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HISTORY AND HERITAGE OF COMPANY TOWNS IN THE NORTHEAST BRAZIL

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ABSTRACT

This research examines the phenomenon of company towns in the Northeast of Brazil from the second half of the nineteenth century to the late twentieth century. It traces the fundamental aspects of the region's industrial development, with its economic and social dynamics, in an attempt to understand the interconnections between the vicissitudes of the company towns and their industrial base. It analyzes the emergence of the company towns articulated within the social construction of the working-class home and of positive and negative dwelling archetypes in Northeastern Brazil. Furthermore, it provides a characterization of the company town phenomenon in the Northeast. It initially looks into its historical development, examining the first housing experiences established by Brazil's early manufactories, the birth of the first company towns at the turn of the nineteenth century, their expansion throughout the first half of the twentieth century and their decline during the crisis of the traditional Northeastern industrial base during the second half of the twentieth century.

LIST OF ACRONYMS

AGCRJ	Arquivo Geral da Cidade do Rio de Janeiro
BNDE	Banco Nacional de Desenvolvimento Econômico
BNH	Banco Nacional da Habitação
CETEX	Textile Executive Commission
CLT	Leis Consolidadas do Trabalho
CRL	Center for Research Libraries
CRT	Companhia de Tecidos Rio Tinto
CIPER	Companhia Industrial Pernambucana
CHESF	Companhia Hidrolétrica do Vale do São Francisco
CODEVASF	Companhia de Desenvolvimento do Vale do São Francisco
CTP	Companhia de Tecidos Paulista
DNOCS	Departamento Nacional de Obras Contra as Secas
EIA	Environmental Impact Assessment
GTDN	Grupo de Trabalho para o Desenvolvimento do Nordeste
IBGE	Instituto Brasileiro de Geografia e Estatística
IOCS	Inspetoria de Obras Contra as Secas
LAMP	Latin American Microfilm Project
PNAD	Programa Nacional de Amostragem de Domicílios
SEA	Strategic Environmental Assessment
SENAI	Serviço Nacional de Aprendizagem Industrial
SESI	Serviço Social da Indústria
SUDENE	Superintendência de Desenvolvimento do Nordeste
SUIT	Sustainable development of Urban historical areas through an active Integration within Towns
TICCIH	International Committee for the Conservation of the Industrial Heritage
UNRRA	United Nations Relief and Rehabilitation Administration

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INTRODUCTION

The construction of company-induced housing, and social and recreation services close to production facilities constitutes a business practice historically observed in countries at the forefront of industrialization, as well as late bloomers like Brazil. In this country, company-built settlements have been an integral part of the rise of industrial capitalism since the second half of the nineteenth century. They shaped and reshaped landscapes and introduced new patterns of urbanization through the implementation of productive activities and networks of infrastructure, and the displacement and relocation of population; they induced changes in social relations of production and redefined relationship dynamics between employers and employees; they transformed modes of living and organizing the urban space through the adoption of novel housing and urban models; and often they also developed into cohesive communities.

Even though the list of ways in which company-induced settlements influenced the unfolding of industrial capitalism in Brazil could certainly go on, these places have surprisingly received little attention from both historical scholarship and heritage practitioners, and, in particular, the lesser advanced industrial areas of the country have been even more neglected. This research seeks to address this gap, focusing on the development of company-induced housing in the Northeast region of Brazil from approximately from 1850 to 1980, the significance and the conservation prospects of their industrial heritage.

This is most certainly a mammoth task due to the broad spatial and chronological scales dealt with by this study: 917,548 square kilometers and a time span of over 100

years. Nevertheless, we felt there was pressing need to significantly increase research on the company-built settlements of the Northeast region because the existing literature is insufficient and too fragmented to provide a comprehensive a synthesis of the wide-ranging typologies and experiences found in the region.

In this thesis we refer to these company-built settlements as “company towns”, which traditionally has been defined as settlements built and operated by a company to provide accommodation and services for their employees (Crawford 1995: 1-2). Even though the international literature has tended to use the English term to denote heterogeneous experiences that present great diversity in respect to historical and geographical contexts, industrial bases, specific urban forms and so on, it is important to bear in mind the underlying differences that the terminology carries in each language.¹ In Brazil, “company town” is best translated by the expression “vila operária”. However, there are significant differences between the two. According to Garner (1992: 3), since it was coined in American in the late nineteenth century, “company towns” has always been used pejoratively and “has carried a stigma that has not gone away”. Echoing Garner’s perspective, Green (2010: 3) described the negative images the term evokes:

A company town seems necessarily to be a place where one business exerts a Big Brother-like grip over the population – controlling over even taking the place of government, collecting rents on company-owned housing, dictating buying habits (possibly at the company store), even administering where people worship and how they may spend their leisure time.

The “vila operária”, however, does not carry the same connection – in spite of the fact that the description above also probably fits many Brazilian company towns. The term “vila operária” emerged in Brazil as a model of hygienic home for the working classes and as such it evoked images of order, cleanliness, morality, productivity. Moreover, unlike

¹ Two published collections of essays on company-built settlements in different parts of the world, adopted the term “company town” as the standard: Garner (1992) and more recently Dinius.

“company town”, “vila operária” does not necessarily mean a settlement built to house employees of an industrial concern. We underline, however, that in this thesis interest is only directed to those vilas operárias built by industrial manufacturers.

Garner had already called attention to how the overuse of “company town” concealed a multiplicity of connotations, but in general scholarship has overlooked these differences. Hence, despite using the terms “company town” and “vila operária” interchangeably throughout the thesis, in Chapter 1 we seek to address this issue of the terminological divergences by providing an examination of the origins of the “vila operária” model. Further clarification on this point is provided below.

Many of the questions posed during the development of this research were fruit of our participation in the Excellence Project *Company Towns in the world: Origins, evolution and rehabilitation (16th - 20th centuries)* which brings together research teams from different parts of the world, under the coordination of the University of Padua, to investigate the company town phenomenon. The interdisciplinary and global nature of this project brought to light the need to construct and communicate of a new perception on the extensive and diverse typological, chronological and spatial articulations of the company town phenomenon.²

² The two international conferences convened at the University of Padua (The International Workshop “Company Towns in the world. Origins, evolution and rehabilitation (16th - 20th centuries)” held on June 29, 2012; The International Conference Company Towns in a Global Perspective took place from October 3 to 5, 2012) and the resulting publications were instrumental to encourage discussions in this sense.

Research Problem and objectives

Company towns are an inherent part of industrial development. Their birth is closely associated to the need of modern industry to create the infrastructure to be able to exploit natural resources or manufacture industrial goods in places that lacked extensive urban development (Dinius and Vergara 2010: 2). To attract and recruit stable workforce and reduce labor turnover, employers built accommodation and provided social and recreational services to workers and their families. Apart from the economic rationale and the search for profit, social ideas also had an important role in the development of those settlements. Employers hoped that the company town would stir workers away from class and political conflict, shape their characters and ultimately achieve social harmony.

The Brazilian company town phenomenon was triggered by the industrial development of the second half of nineteenth century. Settlements were mainly concentrated in the textile, paper, mining and sugar sectors. Even though total dimension of the phenomenon in Brazil is unknown, Correia's (1998) landmark study identified 110 company towns built from 1845 to 1930 in the country. As the author points out the figure, however, certainly represents an underestimation of the total number of company towns in Brazil since mining, railroad and sugarcane mill towns are not included in the inventory and that company towns were still built in Brazil until the last decades of the 20th century. The total number of company towns in Brazil is thus certainly larger and the phenomenon is more extensive than commonly assumed. The history of company towns constitutes a significant part of Brazil's past that has largely been overlooked in the context of the country's industrializing process.

Our research focuses on the company town in the Northeast region of Brazil which despite the historical patterns of industrial concentration in the South of the country was

home to various company towns of expressive scale and singular features.³ This choice was guided by the acknowledgement these settlements form an important and still poorly examined chapter of the history of Brazilian industrial development and of its company town phenomenon. Few Northeastern company towns have been documented in detail and their memory is jeopardized in view of the alarming rate at which the company towns landscapes have been deteriorating.

The area under examination in this research is the Northeast region as it was first officially established in 1942 by the Circular nº 1 da Presidência da República, i.e. comprising the states of Maranhão e Piauí, Ceará, Rio Grande do Norte, Paraíba, Pernambuco and Alagoas⁴. The main difference between the original and the current regional division is the absence of the states of Bahia and Sergipe in the Northeast. Our choice is explained by the fact that this partition reflects the economic and social dynamics of the Brazilian territory during the most part of the historical period analyzed in our research. This geo-economic approach will allow us to take into consideration local specificities and particular social and economic relations.⁵

The period under review stretches from the second half of the nineteenth century to the 1980s. This time frame allows us to examine the birth, development and decline of company towns in the Northeast and to assess the impact of major historical events such as the World War II (1939-1945) and the creation of the Superintendence for the Development of the Northeast (SUDENE) in 1969.

³ Brazil's regional industrial concentration was reflected in the spatial distribution company towns: out of the total 110 settlements recorded by Correia (1998), 66 (60%) were located in the Southeast region, 24 in the Northeast (21.8%) and 20 in the South (18.2%).

⁴ The *Circular nº 1 da Presidência da República* set on January 31, 1942 the first official macro-regional division of the Brazilian territory: North, Northeast, East, South and Center-West.

⁵ This differentiation has now been renewed by the regional division of the *Eixos Nacionais de Integração e Desenvolvimento* which since 1996 guides the *Plano Plurianual*, the Federal Government's Plan for its long-term government projects and programs. The new National Axes divide the Northeast into the *Transnordestina* and the *São Francisco* areas, which respectively correspond to the Northeast and the Septentrional East of 1942.

This research proposes to view the Northeastern company towns in the light of a particular theoretical framework: that of Industrial Heritage studies. As such, it examines those company town experiences from both a historical and a heritage perspective, i.e. it seeks to analyze the evolution of such settlements throughout time, and also to assess their presence in the present-day context. First, the project seeks to carry out a study of the historical development of the company towns in that region, analyzing their emergence, expansion, gradual decline and closure. Second, rooted through the theoretical framework of Industrial Heritage, it examines the footprints of company towns in the current urban fabric, looking into the significance of their heritage in the Northeast, how those spaces are perceived by their current users and assessing their conservation prospects. These are not opposing approaches; on the contrary historical knowledge is a basic foundation for the safeguard of heritage, while tangible and intangible heritage elements can feed historical knowledge. As the Draft Joint ICOMOS-TICCIH Principles affirm, thorough knowledge of the industrial and socio-economic history of an area and regional studies with a comparative component are necessary to understand the significance of industrial heritage sites or structures.⁶ Addressing these issues, this research has three main goals:

Examine two underlying elements that shaped the phenomenon: the particular dynamics of the industrial development of the Northeast and the construction of negative and positive archetypes of dwellings of the working poor. This approach apprehends company towns as the spatial manifestation of a social ideology and an economic rationale.

- Provide an analytical synthesis of the company town phenomenon in the Northeast:

The body of literature on Northeastern company towns consists mainly of case

⁶ Draft Joint ICOMOS-TICCIH Principles for the Conservation of Industrial Heritage Sites, Structures, Areas and Landscapes (2011).

studies focusing on specific aspects of single industrial communities. Such studies, though varied in subject-matter and scope, have not yet provided a comprehensive characterization of the company town phenomenon in the Northeast capable of fully accounting for its complexity. Apart from the historical pattern of concentration in the textile industry, little is known about the defining features of the company town phenomenon in Brazil's Northeast; scholars have not yet carried out deep analysis of key aspects such as spatial distribution, average size, energy supply systems, community facilities and services, transport systems, among others. In the absence of comprehensive and comparative studies neither regional trends can be identified nor the existence of regional models verified in the future.

- Investigate the perceptions on the cultural significance and conservation prospects of company towns in the Northeast: Scholars have emphasized the ephemeral nature of company towns, a “temporary pioneering device” which often introduced “industrial capitalism into previously unexploited territory” and subsequently fell victim to the “continuing cycle of creation and destruction” of capitalist development (Porteous 1970; Mould 1985; Crawford 1995). In the Northeast of Brazil it was no different: from late 1950s following changing economic trends and the growing pressure of capitalist rationalization of the SUDENE, factories experienced drastic economic upheaval and relinquished control over their company towns.

Not often company towns survive the removal of their economic base but in the Northeast preliminary research indicates that a great number of company houses are still occupied rather than being abandoned and left to decay. In a number of company towns, houses and public buildings still stand today though their original features (architecture, urban planning, production facilities, industrial landscape, service and welfare facilities, social structures, etc.) have been disfigured.

This research considers company towns as urban cultural spaces and thus as the embodiment of social memories. Therefore, their destruction implies the crumbling of community's memory and identity references in a process that Bergeron and Dorel-Ferre (1996) defined as the loss cultural "substances". Bearing in mind that often there are differences in values held by heritage professionals and those held by the community, we seek to focus on the perception of users of former company town areas on their cultural significance and conservation prospects. In doing so, our research seeks to enhance understanding that can ultimately guide actions aimed at the conservation⁷ of company town heritage.

Review of the literature

Despite their importance, the history of Brazilian company towns has received comparatively little systematic study. The body of literature on Brazilian company towns consists mainly of case studies focusing on specific aspects of single industrial communities without acknowledgement of the historical, economic, political and social contexts within which they developed. Such studies, although varied in subject-matter and scope, have not yet provided a comprehensive characterization of the company town phenomenon capable of fully accounting for its complexity.

Though investigations into the company town phenomenon have not yielded an extensive *corpus* of writing, they have produced wide interpretative divergence. In Brazil diverse perspectives have been applied to the study of company towns, ranging from traditional historiography, to Marxism and the diverse approaches of the *Annales* School.

⁷ The term "conservation" is also employed here according definition of the Australia ICOMOS Burra Charter (1999): "all the processes of looking after a place so as to retain its cultural significance."

In particular, the Foucaultian framework helped shape the research agenda by focusing attention on the disciplinary component of the company town.

It is important to highlight at the outset that this literature deals with the Brazilian counterpart of the company town phenomenon, that is, the “vila operária”. Presenting diverse typological forms, the vila operária comprises settlements and housing promoted by companies for their employees, as well as those produced by private investors for the rental market not necessarily intended for factory workers. Although some authors deal with both typologies (Decca 1983; Blay 1985; Rago 1985; Bonduki 2004), in this review we are primarily concerned with the first one.⁸

In the first scholarly treatment of the subject based on extensive research in primary sources, Stanley Stein looked into the development of workers’ lodging within the context of Brazil’s industrializing process in his pivotal book “*The Brazilian cotton manufacture: Textile enterprise in an underdeveloped area, 1850-1950*” (1957). Even though it was a secondary theme in his study, Stein’s analysis of the company town phenomenon provided some interesting observations that lend themselves to further examination. He showed that since the onset of industrial development workers were provided with housing and various services and benefits; for instance, as early as 1853 the Todos os Santos mill in Bahia and the Andarahy Pequeno in Rio de Janeiro supplied unskilled labor with room and board. His indication that by the end of the nineteenth century the dormitory system of the first textile mills gave way to vilas operárias of single-family houses sheds light on how the housing offer in the early textile mills was affected by the nature of the workforce and industrial relations context.

We owe, however, the first detailed descriptions of company towns in Brazil to the biographers of prominent industrialists. These authors wove into the tapestry of historical

⁸ Though acknowledging the existence of underlying differences between “vilas operárias” and “company towns”, we employ both terms interchangeably throughout this text. A discussion on the social construction of the “vila operária” can be found in Chapter 1.

tradition that company towns were civilizing enterprises which brought remote and forgotten parts of the country into the light of capitalist development. The founders of company towns were considered progressive and creative entrepreneurs, with a sense of social justice and public responsibility, whose ideas and visions reached far beyond their time. Aragão (2002: 79) considered that workers' loyalty and obedience to the mill were a trade-off for owners' sense of responsibility and care towards the former.

This body of literature spanning several decades was devoted to recounting the blessing of the "civilizing mission" of the company town. Eliana Dumêt (1990) considered that Luís Tarquínio's company town was born out of his bold political concepts of social justice and development. Palmira Teixeira (1990) praised Jorge Street's "model" Vila Operária Maria Zélia for providing workers with a set of services including primary schools, pharmacy and a company store. Although granting that these concessions inhibited free political expression in the company town, Teixeira supported that belonging to such a pioneering project inspired great pride in workers and their families and that the quality of life enjoyed by residents of the Vila Maria Zélia was unquestionable (Teixeira 2009: 5-6).

In particular regard to the Northeast two industrial entrepreneurs have received greater attention: the Lundgrens, an immigrant family of Swedish origin who founded the textile company towns of Paulista (1904) and Rio Tinto (1924), and Delmiro Gouveia, founder of Pedra (1914), a company town in the dry hinterland of the state of Alagoas. The Lundgrens' accomplishments have been detailed in Raul de Goes' *Herman Lundgren: pioneiro do progresso industrial do Nordeste* (1949) and *Um Sueco Emigra para o Nordeste* (1964). The extensive biographical literature on Delmiro Gouveia includes titles such as *Delmiro Gouveia: Pioneiro de Paulo Afonso* (Rocha 1963), *A Glória de um pioneiro: a vida de Delmiro Gouveia* (Araripe 1997) and *Delmiro Gouveia: pionero e nacionalista* (Martin 1979). Both industrialists are also featured in Jacques Marcovitch's

recently published collection of biographical essays, *Pioneiros e empreendedores: a saga do desenvolvimento no Brasil* (2007), which assesses the role of innovation and entrepreneurship in Brazilian industrial development.

This historical tradition also considered company domination over the external lives of its employees as an attempt to “instill civilized habits” into them. Rocha (1963) regarded Delmiro Gouveia’s daily morning patrol around Pedra to enforce company standards of order and cleanliness as part of the industrialist’s civilizing mission, while Marcovitch praised the Pedra’s “well-dressed workers” who learned to “not spit on the floor and litter” and to “take a daily shower” (Marcovitch 2007: 152-153). Góes narrated how the Lundgrens transformed a land covered by marshes, where there was “only malaria, Indians, and sloths” into the town of Rio Tinto (Góes 1964: 126).

A more critical perspective on Brazilian company towns was put forward as increasing scholarly attention was paid to the experiences of the working class and their political exclusion following the military coup in 1964, the resurfacing of anti-authoritarian struggle and the gradual process of political opening in the mid-1970s, and the subsequent return to civilian rule in the late 1980s. Problematizing company towns in the context of the on-going struggle for political reform had serious implications for historical analysis: the historiographical debate reflected scholar’s commitment to the working classes and to the doctrine of the world-historic mission of the proletariat (Rago 1995, 69).

It was thus from that viewpoint that Eva Blay (1985) turned her attention to the vilas operárias of São Paulo in an effort to challenge the paradigm of benevolent paternalism that dominated the Brazilian literature on company towns until then. She considered that the development of company towns was subordinated to the general logic of capital reproduction and accumulation, and that company-induced housing was an expression of exploitation of labor and oppression of the working class within the industrial capitalist system. She supported that by accumulating the roles of landlord and employer,

industrialists could impose a twofold relation of domination over the tenant-worker, while implementing a twofold strategy of capital accumulation through the extraction of surplus value from the exploitation of the workforce and from the land revenue. The company town was considered therefore as coercive entity which, by means of the provision of housing, contributed to weaken workers' demands and struggles, force wages down, and retain and stabilize the workforce in order to lower the cost of labor and of the reproduction of the labor force and to ensure the extraction of surplus value and the production of profits.

New avenues for the study of Brazilian company towns were created by the decisive methodological and epistemological renewal of Brazilian historiography in the 1980s.⁹ From the interpretative models or paradigms focusing on socioeconomic structures and modes of production, attention shifted towards the cultural aspects and ideologies, opening up new fields of enquiry and challenging traditional images of the working class (Costa 1982: 217; Giroletti 2002: 26). A strong influence on Brazilian historiography was E. P. Thompson's now classic work *The Making of the English Working Class*, which was published in Brazil twenty-four years after its first British edition.¹⁰ Thompson's widely-cited renewed definition of class as a historical phenomenon that

(...) happens when some men, as a result of common experiences (inherited or shared), feel and articulate the identity of their interests as between themselves, and as against other men whose interests are different from (as usually opposed to) theirs. The class experience is largely determined by the productive relations into which men are born – or enter involuntarily. Class-consciousness is the way in

⁹ The establishment of new universities and the expansion of graduate teaching following the 1968 reform of the national educational system (Law 5.540/68) provided a stimulus for the adoption of new approaches to the study of Brazilian history.

¹⁰ The original English version of *The Making of the English Working Class* was published in 1936, while the Brazilian translation (*A Formação da Classe Operária Inglesa: A Árvore da Liberdade*) came out in 1987.

which these experiences are handled in cultural terms: embodied in traditions, value-systems, ideas, and institutional forms. (Thompson 1963, 9-10)

reaffirmed the active role of the political subjects and placed the conditions for economic and social change in the cultural realm.

Thompson influenced a number of works published in Brazil that focused on social relationships and social practices of the working classes' inside and outside factory walls, particularly in the early decades of the twentieth century when intense industrialization and urbanization took place (Rago 1999: 77). This scholarship of the working class led way to broadening and deepening the study of Brazilian vilas operárias.

This paradigm shift is best exemplified in José Sérgio Leite Lopes' *A Tecelagem dos Conflitos de Classe na "Cidade das Chaminés"* (1988), which studied the *Companhia de Tecidos Paulista* (CTP).¹¹ Drawing from Bourdieu¹², Lopes approached Paulista as a "particular case of the possible" in order to examine how the forms of domination in industries with company towns differ from the general forms of domination within the capitalist mode of production.

Lopes supported that the structure of relations of domination in Paulista forged a system that was structured around the company's monopoly on industrial production, real estate ownership, agricultural production in areas adjacent to the factory and consumer goods market, combined with the promotion of corporate paternalism under the form of

¹¹ As aforementioned, Paulista was founded in the late 19th century; under the control of the Lundgren family it became one of the most important textile factories in Brazil. More information on this company town is provided throughout Chapters 1 and 2.

¹² "All my scientific endeavour takes its inspiration, in fact, from the conviction that we cannot capture the deepest logic of the social world unless we immerse ourselves in the particularity of an historically situated and dated empirical reality, but only to construct it and treat it as a 'particular case of the possible'; as Bachelard puts it, that is, as a figure in a finite universe of possible configurations." (Pierre Bourdieu, *Espace sociale et espace symbolique, introduction d'une lecture japonaise de La Distinction*, conference presented at the Maison Franco-Japonaise, Tokyo, 4 October 1989.)

medical services, recreational activities, etc., and the use of a private armed militia (Lopes 1988, 21). Like in many other company towns, in the “Paulista system” control reached beyond the workplace and spilled over into workers’ living environment and social life; however, Lopes (1988) argued that what set Paulista apart from other company towns was the scope of its action on the material conditions of existence of its workers. Rosilene Alvim (1997) pursued these issues further by assessing the making of the proletarian family within the “Paulista system”.¹³ She claimed that the recruitment of large families (particularly those with a high number of girls) reinforced and legitimized the company’s ideology and moral of work and served the strategies of the “Paulista system” to regulate and shape the workforce.

Lopes (1988) and Alvim (1997) filled a significant gap in the literature related to the Brazilian company towns which until then had traditionally been read as the history of industrial development in the city of São Paulo. As Emília Viotti da Costa (1982) and Domingos Giroletti (2002: 25-26) pointed out, this historiographical focus tended to perpetuate a representation of the working class under the First Republic (1889-1930) as mainly composed of Italian or Spanish immigrants who espoused anarchist ideas and – less importantly – of Brazilian male workers from rural areas with little or no political experience.

By shifting attention to a company town of the Northeast, Lopes (1988) and Alvim (1997) highlighted the social and political diversity of the Brazilian working class. Alvim gave voice to women workers’ experiences through interviews and ethnographic methods and reflected upon the consequences of the changes in peasant patterns of family work and domestic authority prompted by the proletarianization of families in the “Paulista system” (Alvim 1997: 122-136). Lopes showed the relevance of other labor movement groups

¹³ It is important to highlight that although only published in 1997, Alvim’s research was carried out during the late 1970s and early 1980s in association with Lopes.

previously marginalized in the academic tradition, in particular unionists and social catholics.

Furthermore, Lopes (1988) and Alvim (1997) provided an insight into how company towns and their residents were affected by the decline and closure of traditional industries. Lopes documented the struggle of the CTP workers to put an end to the company's land and real estate monopoly and to create a "free" neighborhood during the second half of the 1940s. Alvim examined how workers' shared experience in the CTP town fostered a sense of belonging which lingered on after the company's closure and how the social meanings of the company town changed as the living environment lost its bonds with the workspace and the company.

Another important source of the historiographical renewal in Brazil sparked in the 1980s was Michel Foucault.¹⁴ Without necessarily questioning conceptual or methodological frameworks, the Foucaultian approach in Brazil broadened the scope of historical inquiry by appropriating the notion of disciplinary power and looking into the discourse practices through which disciplinary power operates. Attention was thus shifted from conventional concerns of classes or economic processes and the large structures of domination and resistance (State, party, union) towards the micro-political realms of power and resistance.¹⁵

As focus was directed to understanding the making of the making of the disciplinary society, its practices and rituals of power (Rago 1999), the vilas operárias emerged as a privileged vantage point from which to view mechanisms of control and

¹⁴ The Brazilian version (*Vigiar e punir*) was published in 1977, only two years after the original *Surveiller et Punir: Naissance de la prison* came out in France.

¹⁵ For a comprehensive assessment of the impact of Foucault's work on Brazilian historiography see: Durval Muniz De Albuquerque Júnior. *Vozes sem rosto, sombrias silhuetas: a contribuição da publicação de Vigiar e Punir de Michel Foucault para a historiografia brasileira* (available at: http://www.cchla.ufrn.br/ppgh/docentes/durval/artigos/segunda_remissa/vozes_sem_rosto.pdf. Access on: 28/11/2011), Rago (1993) and Rago (1995).

discipline and the “architecture of surveillance” in industrial and urban spaces. Borrowing from Foucault’s conceptual underpinnings, Margareth Rago (1985) and Giroletti (2002)¹⁶ examined the role of company-owned housing in the establishment of the factory system and the formation of the industrial labor force in Brazil.

To secure a regular flow of qualified workers, the emerging Brazilian industry resorted to European immigrants and its national impoverished population (former slaves, peasants, urban poor). Both, however, were regarded by industrialists as unfit for factory work – the first for being indolent and corrupted with dangerous political ideas, and the latter uncivilized and unskilled – and therefore had to be transformed through the imposition of discipline to become submissive and productive. Industrialists considered that the issue of housing for the working classes had a central role in this change; they thus responded by establishing company-induced settlements, which would operate as extensions of the factory’s disciplinary power in order to control workers outside their working hours (Rago 1985; Giroletti 2002).

Rago supported that by promoting welfare services and leisure activities, industrialists sought to create largely self-sufficient and autonomous settlements in order to isolate workers from the outside world and its negative influences. These enclosed gated communities – which she referred to as “vila-citadela” – made use of an architecture that reflected the ideal of the panopticon and that allowed for continuous surveillance in order to maximize control of worker behavior (Rago 1985: 179). Giroletti emphasized how the company town contributed to the development of practices of discipline aimed at fostering in factory labor a new consciousness of work, new values and attitudes, and a new lifestyle and encouraging employees to give up their former rural lifestyle and take on a new rhythm of life tied to the demands of the factory (Giroletti 2002).

¹⁶ The first edition appeared in 1985.

Gradually scholars moved away from the “social history” perspective as the dominant intellectual paradigm guiding historical research on Brazilian company towns (although still drawing from Foucault’s work). A fresh outlook was provided by researchers in the field of Architecture and Urbanism, which encouraged a host of new approaches emphasizing the place of company towns within the making of the urban landscape and the examined the architectural form and program of those settlements.

Rosália Piquet (1998) made an interesting contribution to the literature by using as a point of departure the structural transformations of Brazilian industry to examine the impacts of company towns in the country’s urban development. By looking into the changes those settlements experienced from the private-led development based on the production of nondurable consumer goods in the nineteenth and early twentieth centuries to the different conjunctures of the state-sponsored industrialization drive from the 1930s until the 1970s which sought to expand the domestic industrial base and to encourage the production of capital goods and consumer durables, Piquet highlighted the dynamic nature of company towns. Despite her innovative approach, her work has not grabbed much attention of researchers in the field.

Another study on the relationships between the provision of working-class houses and the urbanization in Brazil left a stronger mark on the company town scholarship: Nabil Bonduki’s *“Origens da Habitação Social no Brasil”* (2004).¹⁷ Although not dialoguing directly with Decca (1983), Bonduki’s analysis of the origins of state intervention in social housing in Brazil built upon many of the ideas she put forward. Bonduki showed that during Brazil’s First Republic (1889-1930), government attempts at producing social

¹⁷ The first edition was published in 1998.

housing were almost inexistent as the dominant liberal policies favored private housing initiatives and refused a direct State intervention in the issue.¹⁸

In such a context, the vilas operárias built both by private investors and industrialists assumed great importance in the dynamics of housing provision. The State and the ruling elite during the First Republic tended to consider the vilas operárias as the ideal working-class home since it guaranteed sanitary dwellings without requiring government intervention, while providing ideological, moral and political control over workers. Although the Vila Maria Zélia was promoted as the new paradigm of working-class house, Decca and Bonduki agree that few companies actually provided model low-rent houses to their workers and that the construction program of company-built houses was quantitatively limited. Most companies only built houses for a small number of employees, in particular to close at hand those who were essential to the factory operations (Decca 1983: 48-52; Bonduki 1994: 716). Nevertheless, despite these limitations, company towns had an important impact in Brazil's urban development since they were the first large-scale housing developments in the country (Bonduki 1994: 715).

Further advances in company town scholarship in Brazil were made by Telma de Barros Correia, who identified and documented a great number of experiences in Brazil through a vast on-site research program, particularly in the Northeast region (Correia & Gunn 2005; Correia et al. 2006; Correia & Almeida 2009). Correia focused on the architectural characteristics of company towns, bridging the gap between studies which "look at the company town as a physical environment and those who address its economic, labor, and social aspects" (Crawford 1995, 4). In *Pedra: plano e cotidiano operário na sertão* (1998) she examined, through the study of the Pedra company town, the relationships between spatial and social structures, such as those between the

¹⁸ State initiatives were restricted to the control of sanitary conditions – via health legislation and police action – and the granting of tax exemptions for private investors.

architecture of the workplace and of the living environment and the forms of social control enforced upon workers.

It is fair to say that throughout her many papers Correia provided the first comprehensive analysis of the architecture of company towns and identified trends in the dynamics of the development of company-induced housing in Brazil. She supported that industrial company housing in Brazil inherited features of the architectural program and form of colonial slave quarters and the traditional models of urban housing and that only from 1880 onwards it is possible to identify the constitution of an architecture that presents clear references to the industrial world (Correia 2001; 2006; 2008; 2011). Between the 1930s and 1940s a significant number of company towns built in Brazil incorporated elements from different architectural styles, in particular the Art Deco, which was applied to manufacturing, service and welfare facilities and workers' houses. Correia supports that Art Deco experienced considerable success among industrialists because, on the one hand, its simplified decorative language allowed for construction cost reduction and, on the other hand, it promoted a style update that related to the industrial culture and idea of modernization (Correia 2008).

Correia's work, combined with the recent interest in industrial heritage¹⁹, has sparked a renewed interest in the study of the development of company towns in Brazil,

¹⁹ In Brazil the debates on industrial heritage are still incipient in the academic world, in governmental policies and among the general public. In contrast to other Latin American countries, such as Mexico and Chile, where an inventorying and conservation tradition has been established, in Brazil "Nowadays, both the colonial and the nineteenth century industrial heritage as well as the factories and warehouses of the first decades of the XX century are in jeopardy, despite Brazilian unique heritage, such as sugar cane producing units, mining complexes, coffee farms and factories." (Meneguello 2006, 1)

Recently, academic interest together, the number of listed industrial monuments and sites, and the reuse of industrial buildings have grown. Furthermore, in 2004 a Brazilian representation of TICCIH was organized. Nevertheless, Brazil has not yet developed mature theoretical, methodological and practical knowledge in the field of industrial heritage, and industrial heritage safeguard has not yet been placed on the national public agenda. This reality can be verified by the extremely reduced number of manufacturing plants (and their associated infrastructure, such as railways, bridges,

resulting in a series of – mostly unpublished – graduate researches.²⁰ Noteworthy is Campagnol's account of workers' dwellings in sugar mills in Brazil in which she draws a comparative picture of these establishments in the states of Pernambuco, Rio de Janeiro and São Paulo and in the international scenario (Campagnol 2003). Nevertheless, heretofore little has been said about the footprints of those settlements in the current urban fabric and aspects related to their heritagization, especially in the Northeast. Lopes and Alvim (2009) assessed the demands for recovery and systematization of social memory prompted by of deindustrialization in the vila operária of Paulista. They identified a rooted collective memory in social groups whose lives had in one way or another been touched by the company town, and demand for conservation that has grown hand in hand with the disappearance of the material and immaterial references of the town's past. Lopes and Alvim's analysis still remain an exploratory effort, and do not go much further in considering the particular references and *enjeux* of industrial heritage.

Nevertheless, despite the growing scholarly interest in the company town phenomenon in Brazil, "overspecialized" studies still prevail and provide a limited insight into the complexity of its economic, labor, political and social aspects. Therefore, scholars fail to account for the larger explanatory framework and the particular regional, social, industrial and labor contexts in which company towns developed.

Moreover, studies on the Brazilian company phenomenon tend to mold their analytic categories according to the industrialist/labor dichotomy and thus read company towns as either a philanthropic gesture of businessmen who favored harmony between capital and labor, or as a means to discipline workers' free time, subjecting them to the bourgeois order and keeping them under constant control. We do not here suggest that

warehouses, etc.) protected by the conservation agencies or by private enterprise and the limited research in the field.

²⁰ These include: Balleiras 2003; Paulitsch 2003; Freitas 2005; Silva 2007; Stanchi 2008; and Jeronymo 2011.

the analytic and empirical weight of this dichotomy should be ignored: rather, it means that the industrialist/labor axis itself needs to be reconsidered in order to shed light on their complex intersections.

This research aims to address these gaps first by taking into consideration the wide variety of forms and cases found in the Northeast region and by placing them in a broad explanatory framework that acknowledges the interconnections between company towns and the economic, political and social realms; second, by seeking to supplant the Manichean dualism that underlies interpretations of the company towns phenomenon, approaching them as symbol of contradictory and controversial meanings and images; and finally, by assessing how they are perceived by their current users in order to understand the challenges and stakes of their heritagization.

Methods and sources

The research methodology employed in this thesis was rooted in a qualitative epistemological position that recognizes the importance of locating the research within a particular social, cultural, and historical context, and that acknowledges the social construction of these contexts and the identities participants construct within them. Sources and data gathering was carried out through two major strands: first, the examination of bibliographical and primary sources, and secondly the employment of on-site study visits.

Bibliographical research was carried out in the libraries following libraries in Italy, France and Brazil: libraries of the Università degli Studi Padova and the Università IUAV di Venezia; of the Institut des Hautes Etudes de l'Amérique Latine and the Cité de

l'Architecture; and of the Universidade Federal de Pernambuco, Universidade Federal da Paraíba, Universidade de São Paulo, Biblioteca Municipal Penarol (Camaragibe), and Biblioteca Municipal de Rio Tinto. Interestingly, it was possible to locate in those French institutions, sources that were unavailable in Brazil.

In order to overcome three major challenges regarding the archival research – the intrinsic fragmentary nature of a research project that covers such a large area, the absence of company archives and the constricted timeframe –, priority was granted to consulting the archive of a national institution which gathered documentation pertaining the entire national territory: the Fundação da Biblioteca Nacional do Brasil. Namely, its collection of periodicals was instrumental to collect information to understand the social construction of the vila operária (Chapter 1) and to build synthesis of the company town phenomenon (Chapter 2). Another fundamental source of documentation was the Latin American Microfilm Project at the Center for Research Libraries (CRL) which digitized executive branch serial documents issued by Brazil's national government between 1821 and 1993, and by its provincial governments from the earliest available for each province to the end of the first Republic in 1930. Complementary research was carried out in the Public Archive of the state of Paraíba and the Fundação Joaquim Nabuco (Pernambuco). It must also be registered the importance of documentation obtained via non-institutional channels; those were documents of various nature (historical documents, personal narratives, photographs, maps) presented by local residents during visits to the company towns of Camaragibe and Rio Tinto. Finally, series of industrial censuses carried out by the Brazilian government from 1882 to 1954 provided a great amount of data regarding the country's industrial development and also on the company towns.

The on-site visits were carried in three company towns: Companhia de Tecidos Rio Tinto (Rio Tinto, Paraíba), Companhia Industrial Pernambucana (Camaragibe, Pernambuco) and Fábrica da Torre (Recife, Pernambuco) during the year of 2013. They

allowed us to assess fundamental characteristics of the historical development of Northeastern company towns, as well as obtain relevant information on their present-day state of and the current uses.

Data obtained through the research program described above was continuously compiled into a database in order to analyze the material and arrive at a more complete understanding and historical reconstruction of the company town phenomenon in the Northeast. This database was developed with particular reference to the used to carry out a worldwide survey within the aforementioned “Company Towns in the World” Project of the University of Padova.

For the second part of this thesis, a survey was carried out in the selected case studies to assess perceptions of company heritage and the *enjeux* of its heritagization. This survey was undertaken through a program of structured interviews carried out in three company towns that had been previously selected as case studies, elaborated within the framework of the SUIT methodology (Sustainable development of urban historical areas through an active Integration within Towns) ²¹, which aims to provide indicators of the strength of people’s perceptions with regard to urban landscapes. The survey took the form of a questionnaire schedule where each question aimed to provide a measure against identified indicators of perceived quality. These include indicators associated with perception, indicators associated with proposed interventions and categorical indicators. The SUIT methodological framework is further explained in Chapter 4.

21 Dupagne, A. ; Ruelle, C. ; Teller, J. et al. (ed.) SUIT project (Sustainable development of Urban historical areas through an active Integration within Towns): Guidance for the Environmental Assessment of the impacts of certain plans, programmes or projects upon the heritage value of historical areas, in order to contribute to their long-term sustainability. Research report n°16. Brussels: European Commission, 2004

Thesis structure

This thesis explores the company town phenomenon of the Northeast through two parts, each divided into two chapters.

Chapter 1 examines the historical backgrounds of the development of the company town phenomenon. On the one hand, the chapter traces the fundamental aspects of the region's industrial development, with its economic and social dynamics, in an attempt to understand the interconnections between the vicissitudes of the company towns and their industrial base. On the other hand, it analyzes the emergence of the company towns articulated within the social construction of the working-class home and of positive and negative dwelling archetypes in Northeastern Brazil. In order to understand the ways in which the company-built settlement developed between the 1850s and the 1930s, it is necessary to place it within the larger framework of the "moralization enterprise that engaged public authorities, public health officials and physicians in the mission of "reforming" the urban poor (category that included industrial workers). From this perspective, the substandard working-class home was identified as a social and economic threat, while company-built housing would be the paradigm of the sanitary and respectable house for the working poor. It is thus the articulation between these two elements – with their specificity in the Northeast – that produce the company town phenomenon in that region.

Chapter 2 provides a characterization of the company town phenomenon in the Northeast. It initially seeks to identify the features of this business practice in each historical/economic period, by examining the first housing experiences established by Brazil's early manufactories, the birth of the first company towns at the turn of the nineteenth century, their expansion throughout the first half of the twentieth century and their decline during the crisis of the traditional Northeastern industrial base during the

second half of the twentieth century. In a second moment, it provides a general characterization of these establishments in the Northeast examining a number of aspects pertaining location, housing offer (dwelling types, zoning, groupings, property regime), facilities, public spaces, transportation systems, and labor management relations. By adopting this regional approach, we aim to overcome the approach hitherto adopted in most studies on Northeastern company towns, that is, studies of local history focusing on single cases, and to identify regional trends and specificities of Northeastern company towns development in the broader Brazilian context.

The second part of the thesis considers the presence of the company-induced settlements in the present-day context, that is, the heritage of this particular type of working-class dwelling. It represents an effort to understand the “enjeux” of their heritagization, and particularly the attitudes and perceptions towards, and knowledge and uses of the company town spaces by their present-day users, and the approaches advanced by the field of Industrial Heritage. The development of a comprehensive understanding of the role that company towns play in communities is essential to inform future discussions, policies and actions to safeguard industrial heritage of these areas that have been – in most cases – drastically affected by the removal of their economic base. This last part was undertaken through a program of structured interviews carried out in three company towns that had been previously selected as case studies, elaborated within the framework of the SUIT methodology (Sustainable development of urban historical areas through an active Integration within Towns), which aims to provide indicators of the strength of people’s perceptions with regard to urban landscapes.

CHRONOLOGICAL TABLE OF BRAZILIAN HISTORY

- 1785** *Alvará* issued D. Maria I, queen of Portugal, banning any industries or manufactures, except those linked to the production of coarse cloths (for the baling products or clothing of slaves)
- 1822** 7 September: The Independence of Brazil was proclaimed by Dom Pedro I in Sao Paulo
- 1844** Alves Branco Tariff, which raises the tax on imports up to 60% “ad valorem”
- 1850** Eusébio de Queirós Law, definitely banning the slave trade to Brazil
- 1864** 13 December: Outbreak of the Paraguayan War
- 1870** 8 April: The peace treaty is signed between Brazil and Paraguay putting an end to the Paraguayan War
- 1888** 13 May: Princess Isabel signed the Lei Aurea, which freed slaves in the country
- 1889** 15 November: The Republic of Brazil is proclaimed
- 1891** 24 February: The first Republican constitution of Brazil is adopted: presidential system, federalism and universal male suffrage (excluding illiterate and common soldiers).
- 1894** Prudente de Morais , the first civilian president of Brazil, is elected
- 1906** The First Congress of Brazilian Workers, of anarcho-syndicalist tendency, is realized
- 1907** Act for the Repression of Anarchism, authorizing the deportation of foreigners linked to the labor movement.
- 1917** General strike in São Paulo, of anarcho-syndicalist inspiration
- 1930** 24 October: Coup ousts president Washington Luís and brings Getulio Vargas to power (“1930 Revolution”).
- 1931** Creation Ministries of Labour, Industry and Commerce and Education and Health
- First labor measures: eight-hour day, annual leave and paid weekly rest.
- Legalization of trade unions, subordinated to the Ministry of Labour, Industry and Commerce.

- 1935** November: Communist uprising known as “Intentona Comunista”
- 1937** 10 November: Getúlio Vargas’ state coup and the inauguration of the “New State”
- 1942** Brazil enters World War II against Germany and Italy
- 1946** Inauguration of President General Eurico Gaspar Dutra, elected in 1945, after Vargas’ resignation
- 1950** Getúlio Vargas is elected president
- 1954** Vargas commits suicide; Café Filho, vice-president, takes over
- 1955** Juscelino Kubitschek is elected president
- 1960** Inauguration of Brasilia, the new capital of Brazil
- 1961** January: Quadros assumes the presidency
August: Quadros resigns and vice-president, João Goulart assumes
- 1964** March 31 : Military Coup or Revolution 1964 and removal of João Goulart
General Humberto de Alencar Castello Branco assumes the Presidency
- 1967** General Artur da Costa e Silva assumes the Presidency
December: The Congress is closed and is decreed AI-5 granting extraordinary powers to the President and suspending several constitutional rights
- 1969** General Emilio Medici Garrastazu assumes the Presidency
- 1974** General Ernesto Geisel assumes the Presidency
- 1979** General João Baptista de Oliveira Figueiredo becomes President
- 1985** January 15 - Tancredo Neves elected President by an electoral college
April 21 - Tancredo Neves dies and José Sarney is sworn in
- 1986** March 1 - The Cruzado Plan is launched and a new national currency, the Cruzado (Cz \$) is established
- 1988** A new Constitution is adopted

CHAPTER 1 – THE UNDERPINNINGS OF THE COMPANY TOWN PHENOMENON

This chapter seeks to examine two elements directly at the origin of the company town in the Northeast of Brazil and that shaped its defining features: first, the region's industrial development and its economic, political and social dynamics. Since there is no way around the fundamental fact that company towns are creations of industry, in order to achieve an understanding of this phenomenon, it is necessary to start in this familiar interpretative history. Second, the construction of the notion of company town itself – or “vila operária” in Portuguese – operated from the late nineteenth century amidst the discussions regarding the issue of housing for the urban poor.

It was the articulation of these two elements (with their specificities in the Northeast) that constituted the structural backbone of the vila operária in that region. The interest in these two elements is here thus interwoven with an interest in the development of company towns, as we seek to establish a bidirectional relationship between them; in effect, the historical development of company town, which is conditioned by and occurs within the context of particular social, economic and industrial structures, has effects on and can also condition the development of those social, economic and industrial structures.

1.1 – Remarks on the industrial development of the Northeast

We here provide an overview of Brazil's industrial development over the period from 1850 to 1990, with particular attention to the Northeast region. It is beyond the scope of this research to present a comprehensive analysis of this process, but rather we seek to point to general developments within the country's economic structure in order to later address how company towns responded to change in specific national and regional historical conjunctures.

The body of literature regarding the origins of industrial development – the period ranging from the last decades of the nineteenth centuries until roughly the 1920s – is vast, but the primary sources, however, are more limited. Some of the most relevant sources used include several reports and surveys on the state of industry, such as the one carried out by the Sociedade Auxiliadora da Indústria Nacional in 1877, the Census by the Comissão de Inquérito Industrial in 1882, the surveys of cotton industry written by Vasco Cunha in 1905 and 1907; legislative documents; a number of local newspapers; and reports from Brazil's participation in World Fairs. For ulterior periods, a relatively large amount of quantitative data is available, product of the recurrent surveys carried out by the Brazilian government; notably the industrial censuses, have been very rich sources to examine the state of industry in the country. In addition, the documents and reports published by the Sudene allowed us to have a more clear understanding of the particularities of the industrial development of the Northeast region. For this research we have relied greatly on the work of Suzigan (1984; 2000), Baer (2001), Furtado (2007), Dean (1966; 1982) and Singer (1982) to understand the industrializing process in Brazil and on Cano (1985) to understand the particular dynamics of industry in the Northeast.

Brazil's industrial development began in the second half of the nineteenth century and developed alongside the agro-export model which dominated the economy until the

1930s. At that time, industry began to occupy a favored position in the Brazilian economy through the process of import-substituting industrialization. In fact, during the second phase of import-substituting industrialization, which began in XXXX, industrial activities became the country's engine for economic growth and job creation, and its base for capital accumulation.

1.1.1 First stages of industrial development

Brazil was a latecomer to industrial development; while Brazil was still experimenting in a timid manner to form its first industrial establishments, the politically and economically dominant countries already experienced mature capitalist production and industrialization. For example, while in the United States the number of manufacturing establishments grew from 123,025 in 1848 to 353,863 in 1868, around 1870 Brazil counted only approximately two hundred; it was only in the 1960s that Brazil would attain the same number of industrial workers that the United States possessed in 1869 (2,053,996) (Paula 2012: 221).²²

Nevertheless, the existence of a variety of forms of manufacturing in Brazil prior to the advent of factory-based production has been widely recognized and documented. It is, however, hard to paint a complete picture of Brazil's manufactories prior to the transfer of the Portuguese Court to Rio de Janeiro (1808) due to the lack of systematic data; occasional references can be found on single establishments, many of which were ill-fated. According to the Comissão de Inquérito Industrial in 1882, a significant number of textile factories existed in Brazil at the beginning of the eighteenth century, including

²² It is important to bear in mind that industrializing processes are historical processes that reflect the social, economic, political and cultural contexts of the regions where they occur. The foundations of Brazilian industry were set in the matrix of a slave society, under a monarchic rule, and economically dominated by an export agriculture chiefly consisting of large monocultural estates.

several establishments producing cotton and silk fabrics and different types of ribbon. Using simple machines, they employed a great number of workers with a substantial output that supplied the domestic market (Comissão de Inquérito Industrial 1882: 7) Libby (1987) argued that cotton manufacturing was particularly flourishing in Minas Gerais, consolidating a peculiar form of proto-industrialization.²³

In the Northeast, the earliest evidences of manufacturing activity can be found in the shops producing tools and equipment for sugar mills and consumer goods. Among the latter, the by-products of cattle raising, which was widespread in the region's dry hinterlands, was fundamental to structure the regional economy since the mid-eighteenth century (Frota 1989).²⁴ The production and trade of *charque* (a form of jerky made from dried and salted meat) – a staple in the diet of the slaves working on sugarcane farms – began in Ceará and expanded over the Parnaíba valley; the producers were the states of Ceará, Rio Grande do Norte and Paraíba, while Pernambuco and Bahia were the main consumer markets. Leather products were also added to this trade. Despite the suffering a strong blow from the recurrent droughts of the region and progressively losing importance to other cattle farming areas of the country, it still remained a relevant economic activity in the region.

Cotton spinning and the production of coarse fabric were also of some importance in the cotton growing Northeastern states, particularly in Pernambuco, Ceará and Maranhão, already in the eighteenth century. There is information of cotton-cloth factories

²³ Libby (1987: 89) defined as protoindustrialization “as any manifestation of widespread domestic manufacture potentially oriented toward commodity production.”

²⁴ Since the end of the sixteenth century it was prohibited by the Portuguese Crown to raise cattle up to ten leagues from the coast, in order to preserve the fertile coastal lands for the sugar industry. This measure resulted in the historical spatial division of agriculture and cattle raising. The pastoral area of the Northeast ranged from the Parnaíba River to the north of Minas. Cattle were allowed to roam freely, without stabling or attempts to improve pastures; there was no intensive cattle raising, and productivity was low.

set up in Pará and Maranhão around 1750 following the orders of the Marquis de Pombal, who was impressed by the quality of the cotton exported by those captaincies (Elliot 1921: 225).²⁵ However, as Frota (1989: 26) discussed, the expansion Northeastern cotton industry was severely crippled as it failed to implement technical developments and quickly fell behind the growing American cotton industry, which introduced Whitney's cotton gin model by the last decade of the eighteenth century.

Historical scholarship from Varnhagen (1854) to Caio Prado Jr. (1965) has traditionally pointed to the negative impacts of the Alvará (judicial writ) of 1785 issued by the Portuguese Crown (Novais 2000: 214) as the reason for the industrializing woes. This decree reasoned that great number of industries and manufactories established in Brazil diverted the already reduced contingent of workers from the colony's main economic activities, i.e. agriculture and mining; therefore, it prohibited the establishment of factories and manufacturing in Brazil with the sole exception of the production of coarse fabrics for clothing slaves and for packaging of agricultural products. Disobeying the court order would result in a fine and sequestration of machines.²⁶

²⁵ Amaral (1958) also supports Elliott's claim that the Marquis de Tavora had been charged with engaging expert weavers to establish spinning and weaving mills in Pará and Maranhão. He stated that on March 21, 1750, Diogo de Mendonça Corte Real addressed the following letter to the Marquis of Tavora, Viceroy of India: Ilmo. e Exmo. Sr. — Considerando as singulares disposições, que a natureza uniu na capitania do Pará para se poder nela estabelecer manufacturas de chitas, e outras obras de algodão, e o grande benefício, que deste estabelecimento pode resultar ao Estado do Maranhão, e ao comércio do reino, houve S. M. por bem determinar, que se faça toda a diligência por ajuntar casais de tecelões, e pintores daquelas partes da península da Índia, onde se fabricam as melhores chitas, lenços e cassas; e que estas famílias se transportem para a Bahia, onde se antecipa ordem, que dali se façam ao Pará. (Amaral 1958: 17) However, his statement and the source are incongruent, since Diogo de Mendonça Corte Real, Portugal's Secretary of State under the reign of D. João V, died in 1736.

²⁶ See Attachment 1 for the complete text of the Alvará of 1785.

The Comissão de Inquérito Industrial in 1882 argued that Brazil's this early industrial development, and the loss of market of Portuguese goods “desafiou o ciúme da mãe pátria”.²⁷

Esta medida, que foi executada com o máximo rigor, cortou de um só golpe o desenvolvimento da nossa indústria, arrancando pela raiz os fundamentos de fabricação manufatureira lançados no país, pois que em menos de dois meses desapareceram todas as oficinas e fabricas, que então existiam. (Comissão de Inquérito Industrial 1882: 2)

It is true that as a result of the Alvará a few looms were actually seized, particularly some used in fabricating luxury textiles that included gold or silver thread or both in the city of Rio de Janeiro (Novais 2000: 231). As Libby discusses, the impact of the Alvará, however, was certainly very limited as most of the early manufactories in Brazil produced coarse cottons, products specifically exempted from the prohibitions; therefore, “the Alvará, amounted to much ado about nothing” (Libby 1997: 89).

To explain the tardiness of the Brazil's industrialization, it is necessary, first and foremost, to look into its economic structure; the most serious obstacle to industrial development during the first half of the 19th century was, in fact, the country's cash-crop economy based on slave labor, which largely absorbed national productive resources.²⁸ According to Stein (1957) this system seriously hindered industrializing efforts in a variety of ways:

- a) Absorbed capital resources: at the time, investment capital was accumulated in the hands of the town factor and the seaport merchant community and until 1850 the slave trade absorbed the largest amount of merchant investment capital;

²⁷ “challenged the jealousy of the mother homeland [Portugal]”

²⁸ Sugar was the first great export product of Brazil and it was produced mainly in the humid coastal zone of northeastern Brazil, the Zona da Mata. From the nineteenth century onwards, coffee would dominate Brazil's export portfolio.

- b) Kept income distribution low and therefore prevented the development of a domestic consumer market;
- c) Inhibited the rise of a “middle class” to supply technical skill for local industry and to purchase goods;
- d) Discouraged European immigration with industrial skills;
- e) Financed the importation of cheap manufactured goods.

In addition, another decisive factor in hampering domestic industry was the opening of Brazilian ports to foreign trade in 1808²⁹ and the open-door policies that followed. The Treaty of Navigation and Commerce signed in 1810 set the tariff of all British merchandise exported to Brazil at 15% (this figure was even lower than those from Portugal, which paid 16%).³⁰ The result was a flood of British factory-made textiles in regions where transportation costs did not overburden the final price of imports. The presence of British manufactured goods in Brazil was such that Hobsbawm (1999: 125) affirmed that Latin America “saved the British cotton industry in the first half of the nineteenth century”.³¹ The extent of the presence of European manufactures in Rio de Janeiro can be assessed in the description provided by Spix and Martius during their stay in Brazil between 1817 and 1820:

²⁹ Brazilian ports were open to foreign trade in 1808 following the transfer of the Portuguese Court to Brazil. The Portuguese royal family and its court (approximately 15,000 subjects) escaped from Lisbon to Brazil just days before Napoleonic forces captured the city on December 1, 1807. The Portuguese crown effectively remained in Brazil from 1808 until the return of John VI of Portugal in 1821. For thirteen years, Rio de Janeiro functioned as the capital of the Kingdom of Portugal.

³⁰ With Portugal occupied by Napoleon, the Portuguese Crown depended on Britain to recover the motherland and to protect its colonies; as a result, the Portuguese had very little room for negotiating the terms of the Treaty with the British. Later, however, Portuguese exports were also granted the same favorable tariff.

³¹ The Brazilian government renewed most of the terms of the 1808 Treaty after Independence in the *Tratado de Amizade, Navegação e Comércio* of 1827.

