the purchase of standardized products, functional specialization and expansion of uneven industrial production in space.

Then as part of the improvement of the industrialization process we have the idea of industrialism, which means a fairly advanced level of the technique and science (especially applied science) in an industrial production carried out on a large scale at an accelerated pace, by using various energy sources (mainly mechanical), in a broad consumer market, with a dense territorial division of labor and a highly specialized workforce.

Industrialism, in turn, accelerates the increased mechanization of industry (supported by a technical/science pillar) moving its pivot axis not only to the city, but also to the field combined to form the industrialization process, implementing a new technical environment and also providing proper conditions for the further development of communication and transportation technologies in the areas.

Currently, many social scientists (among them SOJA, 1993) replaced the expressions industrialism and industrial society for post-industrialism and post-industrial society, according to which service activity has a central position in economic dynamics, based on information and development in the telecommunication process. However, the industry as a producer of consumption goods does not lose its participatory weight in the economic life in the state, despite having undergone substantial changes, especially from the 70s in the 20th century, with the rise of the flexible production system and under the aegis of the Third Industrial Revolution.

So the idea of geographical spatial diffusion of industrial production is associated to the industrialization process, but is a specific industrial installation process in a non-densified character, which does not mean that it sociologically contains the expression that accompanies industrialization, i.e. industrialism. We cannot, therefore, recognize the spatial diffusion of industrial production in pre-technical time, but it must be historically contextualized in the field of technique, science, and more currently, information.

Thus, we understand that the information economy makes possible the territorial split between production and management at the same measure that connects them virtually, although it does not physically occur. Certain industrial establishments may be present in certain areas, imposing its rules and guidelines, even if the administrative headquarters of the company is far from the industrial unit where production happens.

Moreover, over the spread of the industrial mode of production there is not, geographically, the strengthening of a dense industrial environment, in more traditional industries, such as food and cooking/garment sub-sector are the most expressive composition of activities considered secondary.

Meanwhile, there may be examples of companies that, despite being located in these segments succeed, through innovation, quality and competitive

management, by gaining new markets, especially foreign markets, through exports and/or even with the installation of factories and office representation in other countries, participating in the global economy and adding new roles and meanings to small centers, with the disruption of hierarchies and the formation of a complex urban network of multiple circuits, through new interactions and spatial strategies.

So in the region of Presidente Prudente we observe, roughly, a divorce between the different segments of the industry that are often not articulated by themselves.

Industrialization accompanied by industrialism (not detected conceptually on general scale in this region) was not able to engender greater economies of urbanization and changes in the spatial dimension of small cities, although we can recognize, in some cases, the production of an industrial space as in Pirapozinho with Bracol and Danisco, and President Epitácio, with JBS/Friboi and Rousselot Gelatine. So what is established in this particular context is the increased complexity in the study of industrial fact and geographical aspects concerning the reproduction of geographic capital aspects.

Therefore, this dissemination of the industrial mode of production should not be confused with the process of diffuse industrialization (discussed especially in Europe to describe the changes in the field, arising from the process of industrialization, economic growth, etc.), as did several Portuguese authors, among them Artur da Rosa Pires (1986), and much less with the sense of diffusion generally employed to explain the process of industrial spread.

In this case, the adoption of this terminology is an original contribution that can be considered in this paper because it is associated to the idea that there is a marginal standard in industrial development in the region of Presidente Prudente, understood as a spread in the narrow sense of the industrial fact; in other words, a broadcasting with not dense character of the industry, i.e., rarefied, a region that is a non-economic node in the national set of fixed and flows (how said Milton Santos, 1996). However, it does not mean that there is no relevant establishments in the regional scope that managed to articulate international agreements and demonstrate strong insertion into the competition and innovation processes.

The adoption of this expression arises then, from the need to better characterize the industrial phenomenon in a regional environment and contribute to the understanding of spaces with lower economic density that also deserve attention, given the amount of research that is focused on the understanding of realities and metropolitan areas with greater economic concentration, and the production of value-added tax.

