

**Analysis method of urban formation in relation to buildings of
historical value: Case Study in Crissiumal/RS**

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SUMMARY

The formation process of cities happens due to the migratory movements that contributed to the colonization of Brazil, and is also responsible for leaving an architectural heritage of great historical and cultural importance for the future of humanity. The objective of this review is to analyze the urban insertion of the first historical and culturally valued buildings in the city of Crissiumal, located in the state of Rio Grande do Sul (Brazil), in order to understand how they influenced the urban formation. For this, initially, the first buildings built in the city were identified, and then their insertion and their influences in relation to the formation of the urban fabric were analyzed. The research presents an analysis of maps in relation to the macro parceling, through the relationship between full and empty spaces, based on the proposal of the Inventory of Configurations of Urban Spaces - INCEU. Through research and analysis carried out from the maps created, it was possible to perceive that the buildings implanted in the immediate surroundings of Praça 25 de Julho had an influence on the urbanization and formation of the city. These buildings housed important places for society, such as City Hall, Church, Schools and Commerce. In this way, most of the new homes were built close to these places, and the city expanded from this environment.

KEYWORDS: Buildings. Urban formation. Historical-cultural heritage. Crissiumal /RS.

1. INTRODUCTION

The appreciation of historical heritage, in its various facets, is important for several factors, since, for example, a nation highlights its identity through material or immaterial goods, expressed or produced by its people, and which are maintained over the years. These goods, therefore, characterize a group and its location and together confer their cultural heritage. On the other hand, intangible goods, such as music, dance, cuisine, and customs, among others, are cultural representations of society, but there are also material goods, such as architecture, which strongly represent cultural identity (CONSONI, MARTINS AND JAPUR, 2020).

The urban landscape and the design of cities, according to Mello (2002), are formed by several factors, including the environment and social activities. Thus, we can place urban space as a “product of human actions on the natural environment, making it necessary to establish, in the configuration of the urban landscape, a harmonious relationship between these environments and the built objects” (MELLO, 2002, p. 1). It can be considered, in this way, that the space is formed according to the way of living of a society and its needs.

The city can only be understood through its urban landscape, which results from social, cultural, and economic factors at a given time (LANDIM, 2004). Among the spaces that man builds, it can be said that the most important are those for daily and continuous use, their shelters: the city. “The city is basically constituted by morphological structures, organized arrangements of volumes and subdivisions that express forms of access and ownership, located in a certain physical support” (LANDIM, 2004, p. 26).

The form of urban spaces is a living element, and in five thousand years of urban history, the configuration of cities presents itself as more than the place where human life and activities take place, but also as “a type of practice indispensable to life”. which, in being a partner, is characterized as social” (INCEU, 2001, p. 10). Urban sites are complex elements when placed as cultural assets, since they have material and immaterial assets “on a unique scale of possibilities, due to the social concentration that characterizes them and allows the wide and rich spectrum of cultural practices that, if protected, form the memory of peoples” (INCEU, 2001, p. 9 and 10).

It is worth remembering that the style of architecture expressed in each building shows a certain period of history, and can be identified as “witnesses of the ways of life, social relations,

technologies, beliefs and values of the social groups that built them, modified them and used” (HORTA, GRUNBERG AND MONTEIRO, 1999, p. 14). Since, the concept of what is known as heritage was, over time, modified. According to Parfitt, Oliveira and Blank (2015, p. 1113) “its evolution is presented in the heritage maps, as it is no longer centered only on a historical or stylistic period”. Currently, it is concerned not only with what is exceptional, but also with what comprises different classes and, therefore, urban complexes are of great value.

Not only in Brazil, but in several countries, greater importance is given to heritage assets such as real estate capital, according to Arantes (2006). According to him, “in aesthetic terms, the stylization that reinforces the allegorical meanings and makes disposable these goods that would be relevant in their singularity” (ARANTES, 2013, p. 8). Heritage, in all its historical value, serves to assist in the development of public culture and should, therefore, be valued (ARANTES, 2013, p. 9).

