Abstract

This research proposes the study and analysis of the existing rail set in the city of Mairinque. Among the buildings that still prevail of the village, founded in 1890, are houses, workshops, warehouse, tree nursery and station. Thus, we seek to understand the relationship between the assets that help define the relationship between the city and the old railway set. Through the identification and analysis of the urban installation occupied by this set, the interventionist actions and the current articulation between the railway assets to understand if the reality of the industrial space is appropriate of preservation guidelines for set. Therefore, the chosen work methodology includes inventory and mapping, documentation and literature, interviews and analysis of the data collected, taking into consideration that the railway sets should be preserved based in guidelines, able to create a relationship between the current city and the old set.

Keywords

Resumen
Esta investigación propone el estudio y análisis del conjunto ferroviario situado en la ciudad de Mairinque. Entre los edificios que aún prevalecen dese pueblo, fundado en 1890, están las casas, talleres, almacén, vivero de árboles y estación. Por lo tanto, tratamos de entender la relación entre los inmuebles, que ayuda a definir la relación entre la ciudad y el viejo sistema ferroviario, a través de la identificación y el análisis de la configuración urbana ocupada por este conjunto, las acciones intervencionistas y los vínculos existentes entre los inmuebles, con el fin de entender se la realidad de estos espacios industriales están de acuerdo con las directrices de preservación para conjuntos patrimoniales. Por lo tanto, la metodología de trabajo elegida incluye inventario y cartografía, investigación documental y bibliográfica, entrevistas y análisis de los datos recogidos, teniendo en cuenta que los conjuntos ferroviarios deben preservarse con base en las directrices patrimoniales capaces de crear una relación entre la ciudad actual y el antiguo conjunto.

Palabras clave
1. Introduction

Heritage can be understood as a result of a dialectic among man and his environment, subject to changes along time. According to Boccardi and Duvelle (2013), tangible cultural heritage is no longer limited to exceptional monuments related to noticeable personalities, and every time teaches us more about the daily life of communities that lived in rural and industrial areas, and others.

Regarding industrial areas, Choay (2001) affirms that they are composed by dwellings, stores and power plants that have been left behind in outlying ghettos and in city centers, articulating relatively complete industrial sets during the second half of the 19th century and early 20th. According to Gutiérrez (2001), this desertion is associated to the rapid transformation that happened on the last few years of the 20th century, which resulted in the obsolescence of iconic elements from the 19th industrial progress such as harbors and railways. In agreement, Abad (2008) says that the industrial crises significantly affected areas hit by the technologic development what created cities and moved the economy of many places around the world. Once intensively used, these industrial elements currently available are valued as new-found heritage.

In Brazil, Correia (1999, p. 1, our translation) affirms that the building of workers’ village and industrial cores such as sugar plants, mining companies and railways, “[...] initiated on the second half of the 19th century with the emergence of spatially organized agglomerations that followed guidelines established by the owner or by the engineers involved with the undertaking” (CORREIA, 1999, p. 1). Among the industries that built such enterprises, the railway industrial activity contributed to urban formations since it was directly responsible for the implementation of some urban areas.

According to Monbeig (1984), the railway was the main artery of circulation and creation of villages. In many cases such villages were directly associated to the interests of railway companies, what allowed the implementation of cities or even the expansion of its urban infrastructure through real estate development, as demonstrated by Oliveira et al. (2011).

Rodrigues (2010) states that from factories and workers’ dwellings that stretched to numerous inland cities, the railways in São Paulo not only determined urban growth vectors but also the arrangement of entire neighborhoods. Thus, the industrial is assimilated to the articulation of items that form sets. About those sets, Rufinoni (2013) affirms that is possible to group buildings from different periods and with distinct constructive typologies, being their complex relationships guided according to their production process.

From the preservation point of view, some studies and international documents reiterate the preservation of historic sets, including the ones coming from industrial activities. For example, among the international letters, there is the Declaration of Amsterdam, that comprehends heritage as “[…] not only isolated constructions of exceptional value but also sets, neighborhoods, and villages that present a historic or cultural interest” (CONSE-
LHO DA EUROPA, 1975, p. 1, our translation). In turn, the Recommendation concerning the Safeguarding and Contemporary Role of Historic Areas, from Nairobi, understands that historic sets configure an irreplaceable universal heritage, and it includes the respect to the meaning of more modest sets, about which should be elaborated legal and administrative measures, beyond treatment and investigative methods, in order for it to be safeguarded (UNESCO, 1976).

