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#### Localização empresarial: fator estratégico para o desenvolvimento das regiões?Uma abordagem sobre a política de localização industrial da Bahia

# Business location: strategic factor for the development of regions? An approach on industrial location policy of Bahia

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## Business location: strategic factor for the development of regions? An approach on industrial location policy of Bahia

#### Resumo

Neste artigo apresentamos uma análise crítica da política de localização industrial do estado da Bahia, no período abrangido entre 1960 e 2000, a partir da perspectiva da economia espacial. O documento analisa a formulação da teoria da localização, através das contribuições dos seus principais autores, evidenciando as mudanças ocorridas em sua base epistemológica com o advento das novas tecnologias de comunicação e transportes. Através de pesquisa documental fez-se uma breve análise das estratégias de localização dos distritos industriais baianos que concluiu que a experiência da Bahia não foi bem sucedida, visto que as indústrias atraídas para o Estado não tiveram seus efeitos extrapolados para outros setores da economia regional, sendo, na prática, enclaves. Algumas possíveis razões para este fato estão relacionadas ao contexto estrutural do sistema econômico e político brasileiro: o modelo de concentração da renda, que obriga as empresas industriais a operar com um elevado coeficiente de localização, ou seja, uma tendência de concentração espacial; um parque industrial dedicado principalmente à produção de bens intermediários, exigindo, para a sua viabilidade, a existência de economias de escala, aglomeração e urbanização, das quais são apenas parcialmente poupadas as empresas do agronegócio e de transformação mineral; a falta de uma política estratégica de desenvolvimento industrial, o que contribui para a sujeição deste espaço às vontades políticas, significativamente marcadas pelo autoritarismo. Do ponto de vista espacial, concluiu-se que a definição de macrolocalização dos distritos industriais também foi, prioritariamente, conduzida pela política e, secundariamente, muito mais na análise da hierarquia urbana do que na ocorrência de possibilidades econômicas eficazes de industrialização. Portanto, segue-se à conclusão, respondendo à pergunta que intitula este artigo, que, para que as teorias de localização contribuam como fatores estratégicos de desenvolvimento regional, devem-se considerar uma série de outras condições locais relacionadas aos aspectos culturais, políticos e à estrutura de mercado vigente.

Palavras chave: Economia espacial; Localização industrial, Desenvolvimento regional; Bahia.

#### Abstract

In this paper is presented a critical analysis of industrial location policy of the state of Bahia, in the period covered in between 1960s and 2000s, from the perspective of spatial economy. This paper reviews the formulation of the theory of location, through the contributions of its principal authors, evidencing the changes occurring in its epistemological basis with the advent of new transports and communication technologies. Through documentary research were analyzed localization strategies of industrial districts of Bahia. The analysis concludes that this experience was not successful and that it was not related to the conditions formulated by the spatial economy. Despite what this theory advocates, industries attracted to Bahia did not have their effects extrapolated to other regional economy sectors, being in practice, enclaves. Some possible reasons for this fact are related to structural context of Brazilian economic and political system: the concentrating income model, which requires industrial companies to operate with a high location coefficient, ie a tendency to spatial concentration; the industrial park is dedicated mainly to the production of intermediate goods, requiring to its viability the existence of economies of scale, agglomeration and urbanization, from which are only partly relieved the agribusiness and mineral processing companies; the lack of a strategy and industrial development policy was determinant in order for this space being subject to strong political will

significantly marked by the authoritarism, which eliminated the integration of intersectoral actions, as well as an effective participation in the process from various segments of society, especially the business sector. From the spatial point of view, it appears that the macro locational definition of Bahia's industrial districts was guided mainly by politics and secondarily relied much more on the analysis of urban hierarchy than the occurrence of effective economic possibilities and industrialization. Therefore, it follows the conclusion, answering the question that heads this article, as the facts indicate, that in order for the locational theories to take place in strategic regional development, it should be taken into account a number of other conditions, such as the local culture, the effective political system and market structure.

Keywords: Spatial economics, Industrial location; Regional development; Bahia.