In this context, it is noteworthy that Sforzi (1999, p. 13-14, apud ENDLICH, 2006, p. 328), in a study on the industry, focused his attention on areas where industrial concentration was not so evident.

According to the author, there is more than one way for industrialization, and other dimensions of industry fact can coexist with the dominant model of industrialization and it takes into account different types of development. This attitude not only considers the logic of marshallian districts, but also the surroundings and spatial dynamics arising therefrom. In Brazil, Buarque de

Holanda (1963) explains how certain parts of the country were industrialized in a particular way in a regional sense in a moment above a concentrated pre-industrialization period.

Regarding the metropolis and its surrounding regions, there are already various studies that seek to theorize about the socio-spatial transformations triggered by the phenomenon of industrialization. We cannot say that such studies are not required, as they contribute to the economic discussion and Industrial Geography. What you want is the urgency to defend a vision of the whole. So we do not despise the articulation of scales and recognize the role in the economic management of the São Paulo metropolis.

In general, what is proposed is the understanding of industrial facts on a differentiated scale of analysis of small cities in the region of Presidente Prudente, located in São Paulo, which has its specificities. It became necessary, therefore, that an original approach to understanding the industrial framework was built, in a relatively remote region of great national center. That is the contribution of our research and it can be incorporated over time in future discussions.

Suffice to mention that while the region of Presidente Prudente was being constructed, São Paulo had already been solidified as an economic and urban hub, expanding its central dynamics and its role as manager of the core national territory, connecting to other centers for managing capital (international scale), as seen in the 50s and 60s of the twentieth century.

Thus, in São Paulo, the oldest and most traditional branches installed with the advent of the automobile industry and a strong state action in the 1950s were changed. Gradually, new technologies were introduced, bringing about more complex social and economic effects. As Selingardi-Sampaio wrote (2009, p. 162):

[...] An industrial activity characterized as traditional, installed in various stages of industrialization and dominated by sectors and branches of non-durable consumer goods came to juxtapose (and coexist with) a more modern industrial enclosure, formed by branches and more dynamic sectors, which triggered a new phase in the development of such places, generating a whole procession of social, economic, urban and space effects, positive and negative (rapid urbanization, uncontrolled expansion of urban spaces, urban-rural and inter-regional migration, slums, social marginalization etc..) [...].

While the metropolitan area of São Paulo took hold in the production of automobiles and machinery, the region of Presidente Prudente was still in the process of urban expansion and industrial plants there installed demonstrated a traditional technological base and were linked mainly to support field activities such as beneficiation machinery, factory wagons, agricultural implements, etc.

Some of the earliest industries were linked to the initial processing of raw materials such as coffee, cotton and peanuts, as well as the small cities that were born in that context. Such urban nuclei had the function of meeting the demands of the population and activities related to the field. The processes triggered in the beneficiation machines were not as complex and had the primary function of

working with the raw materials without transforming them and/or giving them a differential added-value.

In fact, many industries that were born in the region of Presidente Prudente had a direct relationship with local capital. Industrial units did not, at that time, contain a marked technological standard, but managed using a family effort and little accumulated capital in general, from the development of other economic activities. However, there were still industrial establishments of foreign capital placed in the region; especially those related to the processing of agricultural products, which were larger.

In most cases, the enterprises with external capital in the region were linked to the processing and grinding of oilseeds. They emerged in the interwar period, since these products were scarce in the international market and Brazil held the agricultural potential to support the installation of these agro-industries, as highlighted by Dundes (1992), since "[...] the first foreign industries emerged in Presidente Prudente, on the following dates: in 1935, the Continental Gin Co was established, in 1937 it was time for Matarazzo and Clayton Anderson and in 1939, Mac Fadden. The installation of these industries increased in the period 1939 to 1945, thus coinciding with the period of the Second World War "(p. 30).