Thereby, it is noticeable the need of appreciation and insertion of both heritage and heritage sets to the daily life, allowing it to follow the contemporary urban setting, the city dynamic and its new uses. Some of this spaces are marked or formed by the railway industry and configure today the oldest area of a few cities, being considered, individually or as a set, as heritage.

Among the villages originated from railways in the state of São Paulo, this research proposes the study and analysis of the railway set in the city of Mairinque, originally founded as a village in 1890, to serve the interests of the Companhia Estrada de Ferro de Sorocaba (EFS) (CONDEPHAAT, 1986). This village had many properties that formed a set destined to the railway activity (Figure 1). However, with the decrease and the transformation of this activity in the country (MATOS, 1990), its goods were (functionally) dispersed and only one property received legal protection: the railway station of Mairinque. Therefore, this research questions about how this set was structured and disarticulated along time, and also if along the years there were attempts to protect it or at least to justify its protection as an articulated set.

Figure 1: Map with the localization of the original occupation established by EFS in Mairinque. Source: Authors’ elaboration.
These questions are related to current discussions regarding preservation of cultural heritage and railway industrial heritage, which allows us to raise the main issue of this research: understanding how distinct ways of property appropriation interfere on the notion of articulation among the goods that composed the railway set of Mairinque.

Thereby, the general objective of this work is to comprehend the articulation among the railway goods of Mairinque, which determines the understanding about the set, in order to verify if heritage protection measures are appropriate to the existing guidelines about sets. This purpose was elaborated from the historic understanding about the railway sets formation, from the characterization of protection measures promoted by the public power and also from the evaluation about the reality regarding preservation guidelines.

This research’s hypothesis considers that the preservation of built goods, specifically on the old railway areas, should be made according to guidelines appropriate to the reality of these former industrial spaces. These could modify the existing relationships between the city and the set.

Therefore, the chosen methodology of work included document and bibliographic analysis, from the verification of projects, periodicals, maps, and photos so that it was possible to understand the historic, urban and functional context of the set. Beyond that, interviews that followed a pre-established script, allowed a deeper knowledge about the railway spaces, and consults to the station’s process of heritage landmarking at the Instituto de Patrimônio Histórico e Artístico Nacional (IPHAN) and in the Conselho de Defesa do Patrimônio Histórico, Artístico, Arqueológico e Turístico (CONDEPHAAT), helped understand the actions promoted by the public power. Ultimately, we conducted a discussion under the light of contemporary ideas about preservation guidelines directed not only to the urban cultural heritage, but also to the industrial and railway heritage. We extended this discussion to the railway spaces of Mairinque, following guidelines that understand the preservation on the perspective of the set.

2. Theoretical framework

2.1 Cultural heritage in contemporary cities

The contemporary city “[...] always reveals itself through the materiality of its architecture or by the layout of its streets, but also becomes readable by the possibility of seeing on it the past of other cities contained in the city of the present” (PESAVEENTO, 2007, p. 16, our translation). In other words, even under a transformation process, some cities can keep their urban layout through the ambivalence of dimensions, references to their origin and past and correlate old and new on the same environment.

About this past, Salcedo (2007, p. 15, our translation) affirms that “the historic centers mainly represent the initial city’s layout, they are architectonic and urban structures that express political, economic, social, cultural and technological manifestations [...]” from old times and societies, inscribed in their unitary or fragmentary remains.
According to Choay (2001), this old city created a greater relationship with the contemporary city after the industrial revolution when there were major transformations on the traditional environment. Choay (2001, p. 179, our translation) also affirms that “[…] it was precisely becoming an obstacle to the free deployment of new means of urban space organization that the old formations acquired their conceptual identities”. G. Giovannoni (1873 - 1943) integrated these mentioned old formations on the territory organization.

This old formation can be represented by historic sets, which need caution on their new uses since they are capable of generating a dislocation of such representative sets. For example, it “can represent a dangerous way to treat such heritage and generate the puzzle effect, already mentioned by other scholars” (RUFINONI, 2009, p. 216, our translation). These articulated sets should be placed in the territorial and urban development (and their urban instruments) of the contemporary city.

In Brazil, the Federal Constitution of 1988 – Art. 216 defines that “the goods of material and immaterial […] nature bearers of identity, action or memory references of different groups that formed our society” (BRASIL, 1988, our translation) constitutes the Brazilian cultural heritage, being understood from “urban sets and sites of historic, artistic, archaeological, paleontological, ecological, and scientific value.” (BRASIL, 1988, our translation). Therefore, the heritage set receives legal protection (through heritage landmarking) since now it would have acquired relevance in the contemporary city context. Goods that come from the industrialization can be considered heritage and, as such, they need preservation measures appropriate to their intrinsic features.