JEL Classification: R110; R120

#### 1. INTRODUCTION

Thirty years ago, Philipe Aydalot, a french master of Regional and Urban Economics stated that "the theory of location was in crisis." (1985, p. 50). He made this statement because the theoretical framework that supported the locational studies, notably the contributions of Von Thünen (1783/1850), Alfred Weber (1868/1958), Lösch (1906/1945), and Walter Isard (1919/2010), pillars of this theory, experienced a relative reduction of an essential element of its epistemological base represented by transport costs, whose importance on locational decisions had diminished due to technological progress. In fact it is not possible to compare, nowadays, the ratio between weight, km transported and time to that existing in the late nineteenth century and early twentieth century, but the argument that the participation of transport costs in the total cost of the product has been dwindling, may even be true for cases of products with high added value, but in the case of agricultural commodities, this cost still has great relevance, as shown by Oliveira and Caixeta Filho (1997).

Aydalot's approach reflects an Eurocentric view that should not necessarily be generalized to non European countries. What happens in practice are the effects of territorial domination by big business, transnational and multinational, that forming monopolies or oligopolies divide the global space according to the conveniences of their strategic planning. On the other hand national governments learned the notions of externalities and adopted, in their investment attraction policies, the concept of "industrial districts" endowed with the necessary infrastructure and supported by fiscal and financial incentives that made locational attraction irresisistible.

Currently, it should be considered surpassed the complaint of spatial economists and geographers about the omission of space by mainstream economics. Contributions are already abundant and compensate for past omissions. The news that has emerged, ie from 1991/1992, was the focus of Paul Krugman's New Economic Geography (NEG) in his book *Geography and Trade*. This is because whereas the studies of traditional economics analyzed the locational phenomena on the paradigm of diminishing returns and perfect competition, this new approach reversed the key, with a new paradigm that emphasizes the increasing returns to scale and the oligopolistic competition. In fact, Krugman's contribution is not new, at least with regard to competition and market as, in 1940, August Lösch, presented in his book *The Economics of Location*<sup>1</sup>, a complete system of general equilibrium, integrating the space in which, according to Mendes (2009, p.1) the interaction of different firms in search of its great location, not only produced the global optimum, as structured economic regions. With competition, it is therefore formed the areas of influence of products and network markets, generating the overall balance of locations, as stated by Leme (1990:161- 172)

"Lösch model sets the "ideal" market size for the balance of two opposing trends: economies of scale, leading to market growth and the shipping cost leading to reduced market. In its direct form, the model is used for the design of the sale of the finished product market and, in the reverse way, the model is used to size purchase market "

This article revisits some important points of the Theory of Location. Besides this introduction and conclusion, the paper presents two sections: the first deals with the operational aspects of the theory based on formulations of Weber ([1909] 1929), Lösch ([1940] 1954) and Isard (1956.1960) brilliantly summarized by Mota (1968), the second section, based on Spinola (2003) and Haddad (1992) works with a brief location policy analysis in Bahia. The space limitations did not allow a breakdown of contributions related to the Marshall's Industrial Districts and its innovative derivatives and Krugman's NGE.

#### 2. THE INDUSTRIAL LOCATION

Various types of locational orientation are known from the literature. They can, alone or in combination, justify the installation of a plant in a particular territory assuming that in

<sup>&</sup>lt;sup>1</sup> Published posthumously in English in 1954

the rational plan, it seeks to maximize their results as advocated by Lösch (([1940] 1954) for whom the alternative was to find the place of higher profits, thus rejecting both the focus on lowest shipping cost or on the location in which the revenue was higher as explained by Weber (([1909] 1929). Assuming any of the two propositions, can be considered that the companies, in the pursuit of its location, are guided to: the raw materials, the market, to the availability of labour, to the availability of energy and, in some cases, to a kind of no guidance, related to certain activities whose sale price is not determined by the cost of manufacture. This is the case of spices and other things that are of an ubiquitous location.

This scheme is enshrined in locational theories presented in project manuals. In fact, it may not work in various circumstances, one of them occurs when state interference changes the spatial logic.

Therefore, the location of industries is influenced by some factors, which can be classified as: regional, technical and locational, special and motivational.