But this example is not unique of Presidente Prudente, being that it is also characteristic in different contexts and moments in small cities such as Rancharia, with the installation of the Matarazzo establishment, aimed at the processing of oilseeds.

Freitas (2005) studied the secondary sector in Presidente Prudente and helped this understanding by stating that the link between town and country was responsible for the birth of some industrial establishments in the Paulista West due to the fact that

"the types of industrial activity in the city were developed to supplement the agricultural economy, and prevail to this day. Then came the hulling machines of regional agricultural production (coffee, cotton and peanuts). We observed that besides that, coffee has been an important agricultural product; its presence favored the installation of the first hulling machines in the region, with small local initiatives and larger ones from abroad. (p. 59)".

Thus, at this phase, some industrial activities have emerged from the accumulation of capital from the countryside and others due to the accumulation of urban sectors, such as commercial ones.

This first phase of industrial installations in the region still had extensive relationship with the land and with the ideal aspirations of the landowners that flooded the ideological field of colonization, and some of these establishments were deeply connected to the extraction of wood and other raw materials found (*grosso modo*) in the "first" nature.

In this circuit were engendered the first factories of wagons, slaughterhouses, sawmills, ice factories and sewing workshops that related directly to the basic needs of the population. If small cities were born as support centers for the rural

population and to support speculation with land, the region's industries sprang up to meet the most urgent and basic demands of urbanization.

Certain companies could also consolidate this atmosphere of economic growth, as was the case of COIMMA (agribusiness segment) in the city of Dracena, being branded by the initiative of local capital and effort of traditional family in town to come to currently confirm its performance on a national and even international scale. Today, COIMMA is the largest company in its industry branch in South America, selling products across the continent and competing on an international basis through the development of new goods with technical standards of innovation and quality.

Therefore this moment is part of the industry training movement in the region of Presidente Prudente and configured as a base to read the economic interpretation of the region, as this became increasingly urban, though it was still very tied to the field economy in terms of employed persons, lasting to present day through the advancement of sugarcane and sugar and ethanol plants.

Hence, as shown in this analysis, we may present the following observations:

Firstly: a) Industry branches are varied; b) markets are not restricted to the region, but to export and the importance of distant markets; c) several companies' representative offices or subsidiaries were implemented to produce goods in other countries such as the Dominican Republic and other Latin American countries; d) information flows, motivated by the development of information technologies, which are becoming more frequent and intense and benefit the expansion of business scopes, both small and large; e) there are companies such as Coimma in Dracena, which add value by incorporating new technologies using chips in weighing machines, in addition to benefit exports;) Friboi is the largest beef exporter in the world, and Lins, where it was started as a family business, they soon after deployed a subsidiary in Pirapozinho for the production of leather sub-products that became the raw material for the manufacturing of tires in conjunction with Michelin in Colombia; g) even if the aggregated value of certain industrial branches (drinks or condiments such as vinegar Saboroso) is low due to the nature of products and production processes, competition is fought by increasing the scale of production; h) the traditional branches of little added value and high competitiveness - drinks and foods - have mainly a regional scale coverage, with poor results when it comes to exports, although this occurs.

From the methodological point of view, it is still difficult to establish precise classifications to distinguish high-tech industries; those that incorporate more technology and are considered more advanced in added-value, etc. Malecki (1991), cited by Diniz and Gonçalves (2005) defines "as indicators, the intensity of investment in R&D and technical professionals in percentage to the total workforce." For these authors, Benko (1999) highlights four measures: "the degree of technical sophistication of the product, the rate of growth in employment, spending on R&D and the percentage of sales". In 1986, Markusen et al, also cited by Diniz and Gonçalves (2005), concluded that the best indicator would be "the use of the percentage of professionals linked to technological areas" (p. 132).