This article deals with the urban landscape and the heritage of historical-cultural value. It aims to identify the first buildings built in the city, whether they still exist or not, to analyze the influence of their insertions in relation to the formation of the urban fabric. The city object of study of this research, Crissiumal, is located in the northwest of the state of Rio Grande do Sul, on the border with Argentina. It is considered a small city, with about 13,200 inhabitants (IBGE, 2021). The region was one of the last to be colonized in the state of Rio Grande do Sul, by descendants of Italian and German immigrants, coming from the so-called Old Colonies in search of new opportunities, therefore, the city had its foundation late, around 1930 (PLETSCH, 1995).

Through the methodology available in the Manual of the Inventory of Configurations of Urban Spaces (INCEU) - IPHAN (2001), the city will be analyzed through maps of macro parceling and full and empty, carried out from the map provided by the Municipality of Crissiumal, dated from 1956 and hand-drawn on parchment paper, and the current map, from the year 2019.

The first buildings built in the city of Crissiumal have historical value and also influenced the urban form of the city and, therefore, must be studied, aiming at their valorization, both by society and by public power. The objective of this study is to analyze the urban insertion of the first significant buildings for the city of Crissiumal, located in the state of Rio Grande do Sul (Brazil), in order to understand how they may have influenced the urban conformation.

2 METHODOLOGICAL PROCEDURES

The city object of study of this research, Crissiumal, is located in the northwest of the state of Rio Grande do Sul, on the border with Argentina. It is considered a small city, with about 13,200 inhabitants (IBGE, 2021). The region was one of the last to be colonized in the state of Rio Grande do Sul, by descendants of Italian and German immigrants, coming from the so-called Old Colonies in search of new opportunities, therefore, the city had its foundation late, around 1930 (PLETSCH, 1995).

Using the methodology available in the Manual of the Inventory of Configurations of Urban Spaces (INCEU) - IPHAN (2001), we seek to analyze the city through maps of macro parcels and full and empty maps, based both on the map provided by the City Hall of Crissiumal, dated 1956 and hand-drawn on parchment paper, as well as the current map of the city, from the year 2019.

Thus, after the bibliographic research to understand the concepts, the process of the documental and photographic survey began regarding the history of the municipality, as well as

its first buildings. After that, Praça 25 de Julho was initially selected as the starting point of the study, since most of the first buildings built in the city are located in its immediate surroundings. A radius of 500m was defined around Praça 25 de Julho as the delimitation of the study and, within this radius, 7 buildings were found to be analyzed. In this survey, old images of the selected buildings were also obtained. Subsequently, with the map obtained through Google Earth (2021), the identification and location of these 7 buildings, which were built in the first decades of the city, were carried out.

The National Inventory of Configuration of Urban Spaces – INCEU aims to “complement the database currently used by IPHAN in the procedures that subsidize actions aimed at the preservation of urban sites” (INCEU, 2001). Thus, using the methodology proposed by INCEU (2001), some maps of the city of Crissiumal were created. Regarding the macroplotting analysis, it brings the following:

1st.) The macroplotment of the considered area is represented by drawing the areas adjacent to the circulation channels (following the front limit lines of the lots), in a low plan and adequate scale, obtaining a set of flat figures or polygons (macroplots). 2nd.) The total number of macroplots and the percentages of their various types of shape (triangular, square, rectangular, trapezoidal, circular and other types of polygons) and size (very large, large, medium, small and very small). 3rd.) The thematic zones of exclusivity or predominance of each of these different types are defined, representing them in the plan of the considered situation, and obtaining the thematic map for that element. 4th.) The macro-allocation is analyzed according to the composition laws of its elements (polygons in terms of shape and size), verifying: · predominance of repeated attributes; · predominance of differentiated attributes; · balance between repeated and differentiated attributes. 5th.) Add to this analysis any other observation or conclusion deemed relevant and/or enriching to the Floor Plan category (INCEU, 2001, p. 46).

As for the analysis of the relationship between full and empty, INCEU brings the following:

1st.) The relationship between full and empty spaces in the considered area is represented by drawing the areas corresponding to: I) full spaces = spaces enclosed by walls and ceilings, such as buildings, which are represented in a very dark tone (black or dark gray); II) voids = open spaces, such as public open areas or inside the lots and without trees, which are represented in white; [...] 3rd.) The thematic zones of exclusivity or predominance of each of these different types are defined, representing them in the plan of the considered situation, and obtaining the thematic map for that element. 4th.) The relationship between solids and voids is analyzed according to their laws of composition: · predominance or balance of solids, voids or ashes, and the clarity of this relationship; · clarity of its distribution; 5th.) Add to this analysis any other observation or conclusion deemed relevant and/or enriching to the Floor Plan category (INCEU, 2001, p. 47).