The importation of European productions and manufactures into Rio de Janeiro, extends to all imaginable human wants. Portugal and the islands send wine, oil, flour, biscuit, salt, butter, vinegar, stockfish, hams, sausages, olives, and preserved or dried fruits, distilled liquors, leather, medicines, coarse calicoes, hats, coarse woolens, iron ware, Bohemian glass wares, German and Dutch linens, paper (chiefly Italian), Portuguese books, musical instruments, gunpowder, pottery from Oporto, ammunition, cordage, canvass, sail-cloth, tar, pitch and other articles for the marine, steel, shoes, copper ware, etc., etc., etc. In former time, East India goods were bought here in large quantities from Lisbon, but at present they are imported direct from India. England (particularly London and Liverpool) and its colonies supply Rio de Janeiro with all articles of English manufacture, especially cotton goods of all kinds, fine cloths, porcelain and earthenware, iron, lead, copper, tin, raw and wrought, anchors, cables, gunpowder, porter, cheese, salt butter, distilled liquors, etc. (...) France imports, particularly from Havre de Grace and Brest, in these latter times, articles of luxury, trinkets, furniture, wax candle, drugs, liqueurs, pictures and prints, French books, silks, looking-glasses, hats, fine glass goods and china, dried fruits, oil, and butter. Holland sends to Rio de Janeiro beer, glass goods, linen (...). Austria has sent many things to Rio de Janeiro on speculation, namely watches, pianofortes, muskets, linen, silk and half silk stuffs, velveteen, flannel, mortars, iron hoops, fishing hooks, penknives (...) Russia and Sweden import iron, steel, copper utensils, sail-cloth, cords, ropes, and tar. North America sends to Rio de Janeiro chiefly corn, soap, spermaceti candles, biscuit, train oil, tar, leather, boards, pitch, potashes, and rude furniture. (Spix and Martius 1824: 182-184)

To the problems and the limitations imposed on industry by the Anglo-Brazilian trade treaties and the poor performance of the economy's advanced sector discussed above, Bethell and Carvalho (1985: 89-90) add the lack of industrial fuels, particularly coal; poor transportation; rudimentary banking system; outdated commercial legislation that prevented the establishment of joint stock companies; low levels of education and the lack of technical training; the prevalence of a laissez-faire perspective among dominant economic groups; and the lack of government commitment to the promotion of the industrial sector.

As a result, industrial development in Brazil was extremely limited before the second half of the nineteenth century. The engineer Agostinho Victor de Borja Castro wrote in the official *Report on the Second National Exhibition*, which had taken place in 1866 in Rio de Janeiro, that “forçoso será confessar **a triste verdade de uma industria sem vida e sem vigor**, e sobretudo reconhecer que, neste momento, **fallecem ao Brasil**

os principais requisitos para ser uma nação verdadeiramente industrial.” (Rego 1869: 4). However, he granted that the first signs of industrial activity could be found in the country, as the wide variety of products displayed at the Exhibition attested, such as the

(...) tecidos de algodão, lã e linho de Minas Gerais, Bahia, Rio Grande do Sul e outras províncias, que empregão teares à mão; os calçados e chapéus do Rio de Janeiro, Pernambuco e Bahia; as redes de dormir das províncias do norte; os bordados, as rendas, flores e muitos outros objetos da industrial manual.³² (Rego 1869: 13).

Industrial development thus began at a modest pace and throughout the first half of the nineteenth century with manufacturing was mostly carried out in artisan workshops, peasant-households and poorly-mechanized small-scale enterprises which generally produced unrefined consumer goods for the domestic market. As Bethell and Carvalho (1985: 89) indicated,

Brazilian cities were full of artisans' establishments making soaps, candles, cotton thread, clothing, hats, snuff, cigars, furniture and ironware, but the textile and food-processing factories which were to form the basis of Brazil's early industrial growth did not appear until after 1840.

Observations made by foreign travelers in Brazil allow us to glimpse into the early-nineteenth century manufacturing sector. John Luccock (1820: 254), an English businessman who arrived in Brazil in June 1808 and remained in the country until 1818, commenting on the improvements made in Rio de Janeiro after the arrival of the Portuguese Court, wrote:

A manufactory of cordage and sailcloth had been set on foot, under the sanction of the Government, for the supply of the fleet; the fabrication of woollen and cotton cloth had been attempted and met with great encouragement; more decided success attended new projects in the different lines of wood, iron, copper, tin and leather. (...) Craftsmen of different descriptions had made their appearance;

³² “cotton, wool and linen fabrics from Minas Gerais, Bahia, Rio de Grande do Sul and other provinces, which employ handlooms; the shoes and hats from Rio de Janeiro, Pernambuco and Bahia; the hammocks from the Northern provinces; the embroideries, laces, flowers and many other objects of manual industry.”

among them so many smiths, that it was no longer difficult to get a horse shod. Mills for grinding corn had been much improved, and bread was come more into use. Charcoal was manufactured, and for cooking introduced into the houses.

The existence of a significant number of shoemaker workshops was also noted. (Images 1 and 2) Henry Koster³³ (1816: 267) spoke of the “neat shoes which are made by the workmen of the country” in Pernambuco; in Rio de Janeiro, Jean-Baptiste Debret³⁴ (1835: 91) was at first puzzled about the considerable number of those workshops, filled with workers, in a city where five sixths of the population walked barefoot; which was then explained by the rich ladies’ fashion habits.

Hand spinning and weaving was fairly widespread throughout Brazil in the colonial period and the existence of a domestic textile production was frequently registered by many travelers. John Mawe (1812: 273) noted that in Minas Gerais not only cotton was spun by hand and woven into coarse clothing that was generally used for the slaves, but also finer cloth, particularly lace, was also woven for table-linen. In Pernambuco, Henry Koster (1816: 33; 147) also remarked the production coarse cotton cloth, which was sometimes tinged with a red dye, alongside the production of finer goods, such as thread lace and embroidery; he stated, however, that the manufacture of these articles was not sufficiently extensive to allow of exportation. In São Paulo, Spix and Martius³⁵ (1824: 334)

³³ Koster, the son of a British tradesman born in Lisbon, arrived in Brazil on 7 September 1809. He returned to England in 1815 and then once again to Brazil in 1817. He established himself in Pernambuco, where he became a sugar mill owner, and travelled extensively in the Northeast of Brazil.

³⁴ Jean Baptiste Debret, painter, draftsman, printmaker, teacher, decorator, stage designer, attended the Academy of Fine Arts in Paris between 1785 and 1789, where he was a student of Jacques-Louis David. By 1806, he worked as a painter at the Court of Napoleon and after the Emperor’s fall, Debret decided to join the French Artistic Mission that came to Brazil in 1816 to promote the Arts in the country. He settled in Rio de Janeiro, where he worked as Court painter and a professor at the Imperial Academy of Fine Arts. He left the country in 1831 and, between 1834 and 1839, he edited the book *Historical and Picturesque Voyage to Brazil*, illustrated with lithographs based on the watercolors he had painted in the country.

³⁵ Karl Friedrich Philipp von Martius and Johann Baptist von Spix arrived in Rio de Janeiro in July 1817, as members of the “Austrian Mission”, organized by the Museum of Natural History of

wrote about the domestic manufacture of coarse woolens; in later years, after the Independence, Maria Graham (1824: 146) noted that in Minas Gerais the production of coarse cotton cloths was not only for home consumption but also for trade with the other captaincies.

The first attempts at promoting the production of manufactures in the last decades of colonial Brazil had been the conscious effort of the Prince Regent D. João VI after the transfer of the Court and the seat of the Portuguese empire to Brazil in 1808, and his policies to encourage the development of mechanized manufactures. On April 1st of that same year, the Prince Regent revoked the Alvará of 1785, and he later passed the Alvará of 28 April 1809, which lifted import duties on raw materials to be used in manufacturing and granted subsidies and monopoly privileges for the local producers of new machines and innovations and the establishment of manufactories, especially in textile and metallurgical production.³⁶ Luz's (1966; 1978) underlined the mercantilist nature of these industrializing policies based on government-imposed monopolies and privileges; inspired by Colbert's national factory system – which had already been adopted by the Marquis de Pombal – D. João established a system of “manufaturas reais” (royal manufactories): companies that were either under the direct administration of the State or under its tutelage, having been granted duty exemption to the import of raw materials (Soares 2002: 288)

Among the manufactories created under the auspices of the Crown, we can cite: the gunpowder factory, the Fábrica de Pólvora da Lagoa, established by decree on 13 May 1808 in the Fazenda da Lagoa Rodrigo de Freitas, Rio de Janeiro, which was

Vienna. They travelled extensively throughout Brazil; they crossed Rio de Janeiro, São Paulo, Minas Gerais, Bahia, Pernambuco, Piauí, Maranhão, and – for eight months – the basin of the Amazon river, returning to Europe in 1820.

³⁶ The complete texts of the Alvará of 1 April 1808 and the Alvará of 28 April 1809 are available in Attachments 2 and 3, respectively.

acquired by the Crown through voluntary subscription among the city's inhabitants; the ironworks Real Usina de Ferro do Morro do Pilar (also called Fábrica do Morro do Gaspar Soares), located in Minas Gerais, authorized by the Prince Regent in 1808 and inaugurated on 18 August 1814, not going, however, beyond a failed attempt, having all its assets sold to cover debts and being abandoned in 1831; another ironworks, the Fábrica de Ferro de Sorocaba, later called São João de Ipanema, established by royal charter on 4 December 1810 in Sorocaba, São Paulo, as a facility for the extraction and smelting of iron and the production of bladed weapons; and two short-lived textile factories, the Real Fábrica de Tecidos de Algodão do Catumbi (1815-1818) and Tecidos de Malha da Lagoa Rodrigo de Freitas (1819-1822).

Two private pioneering establishments founded during this period in Recife, Pernambuco, are noteworthy: first, the textile mill founded by Gervásio Pires, and second, the iron foundry owned by the British Christopher Starr. Little information is available on them. The former is mentioned en passant in the *Report on the National Exhibition of 1866*. It is said to have been founded in 1826 to produce cotton cloth and blankets using the local raw material (Rego 1969: 32), however from Pereira da Costa's mammoth *Anais Pernambucanos* we learn that the mill might have been founded before given that in 1826 it was already operational. The author cited a Decree from 31 May of that same year granting privileges to the establishment, which was located in the Boa Vista area in the city of Recife, close to the Capibaribe River. It was equipped with six horsepower engine, twelve spinning machines and twenty-one looms, at first moved by animals, and then steam; the labor force included many women and more than fifty slaves. Concerned with improving his establishment, Gervásio Pires had imported modern machinery from England to replace the old ones; however, he passed in away March 1836 before the

machines were delivered.³⁷ Furthermore, Pereira da Costa informed that unable to compete with the English fabric of higher quality and lower price, following the death of its owner, his heirs decided to close the establishment, selling the steam engine to the Foundry Aurora C. Starr & Ca., and the spinning and weaving machines to the Fábrica da Conceição, founded by Antonio de Lacerda (Costa 1965: 47-49).³⁸ The latter, the Fundação Aurora, made machinery for processing raw materials for export, not only parts with which to fix broken equipment, but also complete steam-operated mills; the first steam engine manufactured in South America is said to have been built there in 1836. An advertisement placed in the newspaper in 1854, indicated that the it produced a wide-range of iron goods, including:

(...) moendas com todos os melhoramentos, que a experiencia de muitos anos tem mostrado aos fabricantes; machinas de vapor de baixa e alta pressão; taixas de ferro batido e fundido; carros de mão, ditos para conduzir formas d'assucar, machinas para moer mandioca; prensa para oleo de mamoa; arados de ferro (...) e uma infinidade de outras obras de ferro, que é inutil enumerar.³⁹

³⁷ Pereira da Costa cited a document from the Inspector of Customs, addressed to the president of the province of Pernambuco, on 8 June 8 1838, indicating that the machinery was dispatched free from duties.

³⁸ This piece of information, however, seems erroneous. A factory named “Fábrica da Conceição” was indeed founded in 1835 in Bahia, but not by Antonio de Lacerda; its founders were Domingos José d’Amorim and Domingos Gomes Ferreira. Antonio de Lacerda was one of the owners of the Fábrica de Todos os Santos in Valença, also located in Bahia, but that was founded on a later date, around 1844. We have not found any evidence that Antonio de Lacerda was involved in the Conceição factory in Bahia or any other establishment of the same name.

Although the indicated dates are not exactly the same, this factory is most likely the one that is referred to in the Inquérito Industrial of 1882 (Comissão de Inquérito Industrial 1882: 9) and by Branner (1885: 41): “The first regular cotton spinning and weaving factory was established in Pernambuco immediately after independence. The material was all prepared by hand, though but a few free operatives were employed. Some progress was made, however, and machinery was introduced and put to work. But being confined to slave labor the concern met with embarrassments, and disappeared entirely in 1834.”

³⁹ O Liberal Pernambucano. Recife, N. 657, 19 December 1854, p. 4.

“(...) sugarcane grinders with all the improvements, which the experience of many years has taught the manufacturers; low and high pressure steam machines; wrought iron and cast-iron pans;

The lack of adequate tariff protections and the consequent importation of similar equipment from abroad, however, forced Christopher Starr out of business in 1876 (Graham 17972: 142).

These circumstances were not such as to trigger a vigorous industrial boom, but at least it allowed to lay the first foundations of the domestic industry. Mechanized industries appeared in the 1840s, taking advantage of the protectionist legislation passed after the expiration of the Anglo-Brazilian commercial treaties. The new Alves Branco Tariff of 1844 provided some level of protection for the establishment of local manufacturing; tobacco and related products were taxed at 60%, but cotton cloth and thread were taxed only at 20%. National industries were favored with free imports of machines and raw materials. Though a certain amount of protectionism was promoted by the new tariff, it was primarily connected to fiscal needs.

The first wave of growth in industrial investments took place from the second half of the 1860s due to several reasons related to the particular historical conjuncture. First, the outward radiating effects of the American Civil War (1861–1865) reached Brazil and led to a vast expansion of cotton production. In the Northeast, peasants who survived primarily as subsistence farmers cultivated small amounts of cotton to obtain cash for necessities and taxes. However, when cotton prices went up during the war and with advances financed by British capital, farmers began to “devote all their energies to cotton”, abandoning “their subsistence crops to plant cotton for the world market.” (Beckert 2004: 1414) As a result, Brazilian cotton exports doubled between 1860 and 1865 and sparked the emergence of cotton textile factories. Cotton spinning and weaving mills were the first factories to be established on a commercial scale and to have continuous development. Second, the war against Paraguay (fought from 1864 to 1870)

wheelbarrows, said to conduct forms of sugar, machines for grinding cassava, oil presses; iron plows (...) and a multitude of other articles of iron, which is useless to enumerate.”

increased government spending and favored economic expansion. The Real Fábrica de Ferro de São João de Ipanema, one of the first ironworks in Brazil, was reactivated and played an important role in supplying Brazilian troops. The Fábrica de Ponta d'Areia owned by Irineu Evangelista de Souza, the future Viscount of Mauá, a pioneer in the economic development of Brazil⁴⁰, produced steam and sailing vessels, building seventy-two units in eleven years, most of them used during the war. Finally, in 1867 the government raised taxes to generate revenues to help finance the hugely expensive war with Paraguay and thus involuntarily granted industry more adequate protection (Luz 1978: 41; Suzigan 2000: 84).⁴¹

In 1877, the Sociedade Auxiliadora da Industria Nacional (1877: 9-10) stated that Brazil was longer just an agricultural country, already counting various industries, including approximately thirty cotton cloth factories, and a great number of establishments manufacturing hats, shoes, leathers, candles, chocolate, beer, furniture, books, dye, pottery, wax, cement, sweets, cigarettes, chemicals, etc. Many factories were said to already employ steam power, advanced machinery, and a large contingent of workers. In Table 1 below, we can see the textile mills established until 1870 in Brazil.

Table 1 –Textile mills in Brazil until 1870				
Name	Location – city	Location – state	Date of foundation	Founders
“Fábrica do Fundão”	Recife	PE	1826 (?)	Gervásio Pires

⁴⁰ Mauá was responsible for building of the first railway, shipyard and cast iron metalwork in the country. Moreover, he established the modern Banco do Brasil and played an important role in financing much of the Brazilian economy activity in the 19th century, particularly in coffee plantation.

⁴¹ As a largely rural, non-industrialized economy, Brazil had few easily taxable bases. Between 1831 and 1885, around 70% to 75% of the Empire's revenue came from the movement of external commerce, particularly importation. (Ridings 2004: 177)

Andarahy Pequeno	Rio de Janeiro	RJ	1826	-
Fábrica da Conceição	Salvador	BA	1835 (?)	Domingos José d'Amorim and Domingos Gomes Ferreira
Andarahy Pequeno	Rio de Janeiro	RJ	1841	Frederico Guilherme
Fábrica de Hartley or S. Pedro de Alcantara	Rio de Janeiro	RJ	184-	Joaquim Diogo Hartley
Fábrica Santo Antonio do Queimado	Valença	BA	1842	Monteiro, Espinheiro Junior & cia.
Todos os Santos	Valença	BA	1844 (?)	Antonio Frederico de Lacerda, Antonio Pedrozo de Albuquerque, J. Guillmer
Fábrica Canna do Reino	Conceição	MG	1848	Pigot and Cumberland
Santo Aleixo	Magé	RJ	1849	-
-	Sorocaba	SP	1851	Manoel Lopes de Oliveira
-	Petrópolis	RJ	1851-52 (?)	Alfredo Solier Grand
Fábrica Fernão Velho – União Mercantil	Macéio	AL	1857	José Antônio de Mendonça
Fábrica Modelo	Salvador	BA	1858	José Revault
Nossa Senhora do Amparo	Salvador	BA	1862	Madureira & Dutra
Fábrica Santa Thereza	Parati	RJ	1866	
Sources: Martins, Francisco Gonçalves. Fala que recitou o Presidente da provincia da Bahia na abertura da Assembléa em 4 de julho de 1849. Bahia: Typographia de Salvador Moitinho, 1849; Rego 1869; Comissão do Inquérito Industrial 1872.				

The last period of industrial expansion in the nineteenth century was stimulated by the economic policies of the newly founded Republic. Caio Prado Jr. (1981) emphasized how the new political regime brought more favorable policies to stimulate industrialization,

particularly adopting higher customs tariffs with the deliberate goal of industrial protectionism. An important role was played by the reforms known as the Encilhamento.⁴² The Encilhamento was an economic bubble that boomed between late 1880s and early 1890s in Brazil based on the expansion of credit and the liberalization of business regulation. Though the Encilhamento led to a major financial crisis with soaring inflation, the speculative bubble had two important effects for industrialists. First, it prompted the creation of a great numbers of banks; in 1888 there were only thirteen banks listed on the Rio exchange; by 1894 there were thirty-nine. The banks were granted the right of emission played the role of financiers to a few large industrial ventures (though these mostly failed). Furthermore, it financed the creation of large numbers of joint stock manufacturing companies (Bethell and Carvalho 1985: 239; Ridings 2004: 152).

By the turn of the nineteenth century most Brazilian factories were devoted to the production of basic nondurable goods to satisfy the domestic mass demand. The early manufactures were chiefly goods that could not easily be imported due to bulk, weight or perishability (bricks, beer bottles, beer, shoes, hats, soap, candles, etc.), and those that processed local raw material, such as cotton thread and textiles. Even though industrial activity was mostly carried out in small establishments, some factories expanded and moved beyond the artisanal shops into the factory.

The most important industries were textile mills, tanneries, shoe and hat factories, breweries, and cereal mills but the production of paper, glass, cigarettes, soap and matches was also significant. In addition, there were several noteworthy foundries and iron works that produced hardware, agricultural machinery, and railway cars and wagons. (Graham 1972: 44)

⁴² Currency depreciation and inflation also contributed to the acceleration of industrial development. By 1899, the price of imports was 335% higher than in 1889, while the increase in general price level was 229% (Riding 2004: 228).

From its very beginning, Brazilian manufacturing was characterized by the inability to export, the need for protection from foreign competition, and an almost complete dependence on imported technology.

The number of large-scale concerns was quite limited during this early period. Larger industrial establishments were mainly concentrated in the metallurgical and textile sectors. Mills generally integrated all operations moving cotton through a precise series of production processes that separated, straightened, and twisted cotton fibers, combined them into yarn, and then wove the yarn into cloth.

According to the *Report of the National Exhibition of 1866*, national textile mills employed on average eighty-five workers and counted forty-two looms per factory. The Census carried out by the Comissão de Inquérito Industrial in 1882 indicated that the number of workers in each mill ranged from seventy to four hundred (the Brazil Industrial in Macacos, Rio de Janeiro, the largest industrial concern at the time); most of the larger mill were, however, located in the state of Bahia: the pioneering Santo Antonio de Queimado Mill and Todos os Santos Mill employed eighty and two hundred workers, respectively; the Fábrica Modelo employed one hundred and ten, while the Nossa Senhora do Amparo employed ninety. In the Northeast, from the information made available in the Census, the Fernão Velho Mill in Alagoas counted the highest number of workers: seventy-four.⁴³

The composition of the workforce of these first industrial establishments has been object of a debate in Brazilian historiography, often fueled by the scarcity of primary sources from which to draw data. Historians had traditionally stressed the incompatibility between slave labor and industrial capitalist development or that slave labor was

⁴³ By contrast, in the United Kingdom as early as 1866, the McConnel and Company mill employed 1,545 workers and twenty-five mills employed 1,000 workers or more, although the number of workers in the average mill was 193 (Crouzet 2008: 32). In Brazil, in 1907 the national average of workers was two hundred and eighty-five per mill.

employed on a limited scale for non-specialized positions. A renewed interest in theme has revealed that industrial labor was an important variable within the slave system in the Americas.

The use of a combination of wage and slave labor is well documented for some of the earliest Brazilian manufactories; Danieli Neto's (2006) thorough examination of the literature on industrial slavery in Brazil pointed to the extensive use of slave labor in some industrial activities, such as steel and metallurgy. Libby (1988) showed the strong dependence of metallurgical establishments in regards to slave labor in nineteenth-century Minas Gerais. His analysis of the Morro Velho Mine, operated during most of the nineteenth century by a company of English capital (the St. John d'El Rey Mining Company), indicated the company's wide use of slave labor in its activities. The shipyard founded by the Viscount of Mauá, located in Ponta da Areia, Rio de Janeiro, counted eighty-five slaves among its 250 workers in 1853; most of the slaves probably engaged in the iron and bronze smelting works (Versiani 2002). Out of the one hundred and five workers of the Fundação Aurora, twenty-five were slaves.

The use of slave labor was also widespread in the Royal manufactures founded under the reign of D. João VI. A report produced in 1836 on the Fábrica Real de Ferro de Ipanema pointed to 141 slaves, many of which were specialized workers including: the casting master, casters, blacksmiths, mason, carpenters, etc. Up until the 1870s, the use of a significant number of captives in the ironworks is still registered.⁴⁴ Other establishments using slave labor included the Real Fábrica de Fiação de Algodão, Tecidos de Pano e Malha do Catumbi, which during its brief existence (1815-1818) employed ten slaves; the Real Fábrica de Fiação de Algodão, Tecidos de Pano e Malha da Lagoa Rodrigo de Freitas (1819-1821), employing sixteen slaves; and the Fábrica Real

⁴⁴ A complete examination of the use of slave labor in the Fábrica Real de Ferro de Ipanema can be found in Daniele Neto (2006).

de Pólvora da Lagoa (transferred in 1833 to the town of Estrela), which in 1810 counted over one hundred slaves among its labor force (Soares 2007: 149) Soares (2007) also identified the coexistence of slave and free labor in both small and large scale establishments in Rio de Janeiro during the first half of the nineteenth century, indicating the widespread use of slaves in cigar and hat manufactures, as well as in small workshops.

Much of the historiographical controversy on the use of slave labor in Brazilian early industrial activities revolves around the textile sector, which, as aforementioned, comprised the most of the country's large-scale establishments. Stein's (1957: 51) claim that "some of the earliest Brazilian mills employed slaves with a sprinkling of free operatives" up until the 1850s has been strongly refuted by recent historiography. Versiani (1994; 2002) affirmed that Stein's erroneously generalized a particular case identified in the Relatório sobre a Reforma das Tarifas de 1853 which referred to the previously mentioned textile factory founded in the 1820s in Pernambuco. However, the use of captives in this factory seems to be coherent with its low level of mechanization, approximating it to Brazilian proto-industrial spinning and weaving production, which abundantly employed slave labor. It must be underlined that Stein only indicated the use of slaves in textile mills up until the 1850s, when the prohibition of trafficking slaves from Africa pushed slave prices up, being afterwards largely replaced by national urban wage laborers and European immigrants. Unfortunately, the lack of data hampers any possibility of assessing if the case in Pernambuco was an isolated one or if it was a widespread reality.

Although the composition of the textile labor force before the 1850s is quite blurry, the situation for the following periods is clearer. The textile industry characteristically counted with a large participation of women and children in its labor force, and in Brazil it was not any different. The *Report on the National Exhibition* of 1866 does not register the

use of slave labor in any of the textile mills operating in the country at that time. From those observations, we can describe the work force of Brazilian cotton mills in the mid-nineteenth century as being formed by free wage laborers, both men and women, recruited from the underprivileged classes and by children, often paupers taken from orphanages working as apprentices and not receiving a salary. Most of the workers were Brazilian, but technically trained personnel for installation and maintenance were often immigrants from Western Europe (mainly England, France and Germany) or the United States.

These mid-nineteenth-century observations suggest that the use of free labor may have been widespread in textile mills throughout much of Brazil during the preceding decades. Versiani (1994; 2002) supported that this trend could be explained first due to the technical nature of the transformation processes involved, which rendered women and children more capable of performing the type of job required of a textile worker. Moreover, women and children from the poorest sections of the population had few alternative employment opportunities and constituted a source of cheap labor for textile producers. The limited information presented both the *Report on the National Exhibition of 1866* and the Census of the Comissão de Inquérito Industrial of 1882 indicate that the representativeness of each of these categories in the workspace was almost equal; sometimes there was a trend toward a greater presence of adult male workers, but no information on the functional division of labor is available. In the southern provinces, especially in São Paulo, European immigrants would constitute a fundamental source of labor for factories⁴⁵, which was not the case in the Northeast, where European immigration was not expressive. In the latter region, processing industry benefited from

⁴⁵ Italians constituted the vast majority of the industrial working class in the state of São Paulo, representing 90% of the 50,000 workers employed in factories in 1901 (Gomes 2000: 171).

the large supply of cheap labor available both in coastal cities and in the hinterlands, which grew in the periods of severe drought.

It is difficult to assess the full extent of industrial growth in the nineteenth century due to the lack of statistical data. In 1882 the Comissão de Inquérito Industrial attempted to carry out a survey, but it was unfortunately very unsuccessful. The failure was due to the low number of replies obtained by the Commission, which tried to compensate the lack of data by using information regarding the products presented at the National Exposition in 1866. With the exception of textiles, the survey provided an overview of the state of industry only in the city of Rio de Janeiro; nevertheless, not even for the Capital a complete picture could be painted. Despite the absence of quantitative data, the survey reveals a dynamic industrial sector with increasing mechanization of production.

More significant results were obtained by the Inquérito Industrial of 1907. The census identified 3258 industrial establishments in Brazil employing 151,841 workers, certainly an underestimation once again because of the lack of feedback from industrialists (though it must be underlined that the Census included under the category of “industry” also small works with very little levels of mechanization). National industry had branched into the domestic market, and for the most important nondurable consumer goods its global output value was three times the value of imports. Such was the case for the following goods:

Table 2 – Value of Brazilian industrial production (1907)			
Article	Value of import (in réis)	Value of domestic production (in réis)	Difference in regards to domestic production (in réis)
Cotton textiles	67.499:817\$	135.025:668\$	+ 67.525:851\$
Shoes	968:768\$	26.726:900\$	+ 25.758:361\$
Hats	1.948:539\$	15.384:200\$	+ 16.435:661\$
Matches	4:450\$	21.275:000\$	+ 21.270:550\$
Pottery	2.774:648\$	10.363:000\$	+ 7.588:352\$
Source: Inquérito Industrial of 1907			

Other goods, however, still relied on imports to supply the domestic market, especially those that required imported raw materials, such as silk textiles and perfumes. Factories were mainly concentrated in the textile and food-processing sectors, but growth in the production of intermediate goods was also verified.

Products	Number of establishments	Number of workers
Alcoholic and fizzy drinks	145	1,655
Beer	186	2,942
Butter and cheese	138	981
Cereals	100	1,499
Wine	104	1,316
Hats	107	3,463
Cotton spinning and weaving	161	45,942
Tobacco	104	7,407
Foundry and metal works	169	6,861
Leather	108	1,967
Source: Inquérito Industrial of 1907		

Cotton spinning and weaving was the most prominent industry; although it represented only 4.9% of the total number of factories, it was responsible for 35% of the industrial capital and 30% of industrial jobs, as well as being in the forefront of mechanization. In the two decades prior to 1907, there was a sharp process of import substitution in the textile industry and domestic production grew at a rate of around 10% per year (Versiani and Suzigan 1990). The Inquérito Industrial of 1882 identified nine spinning and weaving factories established until 1886; six of them were located in the Northeast region (five in Bahia and one in Alagoas). Years later the survey of the textile industry carried out by Cunha Vasco in 1905 pointed to the existence of one hundred and ten (110) cotton factories (thirty-seven in the Northeast) employing 39,159 workers and with a total annual output of 242 million meters.

Table 4 - State of the cotton textile industry in Brazil (1853-1905)			
Year	Number of factories	Number of workers	Production (1.000 meters)
1853	8	424	1,210
1866	9	795	3,568
1885	48	3,172	20,595
1905	110	39,159	242,087
Source: Stein 1957: 191; Comissão de Inquérito Industrial 1882; Vasco 1907.			

Not only was the number of establishment and workers and the output steadily growing, but in addition a process of diversification on production took place. At first domestic textiles were very much limited to coarse fabrics but it gradually moved towards the production of fine and medium grey goods and colored fabric. In the Northeast, and particularly in the state of Ceará, the production of hammocks was also expressive.

Nevertheless, despite the expansion of the industrial sector, the centrality of the export agriculture sector remained largely intact. During the 1830s and the 1840s sugar, cotton and coffee accounted for 75-80% of Brazilian exports.⁴⁶ By 1907, industry only contributed to 21% of the country's total product. (Baer 2001: 39) It was the expansion of the mass production of those few staple products – especially coffee, as we discuss below – that was responsible for the country's economic growth during that period.

A body of scholarship has examined the dependency of industrial growth on the leading exporting agricultural sector in Brazil from the nineteenth century until roughly the first half of the twentieth century (Dean 1964; Cano 1985; Singer 1984; Suzigan 2000; Baer 2001). This relationship was both direct and indirect. On the one hand, booming exports sparked the need for some industrial goods, such as machines, equipment,

⁴⁶ Agriculture still remained the core of Brazil's export agenda throughout the 20th century.

packaging, etc. Moreover, in many cases the location of industry was directly affected by the availability of the export commodity, for example in the cotton industry in the Northeast. On the other hand, agriculture exports stimulated the diversification of domestic economic activities, economic modernization, the expansion of the domestic market due to the raise in income, the development of transports, the growing monetization of the economy, the development of the banking system, the acceleration of the transition from a slave economy to an economy based on wage labor, and the emergence of an entrepreneurial class through capital accumulation.

Therefore, as international trade was the main avenue to development in nineteenth century Brazil, the regional disparities in industrializing experiences during this period stemmed largely from the performance of export portfolios. The coffee producing regions of São Paulo did very well, triggering the aforementioned indirect effects. Responding to an increasing demand in Western Europe and the United States, Brazil became the world's most important coffee export center, accounting for three-fourths of the world's supply throughout the nineteenth century. By contrast, the poor performance of the Northeast's two most important exports – sugar and cotton – can explain the region's negative economic experience. Facing the competition of beet sugar and Caribbean sugar in the international market and the slow and ineffective government-sponsored modernization efforts, Brazil's participation in the world sugar market dropped from its traditional 10% to 5% by 1875. Following the expansion of cotton production first in the United States and later in São Paulo, operating on more advanced technological foundations, the Northeast became a marginal exporter both in international and national markets. In 1822, sugar and cotton accounted for 49% of Brazil's aggregate export revenue, while coffee accounted for 19%. By 1913, sugar and cotton provided only 3% of

Brazil's total export revenues, while coffee accounted for 60% (Leff 1997:35).⁴⁷ As a result, the economic center shifted to São Paulo (where it remains until today) and aggravated the dualism between the country's most important economic regions: the Center-South and the Northeast.⁴⁸

It is true, as Boris Fausto affirmed, that "Around 1870, the Center-South's tendency to develop economically and the Northeast's decline were facts of life", and this was largely the result of "different overseas stimuli for agriculture." (Fausto 1999: 143) The loss of international markets for Brazilian sugar from 1900 halted the momentum of industrialization of the Northeast as the agro-mercantile capital no longer provided industrial capital for the region.⁴⁹ But Suzigan (2000) also points to another fundamental issue regarding the loss of relative importance of the Northeast: even though its main cash crops – sugar and cotton – had considerable linkage effects (inducing investments in modern sugar processing plants from the 1870s or in cotton ginning and cotton oil factories, for example), the low levels of income those activities generated and the unequal distribution of this income did not induce substantial investments in other activities.

⁴⁷ It is important to notice that the Northeast did attempt to board the "coffee train". In Baturite, Ceará, main economic activity was coffee production and in the nineteenth century it was responsible for around 2% of the national production, which prompted the construction of the state's first railroad, inaugurated in 1873, connecting the town to the port of Fortaleza (Lima 1994). It was also an important part of the export portfolio of the state of Bahia. Coffee was also grown in Sergipe. Lisboa (1897: 60) indicated that the state produced high-quality beans that could "rival the coffee of São Paulo or Rio de Janeiro"; the limited production, however, was not exported, but only served the domestic market. Nevertheless, from the late 1890s, production levels steadily declined for a variety of reasons: aging coffee trees and declining productivity, the scarcity of agricultural land for coffee, the lack of financial resources, of a good transportation network, technical backwardness and the droughts (Lima 1994: 101).

⁴⁸ Until 1907, the Federal District (located in Rio de Janeiro at the time) was the largest industrial producer in Brazil. From 1910, however, the position of São Paulo as the center of national industry was gradually consolidated.

⁴⁹ Leff (1997: 49) also highlighted that the poor economic prospects of the Northeast's export activities curtailed the investment in railway construction in the region. In the Southeast, the extension of railways opened a new period of generalized economic development.

Suzigan (2000: 156) argued that the energetic operated in the beginning of the twentieth century gave the South region another competitive advantage over the Northeastern mills. Most of the textile mills established in the beginning of the 19th century were driven by water wheels, which were gradually replaced by steam power towards the middle of the century.⁵⁰ The abundance of wood for the production of wood charcoal was an important criterion in the choice of location of plants. The transition to electric power began between 1900-1910, especially in Rio de Janeiro and São Paulo. By 1915, around 77% of textile mills in Rio de Janeiro and São Paulo were powered by electricity while in the Northeast that was only true for 16% of them.

Nevertheless, despite the growing national pattern of industrial concentration in the South and Southeast, the Northeast did have a relevant industrializing experience. The initial stages of industrial development in Brazil occurred in a decentralized fashion due to constraints on regional economic integration, such as the autonomy of regional economic complexes and the absence of efficient and integrated transportation network. This decentralized industrialization allowed large industries to be established in various parts of the country and to coexist without greater competition until at least 1929, when the gradual expansion of the national transport network and the integration of the domestic market after the crisis of 1929 consolidated the position of São Paulo as a center of industry and national economy (Cano 1985).

The Census carried out in 1907 identified a total of four hundred and forty industrial establishments (though most factories were small production units with limited mechanization) in the Northeast of Brazil, mainly concentrated in the state of Pernambuco.

⁵⁰ Details on this transition can be found in the *Report of the National Exhibition of 1866* (Rego 1869).

Table 5– State of industry in the Northeast in 1907		
State	Number of establishments	Number of workers
Maranhão	18	4,545
Piauí	3	355
Ceará	18	1,207
Rio Grande do Norte	15	2,062
Paraíba	42	1,461
Pernambuco	118	12,042
Alagoas	45	3,775
TOTAL	259	20,902
Source: Estatísticas históricas do Brasil: séries econômicas, demográficas e sociais de 1550 a 1988. Vol. 3. Rio de Janeiro: IBGE, 1990.		

By 1907 the Northeast comprised around 40% of Brazil's population but was only responsible for 17% of the domestic industrial production; this figure would decrease as the process of industrial concentration in the Southeast was accentuated in later years. As Cano (1985: 56) indicated, the Northeastern industry grew within straight limits, connected to the expansion of its urban market and the demographic growth and some breaches in the national market.

1.1.2 World War I and the 1920s

The effects of the World War I on industrial growth in Brazil have been has been in the center of ongoing scholarly discussions. One interpretative framework – the so-called theory of “adverse shocks” – has claimed that the progress in the implementation of the modern factory system in Brazil resulted from the “adverse shocks” of the past century: World War I, the Great Depression and World War II. During these periods, a decline in imports occurred causing

increases in the prices of manufactures imported from the advanced countries and, consequently, of prices of import-competing domestic manufacture. At the same time, the closing of the consuming markets in the industrial countries because of the wars of the Depression resulted in sharp declines of prices of primary products. (Pelaez 1977: 683)

And, therefore, the import-starved domestic economy shifted to internal import substituting activities.

A particular strand within this approach, identified by Suzigan as the “extreme version”⁵¹, considered World War I positive for Brazilian industrial development as it stimulated the first outbreak of import substitution industrialization. This position was outlined by Caio Prado Jr. (1981) and consolidated by Robert C. Simonsen (1973).⁵² The main supporting evidence of this expansion was the data of the 1920 Census, which counted 13,336 industrial establishments, out of which 5,936 had been founded in between 1915-1919. (Simonsen 1973: 20)

Another approach was offered by theory of “industrialization led by the expansion of exports”, which established a direct relationship between the performances of the export sector and industry. It affirmed that industry expanded and retracted respectively during periods of growth and crisis of the export sector. Diverging from the theory of adverse shocks, Dean (1969) argued that the War interrupted a phase of industrial

⁵¹ According to Suzigan (2000), there are two perspectives within the “Theory of adverse shocks”: an “extreme” version of this interpretation, more general, put forward by the first observers of the expansion of Brazilian industry, which identifies the World War I as the first “adverse shock”, and a more restricted version, developed mainly in Celso Furtado’s and Conceição Tavares’ analysis, which focuses only on the positive effects of the Depression and crisis in the coffee economy as promoters of import substitution industrialization.

Suzigan (2000) also provides a comprehensive review of the main theories on the origins and development of Brazilian industry.

⁵² It is important to highlight, however, that the idea that World War I spurred growth in Brazilian industry had been put forward even by contemporaries observers. A report on the Brazilian economy written for the British governments in 1924 affirmed: “a considerable development in local manufactures of every description is to be noted since the year 1916. The difficulties of importation during the war years gave a great impetus to Brazilian industries (...)” (Hambloch 1924: 32).

development stimulated by the expansion of coffee exports and hampered the possibilities of increasing industrial production due to the restrictions of the imports of raw material and machinery. Partially in agreement with this position, Baer (2011: 31-32) argued that World War I could not have been a catalyst to industrial growth as the interruption of shipping made difficult to import the capital goods necessary to increase productive capacity, and there were no Brazil capital goods industry at the time. To him, World War I, rather than expanding the industrial capacity of Brazil, increased the utilization of the food and textile producing capacity installed before the war. Production was chiefly directed to the domestic market but some textiles were exported to Argentina and South Africa, and sugar and frozen meats were sent to other Latin American countries. This view is also shared by Stein (1957: 107) that domestic manufacture poured its cotton goods into the market created by decreasing imports, making use of the prewar expansion of equipment and excess productive capacity in the years of recession 1913-1915.

The explanations limited to the aforementioned theories could not fully account for the diverse moments within the industrializing process. As Versiani and Versiani (1977: 141) highlighted,

(...) ambas as colocações parecem incompletas: o início da industrialização surge como resultado dos estímulos produzidos pela conjugação de períodos de dificuldades no setor externo com períodos em que a economia voltou-se mais para o exterior. De um lado, evidencia-se o fato que os “choques adversos” não teriam tido o impacto que tiveram, na ausência de fases anteriores de formação de capacidade produtiva. De outro lado, a interpretação da industrialização como um resultado direto da expansão das exportações aparece como notoriamente insuficiente e simplista.

Suzigan (2000) offered a nuanced revised perspective which sought to take into consideration not only conjunctural variations in the economy during war – underlining its discontinuous growth – but also sectorial variations. In general terms, he supports that the war had a negative impact on industrial investments, which is evidenced by the fact that no large-scale company was established in Brazil during the war years. However, he

granted that industrial production expanded, with differences according to industrial sector. Industries that processed mainly domestic raw material were able to increase their output, occupying markets previously served by imports (cotton fabrics, hats, footwear, pharmaceuticals, etc.) or to meet external demand (sugar, processed meats, cottonseed oil). Therefore, in the end, to Suzigan, the question whether World War I accelerated industrial development boils down to a dispute about what parameter is used to evaluate the intensity of the process. If the chosen parameter is the evolution of the industrial product, then the “adverse shock” or any phenomenon that hampers imports will, in principle, a positive effect on the domestic industry; however, if the assessment is based on the industrial investment, then the high cost of imports will negatively impact the process granted that the imported component of production goods is relevant (Versiani and Suzigan 1990).

After the end of the war, the decade of the 1920s was marked by the expansion of industrial investment in Brazil. Stimulated by importation difficulties during World War I, new investments were made in the following years; for the textile industry, the peak in investment occurred particularly between 1924 and 1928. This increase in productive capacity was to a certain extent related to the effects of World War I on the domestic industry. On the one hand, wartime production had grown by making the most of the installed production capacity without replacement investments; therefore, part of the investment was to replace obsolete or deprecated machinery after their intensive during the war. On the other hand, as Baer (2001: 34) indicated, “the growth of output, especially in textiles, created among producers an anticipation of further market growth of domestic products” which resulted in the order of equipment that was delivered later in the 1930s.

During the 1920 a growing trend towards the diversification of industrial investment can also be identified. The industries developed before World War I were complementary or subsidiary of the export sector, but in the post war years the diversification of industrial

structure and the beginning of the transition to a predominantly industrial economy began to take shape. The reasons behind this diversification include the reinvestment of profits by repair shops that had increased production during World War I; the flow of foreign capital into sectors such as steel and several consumer durables; government stimuli to certain industrial sectors (Baer 2001: 32).

Following shortages of basic commodities during the war, both Federal and governments enhanced the provision of benefits for industries. These incentives generally included exemptions from import duties on machinery, equipment and raw materials not produced domestically for the expansion or construction of new plants, and federal taxes for several years, as well as the offer of long-term loans. Capital goods industries – mostly directly related to foreign capitals – were especially favored, but also industries whose production had increased in the period of the conflict or that were directly linked to the export sector. Such benefits thus stimulated the implementation of various production units of more dynamic and complex industrial sectors, such as iron, steel, cement, chemical fibers for the textile industry, agricultural machinery, textile equipment (mainly looms), equipment for the small sugar industry, and paper, and the expansion of consumer goods industries such as cotton byproducts, cotton and silk textiles, etc.

The Northeast thus saw during the post-war years the establishment of new industrial plants in diverse sectors. The Fabrica de Papel Pernambucana Aktieselskab (Pernambuco Paper Mills), a Norwegian limited company founded in 1916, was later inaugurated in Pernambuco; in 1922, it had an annual production capacity of 3000 tons, increased to 6000 tons per year in 1927 (Suzigan 2000: 305). Also in Pernambuco, the S.A. Grandes Moinhos do Brasil, a wheat mill known as Moinho Recife, was founded in May 1914; despite the increased cost of machinery and equipment caused by the war, its manufacturing facilities were opened in December 1919. It was the first wheat mill of the

Northeast and it had a daily production capacity of 1,000 bags of forty-four kilos (Suzigan 2000: 207).

Immediately after World War I, the cottonseed oil industry progressed considerably in the Northeast. An extensive program of investment in mills for cotton ginning and cottonseed oil production was carried out by Companhia Industrial de Algodão e Óleos, which received – among other benefits – tax waivers from the Federal government, as well as from the states of Pernambuco, Paraíba and Ceará.⁵³ As a result, nine cotton ginning mills were established in those states and Rio Grande do Norte.

Textile investment also grew substantially. In the state of Ceará, six factories were founded: Fiação Santa Maria (1918), Maranguape (1924), São José (1926), São Luís (1928), Baturité (1927) and Santo Antônio (1929). In Pernambuco, other three were founded in 1926: Tecelagem de Seda e Algodão de Pernambuco, Companhia Industrial Pirapama, and Cotonífico José Rufino. In Paraíba, the Companhia de Tecidos Rio Tinto was inaugurated in 1924.

During the 1920s, Brazilian industry thus took an important quantitative and qualitative leap with the expansion and diversification of investment. An incipient production of capital goods and of more diversified and complex consumer goods began to develop. As Suzigan (2000: 60-61) argued, the industries developed from World War I represented the beginning of transition to an economic system dominated by industrial capital, both with regard to the accumulation of capital and the contribution to GDP growth. Another defining feature of the development of the 1920s was the growing trend towards the industrial concentration in the state of São Paulo. In the period 1920-1928 the industry in São Paulo grew at an annual average of 6.6%, while the rest of the country grew at an inferior rate around 3.48% (Cano 1975: 235). This period thus paved the way

⁵³ Diário Oficial da União. N. 96, 25 April 1921, p. 8114.

to the predominance of São Paulo in the domestic industrial product and the sharp decline of the Northeastern industry in the subsequent years.

1.1.3 The 1930s and World War II

While industrial development in the decade of the 1930s was inevitably scarred by the financial crisis of the Great Depression, it also marked the beginning of important structural changes in Brazilian industry. As Villela (2011: 44) put it, “It is almost a cliché to say that the 1930 revolution that brought Getulio Vargas to power marked a watershed in political and economic history. Yet it is hard to escape the conclusion (...)”

The 1929 financial crisis that caused coffee prices to fall by two-thirds on the world market hit Brazil when the country was going through a crisis of overproduction. As at the time of the Great Depression, coffee accounted for 71% of Brazil’s total exports, the steep decline of the global demand caused severe falls in export revenues. The vital importance of coffee for the national economy (which then represented 10% of the Gross Domestic Product) prompted great government support for the coffee sector. Accumulating large stocks of unmarketable coffee and faced with declining world markets and prices, the government’s response to the coffee crisis included taking over the coffee support program from the states, founding the Conselho Nacional do Café in 1931, buying coffee for stocking or destruction, and paying off the debt of agricultural producers.

Celso Furtado (2007; first edition in 1959), with great analytical rigor, shed light on the consequences of the coffee protection policies for the Brazilian economy. His findings, strongly supported by historical scholarship (Baer 2001; Suzigan 2000), indicated that the Brazilian government’s decision to offer direct subsidies to coffee producers and to devalue the currency resulted in the maintenance of the sector’s productive capacity

and an increase in relative prices of imported goods. Ultimately, the combination of the income creation and the curtailment of imports acted as a catalyst for a spurt of industrial production (Baer 2001: 36):

In seeking to maintain money incomes in the country under conditions of declining import capacity, the policy favouring the coffee sector became, in the final analysis, one of industrialisation. With the rapid devaluation of the currency, the relative prices of imported goods rose, thereby creating extremely favourable conditions for home production. Since profits from the cultivation of coffee were now declining, because the favoured treatment shown by the government to the growers only partly compensated for the fall in the real value of their exports, consumer goods production became the most attractive field of investment in the Brazilian economy. (Furtado 1965: 259)

Investment traditionally allocated to the agricultural export sector was diverted to manufacturing industries. The 1930s thus set the foundations that allowed Brazil to move out of the coffee exporting economy in the direction of industrialization through a process that has traditionally been defined as “import substitution industrialization” (ISI).

Unlike previous episodes of ISI in Brazilian history, the shifts witnessed in the 1930s steered the economy onto an altogether different development path. From then on industry – and no longer coffee – set the pace of economic growth, and for almost six decades thereafter Brazil followed the quintessential inward-looking development strategy. At first, unconsciously (and, as mentioned, as a by-product of official measures taken to rescue the floundering coffee sector), industrial growth increasingly became a matter of deliberate government policy. (Villela 2011: 45)

The production of capital goods, particularly cement and iron, received substantial investments, and were fueled by the Vargas government’s efforts to promote the development of heavy industries, creating the Conselho Nacional do Petróleo (1938), the Companhia Siderúrgica Nacional iron and steel complex (1941), the Companhia Vale do Rio Doce mining company (1943), and the Companhia Hidrelétrica do São Francisco hydroelectric power plant complex (1945). This prompted great change in the country’s industrial structure. In 1919 Brazil’s industry was dominated by light industries; textiles, clothes, food, drinks and tobacco accounted for 70% of the industrial production. By 1939,

this total was reduced to 58%, while metallurgical and electric products, and machinery underwent substantial growth (Baer 2002: 61).

Industrial output would be further mushroomed in by the effects World War II; the commitment of industrialized countries to the war effort fostered to some extent industrial expansion in Brazil, which reached out to both overseas and domestic markets.⁵⁴ Industrial production during the war grew at an annual average rate of 5.4%; noteworthy are the growth rates of metal (9.1%), textiles (6.2%), shoes (7.8%), beverages and tobacco (7.6%). During the war the exports of Brazilian manufactures quickly grew and textiles came to account for 20% of total export revenue (Baer 2002: 58-59).

The World War II boosted Brazil's industrial development amid diminishing manufactured imports and massive Allied purchases. As we can see in Table 6, the number of industrial establishment and workers employed in the industrial sector grew substantially in the Northeast during the war and immediate post-war years.

Table 6: Number of industrial establishments and workers in the Northeast and in São Paulo				
State	Census of 1940		Census of 1949	
	Establishments	Workers	Establishments	Workers

⁵⁴ At the beginning of the war in Europe, Brazil's international relations followed a pragmatic policy of neutrality which consisted mostly of a simultaneous approach with the United States and Germany. However, given the evolution of the conflict and the exhaustion of their bargain resources, Brazil became increasingly committed to the American preparations for entering the war alongside the Allies.

Brazil bargained its alignment. It agreed to supply the United States with strategic materials and granted them permission set up bases in the Northeast; in return, the Brazilian government received funding to create the Companhia Siderurgica Nacional and to modernize the Armed Forces.

Consequently, Brazil declared war on Germany and Italy on August 22, 1942. The country helped the Allies by providing raw materials (especially rubber), employing the Navy to patrol the Atlantic, and sending Air Force pilots and an expeditionary force to fight in Nazi-occupied Italy.

Maranhão	703	6,425	1,003	8,581
Piauí	164	1,590	407	1,960
Ceará	789	7,859	2,652	17,445
Rio Grande do Norte	593	4879	1,201	12,049
Paraíba	737	13,210	1,794	25,778
Pernambuco	1,877	57,327	3,633	74,842
Alagoas	687	12,563	1,203	22,265
São Paulo	14,225	272,865	24,519	484,844
Source: IBGE, Conselho Nacional de Estatística 1954: 111.				

In order understand the particularities of industrial development of the Northeast region, we take a closer look at the vicissitudes of textile manufacturing, the region's leading industrial sector and main provider of company housing. The government instituted after the Revolution of 1930 took steps to address the alleged “state of overproduction” – that is a production capacity well above market demand – in the textile industry, observed since the second half of the twenties. Large imports of textile machinery in the period from 1924 to 1926 had resulted in significant increases in production and the establishment of new factories. This fact, combined with the fall in the price of imported fabrics, sparked a concern among traditional producers regarding the increasing foreign and domestic competition, and ultimately a campaign against the textile overproduction (Versiani 2012: 870). As Stein put it (1957: 139), they wished to find some relief to the crisis “untroubled by the risk of new competitors”.

Textile associations of Rio de Janeiro and São Paulo thus pressured the government to take action to limit the effects of the crisis. They campaigned for restriction on machinery imports and regulation on working hours and, later, for “careful studies of wages and the possible establishment of a national minimum wage scale (Stein 1957:

161); these ideas were strongly opposed by the mills of the Northeast, which ultimately sparked a regional dispute between Northeastern mills and the certain mills of the Center-South. The Lundgrens from the Paulista and Rio Tinto mills argued they were a move from a handful of southern mills to diminish the competition of the northern entrepreneurs by using overproduction as an excuse to limit working hours. Implicit in the reasons for this divergence was the fact that, in the contest to expand markets, northeastern mills relied on cheap labor against the better equipment of those in the South.

The partial victory of the latter resulted in the Decree 19739, of 7 March 1931 (then complemented by the Decree 19985, of 13 May 1931), deeming textile industry in a state of overproduction and curtailing for three years textile machinery imports.⁵⁵ Since new machinery and spare parts could still enter the country to replace obsolete or worn-out installations or to improve quality of production, this measure contributed to ensure the position of established producers by blocking increased competition.

The result of this measure, carefully analyzed by Stein (1957), was that during the six years of the curtailment of machinery imports, Brazil had in fact expanded production. This was obtained partially through the purchase of domestically-produced mills, and mainly through the operating installations around the clock. Brazilian cotton manufacture of the 1930s experienced thus a paradoxical situation: “an industry presumed to be in a state of overproduction while many of its factories operated feverishly beyond the normal workday.” (Stein 1957: 143)

After failed attempts by some representative bodies of the industry to prolong the state of overproduction in 1937, the issue wore out with the outbreak of World War II. During the World War II, Northeastern mills worked twenty-four hour shifts; the war represented both their peak in production and number of workers. The years of conflict

⁵⁵ The ban was later extended for three more years lasting until March 1937 and the regulation of working hours was not included in the law.

contributed to boost the textile sector in three major ways: first, by removing from the domestic market any foreign competition; second, by allowing firms to enter new international markets whose production had been impaired by the war, supplying Latin America, Europe and the Middle East; and finally, by the need of increased output to support the war efforts. During the World War II, textile industrial establishments (natural or synthetic spinning, weaving, knitting and finishing) were declared of national interest, and therefore equivalent to those of interest of military interest and mobilized for the war efforts.⁵⁶ As part of the war efforts, Textile Executive Commission (CETEX) established contracts with several firms for the production of textiles. Northeastern mills were allocated 29% of orders of fabrics for the United Nations Relief and Rehabilitation Administration (UNRRA) and the French government, while São Paulo received 33%. In 1945, the Companhia de Tecidos Paulista received an order of 80,000 meters of olive-green denim for the National Army; for contracts signed with the UNRRA, this same company produced around 836,127m² of cotton cloth, and the Companhia Industrial Pernambucana 426,424 m².

During the War, the growth was based on a fuller use of the existing underutilized capacity rather than the expansion of industrial investment; greater output was achieved through the intensive use of equipment and machinery. Consequently, by the end of the war much of the industrial capacity of the country was outdated and obsolete. As we discuss below, outdated machinery was considered a central impairment to the Northeastern industry and it would be targeted by the Sudene's reequipping programs, as we discuss later in this chapter.

⁵⁶ The state of mobilization of textile industrial was established by the Decree-Law 6688, of 13 July 1944.

1.1.4 The Post-War years

During the years that followed World War II, industrialization was no longer a defensive reaction to other external factors. It was becoming the government's focus to develop and modernized Brazil's economy. Policy makers decided that the country could no longer rely on solely on the exportation of primary products to reach a good level of development and thus new policies started to be formed.

Under the presidential mandate of Eurico Gaspar Dutra, elected in 1945 following the deposition of Getúlio Vargas, the first post-war public investment program that acted as complements to the stimuli given to the private sector was introduced. The plan was named SALTE, an acronym containing the first letters of Portuguese words for health, food, transport and energy, which were to be its priorities. It was not a full-scale economic plan. It did not propose targets for the private sector or programs to influence the latter; it was rather a five-year public expenditure program for those four fields. The SALTE was short lived – it did not last more than one year; its discontinuation was due to implementation and financing problems.