Second: articulation of scales is clear because the small cities in the region have trade relations with foreigners without intermediation through São Paulo, for

example. This does not mean that they are isolated in the state, but it means that they jump stages and scales to meet important overseas markets. (Example: the industries of garments and tips for dancers, indicating the emergence of a local productive arrangement in Osvaldo Cruz, all motivated by the clustering of companies in the same industry, with local initiatives, that are already attracting entrepreneurs from other areas).

Third: local capital is essential in order to explain the dynamism of small regional businesses and how the magnitude of capital is small, but persistence in business will expand its industrial production capacity, and enlarge reproduction and incorporation or creation of new units in other areas.

Fourth: knowledge is, at first, produced and incorporated tacitly to spread through the pores of the industrial environment without royalty fees or other charges. Copy of products in several shapes or the production of goods that are just brand differentiators and how value is an aggregator of production strategies adopted by firms.

Fifth: we cannot talk about industrialization in the region of Presidente Prudente, but we can speak over the spread of the industrial mode of production (different from diffuse industrialization) as part of the territorial division of labor and the strategies of territorialization business practices of small, medium and large industries – when considered on a regional scale.

Sixth: the intensity of industrial locations and their consequences have been worked mainly by areolar paradigm. However, with the intensification of flows driven by new information and communication technologies, the improvement of land transport routes by increasing the number of flights between Presidente Prudente and São Paulo (hence with connections to the rest of Brazil and abroad) transformations happen in specific lines of territory selectively benefiting people and places. Even if it is exclusive and selective, development incorporates new people, spreads knowledge, distributes part of the wealth as salaries or goods but, at the end, it benefits only those who are directly driving or taking ownership of capital.

Seventh: This is a process which can be detected in the last decade and has been increasingly intensified. Previously, with decreasing strength of agribusiness that characterized the region since the beginning of its occupation (in the 1930s), this phenomenon was just being gestated (the last decade of the twentieth century). Regional “porosity” becomes bigger each time, with new branches of the manufacturing industry that will highlight the region with the international marketing of products and the strengthening of the regional capital.

Finally, it is not an urban network with large cities or densely populated that catalyzes this process. It is a set of small cities (up to 35,000) controlled and absorbed by a medium-sized city (Presidente Prudente, with 210,000 inhabitants) in an area with strong interference of the rural world (which changes in the territorial division of labor, from extensive cattle raising, to the production of sugar cane, and things such as raw material for ethanol fuel) and whose gross national product has, as the most important component, trade and services.

So, at the time, the small cities of the region of Presidente Prudente keep, in this context, a subtle complexity. Analyze their industrial production in urban

areas requires the articulation of different scales, especially when taking the role of globalization/"mundialization" in relation to industrial fact and informational economy.

With this, the pace of socio-spatial transformations rises and puts forth to researchers on this theme, challenges for their analysis and interpretation, inspiring new work related to the subject and giving different contour to other variables and features of the economic industrial and urban totality (from a geographic space point of view) by small cities in their socio-spatial dimension.

Final considerations

The final considerations do not express an impoverished synthesis of the text, and neither surrenders to the idea of saying that the subject of small cities and industry has been exhausted. It should be emphasized, then, that there are questions that have been answered in this text and others that need to be taken up, best assessed by investigations that may already be underway.

In this sense, the text enables for a geographical reading of the small cities in São Paulo State, and more precisely, in the region of Presidente Prudente, offering support for the interpretation of the role they take in the scenario of the territorial division of labor, within a spatial diffusion of industrial production of non-hardened characteristic, selective, and punctual dissemination, in a particular spatial configuration of industrialism.

There is no doubt that the study is relevant to small cities in contemporary spatial analysis. Besides expressing an important part of urban fact, they demonstrate increasingly intense meanings and are linked to international capital economies, as a synthesis of contacts and multiple and complex spatial interactions that deserve an increasingly watchful eye of the researcher in an attempt to analytically explain the recent socio-spatial changes they such centers are undergoing.

