

**The Industrial Heritage of the Araraquara Railway: the case of the railway villages of Catanduva-SP**

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#### ABSTRACT

This article deals with the industrial heritage of the 20th century in Catanduva-SP, having as object of analysis the Railway Villages of the old company Estrada de Ferro Araraquara (EFA), located in the São Francisco and Higienópolis neighborhoods. The justification of the theme is supported by the lack of research on the railway village of Catanduva, the lack of knowledge of the complex and the lack of recognition of its value as cultural heritage. In this context, the work aims to document and inventory railroad villages in the São Francisco and Higienópolis de Catanduva neighborhoods, and to propose guidelines for their safeguarding. The working methodologies used were Historical Research and Case Study, based on a documentary survey on the object of analysis and on-site visit. As a result, 13 bungalow-style residences were identified, most of them in good condition. As safeguard guidelines, the conservation, preservation, restoration and rehabilitation of these residences were proposed so that they maintain their physical structures and the internal organization of the rooms, meet the needs and expectations of users and preserve their cultural significance.

**KEYWORDS:** Industrial Heritage. Railway village. Araraquara Railway.

#### INTRODUCTION

The coffee-railway binomial contributed to the development of São Paulo state and the transformation of the urban landscape of the western cities from São Paulo. In Catanduva, the Araraquara Railway (EFA) was responsible for the construction of several buildings that are part of the city's industrial heritage. According to Nizhny Tagil Charter (2003), industrial heritage encompasses four major groups: 1) constructions linked to industrial production and activity, such as turntable railroads, work places, stations, warehouses, etc; 2) machinery such as railways, locomotives, cars, furniture, etc; 3) immaterial manifestations, such as soccer teams, parties, train whistles, locomotive noise, construction techniques; and, finally, 4) buildings aimed at the coexistence of employees, such as community facilities – day care centers, schools, hospitals, etc. – and the railway residences.

The dwellings in the workers' villages of Catanduva vary in program, size, shape, implantation and level of ornamentation, according to the occupant's position in the railway company. According to Amos Rapoport (1972), the way of life would reflect the social conventions and cultural demands that guide institutions. Hence, the design and organization of the house result from implicit cultural ideals that affect the environment and the worker's way of living. More than material testimonies, these varied housing typologies keep immaterial values about the memory of the workers who lived there. Therefore, actions such as conservation, preservation and restoration are necessary to safeguard this heritage. For Beatriz Kühl (2013), it is necessary to consider the values of a cultural asset in a broad way, addressing material and immaterial aspects present in collective memory. According to Menezes (2009), these intangible values are related to the affective value that a certain group feels in relation to a heritage, such as the feeling of belonging. Likewise, the author addresses the cognitive value, - when the monument is considered a historical document - the aesthetic value, - when the property allows sensory appreciation - the pragmatic value - related to its potential for use - and, finally, the ethical value – subject to appropriations.

According to Burra Charter (1980), the term "conservation" refers to the care and maintenance assigned to an asset to preserve its characteristics that present a cultural significance, which may or may not imply preservation, restoration, in addition to reconstruction or adaptation, depending on the needs and practical requirements. "Preservation" implies the deceleration of the degradation process of an asset, through constant maintenance (ICOMOS, 1980). The "restoration", in turn, has several aspects, among which the Modern Restoration, by

Camillo Boito, the Critical Restoration, by Cesare Brandi and the Scientific Restoration, by Gustavo Giovannoni. For Boito (2002), interventions must be different from the original parts, using modern materials, and without interfering with the harmony of the ambience, respecting its historical memory and its formal aspects. For Brandi (2004), restoration implies the recognition of the asset as a work of art, aiming to restore its efficiency without committing false historical or artistic. Interventions must be differentiated from the original material and easily replaceable, allowing for future adaptations. Giovannoni (2013) advocates the conservation of the monument as a work of art and document, and interventions based on in-depth studies in the work, which respect its values and different times. His thinking directly influenced the intervention guidelines of the Venice Charter:

Restoration is an operation that must have an exceptional character. Its objective is to preserve and reveal the monument's aesthetic and historical values and is based on respect for the original material and authentic documents. It ends where the hypothesis begins; in terms of conjectural reconstructions, all complementary work recognized as indispensable for aesthetic or technical reasons will stand out from the architectural composition and should bear the mark of our time. The restoration will always be preceded and accompanied by an archaeological and historical study of the monument. (ICOMOS, 1964 *apud* IPHAN, 2004, p. 93, *translated*)

According to Kühn (2013), the apprehension of these values is intended to transmit these assets to future generations, respecting their richness and complexity. Therefore, it is necessary to use the theoretical-methodological and technical-operational precepts that guide the restoration operations, invoked in heritage charters and by numerous authors, as stated by Kühn (2013):