From this methodology, with the map of the city dated 1956, the map of full and empty spaces was created and also the map of macro parcelling in a radius of 500m from Praça 25 de Julho, where there is a greater concentration of buildings object of this study. and, for that, the AutoCad software was used. Subsequently, the same process was carried out with the current map of the city, in order to analyze urban growth and how buildings influenced the context of space production.

3 HISTORY OF THE CITY AND THE FIRST BUILDINGS

The first inhabitants of the place where the municipality of Crissiumal is located were the indigenous people. According to Schwanke and Pohl (2007) there are photographic records dating from the 1930s, of an indigenous group living in the area. Also, according to Jungblut apud Schwanke and Pohl, German colonization took place in four stages in the state of Rio Grande do Sul, and the region where Crissiumal is located was colonized during the third stage, which took place between 1922 and 1955, when German descendants left the so-called “Old Colonies” towards the northwest, to found cities such as Três Passos, Três de Maio, Horizontina, São Martinho, Crissiumal and others.

The first existing buildings in the city were built between the 30s and 40s, some in wood and others in masonry. The first building of the City Hall, (Figure 1) built in wood in the mid-1940s, was located on the block around Praça 25 de Julho, at the time named Praça Valzumiro Dutra. In the 1980s, with the need for a larger space, another building was built with the purpose of housing the City Hall, in a different location from the initial one. Currently, the building no longer exists, having been built a masonry building on the lot.

Figure 1 - Building that housed the first City Hall of Crissiumal



Source: Collection from the Municipal Library of Crissiumal (2021).

Another important building, one of the first in the city, was the Catholic Church (Figure 2). Its construction began, according to Pletsch (1995), in 1938 and finished in 1939, being made of wood and occupying a small area of the court. It was also located on the block around Praça 25 de Julho. With the increase in the Crissiumalense population, it was necessary to build a wider space, which took place in 1961 and was completed in 1964, next to the old building, which no longer exists and gave way to the Parish Hall (Figure 3).

Figure 2 - First Catholic Church from Crissiumal



Source: Vincentini and Klingler (2011).

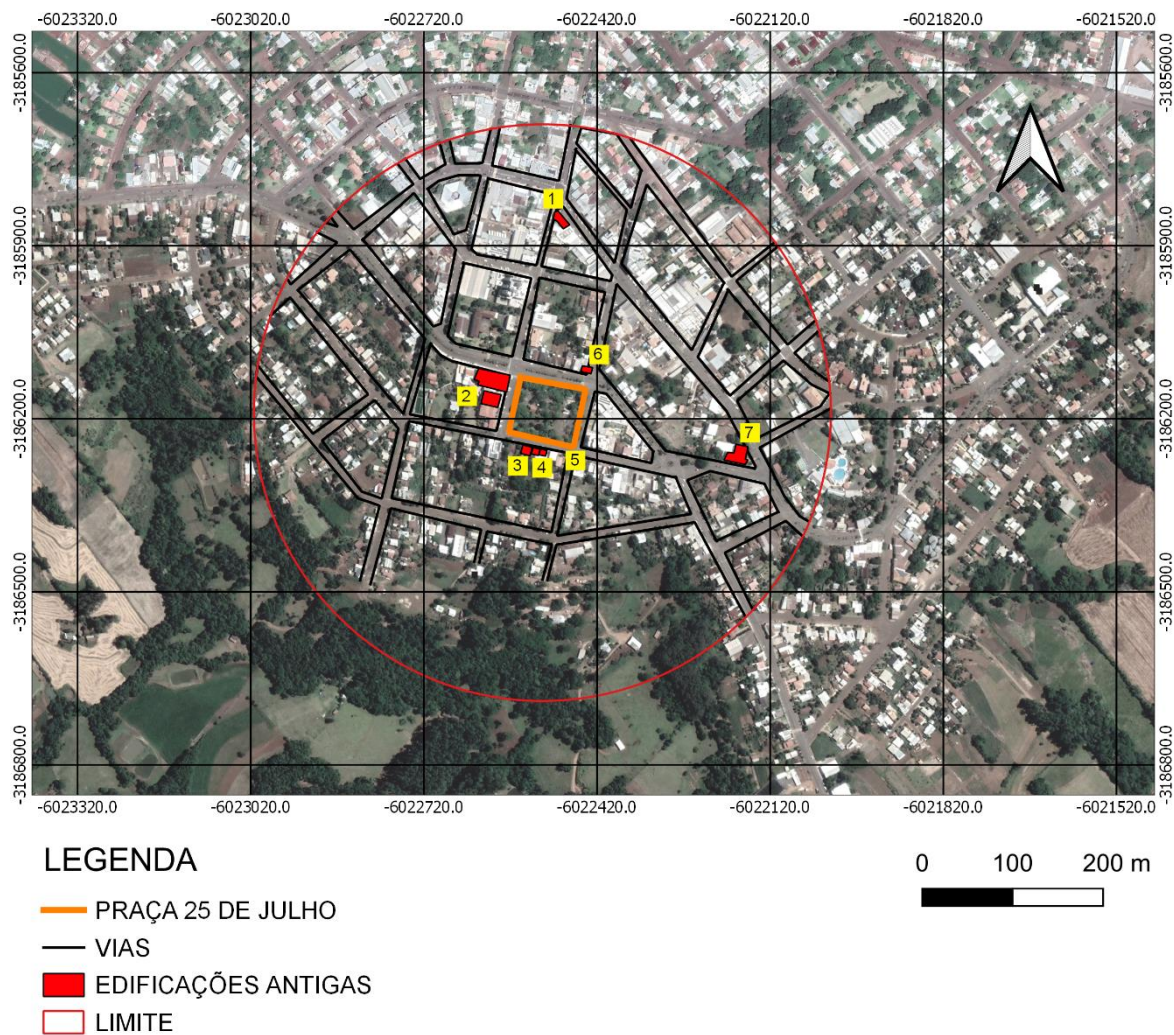
Figure 3 - New Catholic Church during construction, next to the new Parish Hall