A more ambitious and comprehensive attempt at planning was carried out by the Joint Brazil-United States Economic Commission during the period from 1951 to 1953. As Baer (2001: 60) highlighted, the “Its large Brazilian and American technical staff made one of the most complete surveys of the Brazilian economy that had been undertaken up to that time” and formulated an ambitious series of infrastructure projects. It proposed the modernization of various railroads, harbors, and coastal shipping; the expansion of installed power-producing capacity; the importation of agricultural equipment, the construction of silos; and the expansion of some industrial plants. The Commission also made recommendations regarding technical training, diversification of exports and measures to overcome regional disparities in income (i.e. measures to better integrate the Northeast in the rest of the economy). Although its plan was never officially adopted, the

work of the Commission had several beneficial effects. Namely, the establishment of the National Bank of Economic Development (BNDE) in 1952 with the goal of planning, analyzing and financing infrastructural and industrial projects. Moreover, it helped identify some of the infrastructural “bottlenecks” in the way of economic development in Brazil.

Throughout the 1950s the Brazilian government increasingly adopted a more aggressive role towards industrial promotion and fast economic growth. Through a series of postwar development plans the Brazilian federal government embarked upon ambitious projects of fast-paced industrialization amid what come to be known as “desenvolvimentismo” – “a sort of political mystique of development” (Baer 2001: 61). By then, industrialization was no longer a reaction to external events, becoming instead for the government the main road to modernization and to obtain high rates of growth as policy makers were convinced that exports of agricultural could not prompt the desired country’s development ambitions.

The decade began with the return to power of former president Getúlio Vargas in 1951, this time by the popular vote. Vargas sought to implement an ambitious agenda of economic growth – with some levels of social reform – by furthering the industrialization Brazil had embarked since his first tenure in power. Industrial development would also be the greatest hallmark of Juscelino Kubitschek’s presidential administration (1956-1961). The expression “Fifty Years in Five” – an indication of the concern with the attainment of high rates of growth within a relatively short period of time – was the slogan of the candidate’s political platform and the defining direction of his ensuing administration. Under Kubitschek the federal Brazilian State advanced a bold project of material and symbolic modernization of important sectors of the national society embodied in the construction of the new capital Brasília in the Brazilian heartland and in the ambitious Programa de Metas (Program of Targets). The program “If not actually enabling the country to grow ‘50 years in the space of 5 years’ (as his campaign motto would have it),

clearly set it on a new 'modern' (i.e. industrialized) course." (Villela 2011: 48). It covered five general areas: energy, transport, food supply, basic industries and education (particularly technical training). The investment in infrastructure was mostly concerned with eliminate bottlenecks, mainly those previously pointed out by the Joint Commission. The targets for intermediate goods industries regarded the development of steel, aluminum, cement, cellulose, automotive industry, heavy machinery, chemical products.

The industrialization process in the post-World War II period resulted in very high rates of economic growth. During Kubitschek's term in office, Brazilian GPD grew at a yearly average rate of 8%. For the period between 1947 and 1961, the real product increased by 128%; the industrial product increased by 262%, while the real agricultural product increased by only 87% (Baer 2001: 63). Traditional industries (textiles, food products, clothing) suffered declines in their relative position, while the highest growth rates could be found among key-import substitution industries, such as transport equipment, machinery, electric machinery and appliances and chemicals. Baer (Baer 2001: 66) pointed out that in the traditional industries there was greater relative decline of gross value added than of employment, whereas for many new industries the increase in gross value added was greater than the increase of employment.

Despite its many achievements, Kubitschek's "desevolvimentismo" also resulted in problems which would "cast a long and costly shadow over Brazilian society in decades to come." (Villela 2011: 49). Among them, foreign indebtedness, rising rate of inflation, low growth of agricultural productivity and the accentuation of regional inequalities due to the unbalanced distribution of the benefits from growth, which more directly interests our research.

In the classic *Formação Econômica do Brasil*, Furtado examined the gradual consolidation of the industrial concentration in the state of São Paulo. Industrial development began contemporarily in almost all Brazilian regions and throughout its early

stages there was no great regional imbalance. However, the scenario would later change; the point of inflexion seems to be World War I when the first phase of fast-paced industrial development took place. Following the conflict, industry tended to concentrate in one region. Concentration of industrial employment in São Paulo increased from 29.1% in 1920 to 38.6% in 1950, whereas in the Northeast (including Bahia) it dropped from 27% to 17% during the same period of time. Between 1948 and 1955, the participation of São Paulo in the industrial product grew from 39.6% to 45.3%, and the participation of Northeast (including Bahia) declined from 16.3% to 9.6%. A final figure completes the portrait of the aggravation of regional inequality after the World War II: in 1955, the *per capita* income in São Paulo was 4.7 times higher than in the Northeast (Furtado 2005).

Concern about the development of the Northeast and regional imbalances was not new; the difference was that during the decade of 1950 the relative backwardness of the region was considered to require more general, long-term policies since its “spontaneous reversion” was not a possibility. Therefore, regional policies were placed very close to the top of the political agenda and the Northeast, due to its large population and historical importance, became the major target.

At the time, there were already four major institutions working in the region that were concerned with its development. First, there was the Departamento Nacional de Obras Contra as Secas (DNOCS). Having been founded in 1909 under the name of Inspetoria de Obras Contra as Secas (IOCS), it was the oldest federal institution with operations in the Northeast. Its overall aim was to plan and execute actions to fight the impacts of the periodic droughts in the Northeast. Second, the Companhia Hidrelétrica do Vale do São Francisco (CHESF), established in 1945 by Getúlio Vargas to provide hydroelectric power to the following Northeastern states: Bahia, Sergipe, Alagoas, Pernambuco and Paraíba. The first hydroelectric plant Paulo Afonso I was inaugurated in 1954. Third, the Comissão do Vale do São Francisco (CVSF), founded in 1948, and targeted to

implement a plan to exploit the economic potential the basin of the São Francisco River. Finally, the Banco do Nordeste do Brasil (BNB), a development bank established in 1952 to the development of the Northeast by providing investment financing.

In the fifties and sixties, the role of Grupo de Trabalho para o Desenvolvimento do Nordeste (GTDN), under the coordination of Celso Furtado, was fundamental to the discussions on the regional discrepancies and to guide policy-making. The results of their researches, summed up in the document *Uma Política de Desenvolvimento Econômico para o Nordeste* published in 1959, identified the major causes of the backwardness of the Northeast and proposed plans to address them.

The document presented a negative scenario of the Northeast and projected an even worse one:

A disparidade de níveis de renda existente entre o Nordeste e o Centro-Sul do país constitui, sem lugar a dúvida, o mais grave problema a enfrentar na etapa presente do desenvolvimento regional. (...) O Nordeste brasileiro se singulariza no Hemisfério ocidental como a mais extensa e populosa zona de nível de renda inferior a cem dólares por habitante. (...) Projetadas essas tendências [de crescimento], chegaremos a 1970 com uma renda per capita de menos de 120 dólares no Nordeste e cêrca de 440 no Centro-Sul.

(Grupo de Trabalho para o Desenvolvimento do Nordeste 1967: 9)

The Group also argued that due to the absence of an appropriate understanding of the problems of regional inequality, public development policies have contributed to aggravate the problem. In order to remedy this situation, it proposed plan clustered around point main directives:

- A) Intensification of industrial investments, in order to create in the Northeast an autonomous center of manufacturing expansion;
- B) Transformation of the agricultural economy of the humid strip, aiming at providing an adequate supply of supply of foodstuffs in the urban centers, whose industrialization should be intensified;
- C) Gradual transformation of the economy of the semi-arid areas in order to increase its productivity and make it more resistant to the impact of droughts; and
- D) Displacement of the agricultural frontier in the Northeast in order to integrate to the regional economy the humid lands of the *hinterland* of Maranhão, which can

receive the surplus population produced by the reorganization of the economy of the semi-arid strip.

(Grupo de Trabalho para o Desenvolvimento do Nordeste 1967: 14)

To implement such a broad policy for the Northeast region, a federal institution was created in 1959, the Superintendência de Desenvolvimento do Nordeste (Sudene). In the section below we examine the impacts of the Sudene's policies and programs in the Northeast's industrial sector.

1.1.5 Sudene-stimulated industrialization in the 1950s and 1960s

In 1955, the noted geographer Sternberg carried out a survey of the Brazilian economy and concluded:

(...) the benefits of development are becoming increasingly concentrated in the southern part of the country, where profits derived from the sustained coffee boom resulted in an unparalleled accumulation of capital resources. This region now represents a predominant share of the entire national market; here, where more than half of the Brazilian population (enjoying higher-than-average incomes) live, is to be found the overwhelming proportion of the industrial labour force (...); the largest hydraulic potentials and the greatest electric power developments; the maximum density of the railroad network; the greatest extent of roads and the immense majority of motor vehicles ; here, to cut short a long list of advantages, are wider opportunities for education on all levels (...)

(Sternberg 1955: 296)

The description above clearly summarized the effects of the role of the Center-South, and particularly the state of São Paulo, as the dynamic center of the national economy. Production, investments, infrastructure, employment opportunities and even quality education were concentrated in that region.

It was thus to address these issues, as indicated above, that the Sudene was established in 1959 under Kubitschek's tenure in power. The Superintendence was a form

of state intervention in the Northeast conceived with the intent of reducing the internal contradictions produced by the different stages of socioeconomic development in the country's regions, and alleviating poverty in the Northeast. The Sudene was in charge of coordinating and directing all activities of the Federal government in the region. Its main activities were: proposing guidelines for the regional development, supervising, coordinating and controlling the proposal and execution of projects regarding the development of the Northeast, and coordinating national or foreign programs of technical assistance.

Based on the document the GTDN's document mentioned above, four general guidelines were established for the Sudene; especial attention was granted to the industrial sector, valued for its potential to absorb large labor surpluses and render the economic structure more varied. As such, the first guideline aimed at the "intensification of industrial investment with a view to creating resources of employment in urban areas, where much underemployment occurs, and rebuilding of the regional economic structure, which still displays visible signs of feudalism." (Sudene 1961, 4)

Sudene's actions to promote regional development were laid out in its four multiannual plans (1961-63; 1963-65; 1966-68; and 1969-73). The Sudene's industrialization agenda was grounded on a twofold strategy: on the one hand, attract and encourage new industries, and on the other hand, restructure and "save" traditional industry. The agency operated chiefly through the concession of public subsidies to private capital investment via fiscal benefits and investment financing. This was achieved mainly through the mechanism known as Law 34 /18, which allowed firms to invest 50% of taxes due to the Federal government in the Northeast region. All the resources derived from the tax exemptions were deposited in the Banco do Nordeste do Brasil, which thus became the main funding agent of the Sudene.

Investments were concentrated in the states of Bahia, Pernambuco and, to a lesser extent, Ceará, or more specifically in their respective capitals, Salvador, Recife and Fortaleza. Obviously industry was attracted to those areas that offer greater advantages, such raw materials, infrastructure, skilled workforce, etc. In spite of the regulations established by the Sudene to prevent this trend, from 1960 to 1981 those three states received around 70% of the approved projects and 67% of the total investments. Pernambuco concentrated the higher number of projects, whereas Bahia the largest sum of investments (Amora 1994: 126).

Of particular concern to the Sudene was the textile sector. It that “The deterioration of important branches of the Northeast industry, which did not retool in the last few decades and have had to face growing competitor from more modern and progressing industries of the South Central region”, demanded “more drastic measures”. To fight the “progressive closing down of plants” that caused “serious local problems, since, in many instances, these plants were the only source of employment in the respective localities”, it designed a plan to bring production set-ups of northeastern mills into line with local and domestic market conditions. The final goal was to foster a process of industrialization by substituting imports from the Center-South (Sudene 1961, 9).

According to the Sudene’s assessment survey on the northeastern cotton textile industry the outdated machinery (in 1960, only 10% of the looms were automatic)⁵⁷ and the excessive number of workers were its two central impairments. For this reason, the Sudene developed programs aiming at the modernization and rationalization of the textile

⁵⁷ Because of the nature of the technological advances in textile production, reduction in mechanization meant saving in labor costs; therefore, it was more economical to import machinery where labor cost was higher, that is, in the South. Between 1949 and 1953, importation of textile equipment through the Santos port (South) reached 108 million dollars, while the Recife port (Northeast) counted only 9.6 million. (Sudene 1967, 56) Thus, industries in the South were able to increase their productivity through mechanization and eliminate the competitive advantage the lower wages granted the Northeast.

sector through retooling, technical and financial support and industrial relocation (Sudene 1968, 119). The Superintendence understood that transformations must deal with the backwardness of the region's industrial relations and management; as a result, these programs included specific objectives regarding machinery (modernization) and workers (training), but also sought to coach textile industrialists in administrative techniques, and in methods and processes to control and increase industrial productivity. To this end, the following measures were implemented:

- a) treinamento, até o final de 1962, de cêrca de 200 mestres e contramestres de fiação e tecelagem, através de cursos intensivos, nos Estados de Sergipe, Ceará, Maranhão, Paraíba, Bahia e Alagoas, pela ordem, devendo ser iniciado, ainda em 1962, o treinamento de operário do Estado de Pernambuco;
 - b) realização de seminários e reuniões com industriais, aos quais é distribuída literatura técnica sobre métodos e processos de controle e elevação da produtividade;
 - c) prestação de assistência técnica às fábricas, para elaboração de projetos de reequipamentos (...) destinados à substituição dos equipamentos obsoletos (...);
 - d) concessão, para a importação de equipamentos destinados à modernização de algumas fábricas, de incentivos fiscais (...)
- (Sudene 1966a: 45)

Nevertheless, the new projects implemented in the Northeast were mainly concentrated in the production of intermediary and capital goods; during the period 1960-1965, projected investments in consumer goods industries only accounted for 9.1% of the total (Albuquerque 1971: 102).

The goals proposed by the Sudene in its four development plans were not fully attained.⁵⁸ Albuquerque (1971: 101) showed how the analysis of per capita income, employment levels and reduction of inequalities indicates that the Sudene did not succeed in satisfactorily stimulating regional development. Baer (2002: 103) provided some data that point to the limited results obtained: In 1970, even though it was home to 30.3% of

⁵⁸ Barros (2011:139) underlined the negative effects of corruption in the Sudene's processes of project approval and credit distribution, which ultimately reduced its social support and led to substantial falls in the resources allocated via the Law 34 /18 mechanism.

the population, the Northeast was responsible for only 12.2% of the national income and 5.6% of the industrial production; the Southeast, with 42.7% of the population, represented 64.5% of national income and 80.6% of industrial production. Furthermore, great discrepancies in social conditions were identified in 1972 by the Programa Nacional de Amostragem de Domicílios (PNAD). For example, in São Paulo 85% of households were provided with electricity, while in the Northeast only 25%; in the former, 73% of the households were connected to the sewage system or had septic tanks, whereas in the later only 16% of households had such facilities.

For cotton textile factories, the reequipping program brought more unemployment, as the new factories, with modern machinery, were not enough to absorb the unemployed workforce. Furthermore, branches of southern mills were attracted to the Northeast industrial parks by the fiscal benefits and financial aid sponsored by the agency. Though industrialization was intensified, the installation of new factories did not have a multiplying effect due to the external nature of the process: production and the consumer markets of the South, machinery and equipment imported from the South, etc.

The military coup of 1964 consolidated national planning as a centralized system, implying the subordination of the regional development strategies to the general guidelines of the Federal government⁵⁹, and the Sudene took on a secondary role in decision-making and execution of national regional planning – but still retaining its investment financing role. By the eighties and nineties, regional policies faced a collapse and the idea of regional planning was essentially abandoned. With declining resources, the Banco do Nordeste do Brasil would become the major instrument of regional policies.

⁵⁹ Namely through programs such as the Programa de Integração Nacional (PIN), Programa de Modernização para a Agricultura (Proterra), and the Programa Especial de Desenvolvimento para a Área do rio São Francisco (Provale).

1.1.6 Boom and crisis: 1970–1980

The Brazilian economy had lost its momentum in the 1960s after the growth spurt of the previous decade. The immediate cause of the stagnation seems to have been the continuous political crisis the country experienced that followed Janio Quadros' resignation only seven months after he took office in August 1961. Along the years comprised between the resignation and the military coup in 1964, there was no consistent economic policy. Moreover, balance-of-payments difficulties and rising inflation further constrained growth. The country's stagnation lasted until 1967 and was followed by an economic boom spanning the period 1968-1974.

In the immediate post-coup years, economic policy favored stabilization and structural reform of financial markets. According to Baer (2003: 93-94), the former included classic measures, such as restriction on public spending in several sectors, increased tax revenues as a result of improvements in collection mechanisms, and credit and wage restrictions. The negative scenario was prolonged by the effects of the stabilization measures and the time elapsed before the effects of the institutional reforms could be felt. It must be stressed, however, that public expenditure on existing infrastructure projects was not curtailed during this period.

After the severe recession between 1963 and 1967, Brazilian industry underwent a new phase of accelerated growth and structural change from 1968 onwards. Despite the regime's liberal rhetoric, the State played an active role in expanding of the domestic market and promoting manufactured exports. Suzigan (1988: 7) pointed out that, in the beginning of this expansion phase, industrial growth was based on previously installed capacity since the already high levels of spare capacity of the early 1960s were

accentuated by the recession in 1963-1967. However, once these margins of spare capacity were absorbed, industrial investments resumed, especially from 1970.

During the economic boom from 1968 to 1974, Brazil attained real GDP growth rates of 11.3%, contrasting to the meager 3.7% of the 1962-1967 period. Industry was the leading sector, expanding at annual rates of 12.6%; the highest growth rates could be found in sectors such as transport equipment, machinery and electric equipment, whereas traditional sectors such as textiles, clothing, and foodstuffs presented inferior growth rates (Baer 2003: 95-96). That is, industrial growth was concentrated in durable consumer goods and chemicals. In the Northeast, as we discuss below, it was period of hardship for traditional industries, namely textiles.

The decade of 1970 has been described as the “decade of the Brazilian miracle”. Industrial production grew by leaps and bounds and exports hit records; there was also a boom in the construction industry, in both the housing sector and the major projects that continued the public investments in key sectors, such as energy and transports. Development policies in the period were oriented by the I Plano Nacional de Desenvolvimento (PDN) (1972 -1974) and the II Plano Nacional de Desenvolvimento (1975 -1979).

The first was established in 1972 during the government of General Emilio Garrastazu Medici (1969-1974). Its main objective was to prepare the necessary infrastructure for Brazil’s development in the following decades by promoting investments shipbuilding, steel and petrochemicals industries, science and technology. The I PDN placed particular emphasis on the development of transports and communications. In the early years, it achieved an average growth of 11.2% per year (reaching 13.9% in 1973), and succeeded in keeping annual average inflation below 19% (Almeida 2004: 21). It backed the implementation of some major infrastructure works, such as the Itaipu hydroelectric plant, the Rio-Niterói Bridge and the Trans-Amazon Highway

The oil crisis of 1974, however, interrupted the cycle and forced a change of direction in the economy. General Ernesto Geisel, who succeeded the Medici, launched the II PDN to tackle the economic crisis due to the first oil shock and the end of the “Brazilian economic miracle”. At the time, Brazil was highly dependent on oil, which corresponded to 48% of energy use; particularly, it was very dependent of *foreign* oil, importing over two-thirds of the product (Brasil 1974: 5). As a consequence, one of the guidelines proposed by the PDN sought to reduce dependence on foreign oil by investing in research, exploration, exploitation and refining of oil within Brazil, and in alternative energy sources such as ethanol and nuclear energy.

On another front, the plan also sought to dominate the entire industrial production cycle by investing heavily in the production of basic inputs and capital goods. Brazil still achieved, despite the widespread global stagnation, high rates of GDP growth, reaching 14% in 1973 and almost 10% in 1976. But since much of the funding sponsoring this growth came from external sources, the collateral result was a growing imbalance in the current transactions and threefold increase of net external debt between 1974 and 1979 (Almeida 2004: 23). What the II PDN proposed was a:

‘fuga para a frente’, assumindo os riscos de aumentar provisoriamente os déficits comerciais e a dívida externa, mas construindo uma estrutura industrial avançada que permitiria superar a crise e o subdesenvolvimento. Ao invés de um ajuste econômico recessivo, conforme aconselharia a sabedoria econômica convencional, o II PND propunha uma transformação estrutural.⁶⁰

Therefore, the plan achieved partial success; for the first time in history, Brazil managed to dominate the entire industrial production cycle. However, the country paid a high price for this industrialization: the debt skyrocketed and eventually resulted in the moratorium in late 1982.

⁶⁰ Castro, Antonio Barros de; and Souza, Francisco E. P. de. *A economia brasileira em marcha forçada*. Rio de Janeiro: Paz e Terra, 1985. *Apud* Almeida 2003: 23.

During the final phase of the military regime, Brazil experienced serious economic and political turmoil, undermined by the foreign debt crisis and a mass campaign for direct presidential elections. The contrast between the main macroeconomic indicators (growth, inflation, external accounts) during the “economic miracle” was clear, as the table below illustrates.

Table 7 – Economic indicators from 1970 to 1984				
Year	Nominal GDP growth (%)	External debt (US\$ million)	Debt/GDP	Inflation rate
1970	10.4	5,295	12.5	19.5
1973	14.0	12,572	15.9	14.9
1981	-3.1	61,411	23.3	109.9
1983	-2.8	81,319	39.4	154.5
Adapted from: Almeida 2004: 24				

The Brazilian economy experienced a long period of stagnation with high inflation during the final phase of the military regime and during the process of democratization. In contrast to the “miracle” of the previous decade, the eighties were for Brazil “the lost decade”. The sequence of government planning was interrupted while the country tried a total six stabilization plans with an average duration of 18 months each and a sharp acceleration of inflation after each one.

The first attempt to control inflation, in the government of José Sarney (1985-1990) was a shock treatment: the Cruzado Plan (February 1986), which froze prices, tariffs and exchange rates and introduced a new currency. It was followed eight months later by Cruzado Plan 2, in a context of increased tariffs and widespread price adjustment; later

the Bresser Plan (June 1987) brought new exchange rate and tariff shock, fixing prices, wages and rents.

A few months after promulgation of the new constitution, there was a new attempt at stabilization, the Summer Plan (January 1989); again wages and prices were frozen and there was another monetary reform, but its effects were equally ephemeral. Henceforth, the Sarney government was no longer able, despite various attempts, to stabilize the economy and reverse inflation, which at the beginning of his presidential term stood at around 250% per year and gradually escalated until reaching the hyperinflation in (about 1700% per year) in March 1990 (Almeida 2004: 24).

In regards to the Northeast, the Brazilian government continued to use Sudene mechanisms of fiscal incentives to stimulate resource allocation in the region. The new guidelines for its industrial sector was grounded on the establishment of large-scale industrial facilities capable of supplying the Brazilian market with intermediate goods in order to achieve a higher level integration with the national economy. One of the consequences of this policy was the dismantling of the region's traditional industries.

Between 1960 and 1990, the Northeast witnessed the closure of most of its traditional industries: some in the 1960s and others, whose modernization, mainly via Sudene incentives, postponed their final breath, worked until the early 1980s. During this period, this sector experienced changes in shareholding control, transferred from local firms to national groups. New factories were established, usually subsidiaries of multinational groups or Southern ones.

1.2 “Build houses for the shameful poverty”: the construction of the *vila operária* in the Northeast of Brazil⁶¹

We here examine the process of construction and the multiplicity of representations, associations, images and vocabulary used by different social actors aiming at capturing the making of the archetype of the company-built settlement – the *vila operária* – in the Northeast region of Brazil between the second half of the nineteenth and the first half of the twentieth centuries.

As discussed further in this chapter, the *vila operária* could be a settlement type sponsored by both the private and the public sectors with different targets. Despite its multiple manifestations, the identity of the *vila operária* archetype was founded in its shared architectural conceptualization and scope. In Brazil, the private sector, particularly industrial concerns, were the first to actively promote this new housing and settlement type since the end of the nineteenth century, and the public sector only intensively joined in decades later in the 1930s. In order to not leave room for ambiguity, we underline that in this research, we are exclusively concerned with the *vila operárias* developed by the former, that is, dwellings and settlement provided to workers by companies; therefore, we use interchangeably use the terms “*vila operária*” and “company town” throughout the text.

The investigation was carried out by looking at the perspectives and interpretations put forward by journalists, doctors, engineers, public officials and the general public relying mostly on the annual reports submitted by the Presidents of provinces (later

⁶¹ The quotation in this title, published in an article of the newspaper *O Liberal Pernambucano*, sets the tone of the process of the social construction of the low-income dwelling in Brazil and the emergence of the model housing type named “*vila operária*”: “Construir casas para a pobreza envergonhada, construir casas para os operarios, é reduzir o necrologio da cidade, é aproveitar braços uteis, é avigorar-los para o trabalho, dando-lhes a commodidade do lar domestico, e alentando-os no caminho da honestidade.” (*O Liberal Pernambucano*, Recife, N. 908, 19 October 1855, p. 1)

states)⁶² to their respective Legislative Assemblies, the *Posturas Municipais* (municipal ordinances) issued by the *Camaras Municipais* of Northeastern capitals, and newspapers published in the Northeast ranging from 1850 to 1940.

In order to understand the ways in the company-built settlement developed and was perceived between the 1850s and the 1940s, it is necessary place it within the larger framework of the “moralization enterprise” – which Chalhoub (1996) identified as the “Hygiene Ideology” –, that engaged public authorities, public health officials and physicians in the mission of “reforming” the urban poor (category that included factory workers). During that period, as Rezende (2000) argued, the Hygiene Ideology or Sanitarism lent to the reflections on the urban space a repertoire of terms such as *hygiene, circulation, housing, work*, which would gradually become recurrent and inform the discursive practices of the city.

It is this sanitary discourse that produced images of the city, its inhabitants and its problems, feeding different views on what constituted a social problem and therefore should be subject to criticism, complaints and/or (repressing, remediating) action. From this perspective, the working-class home was associated with disease and moral corruption and identified as a social threat, while company-built housing would be the paradigm of the sanitary and respectable house for the working poor (Rago 1997, 175-187; Correia 2004).

We here draw from Foucault’s observations regarding the phenomenon he identified as “urban fear”, a fear of the city, which emerged in late eighteenth-century France:

⁶² The provinces of the Empire of Brazil were the primary subdivisions of the country from its establishment as the Empire of Brazil in 1822 until its end. When Brazil became a Republic in 1889, the provinces were turned into states, according to the second Article of the Republican Constitution of February 24, 1891.

a fear of the workshops and factories being constructed, the crowding together of the population, the excessive height of the buildings, the urban epidemics, the rumors that invaded the city; a fear of the sinks and pits on which were constructed houses that threatened to collapse at any moment (Foucault 2000: 144)

This urban fear would go hand in hand with the development of the French urban medicine in the late eighteenth century and of the British labor force medicine in the second third of the nineteenth century; the former was concerned with the “living conditions of the existential milieu” and the latter with threat posed on public health by the poor. Medical attention shifted, according to Foucault, from the city to the poor people and workers (Foucault 2000: 142-156).

In spite of the diverse chronologies, many parallels can be found between the French and the British models established by Foucault and the Brazilian experience. The tardy spark of salubrity and public health⁶³ concerns in Brazil — largely explained by its later urbanization and industrialization — allowed the country to borrow from the European traditions. Around the second half of the nineteenth century, issues related to salubrity and urban medicine began to gain importance in the discourse of Brazilian cities, whereas public health practices and labor force medicine were boosted following the abolition of slavery and the advent of the Republic.⁶⁴

This fear — simultaneously tangible and intangible — placed upon the city and its residents prompted a multifaceted political-scientific control over and action in the urban

⁶³ Foucault set a distinction between the concepts of “salubrity” and “public health”: salubrity (...) referred to the state of the environment and those factors of it which made the improvement of health possible. Salubrity was the material and social basis capable of ensuring the best possible health for individuals. In connection with this, the concept of public health [hygiene publique] appeared, as a technique for controlling and modifying those elements of the environment which might promote that health or, on the contrary, harm it (Foucault 2000: 150).

⁶⁴ Slavery in Brazil was only abolished by the Law Áurea of 13 May 1888. The Republic was inaugurated following a military coup d'état on 15 November 1889, which overthrew the constitutional monarchy of the Empire of Brazil and ended the reign of Emperor Dom Pedro II.

environment, with their components of spatial ordering, separation and surveillance. What followed was a systematic attempt to alter this perceived dangerous environment through the destruction and spatial reallocation of unwanted urban structures and the proposal and development of novel urban solutions. Such was the case of the notion of the low-income home, category that comprises company-induced housing, an integral part of the effort to promote new living spaces and regulate forms of living.

Throughout the period under review the low-income home (and later particularly the working class housing) was at the heart of debates, denunciations, complaints and recommendations promoted by the hygienist discourse, public officials and the population in general. As we discuss below, it witnessed not only the construction of the archetypes of the unhygienic dwellings of the poor, but also the advent of a new ideal type of working-class home.

1.2.1 Public hygiene and the issue of the urban poor home

The period under review was marked by significant economic, social, political, and cultural, and spatial changes in Brazil, notably the end of the slavery system and emergence of free labor, the gradual development of the industrial economy, the advent of new social categories and replacement of the elites in and the structural transformations that erased colonial features of Brazilian cities and gave way to modern urban spaces power following the fall of the Empire and the proclamation of the Republic (1889), the Revolution of 1930 (which marks the passage from the “Old” or “First” Republic to the “New” Republic) and establishment of the New State (1937-1945). The country experienced an intense population growth from the second half of the nineteenth century (Table 8) prompted by an increase in the number of manumissions, immigration, rural-

urban migration and industrialization. Moreover, particularly in the Northeast, it was also related to the periodical draughts that pushed the inhabitants of the semiarid hinterlands of the Sertão towards the capital cities located by the coast.⁶⁵

In such context, the attention of the national intellectual community was directed towards the future and progress of the young nation. Investigators of the city's plight — such as physicians, sanitary inspectors, engineers and public officials —, clustered around a Sanitarian paradigm, informed notions about the physical and social bodies and interfered in the different approaches of the urban space, influencing practices, reflections and interventions. Inspired by the mesologic⁶⁶ theories, they posited that behavior was influenced by the physical environment, and that therefore a good city would produce good citizens and that order and hygiene would generate morality, discipline and public health. Hence, concerns for issues such as public health, sanitation and beautification of cities gained strength; urban spaces were increasingly associated with clutter and filthiness and the poor home become regarded as a hazard — a health, social, economic and moral hazard.

Contemporary observers agreed that the hectic growth of Brazilian cities enhanced all the pestilence of the urban environment. In 1894 the president of the state of Ceará called the attention of the members of the Legislative Assembly about the deterioration of sanitary conditions in the capital Fortaleza due to the “duplication of the population” which would ultimately render it “inhabitable”.⁶⁷ As Correia (2004: 13) argued, the urban

⁶⁵ The data presented in Table 8 indicate that capital cities in Brazil experienced strong demographic expansion from 1872 to 1920. In this period, the growth of the population in Northeastern capitals was the following: Aracaju 201%, Fortaleza 64%, João Pessoa 95%, Maceió 145%, Natal 47%, Recife 85%, Salvador 169%, São Luís 82% and Teresina 127%.

⁶⁶ "Mésologie" was a discipline founded around 1860 by Louis-Adolphe Bertillon — a physician, statistician and demographer — as a positive science, a form of social-ecology.

⁶⁷ Mensagem do Presidente do Estado Coronel Dr. José Freire Bezerril Fontenelle à Assembléia Legislativa do Ceará em sua 3ª Sessão Ordinária da 2ª Legislatura. Fortaleza: Typographia da

expansion was blamed for aggravating the pitiable housing and sanitary conditions due to the increase in the production of waste and filth and the cluttering of buildings and residences that prevented proper ventilation and lighting.

Table 8: Population in capital cities of the Northeast and in São Paulo					
	1872	1900	1912	1920	1935
Aracaju	9,559	21,132	28,780	37,440	58,477
Fortaleza	42,458	48,369	70,000	78,536	113,277
Parahyba (João Pessoa)	24,714	28,793	48,425	52,990	101,280
Maceió	27,703	36,427	68,000	74,166	129,105
Natal	20,392	16,056	30,000	30,696	50,878
Recife	116,671	113,106	216,484	238,843	472,761
Salvador	129,109	205,813	348,130	283,422	363,726
São Luiz	31,604	36,798	57,709	52,929	70,272
São Paulo	31,358	239,820	400,000	579,033	1,120,405
Teresina	21,692	45,316	49,302	57,500	60,674
Source: Brasileiro de Geografia e Estatística (1941)					

While Chalhoub (1996: 29-30) identified the epidemic of yellow fever in 1850 and of cholera in 1855 in Rio de Janeiro – then the capital of the Brazilian Empire – as the root of the association between insalubrity and public health issues, in the Northeast we can observe that the 1856 cholera epidemic that claimed the lives of thousands of people was the point of inflection.⁶⁸ Reports by the provincial presidents reveal how the sense of urgency for the improvement of sanitary conditions increasingly gained ground following that epidemic.

Republica: 1894, p. 71. Available at: <http://brazil.crl.edu/bsd/bsd/u1435/000106.html>. Access on 08/11/2012.

The high death toll of the cholera epidemic combined with other recurrent epidemics (in particular, yellow fever) was read as indication of the insalubrity of the urban environment, which therefore became the target of hygienists and public officials. The imperial government established the Junta de Higiene Pública in 1850, decision that was followed also by provincial governments, to control of aspects of life bearing directly upon the health of the social body, including the control and regulation of the urban poor home.

Until the mid-nineteenth century the prevailing medical theory supported that disease was produced by odors and emanations, that is, the “‘corruption and infection of the air’, which degenerated into highly poisonous ‘sticky’ miasmas that killed the person they infected, either by inhalation or by contact” (Cipolla 1992: 4). It was believed by physicians and laypersons alike that miasmas originated from foul and filthy conditions and exhalations from sick people and animals.

On August 2, 1850, the President of Paraíba, José Vicente de Amorim Bezerra, addressed the Province’s Legislative Assembly regarding an outbreak of yellow fever:

Sabeis, Senhores, que pouco tempo depois que tomei conta da Administração desta Província, foi ella acometida do flagelo da peste, desenvolvendo-se a febre amarella, que tantos estragos causou em outras Províncias do Imperio, ceifando preciozas vidas. (...) Somente forão recolhidos ao Lazarêto súbditos estrangeiros; porque em pouco conhecerão os Professores, que ali a mortalidade era maior sem duvida **por o ar estar impregnado de miasmas infectos**, (...) não obstante as diversas preocupações que tomei, a peste se havia comunicado á população! Exigí do Vigario deste Freguezia que fóssem vedadas as sepulturas nas Igrejas, o que não pude inteiramente conseguir, porque contra tão salutar medida se oppozerão enraizados preconceitos! (...) Não devo, Srs., deixar de fallar-vos em certas medidas que a necessidade convem ser tomadas para bem da salubridade publica. (...) **Encontrei as ruas menos publicas, e becos desta Cidade quase obstruídas de putrido lixo, e temendo as malignas influencias de tão prejudiciais miasmas principalmente em hum tempo pestifero**, tractei logo com todo o vigor de ativar aos fiscaes, empregando n’esse serviço, os prezos sentenciados.⁶⁹

⁶⁹ Relatório apresentado a Assembléa Legislativa Provincial da Parahyba do Norte pelo excellentissimo presidente da provincia, o coronel José Vicente de Amorim Bezerra, na abertura da sessão ordinaria em 2 de agosto de 1850. Parahyba: Typographia. de José Rodrigues da

Later in 1873, the new President of Paraíba, Francisco Teixeira de Sá, also accused

“a falta de asseio de algumas ruas e praças, o lodaçal existente (...), os pantanos do riacho “Jaguaribe” (...), o cemiterio mal collocado e construido com pessimo systema de enterramento adoptado, o matadouro publico em local tambem mal escolhido e inteiramente descurado, etc., **constituem outros tantos fócios de infecção, donde se desprendem miasmas, que produzem febres e moléstias endemicas.**⁷⁰

In the 1860s, mainly through studies by Louis Pasteur on the relationship between diseases and microorganisms, the germ theory of disease emerged (Martins 2005). Though the germ theory would gradually replace the miasma paradigm, by the last decades of the nineteenth century the latter had not been completely abandoned. The 1883 Report by the President of Paraíba is indicative of the coexistence of the two theories: while the President José Ayres do Nascimento spoke of the causes that “entretém e desenvolvem **os germens das diversas enfermidades** que na transição das estações, costumão recrudescer n’esta cidade.”⁷¹, the Report on Sanitary Conditions presented in the same document by the Inspector of Public Health, Dr. Abdon Felinto Milanez, stated that “**É um facto reconhecido e aceito pela sciencia** que os pantanos

Costa, 1850, p. 19-21. Available at: <http://www.crl.edu/brazil/provincial/para%C3%ADba>. Access on 02/11/2012. Emphasis added.

The spelling of names in the text has been modernized while the original orthography in the quotes, notes and bibliography has been retained.

⁷⁰ Falla dirigida á Assembléa Legislativa Provincial da Parahyba do Norte pelo exm. sr. presidente da provincia, dr. Francisco Teixeira de Sá, em 6 de setembro de 1873. Parahyba: Typographia dos herdeiros de José R. da Costa, 1873, 14. Available at: <http://brazil.crl.edu/bsd/bsd/600/>. Access on 02/11/2012. Emphasis added.

⁷¹ Falla que o exm. sr. presidente, dr. José Ayres do Nascimento, dirigio á Assembléa Legislativa da provincia da Parahyba, por occasião da abertura da segunda sessão ordinaria da 14.a legislatura em 4 de outubro de 1883. Parahyba: Typ. do Commercio, 1883, p. 4. Available at: <http://brazil.crl.edu/bsd/bsd/609/>. Access on 03/11/2012. Emphasis added.

são focos onde se elaboram, e donde **se desprendem os miasmas** resultantes da decomposição de materias orgânicas vegetaes e animais.”⁷²

The complaints and solutions registered in the Reports above recur throughout the entire period under review. The filth in the streets, burials in churches and churchyards, the presence of marshes and wetlands in urban areas, and slaughterhouses located in inappropriate areas were considered the main culprits behind the poisonous miasmas. The fight against the miasmas thus included fumigation and cleaning the streets, land reclamation, and appropriate installations for cemeteries, slaughterhouses and markets far removed from city centers; proposals would also later include the construction of waste disposal services, and sewage and water systems. Even when the microbial theory of infectious diseases was fully established and the field of hygiene itself became increasingly technical and specialized in Brazil during the last decades of the nineteenth century and particularly in the first decades of the twentieth century, hygienist practices were not greatly altered. In 1920, the noted doctor Raul Azedo prescribed dry houses, raised from the ground, free from toxic or depressing gases, with plenty of sunlight to fight the tuberculosis microbe.⁷³ As Correia (2004: 20) indicated, nineteenth-century sanitarian practices survived into the twentieth century, as hygienists and public officials continued to advocate the promotion of cleanliness of the urban space, exposure to sunlight and effective ventilation between and inside buildings in order to prevent the recurrent epidemics.

⁷² Falla que o exm. sr. presidente, dr. José Ayres do Nascimento, dirigio á Assembléa Legislativa da provincia da Parahyba, por ocasião da abertura da segunda sessão ordinaria da 14.a legislatura em 4 de outubro de 1883. Anexo C. Inspectoria da Saude Publica da Parahyba do Norte em 1º de Setembro de 1883. Parahyba: Typographia. do Commercio, 1883, p. 3. Available at: <http://brazil.crl.edu/bsd/bsd/609/>. Access on 03/11/2012. Emphasis added.

⁷³ A Provincia. Recife: December 1, 1920, N. 331, p. 1.

Throughout the years the scope of discussion and action was enlarged through a growing concern over not only public spaces, but also the domestic space. In such context, the urban poor home was increasingly targeted for its allegedly insalubrious conditions and held partially responsible for the spread of diseases and the outbreak of epidemics. In 1855, when examining the appropriate measures to fight the epidemics of cholera that plagued Pernambuco, the periodical *O Liberal Pernambucano* appealed to the President of the Province to “apply his solicitude” “para **essas pequenas e imundas casas, verdadeiros focos de infecção**, cuja maior parte existe em **estado insalubre**.”⁷⁴

From the perspective of public officials, hygiene was reserved to wealthy homes, and the “hygienic ignorance of the people” – in the words of the President of the state of Paraíba, Francisco Camillo de Hollanda⁷⁵ – annihilated every attempt to change the scenario of urban insalubrity. His predecessor, João Pereira de Castro Pinto, shared the same point of view, affirming that the carelessness and the lack of hygiene or at least cleanliness, which he considered “compatible with the poverty of the less fortunate”, of the poor man’s house was the main constraint of public hygiene:

O que mais agrava a situação do nosso meio higienico é a incuria do povo no que affecta a esta ordem de interesses. A hygiene é na quasi unanimidade dos domicilios uma cousa desconhecida, relegada para o luxo dos opulentos; e nem mesmo o asseio, compativel com a pobreza dos mais desfavorecidos, se observa na maioria dos interiores, destinando-se as áreas livres, em grande parte das ruas urbanas, ao deposito de detritos, que não são removidos mezes e mezes seguidos. **Essa falta habitual de preceitos**

⁷⁴ *O Liberal Pernambucano: Jornal Político e Social*. Recife: December 24, 1855, N. 962, p. 3. Emphasis added.

⁷⁵ Mensagem apresentada à Assembléia Legislativa do Estado da Parahyba, na abertura da 2ª Sessão Ordinária da 8ª Legislatura, a 1º de setembro de 1917, pelo Dr. Francisco Camillo de Hollanda, Presidente do Estado. Paraíba: N.p., 1917, p. 10. Available at: <http://brazil.crl.edu/bsd/bsd/u550/>. Access on 04/11/2012.

comezinhos concorre preponderantemente para nulificar os melhores empenhos da Higiene Publica.⁷⁶

Everardo Backheuser⁷⁷, a public intellectual who was at the forefront of the movement for the reform of low-income housing, supported that the sanitary prescriptions for the working-class home should be more rigorous than for others since laborers and the poor in general lacked the instruction and knowledge to recognize the health benefits of a clean house (Backheuser 1906: 4)

The poor people dwelling was widely criticized by public officials, hygienists and the public opinion for not following the fundamental laws of hygiene, which determined that houses should be “bem construidas e arejadas; bem esclarecidas, enxutas, aceiadas e de fácil acesso, guardando em suas devidas dimensões aberturas correspondentes e regularmente dispostas.”⁷⁸ They condemned the “flaws” arising from the “defective” construction system and the over-agglomeration of houses that had a “pernicious influence” on the organism and caused its “sufferings”, as well as the backyards (“quintais”), typical of Brazilian houses, considered as “receptaculos das imundicias de quasi todas as casas” and thus as sources of infection.⁷⁹ In essence, those houses lacked the conditions, which according to “all hygienists” comprised the “wholesome principles”

⁷⁶ Mensagem apresentada à Assembléia Legislativa do Estado da Parahyba, na abertura da 2ª Sessão Ordinária da 7ª Legislatura, a 1º de setembro de 1917, pelo Dr. João Pereira de Castro Pinto, Presidente do Estado. Paraíba: Graphica Torre Eiffel, 1913, p. 17. Available at: <http://brazil.crl.edu/bsd/bsd/u546/000002.html>. Access on 04/11/2012. Emphasis added.

⁷⁷ Backheuser published two very important reports on the living conditions of the underprivileged in which he also put forward his proposals to reform low-income housing: *Onde moram os pobres*, published in March 1905, and *Habitações Populares*, published in 1906. These texts constitute fundamental references to understand the movement in favor of hygienic houses in Brazil.

⁷⁸ Jornal da Parahyba. João Pessoa, N. 2757, 23 March 1889, p. 1.

⁷⁹ Report by the President of the de Higiene Pública, Dr. Joaquim d’Aquino Fonseca. Relatório que à Assembléia Legislativa Provincial de Pernambuco apresentou no dia da abertura da sessão ordinária de 1856 o Exm. Sr. conselheiro Dr. José Bento da Cunha e Figueiredo, presidente da mesma provincia. Recife: Typographia. de M.F. de Faria, 1856, p. 5. Available at: <http://brazil.crl.edu/bsd/bsd/672>. Access on 12/11/2012.

and the “fruitful germ” of the “bases of public and private hygiene”.⁸⁰ In a word, as the Inspector of Public Health of Ceará affirmed, the combination of lack of hygiene and abominable living conditions among the poor classes was to blame for the pitiable state of public health in Brazilian cities:

*O esquecimento da bôa hygiene, parte principalmente das classes pobres, que (...) moram, ou em casebres de palha, mal cobertos, em que facilmente penetram o ar frio da noite e a chuva, ou em pequenas casas melhor construidas, porem tão baixas que lhes falta as condições proprias para o arejamento e ventilação; juntando-se a estas circunstancias, já de si decisivas, o pouco aceio, a acumulação de materias excrementicias e esterquilinios nos quintaes, e carencia das mais comuns necessidades da vida.*⁸¹

Furthermore, apart from spreading diseases, the small, badly ventilated, insalubrious dwellings were also accused of promoting the moral corruption of the poor. If hygiene was the cornerstone of moral and social edification, as well as a sign of patriotism and progressiveness, its alleged absence in those homes implied a promiscuous and brutalizing environment where immorality, mendicancy and revolt germinated, as Correia (2004) discussed.

A general trend that can be observed in the sources mentioned above is the growing identification of the issue of insalubrity of the *urban poor* as the problem of insalubrity of the *working classes* from the last decade of the nineteenth century and especially in the 1920s. Following the fast-paced industrial development between the Encilhamento⁸² and the First World War, the working class (“operários”, “proletário”) was

⁸⁰ Jornal da Parahyba, *op. cit.*, p. 1.

⁸¹ Anexos ao relatório com que o excellentíssimo senhor dr. Esmerino Gomes Parente abriu a 2ª sessão da 22ª legislatura da Assembléa Provincial do Ceará em 2 de julho de 1875. Fortaleza, Typ. Constitucional, 1875. Available at: <http://brazil.crl.edu/bsd/bsd/207/000130.html>. Access on 16/11/2012. Emphasis added.

⁸² The Encilhamento was an economic boom between late 1880s and early 1890s. For more on the Encilhamento and the Brazilian industrial development, see Chapter 2.

increasingly perceived as a distinct social category within the urban poor. And from this connection, two other issues regarding housing emerged.

First, there was the perceived risk of the “moral contamination of the working classes” stemming from what was considered a lack of the appropriate segregation of the social classes. In a thesis presented at the Faculty of Medicine of Rio de Janeiro in 1877, Doctor Cândido Barata Ribeiro censured the poor urban collective dwellings which housed beggars, prostitutes and laborers alike.⁸³ The same perspective was found in Everardo Backheuser's report *Onde moram os pobres*, which described the “usual residence of poor people” as a mayhem assembling “trabalhadores, carroceiros, homens ao ganho, catraieiros, caixeiros de bodegas, lavadeiras, costureiras de baixa freguesia, mulheres de vida rele” leading a “detestable existence” in “horrifying promiscuity” (Backheuser 1905: 89). The cohabitation of those considered filthy and immoral people with clean and decent girls in those dwellings appalled the author:

Italianos vadios ressonam dias a fio nesses ambientes nauseabundos; negras cheias de óleo na carapinha descantam modinhas, lavando roupas ali mesmo nas alcovas, e estendendo-as em telhados, quantas vezes em cordas nos próprios aposentos que adquirem pela persistência uma atmosfera quente e úmida, impossível de respirar; crianças nuas e sujas esfregam-se no chão imundo, sujando-o mais; e no meio disso, mulheres de baixa extração, pretas em geral, em trajas ignóbeis, baralhando-se na mesma colmeia com moças pobres mas recatadas, que cosem para os arsenais pesadas tarefas, mantendo os seus quartinhos luxuosos quase à custa de asseio, enfeitadas as paredes com retratos queridos – ilhas de limpeza naqueles oceanos de imundície (Backheuser 1905: 90).

A distinction was clearly made between the “deserving poor”, defined as those who had stable jobs and high moral standards, and who lived according to the principles of hygiene, and the “undeserving poor” – such as vagrants and prostitutes – who led unstable lives and were seen as troublesome, prone to delinquency, vice, violence and

⁸³ “O mendigo que atravessa as ruas como um monturo ambulante; a meretriz impudica, que se compraz em degradar corpo e alma, os tipos de todos os vícios e até (...) o representante do trabalho (...)” Ribeiro *apud* Chalhoub 1996, 51.

rebellion; the former were seen as useful laborers, and the latter as a problem of public order and security. As one source put it: “O Brazil não precisa desses syphiliticos não tratados, analfabetos, viciados (...). A nossa patria necessita de uma mocidade hygida, forte, cheia de promissor eugenismo physico, moral e intelectual.”⁸⁴ This differentiation affected policy decisions and the treatment received by the two categories. The deserving poor should be treated with compassion and respect, and warranted private and/or public assistance to live a poor but dignified life, whereas the undeserving poor should be watched, controlled, and repressed.

A second consequence was that hygiene was linked to the needs of the emerging industrial order of ensuring the appropriate conditions for the reproduction of human capital. As José Moreira da Rocha, the President of Ceará argued, the improvement of public health and hygiene was the path to ensure the full use of man’s potential as “a source of income”:

Mais que os sentimentos e obrigações de altruismo e solidariedade humana, **a noção de economia política do aproveitamento, valorização e rendimento do capital humano, do valor do homem como fonte de renda, directamente ligado á saúde colectiva**, está reclamando o maior desvelo pelas questões de orthobiose e hygiene. E se ha-de perceber que não vae nisso nenhum exaggero, quando se considera (...) nas **energias que se podiam augmentar e melhor aproveitar**.⁸⁵

The domestic space should thus provide workers with a clean, comfortable environment where they could rest from long work hours and be fully fit for another shift on the following day. And according to the public opinion the working class home was a far cry from this reality. In 1855 *O Liberal Pernambucano* denounced the working class

⁸⁴ A Província. Recife, N. 242, 20 October 20 1929, p. 3.

⁸⁵ Mensagem do Presidente do Estado do Ceará apresentada à Assembléia Legislativa pelo desembargador José Moreira da Rocha presidente do Estado. Fortaleza: Typographia Gadelha, 1926, p. 54. Available at: <http://brazil.crl.edu/bsd/bsd/u229/000002.html>. Access on 16/11/2012. Emphasis added.

house as “infectious corrals” where the “victimas se extenuão justamente á hora em que devem restaurar as forças para os trabalhos da manhã seguinte.”⁸⁶

From the Sanitarian perspective, the future of the country of the country was directly tied to hygiene and housing problems, which would take on national political, social and economic significance. The insalubrious home was believed to prevent the development of a healthy and disciplined workforce required for the progress of the nation and to spark sentiments of discontentment and revolt against the government and the wealthy; therefore, it was considered that it disrupted the country's economic development, political stability and social cohesion.

Themes of patriotism, and economic and social progress would thus pervade the discussions of low-income housing. For Brazil to fulfill its great destiny, the lower classes needed to have access to affordable, salubrious houses:

Ha imperiosa necessidade de socorrer a população pobre proporcionando a cada de moradia para cada família e, ao mesmo tempo, de defende-la dos elevadísimos alugueres pagos com sacrificio da propria alimentação.

E ha imperiosa necessidade, porque **sem o lar organizado apaga-se o fogo sagrado que sustenta a moralidade do casal e dos filhos.**

(...)

O nosso paiz tem a realizar destinos superiores, tem-n'o dito todos aquelles homens sábios que percorrem o nosso territorio e palpam as nossas riquezas. Não ha exagero em dizer que estamos votados a sustentar o resto da humanidade com as nossas materias primas.

E a simples perspectiva de um tão elevado destino deve servir de estimulo para a função de um povo forte, physico e intelectualmente, e, ao mesmo tempo, bom e justo.

E não é dentro dos míseros pardieiros onde se estiolam as crianças e se perverte a mocidade, que poderemos formar a nossa grande raça.⁸⁷

These notions would thus give birth to a discussion regarding the unwanted substandard housing typologies for the urban poor and their subsequent persecution; later

⁸⁶ O Liberal Pernambucano. October 19, 1855, p 1.

⁸⁷ Diário de S. Luiz. São Luís, N. 235, 18 October 1924, p. 4. Emphasis added.

they would also prompt the construction of new desirable models of dwellings that should be encouraged and multiplied.

1.2.2 The archetypes of urban low-income dwellings

We do not seek here to present a thorough analysis of the social imaginary of urban poor dwellings in Brazil; rather, our interest in this issue – which has already received considerable scholarly attention⁸⁸ – lies in its importance to the understanding the construction of company-induced housing in the Northeast region, inasmuch as the strongest argument in favor of the latter was the depreciation of the urban poor home and the life style purportedly associated with it.

In a country where living conditions were generally precarious, establishing what was an acceptable home or not was certainly not a straightforward task. As Chalhoub (1996: 38-39) argued, the decisive element in the identification of an unhygienic and corrupt house was the perception of the observer. The process of condemning, denouncing and combating those dwellings remained largely a subjective experience which was developed through the social construction of archetypes. Here we look into two dwelling types that raised more concerns as public and moral threats throughout the second half of the nineteenth and the first half of the twentieth centuries: the *cortiço* and the *mocambo*, the latter referring particularly to the Northeast.

The aforementioned process of urbanization and the population growth that Brazil underwent from the second half of nineteenth century onwards triggered a severe housing crisis for the poor and lower middle classes. Vaz (1994: 582) showed how the need for

⁸⁸ These include: Carvalho (1995); Mattos (1995); Chalhoub (1996); Freitas (2005); and Silva (2007).

cheap housing for workers and the limited availability of buildings to meet this demand, combined with the potential of high economic profits and the absence of housing assistance for the poor, led to a boom in the construction of collective dwellings by private investors and landlords. Different types of collective housing emerged: the *estalagens*⁸⁹ (also called *casinhas*), row houses of small dimensions and moderate elevation, very closely packed in ill-ventilated streets and courts, opening to a patio or hallway, and generally sharing the drinking-water sources, sanitation facilities and laundry tub located in the patio (Image 3); and the *casas de alugar* (or *casas de cômodos*), which were houses with internal subdivisions, sometimes old single-family houses that were remodeled for multiply-family occupancy. Despite the differences in form, those dwelling types were the products of the same system of housing production: owners would hand over houses, backyards, or lots to third parties who in their turn invested their small savings to build houses or segment existing buildings.⁹⁰ Building small tenements therefore became a common practice among property owners and tenants; at the turn of the century these collective dwellings were spread throughout the city, housing a significant part of the population, and were all indistinctly referred to as *cortiços* (Image 4) (Vaz 1994: 583).⁹¹

⁸⁹ Reis (2002: 58-60) suggested that the architectural scheme of these dwellings and the term “estalagem” derives from the former colonial and imperial inns, which were built in the entrance of the villages and towns to host travelers; they consisted of rows of cubicles, usually without windows, that opened onto a common courtyard.

⁹⁰ The novel *O Cortiço* published 1890 by Aluísio Azevedo narrates this system in detail: “E o fato é que aquelas três casinhas, tão engenhosamente construídas, foram o ponto de partida do grande cortiço de São Romão. Hoje quatro braças de terra, amanhã seis, depois mais outras, ia o vendeiro conquistando todo o terreno que se estendia pelos fundos da sua bodega; e, à proporção que o conquistava, reproduziam-se os quartos e o número de moradores.” (Aluizio 2009, 8).

⁹¹ Vaz (1994, 588) points out that the various estimations on the number of residents in *cortiços* in Rio de Janeiro by the end of the nineteenth century stood anywhere between a tenth and fourth of the population.