The restoration project must, therefore, be the result of an in-depth understanding of the work or set of works, at its core. It must be the result of an accurate historical-documentary, bibliographical, iconographic research, a detailed metric-architectural survey, the analysis of construction techniques and materials, structure and pathologies, typological and formal analysis, which lead to an understanding of the transformations why passed the complex over time. In order to develop consistent proposals for intervention in goods bequeathed by the industrialization process, therefore, it is necessary to consider the works in their material, documentary, formal, memorial and symbolic aspects. (KÜHL, 2013, p. 17, *translated*)

Compatible use is also a recommendation of both the Athens Charter (1931, p.13, *apud* SALCEDO, 2019, p.16), which aims to ensure "(...) the continuity of their lives, always destining them to ends that respect their historical or artistic character", as well as the Dublin Principles (ICOMOS – TICCIH, 2011), which considers the maintenance of the original use the best way to preserve itself, continuing the housing function with the purpose of preserving these villages. The Burra Charter (1980, *apud* SALCEDO, 2019) warns that the compatible use of the building does not result in changes in the essence, values or cultural meaning of the substance, recommending interventions that are reversible or that imply a minimal impact on the work. However, its use does not dispense with listing, since any modifications to a property must, according to the Athens Charter (1931, p. 13, *apud* SALCEDO, 2019, p. 17) respect "the historical and artistic work of the past, without prejudice to the style of any age, in cases where a restoration seems indispensable due to deterioration or destruction".

Care aimed at the continuity of a property should not be restricted to the monuments themselves, but its relationship with the city must be taken into account. Hence, Ermínia Maricato (2001) advocates rehabilitation as a way of preserving urban and architectural heritage, through participatory policies that prioritize the needs of the resident population and aim at improving the local quality of life, defending the right to the city and housing. The São Domingos Resolution, prepared during the I Inter-American Seminar on Experiences in the Conservation and Restoration of Monumental Heritage from the Colonial and Republican Periods, in December 1974, organized by the Organization of American States, emphasizes the importance of preservation, residential use and housing policies as a social commitment aimed at the permanence of residents in urban sites that have assets of historical and cultural interest. The Council of Europe (1975, apud SALCEDO, 2019) recommends the organization of an inventory of architectural heritage assets and urban sites, as it could provide a realistic basis for conservation and be used as a management tool for these assets, being indispensable the protection of heritage and its ambience. In addition, inventory will be needed while:

(...) instrument for listing and deliberation on intervention projects, mainly in restoration and rehabilitation; in addition to subsidizing regulations on uses, fixtures, setbacks, facades and finishes, volumes, integrated into historic sites, historic complexes or historic centers, ambiances, contained in the Master Plan (SALCEDO, 2019, p. 123, *translated*).

Considering the above, this research considers that the railway villages of Catanduva constitute an important collection to be preserved, as they represent part of the history of a city that emerged and anchored its economic, political, social and cultural bases in the coffee-railway binomial, in addition to constituting the industrial heritage of São Paulo state. Not yet listed or inventoried, these villages have been suffering natural wear and tear and interventions that disfigure them, threatening the integrity of this heritage so little known by the population.

#### **THE ORIGIN OF WORKERS' VILLAGES**

The occupation and development of São Paulo state are directly linked to the expansion of the coffee-railroad binomial, as well as to the process of immigration, urbanization and industrialization of the territory of São Paulo. In many cities, the railway system promoted the displacement of the centrality from the church to the station (INOUE, 2014) and transformed the urban landscape thanks to the infrastructure that would support activities linked to the railway, "(...) spreading ways of building until then little used" (KÜHL, 2013, p. 1, *translated*). This railway infrastructure constitutes a large and varied complex that characterizes the industrial heritage of São Paulo, and which is not restricted to the most imposing works, but also includes modest constructions, sociability and craft techniques.

Workers' housing emerged in Europe, in the context of the Industrial Revolution of the 19th century, to solve the problem of workers who lived in precarious and unhealthy places. In Brazil, these villages emerged before industrialization, being introduced with the process of railway expansion (JARDIM; RAFL, 2011). According to Anna Finger (2012), the advantage of investing in the construction of residences for employees was to keep the employee close to the workplace, avoiding daily commutes and delays and ensuring permanent availability of labor. These villages were usually located close to junction areas, maneuvering yards, warehouses and

workshops, where employees needed to maintain machinery and lines (JARDIM; RALF, 2011), "(...) as chief engineers, masters and others in charge of running the complex" (FINGER, 2012, p. 4, *translated*). According to Finger (2012), the three main models of railway residences were: dwellings inserted inside the station buildings; those implemented along the line; and railway villages - varying in program, size and implantation according to the position of the employee occupying the residence. The largest houses, designed for more senior employees, were isolated, which had a more complex program, more rooms and were located in larger lots, with the presence of porches, gardens and backyards, being more ornate.