2.2 Railway Industrial Heritage

The 20th Century was responsible for important social, psychological and cultural changes in society, which reflected directly on the architecture that is still noticeable on contemporary cities (PASCHOALIN, 2012). According to Bloch (2001, p. 63, our translation), on his work of 1943, the human condition suffered, between one or two generations “[…] a change not only really fast but also complete: in such a way that no institution a little old and no traditional manner would have escaped the lab or the factory revolutions”.

Among the techniques created by the factory revolution, which changed the work relationships and the lives of the men from that time, are the sets of properties that came from the industrial production. According to Choay (2001), these sets are composed, for example, by dwellings, stores and powers plants left behind in outlying ghettos and in city centers, configuring relatively complete industrial sets during the second half of the 19th century and early 20th.

Thereby, “to work with buildings and industrial complexes generally means to act in large areas, most of the time obsolesces and declining, that could only be reinserted in a new reality by acting in a larger scale.” (KÜHL, 2008, p. 139, our translation). Configuring, then, a complex task since it is not about a single and isolated good, but instead plots of industrial properties, already with new effective uses, proposed or in ruination that would require different approaches.
Regarding these new approaches, Braghirolli (2010) says that on the 19th century the urban legislation started to get into harmony with a new view about heritage. In many cases workers’ neighborhoods and industrial districts were incorporated on rehabilitation programs since they were understood as intrinsic to the urban environment. According to Braghirolli (2010, p. 159), “la ampliación del concepto de ‘patrimonio’ ha despertado el interés por las tipologías urbanas y arquitectónicas no consagradas, como los conjuntos industriales y los barrios obreros de las primeras décadas del siglo XX”.

Therefore, we observe two enlargements: on the typological scale of heritage which considers the more modest goods and the results of current industrial activities as well as on the treatment of these spaces which could comprehend large areas. For such, the Nizhny Tagil’s letter, from 2003, that deals specifically with the industrial heritage, defines this patrimony as being comprehended by “[...] means of transportation and all its structures and infrastructures as well as the places where social activity related to the industry were developed, such as dwellings, places of worship or education” (TICCIH, 2003, p. 3, our translation), increasing the representativeness of this heritage for workers’ set and social areas not associated with exceptional architecture.

These industrial spaces are currently treated as central to explain “la dinámica de la producción material y para entender las relaciones sociales que ésta generó [...]” (BRAGHIROLLI, 2010, p. 171), contemplating from monumental buildings that highlighted the landscape (as well as the railway stations) to modest properties (as the dwelling sets) that had both historic and social relevance. Kühl (2008) believes that the Brazilian industrialization is directly connected to the railway transport since it boosted and was boosted by railway enterprises. These railway installations needed an industrial structure which articulated the transformation of numerous cities filling vast zones with factories, dwellings and others.

3. Railway village of Mairinque

3.1 Historic Analyses of the Railway Set of Mairinque

Among the villages created by railway interests, we focus on analyzing, from documentary research and bibliography, the development of Railway village of Mairinque.

The village of Mairinque, founded on 1890, was deeply connected to EFS’s interests, and was built around 1870 (SOUKEF JUNIOR, 2001). The village’s location, the place where went all the traffic coming from the connecting branches between Itu and Sorocaba, had great importance since it allowed the connection of the coast with the countryside, which broke the monopoly from the British company São Paulo Railway on the 1930s. These factors mobilized the company’s directors to transfer the railway’s workshops, which were in Sorocaba, to this region, intending to contain the necessary repairs that came from the increased flow on the station that was later built (CÔNDEPHAAT, 1986).
Yet about the village, Soukef Junior (2001) affirms that even before the effective occupation of the area, the company installed a tree nursery, a locomotive maintenance shop, a rolling stock deposit and a patio for maneuver, which allowed the village’s development. According to Ramos (2008), the village intended to establish a set of 100 small houses which would be rented to employees sent by the company to build the maneuver patio, the maintenance shop and the station. While Dias e Souza (1994) affirm that when the city was yet to be born, it was possible to notice that it was marked by modernity, since it configured a worker’s village in 1890, was installed as a prosthesis in the center of a forest and was a capitalist entrepreneurship (a new ideological in Brazil). Still had “equipments and services not so common in most traditional cities at the time, such as water supply, sewage and lighting” (SOUKEF JUNIOR, 2001, p. 72, our translation). Dias e Souza (1994) complement stating that the streets were really large, even without having one single car until the previous decade. Until the 1930s Mairinque went through a prosperous phase while it held EFS’s workshops, which performed repair and maintenance services on the rolling stock. The workshops, transferred to Sorocaba on that decade, had an important role for the railway and were deeply connected to the growth of the Railway village of Mairinque (CONDEPHAAT, 1986). In 1971 EFS became one of the enterprises to compose the state-owned company Ferrovia Paulista Sociedade Anônima (FEPASA) (GIESBRECHT, 2013). This happened because of the decrease on the railway activity compared to the road system, since the 1950s (FATEC/JUNDIAL, 2011). Since 1999 the railways started operating only to cargo transportation, under the responsibilities of America Latina Logística (ALL).