The spread of the collective dwellings gave thus rise to a new category to designate the poor housing. Employing a language that evoked nature – much in vogue among the circles naturalists of the time –, the term *cortiço* originated from the cork box within which the bees produce wax and honey and often its residents were referred to as “bees”; it recalled a noisy, cramped, and chaotic environment. In fact, in time, *cortiço* would become synonymous to substandard and overcrowded housing.⁹²

The social construction of the *cortiço* was largely promoted by regulatory action of the State, particularly through the interdiction of building new *cortiços* in central urban areas, and the demolition, control and inspection of existing ones. Importantly, Chalhoub (1996, 26) calls attention to another aspect of this “war against the *cortiço*” that has not yet been properly assessed by the historiography: apart from being motivated by hygienic and moral concerns, the political decision behind could also be related to the fact that the *cortiços* were important stages to the resistance against slavery and the black civil rights movements in Rio de Janeiro in the last decades of the nineteenth century.

The first direct act against the *cortiço* was issued by the Ministry of the Empire on December 18, 1879, ordering all those dwellings in state of ruins or in poor sanitary conditions to be shut down (Correia 2004). Throughout the Imperial period (1822-1888), however, State action was mostly limited to the restrictions to the construction of new *cortiços*; under the Republican regime, immersed in its modernizing efforts that pursued abstract patterns of social management set by European and North-American models (Sevcenko 1998: 27-28), the persecution of those dwelling was intensified, reaching – in

⁹² The Houaiss dictionary defines *cortiço* as: houses that serves as the collective housing for the poor; agglomeration of very poor houses. It is important to notice that this definition of *cortiço* only exists in Brazilian variant of Portuguese.

the words of Chalhoub (1996: 25) – a “hysteria” with the recurring eviction and removal of the poor classes from the city centers.⁹³

The population also played an active part in supervising and controlling the cortiços by submitting their complains and denouces to newspapers; their nature was twofold, revealing on the one hand concerns with hygiene and public health, and on the other hand a moral censorship. The former sought mainly to accuse the presence of people infected with various contagious diseases (smallpox, chickenpox, fevers, etc.), and of houses that did not respect the legislation on matters of hygiene. The latter included many different types of disturbances of the moral order, such as:

a) Fights: “Todas as noites ha bailaricos naquelle antro de devassidao, **acabando sempre em pancadaria grossa.**”⁹⁴; “Pedem-se que chamemos a atenção da policia para o cortiço à rua da Estrela (...). Ultimamente **produziu-se ai uma**

⁹³ The fight against the cortiço culminated in the dramatic demolition in 1893 of the cortiço Cabeça de Porco, the largest in Rio de Janeiro, which had been ordered by the city's mayor, Candido Barata Ribeiro. This action meant the displacement of about two thousand people and was justified in the public discourse by the need to ensure the salubrity of the city.

On the night of January 26, 1893 the main entrance to the cortiço was taken over by police forces and sanitary authorities, and a real war operation was set up to bring those dwellings down. The mayor was personally in charge of the operation, accompanied by the army, police and about 140 workers. First the left side, which was believed to be vacant, was targeted; however, as the demolition began it became clear that was not the case and its inhabitants began to run outside. Afterwards, the right side, which was still inhabited, was brought down. By the end of the day, the Cabeça de Porco had been conquered (Chalhoub 1996, 15-16)

The mayor Candido Barata Ribeiro allowed dwellers to collect construction material left from the demolition, such as planks of wood. As a consequence, the now homeless people climbed the morro (hill) of the Providência (also referred to as "morro da Favela"), bringing with them furniture and reusable debris, and thus giving birth to the perhaps the first shantytown (favela) of Rio de Janeiro (Vaz 1994: 590-591). According to Chalhoub (1996: 17), the destruction of the Cabeça de Porco, announced the end of the "era of cortiços" and at the same time the beginning of the "century of the favelas".

⁹⁴ Pacotilha, Sao Luis, January 3, 1910, p. 2. Emphasis added.

briga de duas mulheres, que se engalinharam e escandalizaram a vizinhança com seus palavroes.”⁹⁵

b) Crimes: “**A casa onde teve lugar a scena de sangue era uma especie de cortiço**, pertencente à preta africana Maria Joaquina.”⁹⁶; “O italiano Vicente Ebolli (...) n’um cortiço da rua do Hospicio (...) **puxando de uma navalha vibrou-se tres golpes**, attingindo-a no pescoço, no braço esquerdo e na mão direita (...)”⁹⁷; “Esse pobre rapaz foi encontrado morto, hoje, no saguão do mesmo cortiço (...) atirado ao chão, ensanguentado, inerte, tendo ao lado uma faca”.⁹⁸

c) Parties and music: “Chamamos atenção da policia para um cortiço da rua S. Joao (...) Até alta noite troa, o violão e as cantigas, incomodando os vizinhos.”⁹⁹; “Os moradores da rua F. Marques Rodrigues (...) pedem que chamamos a atenção da policia para um cortiço ali existente, **onde se realiza quasi todas as noites um samba**.”¹⁰⁰

d) Noise: “Moradores da rua de S. Napoleão pede que chamemos da autoridade competente, para por termo aos inquilinos do cortiço n. 21, da mesma rua, os quais sentando-se no passeio, **palestram em vozes incomodadoras até alta noite, às vezes até a madrugada, fazendo enorme algazarra** e proferindo frases que ofendem a moral pública.”¹⁰¹

⁹⁵ Pacotilha, Sao Luis, N. 213, September 10, 1913, p. 1. Emphasis added.

⁹⁶ A Provincia. Recife, N. 293, December 27, 1902, p. 1. Emphasis added.

⁹⁷ A Provincia. Recife, N. 118, May 27, 1902, p. 1. Emphasis added.

⁹⁸ Pacotilha, Sao Luis, N. 272, November 16, 1910, p. 1.

⁹⁹ Pacotilha, Sao Luis, July 11, 1911, p. 1. Emphasis added.

¹⁰⁰ Pacotilha, Sao Luis, N. 234, October 2, 1912, p. 1. Emphasis added.

¹⁰¹ Pacotilha, Sao Luis, N. 171, July 23, 1913, p. 1. Emphasis added.

e) Immoral behavior: “Pede-se ao mui digno capitão Firmino que lance suas vistas para um cortiço (...) onde moram umas filhas de Jerusalem, **as quaes encommodam a vizinhança com suas palavras immundas (...)**”¹⁰²; “No cortiço n. 18, à rua do Norte, rezidem as mulheres Julia, Joanna, Chiquinha, Esmeralda e Maria Morgado, que segundo nos informam, **sao o suplicio da vizinhança honesta. Ali a pornografia corre parelhas com as bebedeiras...**”¹⁰³; (...) queixou-se ao delegado do 2º distrito contra umas mulheres, moradoras de um cortiço (...), que **vivem constantemente proferindo nomes ofensivos à moral.**”¹⁰⁴; Chamamos a atenção do sr. major (...) para corrigir o procedimento de umas mulheres moradoras em um cortiço (...) as quaes, à noite, **vão para a praça da Alegria praticar, nos bancos, atos obscenos, sem o menor decoro à moral pública.**”¹⁰⁵

Apart from opposing the existing cortiços, the public was also quick to denounce the construction of new ones in the Northeastern press: “É preciso que a Ilhma. Camara abra os olhos ao seu fiscal da Boa-Vista, que ainda não vio a rua do Hospicio onde estão edificando casinhas de pombos, ou para melhor dizer, um novo cortiço e fora das posturas municipaes!”¹⁰⁶; “Informam-nos de que se estão reconstruindo uns casebres n’um cortiço por traz da rua do Bispo Cardoso Ayres (...)”¹⁰⁷.

¹⁰² A Provincia. Recife, N. 1159, June 8, 1877, p. 3. Emphasis added.

¹⁰³ Pacotilha. Sao Luis, N. 227, September 27, 1911, p. 1. Emphasis added.

¹⁰⁴ Pacotilha. Sao Luis, N. 15, January 19, 1915, p. 4. Emphasis added.

¹⁰⁵ Pacotilha. Sao Luis, N. 53, March 5, 1915, p. 1. Emphasis added.

¹⁰⁶ A Provincia. Recife, N. 273, April 20, 1874, p. 3.

¹⁰⁷ A Provincia. Recife, N. 36, February 14, 1903, p. 1.

From those passages we can see that social rejection of the *cortiço* was widespread. The term was employed to depreciate dwellings and their residents alike, as well as to aggravate and emphasize what was perceived as their negative features. For the collective perception, the corrupt environment of the *cortiço* and the dissolute behavior of its residents mutually influenced and fed one another. When a crime or a fight occurred, it was important to highlight that it took place in a *cortiço*; when someone was involved in reprehensible actions, it should be underlined that they were residents of a *cortiço*. Those spaces were clearly and exclusively treated as health and moral hazards.

This view of the popular collective housing was fully embodied in Aluísio Azevedo's novel *O Cortiço*, which contributed to fix and disseminate the image of the *cortiço* as an insalubrious, brutalizing environment that promoted promiscuity and crime. He portrayed the *cortiço* as was a place where

(...) há um samba e um rolo por noite; aquela em que se matam homens sem a polícia descobrir os assassinos; viveiro de larvas sensuais em que irmãos dormem misturados com as irmãs na mesma lama; paraíso de vermes, brejo de lodo quente e fumegante, donde brota a vida brutalmente, como de uma podridão (Aluizio 2009: 234).

The world that emerged from Aluísio Azevedo's dissection of the *cortiço* – which was inspired by the philosophical frameworks of Determinism and Darwinism much in vogue at the time – was a place where living conditions dehumanized its residents.

In addition to the *cortiço*, in the Northeast (and with particular emphasis in the state of Pernambuco) the public discourse also elaborated a core image of another type of poor dwelling: the *mocambo* (also spelled *mucambo*). Gilberto Freyre (1937: 20) supported that the term *mocambo* derived from the Kimbundu (a Bantu language from Angola), formed by the prefix *mu* + *kambo*, meaning “hideout”. They first emerged in the *quilombos* – settlements of runaway and/or rebellious slaves, located in remote areas, which appeared in Brazil in the beginning of the seventeenth century. (Image 6)

The mocambos were the most widespread type of low-income housing in the Northeast. These “vegetal dwellings” – in the words of Gilberto Freyre (1937) – were predominantly built of adobe, straw, leaves and *capim-açu* (a type of tall grass). Their construction employed techniques resulting from the transposition and adaptation in Brazil of know-how of African slaves, combined with Native American and Portuguese influences (Lira 1994: 733). According to Freyre (1937), the choice of construction materials in the wide-ranging typologies of mocambos indicated a predominant African and Native American influence (Image 7), despite the occasional introduction of European technical elements, such as wooden windows and doors (Image 8).

The sources consulted indicate that until the end of the nineteenth century the term mocambo was used almost exclusively to refer to dwellings of runaway slaves and it did not yet appear in the discourse on the urban low-income home. Newspapers carried stories on “hunts” for mocambos, and fights between their inhabitants and the police, but they did not offer any criticism regarding their salubrity or their construction system; the negative image later heavily promoted by the civilizational and hygienist discourse had not yet gained ground. The newspaper *O Cearense*, for instance, while describing the efforts of an expedition to defeat a mocambo, considered the mocambo to be pleasant and orderly:

O logar é muito aprasivel e fica dentro de uma rica matta. Para ir a elle não ha estrada nem caminho algum: (...) Só os praticos do mocambo podiao entrar e sahir; (...) **O aspecto do mocambo era**, como dissemos, **muito agradável, e indicava que na edificação das casas e disposição della havia presedido certa ordem**. Contava a povoação de uma rua com 58 casas de morada, 3 de fazer farinha, 2 de engenhoca de canna, uma pequena casa com forno para coser pão e duas igrejas (...)¹⁰⁸

¹⁰⁸ *O Cearense*. Fortaleza: March 4, 1877, N. 19, p. 3.

Lira (1994: 733) argued that the first discursive construction of the mocambo lay precisely in this resistance against the master-slave system and the senzala¹⁰⁹. To Gilberto Freyre (2003), the quilombo was the first “city” to rise against the engenho (the plantation system). He supported that the quilombo dos Palmares¹¹⁰ with its “para-socialist” organization and polyculture cropping was a form of confrontation against the patriarchal and slave economy; and as the quintessential dwelling of the quilombo, the mocambo thus represented the “heroic” fight of the adobe against the power of “stone and lime” houses. In this romanticized perspective put forward by Gilberto Freyre, the mocambo was considered as an ethnical-cultural expression of the Brazilian house, which embodied the native culture in an attractive fashion.

¹⁰⁹ Group of houses or rooms in farms or manors that housed slaves in Brazil; slave quarters.

¹¹⁰ The Quilombo dos Palmares assembled runaway slaves mostly from the sugar plantations of Pernambuco in the Serra da Barriga, around 70 kilometers west of the coast of that state, a hard-to-reach area with a rugged terrain covered by palm tree forests.

At its peak Palmares comprised nine villages: Macaco, Andalaquituche, Subupira, Dambrabanga, Zumbi, Tabocas, Arotirene, Aqaltene and Amaro. It was organized as a small state with laws and rules that regulated the lives of its inhabitants; decisions were taken at meetings in which all adult residents took part.

From 1602 until 1694, several expeditions were sent to destroy Palmares, both by the Portuguese as well as by the Dutch who conquered Pernambuco in 1630. At that time, there were approximately 10 thousand inhabitants in the Quilombo dos Palmares. By 1640, Palmares had expanded to the point that the Dutch considered it a "serious danger" and therefore sent two unsuccessful expeditions to destroy it, one in 1644 and another in 1645.

Following the departure of the Dutch in 1654, the Portuguese organized numerous expeditions against Palmares from 1670 onwards. In 1674, the governor of the province of Pernambuco, Pedro Almeida sent a large expedition composed by troops of native Indians and blacks, which had been previously established to fight the Dutch, but the combats ended without a winner. In 1675, Manuel Lopes led a large army that destroyed one of the villages of Palmares, establishing a settlement in the area. In 1691, the new governor of Pernambuco, Souto Mayor, organized an army to annihilate the Quilombo dos Palmares, engaging for this task Domingos Jorge Velho. In 1692, he unsuccessfully attacked the village of Macaco, where Zumbi, the king of Palmares, lived. Calling for reinforcements, Domingos Jorge Velho received help from troops led by Bernardo Vieira de Melo. The Quilombo was then besieged, but it resisted and repelled all attacks of the army; on February 6, 1694 it finally capitulated following an invasion by the army.

Gaspar, Lúcia. Quilombo dos Palmares. Fundação Joaquim Nabuco, Recife. Available at: <http://basilio.fundaj.gov.br/pesquisaescolar>. Access on 09/06/2013.

But beyond the praise of the aesthetical and cultural values of the mocambo, Freyre situates in the environmental realm its greatest advantages. Through the use of local or regional materials and its “purity” of vegetal dwelling, the mocambo attained a “perfect” ecological balance and allowed for ideal living conditions (good ventilation and exposure to sunlight). It was therefore the most appropriate low-income housing type for the Northeast. Unlike the “promiscuous and filthy” lifestyle of the cortiço, to Freyre (1937) the mocambo would favor order, cleanliness and sexual morality and family life.

However, in the midst of Recife’s urban reform and demographic expansion, the moralizing and hygienist concern would reach the mocambo, and its alleged vulnerability to moral and spiritual corruption and epidemics would become a target of public discourse and action. Although Lira (1994) identified the decades of 1920 and especially of 1930 as the turning point in the perception of the mocambo, in earlier references these dwellings were already perceived as part of the housing problem in urban contexts. As early as 1913 censuses were carried out in order to get to know the evil to be combated and controlled.

The mocambo was acknowledged as a poorly constructed dwelling that was both overcrowded and unhygienic, as the engineer Umberto Gondim’s description indicated:

Imagine uma grande área pantanosa, coberta de mangues, surgindo aqui [...] pequenas ilhas, umas esparsas, outras contínuas, formadas por escavações [...] em suas adjacências e nelas se elevando pequenas choupanas de taipa cobertas [...] em sua maioria de folhas-de-flandres, palhas de coqueiro, capim, etc. Outras [...] elas são construídas em terreno firme, mas de tal forma aglomeradas que dificilmente se distinguem ruas de vielas ou vice-versa. Essas casas de aspecto miserável, cujo piso é construído de barro socado, têm apenas duas entradas, na frente e outra na parte posterior, dando às vezes difícil acesso, devido suas limitadas dimensões, aos seus infelizes ocupantes. Compõem-se geralmente de três compartimentos: sala, quarto e cozinha, nas piores condições de higiene, abrigam na maior promiscuidade famílias compostas de dez ou mais membros. (Gondim, Umberto (1925) *apud* Correia 2004, 13)

The persecution of the mocambo was, however, by no means, not consensual. Lira (1994) showed that the multiple representations of the mocambo survived into the 1930s. The most famous supporter of the mocambo was certainly Gilberto Freyre, who situated in the environmental realm its greatest advantages. Through the use of local or regional materials and its “purity” of vegetal dwelling, the mocambo attained a “perfect” ecological balance and allowed for ideal living conditions (good ventilation and exposure to sunlight). It was therefore the most appropriate low-income housing type for the Northeast. Unlike the “promiscuous and filthy” lifestyle of the cortiço, to Freyre (1937) the mocambo would favor order, cleanliness and sexual morality and family life.

The debate that took place in the pages of the newspaper *A Província* during the years of 1929 and 1930 clearly reveals the opposing positions regarding the mocambo. In his column in this newspaper, Ribeiro Couto, a journalist from São Paulo, praised the quaint esthetical values of the mocambo, in agreement with the ideas put forward by Gilberto Freyre. Based on what he had seen during his visit in Recife, he judged the mocambo to be filled with “penetrating poetry”, “no meio dos coqueirais, surgindo modestos entre os mangues reluxentes, com as suas redes de pesca secando no sol, as roupas estendidas nos varaes, as portas de taboa pintadas de claro, as janelinhas que dão vontade de espiar lá dentro.” He also believed the authentic, native architecture of the mocambos was less harmful to the country than the foreign swiss chalet style, which was much in trend in Recife at the time. To him, the mocambos were so charming that “Si Jesus Christo tivesse que nascer hoje, Nossa Senhora escolheria um dos teus mocambos para o doce mysterio”, that they should be exalted in a touristic guidebook about the city’s beauties, and that a Society of Friends of the Mocambo should be created to adore them. Couto also shared Freyre’s view that the mocambo were much more hygienic than the cortiços of Paris or London, where crowds were piled up, living in promiscuity, “families in one room, small cities in one building.” The mocambo, he

supported, at least were single-family houses; granted, they were small and narrow, but they belonged to “cabloco só, com a mulher e a filharada.”¹¹¹ Moreover, the mocambo received direct sunlight and fresh air, whereas the European cortiços were stuffy and repulsive and therefore deprived of any picturesque quality.¹¹²

Couto’s words ignited a very strong reaction among Recife’s intelligentsia. Very few agreed with him. Mario Sette, Professor of Brazilian History at the Faculty of Philosophy of Recife, supported that “o diabo [the mocambo] não é tão feio quanto se pinta.”¹¹³ Even though they certainly lacked the amenities of hygiene and comfort (such as, the flooring and the W.C.), he believed their advantages resided in their single-family occupancy, the exposure to sunlight, and ventilation; with their small backyards and gardens, the mocambo could have a certain charm, if properly looked after by its residents. However, he concluded, far from defending the mocambo as a model of hygienic dwelling, he only stood against what seemed to him excessive negative criticism.¹¹⁴

The opposition to Couto included Salomão Filguiera, who strongly disagreed with both arguments in favor of the mocambo. He supported that the claim the mocambo was more hygienic was false; even though sunlight penetrated the tiny interiors, these dwellings were not salubrious as they were made of mud and rubbish and built in the mud and dunghill. In fact, to him, the mocambo was one of the main sources of diseases in Recife; to confirm his statement, he proposed to carry out a medical survey on the health conditions of the resident population of the mocambos. The latter, he continued should inspire infinite pity and should not be tricked into thinking there are fortunate. To those

¹¹¹ “the man alone, his wife and offspring”.

¹¹²A Província. Recife, N. 105, 08 May 1929, p. 3.

¹¹³ “the devil [the mocambo] is not as ugly as they portray.”

¹¹⁴ A Província, Recife, N. 28, 2 February 1930, p. 3.

who defended the mocambo by arguing it was a better type than the cortiço, he replied that he had no interest about the ghettos or cortiços of any other city, but his duty as a civilizing man from Pernambuco was to extinguish the evil his home state. And to those who enjoyed its picturesque qualities, a final word: Elle faz, certamente, uma bonita figura nas paysagens do sr. Mario Nunes.¹¹⁵ **Somente nem só de pittoresco vive o homem.**¹¹⁶

In the end, the anti-mocambo discourse prevailed and gradually gained strong political connotations, which were translated into policies and actions to rid the city of mocambos and to provide alternative housing for the urban poor, as we discuss below.

The demographic expansion and pressure of the beginning of the twentieth century was generally blamed for the poor state of public hygiene of the urban environment; the Report presented by the Governor of Pernambuco Manoel Antonio Pereira Borba in 1917 spoke of the “progressive growth of the proletarian population”, whereas in 1927 the Governor of Pernambuco Estácio de Albuquerque Coimbra supported that the insalubrity was caused by urbanization and the displacement of rural population to cities that “overpopulate cities, overcrowd dwellings” bringing along its “habits, diseases and primitive dwellings – the mocambo”.¹¹⁷

¹¹⁵ Mario Nunes was a painter, who taught at the Ginásio Pernambucano and the Escola Normal Oficial de Pernambuco and was a founding member of the Escola de Belas Artes de Pernambuco.

¹¹⁶ “It [the mocambo] certainly provides a beautiful imagine in Mr. Mario Nunes’ landscapes. However, man cannot live on the picturesque alone.” *A Província*. Recife, N. 108, 11 May 1929, p. 3. Emphasis added.

¹¹⁷ Mensagem apresentada ao Congresso Legislativo na Abertura da 4ª sessão da 12ª Legislatura pelo Govenador do Estado Dr. Estacio de Albuquerque Coimbra. Recife: Imprensa Oficial, 1927, p. 24-27. Available at: <http://memoria.bn.br/DocReader/DocReader.aspx?bib=720461&PagFis=2570>. Access on 11/02/2013.

In 1920 the number of residents of mocambos in Recife was estimated in 75,000 out of a total population of approximately 250,000¹¹⁸. Colonel Eduardo de Lima Castro, mayor of Recife, estimated in 1921 that around 32% of the city's population lived in mocambos, but as much as 70% or 80% occupied unsanitary overcrowded, damp and dark houses¹¹⁹. Finally, the Census of 1923 carried out by the state of Pernambuco surveyed 39,026 houses and considered 51.1% of them as "deficient" and identified them as "mocambos" (Lira 1994, 744).

To the contemporary observer these numbers revealed the pressing need of action against the mocambo. Colonel Eduardo de Lima Castro considered them "alarming" and that they should "seriously worry governors and governed" for they represented a danger to the future of the country.¹²⁰ The aforementioned Report carried out in 1917 maintained that the lack of "hygiene, comfort and esthetics" of the mocambos that "covered a great extension of the urban perimeter" where "proletarian population" resided indicated to the government "the urgency to find a solution to improve the living conditions of a great part of the urban population", which would equally "contribute to the sanitary condition of the capital [Recife]".¹²¹

This elevated number of mocambos represented not only a danger to the health of their residents and of the city's entire population, but also a scar disfiguring the urban fabric:

¹¹⁸ A Provincia. Recife, N. 54, 25 February 1920, p. 1.

¹¹⁹ A Provincia. Recife, N. 258, 2 November 1921, p. 3.

¹²⁰ *Ibid.*

¹²¹ Mensagem do Emx. Sr. Dr. Manoel Antonio Pereira Borba Governador do Estado lida por ocasião da instalação da 2a sessão da 9a legislatura do Congresso Legislativo do Estado aos 6 de março de 1917. Recife: Imprensa Oficial, 1917, p. 21. Available at: <http://memoria.bn.br/DocReader/DocReader.aspx?bib=720461&PagFis=1703>. Access on 11/02/2013.

Urge (...) que se attenuie a situação cada vez mais angustiosa da pobreza, condenada a viver em **habitações que constituem matadouros colectivos**, emprestando ao Recife aspectos inomináveis de miseria, com os seus **milhares e milhares de mocambos clamorosos horrivelmente encravados no coração e nos flancos da cidade para a vergonha e tristeza de todos nós.**¹²²

In Pernambuco this sense of urgency was translated into the emergence of a structured housing policy based on the stigmatization of the mocambo and its eradication via government intervention. In 1924 the Fundação Casa Operária was established to promote the construction of the housing for the working population. In 1938 the Comissão Censitária dos Mocambos do Recife was organized in order to carry out a census of mocambos in the city and of their residents, which would give birth to the Liga Social contra o Mocambo in the following year (renamed Serviço Social contra o Mocambo in 1945).¹²³

The Liga's aim was to rid Pernambuco of mocambos, replacing them with what was considered hygienic and healthy houses for workers and the underprivileged. The first Article of the project that converted the Liga into an administrative autarchy leaves no room for doubt about its views on the mocambo and its consequences upon the population and the need of replacing them: "para atender à finalidade de construir casas higiênicas e populares destinadas às classes menos favorecidas que se faz mister proteger contra os males da habitação insalubre e da promiscuidade da vida nos mocambos."¹²⁴

To finance its mission, the Liga Social contra o Mocambo resorted to fundraising from public and private sources and to resources of social security institutions and

¹²² A Provincia. Recife, N. 111, 16 May 1929, p. 3.

¹²³ For views of the mocambos identified by the Liga, see ImageS 8 and 9.

¹²⁴ Diário do Estado de Pernambuco. Recife, N. 199, 3 September 1944, p. 1.

pension funds, established by the new labor laws of the Getúlio Vargas administration (1930-1945).¹²⁵

Anchored on the modernizing and civilizing discourse of Varga's New State (1937-1945), the Liga Social contra o Mocambo was the face of a new regime that sought to build an image as the protector of the underprivileged and the working classes. The Liga's

¹²⁵ The Caixas de Aposentadoria e Pensões were instituted in January 1923 but benefited only few professional groups. After the 1930 Revolution, the new Ministry of Labour and incorporated them proceeded to take steps to guarantee that labor rights were extended to a significant number of workers. Thus the Instituto de Aposentadoria e Pensões dos Marítimos (IAPM) was established in June 1933, followed by the Instituto de Aposentadoria e Pensões dos Marítimos dos Comerciantes (IAPC) in May 1934, of Bankers (IAPB) in July 1934, the Industrialists (IAPI) in December 1936, and other professional categories in the following years. In February 1938, the Instituto de Previdência e Assistência aos Servidores do Estado (IPASE) was founded. The president of such institutes was appointed by the President. (Centro de Pesquisa e Documentação de História Contemporânea do Brasil (CPDOC), Fundação Getúlio Vargas. *Anos de Incerteza (1930 – 1937): Institutos de Aposentadoria e Pensões*. Available at: <http://cpdoc.fgv.br/producao/dossies/AEraVargas1/anos30-37/PoliticaSocial/IAP>. Access on: 23/03/2013.

The extent of engagement of the Caixas de Aposentadoria e Pensões in the project of building affordable housing to replace the mocambo can be evaluated in the following list of contributions extracted from the minutes of meeting between the Interventor Agamenon Magalhães and the representatives of those institutes:

- Caixa dos Transportes Urbanos: is applying 1.000:000\$000 in houses for its associates;
- Caixa dos Ferroviarios da Great Western: has applied 600:000\$000 and can apply annually around 1.500:000\$000;
- Caixa de Aposentadorias e Pensões dos Portuarios do Recife: has applied 800:000\$000 and can dispose of 400:000\$000 per year for the construction of popular houses;
- Caixa de Serviços Urbanos Oficiais (Saneamento): has applied 710:000\$000 in the Cabanga (...);
- Caixa dos Comerciantes: can apply annually 1.400:000\$000. Has not yet applied in popular construction;
- Instituto dos Industriais: (...) can annually apply 1.800:000\$000 in the popular construction;
- Instituto dos Estivadores: (...) Can apply annually 300.000\$000 and already has an authorization to begin a vila this year for its associates;
- Instituto dos Bancarios: has a lot and will build 61 houses in Aflitos;
- Instituto Nacional de Previdencia: is applying 1.000:000\$000 in 26 houses;
- Instituto dos Maritimos: still does not have a building portfolio;
- Instituto de Previdencia dos Servidores do Estado: (...) Is building the civil servants' neighborhood with 174 houses in Campo Grande and will build in Areias a vila operária for low-ranking employees.

(Diário do Estado de Pernambuco. Recife, N. 165, 29 July 1939, p. 10)

heated rhetoric inflamed passions against the *mocambo*. In letters addressed to the Pernambuco's *Interventor* Agamenon Magalhães¹²⁶, regularly featured in the state's official publication – the *Diário do Estado de Pernambuco* –, the Liga's work was presented as a “heroic”, “magnificent” and “patriotic” initiative, a “crusade” inspired by Christian values of solidarity, compassion and mercy to fight against the greatest “social wound” and “social evil”; a campaign to re-place the poor of the city in “healthy and decent dwellings”, “the only compatible with the most advanced representatives of the zoological scale”. The appraisal of the Liga was generally accompanied by the scrutinizing of the *mocambo*, defined as “the primitive dwelling of troglodytes”, “muddy shacks that uglify the city of Recife and animalize the poor laborers”, “social plague that saddens the great land of Pernambuco”, “ a social cancer”, etc.¹²⁷

The Liga implemented the plan for the construction of economic houses according to the following criteria: houses for the purpose of social assistance; homes for unionized workers and taxpayers of social security institutes and *Caixas de Aposentadoria e Pensões* of the Ministry of Labor; and homes for applicants from all professional groups (Images 8 and 9). Eligibility criteria for enrollment in the program included the submission of proof of marital status and medical exams, adhering to its mission of combating promiscuity and epidemics. Between 1939 and 1945 the Liga brought down 14,597 *mocambos* while only 6,173 units were built. It is estimated that the program was responsible for the displacement of one fourth of Recife's total population.

It is important to highlight that despite those attempts to extinguish *cortiços* and *mocambos*, both dwelling types are still part of the urban landscape in Brazil. As Correia (2004: 45) has argued, the proposals to extinguish what was regarded as inappropriate

¹²⁶ Agamenon Magalhães was named by Getúlio Vargas as the *Interventor* of Pernambuco in November 1937; he remained in office until March 1945.

¹²⁷ *Diário do Estado de Pernambuco*. Recife: Imprensa Oficial. Consulted series: 1930-1950.

low-income housing remain largely unaccomplished. Although Ribeiro Couto's view of the *mocambo* did not prevail, in time his remarks regarding the means to extinguish it proved to be correct. He argued that inflammatory rhetoric and short-term policies were useless if the root of the mechanism underlying the perpetuation of *mocambos* was not tackled. As he correctly affirmed, the existence of substandard dwellings was related to the existence of abject poverty: "enquanto houver miseráveis, haverá *mocambos*".¹²⁸

1.2.3 Housing reform and the emergence of the standard low-income dwelling

As afore discussed, poor people's housing was regarded as a major social and economic problem for reasons including its deficient sanitarian conditions that allegedly contaminated workers' health and morals and rendered them dangerous and unproductive. The hygienist thinking stripped of value and stigmatized the low-income home in Brazil through the social construction of negative archetypes that were recurrently denounced and opposed, while it conceived and promoted housing types that could

¹²⁸ A Província. Recife, N. 105, 8 May 1929, p. 3.

Although a present quantification of *cortiços* and *mocambos* in Northeast is problematic due to the lack of systematic research, some data collected in the city of São Paulo reveals the longevity of substandard dwellings in the Brazilian urban landscape. A research by the Fundação Instituto de Pesquisas Econômicas (FIPE) had identified in 1993 23,688 "encortiçados" buildings and 595,110 people living in them. Later, an inquiry carried out by the Programa de Cortiços of the Prefeitura de São Paulo inspected from 2005 to 2010, 1,814 properties in the city's central area and identified 1,091 "encortiçados" buildings.

(Prefeitura Municipal de São Paulo. Secretaria Municipal de Habitação. Programa de Cortiços. Available at: <http://www.prefeitura.sp.gov.br/cidade/secretarias/habitacao/programas/index.php?p=3380>. Access on: 12/03/2013)

(FIPE. Secretaria Municipal da Habitação e Desenvolvimento Urbano/Superintendência de Habitação Popular – Fundação Instituto de Pesquisas Econômicas. Estudo das favelas e *cortiços* da cidade de São Paulo. São Paulo, v. 1, 1994.).

replace those objectionable ones. Whereas the allegedly insalubrious homes were considered a corrupting environment, the proposed model homes should become the foundation for shaping a renewed, virtuous, stable and productive worker.

The primary concern during the period under review was the impact of insalubrious housing on public hygiene and health. As previously discussed, according to the widely accepted miasma theory, diseases were the result of malevolent vapors which clung to the environment, and were closely associated with poor sanitation; improvements in sanitation and the consequent reduction in foul odors were therefore prescribed as the means to lower the outbreaks of epidemics. As a result, housing for the lower classes should be reformed to meet these new demands of urban hygiene, in the fundamental passage from denunciation to correction of the urban plight,

One of the most fundamental instruments in pursuing this transformation was the legislation regarding urban layout and in the program and plan of houses introduced by the Câmara Municipais (City Councils) of Brazilian municipalities¹²⁹. The Law of 1 October

¹²⁹ During the colonial and imperial periods, the Câmara Municipais accumulated the Executive, Legislative and Judicial powers in urban agglomerations. Between the eighteenth and nineteenth centuries, the Senado da Câmara (as the Câmaras were known) was composed of judges, councilors (Oficiais da Câmara) and an attorney (procurador), which were elected by the wealthy citizens of the villages, also known as “homens bons”. The President of the Senado da Câmara and the officials were the policy-makers; they were responsible for enforcing national (royal) and local (Posturas Municipais) laws, and administering local everyday life. In regards to the Judiciary, Juízes de Fora and the Juizado de Órfãos.

Following the Independence of Brazil in 1822 and the reorganization of political and administrative structure of the country, the Câmara Municipais lost their autonomy and prestige, but remained as the main body of local government. The promulgation of the 1824 Constitution and reforms instituted in the Regency period (1831-1840) subordinated the Câmaras to the Provincial authorities; the latter thus became responsible for overseeing municipal expenses, in addition to regulating taxes and the posturas municipais.

The Câmaras were eventually dissolved by the federal government after the proclamation of the Republic in 1889 and the Conselho de Intendência was established as the new body responsible for the municipal Executive power. The Republican government separated and formally fixed the authority of the three branches of power, i.e. legislative, executive and judicial, leaving the the Câmaras Municipais in charge of legislature after they are recomposed.

1828 charged the Câmaras Municipais with the responsibility of organizing and regulating the public space seeking to ensure its propriety, both in regards to hygiene and moral order, determining that they should promote and maintain the tranquility, safety, health and comfort of their inhabitants, as well as the cleanliness, safety, elegance, and external regularity of buildings, streets and villages (Article 71, Law of 1 October 1828). Article 66 determined that their regulatory action would be enforced through the establishment of the laws called “Posturas Municipais”. As it was the reference point of the Brazilian Câmaras Municipais during the Empire (1822-1889), the Law of 1 October 1828 granted a certain degree of uniformity to the *Códigos de Posturas* of all municipalities, determining all issues under their jurisdiction (Souza 2002: 161).

According to the Law of 1 October 1828, the attributions to be defined and regulated in the *Códigos de Posturas* included:

§ 1º Alinhamento, limpeza, iluminação, e desempachamento das ruas, cães e praças, conservação e reparos de muralhas feitas para segurança dos edificios, e prisões publicas, calçadas, pontes, fontes, aqueductos, chafarizes, poços, tanques, e quaesquer outras construcções em beneficio commum dos habitantes, ou para decôro e ornamento das povoações.

§ 2º Sobre o estabelecimento de cemiterios fóra do recinto dos templos (...); sobre o esgotamento de pantanos, e qualquer estagnação de aguas infectas; sobre a economia e asseio dos curraes, e matadouros publicos, sobre a collocação de cortumes, sobre os depositos de immundices, e quanto possa alterar, e corromper a salubridade da atmospherá.

§ 3º Sobre edificios ruinosos, escavações, e precipicios nas vizinhanças das povoações, (...); suspensão e lançamento de corpos, que possam prejudicar, ou enxovalhar aos viandantes; cautela contra o perigo proveniente da divagação dos loucos, embriagados, de animaes ferozes, ou damnados, e daquelles, que, correndo, podem incomodar os habitantes, providencias para acautelá, e atalhar os incendios.

§ 4º Sobre as vozerias nas ruas em horas de silencio, injurias, e obscenidades contra a moral publica.

§ 5º Sobre os damninhos, e os que trazem gado solto sem pastor em lugares aonde possam causar qualquer prejuizo aos habitantes (...)

§ 6º Sobre construcção, reparo, e conservação das estradas, caminhos, plantações de arvores para preservação de seus limites á commodidade dos viajantes (...)

§ 7º Proverão sobre lugares onde pastem e descancem os gados para o consumo diario, em quanto os Conselhos os não tiverem proprios. (...)

§ 9º Só nos matadouros publicos, ou particulares, com licença das Camaras, se poderão matar, e esquartejar as rezes; (...)

§ 10. Proverão igualmente sobre a commodidade das feiras, e mercados, abastança, e salubridade de todos os mantimentos, e outros objectos expostos á venda publica (...)

§ 11. Exceptua-se a venda da polvora, e de todos os generas susceptiveis do explosão, e fabrico de fogos de artificio, que pelo seu perigo, só se poderão vender, e fazer nos lugares marcados pelas Camaras, e fóra de povoado, para o que se fará conveniente postura, que imponha condemnação, aos que a contravierem.

§ 12. Poderão autorizar espectaculos publicos nas ruas, praças, e arraiaes, uma vez que não offendam a moral publica (...)

(Article 66, Law of 1 October 1828).

It is important to notice that throughout the Brazilian imperial period, the scope of the Câmaras Municipais' regulatory action over hygiene standards for housing regarded only the exterior space. This can be explained by the limitation of the attributions of the Câmaras Municipais in relation to the regulation of urban constructions at the time; the Regimento das Câmaras Municipais prohibited ruling over what was considered an improper interference of the public power in the private sphere, in view of protecting individual freedom and the inviolability of private property. However, this practice was gradually being replaced in Europe by new forms of public intervention, since the first major epidemic outbreaks, in the first half of the nineteenth century (Campos 2008).

In view of the expansion of Brazilian cities, these legal Codes sought to establish rules of conduct for the developing urban space and its inhabitants; they were pedagogical instruments that could regulate individual and collective behaviors, molding them the requirements and standards of the new *urbe*. As Santos (2009: 55) discussed, their main goal was to clean and order the space that was primarily occupied by the poor and working classes: the street – the traditional realm of stallholders and carts, water carriers, vendors, *tigres*¹³⁰, and slaves – needed to be transformed for the new society that

¹³⁰ “Tigres” were slaves who carried and disposed of the waste. Excrement and wastewater were loaded into buckets that were carried by the slaves on their heads to be thrown away in the sea or watercourses.

was taking shape. As such, the scope of the *Códigos de Postura* in regards to the urban space was threefold: to sanitize the built environment in accordance with what were held to be the laws of hygiene; to impose new forms of social control, especially by criminalizing behaviors and activities associated with the underprivileged or the socially marginal; and to pave way for a new esthetics of the urban environment that distanced itself from the old colonial order and guided Brazilian cities into the light of modernity, progress and prosperity.

The analysis of the *Códigos de Posturas* of Northeastern cities indicates a gradual complexification of the legislation in response to the expansion of urban areas during the last decades of the nineteenth century and the first decades of the twentieth century, and the changes it engendered. Initially, throughout the nineteenth century, those regulations aimed mainly at:

- a) Standardizing the layout of the streets, paying close attention to the alignment and leveling of houses seeking to replace the old irregular and inharmonious plans of colonial cities with a new, modern form of urban planning, particularly through implementation of grid street plans.
- b) Setting minimum dimensions for streets and sidewalks, seeking to organize the flow of people and vehicles and to ensure a proper circulation of air and light.
- c) Enforcing the need of permits and licenses for the construction of houses and other buildings.
- d) Determining the use of collective equipment that could be harmful to public health; for example, the acceptable way of burying bodies, slaughtering animals, and selling meat was prescribed by law.
- e) Establishing where activities considered harmful to public health could be carried out. The law determined that cemeteries, slaughterhouses, tanneries, stables, and factories should be located away from the central urban perimeter.

f) Keeping the public space free from filthiness, which meant the interdiction to raise animals (such as pigs, goats, sheep, and cows) in the city center and to leave them stray in the streets; the interdiction to accumulate rubbish in backyards or sidewalks and to dispose of wastewaters in non-authorized areas.

Following the development of urban areas in Brazil and the consequent expansion in the provision of public services and collective equipment, new Posturas were gradually introduced throughout the years. Therefore, the Legal Codes were enlarged to incorporate under their tutelage the new realities of the emerging cities. By the end of the nineteenth century, the Posturas regulated the sewage system, the waste management services, cemeteries, and public transport, among others. The Codes published in the 1930s, incorporated new facilities, services, and objects such as movie theaters, schools, gas stations, several types of industrial establishments and their chimneys, automobiles, buses, and trucks.

It is important to notice that this legislation acted upon not only material aspects (the built environment), but also regulated and controlled the immaterial dimension of public hygiene and order, seeking to reform habits and gestures. Typically accompanied by moralizing discourses, it sought to reform practices and behaviors associated with the underprivileged and socially marginal. The Codes imposed new habits of hygiene, establishing, for example, the obligation to sweep the sidewalks every week, and the restriction to throw trash in the streets and wastewater out the window, lay clothes or leather to dry on windowpanes, streets or public squares. Moreover, they exerted a moral control of the public space; the *Código de Posturas* of São Luiz of 1866, for example, punished with possible imprisonment anyone who walked in the streets naked or indecently dressed, or who drew or wrote obscenities of the walls, while those who roamed the streets drunk, or who sold alcohol to someone already drunk received a fine. Whereas the Posturas established during the imperial period was largely concerned

behaviors and activities of slaves in public spaces, the subsequent Codes paved the way for the formation of a new labor force constituted of free workers and its implications for the uses of the urban environment. What thus followed was an intensification of the repression of vagrancy, immorality and behaviors deemed unsuitable for productive workers.

One of the most relevant implications of the *Códigos de Posturas* for the development and configuration of the urban space was the introduction of zoning policies. The nineteenth-century Codes established a distinction between central urban areas, with a defined perimeter, and the peripheral or rural areas. In the 1930s, the Codes established a more complex partition of the metropolitan areas, generally divided into four zones: central, urban, suburban and rural. Such a distinction served to determine the type of activities that could be carried out and of buildings that could be raised in each part of the city. Activities that impaired public health and tranquility, as well as buildings of lower esthetic and sanitary quality were restricted to the peripheral zones. The perimeter of this area was successively updated and reviewed but the basic concept of maintaining a central urban area increasingly regulated and a vast suburban and rural area that could be occupied by urban uses restricted in the former, such as slaughterhouses, cemeteries, foul industrial activities, and housing of inferior quality, was never challenged (Rolnik 1999). The zoning was clearly anchored to the Sanitarian paradigm, but also reflected a strong esthetical and moral concern. It sought to exclude the underclass and the immorality, backwardness and brute ugliness with them associated from central areas; practices and behaviors deemed “uncivilized” or “inadequate” to the model of beautification, moralization and sanitation of the city were removed to marginal spaces.

Those zoning policies would have a direct impact in the transformation of residential spaces and in the reform of low-income housing, as the *Códigos de Posturas* set new norms and standards of acceptability for housing in urban areas. To eradicate the

filth and the dangers of the built environment, they regulated housing construction, and imposed changes in house plants and programs, pushing for interventions concerning the distribution of light and air, the water supply, and waste management in accordance with the tenets of the science of Hygiene.

The Posturas set minimum dimensions for lateral and front setbacks, as well as for windows and doors aiming at allowing a proper illumination and circulation of air; they introduced new architectural elements, such as the cornice and parapet and excluded others, such as the “serpentões” – drainpipes typically used in Fortaleza (Image 14). To comply with hygiene standards, the replacement of construction materials was also determined: straw, adobe or wood were thereafter considered unsuitable and only brick and stones structures were accepted by the Posturas in urban areas. This was in fact a widespread requirement; from the 1860s onwards, the Posturas of many municipalities introduced the mandatory use of bricks and stones for new constructions, at least for the facades. In the capitals of the states of Paraíba and Ceará, for example, respectively in 1865 and 1868, it was determined that houses had to be built with brick or stones facades, and that bricks were the only acceptable construction material. Straw roofs were also gradually banned, and houses were to be covered by ceramic shingles. Such obligations and restrictions, however, were limited to the central urban space; in peripheral areas substandard dwellings, such as adobe or straw houses, were authorized by the municipal law in all the Codes here examined.

Therefore, the legislation hierarchized dwellings, defining acceptable and unacceptable types. If at first this division was limited to a dichotomy between insalubrious and high standard houses, gradually in the midst of the discussions about the reform of low-income housing, a new residential pattern emerged: the “popular” dwelling of lower esthetical and constructive quality, but within the minimum standards of hygiene, generally called “vilas”. As previously discussed, throughout the second half of the nineteenth and

the first half of the twentieth centuries, the urban poor home was widely considered a social, sanitary, economic and moral hazard, which therefore needed to be replaced with new housing solutions that could curtail such dangers. The Codes thus responded to this growing need of rethinking dwelling standards for the emerging laboring classes and by the 1930s this new typology was incorporated, stimulated and fixed; in Fortaleza, the 1932 Code set the requirements for the construction of vilas (two rooms of no less than 8 m², kitchen with minimum area of 4 m², bathroom, W.C. and laundry tub), while in São Luis the 1936 Code allowed the construction of “economic houses” and “houses for laborers” in adobe or wood in rural areas, as long as they complied with a set of hygiene regulations.¹³¹

As Blay (1985: 64) pointed out, the dominant underlying perspective at the time, which also guided this legislation, supported that laborers were not a new social category that could sell their labor power and climb out of poverty; rather, their condition of workingmen and women implied being poor and living in substandard homes. As the Pacotilha newspaper argued, the pitiable state of working class neighborhoods in São Luís, which lacked esthetics and hygiene, was due to the laborers’ social condition and low wages that implied they did not have the resources or the initiative to carry out the necessary reforms in their homes:

Os arrabaldes de S. Luiz constituem-se de **bairros proletarios**, quasi todos de palhoças ordinárias, acachapadas e dispostas em grupamentos, **que violam todos os preceitos de esthetica e hygiene.**

Nesses bairros reside o operariado, gente pobre que se mantem a custa de um intenso e rude labor diário, **em troca de pequenos salários que mal lhe chega para manutenção da vida. Desse modo, têm permanecido, os referidos bairros, em estado precário**, sem organização urbana e sem conforto de espécie alguma, pois que **os seus habitantes, pela sua propria condição social, não**

¹³¹ Decree 70 of 13 December 1932, Código Municipal de Fortaleza, Chapter XI *apud* Andrade 1994: 10.

Decree 205 of 3 November 1936, Código de Postura de São Luis In Selbach 2010.

têm posses nem iniciativas para dota-los dos melhoramentos de que carecem.¹³²

Therefore, as we discuss below, the tutelage of industrialists, philanthropists or the State was considered fundamental to reform both homes and workers.

These new houses still remained excluded from the central urban perimeter, kept at a distance for the sake of safety, moral, hygiene, esthetics and order. The 1932 Fortaleza Code determined that the vilas could only be built outside of the urban area. As Foucault indicated, from the perceived danger of the underclass stemmed the decision to establish a spatial segregation between the poor and the rich in the urban space: “The feeling was that cohabitation between rich and poor in an undifferentiated urban environment constituted a health and political hazard for the city.” (Foucault 2000: 152)

In this framework, the *Códigos de Posturas* consolidated a qualitative distinction between housing types and of the space they could occupy. Residences within a determined esthetical and hygienic standard were intended for central perimeters and privileged social categories, whereas the substandard ones, along with their underprivileged residents, were to be excluded from the “visible” arena. As Rolnik (1999) argued, this spatial segregation simultaneously defined a “regulated” area of the city – out of reach for low-income dwellings –, and an “obscure” zone out of the urban perimeter, disregarded by the municipal power.

Those regulations set by the *Códigos de Posturas* – part of wider movement for the sanitary and reform of the low-income dwelling – consolidated a new housing standard that deeply marked the urban and architectural development of Brazil. Zoning policies and spatial segregation of the underprivileged boosted urbanization in peripheral areas of Brazilian cities, giving birth to proletarian neighborhoods, where lots were smaller

¹³² Pacotilha, Sao Luis, N. 230, 6 December, 1929, p. 1. Emphasis added.

and the supply of public services scarce. Furthermore, they stimulated and fixed the paradigmatic residential typology of the pro-hygienic housing movement, establishing a dichotomy between undesirable and model housing for the working poor.

1.2.4 “Charming vilas operárias”: plan and form of the ideal type of the working-class home

The acceptance of the principles of the science of hygiene and the introduction of legal requirements for housing construction meant singling out housing types that were considered inappropriate for the working poor and proposing alternative models to replace the unwanted ones. Through the combination between new legal building standards (determining minimum volume of rooms, size of doors and windows, mandatory sanitation facilities, such as bathrooms and laundries; the use of certain construction materials over others, such as brick, stone and ceramic shingles over adobe and straw) and the ideals of social housing (for the “deserving poor” and laborers, pacified, sanitized and moralized), a new standard type of housing – the “popular dwelling” – was set.

In the late nineteenth century this new privileged model for the reform of the urban poor housing began to be outlined: the “vila operária”, designed to replace the widespread unwanted unhealthy and immoral dwellings of the working classes. “Vila operária” was the most commonly used expression to refer this new ideal alternative model during the period under review. It was originally used to designate a group of houses built by a company for its employees, but soon was applied also to refer to groups of similar modest homes built by other agents (Correia 2001: 84). It was an umbrella term that comprised a wide range of settlement and housing typologies; as Bonduki (2004) indicated, it included those promoted by companies for their employees, as well as those produced by private

investors and public administrators. Furthermore, it was simultaneously employed to designate small housing complexes or large-scale developments, or settlements built in urban centers, in the suburbs or in the countryside (Correia 1998). As such, the term “vila operária” comprised a multitude of housing experiences: groups of houses built by real-estate companies to be rented out or sold to urban workers (not only factory laborers, but also civil servants or private sector employees), by railway companies in urban and more remote locations, by industrial, meatpacking and mining concerns, by sugarcane mills and also by the State.

Public officials and hygienists recommended the vilas operárias as the ideal solution to replace cortiços, mocambo and other substandard dwellings. They supported that the latter, as the physical representation of the dangers related to the poor and their dwellings, should give way to better housing forms. Backheuser was among those that advocated that cortiços and estalagens had to be wiped out from the urban space. To him, trying to improve their appearance or to repair them was useless and he urged public administrators to “let time consume” those dwellings so that the “charming vilas operárias” could bloom in their place (Backheuser 1905: 90).

The vila operária was meant to become the antithesis of the cortiço, the mocambo and all they represented. On the one hand, cortiços and mocambos were held to be unhygienic and uncivilized. They were built anarchically, not following the alignment or leveling of streets, and forming irregular and narrow street patterns, often on unsuitable lands such as marshes or woods. Their use of inadequate construction materials kept residents exposed to the cold and humidity; their poor construction system prevented the circulation of air and exposure of sunlight. For such reasons they posed a serious threat to the public health. Furthermore, it was considered that such a corrupted environment would directly lead to corrupted behaviors. The overcrowded spaces, cramped rooms and the consequent lack of privacy were thought to encourage immoral practices, while the

association of the “deserving” with the “undeserving” poor contaminated the social fabric. On the other hand, vilas operárias, first and foremost, implied salubrious homes with an internal functional division, built in an orderly fashion, which distinguished them from the lack of order, hygiene, space and comfort attributed to substandard houses (Correia 2001: 84).

To Backheuser two aspects needed to be taken into account in order to conceive houses that were in agreement with the tenants of Sanitarism: a) the house itself, its internal distribution of the rooms, its construction, the choice of construction materials, etc.; b) the grouping of those houses which constituted a city or a “vila operária”. Reformers of the low-income dwelling supported that three fundamental principles should inform their design: salubrity, comfort and economy.¹³³

Rendre un logement salubre est une des premières conditions qu'un constructeur doit chercher à remplir, car lorsqu'un chef de famille tombe malade, la misère avec son hideux cortège de souffrance ne tarde pas à envahir le logis du travailleur. La commodité dans un logement doit être recherchée, car c'est un des éléments qui contribuent le plus à la propreté dans un ménage. Lorsqu'une maison est bien distribuée et qu'elle est pourvue des dépendances nécessaires, il en résulte une grande économie de temps pour la ménagère.

L'économie est évidemment l'élément le plus essentiel dont il faut tenir compte quand on construit un logement.

Si le loyer en est trop élevé, l'ouvrier, forcé de le payer, en sous-loue une partie ; il en résulte que la construction replissant les meilleures conditions hygiéniques devient insalubre pas suit des effets de l'encombrement.

(Cacheux 1891: 11)

In regards to the layout of the vilas operárias, Saturnino de Brito¹³⁴, a pioneer of Sanitation Engineering in Brazil, supported that the lots and the spatial disposition of

¹³³ Backheuser (1906:16) considered economy, salubrity and proximity to work as the three main principles to be applied to the construction of low-income dwellings.

¹³⁴ Francisco Saturnino de Brito (1864-1929), a civil engineer graduated at the Polytechnic School of Rio de Janeiro, developed sanitation projects for many Brazilian cities. He established guidelines for the formulation of projects that ranged from the analysis of methods for urban sewage treatment to the comprehensive reform of household sanitation facilities.

buildings were of fundamental importance in order to ensure a correct exposure to sunlight and ventilation, especially in bathrooms and bedrooms. He condemned the construction of dwellings on narrow and deep lots, which did not allow penetration of sunlight, and thus contributed to the creation of dark and insalubrious housing blocks. Brito advocated that lots should have a minimum length of eight meters in the urban areas

Brito supported that planning was crucial to achieve a harmonious urban development and therefore Brazilian municipalities had to elaborate general plans to oversee the expansion of the sanitation and road networks, in order to: prevent uncontrolled or arbitrary urban growth; end conflicts between public and private interests; and ensure the sustainability of the sanitation and water supply works. These general plans should be completed by plans for the different services, such as street lighting, transport, landscaping, etc., among which, the sanitation plan stood out: the urban layout should be subordinated to the sanitation network layout. Among the cities for which Brito developed sanitation plans, two Northeastern capitals can be found: Recife and Paraíba do Norte (currently João Pessoa).

Brito – who was by then reputed for his achievements, especially the sanitation of the city of Santos (São Paulo) – was contacted by the government of Pernambuco in 1909 to assume the position of chief engineer of the Sanitation Commission, a newly-created body responsible for the construction of Recife's new sewerage system. He also proposed a plan for the city's water supply an expansion plan of the city, but financial problems prevented the realization of the plan and delayed the works of water supply, which were only completed three years after the sewage system in 1918.

In 1913 he was invited the governor of the state of Paraíba, Castro Pinto, to also develop a plan for the capital's sewage and water supply networks, while he was working on the sanitation plan for Recife. Echoing many of his other projects, the plan conceived for the city of Paraíba associated concerns with sanitation and urban expansion. However, nearly ten years passed by before his proposals were put into practice due to the financial crisis that shook the local economy. Only in 1922, under the administration of Solon de Lucena, the sanitation works began, being completed in 1926.