The semi-detached houses, designed for intermediate employees, were implemented in pairs and had a less complex program than isolated houses, the dimensions of the rooms were smaller, and the decoration was simpler. Finally, the models aimed at lower-educated workers, which could be "block" (implanted in a block) or "stripe" (implanted along the railroad) residences, had smaller rooms and a more basic program, being restricted to a kitchen, a living room and some bedrooms, all always with windows due to natural lighting and cross ventilation, with openings in all the facades of the house.

When there was ornamentation, it was restricted to the door frames, windows, platbands and company inscription on the roof of the house, which also varied with the position of the ridge and the flow of water (FINGER, 2012). According to Luciana Inoue (2014), the allocation of workers' residences reflects the hierarchy and ordering present in their architectural project, reinforced by the housing typology being directly proportional to the status that the employee exercised in the company and their level of qualification (FINGER, 2012). According to Correia (2004) and Moreira (2007) (apud JARDIM; RALF, 2011), the way in which these villages were implemented shows the reproduction of the functional hierarchy, present in the work of the industry, being applied in the private lives of these employees, to the extent that where their level of specialization was the only criterion for choosing the type of residence to be occupied. This criterion did not take into account other factors that more directly influenced the dynamics of occupation of the house and the daily lives of residents, such as the size of the family, ending up not relating the number of members with the number of rooms in the house to be transferred by the company (DE MORAIS, 2002). In his study of railway villages in the state of São Paulo, Marcelo de Moraes (2002) observes a sectorization present in workers' homes on the Araraquara Railroad (EFA):

[...]in most of the plans there is a distribution hall, in order to isolate the activities of the dwelling: however, in the one-bedroom houses there is a clear overlap of living, leisure and rest activities. This overlap is described by Lemos (1999) and occurs mainly in lower-income households. The styles of the houses, according to Veríssimo (1999), can be described as a trend of the thirties, with Araraquarense village being similar to the neocolonial "Spanish missions" residences (DE MORAIS, 2002, p. 207, *translated*).

According to the author (DE MORAIS, 2002), EFA was one of the companies that proportionally invested the most in housing for its employees, reaching a total of 415 houses, serving 18% of its employees. The company spread its houses in several cities, reaching the longest period of housing production between the 1930s and 1950s (DE MORAIS, 2002). However, from the 1940s onwards, the incentive to road transport and the decline of the railway

policy ended up suppressing several deficit branches and many companies became State property (INOUE, 2014; KÜHL, 2013). In this context, housing followed the same upward and downward dynamics of the railway companies to which they belonged, ending up being susceptible to the movement of the real estate market.

The trajectory of many of these workers' villages was a continuous process of construction, expansion and transformation. One of the moments in this transformation process is its dismantling. Motivated by different causes, companies began to dispose of their houses and equipment for collective use in different states of Brazil, causing the villages and residential centers they created to be found, in most cases, demolished or demolished. There are many cases in which there is no material destruction of buildings, but a transformation, which can mean a total disfigurement. (CORREIA, 2006, p. 29, *translated*)

In Catanduva, the railway residences were sold in the 1980s to their tenants – former EFA employees – and, to this day, almost all the houses are still occupied, in part by people who no longer have any relation with former employees of the railway. However, their occupation is not synonymous with preservation, since the lack of a legal instrument to protect these assets allows for changes that will detract from these residences and despise their historical value (DE MORAIS, 2002). Thus, the record of an important testimony of the railway heritage of São Paulo and the memory of the urban worker is lost:

The railway villages, inhabited by workers, perhaps because they belong to the “world of work” were despised, even architecturally. If the station was the postcard of this industrial complex, even remaining the only large employing company in many small towns, it cannot be forgotten that behind this postcard there was not only a set of machines and buildings, but people who made the railways work. And part of these workers, inhabited the railway villages. (INOUE, 2014, p.3, *translated*)

This dismantling suffered by the workers' residences reflect the difficulties that the railway heritage has faced regarding to its preservation, mainly due to real estate speculation. In this context, it is essential to document and inventory the railway villages in Catanduva.

## **OBJECTIVES**

The objectives of the research are to document and inventory the railway villages in the São Francisco and Higienópolis neighborhoods of the city of Catanduva and to propose guidelines for their safeguarding. Therefore, it is considered essential to draw up an inventory for documentation and registration of these residences, with a view to establishing bases for a possible registration and preventing these assets from being further mischaracterized.

## **MATERIALS AND METHODS**

The work methodologies used were the Historical Research and the Case Study, through a bibliographic and documental survey and field research. After collecting material from primary and secondary sources, and from records made in the field, the material underwent analysis, selection, crossing and systematization. As a result, the documentation and inventory form of the two railway villages studied were carried out. In addition, safeguard guidelines for these assets were proposed, based on literature and the Heritage Charters. Finally, as a result of this

study, we seek to bring to the population the recognition of the values of these railway villages and their importance in the constitution of the railway heritage of Catanduva.