#### 2.1 Regional factors

Include transportation costs of materials and supplies and finished products and byproducts; the relative costs of labour and energy as well as the breadth of the market. Dependent on the geographical advantage they have, these factors act as forces of industrial attraction given the level of competitiveness they provide. In Brazil, it can be visualized, for example, the competitive relationship between some companies established "artificially" in the Northeast, compared to similar ones in the Southeast, which often disappear as soon tax subsidies that sustain them are abolished<sup>2</sup>.

In a more specific approach to each of these elements that make up the regional factors will then be considered, namely: transport, raw materials, labour, energy and the market.

#### **Transport**

<sup>&</sup>lt;sup>2</sup> In this regard see Spinola (2009:417)

Transport costs are a function of the weight to be transported (w), the distance to be traveled (d) and freight to be paid (f).

When considering the weight and distance in determining transport costs it is also necessary to qualify other factors that influence through the tariff system, such as: 1) the types of transport - rail, road, inland waterway, sea, air etc. .; 2) the extent and direction in the use of transportation, which can alter the tariffs basis according to the volume of goods to be transported and / or distances and lead sometimes to the return freight; 3) the topography, climate and the structure of the regional transport systems, which can affect the foundations of tariffs or cause additional loading and unloading costs; 4) the quality of the goods themselves to be transported, which may be more or less transportable; and 5) the degree of dangerousness of routes to be traveled, which greatly affect insurance costs.

Transport costs are not limited only to freight charges, since they also include complementary factors such as insurance premiums, social security taxes, customs duties; taxes etc. This is why, using the terminology Ohlin (1933), Hoover (1948) replaces the designation transport costs per transfer costs (costs transfer).

In practice, all these complementary factors, which influence on transport costs should be considered carefully by entrepreneurs, especially because on them depends sometimes the competitiveness of enterprises, depending on their location.

Since shipping costs directly influence the displacement of the raw materials and products and the cost of labour and energy are essential in the transformation procedure, one can conclude that if the transportation cost is greater than the total cost of expenditures with labour and energy, the industry will be driven by the geographical location alternatives dictated by transportation costs and vice versa.

However in cases where the total cost of expenditures for labour and energy were to be equal to the cost of transport, the industry will be driven by the geographical location alternatives dictated by other costs.

Considering that transportation costs refer to matters of freight - materials and finished products, the industry will be oriented according to the predominance of one or another type of shipping.

The same reasoning is employed with the total cost of expenditures for labour and energy.

#### Raw materials

Regarding this element is important to distinguish two kinds of materials used by industries: ubiquitous materials and localized materials. The ubiquitous materials, according to Weber's terminology, are those that can be found anywhere. This concept is still deployed in two others. The absolute ubiquity occurs when the material is fed in a particular region, such as wood in the Amazon, and the relative ubiquity as quartz in the Northeast.<sup>3</sup>

The localized materials are those that are only found in well defined geographical areas. Generally, minerals or agricultural products correspond to this classification. Example: oil, iron ore, gold, diamonds, cocoa, coffee, sugar cane.

Weber also classifies materials as raw and pure. The raw materials are those that lose weight (weight-loosing Materials) in the production process, either totally or partially, while the pure materials incorporate all its weight to the product. As an example of the raw materials it can be cited: the limestone in cement production, wood for furniture, rubber in tire manufacturing. Regarding pure materials, the stone used for stamping or silver and gold used in jewelry manufacturing<sup>4</sup>.

Regarding the distance x weight aspect it should be taken into consideration the problem of displacement which can be considered as a possible alternative choice between: the use of different materials or combinations thereof in the production process. This is the case of Japan and Italy, for instance, that replacing iron ore for scrap could install their steel industries without obtaining deposits of this mineral. Thus, besides the geographical occurrence and weight loss, in terms of raw materials, it must be considered its dispensability and mobility.

 $<sup>^{3}</sup>$  The concept of ubiquity, according to Weber , should only be used when dealing with regional resources and their spatial distribution .

<sup>&</sup>lt;sup>4</sup> This Weber classification is made to fulfill the purposes of its analysis, the variables weight and distance , assuming other factors are constant , they are seen as determining the location of an industry . This classification , however, is not satisfactory for determining the best location of an industry

The degree of transportability of goods is the main aspect of industrial products that influence the transportation costs. This concept was introduced by Hoover (1948), that can be defined as the result expressing the product transport or transfer per unit cost ratio and the product unit value. The perishable, dangerous or fragile products are less transportable, of course, when assuming, for them, a low unit value.