Source: Collection from the Municipal Library of Crissiumal (2021).



Considering that the buildings already presented above (City Hall and Church) were demolished, and that the focus of the study is the remaining buildings, a total of 7 buildings were identified within the defined radius of 500m from Praça 25 de Julho, as shown in the map of Figure 4, and how they were built in the first decades of the city's existence, are important to identify the growth and urban history of Crissiumal. Table 1 presents old and current images of the buildings identified in the map in Figure 4, as well as the year of construction, original use and current use.












Figure 4 - Map with the location of the 7 buildings surveyed



Source: Google Satellite adapted by the authors (2022).

Table 1 - Identification and information of the buildings on the map in Figure 4

No.	OLD IMAGE	CURRENT IMAGE	USE IDENTIFICATION	CONSTRUCTION YEAR	CURRENT USE
1			Sturmer Building / White House	1957	Commercial

two			Parish Hall	1969	Parish Hall
3			Bus Station	1944	Business
4			Central Hotel	1934	Hotel
5			City hall	40's	Demolished
6	Not found		Rocha Pombo School	1935	Residential
7			Crissiumal Club	1949	Restaurant and ballroom

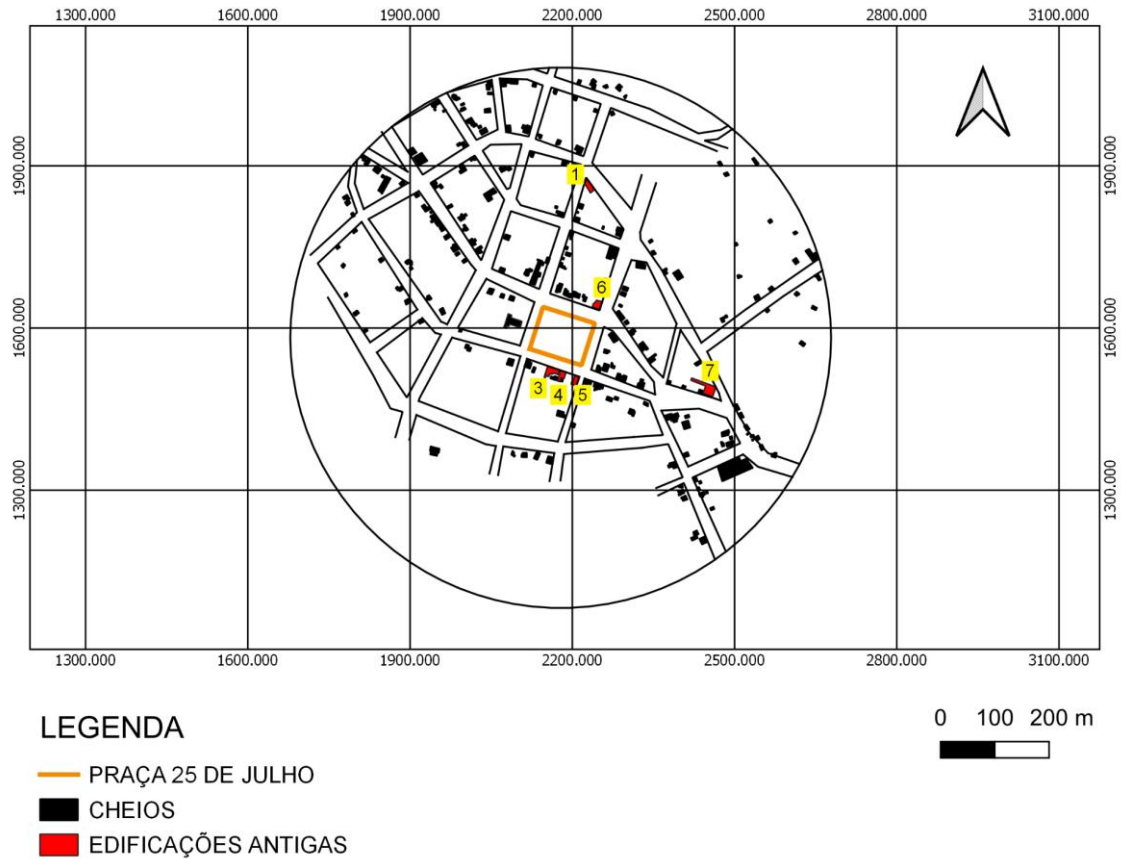
Source: Collection from the Municipal Library of Crissiumal (2021) Vicentini and Klingler (2011) and Authors (2022).

The following chapter will present the maps developed, as well as the relationship that buildings of historical and cultural value have in relation to the urban development of the city.

4 RESULTS AND DISCUSSIONS

The first full and empty map (Figure 5) was developed overlaying the 1956 city map, provided by the Municipality of Crissiumal . From this map, the buildings that had already been built at the time were identified. Among the 7 buildings, only one had not yet been built, this being the Parish Hall (N.º 2), which was only started in 1969.

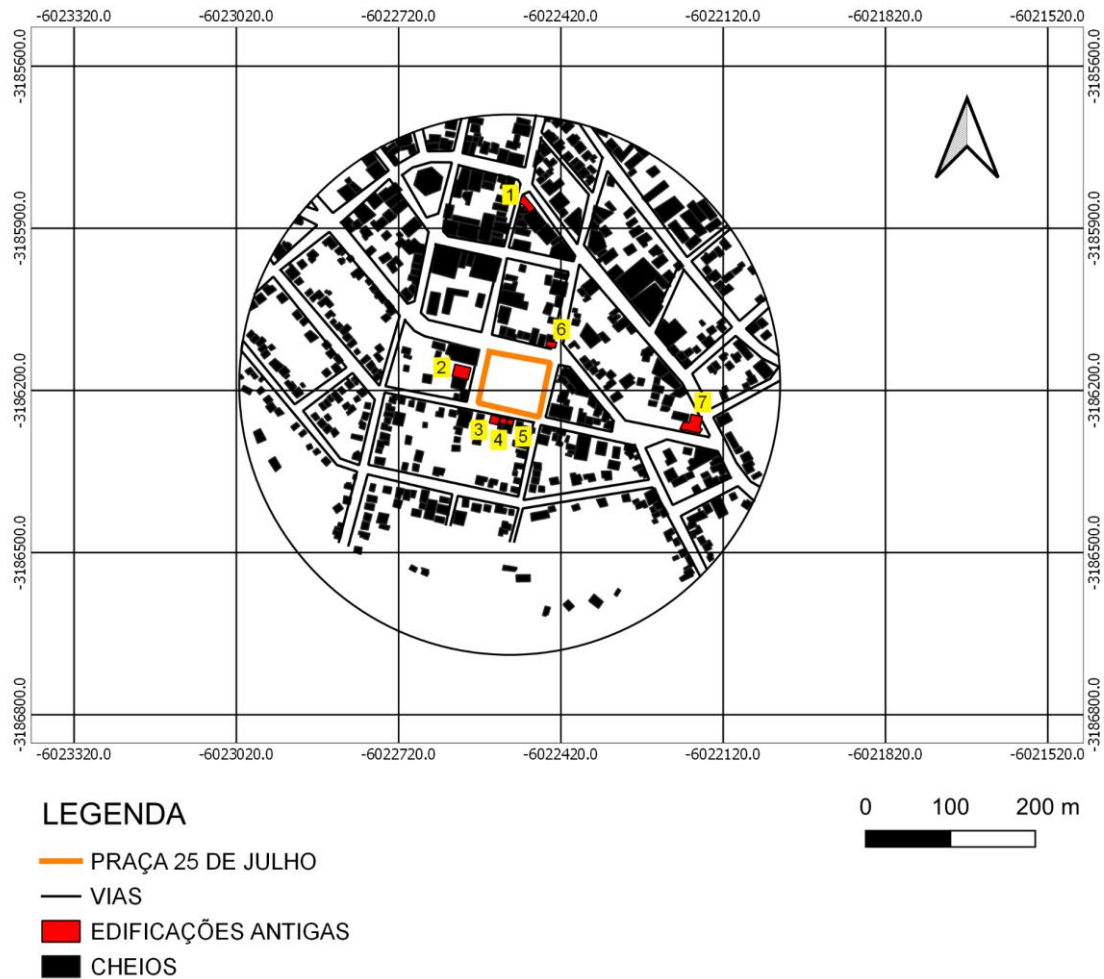
Figure 5 - Map of full and empty spaces carried out on the 1956 survey