The main theoretical framework on safeguarding industrial heritage, documentation and inventory is composed by authors such as: Kühl (2013), Nizhny Tagil Charter (2003), Venice Charter (1964), Burra Charter (1980), Boito (2003), Brandi (2004), Maricato (2001) and Salcedo (2019). About workers' villages, works by Marcelo de Moraes (2002), Luciana Inoue (2014) and Anna Finger (2012) are used. The theoretical approach is the basis for the interpretation and analysis of information, documentation and inventory, in addition to the proposal of guidelines for safeguarding the railway industrial heritage.

The document collection, carried out with the collection of the National Department of Transport Infrastructure (DNIT), contributed to the survey of the history of the railway village, its context of appearance, its destination, architectural characterization and urban insertion. Registration certificate and deed of real estate were used; technical drawings of houses, such as plans, sections and facades; descriptive memorial of original projects; decree-laws and processes relating to land donation, construction, renovation, purchase and sale of houses. The field research complemented the primary sources with the photographic record made in loco, contributing to the analysis of the buildings, their current state of conservation, their transformations, their values and their relationship with the urban environment. Finally, after crossing and analyzing the collected material, with the support of the bibliography, the documentation was systematized, the buildings were mapped and the houses in the railway village were inventoried.

## **RESULTS**

Documentation and inventory of railway villages in the Higienópolis and São Francisco neighborhoods, by the former Araraquara Railroad Company (EFA), in the city of Catanduva.

### **The Village of Higienópolis Neighborhood**

These are three semi-detached houses that are located behind the Railway Station, in the Higienópolis neighborhood, a place of old, consolidated, infrastructure, with a predominant presence of medium to high-end old properties, for residential and mixed use (trade and service) and low buildings. According to an EFA Report from the 1920s, the construction of these houses came with the need to remove the existing workers' residences within the railway yard, in order to relieve it and free up space. Thus, the works began in 1949 and were completed in the early 1950s. All are in good condition and retain much of their original features. Technical drawings of three EFA housing typologies were identified: one-bedroom dwelling (called "C1"), two-bedroom ("C2") and three-bedroom ("C3") – this last typology belongs to the presented set. They were intended for the company's most qualified employees – one house for the Station Chief and two for employees of the Traffic and Line Division – as they are larger homes. As can be seen in Figure 1, this typology has three main volumes, consisting of the porch, the living room and the bedroom.

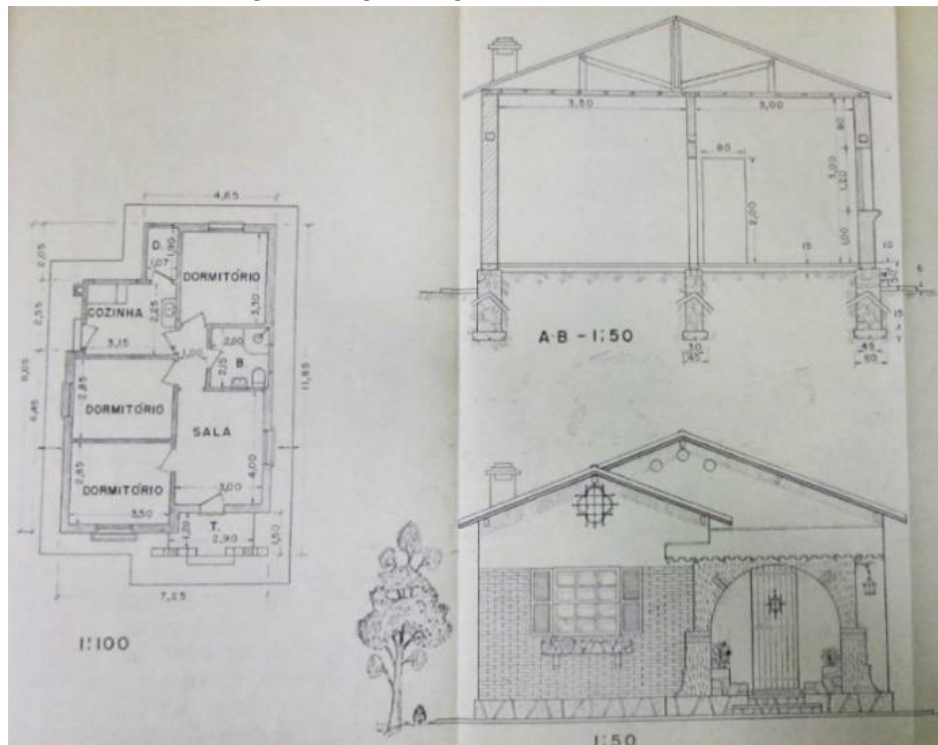
Figure 1 – Residential sample of the railway village in the Higienópolis district



Source: Onofre Baraldi, 2020.