After Saturnino de Brito passed away, his sanitarian legacy was carried on by the firm Escritório Saturnino de Brito, under the direction of his son Saturnino de Brito Filho. This office was also active in the Northeast: it was responsible for elaborating projects for the water and sewer systems of Natal (Rio Grande do Norte) and Campina Grande (Paraíba).

All stages of his projects were carefully recorded initially in *Relatórios de Projetos*, and, following their conclusion, in *Relatórios de Obras*. Between 1943 and 1944, the Ministry of Education and Health published the engineer's *Obras Completas* ("Complete Works") in 23 volumes, which include all his major works published in Brazil and abroad. These works include the rehabilitation plans of major Brazilian cities developed by Brito, as well as publications of theoretical and methodological nature related to Sanitation Engineering, town planning and Urban Sociology.

For more on Saturnino de Brito's role in the sanitation of Northeastern cities, see: Almeida 2006; Lima 1998; Lopes 2013; and Moreira 1990.

and 10 in the suburbs; there should be a two-meter gap between buildings outside the urban perimeter; the height of a residential building should be calculated in accordance to the width of the street; and no construction plan should be approved by the municipal authorities without talking into consideration the conditions of the lot, of the neighboring buildings, the housing block and the streets.¹³⁵

Another important issue to be addressed in the design of the vila operária was the layout of the streets. The orthogonal grid was considered to be consonance with the rationality of sanitarian needs as it provided good conditions for light, ventilation and for the circulation of people, vehicles and goods, and, as Juan (2011) discussed, it also facilitated the development of city plans based on zoning policies. However, there was also opposition to the dogma of orthogonality and symmetry; Camillo Sitte in his famous *City Planning According to Artistic Principles* published in 1889 had criticized the increasing use of the gridiron system in the development of cities for their exclusively technical intentions that did not contain “a single drop of artistic blood” (Sitte 1965: 91).¹³⁶ Echoing this perspective, Backheuser affirmed that a straight line gave the agonizing impression of two lines that never meet; the soft, slightly concave curve, on the other hand, allowed for a view of the ensemble and of facades and could prevent uncomfortable wind drafts if the street was oriented towards the dominating winds. Therefore it would be possible to put an end to the

detestáveis topographias das cidades feitas em fôrma de xadrez, como que mandadas preparar de encomenda nos fornos da engenharia oficial e que

¹³⁵ A Provincia. Recife, N. 193, 18 July 1921, p. 2; A Provincia. Recife, N. 194, 19 July 1921, p. 2; and A Provincia. Recife, N. 195, 20 July 1921, p. 1.

¹³⁶ It is important, however, to highlight that Sitte’s remarks on the grid plan were not fully intended for the working-class neighborhoods; as he affirms: “The broad mass of living quarters should be businesslike, and there the city may appear in its work-clothes. However, major plazas and thoroughfares should wear their ‘Sunday best’; in order to be a pride and joy to the inhabitants, to awake civic spirit, and forever to nurture great and noble sentiment within our growing youth.” (Sitte 1965: 92)

emprestam ao todo um aspecto de uniformidade e de aborrecimento (Backheuser 1906: 8-9)

Approaching the argument from a Sanitarian point of view, Saturnino de Brito did not give preference to one solution *a priori*; linear roads should be applied on flat terrain, while the irregular trace of winding curves should be restricted to hilly terrains:

Não é preciso que a rua conserve seus alinhamentos paralelos; as larguras de uma rua podem ser diferentes em um mesmo trecho de um quarteirão e em trechos sucessivos; os acidentes planimétricos existentes podem ser geralmente conservados. (Brito 1944: 166)

To Brito, the most important was to ensure the proper functioning of the sanitarian network and to preserve its layout, though without disregarding the city's esthetical dimension. He considered that the use of curved roads could achieve the result of beautiful perspectives: “a arte moderna de construir as cidades ensina a aproveitar grande número destas irregularidades para obter belos efeitos de perspectiva.” (Brito 1944: 166)

As to the location, as we afore discussed, the construction of vilas operárias was generally authorized in suburban or peripheral areas. But beyond this legal requirement, doctors and sanitation engineers also indicated these areas for building salubrious and economic low-income houses, due to their fresh air and lush vegetation, and lower price of the terrains. Backheuser (1906), however, disagreed with this widely-accepted idea, and proposed that proximity to work should be the main determinants of the location of vilas operárias since in most Brazilian cities workers could not count on an efficient transport system. He calculated that a laborer living in the suburbs who had to travel to the city center to be at work at six in the morning would have to get up two hours and ten minutes earlier, and after leaving work at four in the afternoon would only arrive at home two hours later. In the end, four hours were added to the daily work shift and, therefore, nullifying the benefits of life in the suburbs: “De que lhe valem a verdura e o ar puro, si o

seu cansaço o predispões ás doenças, si a sua debilidade o põe em um estado de receptibilidade morbida especial?” (Bakheuser 1906: 44). In the end, however, the combined development of industry and urban areas led to the emergence of vilas operárias in suburban areas, where the industrial plants and/or railroads were located. This phenomenon would gradually produce the urbanization of peripheral areas which had been until then rural, agricultural areas. The location of the vilas operárias will be further discussed in Chapter 2.

The conceptualization of architectural plan of the dwellings in the vila operária was directly related to the process of resignification of the domestic space, which Correia (2004) identified as the passage from the idea of the house as a shelter to the house as a sanitary space. The residential space was to be ruled by the tenants of hygiene, to ensure certain level of privacy to its inhabitants (also by promoting the withdrawal of strangers from the household) and stabilize relationships and behaviors inside and outside the domestic space (Correia 2004). Murard and Zylberman (1976) defined this as the construction of the “modern habitat”: the house was invalidated as a workplace and converted into a place for family life, resting and replenishing one’s energies; it was a regulated, hygienic, comfortable and pleasant space for pacified, hard-working and moralized families. This new dwelling model, underlain by the notion of the house as a *home* and as sanitary space, implied a new rationality in the use and organization of the domestic space. This rationality exerted a twofold effect on dwellings’ plan and forms: first, a rejection of collective dwellings and, second, a reordering of the interior of the domestic space.

In regards to the form the dwellings in the the vila operária, Muller and Cacheux (1879: 88) classified the working-class dwelling into five types:

- a) Multi-story building that can lodge a great number of working-class families;
- b) Mixt-use buildings, where only the top floors are inhabited by the workers.

- c) Detached or juxtaposed houses, for single-family occupancy;
- d) “Hotels” for single workers;
- e) Houses adjoining workshops to allow laborers to work from home.

Muller and Cacheux (1889: 88-104) did not favor single-family houses over collective buildings, indicating the advantages and disadvantages of both layouts, and provided guidelines for their construction. Some of the examples of collective housing included the Peabody houses in London and Godin’s *familistère* (Images 13-15).

In Brazil, however, unlike in certain European countries or in North America. collective housing (multi-family dwellings), was strongly repudiated as a model working-class home. As Lilian Vaz (1994) affirmed, the national hygienist thinking took a firm stand against “agglomeration of individuals”, i.e. the high density of residents per building and the socialization of living spaces, and considered the collectivization of housing to promote insalubrity and promiscuity. Collective residential buildings would remain until the first decades of the twentieth century synonymous with the plight of the poor,¹³⁷ and reformers of the low-income dwelling would seek to replace them with new constructive typologies designed for single-family occupancy, which were considered to promote urban sanitation and the transformation of the life of the urban poor. Backheuser (1906) suggested compromises between the ideals of hygiene and economic restrictions. For the layout of the vila operária, he favored single-family detached homes, but acknowledged

¹³⁷ The acceptance of collective-housing units was prompted by the process of verticalization of Brazilian cities that began roughly in the 1920s. Gradually, apartment buildings would become the new dwelling pattern in urban areas, but not for the underprivileged. The apartment building appeared as the new residential typology for the middle classes, often associated to the ostentation and luxury of the new bourgeoisie. Analyzing the urban transformation of the city of Rio de Janeiro, Vaz (2002) argued that such a change of outlook on collective buildings can be explained by the fact that the first apartment buildings were built in high-end and modern areas of the city, and they were associated to certain practices pertaining to the middle and high classes. Thus, the “edifícios de apartamentos (...) viriam a sintetizar um novo modo de morar que significava simplesmente ser moderno.” (Vaz 2002: 81).

that those were not always affordable for low-income workers. In this case, semi-detached houses and terrace houses (furnished with spacious backyards) could provide more economical solutions.

The new dwellings required a functional division of the interior space that espoused the principles of hygiene and of the modern habitat. Cacheux (1891: 16) recommended family residential units to comprise two or three living spaces, a kitchen and other spaces where the family could carry out necessary tasks and raise animals; citing Muller, Cacheux also suggested that the working-class dwelling should include a common living room, where the family can get together in the evenings, a kitchen and enough rooms to separate the men and women during the night. Backheuser (1906: 15-16) discussed some of the reputed European models (including those proposed by Cacheux), and concluded that the Comte's proposal— which included for an extended household separate rooms for according to age group (and for the space reserved to the children should also be divided by gender), a meeting and living room, a space to prepare and consume food, and an oratory – was the ideal dwelling type. Nevertheless, he considered that Comte's plan was too expensive and therefore could not be realized in Brazil. Backheuser also stressed the need of adapting foreign models to the local context, “não se podendo indicar aqui tudo que a pratica estrangeira tenha indicado para lá.” (Backheuser 1906: 17).

Building upon Comte's model, Backheuser's proposals took into consideration not only the specificities of the Brazil's physical *milieu*, but also of the social *milieu* and the local uses and habits. In the warm climate, the kitchen should not have an essential role in the architectural program¹³⁸; it should be built in airy areas and, granted the dining and living spaces are large enough, the kitchen could have reduced dimensions. For a two-

¹³⁸ In cold countries, where the kitchen could be used a living room in order to avoid the need of two fires in the house, the kitchen should be large and spacious.

living-space dwelling, the kitchen could also be used as a dining area since “nossas classes populares não se sentem mal comendo na cozinha”.¹³⁹ Verandas or porches should be built as extensions of the living room so that the mothers could supervise their children at play while enjoying mild temperatures. To remove the corrupt air from the bedrooms and ensure proper ventilation, wireframes could be used instead on windows of glass panes. Backyards were an important component of the plan as they had multiple functions, especially since most Brazilian dwellings did not have gardens:

é nelle que se faz a lavagem da roupa de casa e tambem da de fora, pois infelizmente não está generalizados entre nós o uso das lavanderias publicas (...); é nelle que brincam os filhos, porque do contrario irão para a rua; é nelle que há o galinheiro. (Backheuser 1906: 24)

And on the matter of gardens, Backheuser’s opinion was that, if possible, without raising rent prices, every house ought to be furnished with a front garden since it provided a regulated leisure activity that contributed to the moralization of workers:

Devemos nos acostumar e acostumar a população a julgar o proletário como um homem civilizado e não como um ser bruto inacessível ás vantagens sociaes. (...) É considerável a influencia da verdura, da arvora, da flor sobre o conjunto de sentimentos do homem e especialmente da família. Considere-se mais que todas estas vantagens teem a vantagem única de attrahir o operario para o lar em vez de leval-o á taverna, de formar um cidadão válido em vez de um ébrio. (Backheuser 1906: 24)

And, as we examine below, the moralization of workers was precisely one of the main objectives of this new proposed type of living. These model dwellings should contribute to the transformation of workers’ characters by subduing their “natural” wild inclinations and poor hygiene habits and to the regeneration of the urban space.

¹³⁹ “Our popular classes do not mind eating in the kitchen.”

1.2.5 Scope of the vila operária

The reasons underpinning the support for the vilas operárias stemmed from the growing notion that in many different ways the future of the country relied on the solving the issue of housing for the underprivileged. Salubrity, public health and its consequences were, of course, at the heart of the matter, but there were other issues at stake. First, there were the economic reasons; the vila operária was viewed to ensure the provision of stable, reliable and healthy workers required by the expanding commercial and industrial sectors. The “salubrious, joyful and comfortable home” could “elevate their [workers] esthetic sense, invigorate their bodies and souls”, ensuring new and valuable **“units of labor” for the nation’s present and future.**¹⁴⁰

Workers in precarious living conditions were “bad business”, since they contributed to weaken them and reduce their productivity: “(...) dão-se-lhe [to the laborers] albergues nauseabundos para morar, por alugueres elevadíssimos, às vezes por metade do salario, e concorre-se para a destruição do braço do trabalho. Fazemos economia às avessas.”¹⁴¹ For the factories, the advantages seemed clear: “(...) é evidente a vantagem de formar a fabrica, a casa para o operario. **Fixa-o, torna-o disciplinado, assiduo no serviço e consequentemente, bom chefe de família e um homem fator primitivo do progresso na sociedade.**”¹⁴²

Second, the vila operária was seen as a means to counterbalance growing social instability and political tension resulting from the process that Foucault (2000: 143-144) identified as the transformation of a poor, laboring population into a class: the proletariat.

¹⁴⁰ A Provincia. Recife: 2 November 1921, N. 285, p. 3. Emphasis added.

¹⁴¹ Diário de S. Luiz. São Luís, N. 235, 18 October 1924, p. 4.

¹⁴² *Ibid.* Emphasis added.

Despite making up a small minority of the population during the First Republic, the presence of the industrial proletariat was already visible in Brazilian society. In 1889, industrial workers represented around 0.4% of the Brazilian population and by 1919, approximately 1%, which indicates a relative growth of over 100% in the period. In absolute numbers the category moved from 54 thousand to 275 thousand, an increase of over 400% (Foot and Leonardi 1982: 146).

In Brazil, a growing hostility to and a fear of this class emerged particularly after the advent of the Republic as laborers' struggle and aspirations began to materialize in diverse types of organizations and actions. At first, mutual-aid societies emerged from working communities seeking to protect workers by providing a variety of social services, including aid to the sick, literacy programs and death benefits. In the last quarter of the nineteenth century, the labor movement gained strength and the organization of the proletariat began to take the form of political parties and trade unions, and the first strikes took place. Foot and Leonardi's (1982) extensive analysis provide a comprehensive view of the making of the labor movement and its diverse ideological underpinnings and forms during the First Republic.¹⁴³

In the Northeast, Recife was one on the epicenters labor movement. On 20 July 1890, a workers' association called "Congresso Artístico-Operário de Pernambuco" was formed to "fight for the rights and interests of the classes it represents"; on that same year, the workers of the Fábrica de Tecidos Madalena (founded in 1876) went on strike. In January 1909 the biggest labor upheaval ever experienced to that point took place: the "strike of the 1,300 kilometers", which, irradiating from Recife, reached different Northeastern states, including Alagoas, Paraíba and Rio Grande do Norte. It was the first general strike of workers of the Great Western that also brought to a standstill telegraphic

¹⁴³ For more on the labor movement and its regional and ideological features, see: Fausto (1977) and Foot and Leonardi (1982).

communications in the entire region, lasting for twelve days and directly involving 8500 workers.¹⁴⁴ In Ceará, in 1892 there was news of the workers of the Estrada de Ferro de Baturité railroad, and in 1904 boatmen and sailors organized in Fortaleza a strike that ended up in violent confrontations. In the state of Alagoas, in 1902 the newspaper *O Proletário*, “órgão de propaganda das classes trabalhadoras do Estado” appeared. Even in the scarcely industrialized states, the labor movement emerged in the nineteenth century. In Maranhão, workers edited the newspaper *O Operário* since 1892. The *Partido Socialista Brasileiro* (PSB), since its foundation, established many socialist centers in the Northeast: in Pernambuco in 1902 and in Alagoas, Paraíba, Rio Grande do Norte and Ceará in the following year. They published union newspapers, coordinated strikes, and organized 1st of May celebrations. In the 1917-1920 conjuncture, the labor movement gained much ground and experienced the proliferation of labor newspapers and journals, and of strikes and manifestations. In that period, seventeen workers’ strikes were registered in Paraíba; in June 1919, the first general strike was organized in Bahia, followed by the establishment of the *Sociedade União Geral dos Tecelões da Bahia*, and new demonstrations took place in September, bringing to a stop the state’s main textile factories (Companhia Empório Industrial do Norte, Paraguaçu and Plataforma).

Later, especially during the Vargas administration, the atmosphere of instability was reinforced by the arrival of communism in the political scene. Until 1917 communism was not seen by the conservative leaders of Brazil as a real threat, but with the spread of communist ideals coming from the Russian Revolution and the subsequent formation of the *Partido Comunista Brasileiro* (PCB), the situation changed. Founded on 25 March 1922, the party was declared illegal just a couple of months afterwards and would remain so for the sixty years (apart from some brief moments of *de facto* legality). In the beginning of the 1930s, the situation was aggravated by the foundation on 30 March 1935

¹⁴⁴ Pacotilha. São Luís, N. 13, 16 January 1909, p. 1.

of the communist-backed popular front *Aliança Nacional Libertadora* (ANL). Supporting the formation of a popular-national-revolutionary government, this movement succeeded in attracting the enthusiastic support of thousands of Brazilians, counting with a number of members ranging between 70 and 100 thousand (Levine 1980: 122); it became one of the first national political organizations capable of mobilizing masses in its demonstrations and political rallies. The ANL was outlawed on July 11, only four months after its foundation. Leaders of the PCB then decided to promote the overthrow of the Vargas regime by force of arms and it was in two Northeastern cities that the movement – which national historiography labeled the “Intentona Comunista” (Communist Conspiracy) – first erupted. On November 23, 1935, on behalf of the NLA, a revolt broke out in Natal, where the first popular revolutionary government was established, lasting for four days. The news of the victory in Natal triggered the movement in Recife on 24 November, which was quickly subdued. The insurgency spread to Rio de Janeiro in the following days and ultimately led to a state of emergency to be declared throughout the national territory. Thereafter, strong repression struck not only the Communists, but all opponents of the government.¹⁴⁵

The political and social turmoil experienced by Brazil during that period was seen by the ruling elites as a “social evil”, leading society into a “feverish state” due to a “curious movement of ideas” and bringing concern over what tomorrow might bring. If the working class and the labor movement were a new political force that shook the world’s economic and social foundations, in Brazil – a country in the making –, the success on the

¹⁴⁵ A vast literature on the 1935 movement is available, including Nelson Werneck Sodr e’s *A intentona comunista de 1935* (Mercado Aberto, 1986), and John W. F. Dulles’s *Anarchists and communists in Brazil: 1900-1935* (University of Texas Press, 1973) and its sequel *Brazilian communism: 1935-1945* (University of Texas Press, 1983). For more on the 1935 movement in Natal and its articulation in the Northeast region, see: Costa (1991); details on the anticommunist repression of the Vargas’s government in the year preceding the Insurrection are provided by Silva (2000).

new Republican regime seemed to be tied together with the capability of, at the same time, controlling and accommodating them.

On the one hand, in “inept or unpatriotic hands” the labor movement could provoke a “relentless combat” that would harm the country’s social and economic progress. Therefore, the Brazilian laborer, who did not possess “nem socialismo científico do operario alemão e italiano, nem o radicalismo do operario francez e ainda menos a energia paciente do operario inglez” should be guided towards the correct path.¹⁴⁶ On the other hand, as Boris Fausto (1977: 159) argued, this rise of the laboring classes and intense labor unrest during the first decades of the Republic corresponded to a change in the relationships between classes and social groups that prompted the debate about the “social issue” within both the civil society and the State. The relevance assumed by issue can be assessed in Senator Nilo Peçanha, the country’s former President of (1909 - 1910), declaration that it was the “the greatest problem in the contemporary world”. This outlook is also clearly represented in the speech of a Deputy from São Paulo:

É que as condições do trabalho humano se modificaram profundamente da ultima faze do Seculo XIX. No momento prezente o operario intervindo nos paizes livres com o seu voto para a formação dos poderes publicos, adquiriu a consciencia de sua dignidade como homem e como cidadão.

Já um ilustre filozofa da nossa pátria acentuou **a necessidade da grande reforma social**, afirmando que a sorte da Republica Brasileira depende da elevação do carater nacional, consistindo ella essencialmente na elevação do proletariado porque este constitue a quae totalidade da nação.

É elle que forma propriamente o povo; é delle que saem e é para elle que revertem todas as outras classes sociais. No seio das famílias proletárias nace a massa geral dos cidadãos. O exemplo seguido pelo Brazil no encaminhamento da questão social assinalará ao Mundo a senda que convém trilhar para a solução definitiva do **momentoso problema em toda terra**.¹⁴⁷

In the dominant discourses, addressing the “social issue” did not, however, mean a subversion of the existing class structure; the working classes were not to be elevated

¹⁴⁶ A *União*. João Pessoa, N. 576, 14 July 1895, p. 1.

¹⁴⁷ Pacotilha. São Luis, N. 34, 10 February 1911. p. 2.

from their subordinate condition of poor men and women, but rather their distress should be relieved through the intervention of philanthropy and public relief.

The political and social agitation of the working classes combined with the widespread pauperism was acknowledged as a potential danger for the political and social order. The labor movement was equated to a latent catastrophe that would burst if nothing was done to mitigate labor tensions and to relief the sufferings of the underprivileged:

A tempestade não surge todo o dia. O mar não se incapella todo o dia. O trovão não ribomba toda hora. O terremoto quando menos se espera, ele aparece... Assim também é o operário.

(...)

Como e porque se fazem as revoluções? Simplesmente porque em certos momentos, fartos de sofrer injustiça, de serem victimas dos ricos(...), os tímidos, esses taes covardes conhecem (...) que são a grande, a immensa maioria.

Um deles, o mais arrojado e corajoso, atreve-se a suspirar alto. O segundo murmura, um terceiro grita e, depois, todos os cordeiros se transformam em leões... (...)

A marcha para esse hectabombe prossegue mais ligeira do que se pensa, não tarda arrebentar. (...)

A carestia pela vida prossegue vertiginosamente, e os salários... continuam miseravelmente minguados.

Tudo na vida tem limite, a começar pela paciencia huamana.

O governo que desvie um pouco a sua atenção para a miséria dos operários e procure minorar-lhes os sofrimentos (...)¹⁴⁸

(...) a necessidade de se dar uma solução prompta, justa e equitativa á questão social. Comparou esta, na sua phase contemporanea, a um vulcão cujas lavras ardentes podem, de momento, abraçar e destruir. Lembrou a proposito o Vesuvio, devorando Pompéa e Herculanium e ajuntou: **é assim hoje a consciencia das massas trabalhadoras, trabalhadas pela revolta, lava comburente** que pode elevar-se e arrastar na sua vingança a turba afortunada dos opulentos que continuam indiferentes ao desenvolvimento da questão social.¹⁴⁹

¹⁴⁸ Diário de S. Luiz. São Luís, N. 39, 16 February 1923, p.1. Emphasis added.

¹⁴⁹ Pacotilha, São Luís, N. 137, 13 June 1921, p. 1. Emphasis added.

If the “whole civilized world” was shaken by the “social issue”, “auspicious solutions” that could conciliate everyone’s interests and rights had to be found.¹⁵⁰ And an essential part of the solution would be solving the problem of the low-income housing:

Os tectos dos pobres merecem bem os cuidados de toda bôa administração.

A ordem publica, a hygiene, o futuro de nossa raça, a riqueza do paiz, o proprio conforto dos ricos estão a mandar nesses cuidados.¹⁵¹

Urbano Santos, Governor of Maranhão, (21 October 1918 – 25 February 1922), referring to his administrative program, emphasized that in order to deal with the social issue, it was crucial to address the living conditions of the working poor, by simultaneously eliminating substandard dwellings and promoting hygienic vilas operárias:

Dirigindo-se-lhe a uma pergunta acêrca das condições do operário e sôbre se era estranho á questão social, s. exc. respondeu – “Nem o podia ser. Não o é, no momento, nenhum administrador. Estudo o problema com carinho. E, **praticamente vou agir quanto a um ponto de aflige seriamente o proletariado de minha terra. Refiro-me ás habitações.** Em S. Luís, ha uma chaga: a moradia debaixo dos sobrados. Pretendo extingui-la. Isso diz respeito, por um lado, com o problema profilaxia urbana; de outro, com o problema da habitação. **Penso em construir habitações baratas para operários, nos arredores da cidade, proibir terminantemente a moradia debaixo dos sobrados, sanear os “cortiços”, - transformando-os em avenidas e vilas rigorosamente higiênicas.**¹⁵²

Later, particularly under the Vargas regime, when anticommunism was incorporated and materialized as one of the foundation of national policy, the fight against unhygienic dwellings also became a fight against the spread of the ideas of “creed of Moscow”. The mocambo had to disappear because it was an excellent field to cultivate communism, and as such the problem of housing reform was primordial for the “destinies of the nation itself.”¹⁵³ In a period of labor history whose signature was discontentment –

¹⁵⁰ A Província. Recife, N. 285, 2 November 1921, p. 3.

¹⁵¹ Pacotilha. São Luis, N. 242, 25 December 1929, p. 14-15.

¹⁵² Pacotilha. São Luis, N. 27, 2 February 1920, p. 1.

¹⁵³ Diário do Estado de Pernambuco. Recife, N. 184, 22 August 1939, p. 10.

evidenced in increased unionization and strikes – housing for the underprivileged became a priority for reform and the *vila operária* was seen as a barrier to prevent the fruition of labor unrest.

Throughout the period between 1850 and 1940, beliefs and discussions on hygiene, salubrity and the “social issue” went hand-in-hand with the promotion of the *vilas operárias*. And, as previously indicated, industrialists were frontrunners in this process. Even though Correia (2001) supported that the term “*vila operária*” was gradually discredited from the 1930s onwards and made room for new terminologies¹⁵⁴, we have identified that its nature, scope and the term itself were deeply rooted in Brazilian society until at least the 1970s. In 1977, for example, Empresa Salinera e de Navegação Igonhon S.A. (ESNISA) advertised the social benefits its industrial achievements had brought to the region of the River Paranaíba delta which could count on a *vila operária*, school, cooperative, health clinic, maternity hospital, club, etc.¹⁵⁵ The perspective of substandard housing *versus* the *vila operária* is also clear in an article appeared in 1976 on the construction of hydroelectric dams in Brazil. Near the town of Sobradinho, Bahia, where the CHESF was implementing a dam, construction workers – around 9,000 people – and the displaced local populations lived in precarious conditions since there was no “model *vila operária*”. The area had no running water, sewage system or medical clinic, whereas the CHESF took greater care of the areas reserved to the engineers.¹⁵⁶

¹⁵⁴ It was replaced by terms such as “bairro proletário”, “bairro popular” or “vila popular”. Reference to proletarian nature of the settlements was often also eliminated by removing the word “operária” (for example, the Vila Diogo or Vila Araken of the firm Grupo A. D. Siqueira); later, the term “vila” itself would also no longer be used.

¹⁵⁵ Revista Veja. Rio de Janeiro, N. 457, 8 June 1977, p. 31.

¹⁵⁶ Revista Veja. Rio de Janeiro, N. 394, 24 March 1976, p. 38.

CHAPTER 2 – HISTORICAL DEVELOPMENT OF THE COMPANY TOWN IN THE NORTHEAST

The aim of this Chapter is to provide a condensed and broad historical description and analysis of the company town phenomenon in the Northeast region of Brazil. As we have afore discussed, literature on the company towns of the Brazilian Northeast comprises mainly works of monographic nature confined to the study of particular case studies. We therefore sought to address this gap by focusing our attention to the region as a whole and to raise empirical evidence of this business practice in different moments of the industrial history of the Northeast.

Consulting a wide range of sources – namely periodicals, official government reports, photographs, company documents, many academic and non-academic studies of a monographic nature, as well as field surveys –, this research carried out a quantitative and qualitative survey of the company town phenomenon in the Northeast. Our research identified forty-three company towns in the Northeast region.¹⁵⁷ Although this research has greatly succeeded in expanding the number of identified company towns in the Northeast region¹⁵⁸, it does not represent an exhaustive historical inquiry, particularly because the

¹⁵⁷ And also other nine company towns in the states of Bahia (five) and Sergipe (four) that are not part of the area under review in this thesis.

¹⁵⁸ Correia (1998) – the standard work of reference on the subject – had identified twenty-one company towns in the area of study.

sugar and mining sectors were not investigated and also the research was limited to the company towns founded until the first half of the twentieth century.

The study of these cases allowed us to draw qualitative data that was analyzed in order to understand the historical development and to provide a relevant qualitative overview of the phenomenon (presented throughout this chapter). Bearing in mind that company towns are dynamic communities that experienced many transformations over time, we initially look into their historical evolution and then propose a characterization based on a fixed moment: the decade of the 1950, when the vilas operárias reached this maximum development. Our analysis is framed within the historical contexts of the two elements embodied in the company town phenomenon pointed out in the previous chapter: the construction of archetypes of urban poor housing and the industrial development of the Northeast.

We provide below a list of the company towns identified by our research. Despite our best efforts, the portrayal is not a full one. For some company towns we could not find anything more in the sources consulted than a reference to their existence. For such reason, the list provided above included many company-induced housing experiences that are not described in this thesis. They have been included in order to provide a more precise quantitative view on the phenomenon.

Some remarks on the information below. First, it is important to underline that not all company towns were established at the same time as the factories; therefore we have indicated the cases in which we have identified different moments for the foundation of the company town and the factory. Second, we have also indicated the cases when the vila operária takes a name different from the factory. Third, for the firms founded between the end of the nineteenth century and the World War I, the year of reference is 1909 for information on capital, power, value of production and number of workers (Centro Industrial do Brasil 1909), unless stated otherwise. Finally, unless indicated differently, all

the industrial establishments below are cotton textile mill. Details on the features of these establishments are provided throughout this chapter and the following one.

Alagoas

1. Firm: União Mercantil (Fábrica Fernão Velho)

Location: Macéio

Historical overview: Founded in 1857

Vila operária: Vila Goiabeiras; Vila do ABC

2. Firm: Companhia Alagoana de Fiação e Tecidos (Fábrica Cachoeira)

Location: Rio Largo

Capital (in Réis): 2.000:000\$

Power: 700 hp

Production value: 3.981.400m of colored and “morim” fabric

Number of workers: 600

Historical overview: Founded by José Antônio Teixeira Bastos. The corporation founded the cotton spinning and weaving factory Cachoeira on 24 October 24 1888 and production began on 12 October 1890.

3. Firm: Companhia Progresso Alagoano (Fábrica Progresso)

Location: Rio Largo

Capital (in Réis): 1.755:400\$

Power: 250 hp

Production value: 3.980.000m of cotton fabric

Number of workers: 600

Historical overview: Established on 30 September 1892, and inaugurated in November 1893. It was later incorporated by the Companhia Alagoana de Fiação e Tecidos.

4. Firm: Companhia Pilarense de Fiação e Tecidos (Fábrica Pilarense)

Location at foundation: Pilar

Capital (in Réis): 432:487\$

Power: 250 hp

Production value: 513.440m of cotton fabric

Number of workers: 180

Historical overview: Established on 13 March 1892 and inaugurated in October 1893.

5. Firm: Companhia Industrial Penedense

Location at foundation: Penedo

Capital (in Réis): 858:000\$

Power: 250 hp

Production value: 1.560.000m of cotton fabric

Number of workers: 500

Historical overview: Founded in 1895 and works in the spinning section started in August 1898.

6. Firm: Companhia Agro-Fábrica Mercantil (Fábrica da Pedra)*

Location: Delmiro Gouveia

Capital (in Réis): 2.000:000\$

Power: 800 hp (electric)

Number of workers: 500

Historical overview: Cotton thread factory founded in 1914 by Delmiro Gouveia in the hinterland of Alagoas. To power the factory he ordered the construction of Angiquinho, the first hydroelectric plant in the Northeast.

* Information retrieved in: Pearse 1921.

7. Firm: Fábrica Marituba

Location: Piaçabuçu

Historical overview: Founded in the 1940s.

8. Firm: Pompeu & Irmãos

Location: Fortaleza

Capital (in Réis): 600:000\$

Power: 100 hp

Production value: 540.000m of cotton fabric and 30.000kg of thread

Number of workers: 203

Historical overview: Part of the Thomas Pompeu textile group.

9. Firm: Dr. Th. Pompeo de Souza Brazil

Location: Fortaleza

Capital (in Réis): 170:000\$

Power: 70 hp

Production value: 20.000 hammocks

Number of workers: 45

Historical overview: Part of the Thomas Pompeu textile group. The Fábrica Progresso in was established in 1889.

10. Firm: A D Siqueira & Filhos group

Companhia Ceará Industrial

Location: Fortaleza

Capital (in Réis): 400:000\$

Power: 50 hp

Production value: 216.000m of cotton fabric and 60.000kg of thread

Number of workers: 156

Historical overview: Founded in 1884, it was part of the A D Siqueira & Filhos group.

Fábrica Santa Elisa

Location: Fortaleza

Historical overview: Founded in 1904, it was part of the A D Siqueira & Filhos group.

Vila operária: Vila Diego established in 1922.

11. Firm: Companhia de Fiação e Tecidos Ernesto Deocleciano (Ernesto & Ribeiro)

Location: Sobral

Capital (in Réis): 600:000\$

Power: 150 hp

Production value: 960.000m of cotton fabric and 20.000kg of thread

Number of workers: 194

Historical overview: The Fábrica Sobral was founded in 1895.

12. Firm: Companhia Popular Aracatyense

Location: Aracati

Capital (in Réis): 600:000\$

Power: 150 hp

Production value: 1.400.000 of cotton fabric

Number of workers: 310

Historical overview: Founded in 1893, it would later become the Cotonificio Leite Barbosa (Fábrica Santa Thereza).

13. Firm: Fábrica São José

Location: Fortaleza

Historical overview: The factory was founded in 1926 by Pedro Philomenos Ferreira Gomes in the Jacarecanga neighborhood.

14. Firm: Fábrica Baturité

Location: Fortaleza

Historical overview: Founded by in 1927 the Corporation José Pinto do Carmo & Filho Ltda in the Jacarecanga neighborhood.

Vila operária: founded in 1942.

15. Firm: Cotonificio Leite Barbosa (Fábrica Santa Cecília)

Location: Fortaleza

Historical overview: Founded by in 1945.

Vila operária: founded in 1942

16. Firm: Fábrica Maranguape (Gradvohl & Filhos)

Location: Maranguape

Historical overview: Founded in 1924.

17. Firm: A D Siqueira & Filhos

Location: Fortaleza

Comprised the following textile factories: Fábrica Santa Maria (1918), Fábrica São Luís (1928) and Fábrica Santo Antônio (1929).

18. Firm: Fábrica de Cigarros Araken (A D Siqueira & Filhos)

Location: Fortaleza

Vila operária: Vila Araken founded in 1942.

Maranhão**19. Firm: Companhia de Fiação e Tecidos do Rio Anil**

Location: São Luís

Capital (in Réis): 1:996:000\$

Power: 500 hp

Production value: 1.700.000 of cotton fabric

Number of workers: 600

Historical overview: Founded in 1893 near the River Anil.

20. Firm: Companhia de Fiação e Tecidos Maranhense

Location: São Luís

Capital (in Réis): 1:435:000\$

Power: 120 hp

Production value: 1.000.000 of cotton fabric and 125.000kg of thread

Number of workers: 315

Historical overview: Established in 1890 near the River Anil.

21. Firm: Companhia União Caxiense

Location: Caxias

Power: 800 hp

Production value: 1.802.880m of “brin” and “lona” fabrics

Number of workers: 40

Historical overview: Established in 1889. From 1905 it incorporated the Companhia Manufatora Caxiense, which had been founded in 1892.

Paraíba

22. Firm: Companhia de Tecidos Paraibana

Location: Santa Rita

Capital (in Réis): 1.778:000\$

Power: 800 hp

Production value: 2.725.491m of cotton fabric and 110.000kg of thread

Number of workers: 651

Historical overview: Founded in 1892.

23. Firm: Companhia de Tecidos Rio Tinto

Location: Rio Tinto

Number of workers: 2000 at inauguration

Historical overview: It was founded by the Lundgren family in 1917 and inaugurated in 1924.

Pernambuco**24. Firm: Companhia de Tecidos Paulista**

Location: Paulista

Capital (in Réis): 1:200:000\$

Power: 750 hp

Production value: 6.320.000m of cotton

Number of workers: 1300

Historical overview: The Fábrica Paulista was founded in 1891 and came under the control of the Lundgren family in 1904.

25. Firm: Companhia Industrial Pernambucana

Location: Camaragibe

Capital (in Réis): 5:857:700\$

Power: 600 hp

Production value: 5.591.500 of cotton

Number of workers: 604

Historical overview: It was founded in 1891 by a group of wealthy merchants of Recife and was under the management of Carlos Alberto de Menezes. It was inaugurated in 1895. The factory was located near the Rivers Una and Camaragibe.

26. Firm: Companhia Industrial Fiação e Tecidos Goyanna

Location: Goiana

Capital (in Réis): 1.614:000\$

Power: 180 hp

Production value: 2.493.282 of cotton

Number of workers: 250

Historical overview: Founded in 1893 and production started in 1895/

Vila operária: Built during the second half of the 1930s and the 1940s.

27. Firm: Societé Cottonnière Belge-Brésilienne (Fábrica do Catende)*

Location: Morenos

Capital (in Réis): 3.750:000\$

Power: 1480 hp

Production value: 2.493.282 of cotton

Number of workers: 1200

Historical overview: The Societé Cottonnière Belge-Brésilienne was organized on 9 de March 1907 in Antwerp and the factory was founded in 1908.

* Information retrieved in: Pearse 1921.

28. Firm: Braz Silva & Cia.

Location: Recife

Capital (in Réis): 626:000\$

Power: 150 hp

Production value: 800.000m of "brim" fabric and 110.000 of thread

Number of workers: 200

Historical overview: It was established in the district Apipucos in 1895. It is better known as "Cotonifício Othon Bezerra de Mello".

Vila operária: Vila Burity. The construction of the vila operária began under the Othon Bezerra group took over during decades of 1930 and 1940.

29. Firm: Companhia de Fiação e Tecidos de Pernambuco

Location: Recife

Historical overview: The activities of the factory began in early 1875, with the corporate name of Pernambuco Barroca Ltda (later changed to Companhia Fiação e Tecidos de Pernambuco), in the Madalena neighborhood; however, due to need of expanding the manufacturing facilities, the new factory at the Torre neighborhood was built in 1884.

Vila operária: It began building houses by the end of the nineteenth century.

30. Firm: Companhia Têxtil de Aniagem

Location: Recife

Historical overview: The company was established in 1891 in the São José neighborhood. There is evidence it was part of the Lundgren group.

31. Firm: Fiação e Tecelagem de Timbaúba

Location: Timbaúba

Historical overview: It was founded in the late 1910s by Pinto Alves & Cia (important cotton exporters from that state), later acquired by the Sociedade Algodoeira do Nordeste Brasileiro (Sanbra) and finally by the Fiação e Tecelagem Timbaúba. It is located in Pernambuco, close to the state of Paraíba.

32. Firm: Companhia Manufatora de Tecidos do Norte (Fábrica Tacaruna)

Location: Recife

Historical overview: It opened in 1895 it was designed by Delmiro Gouveia to be the first tablet sugar factory in the country. In the early 20th century, it was transformed into a sugar refinery plant belonging to the Usina Beltrão. In 1924, it was acquired in by the Companhia Manufatora de Tecidos do Norte, which turned the installations into a textile factory and thus naming it Fábrica Tacaruna.

33. Firm: Pernambuco Powder Factory

Location: Pontezinha, Cabo

Capital (in Réis): 1:200:000\$

Power: 120 hp and 17 hp (oil)

Production value: 1.400:000\$

Number of workers: 400

Historical overview: Black powder factory founded in 1861 by Herman Lundgren.

34. Firm: Fábrica Peixe

Location: Pesqueira

Capital (in Réis): 250:000\$

Power: 35 hp (kerosene)

Production value: 300:000\$

Number of workers: 150

Historical overview: At first a small domestic factory of sweets, the Peixe Factory grew and began industrial production in 1902.

35. Firm: Tecelagem de Seda e Algodão de Pernambuco

Location: Recife

Historical overview: It was founded in 1926 in the Santo Amaro neighborhood.

36. Firm: Companhia Industrial Pirapama

Location: Escada

Historical overview: It was founded in 1926 by Luiz Dias Lins.

37. Firm: Cotonífico José Rufino

Location: Recife

Historical overview: It was founded in 1926 in the Cabo neighborhood.

38. Firm: Fábrica Iolanda

Location: Recife

Historical overview: Founded in 1937 in the Jequiá neighborhood. The factory produced jute sacks.

39. Firm: Moinho Recife / Grandes Moinhos do Brasil S.A

Location: Recife

Historical overview: Wheat mill founded in 1914 and inaugurated in 1919.

Vila operária: Construction of the vila operária began in 1939.

40. Firm: Lucena, Paes & Cia (Fábrica e Fundação Capunga Lucena S/A.)

Location: Recife

Historical overview: It was established in 1932 at the Capunga neighborhood by Euclides Pereira de Oliveira Lucena and José Mendes dos Santos Paes.

41. Firm: Companhia de Cimento Portland Poty

Location: Paulista

Historical overview: Cement factory founded in 1942; later acquired by the Votorantin Group.

Vila operária: Vila Poty

42. Firm: Fábrica de Cimento João Santos

Location: Itapessoca

Historical overview: Cement factory founded after World War II.

Rio Grande do Norte**43. Firm: Fábrica de Tecidos Jovino Barreto**

Location: Natal

Capital (in Réis): 875:000\$

Power: 150 hp

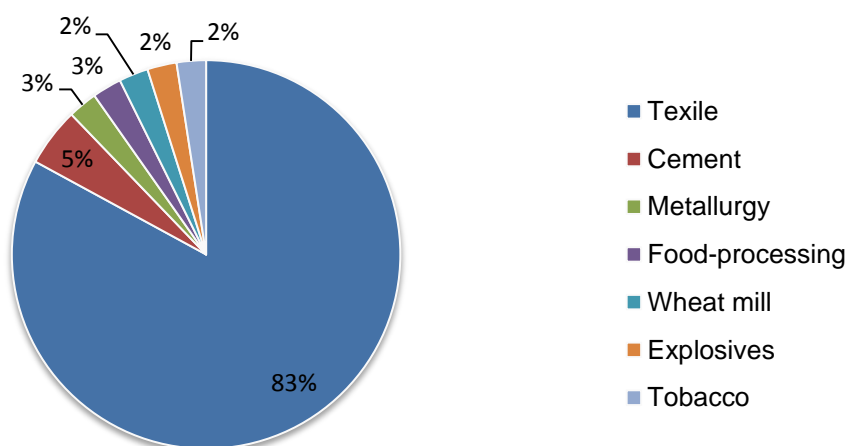
Production value: 1.650.000m of cotton fabric and 90.000kg of thread

Number of workers: 320

Historical overview: The factory was founded in June 1886 and inaugurated on 21 July 1888.

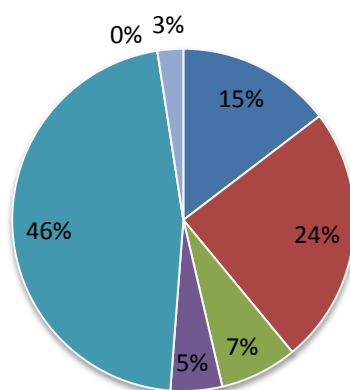
Based on the information presented above, the following charts illustrate some features that stand out among the company towns in the Northeast. First, their overwhelming concentration in the textile sector and second the spatial concentration in the state of Pernambuco.

Company towns distribution according to production sector



Location of company towns in the Northeast

■ AL ■ CE ■ MA ■ PB ■ PE ■ PI ■ RN



After this initial overview, we present below a discussion on the development of the company towns from the first company-built dwellings that appeared in the 1840s to the dismantlement of most of these sites around the 1980s and 1990s. We also provide an in-depth examination of some of its structuring physical elements during the decade of 1950, when they reached their climax, and intangible aspects related to their management relationships.

2.1 From the emergence to the decline

2.1.1 First workers' housing experiences (1840 – 1889)

The roots of the company town system in the Northeast can be found in the early manifestations of business benevolence set in place to respond to the production needs that followed the establishment of the first factories in the 1840s and to the growing concerns over the dangers of the poor classes.

The first requirement of the industrial establishments was to recruit and retain steady workers. While small-scale workshops and factories, generally located in the urban perimeter, could more easily procure workers, larger establishments faced a greater challenge. Mainly concentrated in the metallurgical and cotton textiles sectors, they were generally located in the outskirts of urban agglomerations or in rural settings due to the nature of their operations. For metallurgical concerns, location was of course determined by proximity to the mine site, while for cotton mills the use of water power and steam power fueled with charcoal imposed the establishment of factories closer to water courses and woods. Therefore, these concerns had to conceive strategies to ensure their required regular workforce.

During this early stage of industrial development in Brazil, two main responses to this issue were sketched: as we previously discussed, on the one hand, some early industries – in particular metallurgical ones – resorted to the use of slave labor; on the other hand, textile mills, the main industrial concerns in the Northeast, engaged unemployed urban men and women, and minors from local orphanages and poorhouses. In both cases, some initial forms of company provision of dwellings and services for workers can be found, though not constituting company towns *stricto sensu*.

In the Northeast, no company employing slave labor that offered housing to its workers was identified by our research; however, at the national level, one of most

developed industrial settlements was founded by the Fábrica Real de Ferro de Ipanema close to Sorocaba, state of São Paulo, which functioned intermittently from 1810 to 1895. This ironworks developed as a self-contained unit adapted to its system combining free and slave operatives. It occupied a large area comprising forests, rivers, pastures for animals, farming land for supplying food provisioning requirements, as well as slave quarters, houses for employees, chapel, prison, hospital and several types of workshops (brickworks and, of course, workshops and furnaces connected directly to the production of iron) (Daniele Neto 2006: 107). This settlement was adapted to the particular context of an economic and social system based on slave labor; dwellings and services thus conformed to this reality, as the presence of the slave quarters and the prison attest. Moreover, the management of the settlement was also founded on slavocratic practices. The slave master had a fundamental role organizing and disciplining the workforce, particularly – but not exclusively – the slaves.¹⁵⁹

In turn, textile mills faced the serious problem of fulfilling the “overriding factory requirement of sufficient and regulated labor to tend to the machines” and of managing their workforce under “the shadow of the patriarchal plantation” and poverty (Stein 1957: 56). The absence of an expressive number of free workers – and even fewer skilled ones – combined with the slaveholding traditions required that industrialists sought to ensure a minimum contingent of workers “bounded” to the factories. To address these issues, “for the good hand of the factory and the efficient operation of the mill” (Stein 1957: 57), some mill owners developed a system of social services to benefit their workers. Although this early manifestation of business benevolence was far from structured, it presented some

¹⁵⁹ Daniele Neto’s (2006) analyzes of the regulations applied to the slave masters in the Fábrica Real de Ferro de Ipanema in 1811 indicated that discipline imposed onto the slaves did not only aim at increasing productivity, but also to ward off rebellions or disobedience. Furthermore, the slave masters had to maintain order in the workplace and in the dwellings, to oversee the slaves’ religious practices, to administer the food and clothing of the captives, regularly providing food at the correct time of day, and to supervise their state of hygiene. In order to fulfill their obligations, the slave masters were supposed to live together with the slaves or close to them.

common strategies. First, the offer of lodging to workers who did not or could not have their own house; notably, in this initial phase, they were housed in collective dwellings – dormitories – adjacent to the factories. In addition to the dwellings, the cotton mills often also provided houses for technical personnel, chapel and school.

Some of the mills that implemented this system in Brazil until 1890 include: Todos os Santos (1844); Esther (1849); Fernão Velho (1857); Nossa Senhora do Amparo (1868); Brasil Industrial (1871); Cedro (1872); Petropolitana (1874); Carioba (1875); Biribiri (1876); Gabiroba (1876); Santa Francisca (1876) e Cachoeira (1877). Among these cases, the only comprised in our area of study is Fernão Velho factory.¹⁶⁰

That factory was founded in Fernão Velho, state of Alagoas, which was then part of the municipality of the Santa Luzia do Norte and is nowadays a neighborhood of state capital, Macéio. Despite this proximity, it presented a relative isolation due to the geographical conditions of the area: on one side surrounded by remnants of the Atlantic Forest, and Mandaú lagoon on the other. At the origin of this initiative was José Antônio de Mendonça. A very influential figure during the Imperial period, he served as Provincial Deputy between 1844 and 1851; considered a rich merchant, he received the title of Barão de Jaraguá in 1860. Once the total capital of one hundred and fifty contos de réis was raised among friends, he obtained tax reliefs and acquired the machinery, imported from England and Belgium. The factory was thus established on 22 August 1857 by the textile company União Mercantil with the goal of producing coarse white cotton fabrics for “clothes for slaves, table towels and other purposes”¹⁶¹, as well as sackcloth. The

¹⁶⁰ We also have evidence that the Companhia de Fiação e Tecidos de Pernambuco (1874), located in Recife, provided housing to the orphans employed at the Madalena factory, but no further information was available regarding other services or benefits.

¹⁶¹ Correio Mercantil, e Instructivo, Politico, Universal. Rio de Janeiro, N. 309, November 7, 1867, p. 4.

provisory Board of Directors was formed by José Antônio de Mendonça, Manoel de Vasconcelos e Manoel V. Prado (Costa 1902).

The enterprise faced severe difficulties at the beginning, including the devaluation of the company's shares; one major event hampered the progress of the works and discouraged investors even further: on 5 November 1861, as the first tests on the looms were about to take place, the water dam burst, causing a "real disorder".¹⁶² Overcome the obstacles, the factory was finally inaugurated on 1 September 1863 (Rego 1869: 45; Comissão de Inquérito Industrial 1882: 20-21). During its first years of operations, the number of workers did not present great variation: in 1869, it counted twenty-six workers and eighteen apprentices¹⁶³ and in 1872, twenty-three workers and eleven apprentices¹⁶⁴; later, however, it underwent substantial expansion and by 1884, it counted one hundred and thirty-four people (including one hundred and twelve factory workers), out of which twenty-one were foreigners.¹⁶⁵

After its first year of operation, the União Mercantil invested in the expansion of the industrial site. Apart from installations for new equipment and production sectors, the company also erected a new building, located to the right of the factory, to which it was connected both on the first and the ground floors. This facility had a threefold scope:

¹⁶² Correio Mercantil, e Instructivo, Politico, Universal. Rio de Janeiro, N. 304, November 18, 1861, p. 2.

¹⁶³ Relatório Lido perante a Assembleia Legislativa da Provincia das Alagoas no Acto de sua Instalação em 16 de março de 1869 pelo Presidente da Mesma, o Exm. Snr. Dr. José Bento da Cunha Figueiredo Junior. Macéio: Typographia Commercial de A. J. da Costa. 1869, p. 13.

¹⁶⁴ O Auxiliador da Industria Nacional. Rio de Janeiro, Vol. 40, 1872, p. 24.

¹⁶⁵ Report from the Companhia União Mercantil, from 28 February 1885, to Dr. Antonio Tibúrcio Figueira, President of the Province of Alagoas *apud* Maciel 2007: 47

Maybe this expansion is related to the installation of a new waterwheel that allowed greater output, as we point out below in the text.

establish an infirmary, a canteen and dwellings for workers. As the *Report on the National Exhibition of 1866* stated:

Esta obra destina-se a tres fins uteis: 1º estabelecer uma pequena enfermaria onde possam ser cuidadosamente tratados os operários que adoecerem; 2º crear uma secção de refeitório, para melhor commodidade dos operarios e aprendizes sem família, e 3º estabelecer dormitórios e residencias para os mesmos operarios que por si não tem, ou não podem ter morada propria” (Rego 1869: 46)

Workers thus received lodging and boarding, as well as medical assistance, from the company. Although the exact number of dwellings built at the time is unknown, by 1901 the company disposed of thirty houses and eleven rooms for workers (Costa 1902). The company was also in charge of the orphans’ schooling as part of a “trade off” between their hosting institutions and the factories. The orphans were “handed over” to the factories which would assume their education in exchange for their labor force. For the shelters and poorhouses this arrangement was an opportunity to lessen their burden and they were fast to supply factories with working hands.

This system of social benefits contributed to attract and retain a stable workforce and also to forge new management practices that could replace the old slavocratic ones. The industrial workplace would be molded according to the framework of paternalism, in which the mill owner would oversee not only aspects directly related to workers’ performance of their jobs (such as providing technical training and the supervision of tasks), but also be personally in charge of looking after several aspects of their lives outside factory walls. The term “paternalism” is here employed to indicate the broad concept of an employment relationship anchored “in the reality of employer provision and the expectation of employee deference” (Tone 1997: 1).¹⁶⁶

¹⁶⁶ This is not to say that we assume that all paternalisms are alike; we recognize that paternalism took on multiple forms, and that its temporal and geographical boundaries are specific. Later in this chapter, we look into the specific setting and meanings that bounded the existence of paternalism in the Northeast.

Furthermore, as we have discussed in the previous chapter, the development of this system of business benevolence took into consideration not only the immediate needs of industrial production, but was also intertwined with notions about the poor and concerns regarding their substandard living conditions, and the philanthropic ideals of the ruling classes. Workers – as members of the poor classes – were judged naturally primitive and unmanageable and therefore needed to be looked after and civilized by the company. Quoting Adolphe Trébuchet, member of the Salubrity Council of Paris, one newspaper from the state of Maranhão supported that “La salubrité est ce qui interesse le plus les populations, surtout la classe ouvrière, qui ne pouvant, comme les classes plus aisés, lui donner tous les soins qu’elle reclame, a besoin qu’une autorité tutélaire et protectrice s’en occupe pour elle.”¹⁶⁷

As the expansion of cities and of the urban classes were considered the root of deep social, sanitarian and economic problems, mill owners who furnished special provisions to workers were seen as benevolent civic boosters and stewards of development. Therefore, the provision of benefits to workers ultimately implied the reform the laboring classes and the correction social evils.

A praised example was the social system set in motion by the Todos os Santos mill, in Bahia, which was committed to providing workers with a “moral sense” and an “education”. There, all workers “belonging to poor and honest families of the region” lived in the dwelling provided by the company “gathered as a family”. The mill provided not only a “decent occupation” but also “all resources precious to life”. Workers and their children were provided with classes since “the need for the most rudimentary schooling is evident”. Dance and music classes were held, and the girls also learned to sew and embroider. Workers benefited from a chapel where mass was celebrated on holy days and Sundays;

¹⁶⁷ O Cearense. Fortaleza, N. 41, May 23, 1872, p. 3.

a “good infirmary” with nurses and a doctor “paid by the establishment”; and a musical band formed by the workers. Every year on November 1st, the festive anniversary of the inauguration of the factory would be the occasion to celebrate weddings between workers, who would then move to houses near the factory. In this system, there was no room for insubordination or nonobservance of the rules or the expected patterns of behavior: the misbehaved and “hopeless” young men were sent to the national service, and the girls were fired from the house. As the result of the combination of the benevolence and moralizing efforts of mill owners, there were “no cases of death caused by diseases in the past four years” and “no case of immorality was found among the workers” (Rego 1869; Comissão encarregada da revisão... 1853).

In the Todos os Santos mill discipline in the workplace was judged to be fair; the working girls were said to have “much freedom” in their free time and to be themselves in charge of their “conduct and doings” (Comissão encarregada da revisão... 1853). Nevertheless, disciplinary strategies may have been disregarded or underestimated given the widespread belief that the guidance and the hand of the mill owner were necessary to curb the uncultivated and criminal tendencies of the poor.