Crissiumal City Hall (1956), adapted by the authors (2021).

Regarding urban occupation, there is a certain linearity and a greater density of floods in the northwest and southeast directions. We also noticed that most of the buildings of the time are close to Praça 25 de Julho, at the time called Praça Valsumiro Dutra. Regarding the topography, the square is at a high point, and all the roads leading to it are uphill. The buildings that are located in the immediate surroundings of the square are on the same level as it, with the Catholic Church standing out at a slightly higher point. In addition, it is noticeable that the voids overlap the full ones, and due to the city being at its beginning at the time. The current map of the city (Figure 6) shows a considerable expansion and densification of the area.

Figure 6 - Map of full and empty spaces carried out on the 2019 survey.

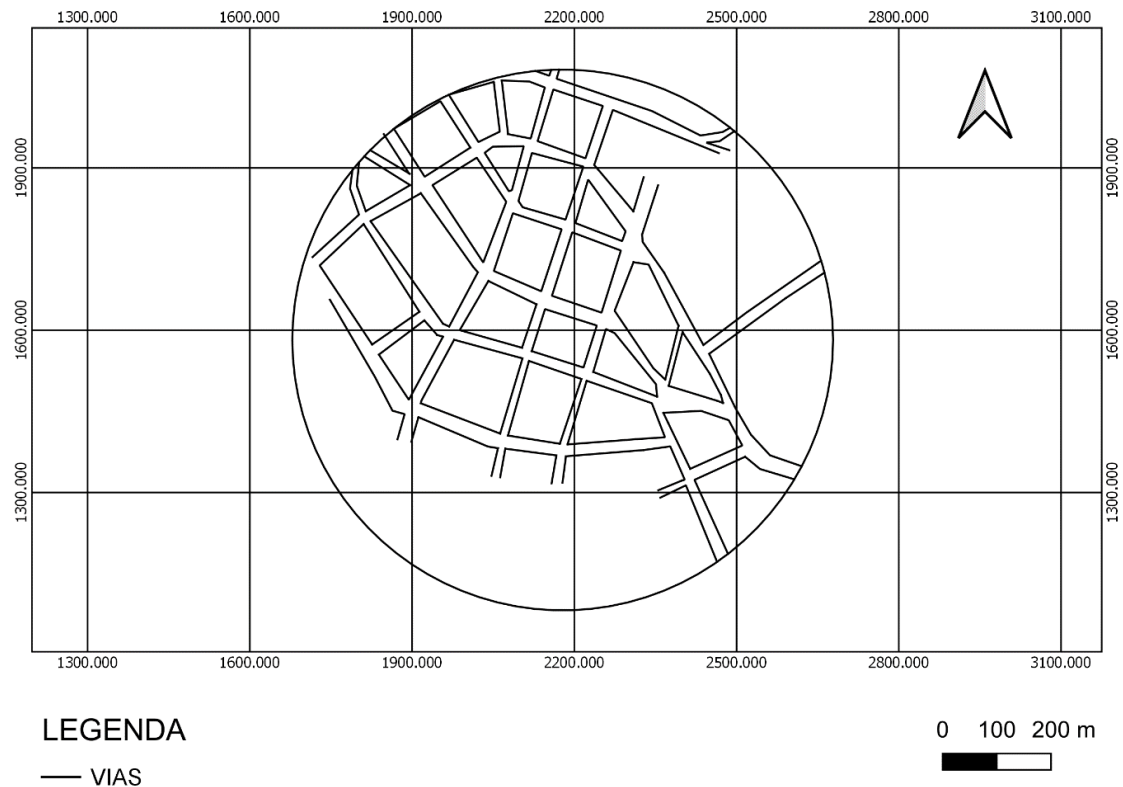


Source: Google Maps (2021), adapted by the authors (2021)