The main entrance is through the porch, the first volumetric body of the house, which forms a kind of transition between the exterior and the interior. The living room is established as the main room, located in the largest part of the residence, from where the other rooms depart. The third volume of the house is in the room next to the garage, which communicates with the outside through the window. The residences are isolated on the lot, with lateral, front and rear setbacks, in addition to having openings in all rooms and shuttered windows for natural lighting and permanent ventilation, demonstrating a concern to keep the house airy, healthy and hygienic. They can be characterized by bungalow architecture with Spanish missions trend (CORATO; PORTO, 2007), due to the existence of the porch as a detached volume from the rest of the residence. According to Karla Di Giacomo Santos (2016), the most striking element of the bungalow is the porch, which has the function of indoor air conditioning and seating, reinforced by the use of furniture and vegetation that favors its use (SANTOS, 2016). As an architecture of vernacular origin, the bungalow is not considered a style, but a simple, practical and low-cost housing typology, which can be adapted according to each location (JANJULIO, 2013).

Figure 2 - Original design of the “C3” house model



Source: DNIT, 1949.



In Catanduva, the bungalow in the railway villages took on a more compact and uncluttered appearance, allowing the use of “garments” referring to the Missions style, such as the porch arch, and other ornaments, for example the exposed brick walls, the quadrifoils in the facade and at the entrance door, the stone skirting, the frieze walls and the rocks on the porch. It can be seen from the facade of the residence that the search for contact with nature also persists through the use of recesses, vegetation on the porch, the side garden and the flower box under the window. It can be seen from the photographs (figure 1) and the technical drawings (figure 2), that the distribution scheme of the house does not vary much from the Brazilian urban bungalow, with the porch being the entrance door that passes between the exterior – the street – and the interior – the room. The house is framed in a rectangular plan with three basic sectors: social (porch and living room), intimate (bedrooms) and services (bathroom and kitchen), configuring a relatively modest housing typology “(...) whose program held at most three bedrooms” (WOLFF, 2001, p.190 *apud* SANTOS, 2016, p. 119, *translated*).

The original project was signed by chief engineer Oswaldo Santana de Almeida and assistant engineer Abel Magalhães. According to Nabil Bonduki (2012, *apud* SANTOS, 2016), workers' villages were not built with prefabricated components, but handcrafted, configuring new architectural typologies, such as the urban bungalow. The search for quality in housing in railway villages intended to meet requirements such as “(...) practicality of execution, presence of setbacks, contributing not only financially, due to its constructive simplicity, but also hygienic housing” (SANTOS, 2016, p. 56). Finally, in addition to this EFA housing typology - type “C3” - one and two-bedroom typologies are also used in the São Francisco neighborhood - “C1” and “C2”, respectively - and will be addressed in the following topic.

### **The Village of São Francisco Neighborhood**

It is a set of ten houses located in a family neighborhood, in São Francisco, with old occupation, consolidated, equipped with infrastructure, with a predominant presence of old properties, housing use and low houses. The works began in 1949 by the Companhia Melhoramentos Araraquarense (COMARA), but were completed in the 1950s by the EFA Works Section due to a contractual termination between the contractor and the railway company. The complex has EFA's three residential typologies – “C1”, “C2” and “C3” – and were intended for employees of the locomotion, traffic and line departments, with the residence varying according to the occupant's position. The housing typologies “C1”, “C2” and “C3” can be seen below, in figure 3:

Figure 3 – Models “C1”, “C2” and “C3”, respectively, in the São Francisco neighborhood



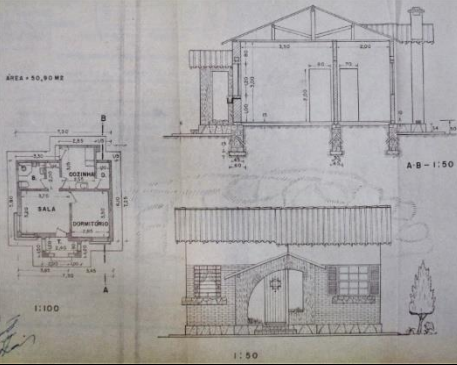
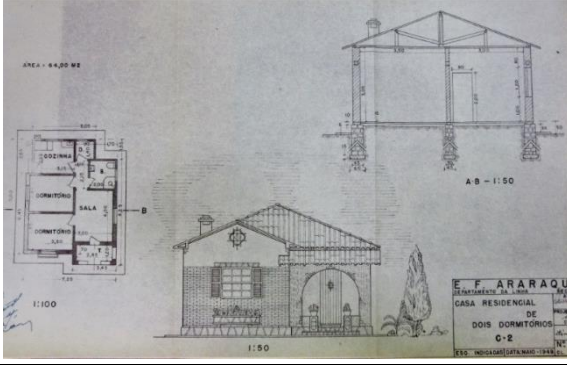
Source: author, 2020.