In Moura (2003), however, we can find indications that the improvement of workers’ characters was not always the ultimate goal of factory discipline. Among the many mistreatments suffered by the minors taken from poor houses to work at the Madalena factory in Pernambuco (punishment with whips and ferules; food deprivation; sleeping on a brick bed inside an open shed behind the factory), there was also indication that the Companhia de Fiação e Tecidos de Pernambuco had failed to provide them with schooling and guide them in their religious duties. That comes to show that, under the shadow of the *senzala*, harsh factory discipline was regarded as a means to induce high output.

Grounded on severe paternalistic practices and notions about the working poor, these early manifestations of company provisions to workers in textile mills constituted the typical elements of the prevailing work relations in the industrial sector and laid the foundations of the subsequent company town system in the Northeast.

2.1.2 The development of company towns of traditional industries (1890 – 1930)

The company town phenomenon in the Northeast was triggered in the last decade of the nineteenth century. Brazil entered that decade much different than it was before; two major changes would reshape the course of its history: the Abolition of slavery on 13 May 1888 and the Proclamation of the Republic on 15 November 1889. Even though the main characteristic of the economic structure essentially remained unchanged – that is, exporting agricultural sector was still the leading sector –, the new political regime brought a fever of business initiatives. As Prado Jr. (1981) pointed out, the end of the Empire's conservatism paved way for a more conscious support to industrial production granted through higher customs tariffs. As we have seen in Chapter 1, by the turn of the century, Brazilian industry had begun to occupy an important place in the national economy and could already satisfy a relevant part of the domestic demand of basic nondurable goods.

Stein (1957) defined the period here under review as the “golden age” of Brazilian textile industry: “By 1892 the Brazilian cotton manufacture, now well established, ended its initial period of growth and entered upon more than three decades of development which the great depression and the Vargas revolution of 1930 closed.” (Stein 1957: 98). Cotton textile mills remained the leading industrial sector in the Northeast in terms of invested

capital and number of laborers¹⁶⁸ and the scale of operations and investments would experience a considerable growth. Mills now employed on average: 462 workers in Pernambuco, 289 in Maranhão, 416 in Alagoas, 160 in Ceará, 561 in Paraíba, 289 in Piauí and 320 in Rio Grande do Norte (calculated from data provided in Centro Industrial do Brasil 1909). Increased industrial operations brought new challenges for entrepreneurs, particularly ensuring the necessary infrastructure and work force for the operation of manufacturing facilities.

The structure of Northeastern cities was not complex enough to fulfill all the needs of industrial production. The unequipped urban structure did not provide the minimum infrastructure requirements of the emerging large-scale industry as energy, water, sewage and transport networks were precarious or non-existent. Therefore, private capitals had to bear the installation and provision of these services; factories themselves had to organize energy supply, to have a metallurgical sector to ensure the repair and maintenance of machinery, and a construction sector (often including brickworks and carpentry), as well as carry out many other support activities. This structure did not go unnoticed by Arno Pearse during his visits to textiles mills throughout Brazil¹⁶⁹:

The great difference between a Lancashire and a Brazilian cotton mill is that in the latter not only spinning and weaving are carried on, but that there are also, in almost every case, departments for doubling, dyeing, finishing, bleaching and printing (...) Every mill in Brazil is bound to have a mechanic's, a carpenter's and a joiner's shop of larger dimensions than is the case in Europe. In three mills visited by us there were iron foundries (...) (Pearse 1921: 29)

¹⁶⁸ One regional exception was the state of Rio Grande do Norte, where the salt industry whose production corresponded to almost twice of the cotton textiles (Centro Industrial do Brasil 1909: 272-273).

¹⁶⁹ Pearse was the General Secretary of the International Federation of Master Cotton Spinners' and Manufactures' Associations and he took part of the International Cotton Mission, which survey the cotton economy in the states of São Paulo, Minas Gerais, Bahia, Alagoas, Sergipe, Pernambuco, Paraíba and Rio Grande do Norte in the year of 1921.

Cities also did not provide the stable work force required for guaranteeing a production process without any interruptions and therefore entrepreneurs had to find means to attract and retain workers – now at even greater numbers. In 1893, an inspection carried out by the Board of Directors at the Companhia União Caxiense clearly indicated difficulties faced to ensure a regular number of operatives:

Notou o Conselho Fiscal que em algumas secções ha falta de pessoal: na de fiação porem, pareceu-lhe demasiado o pessoal a ella destinado, convencendo-se entretanto em vista da explicação que lhe foi logo dado pelo Director gerente e o chefe dessa secção de que esse pessoal, que parece ser demasiado, ao contrario dias há que é insuficiente para o trabalho, não só devido à falta de assiduidade, senão tambem ao suprimento de pessoal que faz esta secção a muitas outras pelas faltas que tambem nelas se dão.¹⁷⁰

As further discussed below, the vilas operárias were thus a fundamental strategy employed to address this problem and to retain and adapt a heterogeneous mass of poor workers whose unfamiliarity with the methods of industrial work resulted in absenteeism, disrespect for schedules and lack of adaptation to the rhythms of the factory (Correia 1998: 170).

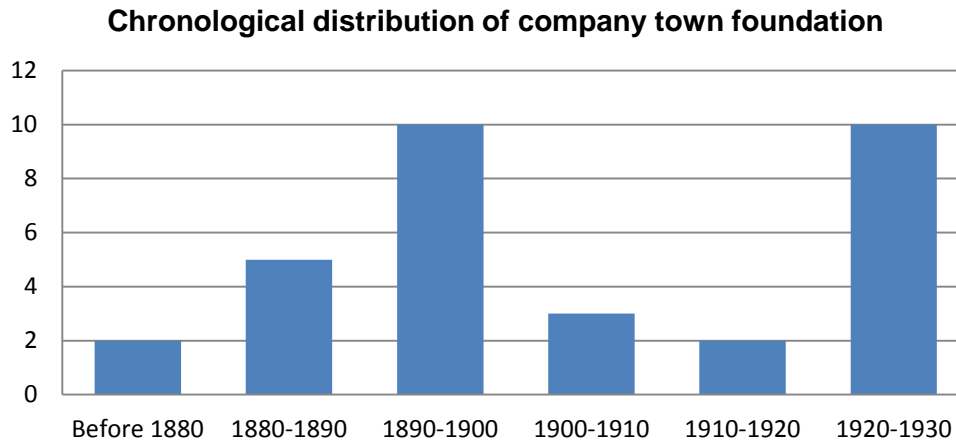
In agreement with Piquet (1998: 14), we support that this unpreparedness of urban *milieux* led companies to contain specialized sectors such maintenance and repairs, power generation and even the provision of housing to workers. However, we consider that the persecution of the supposedly insalubrious homes of the lower classes and the life style associated with them, and the generalized support for the promotion of standard hygienic dwellings also played an important role in firms' decisions to provide workers with housing. As the movement pro-hygienic housing gathered momentum under the Republican regime, the prevailing perspective dictated that insalubrious homes harmed the laboring classes' physical, mental and moral health and consequently also damaged the country's economic and social development by causing lower productivity, labor unrest

¹⁷⁰ Gazeta Caxiense. Caxias, N. 64, October 3, 1893, p. 1.

and health hazards. As such, many entrepreneurs promoted company-induced housing and settlements firmly believing that their actions would regenerate the urban space and prompt the creation of a new type of worker: hard-working, clean, educated, honorable; in short, by founding vilas operárias, symbols of progress and social peace, they were paving the way to the country's civilization.

In tandem, practical needs of industrial production and beliefs about standard and substandard working-class housing contributed to give birth to the company-induced vilas operárias, that is, the company towns. Unlike in the previous company provisions consisting of provisional and unstructured initiatives, companies would now begin to develop complete communities.

A significant number of companies founded in this period built vilas operárias for their workers. Two periods represent the peak of investment in housing provision, as we can see in the chart below: the industrial spurt of first years of the Republic and the decade of the 1920s. As we have seen, for the former, conditions for development had been furthered under the new regime by the abolition of slavery, the performance of the coffee export economy, and a novel governmental approach more sympathetic to industry. The result was a significant growth in import-competing cotton textiles. The second phase of expansion was sparked by the profitable years during World War I, when domestic cotton manufacture had poured its cotton goods into the market created by importation difficulties. In the aftermath of the war, particularly between 1921 and 1927, industry mushroomed as established mills invested to expand productive capacity and enthusiastic entrepreneurs founded new ones (Stein 1957: 111).



In regards to the Northeastern company towns, the period comprised between 1890 and 1930 marks the transition between embryonic forms of social support for workers and the consolidation of a plurality of social systems in subsequent stages. Firms expanded their investments to provide special benefits for their workers, delineating the first company towns of the Northeast. Those that had begun construction of housing in the previous years handsomely increased the number of company-induced houses, while others launched construction programs. By the 1920s, they were flourishing reality in the Northeast to the extent that Pearse, who visited cotton mills throughout the region, described that

Every mill of importance in Brazil undertakes a good deal of welfare work; (...) There is a club, school, football field, tennis ground, etc., attached to almost every mill. A first aid room is to be found and in many establishments it is the custom for a qualified doctor to be in attendance at the mill during one hour each day. Workmen's dwellings are provided at a low cost (Pearse 1921: 42).

During this period, vilas operárias asserted themselves as important expressions of the industrial age.

One of its key defining features was the break with the collective dwelling tradition and the emergence of a new standard based on single-family housing. As discussed in Chapter 1, the Brazilian hygienist thinking developed an aversion for collective dwellings,

which were considered to be cradles of insalubrity and promiscuity. “Surfing the wave” of the sanitarian discourse, entrepreneurs abandoned the boarding house system and embraced new constructive typologies designed for single-family occupancy.

It was the beginning of the process identified in the previous chapter as the making of the modern habitat. Unlike the earlier boarding houses, the new dwellings were detached from the factory premises, thus fixing the residence-work separation and the one-dimensional nature of residential housing. The new company-built houses followed a functional division of spaces that prevented the clustering of individuals and promiscuity while also securing the prescribed hygiene standards. One wide-spread exception to the rule of single-family dwellings was determined by the recommendation of restraining the occupation of living space to close family members, and particularly avoiding the cohabitation of single men and. Consequently mills would often establish collective residences to house single men in order to cater to this restriction.

This change in housing pattern also reveals another important direction in the company town phenomenon in the Northeast: a shift from the recruitment of orphans or single individuals to a strategy based on family recruitment. Each household was expected to provide multiple workers to the mill and those families that could provide more workers over a longer projected future were more highly valued. Alvim (1998) has shown how this mode of procuring workers was advantageous to the factory. First, the integrated cotton mills (which also included a wide-range of non-industrial support activities) could utilize the labor force of all members of the family. Women generally dominated spinning room and also worked as weavers; men worked as weavers, loom fixers, carders, supervisors, and in the many mill workshops (as masons, carpenters, blacksmiths, etc.); and boys were usually employed as doffers or sweepers. Second, the joint-proletarianization of the whole family contributed to reduce turnover force by retaining workers who – in times of greater competition between mills for working hands – might

choose to go elsewhere.¹⁷¹ If on the one hand, from an employer perspective, a quit meant the loss of multiple workers, from a from a labor perspective, it was difficult for individual workers to quit unless the whole family quit, and such a dramatic quit invariably meant moving from the vila operária; such a move was made only by those who could get a better deal elsewhere or those forced out. Last, family recruitment also allowed employers to pay lower wages to each individual. As Alvim (1998) and Lopes (1988) argued, the extremely low value of adult workers' wages was attenuated in its confrontation with the joint-family wages, i.e. the sum of all the individual salaries that operated as unit. "In this way, mills attracted a core of mature workers at low cost along with younger, even cheaper, laborers who could perform simple tasks and move in and out of the mills in response to market fluctuations" (Hall et al. 1987: 49). Such perspective can be identified in the ads to recruit workers placed in the *Jornal de Alagoas* by the Companhia Agro-Fabril Mercantil (Iona & Cia.) from 24 April 1914 stating that the company was hiring laborers specialized in the production processes of cotton spinning including children to carry out "delicate activities" (Sant'ana 1996: 28).

The provision of housing operated as a key element in the attraction and sedentarization of this labor force, especially given the hardships of life in the Northeast and the housing shortage in urban areas. The same advertisement by the Companhia Agro-Fabril Mercantil is an indication of how companies used housing and the company town as a strategy to recruit workers: "na Pedra o clima [era] saudável e nela o ar renovado de modo a não prejudicar a saúde do operário" and the company supplied workers with "casa limpa e higiênica, água e luz elétrica sendo seus ordenados tão ou mais compensadores do que atualmente pagam quaisquer outras fábricas congêneres" (Sant'ana 1996: 28). Alvim's study of the recruitment processes in the Paulista company

¹⁷¹ For instance, when the mill in Moreno was inaugurated by the Société Cotonnière Belge-Brésilienne it attracted skilled workers (weavers, spinners, carders, mechanics, masons, electricians, and so on) from the Camaragibe and Paulista mills (Cunha n.d.)

town showed how agents hired by the company would travel around the Northeast trying to engage families by describing the prosperous life that they would lead in the company town, to the point of promising “fountains of milk and mountains of couscous” (Alvim 1998: 59)

Although the paternalist tradition previously introduced still served as an important point of reference, firms now introduced extensive social programs, which were linked to a broader justificatory ideology – a “discourse of benevolence” that directly addressed concerns about the living conditions of the underprivileged and their negative consequences. Paired together with the offer of hygienic housing and public areas, company benefits had two complementary purposes: they contributed to cement paternalistic labor management relations; and it was believed they would foster an improvement in workers’ characters.¹⁷²

Concerned with imposing a strong discipline on the workforce and addressing the “social issue”, those kinds of initiatives were generally concentrated in three categories. First, there was education. Education was seen as the best way of “helping workers to help themselves” and the path to personal improvement. But schools also served the purpose of forming students (laborers who were employed by the company or children who would potentially be employed) within the company’s ideological frame of reference and instilling into them a set of beliefs and values; furthermore, it also prepared them to become good factory workers by fostering habits and attitudes of discipline, regularity and subservience. Second, the benefits related to the workers’ well-being: hospitals, pharmacies, provision of medication and sick pay. Even

¹⁷² The prevailing view on the character of national workers was so negative that the Companhia Industrial Pernambuco set in its Foundation Statutes the aim of importing European labor in order to improve the “quality” of the former: “Introduzir em suas fábricas operarios estrangeiros, escrupulosamente escolhidos na Europa, com todas as condições de aptidão e moralidade, estabelecendo-os simultaneamente com os nacionais, para que o exemplo e systema d’aquelles aproveite e aperfeçoe as qualidades destes.” (A Província. Recife, January 30, 1981, N. 24, p. 8)

though these services clearly improved quality of life and were surrounded by benevolent discourses, they were also addressed employer's concern with the workers' productivity; healthy workers directly translated into less absenteeism and improved output. Finally, there were "healthy" leisure activities. Correia (1998: 135) highlighted how the company town rejected idleness, considered a road to vice and moral corruption, and unrestrained amusements that corroded workers' energies and budget. To fill up workers' free time, it promoted forms of "innocent distractions". Informal football games, a favorite pastime, were reorganized into mill teams. Industrialists hope this structured leisure time would serve as a lesson in discipline and obedience to rules and transfer the workers' loyalty from the teams to the mill. Programs aimed at women, such as sewing and embroidery courses, developed manual skills and helped to promote a new model of femininity: the devoted wife and mother.¹⁷³

Those benefits in form of housing and services did not go unnoticed by those who visited or wrote about the great industrial concerns of the Northeast, generally shedding a very positive light on them. Of Paulista, Elliot wrote:

The factory employs three thousand five hundred people, of whom seventy percent are women and children; (...) the majority of the workmen's dwellings are built and owned by the company, and are rented out cheaply, (...) The company maintains a school, a hospital, and a dispensary, free, for the villagers (Elliot 1921: 232).

The publication *Impressões do Brasil no Século XX*, edited in England in 1913, put a spotlight on the company towns, commended the industrialists' initiatives and always highlighted the favorable sanitary conditions of the company housing and the special benefits provided to workers (Lloyd 1913: 387-430). For example, the vila operária of the Companhia Industrial Pernambucana (CIPER):

¹⁷³ For more on the "hygienization of social roles" and the valorization of women's domestic and maternal roles, see Rago 1985: 61-116.

A vila operária de Camaragibe fica em ótimo local e compreende 155 casas de tipos diversos, higiênicas e de sólida construção, cujo valor total se eleva a Rs. 494:000\$000. A vila operária compreende também um armazém-cooperativa, padaria, escolas, consultório médico e um círculo católico. Os operários desta companhia, em número de 731, organizaram entre si a Corporação Operária de Camaragibe, com fins religiosos, beneficentes e sociais.

And the vila of the Societé Cotonnière Belge-Brésilienne was praised for replacing the old wood shacks with decent housing and improving living conditions:

Graças à iniciativa tomada pela companhia, há hoje uma grande e laboriosa colônia operária em Morenos, onde antes existiam apenas algumas cabanas de madeira. A companhia construiu para os seus operários residências próprias e melhorou, na medida do possível, as condições locais.

A great variation in the scale of construction programs can be found. Correia (2006: 39) proposed a simple threefold classification of company town settlements according to their size and program: there were *small* settlements comprising production facilities and a small number of houses, or production facilities and a few houses to the boss and workers; other could be classified as *medium-sized*, bringing together production facilities and its annexes (brickworks, stables, etc.), some houses, collective accommodation (e.g. dormitories for single workers) and some kind of collective equipment (church, school and/or cafeteria); finally there were also *large* settlements with more complex programs. Even though this attempt to categorize company towns according to their extension may have pedagogical value, we consider that in the absence of chronological references it becomes a useless exercise and falls into error by approaching those settlements as static physical objects instead of the product of a dynamic process.¹⁷⁴ The extension of the vila operárias changed over time; the construction of most of the sites investigated spanned decades, expanding when mills needed to accommodate more workers or embarked on hygienist missions.

¹⁷⁴ Moreover, such classification is subjective if the categories are not numerically defined.

During the period comprised between 1890 and 1930, vilas operárias in near urban agglomerations carried out a reduced construction program, generally only limited to providing houses to employees in positions of leadership or essential for the continuity of production. For example, the Vila São José only counted six houses for foremen in 1928. But it is in later years that these firms will expand their construction programs. The vilas operárias with greater offer of housing and services were those located in rural areas and particularly removed from sources of labor. In Maranhão, the vila operária of the Companhia de Fiação e Tecidos do Rio Anil housed two hundred workers in 1889.¹⁷⁵ In 1910, the Vila Nathan of the Societé Cotonnière Belge-Brésilienne had four hundred and fifty houses and fifty-eight under construction. The Companhia de Tecidos Paulistas (CTP), whose workers were initially housed in mocambos, began a continuous building program in the 1910s, after the Lundgren family took over control. In 1919, it built two hundred houses and had another hundred being constructed.¹⁷⁶ The Companhia Industrial de Pernambuco (CIPER) in 1906 had one hundred and fifty-five.¹⁷⁷ The Companhia de Tecidos Rio Tinto (CTRT) counted nine hundred and sixty houses already occupied at the time of its inauguration and three hundred and sixty more were already under construction.¹⁷⁸ Apart from a significant number of dwellings – over one hundred –, those company towns also built the entire necessary infrastructure and ran social services and facilities. It was common to find schools, shops, markets, pharmacies, bakeries, medical clinics, religious associations, churches, clubs, sports fields, as well as complementary

¹⁷⁵ Diário do Maranhão. São Luís, N. 7847, 26 October 1889, p. 1.

¹⁷⁶ A Provincia. Recife, N. 87, 30 March 1919, p. 4. This program followed an agreement signed with the Municipality of Olinda which resulted in the Municipal Law N. 313 of 4 August 1913 granted the CTP tax exemptions on the houses of the vila operária.

¹⁷⁷ A Provincia. Recife, N. 129, 8 June 1906, p. 1.

¹⁷⁸ A União. João Pessoa, N.284, 30 December 1924, p. 2-3.

infrastructure such as port, brickwork, foundry, railroad, energy networks, water and sewage system, etc.

The period comprised between 1890 and 1930 thus saw the rise of industrial settlements that assumed nearly total control over the implementation of the required infrastructure and the management of its workforce; these company towns with high level of autonomy where industrialists held the roles of law-makers, police force and provided social services have often been defined as a parallel *de facto* governments (Lopes 1988) which took over roles traditionally assigned to public instances. Brazilian scholarship has had much to say in regards to industrialists' inflated autonomy and the autarchic nature of the company towns (Rago 1985; Blay 1985) and some studies have examined the interactions between government and private powers in the company towns (Lopes 1988; Correia 2003). However, emphasis has constantly been placed on industrialists' desire for autonomy in the management of the settlement for the purpose of control over the workforce and ultimately economic profit, while the government's "self-effacing" position towards the company towns has received comparatively little attention in this debate. We support that it is necessary to read the constitution of this settlement typology in close relation to the process of State-building in Brazil and specifically in the Northeast. Contributions from economic and political history can be useful in order to point to complementary explanations.

As (Porteous 1970: 129) noted, company towns with strong overtones of social control is often exercised by employers who provide workers with facilities which local government is unable or unwilling to supply. That was precisely the Brazilian case in the initial decades of the twentieth century. After the uncertainties and turmoil that followed the proclamation of the new regime, the foundations of the political stability of the Republic were laid in 1898 through the political pact known as "Policy of Governors" or "Policy of the States". Aimed at neutralizing the opposition and domesticating intra-

oligarchic political conflict, through the policy of the governors the federal government began to support the dominant groups in the states, while these, in turn, supported the policy of the president in Congress voting with the government. This type of agreement was repeated among governors and local leaders (Ferreira and Pinto 2006: 4). These decentralizing policies granted a high degree of autonomy to local leaders, among them the founders of company towns.

Furthermore, the autonomy and self-sufficiency of those company towns was broadened by the deficient or inexistent comprehensive public system for provision of various social services. On the one hand, financial constraints limited resources for investment in such services. Fausto (1995: 260) described the financial situation of the early years of the Republic as “dramatic”. The republican government had inherited from the Monarchy an enormous foreign debt which was aggravated by the growth of public debt. Growing expenditure was frequently financed by foreign credit and the debt mushroomed around 30% between 1890 and 1897. Falling coffee prices reduced export revenues and the inflow of foreign currency. And to complete the picture, due to the political instability had the government had to finance costly military operations.¹⁷⁹ On the

¹⁷⁹ The initial decades of the Republic were marked by a great number of uprisings throughout the country; despite their diverse nature, they all contributed to the instability of the regime and posed a threat to the central power. The product of the intra-oligarchic disputes, the Federalist Revolution opposed to the government of Floriano Peixoto developed between rival political factions in Rio Grande do Sul. The movement broke out in 1893 and the conflicts came to an end in 1895 with the victory of the government.

Other disputes revealed the lack of consensus among the Military – the group that had overthrown the Monarchy. The control of the military during the early years of the Republic meant no full convergence of this class around the same interests. The Revolt of the Armada was a movement sparked within the Army against the government Floriano Peixoto. On 13 September 1893, the ships under the control of rebels opened fire on the city of Rio de Janeiro. Until March of the following year the government responded using land fortresses and troops. The Revolt of the Forte de Copacabana, the first of a series *tenentista* revolts, erupted on July 5, 1922 and was led by 18 lieutenants, who gathering a troop of 300 men, decided to act against the government and prevent the inauguration of President Artur Bernades.

There were also uprisings related to poor social conditions, such as the Revolta da Chibata (Revolt of the Whip) in Bahia in 1910 led by sailors and then later joined by the Marines allocated in Ilha

other hand, anchored on liberal paradigms, the government privileged private production and refused direct intervention in housing provision for the working classes. Therefore, until the 1920s, public initiatives were limited to repressing severe unsanitary conditions – via legal and police action – and granting tax exemptions to private construction companies (Bonduki 1994: 712).¹⁸⁰ In this climate of instability and deteriorating public finances, the inability or unwillingness of the Federal, state or local governments to provide the necessary services to its population, industrialists and their company towns filled institutional voids. Hence, public powers took the “collaboration” with private entrepreneurs as an opportunity to “control”, “civilize” and “develop” the country without having to make huge financial investments.

This would often involve the offer of fiscal benefits and concessions to the establishment and improvement of industrial facilities and the construction of houses. In fact, this often amounted to a system of reciprocal exchange of favors. In Rio Tinto, the

das Cobras. Some of these movements were of a messianic nature: Guerra do Contestado that occurred between the states of Paraná and Santa Catarina and resulted in sending military expeditions between 1912 and 1916; Guerra de Canudos (1893-1897) in the hinterlands of Bahia annihilated by an army of 7,000 men.

¹⁸⁰ Among the earliest examples of governmental initiatives regarding housing for the underprivileged, we find in Recife: the Vila do Arraial, built in the beginning of the 1920; the establishment of the Fundação da Casa Operária in 1924 with the goal of building hygienic houses for the poor¹⁸⁰; the Villa Operária Paz e Trabalho, conceived by Dr. Amaury de Medeiros, director of the Department of Health and Assistance of the state of Pernambuco. The precocity of the involvement of the state of Pernambuco is probably explained by fervent rejection of the mocambo that began stirring up around this time.¹⁸⁰ In São Luís, Maranhão, the state government also financed the construction of the city’s first vila operária in 1925, but only after incentives to private initiative had not yielded results:

Ahi está a iniciativa official que vem suppir a falta de identico movimento por parte de um capitalismo avesso a negocios de ordem do de construções para operarios, e por outro lado, prompto sempre a aquisição de portas-janelas abafadas e sórdidas ou a exploração de colmeias que são os sobrados imundos (...) (Diário de S. Luiz. São Luís, N. 377, April 1, 1925, p. 1).

Nevertheless, these were sui generis projects and public measures were overwhelmingly directed to stimulate the private sector through fiscal concessions.

CTP obtained a twenty-five year tax exemption from the government of Paraíba granted the company took charge of security, health, and education services (Fernandes 1971: 35). In particular, public officials were also interested in addressing the “social issue” and the dangerous of the insalubrious homes through the promotion of private vilas operárias.

The process of State-building – the creation of new governmental institutions and the strengthening of existing ones – was therefore closely intertwined with the vicissitudes of the company towns. In the absence of stronger and more direct government presence, the private-run vilas operárias supplied the population with a range of services and, in more extreme cases, assumed nearly complete control over a territory and its residences.

2.1.3 The golden age of Company towns (1930 - 1950)

During the decades of 1930, 1940 and 1950, the number of company-induced housing in the Northeast mushroomed as new settlements were built and the existent ones were expanded. The main immediate factor behind this growth was the industrial boom during the years of the World War II. As discussed in Chapter 1, the world conflict reduced the supply of imported manufactured articles, forcing the replacement of these imports and encouraging the development of domestic industries; plus, it opened up new foreign markets to Brazilian manufactures. As we have seen, cotton mills embarked upon their most prosperous years between 1940 and 1945:

Since Brazil ranked second among the nations of the western hemisphere in the size of its textile industry, and since the United States was involved in its own war effort, Brazilian manufactures in the same period found ready purchasers in the other underdeveloped nations of the Americas as well, selling to Uruguay, Venezuela, Paraguay, and Chile, and to the colossus of the north, the United States, a total of 327,877,970 meters. (Stein 1957: 165)

And they did so with the plant, equipment and managerial techniques of the previous decade largely unchanged:

To meet constantly growing demands overseas, manufacturers continued the practices widely adopted during the thirties: they crowded into their labor force inexperienced rural workers, and ran their mills, wherever possible, twenty-four hours daily. (Stein 1957: 165)

The number of workers then skyrocketed in most of the mills, especially in the Northeast where the cost of labor was much lower. For instance, in Ceará exports backed for the expansion of some mills, such as the Fábrica São José that reached at the time 1,050 laborers; the Cotonificio Leite Barbosa passed from three hundred employees in 1930 to eight hundred in 1945 (Aragão 2002). By the end of the war, the Companhia de Tecidos Paulista (counting the factories Rio Tinto and Paulista) employed between ten and fifteen thousand factory workers and from five to eight thousand non-factory employees. The consequence was then the expansion of the company housing offer to incorporate newcomers.

We provide some figures to illustrate this process. The Companhia de Tecidos Paulista, due to the influx of workers and the wish to replace remaining mocambos, intensified its construction program between the decades of 1930 and 1960. In 1939, there were 2,980 houses furnished with water supply, sewage system and electricity. Lopes (1988: 158-159) registered the number of houses built each year: three hundred and sixteen houses in 1945; three hundred and eighty-three in 1946; 380 in 1947; seventy-eight in 1948; one hundred in 1950. In this gradual expansion of the company town, according to a publicity leaflet of the company, Paulista reached more than six thousand houses “built in bricks all belonging to the factory”. The Companhia Industrial Pernambucana moved from the one hundred and forty seven houses in 1908 to nearly four hundred in the 1950s. The Companhia de Tecidos Rio Tinto grew from nine hundred and sixty houses at the time of inauguration to two thousand houses by 1950. The

Cotonifício Othon Bezerra de Mello raised the vila operária during decades of 1930 and 1940. In 1941, there were three hundred and twenty-one company-built houses and in 1951 the number reached six hundred and sixty-six. The Fábrica São José built eighty dwellings for laborers in 1933 and other one hundred and sixty-seven in 1945. The Fábrica Baturité first founded a small vila operária (Vila José Pinto do Carmo) in 1934 with twenty-seven houses and later in 1942 a second vila operária, the Vila Baturité, was founded with fifty houses. The Companhia Industrial Fiação e Tecidos Goyanna began the construction of its vila operária in the mid-1930s and reached a number of 472 houses. The vila operária of the Tecelagem de Seda e Algodão de Pernambuco – named Vila Pombal – was built during the decades of 1930 and 1940. In 1937 there were eight finished houses and fifty-six under construction; in 1940, the number went up to eighty-nine houses for labors and seven for higher-ranking employees; it finally reached three hundred and fifty-nine houses in 1955. Finally, the Fábrica Iolanda initially built twenty-four houses in 1941 and by 1951, it counted one hundred and twenty and later it reached one hundred and forty-five.

The provision of company social services and investment in leisure activities was also expanded. Again, we provide non-exhaustive examples to show the wide-range of services offered in company towns. The Companhia Alagoana de Fiação e Tecidos inaugurated two more schools, a theater, a cinema, a leisure club, a refectory, and a day care center. The Companhia de Tecidos Rio Tinto founded new recreation clubs (which were segregation according to one's position in the factory's hierarchy). In 1944 it inaugurated the Santa Rita de Cássia church and two years later the movie-theater "Orion" that could seat 1,600 people. The Companhia de Tecidos Paulista built between 1946 and 1950 the Santa Isabela church. The União Mercantil (then under the Othon de Mello administration) built in a movie theater, and recreational center (inaugurated in

1948) for workers. In Recife, the Cotonifício Othon Bezerra de Mello provided workers with a school, church, club, and cinema.

In the decades of 1940 and 1950, paternalism began to appear in a new guise associated with “welfare work”. Existing traditions and a range of social services were institutionalized and professionalized. Industrialists organized specific departments to handle what they described “social assistance” or “social services”. This new approach appropriated scientific and sanitarian discourse to guide the management of the workforce.

The period comprised between the 1930s and 1950s thus constituted the height of the development of Northeastern company towns. In order to assess the extent of the phenomenon, a description of some company towns of the Northeast during this period is presented below. We considered of great relevance to provide this panorama since there have been only few and incomplete attempts to collect and organize information of those settlements. Unfortunately, as mentioned above, it was not always possible to locate detailed information on all the settlements, but even this partial picture allows us to have a better understanding of their complexity.

1. *Companhia de Tecidos Paulista*: Paulista reached more than 6,000 houses “built in bricks all belonging to the factory”. In 1939, the CTP ran fourteen schools. Apart from the textile factories and houses, Paulista also comprised a private port and railway, water and electricity networks, clinic, hospital, church (built between 1946 and 1950), food market, park, cinema, theater, clubs and sports fields.
2. *Companhia Industrial Pernambucana (Fábrica de Camaragibe)*: A company report in 1908 indicated that the vila operária comprised a total of one hundred and forty seven houses and by the 1950s it reached an approximate total of four hundred; it also included collective buildings for the single workers. The company provided music and drama clubs, savings banks, schools for boys and girls, a cinema, a chapel and three

shops organized into cooperative. The industrial installations included brickworks as well.

3. *Companhia de Tecidos Rio Tinto*: It reached 2,000 houses by 1950. The village had a water distribution system, in the workers' houses running water was not available; instead, there were water fountains at the public squares, which provided residents with a free water supply. There were three all-boy schools and six for the girls. There was also a pharmacy, bakery, grocery store, food market, cinema, and clubs. It included a thermoelectric power plant, private port, railway and airport, carpentry, brick works, mechanical garage, and foundry.
4. *União Mercantil (Fábrica Fernão Velho)*: Progressively expanded over more than one hundred years, between the mid-nineteenth and mid-twentieth centuries. Between 1911 and the late 1960s it built a movie theater, recreational facilities for workers, medical clinic, day care center, and developed the town's infrastructure, implementing the drainage and paving of streets, water and electricity services.
5. *Société Cotonnière Belge-Brésilienne (Fábrica do Catende)*: In 1939 it comprised around seven hundred houses, medical clinic, day care center, leisure and sports clubs, soccer field, musical band, and schools. It also included a private railway. The company provided water and energy supply services.
6. *Fábrica Peixe*: The construction of the vila operária Maria de Britto began in around 1906. We have not located information regarding the number of company-built houses, but the number must not have been impressive, as they do not appear in any reference to the company, apart from the fact that it provided housing for those deprived of dwellings. The company maintained primary schools for the workers' children and dispensary for the poor (dating from 1939). It was also in charge of the tramway service and in 1947 in built a small airport.

7. *Companhia de Tecidos Paraibana*: At its peak, the vila operária counted 245 houses, and it included a square, medical clinic, school, and club (dating from the 1920s).
8. *Cotonifício Othon Bezerra de Mello*: In 1951 the number of company-built houses reached 666. It also comprised a school, church, club, cinema and medical and dental clinics.
9. *Fábrica São José*: The vila operária comprised two hundred and forty-seven dwellings in 1945. Interestingly, it provided workers with both houses and apartments. The company town also included a primary school, medical and dental clinics, restaurant, club, sports fields, and choir formed by the workers.
10. *Fábrica Baturité*: It built two vilas operárias (Vila José Pinto do Carmo and Vila Baturité) with a total of seventy-seven houses.
11. *Fábrica Maranguape*: After its acquisition by the Group J. Macêdo around 1962, a vila operária comprising thirty-six houses (four for managers and the remaining thirty-two for employees) was built.
12. *Fábrica Progresso*: Its social program was intensified between the 1930s and 1950s. It provided medical and social services, and in 1945 a school was founded for the employees' children.
13. *Cotonifício Leite Barbosa*: The vila operária comprised three hundred houses of diverse dimensions for laborers, masters, foremen, and administrative employees. It also included a football field, a park with playground and a public television. Workers were provided with medical, dental and social assistance.
14. *Companhia Industrial Fiação e Tecidos Goyanna*: The construction of the vila operária began in the mid-1930s and reached a number of 472 houses; it also counted with houses for specialized employees and the owner's house. It provided medical and dental services, school, and free weekly movie sessions at the owner's house for workers and their families.

15. *Tecelagem de Seda e Algodão de Pernambuco*: The vila operária – named Vila Pombal – was built during the decades of 1930 and 1940 and reached 359 houses in 1955. The company also furnished workers with medical and dental services, a grocery store, day care center (built in the 1950s), refectory, school and a soccer field.
16. *Companhia Industrial Pirapama*: No quantitative information on the houses of the vila operária was located. The company provided school for children and adults, medical services and clinic, day care center, musical band.
17. *Companhia de Fiação e Tecidos de Pernambuco (Fábrica da Torre)*: No information on the total number of houses in the vila operária was located. In 1949, the firm built two groups of dwellings to expand the vila: eighteen houses and four two-story buildings for employees. It also comprised a school, and medical and dental clinics.
18. *Fábrica Iolanda*: Construction of the vila operária began in 1941 with twenty-four houses. By 1951, it counted 120 dwellings and later it reached 145. It also comprised a club.
19. *Grandes Moinhos do Brasil S.A.*: The vila operária comprised sixty-six bungalows for employees.
20. *A D Siqueira & Filhos*: The Group built the Vila Diogo in 1922 and the Vila Araken in 1944, which counted around 66 and 22 houses, respectively.

The political conditions under which these company towns rose during this period bore little resemblance to those of the previous regime. The 1930 Revolution had ended the First Republic and ushered in a period of rapid change in Brazil. With the onset of depression and the collapse of the old political structure in 1930, government began to take upon itself the solution of social conflicts and economic stagnation. Shifted from a brief stage of liberal democracy to a dictatorship, the Vargas regime steward the creation

of a corporatist-like State which moved up a notch the process of institution-building and State modernization.

Unlike before, when government participation was in those settlements was reduced to subsidies via tax benefits and the firm used to take full responsibility over their construction, service provision and management, the Brazilian State would be called to assume new roles, increasing its participation in the social and economic life of the country. Increasingly the “void” would be replaced by novel forms of cooperation with companies through public or joint management of services and collective facilities, and collaboration for the construction of housing, and also through greater participation of public institutions in the promotion of vilas operárias.¹⁸¹

In the Northeast, evidence indicates that there was no direct investment of public funds to finance housing construction in company towns until the creation of the Banco Nacional da Habitação (BNH) in 1964. Nevertheless, the engagement of manufacturers in the Liga Social contra o Mocambo promoted by the state of Pernambuco was an important form of public-private cooperation throughout the period. Against the backdrop of the movement against the mocambo, industrialists justified the construction of new vilas operárias or the expansion of existing ones. A meeting of the Liga Social contra o Mocambo that took place on 28 August 1939 shows the collaboration between the public and private sectors. The *Interventor* Agamenon Magalhães praised the Grandes Moinhos do Brasil S/A for launching the construction of its vila operária; earlier that year, the firm had also made a contribution of 10:000\$000 to the “humanitarian” and “patriotic” crusade against those dwellings.¹⁸² He also spoke of the Federação dos Sindicatos Industriais do Estado de Pernambuco’s push to get every factory in the state to build a vila operária for

¹⁸¹ The role of the State in promoting social housing is beyond the scope of this research. For a thorough investigation of this issue, see Almeida 2012, which focuses specifically on the public action in the Northeast.

¹⁸² Diário do Estado de Pernambuco. Recife, N. 175, 10 August 1939, p. 3.

its workers. And finally, in that same meeting, Manoel de Brito, director of the Fábrica Peixe announced his intention to build a vila operária adjacent to the factory.¹⁸³ Later, the Fábrica Apipucos, property of the Cotonificio Othon Bezerra, also associated its plan to furnish worker with six hundred houses to the movement against the mocambo.¹⁸⁴

Association between the construction of company vilas operárias and the Liga Social contra o Mocambo was a mutually beneficial strategy to win public approval and to weaken tensions between public and private sectors. Lopes (1988) pointed out how an article published in the newspaper *Folha da Manhã* – belonging to Magalhães – tried to establish a connection between government’s campaign and the Companhia de Tecidos Paulista’s systematic destruction of mocambos in its properties which had begun since the 1920s. The CTP posed its action that preceded the creation of the Liga as part of the government’s efforts to attenuate its divergences with Magalhães, while the latter used the CTP to promote the success of his campaign. The article’s subtitle read “Solidária com o governo na benemérita campanha social contra o mocambo, a Companhia de Tecidos Paulista está desapropriando mocambos e construindo muitas casas de alvenaria para os seus operários”, and it stated:

Merece registro especial a adesão que a Companhia Paulista de Tecidos há dado ao governo, na meritória campanha contra o mocambo. A companhia já desapropriou mais de 300 mocambos pertencentes a terceiros, edificando casas confortáveis de alvenaria para os seus operários. A Empresa possuía casas de pedra e cal, em números aproximados de 6.000, fornecendo aos operários habitação quasi gratuita, porque os operários pagam ali apenas uma taxa de conservação do imóvel, taxa essa que, em geral, não vai além de 15\$000 mensais.

(Folha da Manhã, 12 July 1942 *apud* Lopes 1988: 157)

Another indication of the tendencies towards the strengthening of the executive power inaugurated in 1930 was that services initially created and managed by the

¹⁸³ Diário do Estado de Pernambuco. Recife, N. 190, 29 August 1939, p. 9.

¹⁸⁴ Diário do Estado de Pernambuco de Pernambuco. Recife, N. 49, 3 March 1942, p. 5.

company were gradually transferred to the State. This was particularly true in regards to educational services. In Paulista, for example, in 1939 out of the city's twenty-two schools, fourteen were managed by the factory, while four belonged to the municipality and another four to the state government (Correia 2003: 10).

This growing State presence, however, did not necessarily mean that companies gave up their control and autonomy in the management of their settlements or social services. As Correia (2003: 3) argued,

O que marcou durante várias décadas as estratégias das empresas nestas ações de cooperação com o Estado, foi um inequívoco desejo de conciliar o subsídio público de custos com a produção e reprodução da força de trabalho, com a busca de preservar a autonomia da gestão operária frente ao poder público.

Delgado (2007) identified this wish for autonomy in the process he labeled the "birth of modern social policies in Brazil". Notwithstanding the Estado Novo foundations set in partnership among the military, the state bureaucracy and business, tension was not absent from the relationship between the latter and the Vargas Executive; particularly, in view of Vargas' efforts in seeking support for the regime in through the mobilization of corporate unionism, entrepreneurs feared that State action would cross industry's margin of autonomy. In such context, industrialists articulated efforts to set the terms of their presence in Brazilian society in the pending new political scenario that would be brought by the end of the war, and redefined positions and roles regarding the country's social policies. In May 1945, convened at the Conferência das Classes Produtoras de Teresópolis, industrialists developed proposals aimed at ensuring their hegemonic presence in the upcoming political order, redefining and solidifying ties with workers, and defining the limits of state action. According to Delgado (2007: 151), the document resulting from this conference, the *Carta Econômica de Teresópolis*

revela um empresariado disposto a aceitar a intensificação da ação protetora do Estado, de modo a superar as "incompreensões e mal entendidos" que haviam

marcado as relações entre empregadores e empregados, no sentido de estabelecer as condições para o “trabalho harmônico” necessário ao desenvolvimento da economia brasileira, sob liderança da indústria, na ordem democrática que se avizinhava.

The promotion of “understanding and close cooperation” between industry and workers was furthered in the *Carta da Paz Social* elaborated in late 1945 by the Confederação Nacional da Indústria together with the Confederação Nacional do Comércio.

Both charters reveal industrialists’ wish to build private corporate bodies, free from the influence of the State, to implement actions to furnish workers with social welfare, health assistance and education. Two institutions were instrumental in this project: the Serviço Nacional de Aprendizagem Industrial (SENAI) and the Serviço Social da Indústria (SESI). The former was founded on 26 January 1943 by Getúlio Vargas to provide professional education and training to workers, and the latter was established on 25 June 1946, under the administration of Eurico Gaspar Dutra, with the scope of providing social assistance. To Weinstein (2000) the creation of these two entities was novel and unusual situation since associations of industrialists, rather than the State that had instituted them, were in charge of their funding and management.

By the end of the 1950s, the SENAI and the SESI were present in almost the entire national territory, including many vilas operárias. These welfare programs did not essentially threaten mill owners’ control over their company towns. Sharing common views on the need to reform national workers’ characters and to stir them away from the threat of labor radicalization, the SESI and the SENAI were instrumentalized to maintain or reconstruct basic value systems. In his analysis of the company town of Rio Tinto, Morais (2009) showed that there was a very strong overlapping between CTRT and SENAI; the fact that the SENAI school in Rio Tinto took the name of the that company town’s founder (Escola de Aprendizagem Coronel Frederico Lundgren) is revealing of how

mill owners tried to incorporate these new mechanisms into pre-established control systems.

2.1.4 The decline of CTs of traditional industries (1950 – 1980)

From the decade of 1960, for diverse reasons, firms began giving up their ownership of houses and collective buildings. The most immediate cause was, above all, economic. As we have seen, the end of World War II brought a severe crisis to industries in the Northeast. Once the conflict was over and global trade was once normalized, Brazilian companies lost the international markets that had pushed output in the precedent years; in the Southeast, better equipped companies turned to the domestic markets and to the “unexplored” Northeastern market. If up to the 1950s development constraints on regional economic integration – such as the autonomy of regional economic complexes and the absence of efficient and integrated transportation network – had allowed the Northeast to experience industrial growth despite the national pattern of industrial concentration in the South and Southeast (Cano 1985), following the integration of the national territory through extensive development of the road network system, the region lost relative importance as the South and Southeast became the absolute focal point of industrial production.

If up until the mid-1950s only the southern half of the country was interconnected, the expansion of road network and the car industry triggered the integration of the Northeast and the Center-West, causing an even greater process of concentration. (Singer 1982, 227)

As a result, Northeastern industry, which had historically relied on the irregularity of international trade and on the lack of regional integration in Brazil, sank into a severe crisis.

A study by the Banco do Nordeste do Brasil carried out in 1978 to assess the underdevelopment of the Northeast highlighted the contrast between the industrialized South and Southeast regions and the underdeveloped Northeastern region, which was defined as an “economic dualism within a political unity” (Banco do Nordeste do Brasil 1978: 67). The obsolete technology employed, labor-intensive operations and the low quality of its products were pointed as the main causes of the industrial underdevelopment of the Northeast. To address such issues, as aforementioned, the Sudene was created in 1959.

Northeastern factories responded to the Sudene’s stimulus in different ways, some underwent a process of modernization, especially through re-equipping while others remained unaffected by the “stimulated industrialization”.¹⁸⁵ Many of the company towns here investigated obtained import tax exemptions to renew their machinery throughout the sixties and all the way to the end of the seventies. The Companhia de Tecidos Paulista presented reequipping projects in 1961 and 1962; the Cotonificio Othon Bezerra de Mello presented several projects in 1961 (for factories in Recife and also the textile mill in Fernão Velho, which had been incorporated by the company), 1968, 1971 and 1977; the Societé Cotonnière Belge-Brésilienne in 1966; the Companhia de Fiação e Tecidos de Pernambuco and the Fábrica Yolanda in 1961; the Companhia Industrial Pernambucana

¹⁸⁵ Furthermore, some companies were shut down before the creation of the Sudene. The Companhia Pilarense de Fiação e Tecidos and Industrial Penedense in Alagoas, closed in 1958 (IBGE 1959: 124).

in 1977; the Companhia Industrial Pirapama in 1975; the Companhia de Tecidos Rio Tinto in 1960, 1962 and 1971.¹⁸⁶

These new investments gave momentary new breath to the mills, but did not prove to be enough. The example of the Thomaz Pompeu Group in Ceará is illustrative of the vicissitudes of Northeastern companies during the period. After the War, the firm invested profits in a complete modernization of the factory and production and then in 1974 it received support from the Sudene for a second reequipping project; at first, production expanded and in the 1960s and 1970s, it exported fabric to many markets. In 1982, the Group presented another project to the Sudene to found another production unit. Counting with the financial support of the government agency, it began investing its own resources in the installation of the new factory; however, the aid did not materialize and the company was left in a serious condition. By 1987, the bankruptcy of the Thomaz Pompeu Têxtil S/A and the Pompeu Têxtil S/A was declared. Throughout the 1990s, all employees were gradually laid off and the company rented out its machinery (Aragão 2002: 139-142). Like the Thomaz Pompeu Group, most firms that invested in modernization projects did not survive many decades more due to management problems, inefficiency in the government's support programs, or deep economic issues.

One of the main consequences of the reequipping programs and the Sudene sponsored industrialization was unemployment caused by the evident fact that older equipment was more labor-intensive than new equipment making the implemented technological changes labor-saving. Although industrialization was intensified with the establishment of subsidiaries of multinational or Southern groups in the region, the external nature of the process did not have a multiplying effect.

¹⁸⁶ Complete list of machinery imported via the Sudene reequipping programs, can be found in the *Diário Oficial da União*. Consulted series: 1960-1970.

In this context of crisis, companies began to reduce indirect investments and dismantling their housing and social services, selling out real-estate and transferring services to the State or simply shutting them down.

Furthermore, underlying the distancing between companies and their towns was also the gradual strengthening of public power and of government involvement in social matters; the economic and social foundations of the company town were seriously undermined by the gradual ascendancy of government as the most powerful single entity in the country. New public agencies were established to fund and/or produce housing for lower classes (the aforementioned *Institutos de Aposentadorias e Pensões*, and the *Fundação da Casa Popular* in the 1930s and the 1940s and later in 1964 the *Banco Nacional da Habitação*) transferred the responsibility of housing provision from the private to the public sector.

In the Northeastern company towns the usual strategy was to pay workers a very low financial compensation in exchange for their labor and compensate it with benefits that allowed them to maintain a tolerable standard of living. Such industrial relations had been legitimated by the absence of legislation designed to protect the workers. However, new structural labor legislation changes introduced during Vargas' term gradually undermined paternalistic company control over the workforce. The possibility of relying on paternalistic acts to avoid paying better wages was reduced after the introduction of the *Leis Consolidadas do Trabalho (CLT)* in 1943. The CLT assembled the labor laws existing at that time aiming at the creation of a system to protect workers from exploitation by employers, and harmonizing labor relations and avoiding direct disputes between the parties. Vargas' labor legislation provided workers with basic welfare protections, such as minimum wage, pensions, unemployment compensation, health and safety regulations and maximum working hours. Naturally, there was resistance from industrialists towards the new workplace legislation. In Paulista, for example, the Ludgrens deliberately blocked

the implementation of the labor laws. When the Minimum Wage Commission of the State of Pernambuco decided to enforce upon the mill the payment of a minimum wage, Frederico Lundgren ordered the suspension of production and the closure of commercial establishments in Paulista. He then called upon the workers to protest against the law and forced them to sign a document rejecting the minimum wage under the threat of closing down the factory (Lewis 2005: 155).

Providing housing in order to recruit and retain workers was no longer a need since industrial growth had fostered urban development; in fact, the maintenance of the houses represented a burden to the company which was not compensated by the low rents. On the other hand, the welfare services delivered by the State replaced the company town's paternalistic services.

Since the 1980s the history of these company-induced settlements in the Northeast has been one of paths of dismantling and of the end of company provision of housing and services. This process has assumed different forms: total or partial, touching only certain categories of workers; gradual or accelerated; implying or not the physical destruction of the site; producing or not deep decharacterization of the material heritage; the service and recreation facilities may be transferred to the State, sold, closed or find new uses; dwellings may be sold, rented or demolished. Some examples illustrate this variety.

In many cases, workers received houses as compensation for termination of their work contracts. In Paulista, almost all the dwellings were passed on to workers in this manner, bringing an end to the company's real estate monopoly; in Rio Tinto, only some workers were granted ownership of the houses and the vast majority still remain in the hands of the company.

The Fábrica Santa Tereza, belonging to the Cotonificio Leite Barbosa (by then called Unitextil) was shut down in the 1980s and had its facilities adapted to new uses,

such as stores and nightclubs. Its façade was partially decharacterized, but some structures still retain its original features. In Rio Tinto, the Universidade Federal da Paraíba opened a new campus in the former textile plant. Most of the buildings are now are rented out to that institution and re-adaptation work has disrespected both the exteriors and interiors. A recent observable tendency has been the conversion of industrial facilities into shopping centers; two are currently underway in Camaragibe and Paulista.

The total abandonment of industrial structures is registered in Pesqueira, where the Fábrica Peixe was stripped of its machinery in 1999, which was transferred to other factories belonging to the group in Nova Glória (GO) and Taquaritinga (SP), leaving an area of 81,000m² in the heart of the city center with no use. Many other mills are now in the process of being overwhelmingly reduced to ruins: the mill of Société Cotonnière Belge-Brésilienne, which closed down in the late 1970s; the Companhia Têxtil de Aniagação (whose houses were demolished in 1957), the Companhia Alagoana de Fiação e Tecidos, the Fábrica Arthur of the Companhia de Tecidos Paulista, the Companhia Manufatura de Tecidos do Norte (Fábrica Tacaruna), the Companhia Pilarense de Fiação e Tecidos and the Industrial Penedense.

Some exceptions can, however, be found. In Pedra, the textile mill is still in operation, as well as the Companhia Industrial Pirapama in Escada.

This dismantling of housing and production and service facilities deprived the towns from its virtually only source of income and leaving behind a poverty-stricken population. If the economic distress was not enough, the subsequent abandon of the industrial sites also meant the destruction of material references related to communitarian memory and identity due to the decharacterization or destruction of the vilas operárias. Furthermore In view of view of the absence of safeguarding efforts, as the older

generations disappear, the immaterial heritage of company towns are fading away with them.

2.2 Characteristics of the company towns in the Northeast

The research program carried out has allowed us to observe trends across the series of company town experiences identified in regards to some its structuring features. This analysis seeks to examine how aspects related to the location, housing offer, urban plan, services and facilities provided, and labor management relations are intertwined with the underlying elements pointed out in the first chapter – that is, the vicissitudes of the region's industrial development and the discussions of the reform of working-class dwellings.

2.2.1 Location

Between the last decades of the nineteenth century and the early twentieth century, cities did not constitute the privileged locus of industrial production; rather, certain urban peripheral zones and rural environments were more fertile to evolving industries. This was the result of the combination of two factors: first, the imperative requirements of industrial production (namely, raw materials and sources of energy), and the lack of extensive urban development in Brazil.

Historical scholarship has documented how in the early stages of industrial development the proximity to bodies of water was a strong determinant in the location of manufacturing facilities. In her analysis of the morphology of the mill village Crawford (1995: 20) showed how the primary determinant for the location of the mill was the water supply and waterpower. In Brazil, it was not any different since water powered the first textile mills. Crawford (1995: 20) also added that ultimately the availability of waterpower conditioned the size of the mill village since “its size was determined by the size of the mill, which depended on the amount of waterpower.” This dependency on waterpower for

the expansion of industrial operations is clearly outlined in the problems faced by Fernão Velho, the oldest mills in the area here under review, which in 1866 was hampered by its deficient use of waterpower:

O motor é agua represada em dous grandes açudes e conduzida por levadas á uma roda hydraulica de força de 14 cavallos, mas que sendo a roda hydraulica colocada n'um dos lados dos edificio dá ao machinismo um movimento indirecto, fazendo perder grande parte do motor. A companhia, porém, tomando em consideração o augmento da fábrica mandou preparar um grande cavouco no fundo do edificio para collocar uma nova roda hydraulica, que, recebendo todo o liquido, dará movimento directo ao machinismo, que terá força superior a 50 cavallos. (Rego 1869: 45)

Mills founded in the last decade of the nineteenth century were no longer using waterwheels, having adopted steam engines. In 1907, Cunhas Vasco's report on Brazilian cotton textile industry did not indicate any mill powered by waterwheels in the Northeast, but in 1909 the Fernão Velho mill still employed waterpower (combined with steam power) and hydraulic turbines were also used.¹⁸⁷ There was also reference to two mills using gas in Recife (the Companhia Fiação e Tecidos de Juta and the Companhia de Fiação de Estopa).¹⁸⁸ Noteworthy is the fact that electricity was only employed in Rio de Janeiro according to Vasco (1907: n/p).¹⁸⁹

Although this new technology released mills from the dependence on waterpower, textile industrial production still required large volumes of water and water courses constituted important transportation networks. Consequently, the mills founded in the period considered in this research were located close to bodies of fresh water. In Alagoas, many were gathered in the proximities of the Mundaú River and Lagoon (Fernão Velho,

¹⁸⁷ Centro Industrial do Brasil 1909: 1.

¹⁸⁸ Centro Industrial do Brasil 1909: 80.

¹⁸⁹ The first hydroelectric power plant of the Northeast was inaugurated on 26 January 1913. It was a fruit of a private investment (with government support) made by Delmiro Gouveia to power his textile factory in Pedra.