Thereby, we tried to identify elements from the railway past that still exist in Mairinque, with location and delimitation of properties and of the urban configuration of the city, and also from consulting the maps of the archives of Inventarização da Extinta Rede Ferroviária Federal S.A. (RFFSA) (Figure 2). On these
maps was possible to identify the formation of gridlines on the set established by EPS. This formation is still present on the south and central areas of the city (which has the stention as reference) and there is the presence of a few properties associated to the railway activity described on the blueprint, such as a dwelling set, the workshops and the warehouse. This composition is different from the one on the north area of the city, formed more recently and which has an urban configuration distinct from the gridlines imposition.

3.2 Analysing the Railway Heritage of Mairinque

The station of Mairinque, projected by Victor Dubugras in 1906, was considered the first construction from the architectonic modernism in the state of São Paulo and the first elaborated on reinforced concrete. That is why it’s landmarking was approved by CONDEPHAAT in 1986, also demarcating a ratio of 300 m of its surroundings, what covered the north and South of the city divided by the rails (in which the access to the “island-station”) and to both parts of the city is made by tunnels under the rails) (CONDEPHAAT, 1986). The station was also landmarked, in 2004, by IPHAN, which defined a surrounding polygonal that included the functional part and the first few old blocks close to the station (IPHAN, 1998). In 2001 the station was acquired by the City Hall and was transformed into the Centro da Memória Ferroviária de Mairinque (GIESBRECHT, 2013), while the rest of the set is not linked to the station, or is only on the surroundings defined by the landmarking, receiving new uses, generally no related to the railway activity.

The consults to the landmarking process allowed us to identify references to other goods related to the railway operation, beyond the station. During CONDEPHAAT’s landmarking process, for example, it was mentioned the importance of the workshops to the city’s development, however, the final decision of the heritage landmarking refers only to the station. Even though the landmarking of the railway set was considered on IPHAN’s process, such intention was discarded in face of the architectonic relevance of the station. In both processes were defined protection surroundings related to the station (Figures 3 and 4), which comprised great part of the buildings related to the
A last piece of information was gathered by semi-structured interviews with representatives of local conservation groups. One of the interviewees is Ciro Gomes, who commented about the history of the railway village of Mairinque, about the life during the EFS, and about the current situation of the station, of the trains, of the houses and of the buildings constructed by the railway company. The other interviewee is João Roberto Pinto Figueiredo, who commented about aspects regarding the preservation of properties related to the railway activity. The interviews denote an identification to other goods related to this activity, beyond the landmarked station. An example of reference to the set as a whole occurs when Figueiredo affirms that the station could not be separated from the rest of the set because the houses will continue to deteriorate and to suffer alterations on their initial features (Figures 5 and 6). As well on Gomes’ speech when he affirms that the facade of the houses should have been landmarked because “[...] the beauty was on the similar facades”. Therefore, it became clear that the railway set of Mairinque was established with a typical formation, a unique organization and exclusively dedicated to the railway activity, what, to EFS, represented a moment dedicated to its functionality, especially as a link between the connecting branches of Ituana and Sorocaba and as a connection with the coast. Acquiring, then, a territorial importance that marks this set as heritage also for the State of São Paulo.

From the local point of view, there was the installation of a variety of services directly or indirectly related to the city’s railway, such as houses, the workshops and the tree nursery (CONDEPHAAT, 1986; IPHAN, 1998) what expanded the development of this activity from a strictly operational area to the city, generating properties that articulated themselves and that allowed a certain functioning of the village. This had great relevance until the 1930s to the development, fixation and expansion of the railway activity and indirectly to the village itself, configuring then a local heritage for Mairinque.
However, the action of time, the changes on the railway system, the alterations of property (public, private and concession) and these places appropriation have been causing long-term changes to the integrity of the spaces from the city’s origin, what also causes the set’s dissolution. Beyond that, the zoning proposed by the Master Plan established to Mairinque in 2006 does not make it explicit the station property, landmarked by CONDEPHAAT and IPHAN neither it defines its surroundings, it only being represented as properties of the central area\(^2\).