The determination of freight differences by calculating the degree of portability is important for measuring the competitiveness of industries located in different regions

#### Labour

In the analysis of this input which also makes up the regional locational factors it is important to ask two questions: 1 - What industries should strategically be targeted to regions or areas where there is the most advantageous use of labour or energy? 2 - to what extent these regional advantages (or local), may constitute market differentials for industries?

In the past, as Weber defended, the locational decisions should favor the search for lower costs. Lösch ([1940] 1954), for his part, considered that the goal of the company was to maximize their profits. A viewpoint that is recovered more recently by Krugman (1992) with his apology to increasing returns to gains of scale.

However, nowadays, in the context of an economy that migrates from one locational paradigm to another, based on knowledge, development and use of new technologies, it should be inserted the human capital labour factor as an important locational attractive.

In Brazil, the different salary levels in the country, despite the minimum wage, establish major regional differences. This is more pronounced when working with the concept of human capital. Among the regions, for example, in the Northeast and Southeast regions occur advantages and disadvantages in the costs of industrial process as a function of labour quality.

Gains and cost advantages can be eliminated by various cultural and behavioral factors that significantly affect the performance of workers. This occurs on hand productivity of work and their ability (and disposal) of learning. The construction companies, for example, prefer to recruit unskilled labour in the innerland despite the use of coastal workers. Empirical research has shown that while the first forged in the wild is more hardworking and willing to learn, the second, created at the seashore, is more "accommodated" and resistant to change.

The debased wages also contribute to reducing the social value of work and lead to labour indifference and contempt for jobs with a consequent reduction in their productivity.

Therefore, it should be considered whether such regional differences are real, if they can be modified and if the differential can be eliminated. The cheapest labour is often also less efficient; or require the completion of additional training expenses and assurance of livelihoods, housing etc.

Industries can be classified as capital intensive or labour intensive. The higher the capital / labour (K / L) ratio more intensive in capital will be the company, meaning greater volume of investments per unit of employment created. The lower this ratio greater the intensity of labour. It means that jobs created demanded the realization of smaller investments, ie: are cheaper.

The number of jobs generated by the industry has substantially reduced over time due to technological progress, which has led gradually to the automation of industrial processes. Still, some industrial segments, continue to be labour intensive. This is the case of the garment industry, footwear and many others where automation could not replace the manufacturing steps.

#### Energy

From the standpoint of physics and according to Ferreira (2009), energy is the property of a system that allows you to do work. The energy can take several forms (thermal, kinetic, electrical, electromagnetic, mechanical, potential, chemical, radiant), convertible into one another, and each of which capable of causing well-defined and characteristic phenomena in physical systems. The availability of energy is essential for all industrial activities. Therefore, companies generally are located only where this input is available in quantity and quality. The main sources of energy used by industry are derived from non-renewable sources like oil, gas, coal and nuclear power and renewable sources such as water, biomass (biofuels), the sun, wind and hydrogen .

Some companies are electro intesives such as aluminum and require high volume supplies. There are currently no industries that do not spend energy to manufacture its products. But when consumption is small, the cost of energy is less important than the supply stability.

Considering the transportation difficulties, solid fuel (wood, coal) took prime importance as a location factor from the Industrial Revolution to the beginning of the preponderance of liquid and gaseous fuels in the 1960s These fuels are easily transported by oil and gas pipelines. Therefore, new industrial zones emerged in the points served by lines of supply of these inputs.

Brazilian environmental policy recommends the location of industries in the vicinity of sources of supply of liquid or solid fuels, aiming to reduce the risks inherent to their transportability over long distances. Consequently, the nearer location to the ports is an alternative often used to receive those fuels with lower transportation costs and greater safety.

According to Mota (1968) regional factors are primary causes that influence the spatial distribution of industries.