The simplest dwelling (figure 4) belongs to the “C1” model, it has only one bedroom, 50.90m<sup>2</sup> of built-up area and can be identified by the bungalow typology with the Missions trend

(CORATO; PORTO, 2007), marked by the presence of a separate porch the main body of the house and its entrance drawn by a semicircular arch. The house has two main volumes, - the porch and the rest of the rooms - a square floor plan where the porch is centered on the facade. All rooms have windows, especially the living room, which has two openings, facing the front and side facades. The porch has a lower ceiling height, is at a lower level than the rest of the house, has a gable roof and an opening with a semicircular arch, in addition to equipment that favors permanence, such as flower boxes. Even though it is a simpler typology, the same concept present in larger houses is applied to this house, such as ornamental elements - exposed brick on the walls, quadrifoil on the entrance door, rocks on the baseboards and on the porch and flower boxes under the windows - the use of recesses, the porch for internal air conditioning and living space, permanent ventilation through the use of shutters and natural lighting through the openings in all the facades and the strong presence of vegetation. According to the descriptive memorial and the stamp on the technical drawings, this typology follows the same use of materials as the "C3" model house - shown in the Higienópolis neighborhood - and has the same authorship in the project. Of the five residences of this typology, two are totally uncharacterized, while three have the same appearance as the original project, with only a few changes - such as the new painting, the wall and the railing, the removal of the flower boxes and the replacement of wood by metal shutters.

The intermediate dwelling (figure 5) belongs to the "C2" model, it has two bedrooms, 64.00 m<sup>2</sup> of built-up area and is identified by the bungalow typology with a picturesque tendency (CORATO; PORTO, 2007). It differs from the others in that the porch is not detached from the main body of the house, but is internal to the volume corresponding to the room. Another highlight is that, contrary to what the technical drawing shows, the entrance to the porch was not built in a circular format, but straight lines were made, forming a beam that rests on the porch pillars. The house has two main volumes, - the porch with living room and bedroom - a rectangular plan where the porch is offset to the right on the facade. All rooms have windows, the porch has a lower ceiling height, has a water roof and a straight opening - formed by a beam - in addition to equipment that favors permanence, such as flower boxes.

The concept applied in typologies "C1" and "C3" are the same applied in "C2", as the ornamental elements, - exposed brick on the walls, quadrifoil in the entrance door and in the facade, rocks in the baseboards and in the balcony and flower boxes under the bedroom window - the use of recesses, the porch for internal air conditioning and seating, permanent ventilation and natural lighting through the openings in all facades and the strong presence of vegetation - present, as already mentioned, in the side garden, in the planter under the window and on the porch. This typology follows the same use of materials as the "C1" and "C3" housing models and the same authorship in the project, as mentioned above. All three residences of this typology are well preserved, have practically the same look as the original project, with only a few changes - such as the new paint job, the construction of walls and railings in the houses and the replacement of wooden doors and windows with metal.

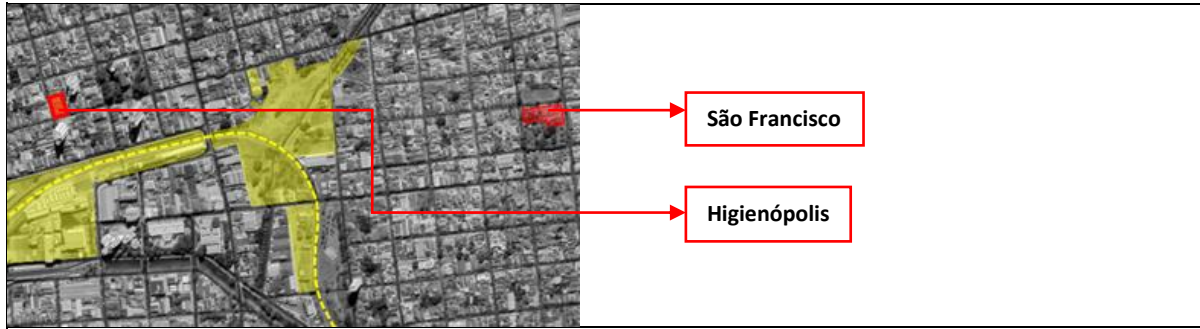
Figure 4 - Original design house type "C1"	Figure 5 - Original design house type "C2"
	
Source: DNIT, 1949	Source: DNIT, 1949.

Finally, the houses of typology “C3” are identical to those built in the Higienópolis neighborhood, as shown in the previous topic through the original project (figure 2). Of the ten houses in the railway village in São Francisco, two belong to the “C3” model, which has 75.50 m<sup>2</sup> of built-up area and three bedrooms – as already mentioned. Both residences are in good condition, preserving much of their original appearance. Only a few changes were noted, such as the replacement of the old wall with a grating and gate, the wooden window for a metal window and the removal of the flower boxes.