Companhia Alagoana de Fiação e Tecidos), while the Agro Fabril Mercantil in Pedra used the waters of the São Francisco River. In Pernambuco, the along the Capibaribe River, the Companhia de Fiação e Tecidos de Pernambuco and the Companhia Têxtil de Aniagem, Companhia Manufatora de Tecidos do Norte (Fábrica Tacaruna) could be found; the Companhia Industrial Pernambucana was set near the Una and Camaragibe Rivers; and the Braz Silva & Cia mill (later Cotonificio Othon Bezerra de Mello) was by the Apipucos Lagoon; the Companhia de Tecidos Paulista was by the Timbó River. In Maranhão, two mills were by the Anil River: the Companhia de Fiação e Tecidos do Rio Anil and the Companhia de Fiação e Tecidos Maranhense; the Companhia União Caxiense was between the Itapicuru and Ponte Rivers; in Paraíba, the Companhia de Tecidos Paraibana was by the Tibiri River and the Companhia de Tecidos Rio Tinto by the rivers Rio Tinto and Mamanguape.

Northeastern mills generally burned wood to generate steam power since coal was scarce in Brazil and the imported material was costly. Therefore the availability of large reserves of wood or vast lands to plant the rapidly growing eucalyptus tree was also fundamental in the choice of location (Pearse 1921: 39).

Apart from the conditionings of industrial production, the lack of infrastructure in Northeastern cities also pushed factories to more remote areas, as previously discussed. Piquet (1998: 16-17) emphasized this point and considered that the insufficient conditions offered to industrial production by Brazilian urban centers pushed large-scale industries to self-supply its production needs. As a result, areas far removed from urban centers, close to transport networks and with availability of vast cheap land to hold the required infrastructure, were favored for the establishment of factories.

As aforementioned, these mills thus tended to be established in relatively isolated areas and assume an autarchic posture. It is important to underline, however, that – with the exception of the Agro Fabril Mercantil – those mill were concentrated in region's

coastal line. This is explained by the fact that consumer markets, even though limited, could be found in the coastal cities. Reaching out to other markets was complicated due to poor transport infrastructure. As Bethel (1989: 248) described until the end of the First Republic,

(...) the bulk of its [Brazil's] population, a little less than ten million in 1870 and seventeen million in 1900, still lived along the extensive coasts, clustered around port cities which were in most cases state capitals. (...) For shorter or longer distances into the hinterlands of the coastal cities stretched networks of rails, roads or trails. These networks were only casually tangential to the next, and in some cases they were separated by hundreds of kilometers of utter wilderness.

The relative isolation of factories, in fact, was more due to the defective transport systems than to their distances from urban centers. Even the factories located in the urban periphery were quite detached from central areas. As discussed in Chapter 1, the Códigos de Posturas gradually imposed a separation between the urban centers and areas of production and factories moved towards the fringes of the cities and the lack of urban transportation contributed to isolate these areas. It is, therefore, sometimes hard to establish a clear separation between rural and urban peripheral areas until the first half of the nineteenth century Brazil and it is an oversimplification to say that factories located in cities – even capital cities – were set in an urban context.

The result of this location pattern was the following: on the one hand, there was a relative accumulation of workforce in urban areas, whose housing needs did not receive any stimulus or subsidies; on the other hand, the scale of production at the same time generated the need for working hands and pushed industrial concerns towards isolated areas, therefore leading them to assume responsibility for the provision of housing to its workforce. Consequently, unlike cortiços and mocambos, located in central urban areas, company towns – guided by industry's economic rationale – generally prevailed in rural areas and urban fringes. Some company towns were founded *ex nihilo* (such as Pedra,

Rio Tinto, Braz Silva & Cia mill and Fernão Velho), while others appeared close to or within small villages or cities.

In time, urbanization, however, normally caught up with once isolated areas and many company towns were then integrated into the urban fabric. This tendency is particularly observed in Recife and Fortaleza, the two great regional metropolises, where company towns were at the origin of what are presently neighborhoods, such as Torre and Apipucos, and Jacarecanga, respectively.

2.2.2 Housing and urban outlines

This section looks into defining aspects regarding the company-built housing offer in the Northeast. Dwellings were the essence of the vilas operárias, their *raison d'être*, and the analysis of their architectural program, as well as plan and possibilities of housing tenure (home-ownership versus renting) is fundamental to understand the “nature” of the company town.

One initial feature that stands out is the absence of major typological variations over space and time; this finding may come as a surprise at first when considered the great territorial extension and the long period of time considered in this research. However, two factors can perhaps account for this fact. First, the homogeneity of residential patterns inherited from the colonial and imperial periods. Reis (2000:21-27) underlined that urban residences in Brazil corresponded to a standard type of lot and architecture (in regards to both the plans and constructive techniques). Towns and cities presented a uniform aspect with one-story houses and multi-story houses (“sobrados”) set on the alignment of the streets and without lateral setbacks. Whereas this standard for the

exterior was determined first by Cartas Régias and later Posturas municipais, the plans – “left up to the owners’ tastes” – “always presented a surprising monotony” (Reis 2000: 25). Almost all the dwellings in Brazil during those periods followed the “door and window” dwelling type – as they are commonly known in the country. Debret (1839: 214) provided a description of these houses he observed all around Rio de Janeiro:

Ces maisons particulières habitées par une seule famille, sont en général étroites et très profondes. Elles ne se composent ordinairement que d’un rez-de-chaussée, et quelquefois d’une petite pièce donnant sur la rue (appelée Sotto). On y entre par une allée qui conduit à une petite cour autour de laquelle sont réunis les besoins du service; tels que, salle à manger, cuisine, logement des esclaves domestiques. Sur la rue le salon ou parloir à la suite duquel sont les chambres à coucher.

There were no significant differences between humble urban homes and finer dwellings. The latter were greater in dimensions and comprised a more rooms, but they did not constitute a separate typology; the larger plans generally corresponded to the superposition of the structure of simpler plans.

This lack of innovation is also related to the low levels of technology use in construction passed down by centuries of widespread use of unskilled labor. Construction techniques employed for simpler dwellings were wattle and daub, adobe or rammed earth, while stone and clay, bricks or stone and lime were used in more important houses. The most common roofing system was the gabled roof, which directed rainwater towards the street and the backyard, and therefore avoided the need for any pluvial water drainage system, such as gutters (Reis 2000: 25-26). (Images 31 and 32) The first half of the Republican period largely conserved former techniques and rigid plans based on simplicity since skilled labor and industrialized construction materials were not widespread until around the 1940s.

Such reasons can perhaps explain why even though the vilas operárias constituted new forms of urban living, they continued to employ old architectural and urban languages. In the end, the architectural form and plan of these dwellings were generally

inspired by traditional Brazilian housing types and reinterpreted old traditional schemes. The most frequent housing type in vilas operárias during the period under review was the single-story terraced house – a row of identical or mirror-image houses that share side walls – designed for single-family occupancy; the façades generally presented just one front window and door openings and had no lateral and front setbacks. The plan consisted of living room in the front, a number of alcoves and kitchen at the back, all connected by a hallway.

There were two main models within this typology. The most common was the gabled roof indicated before with the roof ridge perpendicular to the street and covered with channel or French ceramic tiles. This type was found in all the company towns. A variation of this type presented front porches (“alpendres”). Debret (1835: 42) had observed the recurrent use of the porch in Brazilian houses – even the poorest ones – in the nineteenth century:

Les observateurs des systèmes d'architecture ont constamment retrouvé l'usage de l'abri placé à l'extérieur des habitations, dans les contrées méridionales comme dans celles du Levant: c'est ce qui a produit la Galerie moresque, la Loge italienne, ainsi que la Varanda brésilienne représentée ici. Il est tout naturel que sous une température qui s'élève jusqu'à 45 degrés de chaleur, sous un soleil insupportable pendant six à huit mois de l'année, **le Brésilien ait adopté l'usage de la varanda dans ses constructions: aussi l'a retrouve-t-on, mais très simplement construite, dans la plus pauvre habitation.** (emphasis added)

Correia (2006: 16) affirmed that this housing type – in which the alpendre appeared as an extension of the main roof, supported at its lower end by columns – drew influence from the architecture of slave quarters erected in sugar mills in the Northeast during the colonial period and the 19th century. The typical slave dwelling in the Northeast was series of adjoining cubicles in a row with a common porch covered with a gabled roof along the entire the building; they were built in mud or brick masonry and covered with channel type clay tiles (Correia 2006: 17). As Debret pointed out in the quote above, the porch was an element that provided a shelter from the heat; it also served as a buffer

space between the house and the street, thus protecting the intimacy of the residences. It also added interest and value to those simple constructions. This housing type can be found in the company towns of Pedra, Rio Tinto, Paulista, Pontezinha and the Vila Buriti of the Cotononificio Othon Bezerra de Mello. Some houses in Rio Tinto feature a common porch shared by two semi-detached houses; in the Vila Buriti, the porch is partitioned, delimiting an exclusive terrace for each property that makes up the block of houses. Nowadays, in the latter vila operária, the porches have been closed up with gates or walls, probably for security reasons.

The row house model was easy to reproduce and therefore answered the one of the three fundamental principles that, according to Backheuser (1906), as we have seen, should inform the construction of working class homes: economy. It also met the basic standards of salubrity and comfort – the other two principles –, although this varied according to their program and use, as we discuss further in this section.

Generally company towns comprised groups of houses of different sizes and designs, of lower and higher standard, adjusted to reflect the factory's hierarchy of status and control. Sometimes other criteria, such as family size or how long the worker had been employed at the factory, were also taken into account in the distribution of the higher standard dwellings. Most of the houses were small and their program was limited to the basics: one living room, two bedrooms, backyard, kitchen, and WC. As we see below, sometimes the last two elements were incorporated into the backyard. Higher quality houses often followed vernacular prototypes but with a larger program, comprising, more bedrooms, another living room, verandah, detached servant quarters, or garage. For example, in the vila operária of the Companhia Industrial Fiação e Tecidos Goyanna there were two housing models. The more restricted one was the “door and window” type measuring 57.2m² of built surface and 28m² of non-built surface and comprising a living room, three bedrooms, hallway, kitchen and backyard with toilet facilities. Higher-ranked

employees lived in houses measuring 102.7m² of built surface and 50m² of non-built surface. Both types followed the urban colonial model, set in long and narrow lots and without lateral or frontal setbacks (Correia 2008: 85).

Sometimes the program and plan of the terraced houses was adapted to semi-detached houses or into small groups of row houses. These could be found in the vila operária of the Fábrica Yolanda. Its nearly 145 houses were arranged in almost orthogonal residential blocks; ten houses were semi-detached with hip roofs, while the others were grouped in blocks varying from three to nine. The larger houses comprised terrace, living room, two bedroom, kitchen and WC; the lower quality ones, included living room, one bedroom, kitchen and WC. Both types had backyards and most also had gardens.

Another widespread typology was the bungalow, generally referred to as “chalet”. They were one-story houses with a small terrace and garden, which were reserved to higher-ranked employees.

Often company towns presented a wide range of housing patterns (though almost always limited to the types indicated above). The Tecelagem de Seda e Algodão de Pernambuco built detached chalets, semi-detached houses, terraced houses in blocks, and two-story houses for managers. In Rio Tinto, there were nine different types of houses which were partially standardized, that is, grouped together by type. The most widespread housing types – the variations of the urban colonial house – included three small bedrooms, a kitchen and a living room (the WC was in the backyard) and measured 60m²; their differences lay in the disposition of the houses (semi-detached, terraced) and the presence of lateral setbacks and porches. Semi-detached houses for qualified employees included basically the same program as the others, with the addition of a

scullery room and a porch, and measured 105m². Finally, there were chalets with lateral or front gardens and backyards.

With the exception of collective buildings with dormitories for single workers, all the housing typologies described above were designed for single-family use. The only example of collective residence identified by our research program was the apartments built by the Fábrica de Tecidos São José in the 1940s. There were thirty-two small apartment buildings: sixteen on the ground floor and sixteen on the first floor. They were furnished with a front garden and comprised two living rooms, two bedrooms, kitchen, pantry, bathroom, laundry, and maid's room.

Finally, apart from housing for laborers and employees, the vila operária generally also included the house of its founder/owner. These houses presented great variety of style and size, but they had in common the fact that they stood out either for their grandeur, esthetics or size and thus constituted significant symbols of power in the town's architecture. In Rio Tinto, the house of the Lundgren family – known as Palacete – was an imposing construction in red bricks that sat astride the hill overlooking the community below. The exterior was very plain, unadorned, and nearly rustic; there was a fortress-like quality to it, which was enhanced by its heavy gates. The sober exterior contrasted with the interior was richly furnished with Italian carpets, chandeliers and decorated tiles (Panet 2002: 110). In Paulista, the Lundgrens also had an imposing manor in red bricks called “the Casa-Grande”. It comprised two contiguous buildings dating from different periods. The first is a one story-house of nearly 400m² surrounded by porches and built in the early decades of the twentieth century; the second house was erected later in the beginning of the 1930s and it was an imposing four-story construction with 1,164 m². Adjacent to the Casa-Grande there was a large park, the “Jardim do Coronel”, which used to be open to the workers on Sundays and hosted a zoo and an amusement park in the

1940s and 1950s. Like its counterpart in Paulista, the house of José Albino Pimentel, head of the Companhia Industrial Fiação e Tecidos Goyanna, combined private residential areas and areas for public recreational use, namely the cinema.¹⁹⁰ In fact, the public use of the mill owner's private residence by workers and their families was not so unusual in the vilas operárias. Pedro Philomeno Gomes used to grant laborers' children access to the swimming pool in his elegant villa located next to the vila operária of the Fábrica São José in Fortaleza. Opening these spaces that materialized the presence and the power of the mill owner to laborers were often read as gestures of kindness and concern for the latter's well-being and certainly contributed to reinforce paternalistic bonds.

The architecture of these settlements has been thoroughly examined by Correia in a series of published papers¹⁹¹, and her work has prompted an academic interest in this topic in Brazil. In the past years, a number of studies have analyzed aspects related to the architectural features of vilas operárias, namely Campagnol (2008), Balleiras (2003), Freitas (2005) and Almeida (2007).

The architecture of company towns in the Northeast presented a typically industrial aesthetic, grounded in notions of economy, efficiency, utility and functionality. It was marked its simplicity and it was for the most part deprived of ornaments, restricted to its essential constructive elements. Unlike the average housing for the underprivileged in the region, they were generally built with industrially produced materials, particularly bricks (Correia 2011: 13)

¹⁹⁰ Correia (2008: 91-92) provides a thorough analysis of the architecture of this dwelling.

¹⁹¹ See Bibliography for a complete list of references.

It was common for the “door-and-window” houses to present reliefs around doors and windows that were accentuated by the painting; this effect was sometimes also applied to plaster strips on the façades, like in the Vila Yolanda. The most important ornamental difference within typology appeared in vilas operárias built in urban contexts. Due to the implementation of the Códigos de Posturas, the use of the platband – a horizontal strip which frames the top of a building and serves to hide the roof – was introduced. This element is found in the vila operária founded by the Companhia de Fiação e Tecidos de Pernambuco in the Torre and the in the Vila Diogo in Fortaleza; in the latter, the houses facing the street present platband, while the ones towards the internal alleyways do not.

Some vilas operárias built in the 1930s and 1940s also carry elements associated to the Art Déco architectural language. The school building built by the Companhia de Tecidos Paraibana is one example. The building consists of a regular single block of pure geometry, on which rises another simple volume with a clock tower; the Art Déco influence is incorporated in the relief ornaments following a zigzag pattern. In Ceará, the facades of the houses built by São José mill in Fortaleza adopt simple decorative details of geometric shapes; in Natal, the facades of the houses of the Jovino Barreto mill have geometric ornamental designs, inspired by the Art Déco language, set to emphasize the scaling resulting from the strong sloping of the terrain. In Pernambuco, the Art Deco vocabulary emerges on the premises of Fábrica Peixe in Pesqueira with its succession of staggered pediment, in some houses in the vila operária in of the Companhia de Tecidos Paulista, and in the club of the Cotonificio Othon Bezerra de Mello, marked by the scaling the façade and other ornamental features. In the Northeast, the most noteworthy use of the Art Déco esthetics is found in the vila operária of the Companhia Industrial de Fiação e Tecidos Goyanna. The Art Déco influence appears simplified and expressed solidarity with the industrial utilitarianism and the pursuit of an effect of ensemble. These themes

are expressed in geometrical forms, the use of cylindrical columns, decorative geometric details of the facades (friezes and marquees), of staggered vertical forms (gables and parapets in the details), walls with curved surfaces and openings (Correia 2008).

Architectural styles and differentiated materials were often used in the company towns to mark and highlight the company's power and thus contributed to the promotion of the social order and hierarchy. In Rio Tinto, collective buildings were singled out by the use of red bricks and the application of ornamental brickwork details on the façades. In the vila operária of the Companhia de Fiação e Tecidos Goyanna, the mill owner's house incorporated and synthesized two different decorative elements used throughout the town: the cylindrical columns, employed in some buildings, such as the ice cream parlor and the chalet houses, to denote prestige, and the vertical stripes in relief used on industrial buildings and workers' dwellings. It was the only building that presented this combination which symbolically materialized the industrialist predominance over the town.

The urban layouts of the vilas operárias were also characterized by their simplicity. The same notions of economy and rationality that dominated the industrial facilities were applied to their plans. Even though they presented a great variation, some features were common to the plans of the vilas operárias, which were guided by a concern of promoting social control and hygiene. Like the *modern habitat*, the mill plan also sought to specialize and hierarchize spaces, establishing appropriate spaces for different activities, separating work and living areas. The factory was the center of the plan, with its imposing chimneys; it ruled the space and the life of its residents. They generally presented large non-constructed areas, like squares or wide streets, which favored the circulation of air and the exposure to sunlight. Health concerns also motivated implementation of basic sanitation

services, with simple water and sewage systems.¹⁹² The concern with economy was often translated into standardized plans, deprived of any element deemed superfluous, which often led to monotony and uniformity, only broken by the singularity of the houses built for higher-ranking employees and the houses of the mill owners themselves. As we indicated above, this strategy not only followed an economic rationale, but also aimed at reinforcing company hierarchy and power.

In the Northeast, we have not identified any example of what Crawford (1995) labeled the “new company town”, that is, settlements that were the fruit of professional design task, undertaken by architects, landscape architects and city planners.¹⁹³ The tendency was that mill

owners themselves conceived the plans of their towns, sometimes following complete and conceptually justified urban projects, other times responding to the moment’s needs.¹⁹⁴ Even the company town of the Companhia Industrial de Fiação e Tecidos Goyanna, which presented an interesting application of Art Déco elements, was designed by the mill owner.

Nevertheless, concerns with esthetics, hygiene, and salubrity were not completely absent. The Companhia Industrial Pernambucana wrote in its Report in 1908:

¹⁹² Until the 1930s and 1940s, most company towns in the Northeast did not furnish workers’ dwellings with running water or toilet facilities.

¹⁹³ At a national level, however, architects and urban planners had already become involved in company town planning since the second half of the 1930s. A national architectural contest was held for the Monlevade company town in 1934 promoted by the Companhia Siderúrgica Belgo-Mineira. Another example was the town designed by the architect Aberlado Caibuí, inspired by the garden-city movement, in Paraná for the Fábrica de Papel e Celulose Klabin in 1943. For more on the Monlevade contest, see: Lima, Fábio José Martins de. *Cidade Operária de Monlevade: Novos Conceitos de Morar*. Available at: <http://www.docomomo.org.br>. Access on 23 March 2013.

¹⁹⁴ One exception were two groups of houses built in the vila operária of the Fábrica da Torre in 1948 whose design was overseen by the engineer David Litover. (Diário Oficial do Estado de Pernambuco. Recife, 28 April 1949, p. 1780).

A Villa Operaria de Camaragibe foi edificada n'um planalto a 25m acima do nível do mar a pequena distancia da fábrica e 13m acima da explanada d'esta.

O local elevado, em **optimas condições higienicas** bem ventilado e favorecendo o escoamento rapido das aguas torna a villa secca e saudável, **discortinando ao mesmo tempo um bello panorama.**

A arborização geral e regular e a proximidade das mattas, que cobrem o resto da propriedade amenizam os rigores do sol, **concorrendo muito para embelezamento e salubridade da mesma.**

Boas estradas e ladeiras suaves offerecerem fácil communição com a fábrica e as localidades vizinhas.

A construção da villa operaria obedeceu a um alinhamento regular, fugindo apenas a esta disposição um grupo de casas de *taipa* edificadas no inicio dos trabalhos da Companhia, com character provisorio e, devendo desaparecer dentro em breve.

(Companhia Industrial Pernambucana 1908: 23; emphasis added)

Concerns with hygiene were at the very core of the signification of the vila operária – a housing model promoted to oppose the unsanitary substandard dwellings occupied by the underprivileged in Brazil. However, this goal seems to have been at times more present in the rhetoric than in the reality of company-built housing in the Northeast.

In its first report, dating from 1892, the company declared that it was building “habitações comodas, higienicas e confortaveis” for its employees; these houses were isolated in the lot and offered all the advantages that the cluttered cortiços could not offer. The latter, the company stated, were “verdadeiros sepulcros de gente”.¹⁹⁵ However, the Report in 1908 indicates that the construction of mocambos was authorized by the Company:

A Companhia permite aos seus operarios edificar casas de *taipa* em terenos de sua propriedade mediante uma licença previamente requerida. Não cobra taxa alguma sobre os terrenos ocupado, estabelecendo porem, que essas casas destinadas exclusivamente a moradia das familias de quem as possui, e em caso de retirada d'esses serão vendidas aos seus companheiros de trabalho.

Existem 129 casas construidas sob essas condições sendo 53 cobertas de telha, 4 cobertas de zinco e 72 cobertas de palha.

(Companhia Industrial Pernambucana 1908: 23; emphasis added)

¹⁹⁵ Companhia Industrial Pernambucana. 1º Relatório, 1892, p. 11. Fundação Joaquim Nabuco: Carlos Alberto de Menezes Collection, Series Produção intelectual, Folder 10.

The company's main concern does not seem to be the substandard housing, but to maintain the occupation of the company town reserved to its workers.

The coexistence of "hygienic" houses and the mocambo was, in fact, tolerated in most company towns. Lopes (1988) pointed out how the Companhia de Tecidos Paulista for twenty years the company had allowed workers to build small shacks for themselves before launching a movement to progressively eradicate them in the 1920s – movement that was intensified from the 1930s onwards. The description of Paulista provided by Elliot's (1921: 232) indicates that the company not only tolerated, but also tried to obtain profit from the mocambos, although they were built by the workers:

The majority of the workmen's dwellings are built and owned by the company, and are rented out cheaply, while in some cases modest cottages of sun-dried brick, thatched with palm or covered with a zinc or tile roof, have been erected by the workmen themselves, their only obligation to the company being the payment of ground rent of two to four mil-reis a month, the palm-thatched house paying the lowest and the zinc-roofed paying the highest.

The "agglomeration of bodies" – argument so often used to condemn cortiços and mocambos for resulting in promiscuity – did not become an issue when the company's interests were at stake. In 1944, at the peak of industrial production prompted by World War II, the Cotonificio Othon Bezerra de Mello established that due to housing shortage, workers living in houses with more than one bedroom had to allow the cohabitation of another laborer or leave the house. Those who did not agree to the measure were denounced to the Departamento de Ordem Política e Social¹⁹⁶ as subversives (Ricardo 2011: 96).

The sanitarian rationale seems to have often been put in second place in order to make adjustments to economic profit, even though industrialists constantly proclaimed

¹⁹⁶ The Department of Political and Social Order (DOPS), created in 1924, was the Brazilian government agency, used mainly during the Estado Novo and later the military regime in 1964, which aimed to control and repress political and social movements opposed to the regime in power.

their engagement with the reform of the underprivileged classes via the promotion of the *hygienic vila operária*.

2.2.5 Labor management relations

As Stein (1957: 100) highlighted, these company towns of the “golden age” developed “along the pattern established by the early cotton manufacture” and paternalism underpinned labor-management relations. In the Northeast, three general trends regarding company town paternalism emerged in the early twentieth century, which we look into below.

The first trend, which we defined as “Catholic corporatism paternalism”, was introduced and implemented in Camaragibe by the Companhia Industrial Pernambucana (CIPER). Its greatest advocate was the factory’s manager (and minor shareholder) Carlos Alberto de Menezes, an engineer from Rio de Janeiro who had graduated from the Escola Politécnica Fluminense in 1878.¹⁹⁷ As other Brazilian industrialists during his time, Menezes was deeply concerned about the “social issue”. He considered, in general, that at the root of the state of agitation and revolt of the working classes laid the errors of both industrialists and workers who had moved away from Christian principles and teachings. The former driven by greed and forgetting the

são e puros princípios de justiça e caridade, que devem inspirar aqueles que têm a missão de dirigir homens, seus irmãos, no conseguimento de um trabalho coletivo qualquer; o princípio de exploração injusta e iníqua do trabalho do homem, como

¹⁹⁷ Gilberto Freyre pointed out in that Menezes, however, was not “quixotically” alone in his enterprise: “he worked in collaboration with Antonio Muniz Machado, Pierre Collier, and with the future federal deputy Luis Correia de Brito (Freyre 1986: 326; first edition in Portuguese in 1957).

se tratasse de uma simples máquina; a ganância que levou os industriais a procurarem para si grandes lucros (Menezes *apud* Collier 1996: 70-71)

In their turn, in the state of oppression, workers fell into the trap of the

abandono do terreno calmo, de justa e santa reivindicação dos seus direitos conculcados, para se atirar nos braços do socialismo, com todo o seu cortejo de princípios falsos e práticas violentas: a negação do direito de propriedade, o nivelamento social, o esquecimento do princípio de autoridade, os assassinatos, as revoluções, as greves barulhentas para reclamar o justo e o injusto (Menezes *apud* Collier 1996: 72).

And the consequences of departure from the principles of religion would be detrimental to both:

Sem Deus, por conseguinte, os patrões opprimiram, exploraram, sugaram o sangue do operario enquanto puderam; sem Deus, os operarios, desde que puderam levantar a cabeça, se revoltaram violentamente, reclamaram o justo e o injusto, pretendem tudo nivelar, para **morrerem todos junctos sobre os escombros da revolução** (Menezes *apud* Correia 1998: 31; emphasis added)

To Carlos Alberto de Menezes in Brazil, however, the state of affairs was not yet as severe as in Europe, due to a series of reasons. First, in Europe the excessive number of workers had rendered work mere merchandise, subject to the rules of the market and the law of supply and demand, and therefore depreciated to an extreme. In Brazil, on the other hand, due to the insufficient number of workers the emerging industry had to compete for working hands, preventing such devaluation of workers. Second, the great number of industrial establishments in Europe had sparked a severe competition for markets, which regarded initially the quality of products and ultimately their price. Since it was not always possible to lower prices through the improvement of production processes, the solution was to exploit the workers by reducing wages to revolting lows, demanding a very high-quality output, an immoral number of working hours, and the work shift on Sundays. In Brazil, industrial production was still quantitatively below the demands

of the consumer market and thus prevented competition between industrialists. Moreover, he considered that the ignorance and the simple habits of the Brazilian people kept them in a state of “primitive purity”. “Operario brasileiro não foi ainda trabalhado, pervertido, como o europeu.” (Menezes apud Correia 1998: 32)

Nonetheless, those were merely contingent and accidental causes and therefore their influential benefits would rapidly be diluted with the aggravation of the antagonisms that generated the “social issue”. If the Brazilian industrial development had not yet yielded an wide-ranging and deep social issue as in Europe, the “deprorável situação moral e material do nosso proletariado” would heat up the situation. “(...) si a situação não existe, existirá dentro em pouco tempo; o terrivel vírus nos é trazido por muito vehiculos. O nosso dever é prevenil-a, é applicar ao nosso organismo social, ainda isempto, a vaccina que o torne immune” (Menezes apud Collier 1996: 74; Menezes apud Correia 1998: 32).

Although two major solutions had been offered to the “social issue” – the socialist path and the Christian path –, Menezes believed only in the second one. Socialism to him was founded on the subversion of the eternal principles, denying both God and the divine laws, and hence was “solemnly and formaly” condemned by the Church. The latter, by contrast, provided the real solution, the “only capable of producing real good and the effective happiness of laborers”, which was embodied in the Encyclical of Pope Leo XIII *Rerum Novarum* (1891).

Leo XIII criticized both capitalism for its tendency toward greed, concentration of wealth, and mistreatment of workers, as well as socialism, for what he understood as a rejection of private property and an under-emphasis on the dignity of each individual person. He was particularly concerned about harmony in society; class should not be hostile to class, the wealthy and the workingmen were not intended to by nature to live in mutual conflict. Instead, harmony and agreement could be reached through Christian

moral and the observation of their respective duties by both classes. For the worker, obligations included:

Fully and faithfully to perform the work which has been freely and equitably agreed upon; never to injure the property or to outrage the person, of an employer; never to resort to violence in defending their own cause, not to engage in riot or disorder; and to have nothing to do with men of evil principles (...) (*Rerum Novarum* §20)

And as for those who dealt with the working poor, they had the obligation of caring for their material and moral well-being. Guided by the *Rerum Novarum*, Carlos Alberto de Menezes proposed employers should abide by the following program:

- 1º Proteção legal à propriedade legítima;
 - 2º Garantia de vida moral ao operário, não o absorvendo completamente na materialidade do trabalho;
 - 3º Equidade no número de horas de trabalho, atendendo aos sexos, idades e às Estações do ano;
 - 4º Regularização do trabalho das mulheres e das crianças;
 - 5º Repouso diário e repouso dominical;
 - 6º Fixação do salário, obedecendo aos princípios da justiça, da equidade e das necessidades da vida;
 - 7º O direito garantido ao operário de prever e acautelar o futuro;
 - 8º Estabelecimento de todos os meios e obras capazes de melhorar a situação material, própria e da família, acudir nas doenças e invalidez, prevenir o futuro dos operários, proporciona-lhes a instrução que lhes eleve o espírito e a alma; garantir-lhes o bem estar e as Distrações lícitas.
- (Menezes *apud* Collier 1996: 92-93)

It was thus in this spirit that the CIPER was founded in 1891 with the guiding principles of the *Rerum Novarum* incorporated into the company's goals laid out in its Statutes:

VIII. (...) Em compensação do trabalho activo, esforçado e inteligente que de todos exigirá e para chegar a formar um pessoal escolhido e superior, fará a todas as maiores vantagens, desde a instalação em habitações commodas e confortáveis, segundo os typos mais aperfeiçoados conhecidos, até o

estabelecimento de escolas, hospitaes, instituições economicas, beneficentes, de auxilio mutuo, divertimentos, etc.¹⁹⁸

In Camaragibe this company aim would be translated into a structure built on the pillars of Christian corporatism. A decisive influence in this project was the experience of spinning mill of Val-des-Bois, located near Reims in France, managed by the Catholic entrepreneur Léon Harmel. Trimouille (1974) argued that Harmel's desire to save workers through Christianization and moralization was not a very original paternalist perspective; rather, what rendered Val-des-Bois a "unique social laboratory" was the method proposed to achieve this goal: the establishment of Christian "corporations" – religious and economic societies formed freely by employers and workers.

During a trip to Europe in 1892, Carlos Alberto de Menezes met with Léon Harmel, of whom he had heard and who enjoyed great prestige with the Pope Leo XIII. The Brazilian entrepreneur visited Harmel's factory and discussed his plans for the CIPER, with "still undecided and blurry desires"; Harmel encouraged him and showed him solutions (Menezes *apud* Collier 1996: 124). Impressed with what he had witnessed in France, Carlos Alberto de Menezes decided to adapt that labor management model to his enterprise. Harmel put him in touch with priest Léon Dehon, founder of the Congregation of the Priests of the Sacred Heart, which was in charge of the religious assistance in Val-des-Bois, to also overview religious services provided to the workers of Camaragibe. Moreover, he also sought to engage the sisters of this Congregation to be charge of health and education services.

The friendship between Menezes and Harmel continued throughout the years, as some of the surviving letters exchanged between them attest. On 4 November 1891, Harmel wrote : "Pour moi, très excellent ami, je remercie Dieu de m'avoir procuré votre amitié. Si nous arrivons à implanter le règne de Jésus Christ dans une usine ai Brésil ce

¹⁹⁸ A Província. Recife, January 30, 1981, N. 24, p. 8.

sera la plus grande joie de notre vie. Et c'est vous que l'aurez donné" (Collier 1996: 96); later on 28 February 1896: "Nous considerons votre fondation comme la fille bien-aimée du Val-de-Bois. Une fille qui dépassera sa mère quand les années auront accumulées les actes de dévouement" (Collier 1996: 98). After Menezes passed away in 1904, Harmel's interest in Camaragibe motivated him to correspond with Pierre Collier, the former's son-in-law and successor.

The economic and moral organization of the CIPER was thus – in the words of Carlos Alberto de Menezes – grounded on Christian sentiments. "as primeiras associações estabelecidas foram as religiosas, desde 1893. Logo depois de concluído e formado o primeiro grupo de homens formado no espírito cristão, nos animamos a nos lançar em outros empreendimentos" (Menezes *apud* Collier 1996: 142-143). The association he referred to was the Society of Saint Vincent de Paul, which he had joined in 1886.

Encouraging joint participation of employers and workers as Vincentian confreres probably contributed to strengthening the social role that according to Menezes was reserved for the employers: the paternal protection of their workers in order to promote their moral education and the social progress. In this regards, Menezes declared at the Catholic Congress of Bahia: "a tal respeito não se iludam os industriais católicos: nós temos cargo de almas; nós temos que responder perante Deus por essas almas, como temos de responder pela alma de nossos filhos. (...) O patronato é uma segunda paternidade" (Menezes *apud* Collier 1996: 111).

Harmel advised Pierre Collier that, in this role as the "head of the proletarian family", the main occupation of the employer should be to form their workers by means of study groups and the management of associations in order to render them more capable of conducting their own affairs (Collier 1996: 106). It was thus on education and the principle of association that the labor-management relations were founded. Workers

congregated in associations, which were incorporated into a Corporation; then the Corporations into Unions and Federations.

In Camaragibe, the *Corporação Operária*, founded on 1 July 1900, was the structuring element of the company town. This institution stemmed from the associations that had been founded throughout the years. In January 1895, the *Sociedade Cooperativa de Consumo*, and the Associations *Associação das Filhas de Maria* and *Associação dos Santos Anjos*, of economic and religious scope, respectively, were established. Then, during that same year, the girl's school, the Musical Club and the *Apostolado da Oração* were also founded. In 1896, religious associations geared towards youngsters and boys, the associations of *São Miguel* and *São Luiz Gonzaga*; in 1897, the associations *Santana* and *Santa Filomena* for mothers and girls; finally, in 1899 in 1899, the workers' Drama association (*Clube Dramático dos Operários de Camaragibe*) was created. Noteworthy, with the exception of the *Apostolado da Oração*, all the other religious associations avoided mixing of the sexes and age groups (Aguiar and Lima 2012: 168).

The Corporation took over the execution and the costs of the firm's social program, which heretofore had been under the responsibility of the CIPRE, comprising the chaplain, the chapel, the religious service, the teachers of the schools, the tenements, the medical services, medication, and as soon as possible, aid in case of prolonged illness and accidents. To tend to all these obligations, the Corporation was organized into a central part and two branches: the *Sociedade Cooperativa* and the *Sociedade de Mútuo Socorro*. The central part was in charge of the religious services, the schools, police, cleanliness and salubrity of the *vila operária* and leisure (music club, drama club, celebrations). The *Cooperativa* maintained a grocery store, a shop, a butcher shop and a bakery. The scope of the *Sociedade de Mútuo Socorro* was providing health care, pay allowance in case of serious and prolonged illnesses and carrying burial expenses (*Companhia Industrial Pernambucana* 1908: 29-34).

In order to carry out its programs, the Corporation received a yearly subvention of 15:000\$000 from the CIPER, contributions from the workers (the equivalent of half day of work per month and a part of their cooperative bonus) and part of the profits of the Cooperativa. The corporation was run by a president, the factory manager; a vice-president, the manager's assistant engineer; and a council composed by twenty members, out of which ten were indicated by the president and the remaining ten elected by the laborers (Companhia Industrial Pernambucana 1908: 29-34; Collier 1996: 138-139). Even though it was set up as a mean to promote workers' autonomy, the company's preponderant presence in the direction of the Corporation was evident. However, workers' were also represented at the direction of the factory through the Conselho Profissional Consultivo, charged with indicating and requesting any measure deemed necessary to their well-being.

Organization of labor in the Camaragibe factory drank from the fountain of the *Rerum Novarum*. To avoid the mixing of the sexes in workshops and factories that could jeopardize morality and present harmful occasions of evil (§36), in Camaragibe labor division prevented "confusão e aglomeração de pessoas de sexo e idades diferentes" (Companhia Industrial Pernambucana 1908: 36). To ensure the material well-being of the proletariat (§5, §6), higher-paying positions were preferably given out to fathers of large households and widows, who had to work to provide for their families. To respect the authority of the father and his natural role as family provider (§13), the company established the payment of the family wage system, which pooled the wages of all family members and handed it over to the father. To take great care that children are not engaged in industrial work before an adequate development of their bodies and minds (§42), the workingmen's children only had the right to join the factory after completing their primary education. And finally, to ensure the necessary rest which disposes men to turn

his thoughts to God (§41), the factory worked in shifts of ten hours during the weekdays, eight hours on Saturday and there was no shift on Sunday.

To reach the full extent of his mission, Carlos Alberto de Menezes also considered that it was important to disseminate the program developed in Camaragibe and to seek to reproduce its benefits. An important step in this direction was the Catholic Congress of Pernambuco that convened in Recife during 22-29 June 1902, with a session dedicated to the “social issue” and its solutions.¹⁹⁹ The success of the Congress can perhaps be measured by the fact the tramway company had to ensure supplementary service during the days of the event in order to cater to all the attendees.²⁰⁰ The main outcome of the Congress was the establishment of the Federação do Trabalho Cristão (Christian Federation of Workers) whose scope was to coordinate the associative organizations. Gilberto Freyre highlighted the role of the Federação Operária Cristã in the passing of the Decree-Law n. 1637 of 5 January 1907, which enabled professional unions (*sindicatos profissionais*) and cooperatives (*sociedades cooperativas*). First, the Federation, representing seven affiliated organizations, together with other fifteen labor organizations, presented a petition to the Chamber of Deputies in 1904; in the following year, Bahian deputy Joaquim Inácio Tosta, connected with the Social labor movement since 1900, reintroduced the ideas of the petition in a bill which eventually became the aforementioned law (Freyre 1986: 326).

The “Camaragibe model” aspired to hegemony among industrialists. Nevertheless, despite the intensive informative and formative work carried out by Carlos Alberto de

¹⁹⁹ The second session of the Congress, entitled “Social Works”, proposed the following conferences: 1) Social issue. The socialist solution and the Christian solution; 2) Christian labor organization in large-scale industry or isolated factories; 3) Christian labor organization in small industries or cities; 4) Christian labor organization in agriculture or among rural workers; 5) The Federação Operária Cristã or great general diocesan center. Its organization and foundation. (A Provincia. Recife, N. 114, May 22, 1902, p. 1).

²⁰⁰ A Provincia. Recife, N. 141, June 24, 1902, p. 3.

Menezes and his partners, the Camaragibe “Catholic corporatism paternalism” did not gain ground in the Northeast. Associations, clubs and – later – trade unions were established in different company towns, and the social catholic framework also inspired industrialists (for example, Gustavo Paiva, director of the Companhia de Tecidos e Fiação Alagoana), but the level of engagement with the catholic corporatism found in Camaragibe was not replicated elsewhere; one exception was the CIPER’s Usina Goiana sugar mill, where the cooperative was started in 3 September 1903.

Interestingly, it was the Companhia de Tecidos Paulista (CTP) that initially flirted most with Menezes’ teachings, although later it would forge a labor management system based on the authoritarian control of workers, as we discuss below. The CTP set up a cooperative on 1 May 1902, through the initiative of the factory’s manager Custódio José da Silva Pessoa, a disciple of Menezes. The former “prided himself on having risen from the ranks of the textile workers and being therefore well acquainted with the needs and aspirations of his former working companions (Freyre 1986: 237). In the beginning of the twentieth century, a number of associations or “societies” could be found in Paulista, inspired by the “Camaragibe model”. Among them, the Associação dos Filhos de São José held an important place, “dealing with everything related to life of its members”. In its “carefully painted building” it housed most of the services it maintained:

a bem montada pharmacia que fornece gratuitamente os remedios aos socios e as suas familias; o consultorio medico com salas de espera de consultas, de exams e operações; a biblioteca perfeitamente instalada e contendo além de bons números de livros uma vitrina com uma interessante colleção de fibras têxteis; a escola do sexo feminino, abrindo por duas portas de arco, numa outra sala reservada a aula de costura. (...) Em outra parte da villa operaria tem sua sede a banda musical, e ao lado da esplanada que se estende em frente da fabrica está collocada a capela que é extremamente linda e bem decorada.²⁰¹

²⁰¹ A União Operária. Recife, N. 4, April 10, 1906, p. 1-2.

The Association also maintained a school for boys, and as the Corporation at the CIPER, it gave awards to the students that distinguished themselves. Furthermore, the Filhos de São José de Association was actively involved with the activities of the Federação Operária Cristã.

It is not clear until when the Association was active. It had been founded in 1902, before the Lundgren family took control of the CTP, but it still counted with the company's financial support after they became major shareholders. We located references to the functioning of the Association up to the year 1911, when its president James Anderson passed away. Lopes (1988: 622-623) affirmed that some of the Associations Paulista lived into the 1930s, but throughout the years the reproduction of a model aiming at a "bourgeois utopia" crumbled while the concern with the "invention" of a "system of domination" over the large masses of workers recruited.

Behind the discourse of liberation and autonomy of the working classes and of social harmony in the "Catholic corporatism paternalism" laid the employer's desire to determine the paths of the formation of the proletariat, preventing its self-construction as a class. It did so by regulating workers' lives inside and outside the factory; rejecting and weakening social contestation; imposing a model of family and religious practices; and using the medical-sanitarian discourse to regulate living spaces and habits.

The project of Carlos Alberto de Menezes and his supporters – part of the "moralization enterprise" identified in Chapter 1 – perceived workers as wild, ignorant and uncivilized. Menezes asserted that the "rebaixamento geral dos espíritos e dos costumes do nosso proletariado" resulted largely from years of prevalence of the slave regime in Brazil:

A ausência absoluta do sentimento do respeito de si e da sua dignidade de homem; a aniquilação da ideia de família, que o escravo não podia formar; o conseqüente desapego dos filhos que, como entre os animais, só lhes pertenciam enquanto não podiam dispensar os cuidados maternos (...); a maior animalidade

estabelecida em suas relações sexuais; a mulher considerando sua virgindade em pequeno valor, a negociar com o primeiro pretende, se os olhos do senhor não a tinham marcado com o estigma de sua preferência; a ignorância arvorada em condição de existência; a ausência de sentimento religioso que não fosse uma grosseira e supersticiosa devoção; nenhuma ideia de conforto, nenhuma aspiração moral (Menezes *apud* Collier 1996: 75-76)

Hence, for Menezes from the institution of slavery, Brazilian workers had inherited their intellectual and physical flaws – indiscipline, absence of paternal authority, promiscuity, poor health and body strength. And based of these assumptions, the CIPER sought to impose a new model of behavior and living on a workforce in an attempt to “domesticate” it and shape hard-working, docile, submissive and economically productive laborers. This perspective found wide support among the local elites; Freyre (1986: 327) echoed the words of geographer and historian Tadeu Rocha in an article published in 1957 affirming that the Usina Goiana had to overcome a series of obstacles to set up its cooperative and that it was not easy to “bring about this integration of employees, working as he was with a very ignorant rural proletariat barely emerged from slavery and still imbued with all the vices of that institution.” Workers’ resistance to the imposition of labor management strategies that dismissed their traditions, system of values and habits, symbolic representations, etc. is presented in the paternalist discourse as inferiority, highlighting the prescriptive and discriminatory nature of the “Catholic corporatism paternalism”.

The second trend we refer to as “Authoritarian paternalism” is represented by the labor management strategies implemented in the company towns of Paulista, Rio Tinto and Pedra, which constitute perhaps the company-induced settlements more strongly engraved in the regional collective memory.

Paulista and Rio Tinto were cotton spinning and weaving mills controlled by a family of entrepreneurs of Swedish origin, the Lundgrens. As aforementioned, the former factory had been founded in 1891 in the state of Pernambuco, but it was when it came

under the control of the Lundgrens in 1904 that it began to flourish; the latter was pre-planned company town founded *ex nihilo* in Paraíba in 1917 and inaugurated 1924. They stood out due to their dimensions: set within areas of approximately 240 km² and 600 km² and achieving a number of approximately 6,000 and 2,600 company houses, respectively. Despite not equaling the size of the aforementioned industrial settlements, the town of Pedra, home to the Agro Fabril Mercantil, a cotton thread factory, was also a noteworthy experience that attracted much attention in Brazil. Pedra was built in 1913 in the dry hinterlands of Alagoas by the entrepreneur Delmiro Gouveia.

The “Authoritarian paternalism” emerged in Paulista, Pedra and Rio Tinto in different moments. In the Lundgren company towns, as we indicated before, its framework of action was defined during the period 1930-1940; the social project in Pedra, on the other hand, was a short-lived experience that disappeared together with its founder, murdered in 1917 in the midst of a political dispute. Nevertheless, despite these chronological differences, they adopted similar approaches to the management of its workforce, as we discuss below.

Rule in these company towns were built upon the foundations of systems of authority forged within the broader framework of *mandonismo* (“bossism”) – a form of traditional politics built upon oligarchic and personalized power structures (Carvalho 1999: 133). In the Northeast, *mandonismo* has generally identified with the socio-political phenomenon of the *coronelismo*, which gained ground during the First Republic and persisted for decades. A body of literature has acknowledged this phenomenon as the result of a compromise between local political bosses – the colonels²⁰² – and the

²⁰² The term “Colonel” was often employed in Brazil to refer to important people. Its use came from the colonial order when wealthy “homens bons” required military honors backed by the justification of having carried out “war services”. The high military patents they were granted did not furnish them with wages or training, but they legitimized their power and ensured them privileges. Later, the creation of the Brazilian National Guard contributed to extend the use of the word to denote the powerful chiefs of rural areas. This paramilitary force recruited members among the most

government (state and federal): the colonel maintained his base of domination in small towns with “expressions of private power” and, in an exchange of mutual benefits, provided the government with electoral support.²⁰³ Though its roots could be found in the past colonial practices, the coronelismo stemmed from the superposition of developed forms of representative government to an inadequate social and economic structure; it was an adaptation of the overreaching Brazilian private instances of power to the new federative republican regime (Leal 2012: 43). Roniger (1987: 74) summed up the dynamics it assumed:

As the government adopted liberal institutions during the “Old Republic” (1889-1930) and developed parliamentary politics on the basis of a narrow but expanding franchise, political clientelistic networks emerged around the so-called coroneis (“colonels”). The latter bargained with political forces at the regional and state-capital levels, handing over the votes they controlled in exchange for access to office-holders and concomitant benefits like jobs, health and credit facilities, and exemption from regulations. The coroneis thus could offer various services and commodities for fostering positions of social and political authority as well as diffuse relationships with followers at municipal and regional levels. Within their sphere of influence, coroneis could obtain jobs, lend money, secure lawyers and influence judges, “persuade” witnesses, prevent the police from confiscating their clients’ weapons, legalize land rights, grant fiscal exemptions, settle interpersonal disputes, act as godfathers, and give recommendations.

Even though it is primarily regarded as localized patron-client relations were established between landowners and their rural workers and tenants, as Domingos (2000:

prestigious and wealthiest local patriarchs, who then formed their own corps. Hierarchy followed the socioeconomic structure with the Colonels were at the top. After the extinction of the National Guard in 1922, the title was still used by the population to set apart those who had great political and economic power.

²⁰³ A thorough examination of the phenomenon of coronelismo is beyond the scope of this research, as our interest is limited to the light it can shed to better understand paternalistic relations in the company towns of the Northeast. For more on coronelismo, see Victor Nunes Leal’s classic *Coronelismo, enxada e voto: o município e o regime representativo no Brasil*, first published in 1957; Queiroz, M. I. P. de. *O mandonismo local na vida política brasileira*. São Paulo: Instituto de Estudos Brasileiros/ USP, 1969; Janotti, M. *O Coronelismo, uma política de compromissos*. 2ª ed. São Paulo: Brasiliense, 1981; Saes, D. *Coronelismo e Estado burguês: elementos para uma reinterpretação*. In: *Estado e Democracia: ensaios teóricos*. Campinas: UNICAMP, Instituto de Filosofia e Ciências Humanas, 1998.

4) indicated the term *coronelismo* has been widely applied to forms of reproduction of power involving diverse administrative spheres, geo-economics areas and social relations – from powerful landowners to professors, merchants, industrialists, and so on; men designated as colonels presented an extraordinary variety of social backgrounds, economic interests, wealth, educational background, and political influences:

Havia coronéis senhores de grandes e pequenas glebas, empresários modernos, comerciantes e banqueiros; analfabetos, doutores e intelectuais refinados; com grandes parentelas, de famílias ancestrais e aventureiros recém-chegados. Havia coronéis cuja autoridade derivava da força armada, da ascendência moral, da capacidade de prestar serviços, do uso de recursos e instrumentos públicos ou de tudo isto combinado em diferentes proporções. Coronéis mandavam em parte do município, no município inteiro, em conjuntos de municípios e mesmo em todo o estado (...) (Domingos 2000: 4).

In a word, the “colonel” was someone who, for different reasons, was considered to deserve a respectful treatment.

Thus, not surprisingly, Frederico and Arthur Lundgren, as well as Delmiro Gouveia, bore the title of “colonel”. If at the time, it was a sign of prestige and respect, later when Levine (1978: 11) described the Lundgren brothers as “urban coronéis” it was not in the same spirit. What the scholar wanted to highlight was the authoritarian and the clientelistic nature of relations in their company town, which we look into further below.

We here do not apply the concept of *coronelismo* to describe the industrial management relations under study; as Carvalho (1999) alerted, *coronelismo* was a historically dated phenomenon and the over-application of the concept has weakened its heuristic value. Nevertheless, parallels can be traced between these phenomena situated within the spectrum of *mandonismo*, and *coronelismo* can be a relevant analytical instrument to elucidate aspects of the “authoritarian paternalism”.

We derive many of our notions of the convergences between the *coronelismo* and the Authoritarian paternalism from Dantas (1987). Challenging the idea that the main

source of power of the colonel always laid in the control over a great number of voters, Dantas (1987) considered the phenomenon to be set on a threefold base: the relations of personal domination exerted by the landlords over peasants; the discourses and symbols that reaffirm those bonds of loyalty and submission; and the colonels' role as middle men between State politics and the rural electorate.

The personal domination of those industrialists over the employees in their company towns was the first element that configured the "authoritarian paternalism". Despite using similar strategies, the aim of this rule was not exactly the same in Pedra and Paulista and Rio Tinto. In the Lundgren's factories, concern was mainly directed towards fostering industrial discipline in workers and to quieting down social and political contestation in view of the large workforce they had to manage. In Pedra, while the discipline factor was, of course, still central, it was backed up by a broader agenda of social reforms.

The isolation of the company towns was an initial key strategy to ensure this domination; as Crawford (1995: 30) remarked, isolation often encouraged near-feudal control over those spaces. In Pedra it was imposed by its location far from the coastal urban centers, while in Paulista and Rio Tinto the vast land surrounding the factories belonging to the Lundgrens served to isolate the towns. Furthermore, to reinforce their "closed town" nature, the central areas of the towns were enclosed by fences with a checkpoint at the entrance, enabling careful monitoring and screening of those who were granted access. Setting foot and staying in the company towns naturally depended on the approval of the colonels. A well-known episode that took place in Rio Tinto involving Frederico Lundgren and one of his employees is indicative of such control. In 1931, Frederico became aware that a certain Mr. Sales was spreading around "talks" of founding a trade union; the worker was immediately summoned to the boss' office and addressed in the following terms: "Mr. Sales, I am the union! I am the captain of my

workers! I know the needs of the workers! I created all this, Mr. Sales!" He was then fired, received some money for his travel expenses and also a warning: "As long as Frederico João Lundgren has any business in Rio Tinto, do me the special favor of never again coming close to the border of Rio Tinto!" (Fernandes 1972: 119-121). Of his visit to Pedra, the famous Brazilian writer Graciliano Ramos also recorded that the factory and the vila operária were surrounded by barbed wire and that government agents, municipal employees, police officers stopped at the gate because they were not required due to the "excessive" order that reigned in the town (Ramos 1969). Ramos' assertion inadvertently points to the total authority colonels' had in the towns, managing them as "private fiefdoms" (Crawford 1995: 30), to the extent that they could even obstruct or undermine public authority.

CONCLUDING REMARKS

Company towns are the product of their owner's hope that shaping the built environment in particular ways would allow them to reach certain political, economic, social and moral goals, whether there were greater control of the workforce, implementing certain types of labor management relations or providing their workers with better housing than they might otherwise be able to secure.

Our research examined the development of company towns in the Northeast region of Brazil from the second half of the nineteenth century to the present-day. These settlements largely remain a neglected theme in historical and heritage studies scholarship, and this research sought address this gap by situating company towns in the broad explanatory framework of the regional, social, industrial and labor contexts in which they developed in order to remedy the predominance of overspecialized scholarship. Through an extensive research program we managed to enlarge the number of identified company towns in the region.

Since the materialization of each of these spatial settlements correspond to the stages of industrial development, combining the specific conditions under which the manufacturing enterprises with the the general conditions of capitalist development in Brazilian society, we examined their phases of development. The main stages of their development were identified according to the responses to the different economic and social conjunctures.

We also examined the differences between the terms employes to describe the company-built settlements in Brazil – the “vilas operárias” and “company towns” in the

international literature. This resulted in an analysis of the construction of housing negative and positive archetypes for the working classes of Brazil and particularly in the Northeast.

Finally, we also produced a characterization of the phenomenon of the company town in the Northeast, aiming to identify its structuring features. This yielded a complex panorama of might constitute a regional model. Future research is now necessary to place the Northeastern company towns into the national framework.

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Periodicals consulted		
Title	Province/State	Period
<u>Almanak da Provincia das Alagoas</u>	<u>Alagoas</u>	1873 - 1880
<u>Mensário Ilustrado</u>	<u>Alagoas</u>	1938
<u>Almanak Administrativo Mercantil, e Industrial da Bahia</u>	<u>Bahia</u>	1854 - 1863
<u>O Cearense</u>	<u>Ceará</u>	1846 - 1891
<u>A Estrella do Norte: periodico da Sociedade Fé e Luzes</u>	<u>Pará</u>	1860 - 1869
<u>A União</u>	<u>Paraíba</u>	1893 - 1899
<u>O Publicador</u>	<u>Paraíba</u>	1864 - 1869
<u>A Epocha</u>	<u>Pernambuco</u>	1889 - 1890
<u>A Provincia</u>	<u>Pernambuco</u>	1872 - 1933
<u>O Liberal Pernambucano</u>	<u>Pernambuco</u>	1852 - 1858
<u>A União Operaria</u>	<u>Pernambuco</u>	1900-1909
<u>Correio Mercantil, e Instructivo, Politico, Universal</u>	<u>Rio de Janeiro</u>	1848 - 1868
<u>O Auxiliador da Industria Nacional</u>	<u>Rio de Janeiro</u>	1833 - 1896
<u>Gazeta do Natal</u>	<u>Rio Grande do Norte</u>	1888 - 1890
<u>Diario do Estado de Pernambuco</u>	<u>Pernambuco</u>	1936 - 1950

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IMAGES

Image 1:

Interior view of a shoemaking shop.