3.3 Guidelines for the preservation of railway heritage of Mairinque

Regarding the village of Mairinque, we identified many material evidence and written and oral references which mention the importance of the railway operation to the city, as well as to the properties associated to this activity, also including the landmarked station. These railway goods should be protected, if not completely as the station, with measures that at least consider the set in an articulated way. Therefore, to understand this heritage, we should consider all aspects that allowed its formation and development as a railway set, including a technic, historic and social point of view. Before that, it is of utmost relevance that the existing evidence of Mairinque is studied, valued, preserved and broadcasted by guidelines that consider the insertion of the old set on the urban contemporary legislation, since they are fundamental measures to generate integration between the set’s properties that represent such railway heritage. We will focus on that from now on.

According to Rufinoni (2009), for example, the sets should be integrated to a regional and urban planning, in which punctual and disarticulated solutions may generate even more problematic imbalances to the region. We can picture such approach regarding the situation of Mairinque, where only one property of the set receives effective legal protection while the rest of it is isolated from protection measures of the local railway heritage as a set.

However, according to the Nairobi recommendation, the safeguard and integration on the contemporary life of these historic sets is a fundamental measure on the physical and territorial planning (UNESCO, 1976). While the International Letter to Safeguard Historic Cities, also called Washington’s Letter, affirms that the safeguard of cities and neighborhoods “[…] in order to be effective should integrate a coherent policy of social and economic development and be considered on the spatial and urban planning at all levels” (ICOMOS, 1986, p. 2, our translation). That means, these cultural interest zones should be inserted in the Master Plan, in Zoning Laws, in IPTU (Urban Building and Land Tax) tax exemption of the current city. This is a concern that comprehends the railway goods of Mairinque that need a guardianship and an especial approach, with its insertion in the city zoning and its consideration as a cultural interest zone.

About that, Hernández (2009, p. 3-4) affirms that the conservation should be based on the respect to the cultural site the possesses a potential documentary and historic value, allowing an interaction between the old city and the contemporary city. Thereby, the old set and the current city should evolve together and continuously, being respected features of pre-existing sets that,
in Mairinque, still have particular components that allow the contemporary city’s evolution without affecting the old set because the gridlines formation, the access tunnels and the large streets do not interfere on the urban circulation.

We also comprehend that the preservation should reach work, leisure, and home spaces that marked the city’s development by the railway activity. The increased deterioration of the goods and the consequent risks to which they are exposed are related to incorrect interventions, transformations and substitutions caused by isolated actions that do not follow the historic set preservation guidelines, even offering the visual disarticulation of the railway set of Mairinque.

Precisely because of that, according to Kühl (2008), we should think beyond the isolated monument, embracing the entire complex of buildings that can compose an industrial set going from factories, dwellings, schools, etc, taking in consideration that “[…] any industrial structure is not an isolated monument but part of a network of linkages relating to the methods and means of production” (PALMER; NEAVERSON, 1998, p. 5). On this case, we understand that the value of Mairinque is represented by the whole railway set of the city from a historic, technic, social and others points of view, which characterizes it as a set that extends the architectonic value of the station.

4. Conclusion

According to Kühl (2008), the industrial and railway zones nowadays do not have an exclusively functional interest, since they also acquired heritage sense. The railway changed the configuration of areas in which their rails went through, what configures the evidence of a time that should be studied and valued from the insertion of this heritage and, in this case, of the heritage set into the daily life, allowing it to follow the contemporary urban configuration, the city dynamic and its new uses.

From the functional point of view, we understand that the railway set of Mairinque was articulated on its origin, loosing such articulation after factors already enumerated. Among them, we could mention the transformations on the railway operation (from the historic point of view) and its distinct froms of protection (from the preservationist point of view) which were not able to promote a preservation policy to the set. However, the return of the notion of articulation between the goods is a possibility, at least on the preservationist field, by guidelines that consider the management of these spaces based on the set, necessary to the continuity of the properties.

If applied to the railway of Mairinque, the heritage guidelines would make it possible to identify, comprehend, register and value important components of the railway heritage, in such a way that its original articulation would become explicit. These guidelines are in the heritage letters and cited relevant authors, which the insertion are entirely plausible in Mairinque’s reality. Furthermore, would be able to alter the current abandonment situation of areas that suffered
from the decline of the railway activity, to value regions that still have a trace of this activity and to modify the relationships established among the city and the set, based on its continuity and the development of the city.

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