Most of these residences still preserve a large part of their characteristics as they still retain their original use, but some are totally uncharacterized. This is due to the inexistence of a legal instrument to protect these assets and, added to the fact that they are relatively modest residences, they are still not recognized as a historical and architectural heritage. However, Nizhny Tagil Charter (2003) emphasizes the importance of all industrial buildings and structures in the composition of industrial heritage, including workers' residences, for their historical value in relation to railway development, or for their aesthetic value due to the quality of its architecture and design, or its social value, which promotes a feeling of belonging and identity in the memory of the workers who lived there. In this sense, we will address the guidelines for safeguarding these villages, in the next item.

### Inventory of EFA Railway Villages, Catanduva-SP

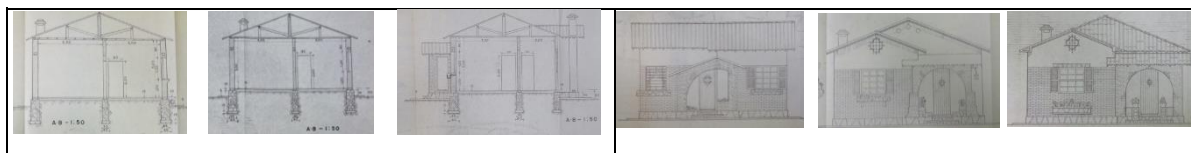
<b>1. IDENTIFICATION</b>		
<b>1.1 Territory:</b> Higienópolis and São Francisco neighborhoods		
<b>1.2 Theme:</b> Historical, architectural and urban analysis of Vila Ferroviária da EFA		
<b>1.3 Identification of the research object (official/popular name):</b> EFA railway workers' houses		
<b>2. LOCATION THE THE RESEARCH OBJECT</b>		
<b>Company Name</b>	Estrada de Ferro Araraquara (“Araraquara Railroad”)	
<b>3. TYPE OF PROPERTY ACCORDING TO ORIGINAL USE:</b> Residential		
<b>4. YEAR OF CONSTRUCTION:</b> 1950s	<b>5. ORIGINAL USE:</b> Housing	<b>6. CURRENT USE:</b> Housing
<b>7. USER / POSSESSION / CURRENT CONCESSION:</b> Several owners (possession and alienation)		
<b>8. THE PROPERTY WAS REGISTERED AS HISTORICAL HERITAGE:</b> No		
<b>9. IMPLANTATION OF THE PROPERTIES IN RELATION TO THE STREET AND NEIGHBORHOOD</b>		



**10. FACADE IMAGES**



<b>11.1 Roof Cover:</b> ceramic	<b>11.2 Walls:</b> structural masonry	<b>11.3 Frames, fence, windows and Doors:</b> wood and metal	
<b>11.4 Floor:</b> ceramic and wood	<b>11.5 Structural component:</b> masonry	<b>11.6 Foundation:</b> stone/rock	
<b>12. Status of external preservation of the property:</b> Modified		<b>13. Status of internal preservation of the property:</b> Modified	
<b>14. CONSERVATION STATUS OF MATERIALS</b>			
<b>14.1 Structure:</b> Good	<b>14.2 Floor:</b> Good	<b>14.3 Doors:</b> Good	<b>14.4 Windows:</b> Regular
<b>14.5 Ceiling lining:</b> Regular	<b>14.6 Wall/Floor covering:</b> Good		<b>14.7 Roof Cover:</b> Good
<b>15. Is there local interest in the use of the property?</b> Yes	<b>15.1 Type of use?</b> Housing		<b>15.2 Interested body/institution:</b> the residents themselves
<b>16.1 Proposal for the preservation of the property:</b> Architectural		<b>16.2 Property protection proposal:</b> Full	
<b>17. Is there surveillance?</b> No		<b>18. Infrastructure:</b> water, sewage, telephone and electricity network	
<b>19. IMPLEMENTATION OF THE BUILDINGS IN THE LOTS OR AREAS</b>		<b>20. PLANS</b>	
<b>21 SECTIONS</b>		<b>22 FACADES</b>	



**23.1 History:** Houses built in the 1950s by COMARA (Cia Melhoramentos Araraquarense) and intended for employees of the Traffic and Locomotion Section of EFA.

**23.2 Architecture:** One-story bungalow style houses with a Missions trend (CORATO; PORTO, 2007), porch volume separated from the main entrance, with main access with arch, on the side, isolated plan and centered on the lot.