#### 2.2 Technical and locational factors

Refer to the impacts produced in business competitiveness by the economies and diseconomies of agglomeration; economies and diseconomies of scale; and economies and diseconomies of urbanization. Meanwhile regional factors previously analyzed, determine the distribution, with reference to various regions or several areas, technical and locational factors only relate to a particular region or a particular area. For this reason, they are associated with the concentration or dispersion of industrial activity in a region or an area, according to its influence as agglomerative or divisives forces.

The technical and locational factors play a significant role in the location theory as the global market leans more and more towards an oligopolistic competitive basis. According to the model of Weber, agglomeration refers to spatial concentration of

industry, resulting from the perception that the clustering of different production units at a production common place results in lower costs per unit of output (Mota, 1968:81).

The industrial agglomeration is based on economies of scale, economies of location and economies of urbanization.

The increase in the scale of production of an industrial plant at a certain location with the average cost remaining unchanged, implies in the achievement of increasing yields<sup>5</sup>. And therefore, its driving effect on complementary industries downstream and upstream of its plant constitute the preliminary stage of industrial agglomeration and the formation of a growth pole, if it produce polarizing effects of a technical, lace, psychological and geographical nature as indicated by Perroux (1955) and Paelinck (1965).

The economies of scale associated with the agglomeration economy, by enabling obtaining lower production costs, implies in that any increases in transportation costs for the various units can be absorbed by the reduction in costs arising from productivity and complementarity gains.

In turn the economies of location refer to the benefits that would result from several firms in a single industry, locating in a single region or in one area for historical and cultural nature reasons. These savings are well exemplified by Marshall's industrial districts that operate in a flexible specialization structure, as was the case of industrial districts in England and in Italy, according to Marshall ([1890] 2001) and Bagnasco (1977) among others.

Location economies occur when several firms in a single industry are associated in one region or in one area, and "merge" their individual production units, of different scales, in a single larger scale production unit. In fact these various associated firms, through complementarity and integration within a production chain, according to Porter (1999), form production clusters (clusters) that assures them bargaining capacity (bargaining ability).

<sup>&</sup>lt;sup>5</sup> This is the central point of Krugman thesis.

One can also evaluate the location economies, in a view of the so-called "ancillary industries," which, independent of its production scale, may obtain best economic advantages of a locational position nearest to the driving industries. In this regard, the analysis of agglomeration, viewed in an empirical way, fits also in the programming of regional development.

In urbanization economies the city or metropolis is considered as a broader economic dimension of location with the economic advantages of their externalities. Cities, depending on their technical and scientific development can produce great locational advantages for some kinds of industries, like the sector of information technology.

One aspect of economies of urbanization that matter, closely, to regional development programs relates primarily to the possibilities of linking the theory of industrial location with urban planning.

Indeed, the "urbanization economies" depend, substantially, on the very structure of cities, especially regarding the "land use" and facilities of public services such as transport, communications, energy, water and sewerage etc. Since these factors are not considered, carefully, in urbanization plans, they may become disruptive factors as a result of a rise in land values and rents, costs time, transport etc.

Hence arises the practical importance of "zoning" and the creation of industrial perimeters, with appropriate urban planning implementations, such as conditions for industrial expansion of cities. Problems of the same nature emerge, as well, when considering the metropolitan areas, keeping in view the best spatial distribution of suburban centers or satellite towns.

Special factors consider the availability of resources such as water, climate, land, services and compatibility with industrial waste.

Finally, regarding motivational factors are taken into account tangible factors such as the resources of capital and credit; government incentives; and the weight of taxes and fees; and intangible factors not measurable, such as social welfare; community attitudes; and psychological, personal and behavioral entrepreneurs.

#### 3. THE INDUSTRIAL LOCATION EXPERIENCE OF BAHIA

According to Spinola (2003) Bahia was not successful with its experience in the field of industrial location. Industrial districts built in the 1960s and 1970s failed to meet expectations of state planners<sup>6</sup>.

Under the aspect of locational theory no similarity to the industrial districts of Marshall was kept. Even Weber, if he could be heard, would refuse them the paternity. This is because they were created in a topdown process where civil society and the spatial economic logic did not have the slightest participation.