In the immediate surroundings of Praça 25 de Julho (Valzumiro Dutra), important buildings were built for the functioning of the city. Thus, you have the old town hall and also the Hotel Central, on the same street. On another street, but still around the square, was the first church, and the block next to it had been destined for the Educandário Madre Paulina. On another wooden street was the Rocha Pombo School building. This building is also a remnant. It is known that, in addition to these buildings, houses and businesses were also located in this environment. In this sense, we noticed that important buildings were built close to the square, a place with high topography.

Regarding the macroplotment , comparing the old map of the city (Figure 7) with the current map (Figure 8), it is noted that the roads and blocks remained mostly in the same arrangement.

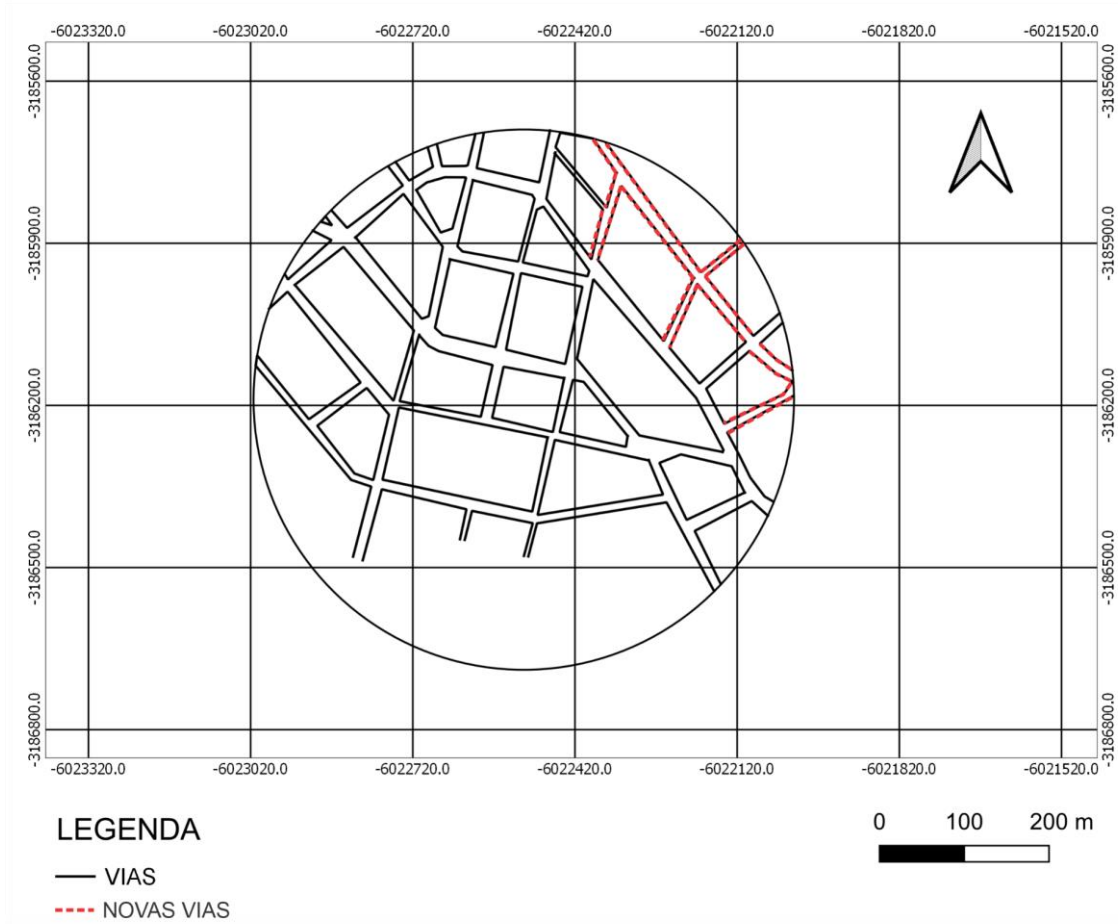
Figure 7 - Macro – installation in 1956.