**23.3 Construction techniques:** Stone masonry foundations, laid with a mixed mortar of cement, lime and sand; sidewalks made of regular "gold" or equivalent slabs, or concrete, laid between laths; wooden parquet floors in the bedrooms and red hydraulic tile in the other rooms; baseboard made of mixed cement, lime and sand; brick walls laid with lime and sand mortar; iron and/or wood frames; pine or peroba lining; Paulista ceramic tile and wooden structure; cement water tank. (Source: descriptive memorial)

**24. HISTORICAL DOCUMENTATION:** EFA processes, plans, sections and facades, descriptive memorial, photographs and legislation (decree-laws and chamber dates)

**25. ARCHITECTURAL DOCUMENTATION**

<b>25.1 Plan:</b> document collection	<b>25.2. Scale:</b> 1:50	<b>25.3 Data base:</b> DNIT	<b>25.4 Date:</b> 2020
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**26. OTHER EXISTING DOCUMENTATION/DATA BASE**

<b>26.1 Type</b> (photography, drawing)	<b>26.2. Quantity</b>	<b>26.3 Authorship and available data basis</b>	<b>26.4 Date</b>
Photos taken in situ	65	Marina Guimarães Destro	2020
Photos collected from the internet	4	Google Street View	2011
Owner photos	12	Onofre Baraldi	2020

**27. DOCUMENTAL SOURCES:** DNIT archive, private photographic collection and personal collection

Source: Salcedo, Rosio Baca Fernández (2019). Edited by the author, 2020

**PROPOSED GUIDELINES FOR SAFEGUARDING RAILWAY VILLAGES**

In view of the above, it is considered essential to carry out an inventory of railway villages to subsidize their registration and intervention projects to safeguard them through conservation, preservation, restoration and rehabilitation of the villages. To safeguard these houses, conservation actions are needed by maintaining the internal organization of the rooms, typologies, ornaments, volumes, colors, materials, gardens, and so on. The elaboration of conservation, restoration or rehabilitation projects and the preservation of the existing elements are fundamental actions to slow down its degradation process and avoid its deterioration. To enhance the ensemble and reveal its historical and artistic values, it is considered important to restore the facades and interior of the residences - ceilings, floors, coatings - always after an in-depth historical and archaeological study to avoid illegitimate interventions that may harm the authenticity of the well.

As for new interventions aimed at the practical needs of residents - such as garages, grating gates, metal windows and doors - these should be easily replaceable, allowing for the adaptability of the property, and stand out from the original parts without harming the harmony of the whole and interfere with the facade. Thus, it is necessary to rethink the use of walls that cover the facades, establishing height limits or opting for railings. The rehabilitation of these villages and the maintenance of housing use are also ways to respect their vocations and preserve their integrity. Rehabilitation projects must preserve the physical characteristics of buildings with minimal interventions that do not detract from their typology and especially the adequacy of internal spaces to the needs and expectations of users. Finally, the participation of residents regarding the decisions to be taken is essential to ensure a democratic process and prioritize actions aimed at the needs of each family.

## FINAL CONSIDERATIONS

As already shown, the railway villages were intended for the most qualified employees of the companies, noting the hierarchy present in the relationship between the typology of residences and the status of the occupying employee. Concerns with health and hygiene were ideals that governed the architectural concept, which used recesses, permanent ventilation, natural lighting and vegetation in their project. Through their architecture, their history and their affective value, these residences reveal their local importance, representing the railway heritage of Catanduva and a new way of living in the 20th century, through the use of the bungalow. However, following the decaying movement of the railway system, these villages have been progressively dismantled, showing disinterest and ignorance of this heritage.

Despite the availability of documentation for the research, these villages had never been inventoried or explored in previous studies. The inventory sheet shows that, despite practically all the houses having gone through renovations – aiming at practical needs with the replacement of windows, doors, gates and paintings – most of them still preserve the original facade and are in good condition. This preservation, even if not integral, is positive if you take into account that these houses are simple, old, built in the 1950s and not listed as cultural heritage. However, there are already two houses in the São Francisco neighborhood that are completely deprived of character, reflecting the imminent threat of the integrity of this heritage. In this sense, the inventory sheet aims to create support for the registration and disseminate knowledge about these assets, serve as a management tool and propose safeguard guidelines that can be articulated with local public policies, with theoretical-methodological and technical-operational studies based in the Restoration Theory, in Heritage Charters and with the material and immaterial values of these villages.

The proposals to safeguard these homes were their preservation, conservation, restoration and rehabilitation through permanent care, maintenance of physical structures and the organization of internal spaces, their typologies, volumetry, colors, materials, ornaments, and so on. Public policies should make these actions feasible through tax incentives that enable the good conservation status of these properties and the maintenance of residential use, respecting their original function. Any interventions must be replaceable, allowing for the adaptability of the property, and stand out from the original materials to avoid false history or damage to the authenticity of these assets. Finally, safeguarding actions must meet the needs and expectations of users and, at the same time, preserve the cultural significance and values of these villages as railway heritage of Catanduva.

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