As noted by Haddad (1992), one of the essential conditions for an economic activity that is localized in a region to promote their sustainable development and not only stimulate an unstable and short-lived growth cycle is a diffusion of the dynamism of its economic activity throughout other sectors of the regional economy. In this way, that activity is linked properly with the regional production system in an embeddednes process.

Still, in the opinion of Haddad (1992) the worse situation for the process of developing a region, under the aspect analyzed, may occur when there is a convergence of the following factors related to the implementation of a new economic activity: a) whether the region is exporting products of great weight, generated by new activity, the return shipping tends to occur with excess capacity, reducing the amount of freight; Given the lower return freight, increases the competitiveness of imports, inhibiting possible substitute local activities aimed into the regional demand (reduced impact on the effects of glare and induced effects.);b) if the wealth and personnel income distribution profile are not sufficient to cause the devolution of the prevailing distribution (or even act in the direction of strengthening the hub default), the induced effects will be lower to promote the expansion of the regional domestic market; c) if the capital invested in the new activity is originated in other regions, it can not internalize the surplus funds generated in the new production cycle, which "leak" to developed regions (reduced cash flows to promote the diversification of regional productive structure ); d) whether the specific tax legislation demonstrates clear interest in exonerating the new activities in international trade or to contribute to anti-inflationary policies, there will be insignificant tax purposes for the benefit of the region; e) if the new activity has a

<sup>&</sup>lt;sup>6</sup> Later a dozen other districts were built in Bahia cities without however any highlight .

technological feature to use few inputs produced in the production process (low level of dispersion or backward chaining) and that for locational reasons, can only occur in the region, investments for the first processing of those activities in order to improve the relative weight value for use in the transport infrastructure is also reduced dispersion index or forward chaining (Haddad, 1992: 10 - 11)..

That's exactly what happened in the planning of the Bahia's industrial districts of Ilheus, Jequié, Vitória da Conquista and Juazeiro and Industrial Centers of Subaé (Feira de Santana), Aratu and Camaçari, the latter two in the metropolitan area of Salvador (RMS) transformed, in practice, in authentic regional enclaves, at best.

It is important to note about these districts, two aspects of the country's economic system to be highlighted: first, the high concentrator income model which requires the industrial companies to operate with a high coefficient of location, ie a tendency towards spatial concentration; secondly, being a industrial park mainly dedicated to the production of intermediate goods, requires, for its viability, the existence of scale, agglomeration and urbanization economies.

The spatial consequences of a model of this nature culminated, at a national level, with the concentration of production in a few parts of the territory - the Southeast cities - making the old regional capitals lose control over their respective areas of influence and, above all due to changes in transport systems, being transformed into simple intermediate cities, since the distribution functions assumed in these locations, more importance than the production functions.

Those characteristics of the economic model, by definition, conflict with an industrial deconcentration policy such as the industrial districts of Bahia, though this was justified by the need to mitigate regional imbalances. In these circumstances, the policy aimed to the creation of secondary poles of growth, complementary and articulated with major regional centers - in the case of metropolitan industrial centers of Aratu and Camaçari - which did not happen due to the absolute lack of links with national economic reality.

It should be noted, additionally, the negative economic consequences of the interior districts creation moment, when the economic growth strategies were beginning to fade, making even tax incentives insufficient to generate and attract new projects. On the other hand, despite the existence of these specific tax incentives and a weak technical assistance, not always readily available, it was precarious, not to say zero, the articulation between the different instruments of industrialization policy implemented.

The lack of a strategy and policy of urban development implied that this space was occupied by political interests, in an authoritarian manner, preventing the integration of intersectoral actions, as well as effective participation in the process of the various segments of society, especially the businesses.

From the spatial point of view, it appears that the macro locational definition of industrial districts of Bahia was guided, primarily, by political factors and, secondarily, relied much more on the analysis of urban hierarchy than on the occurrence of effective economic possibilities. As the state urban network is also marked by the macrocephaly of its capital and metropolitan region, the demographic volume, urban equipment and average income of the inner cities do not appear being capable of enabling industrial districts, making it necessary not only rigorous criteria of priorities, but also a massive governmental effort, as has occurred for the implementation of the Petrochemical Complex in RMS. This effort, likewise, should include not only the deployment of infrastructure but also the promotion, agency and participation in nuclear projects designed to enable the viability of these districts.