The employment of slaves in small workshops was current practice.

Source:

Debret 1835,
Plate 29

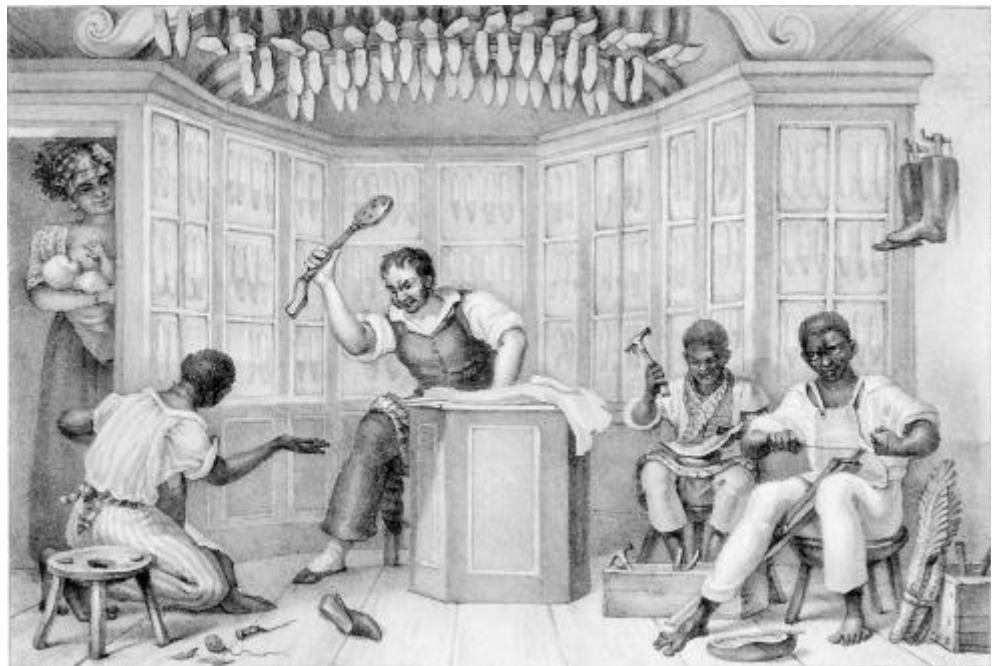


Image 2:

spinning and weaving were characteristically carried out by women at home.

Source:

Debret 1835. Plate 34.



Image 4: View of the Fábrica de ferro de São João de Ipanema, Sorocaba (SP), with the dwellings for employees to the left. 187-

Source:

Coleção Thereza Christina Maria, Biblioteca Nacional (Brasil)

FOTOS-ARM.1.1.4 (19)



Image 5:
The only two
animals in the world
who do not mind the
high cost and the
lack of houses.

Source: A Provincia.
Recife, N. 72, March
14, 1920, p. 1.



Image 6:
“Cortiço páteo”.
Photo taken for the
inspection of
insalubrious houses
in São Paulo in 1894
by the Comissão de
Exame e Inspeção
das Habitações
Operárias e Cortiços
no Distrito de Santa
Ifigênia

Source: Prefeitura
do Município de São
Paulo (2010)

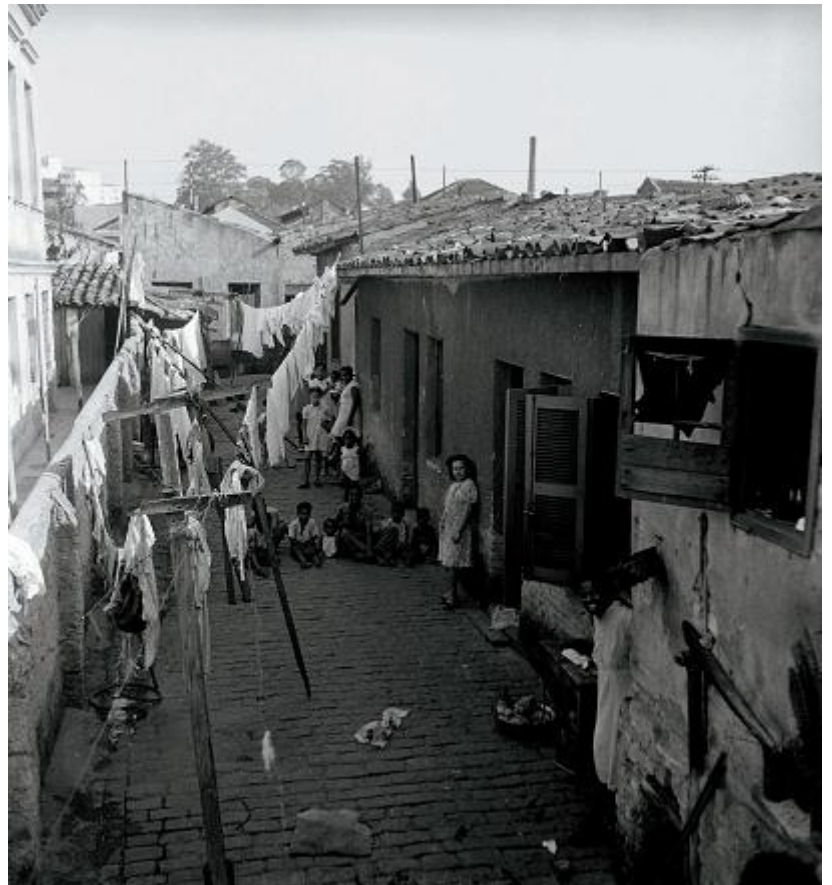


Image 7:

Entrance of
collective dwelling,
1906. Photo by
Augusto Malta.

Source: ACGRJ,
<http://www.unicamp.br/cecult/mapastematicos/corticocort07net.jpg>

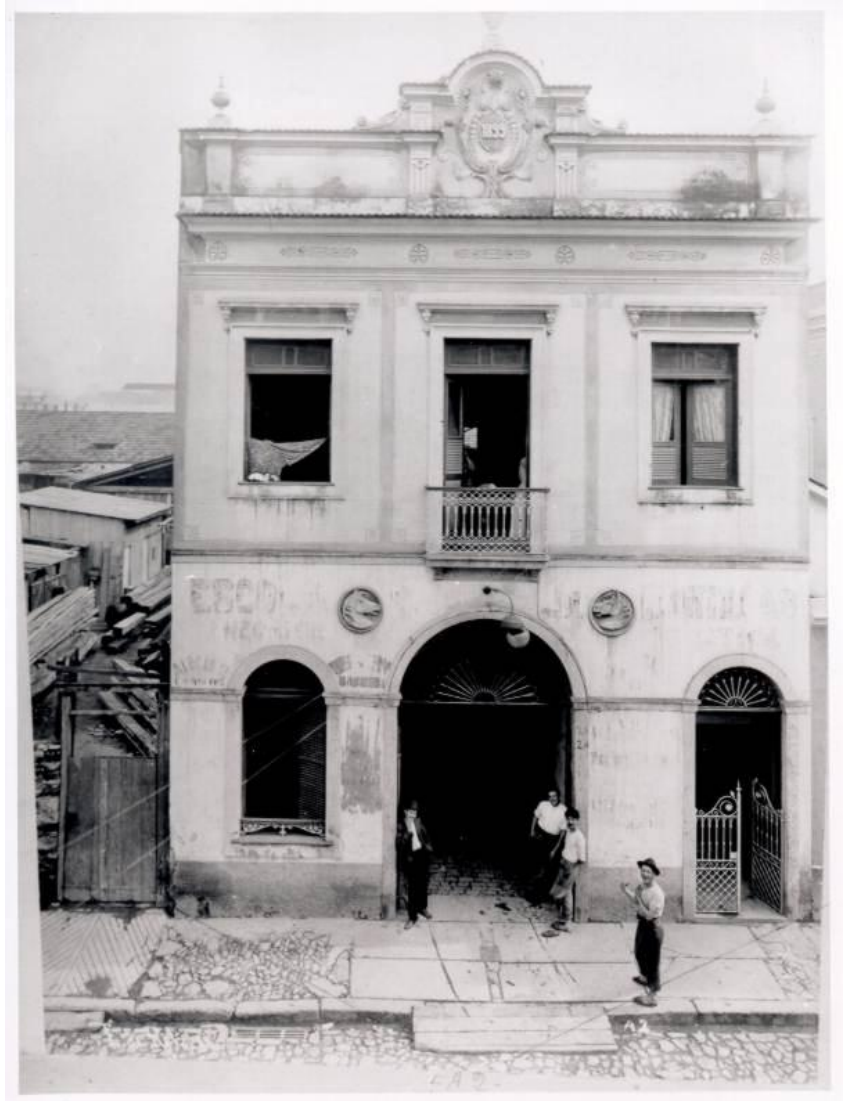


Image 8:

View of a mocambo.

Source: Rugendas,
Johann Moritz.
Malerische Reise in
Brasilien. Paris:
Enlmann & Cie.,
1835.



Image 9:
Mocambos made of
wood and straw.

Source: Freyre 1937



Image 10:
Picture indicating
two of the different
construction
typologies of
mocambos: the one
on the top is made
entirely of coconut
palm leaves and the
one below of adobe
and straw.

Source: Freyre 1937

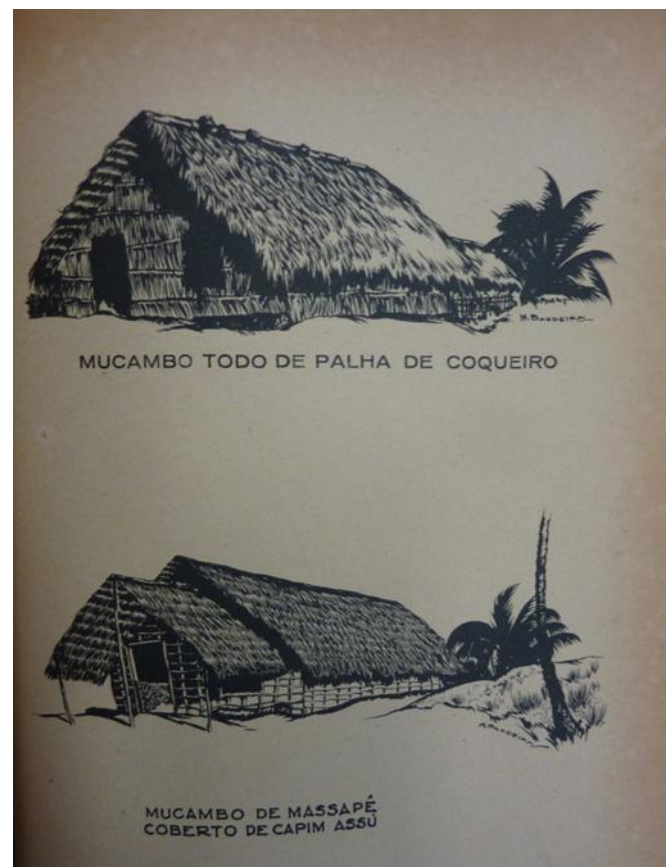


Image 11:

Views of mocambos in the state of Pernambuco (1938-1950).

Source: Archive Agamenon Magalhães Photo series 024, Centro de Pesquisa e Documentação de História Contemporânea do Brasil (CPDOC), Fundação Getúlio Vargas



Image 12:
View of vilas built by the Liga Social contra o Mocambo (1938-1945).

Source: Archive Gustavo Capanema Photo series 478, Centro de Pesquisa e Documentação de História Contemporânea do Brasil (CPDOC), Fundação Getúlio Vargas.

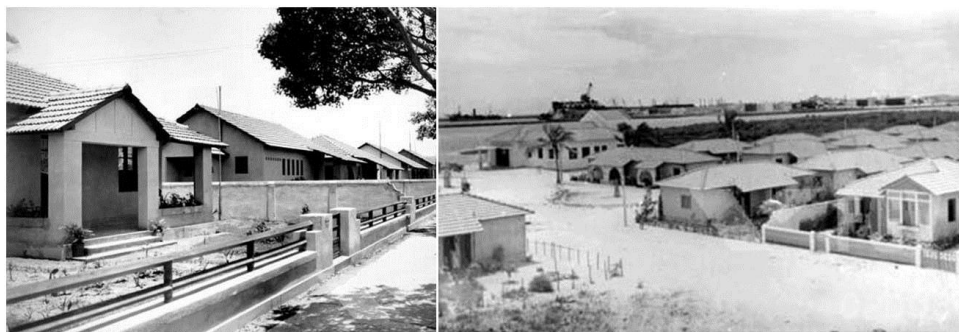


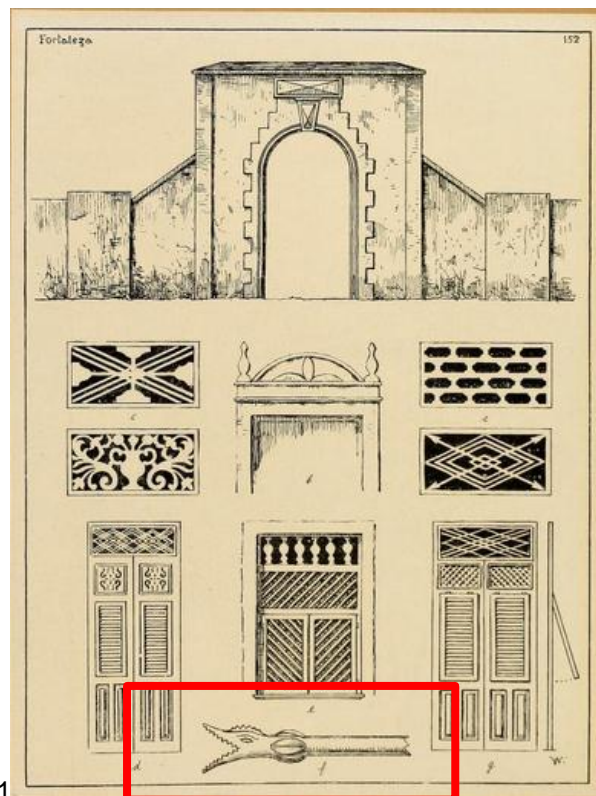
Image 13: The Liga Social Contra o Mocambo built vilas operárias for professional groups; in the picture the vila for cooks (1938-1950).



Source: Archive Agamenon Magalhães Photo series 024, Centro de Pesquisa e Documentação de História Contemporânea do Brasil (CPDOC), Fundação Getúlio Vargas

Image 14:
The “serpentão”, the characteristic drainpipe of Fortaleza.

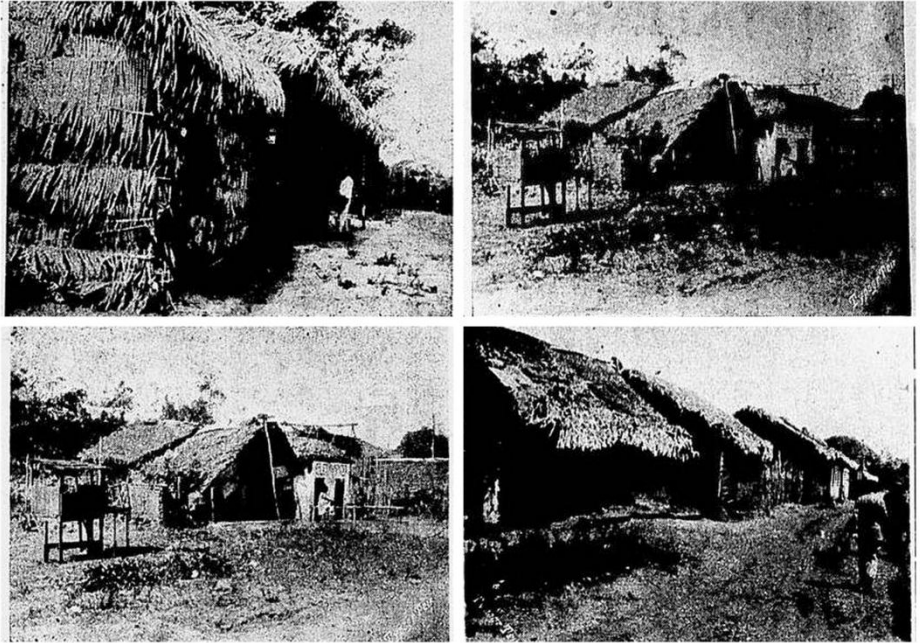
Source:
Rodrigues (1951)
Plate 152
(emphasis added)



1

Image 15:

“Aspect of one of our working-class neighborhood”. Series of photos in a report about the living conditions in working class neighborhoods in São Luís, Maranhão, published in the Pacotilha newspaper.



Sources: Pacotilha, Sao Luis, N. 240, December 23, 1929, p. 1

Pacotilha, Sao Luis, N. 242, December 25, 1929, p. 1

Image 16:

View of cortiços in the city of São Paulo. Photos taken by photographer Fabio Knoll for the Exhibition *Cortiços – a experiência de São Paulo*.

Source:

Prefeitura do Município de São Paulo (2010)



Image 17:

Peabody estate
Lawrence Street in
Chelsea, London,
built in 1870. Each
flat contained
between one and
four rooms. The flats
were not self-
contained, and there
were shared sinks
and lavatories on the
landings.

Source:

<http://www.peabody.org.uk/about-us/our-story/our-history/peabody-through-the-ages>



Image 18:
Hammersmith
(dating from 1926)
was the last of the
Peabody estates to
have a separate
bathhouse.

Source:

<http://www.peabody.org.uk/about-us/our-story/our-history/peabody-through-the-ages>



Image 19:

View of the
Familistère of Guise,
built by the
industrialist Godin.

Source:

Godin (1901)

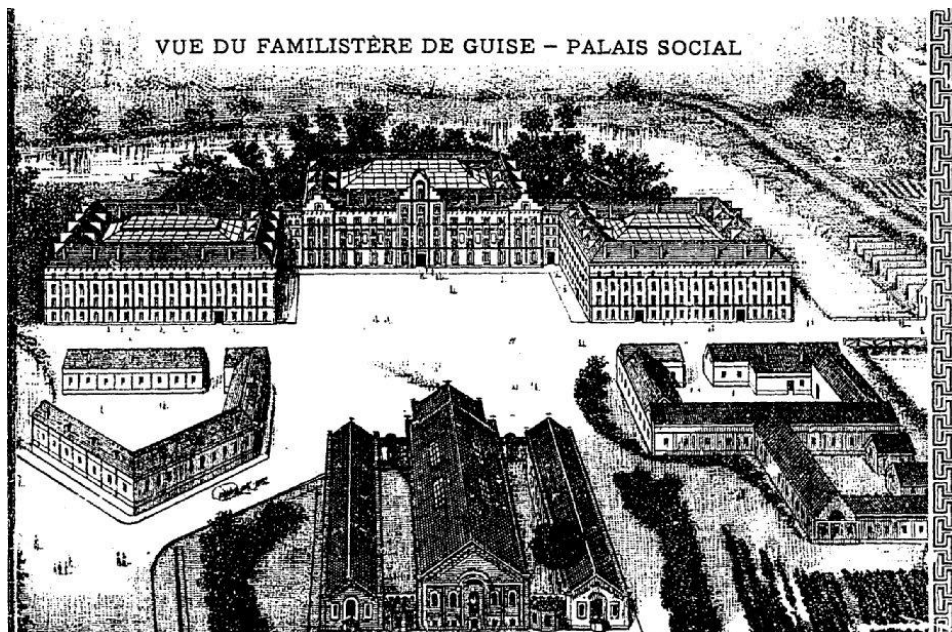


Image 20:

Companhia Paulista
de Tecidos, textile
mill in Pernambuco.

Source:

Lloyd 1913

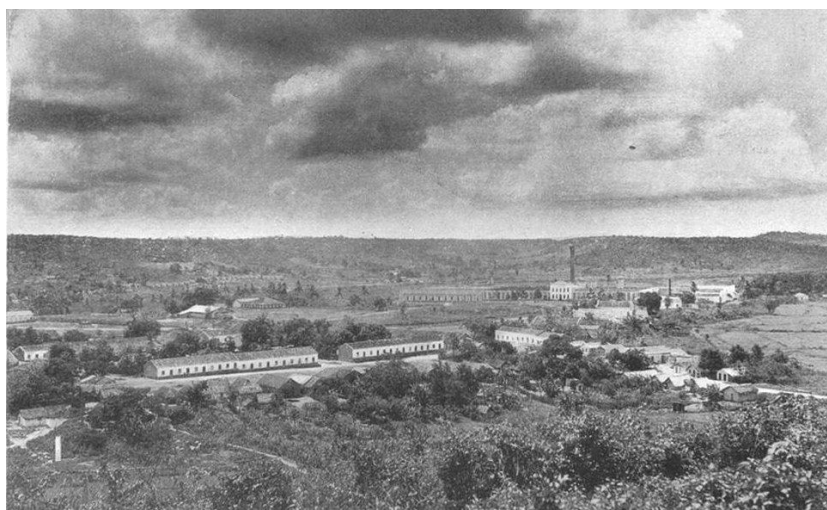


Image 21:
Textile mill of the
Companhia de
Industrial
Penedense, Alagoas

Source:
República dos
Estados Unidos do
Brasil 1927: 74



Image 22:
Fábrica de Tecidos
Penedense.

Source:
IBGE,
Acervo dos
Trabalhos
Geográficos de
Campo
Available at:
<http://biblioteca.ibge.gov.br/detalhes.php?id=427280>

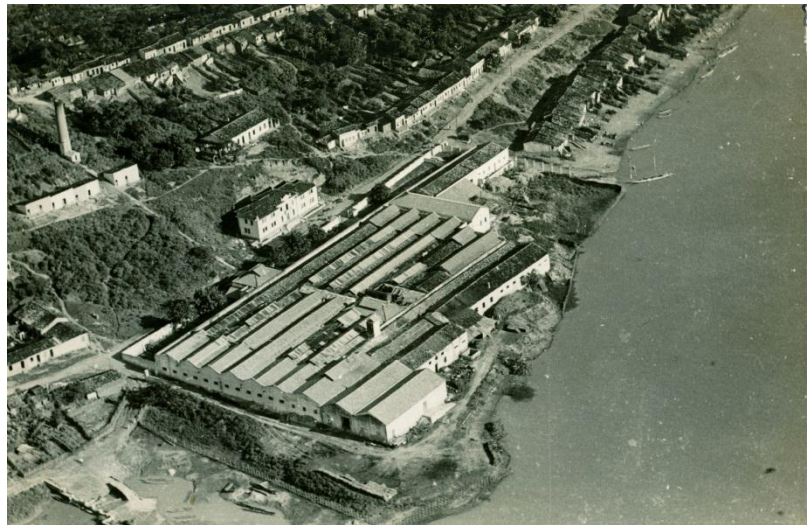


Image 23:

Textile mill of the
Societé Cotonnière
Belge-Brésilienne,
Pernambuco

Source:

República dos
Estados Unidos do
Brasil 1927: 132

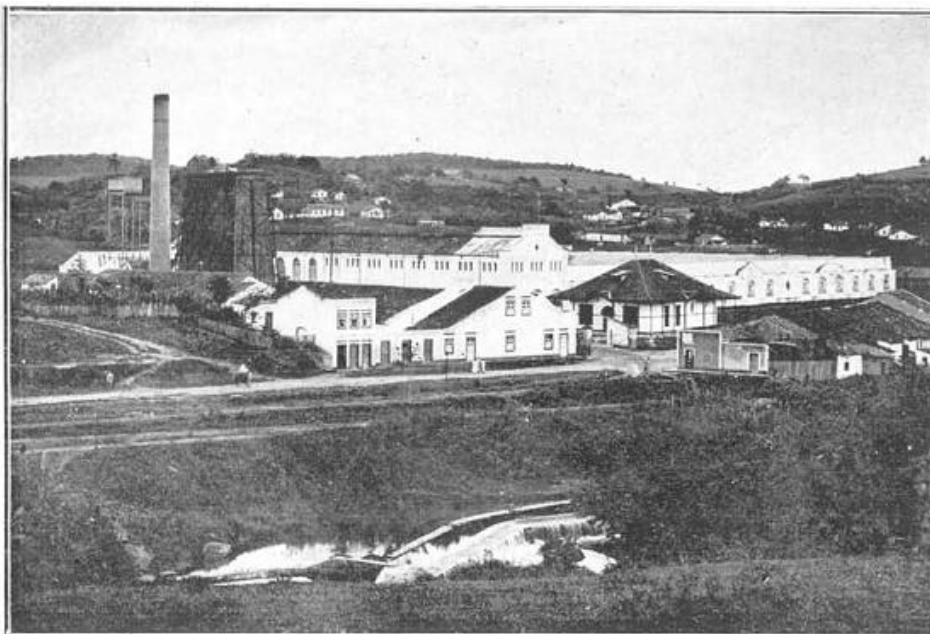


Image 24:

Weaving mill of the
Societé Cotonnière
Belge-Brésilienne,
Pernambuco

Source:

República dos
Estados Unidos do
Brasil 1927: 327

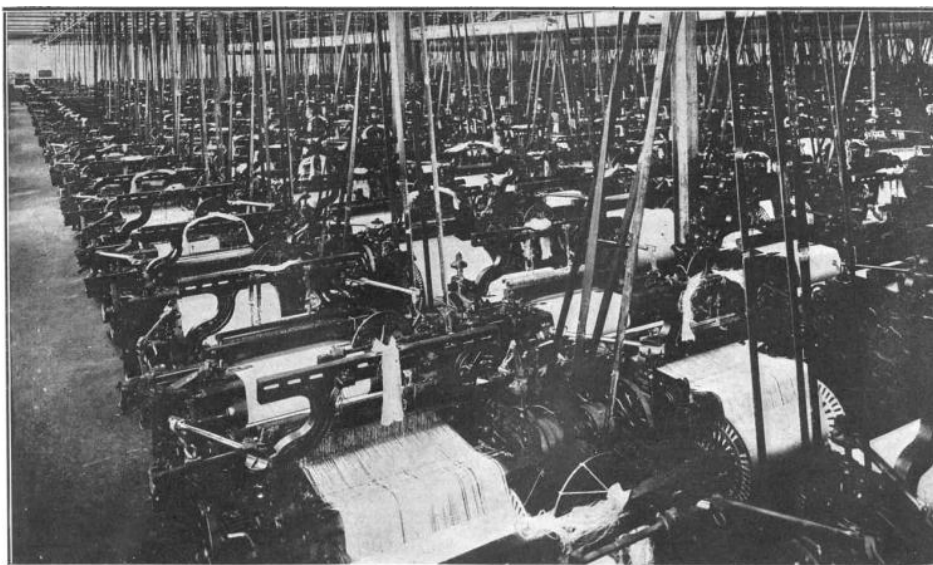


Image 25:

Fábrica de Fiação e
Tecidos da
Companhia
Pilarense, Alagoas

Source:

República dos
Estados Unidos do



Brasil 1927: 327

Image 26:

Fábrica de Tecidos
Cachoeira, Alagoas

Source:

República dos
Estados Unidos do
Brasil 1927: 327

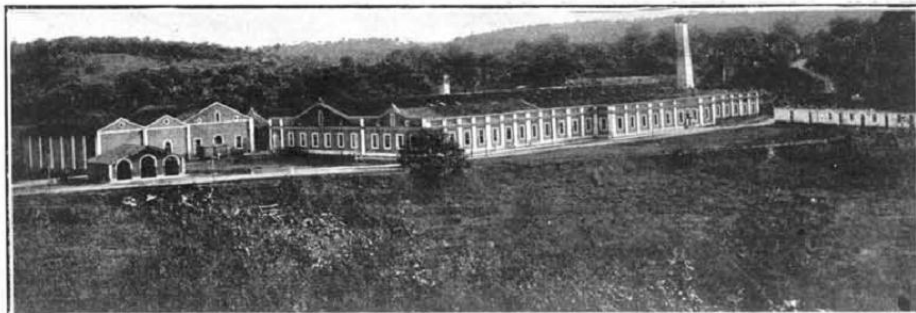


Image 27:

Fábrica de São
José, Ceará in 1957.

Source:

IBGE,

Acervo dos
Trabalhos
Geográficos de
Campo

Available at:

http://biblioteca.ibge.gov.br/d_detalhes.php?id=410504

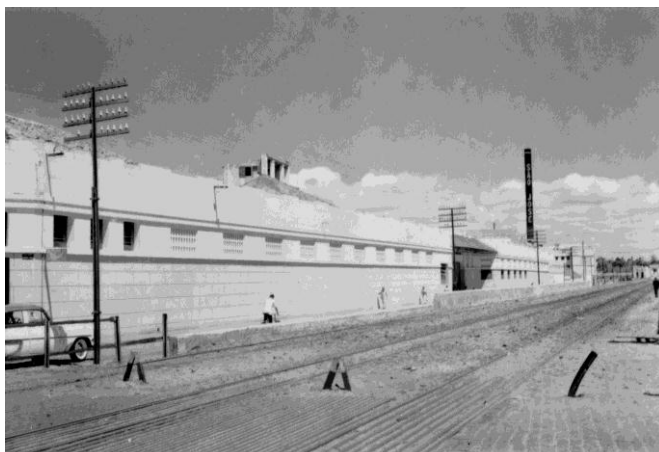


Image 28:

Cia. Rio Anil e Jorge & Santos: 1) spinning; 2) weaving; 3) Company headquarters; 4) Rio Anil cotton mill

Source:

Lloyd 1913: 1028.

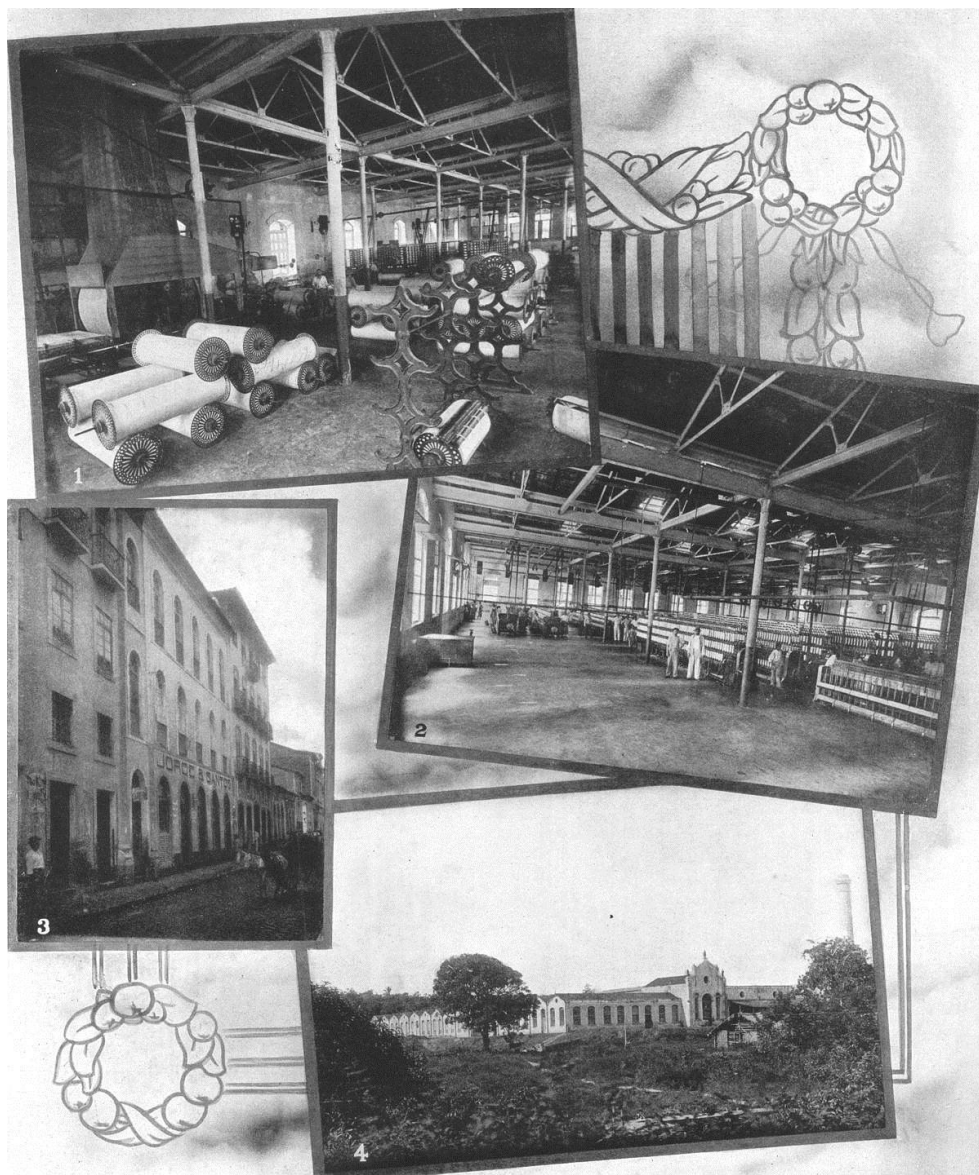


Image 29:
Fábrica de Tecidos
Tibiri em Santa Rita,
Paraíba in 1957.

Source:
IBGE,
Acervo dos
Trabalhos
Geográficos de
Campo

Available at:
http://biblioteca.ibge.gov.br/d_detalhes.php?id=411026



Image 30:
Fábrica Peixe in
Pesqueira,
Pernambuco.

Source:
IBGE,
Acervo dos
Trabalhos
Geográficos de
Campo

Available at:
http://biblioteca.ibge.gov.br/d_detalhes.php?id=410504



Image 31:
Plan of the typical
“door-and-window”
one-story house

Source:
Debret 1839.
Cropping of Plate
42.

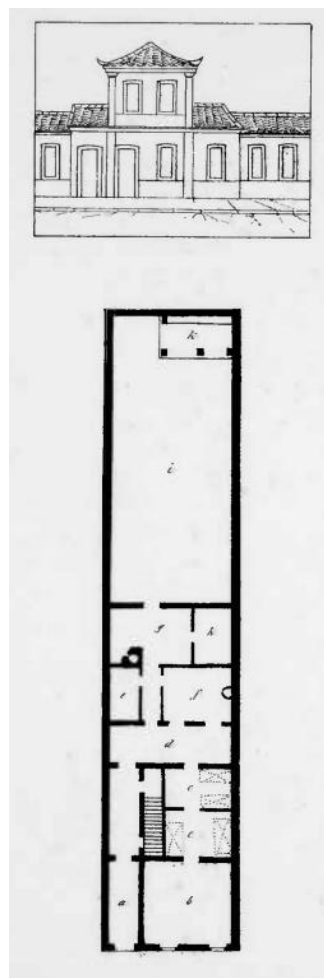


Image 32:
Another view of the
“door-and-window”
one-story house with
a gable roof.

Source:
Reis 2000: 31.

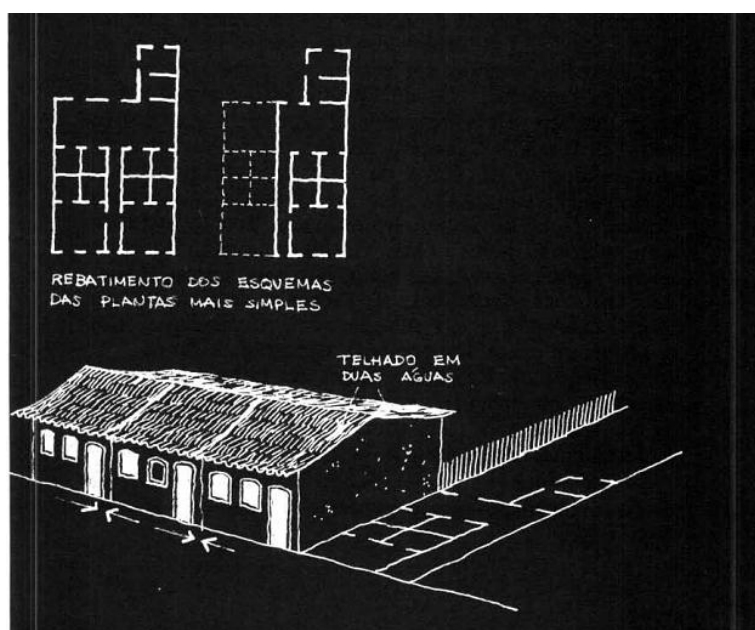


Image 33:
View of “door-and-
window” houses in
João Pessoa.

Source:
Stuckert s/d



Image 34:
“Door-and-window”
houses with gabled
roof in the Fernão
Velho company town
in Alagoas

Source: Google
maps



Image 35:
“Door-and-window”
houses with gabled
roof in the Rio Tinto
company town in
Paraíba

Source: personal
photo by author



Image 36:
Companhia
Alagoana de
Fiação e Tecido

Source:
Google maps



ATTACHMENTS

List of Attachments

Attachment 1 - Alvará of 5 January 1785

Attachment 2 - Alvará of 1 April 1808

Attachment 3 - Alvará of 28 April 1809

Attachment 1**Alvará of 5 January 1785**

Conjunto documental: Cartas, provisões e alvarás

Notação: códice 439

Título do fundo: Junta da Fazenda da província de São Paulo

Código do fundo: EG

Folha(s): 27 a 28

ARQUIVO NACIONAL



U A RAINHA. Faço saber aos que este Alvará virem: Que sendo-me presente o grande número de Fabricas, e Manufacturas, que de alguns annos a esta parte se tem diffundido em diferentes Capitánias do Brazil, com grave prejuizo da Cultura, e da Lavoura, e da exploração das Terras Mineraes daquelle vasto Continente; porque

havendo nelle huma grande, e conhecida falta de População, he evidente, que quanto mais se multiplicar o número dos Fabricantes, mais diminuirá o dos Cultivadores; e menos Braços haverá, que se possam empregar no descobrimento, e rompimento de huma grande parte daquelles extensos Dominios, que ainda se acha inculta, e desconhecida: Nem as Sesmarias, que formam outra consideravel parte dos mesmos Dominios, poderão prosperar, nem florecer por falta do beneficio da Cultura, não obstante ser esta a essencialissima Condicação, com que foram dadas aos Proprietarios dellas: E até nas mesmas Terras Mineraes ficará cessando de todo, como ja tem consideravelmente diminuido a extracção do Ouro, e Diamantes, tudo procedido da falta de Braços, que devendo empregar-se nestes uteis, e vantajosos trabalhos, ao contrario os deixam, e abandonam, occupando-se em outros totalmente differentes, como são os das referidas Fabricas, e Manufacturas: E consistindo a verdadeira, e sólida riqueza nos Frutos, e Produções da Terra, as quaes sómente se conseguem por meio de Colonos, e Cultivadores, e não de Artistas, e Fabricantes: E sendo além disto as Produções do Brazil as que fazem todo o fundo, e base, não só das Permutações Mercantis, mas da Navegação, e do Commercio entre os Meus Leaes Vassallos Habitantes destes Reynos, e daquelles Dominios, que devo animar, e sustentar em commum beneficio de huns, e outros, removendo na sua origem os obstaculos, que lhe são

ARQUIVO NACIONAL
S. D. E.
TITULO E LEYENDA

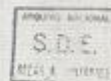
são prejudiciaes, e nocivos : Em consideração de tudo o referido : Hby por bem Ordenar, que todas as Fabricas, Manufacturas, ou Teares de Galões, de Tecidos, ou de Bordados de Ouro, e Prata. De Veludos, Brilhantes, Serins, Tafetás, ou de outra qualquer qualidade de Seda: De Belbutes, Chitas, Bombazinas, Fustões, ou de outra qualquer qualidade de Fazenda de Algodão, ou de Linho, branca, ou de cores: E de Pannos, Baetas, Droguctes, Saetas, ou de outra qualquer qualidade de Tecidos de Lã; ou os ditos Tecidos sejam fabricados de hum só dos referidos Generos, ou misturados, tecidos huns com os outros; exceptuando tão somente aquelles dos ditos Teares, e Manufacturas, em que se tecem, ou manufacturam Fazendas grossas de Algodão, que servem para o uso, e vesturio dos Negros, para ensardar, e empacotar Fazendas, e para outros Ministerios semelhantes; todas as outras sejam extinctas, e abolidas em qualquer parte onde se acharem nos Meus Dominios do Brazil, debaixo da Pena do perdimento, em tresdobro, do valor de cada huma das ditas Manufacturas, ou Teares, e das Fazendas, que nellas, ou nelles houver, e que se acharem existentes, dous mezes depois da publicação deste; repartindo-se a dita Condemnação metade a favor do Denunciante, se o houver, e a outra metade pelos Officiaes, que fizerem a Diligencia; e não havendo Denunciante, tudo pertencerá aos mesmos Officiaes.

Pelo que : Mando ao Presidente, e Conselheiros do Conselho Ultramarino; Presidente do Meu Real Erario; Vice-Rey do Estado do Brazil; Governador, e Capitães Generaes, e mais Governadores, e Officiaes Militares do mesmo Estado; Ministros das Relações do Rio de Janeiro, e Bahia; Ouvidores, Provedores, e outros Ministros, Officiaes de Justiça, e Fazenda, e mais Pessoas do referido Estado, cumpram, e guardem, façam inteiramente cumprir, e guardar este Meu Alvará como nelle se contém, sem

ARQUIVO NACIONAL

embargo de quaesquer Leys , ou Disposições em contrario , as quaes Hey por derogadas , para este effeito sómente , ficando aliás sempre em seu vigor. Dado no Palacio de Nossa Senhora da Ajuda , em cinco de Janeiro de mil setecentos oitenta e cinco.

RAINHA . . .



Martinho de Mello e Castro.

Alvará, por que Vossa Magestade he servida prohibir no Estado do Brazil todas as Fabricas , e Manufacturas de Ouro , Prata , Sedas , Algodão , Linho , e Lã , ou os Tecidos sejam fabricados de hum só dos referidos Generos , ou da mistura de hums com os outros , exceptuando taõ sómente as de Fazenda Grossa do dito Algodão.

Para Vossa Magestade ver.

José Theotônio da Costa Posser o fez.

A fol. 59 do Livro , em que se lanção os Alvarás nesta Secretaria de Estado dos Negocios da Marinha , e Dominios Ultramarinos , fica este registado. S'io de Nossa Senhora da Ajuda em 2 de Março de 1785.

Francisco Delaage.

Na Officina de Antonio Rodrigues Galhardo

Eu a rainha. Faço saber aos que este alvará virem: que sendo-me presente o grande número de fábricas, e manufaturas, que de alguns anos a esta parte se tem difundido em diferentes capitâneas do Brasil, com grave prejuízo da cultura, e da lavoura, e da exploração das terras minerais daquele vasto continente; porque havendo nele uma grande e conhecida falta de população, é evidente, que quanto mais se multiplicar o número dos fabricantes, mais diminuirá o dos cultivadores; e menos braços haverá, que se possam empregar no descobrimento, e rompimento de uma grande parte daqueles extensos domínios, que ainda se acha inculta, e desconhecida: nem as sesmarias, que formam outra considerável parte dos mesmo domínios, poderão prosperar, nem florescer por falta do benefício da cultura, não obstante ser esta a essencialíssima condição, com que foram dadas aos proprietários delas. E até nas mesmas terras minerais ficará cessando de todo, como já tem consideravelmente diminuído a extração do ouro, e diamantes, tudo procedido da falta de braços, que devendo empregar-se nestes úteis, e vantajosos trabalhos, ao contrário os deixam, e abandonam, ocupando-se em outros totalmente diferentes, como são os das referidas fábricas, e manufaturas: e consistindo a verdadeira, e sólida riqueza nos frutos, e produções da terra, as quais somente se conseguem por meio de colonos, e cultivadores, e não de artistas, e fabricantes: e sendo além disto as produções do Brasil as que fazem todo o fundo, e base, não só das permutações mercantis, mas da navegação, e do comércio entre os meus leais vassallos habitantes destes reinos, e daqueles domínios, que devo animar, e sustentar em comum benefício de uns, e outros, removendo na sua origem os obstáculos, que lhe são prejudiciais, e nocivos: em consideração de tudo o referido: hei por bem ordenar, que todas as fábricas, manufaturas, ou teares de galões, de tecidos, ou de bordados de ouro, e prata. De veludos, brilhantes, cetins, tafetás, ou de outra qualquer qualidade de seda: de belbutes, chitas, bombazinas, fustões, ou de outra qualquer qualidade de fazenda de algodão ou de linho, branca ou de cores: e de panos, baetas, droguetes, saietas ou de

outra qualquer qualidade de tecidos de lã; ou dos ditos tecidos sejam fabricados de um só dos referidos gêneros, ou misturados, tecidos uns com os outros; excetuando tão somente aqueles dos ditos teares, e manufaturas, em que se tecem, ou manufaturam fazendas grossas de algodão, que servem para o uso, e vestuário dos negros, para enfardar, e empacotar fazendas, e para outros ministérios semelhantes; todas as mais sejam extintas, e abolidas em qualquer parte onde se acharem nos meus domínios do Brasil, debaixo da pena do perdimento, em tresdobro, do valor de cada uma das ditas manufaturas, ou teares, e das fazendas, que nelas, ou neles houver, e que se acharem existentes, dois meses depois da publicação deste; repartindo-se a dita condenação metade a favor do denunciante, se o houver, e a outra metade pelos oficiais, que fizerem a diligência; e não havendo denunciante, tudo pertencerá aos mesmos oficiais.

Pelo que: mando ao presidente, e conselheiros do Conselho Ultramarino; presidente do meu Real Erário; vice-rei do Estado do Brasil; governadores e capitães generais, e mais governadores, e oficiais militares do mesmo Estado; ministros das Relações do Rio de Janeiro, e Bahia; ouvidores, provedores, e outros ministros, oficiais de justiça, e fazenda, e mais pessoas do referido Estado, cumpram e guardem, façam inteiramente cumprir, e guardar este meu alvará como nele se contém, sem embargo de quaisquer leis, ou disposições em contrário, as quais hei por derogadas, para este efeito somente, ficando aliás sempre em seu vigor.

Dado no Palácio de Nossa Senhora da Ajuda, em cinco de janeiro de mil setecentos oitenta e cinco.

Rainha

Martinho de Melo e Castro

Alvará, por que Vossa Majestade é servida proibir no Estado do Brasil todas as fábricas, e manufaturas de ouro, prata, sedas, algodão, linho, e lã, ou os tecidos sejam fabricados de um só dos referidos gêneros, ou da mistura de um com os outros, excetuando tão somente as de fazenda grossa do dito algodão.

Para Vossa Majestade ver.

José Teotônio da Costa Posser o fez.

A folha 59 do livro, em que se lançam os alvarás nesta Secretaria de Estado dos Negócios da Marinha, e Domínios Ultramarinos[21], fica este registrado. Sítio de Nossa Senhora da Ajuda em 2 de março de 1785.

Francisco Delaage

Attachment 2**Alvará of 1 April 1808**

Conjunto documental: Cartas, provisões e alvarás

Conjunto documental: Junta do Comércio. Portarias e circulares recebidas

Notação: caixa 419, pct. 01

Título do fundo: Junta do Comércio, Agricultura, Fábricas e Navegação

Código do fundo: 7X

"Eu o príncipe regente faço saber aos que o presente alvará virem: que desejando promover, e adiantar a riqueza nacional, e sendo um dos mananciais dela as manufaturas, e melhoram, e dão mais valor aos gêneros e produtos da agricultura, e das artes, e aumentam a população dando que fazer a muitos braços, e fornecendo meios de subsistência a muitos dos meus vassallos, que por falta deles se entregariam aos vícios da ociosidade: e convindo remover todos os obstáculos, que podem inutilizar, e prestar tão vantajosos proveitos: sou servido abolir, e revogar toda e qualquer proibição, que haja a este respeito no Estado do Brasil, e nos meus domínios ultramarinos, e ordenar, que daqui em diante seja o país em que habitem, estabelecer todo o gênero de manufaturas, sem excetuar alguma, fazendo os seus trabalhos em pequeno, ou em grande, como entenderem que mais lhes convém, para o que. Hei por bem revogar o alvará de cinco de janeiro de mil setecentos oitenta e cinco e quaisquer leis, ou ordens que o contrário decidam, como se delas fizesse expressa, e individual menção, sem embargo da lei em contrário.

[...]

Dado no Palácio do Rio de Janeiro em o primeiro de abril de mil oitocentos e oito.

Príncipe = d. Fernando José de Portugal."

Attachment 3**Alvará of 28 April 1809**

Isenta de direitos ás materias primas do uso das fabricas e concede outros favores aos fabricantes e da navegação Nacional.

Eu o Principe Regente faço saber aos que o presente Alvará com força de lei virem, que sendo o primeiro e principal objecto dos meus paternaes cuidados o promover a felicidade publica dos meus fieis Vassallos; e havendo estabelecido com este designio principios liberaes para a prosperidade deste Estado do Brazil, e que são essencialmente necessarios para fomentar a agricultura, animar o commercio, adiantar a navegação, e augmentar a povoação, fazendo-se mais extensa e analoga a grandeza do mesmo Estado: tendo consideração a que deste estabelecimento se possa seguir alguma diminuição na industria do Reino de Portugal, bem que com a serie e andar dos tempos a grandeza do mercado, e os effeitos da liberdade do commercio que tenho mandado estabelecer, hão de compensar com vantagem algum prejuizo ou diminuição que ao principio possam soffrer alguns ramos de manufacturas: desejando não só remediar estes inconvenientes, mas tambem conservar e ampliar a navegação mercantil e o commercio dos povos de todos os meus dominios: tendo ouvido o parecer de Ministros do Meu Conselho, e de outras pessoas zelosas do meu serviço; em ampliação e renovação de muitas providencias já a este respeito estabelecidas, e a fim de que tenham prompta e exacta observancia para prosperidade geral e individual dos meus fieis vassallos, que muito desejo adiantar e promover, por depender della a grandeza e consideração da minha Real Corôa e da nação; sou servido determinar o seguinte:

I. Todas as materias primeiras que servirem de base a qualquer manufactura, serão isentas de pagar direitos alguns de entrada em todas as Alfandegas dos meus Estados, quando o fabricante as comprar para gasto de sua fabrica, ficando sómente obrigado a mostrar que as consome todas no uso de sua industria, e sujeito aos exames e averiguações que julgar necessarios a Real junta do Commercio, para evitar a fraude e descaminho dos meus reaes direitos. Da mesma isenção gozarão os fabricantes que comprarem generos e producções dos meus Estados, que são obrigados a pagar algum direito, ficando este perdoado a favor dos referidos fabricantes em beneficio do augmento da industria.

II. Todas as manufacturas nacionaes serão isentas de pagar direitos alguns na sua exportação para fóra dos meus Estados, e todas as do Reino serão isentas de os pagar por entrada nos meus Dominios do Brazil, e em quaesquer outros, ficando só seus donos obrigados a verificar com certidões e clarezas competentes, que as mercadorias são de manufacturas Portugueza, e indicar a fabrica donde suhiram.

III. Todos os fardamentos das minhas Tropas serão comprados ás fabricas nacionaes do Reino, e ás que se houverem de estabelecer no brazil, quando os cabedaes que hoje teem melhor emprego na cultura das terras, puderem ser applicados ás artes com mais vantagem; e não se poderão para este fim comprar manufacturas estrangeiras, senão no caso de não terem as do Reino e Brazil com que supprir a necessidade publica. E ao Presidente do meu Real Erario hei por muito recommendado, que procure sempre promptos pagamentos auxiliar os fabricantes dos meus Estados, a fim de que possam supprir o fornecimento dos meus Exercitos e se promova por este meio a extensão e augmento da industria nacional.

IV. No recrutamento que se faz geralmente para o Estado, haverá todo o cuidado em moderar o numero das recrutas naquelles logares onde se conhecer que a agricultura e as artes necessitam de braços; e muito recommendo aos Governadores das Armas e aos Capitães-Móres encarregados dos recrutamentos, se hajam nesta materia com toda a circumspecção, representando-me o que julgarem mais digno de providencia a este respeito.

V. Sendo o meio mais conveniente para promover a industria de qualquer ramo nascente, e que vai tomando maior augmento pela introducção de novas machinas dispendiosas, porém utilissimas, o conferir-se-lhe algum cabedal, que anime o Capitalista que emprehende promover uma semelhante fabrica, vindo a ser esta concessão um dom gratuito que lhe faz o Estado: sou servido ordenar, que da Loteria Nacional do Estado, que annualmente quero se estabeleça, se tire em cada anno uma uma somma de sessenta mil cruzados, que se consagre, ou toda junta, ou separadamente, a favor daquellas manufacturas e artes, que mais necessitarem deste socorro, particurlamente das de lã, algodão, seda e fabricas de ferro e aço. E as que receberem este dom gratuito não terão obrigação de o restituir, e só ficarão obrigadas a contribuir com o maior desvelo para o augmento da fabrica que assim for socorrida por effeito da minha real consideração para o bem publico. E para que estas distribuições se façam annual e impreterivelmente, a Real Junta do Commercio dando-me todos os annos um fiel, e exacto quadro de todas as manufacturas do Reino, apontará as que merecem mais esta providencia, e a somma que se lhes deve applicar.

VI. Sendo muito conveniente que os inventores e introductores de alguma nova machina, e invenção nas artes, gozem do privilegio exclusivo além do direito que possam ter ao favor pecuniario, que sou servido estabelecer em beneficio da industria e das artes; ordeno que todas as pessoas que estiverem neste caso apresentem o plano do seu novo invento á Real Junta do Commercio; e que esta, reconhecendo a verdade, e fundamento delle, lhes conceda o privilegio exclusivo por quatorze annos, ficando obrigadas a publical-o depois, para que no fim desse prazo toda a Nação goze do fructo dessa invenção. ordeno outrosim, que se faça uma exacta revisão dos que se acham actualmente concedidos, fazendo-se publico na forma acima determinada, e revogando-se todos os que por falsa allegação, ou sem bem fundadas razões obtiveram semelhantes concessões.

VII. Para promover e adjantar a Marinha mercantil dos meus fieis Vassallos: hei por bem determinar que paguem só metade dos direitos estabelecidos em todas as Alfandegas dos meus Estados, todos os generos e materias primeiras, de que possam necessitar os donos de novos navios para a primeira construcção e armação delles, como madeiras do Brazil, pregos, maçames, lonas, pez, alcatão, transportados em navios nacionaes; havendo porém os mais escrupulosos exames e averiguações afim de que se não commettam fraudes e descaminhos da minha Real Fazenda.

Pelo que mando á Mesa do meu Desembargo do Paço, e da Consciencia e Ordens; Presidente do meu Real Erario; Conselho da minha Real Fazenda; Real Junta do Commercio, Agricultura, Fabricas e Navegação; e a todos os mais Tribunaes do Reino, e deste Estado do Brazil; e a todas as pessoas, a quem tocar o conhecimento e execução deste Alvará, o cumpram e guardem, e façam inteiramente cumprir e guardar, sem embargo de quaesquer leis ou ordens em contrario, que todas hei por derogadas para esse effeito sómente, como se de cada uma se fizesse especial menção. E este valerá

como Carta passada pela Chancellaria, posto que por ella não ha de passar, e que o seu effeito haja de durar mais de um anno, sem embargo da lei em contrario. Dado no Palacio do Rio de Janeiro em 28 de Abril de 1809.

PRINCIPE com guarda.

Conde de Aguiar.

Alvará com força de lei, pelo qual Vossa Alteza Real é servido isentar de direitos as materias primeiras, que servirem de base a quaesquer manufacturas nacionaes, e conferir como dom gratuito a quantia de sessenta mil cruzados ás fabricas, que mais necessitarem destes soccorros, ordenando outras providencias a favor dos fabricantes e da navegação nacional; na fórmula acima exposta.

Para Vossa Alteza Real ver.

João Alvares de Miranda Varejão o fez.