Thus the notion of industry was worked towards the conceptual deconstruction of industrialization and the development of a new characterization for the region's industrial fact, i.e., the interpretation of the spatial dissemination of industrial production on a non-dense, punctual and selective spread in a distant particular spatial configuration to industrialism.

Doubtlessly, there is relevance in the study of small cities in contemporary spatial analysis. In addition to expressing an important part of urban fact, they demonstrate meanings that are becoming more and more economic as well as linked to international capital, such as a synthesis of multiple and complex contacts and spatial interactions; some that deserve to be observed, in an attempt to analytically explain the recent socio-spatial transformations to which these urban centers are submitted.

The association of small cities to the place of rest, quiet and peripheral economic production was not taken as a hypothesis in this text. Old explanatory models of the urban hierarchy are removed and here we adopted the approach of various spatial interactions, since small centers, in order to produce their network of relationships in the world of globalization, add new contours to the process of

understanding economic spatiality, in times of the Third Industrial Revolution and the role of telecommunications and information technologies.

Finally, while drawing this text, certainly other studies on small cities were and are being produced. The conceptual reality becomes therefore increasingly complex and difficult to understand. Therefore, this is a reading of current empirical time, which seeks to better comprehend the expression of a geographic context, within the interpretation of industrial and urban facts.

References

- CORRÊA, R. L. Globalização e Reestruturação da rede urbana – uma nota sobre as pequenas cidades. *Revista Território*, Rio de Janeiro: LAGET/UFRJ, v. 6, n. 6, p. 43-53, jan. - jun., 1999.
- DUNDES, A. C. Industrialização e produção do espaço urbano: o caso e Presidente Prudente. 1992. 73 f. Monografia (Bacharelado em Geografia) - Faculdade de Ciências e Tecnologia, Universidade Estadual Paulista, Presidente Prudente.
- ENDLICH, A. M. Pensando os papéis e significados das pequenas cidades no Noroeste do Paraná. 2006. 505p. Tese (Doutorado em Geografia) - Faculdade de Ciências e Tecnologia – Universidade Estadual Paulista, Presidente Prudente.
- FREITAS, O. L. C. Capital e força de trabalho no setor secundário em Presidente Prudente. *Caderno Prudentino de Geografia*, Presidente Prudente: AGB, v. 1, n. 27, p. 59-75, 2005.
- JURADO DA SILVA, P. F. Cidades pequenas e indústria: contribuição para a análise da dinâmica econômica da região de Presidente Prudente-SP. 2011. 282f. Dissertação (Mestrado em Geografia) - Faculdade de Ciências e Tecnologia – Universidade Estadual Paulista, Presidente Prudente.
- PIRES, A. R. Industrialização difusa e modelos de desenvolvimento: um estudo no distrito de Aveiro. *Finisterra*, Lisboa, v. 21, n. 42, p. 239-269, 1986.
- SANTOS, Milton. *A natureza do espaço*. São Paulo: EDUSP, 1996.
- SEADE. Dados sobre a economia e a população paulista. Disponível em: <<http://www.seade.gov.br>>. Acesso em várias datas.
- SELINGARDI-SAMPAIO, S. Indústria e território em São Paulo: a estruturação do multicomplexo territorial industrial paulista: 1950-2005. 1. ed. Campinas: Alínea, 2009.
- SPOSITO, E. S. Desenvolvimento regional: para além da região. In: PASSOS, M. M., CUNHA, L., JACINTO, R. (org.). *As novas geografias dos países de língua portuguesa. Paisagens, territórios e políticas no Brasil e em Portugal*. São Paulo: Outras Expressões, 2012, v. 2, p. 469-492.
- SPOSITO, E. S.; JURADO DA SILVA, P. F. *Cidades pequenas: perspectivas teóricas e transformações socioespaciais*. Paco Editorial: Jundiaí, 2013.