The large districts of the metropolitan region of Salvador - CIA and Copec - followed the same fate of their smaller inner counterparts. The first has become, according to local media, a "graveyard of industries". Megalomaniac idealization of a famous architect, not specialized in this sector, was designed as a generic industrial center. A true "industrial bazaar." And the second, pretentiously called Polo, an "enclave" because it haven't produced the polarizing effects expected. In this case it is worth noting Paelinck's observation (1965, p.192) "First the theory of polarized regional development is not a theory of location (...). Anyway it is not an easy remedy for the opening of economically backward areas . This leads us to refute the banal but current idea of savior pole. "

Moreover, according to experts in the field, the "Polo" was victim of two serious locational misconceptions. Opposing numerous technical reports and due to the discrepancies between the levels of power, it was settled far from the sea, as often happens in this kind of projects, and deployed on top of the largest freshwater underground aquifer of RMS, the aquifer of San Sebastian, which has demanded considerable efforts to prevent its contamination by petrochemical industrial waste.<sup>7</sup>

Then in locational terms Bahia's industrial policy failed. It could not confront the tendencies of financial concentration of Brazilian companies, a phenomenon that occurred since 1990s. This concentration that took to the formation of oligopolies began to dictate the industrial location policy.

#### **4. CONCLUSION**

In countries like Brazil, for example, of late entrance in the capitalist system, the application of the location theory principles is quite fragile. Being a patrimonial society, with strong traces of regulation, the state is an omnipresent figure in the economy, heavily interfering in the market.

And the state's presence brings with it, politics, and the introduction of irrationality in the economic field, since its principles are based on clientelism and physiological principles of an oligarchy, which parasite the nation's body.

There are honorable exceptions, notably in the Southeast of the country, but the fact is that in Brazil, the state has the power and the ability to target the location of the companies in its territory, bargaining with subsidies, tax exemptions, infrastructure offerings, in this way creating a set of artificial advantages that distorts locational process.

This leads to companies that, considering the locational indicators, instead of being installed in the region A, are otherwhise set up in the region Z, writing with this, in the long run, like say Garcia Marques, the chronicle of na announced death.

The Brazilian Northeast is fraught with examples of this nature, starting with the so called Camaçari Petrochemical Complex or the case of Caraíba metals, copper metallurgy installed in the same region, whose locations were mistakes made in the period of authoritarian governments of the military dictatorship (1964/1985). But these

 $<sup>^7\,</sup>$  A deep analysis of CIA and COPEC experiences  $\,$  can be found at Spinola (2003:165,272 )  $\,$ 

discretionary positions are not the privilege of non democratic governments. In a plain democracy, under the command of governments claiming to be liberal, there were installed in the state companies that configured, according to government propaganda, "poles" including a shoes & leather one that, illogically, spread along several cities in the state following requests demanded by mayors and influential deputies.

These companies are mostly "footloose", ie whose light installation does not imply substantial fixed investments and thus does not prevent their rapid removal and transfer to other locations. The Vulcabrás/ Azalea group dismantled 12 shoe factories in the state disservicing more than 4000 people (Veja, 2012). This happened after the State Government had built for them the industrial buildings and the infrastructure of the whole area.

The conclusion, answering the question that heads this article, as the facts show, is that locational theories, in order to constitute strategic factors in regional development depend on a number of conditions, such as the local culture, the effective political regime, market structure and technical training of professionals in spatial economy.

From the cultural point of view it is expected the existence, in this society, of a social contract that is effective in practice, not just in speech, by which prevails the sovereignty of society and the political sovereignty of the collective will. (Rousseau [1772] 2002).

Clearly such a contract presupposes a democratic political regime where the State, without giving up its role of development promoter, respect the legitimate operation of the market. In this plan it is necessary the adoption, by the competent bodies, of a policy to restrict the economy concentration and the stimulus, by the government, of a monopolistic competition structure that opposes the oligopolies, at least minimizing its effects of cartelization and collusion. Finally, it is necessary that the state and companies worry about the human capital, essential for the instrumentation of actions technically solid and spatially consistent.

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