Crissiumal City Hall (1956) adapted by Autores (2022).

Analyzing the map in Figure 8 in relation to the map in Figure 7, one can see the creation of new roads in the northeast direction, demarcated with red lines on the map. In the south and southwest directions there was no urban expansion. Afforestation, especially in areas of commercial use, is almost non-existent. The existing roads currently have, for the most part, sidewalks and paving, although most of them are not in perfect condition.

Figure 8 - Macro - installation in 2022



Source: Google Maps (2022) adapted by the Authors (2022).

As can be seen in the maps in Figures 7 and 8, the blocks have different formats. In the analysis of the current map (Figure 8), 26 blocks appear, and therefore, one square, seven rectangles, six trapezoids, various rectangles and other formats were perceived. The sizes are also different, some courts are large, others medium and small.

5 FINAL CONSIDERATIONS

Analyzing and understanding the process of urban formation of cities proves to be important to assist in urban planning and projects. The city of Crissiumal, despite being a small city, needs planning in relation to its urban development. In addition, the identification of buildings built in the past, which were and continue to be relevant to the community, and also the characterization of their values, can help in their appreciation, both by society in general, and by the government.

Making cities pleasant for their inhabitants, as well as creating a sense of belonging, is essential for these residents to want and enjoy living there. Therefore, this research also values the history of the city, as it sought to identify, analyze and understand how some of the buildings built in the first decades of the city influenced the process of local urban formation.

The maps developed helped to understand the process in question in this research. His analysis resulted in the identification of the tendency of the initial urbanization process, which had a certain linearity and expanded mainly in two directions: northwest and southeast.

The urban formation of the city and its history are relevant both in the production and planning process, as well as for the valorization of the historical and cultural heritage of these cities. Thus, this research can contribute to future urban projects in the city, as well as to the valorization and preservation of the old buildings that have been identified and that are already part of the city's historical heritage.

REFERENCES

ADAM, Roberto Sabatella. Analisando o conceito de paisagem urbana de Gordon Cullen. **Da Vinci**, Curitiba, v. 5, n. 1, p. 61-68, 2008.

ARANTES, Antonio A. O PATRIMÔNIO CULTURAL E SEUS USOS: a dimensão urbana. **Habitus**, [s. l.], v. 4, n. 1, p. 425-435, jan. 2006.

BRASIL. **Constituição da República Federativa do Brasil de 1988**. Brasília, DF: Presidência da República, 1988. Disponível em <http://www.planalto.gov.br/ccivil_03/constituicao/constituicao.htm> Acesso em: 15 jul. 2021.

CONSONI, Gilberto Balbela; MARTINS, Paulo Edi Rivero; JAPUR, Léa Maria Dornelles. REALIDADE AUMENTADA APLICADA AO PATRIMÔNIO HISTÓRICO-ARQUITETÔNICO: projeto de aplicativo para visualização dos prédios históricos da ufrgs. **Revista do Instituto Histórico e Geográfico do Rio Grande do Sul**, Porto Alegre, n. 157, p. 63-78, abr. 2020.

HORTA, Maria de Lourdes Parreiras; GRUNBERG, Evelina; MONTEIRO, Adriane Queiroz. **Guia básico da educação patrimonial**. 69 p. Disponível em: http://portal.iphan.gov.br/uploads/temp/guia_educacao_patrimonial.pdf.pdf. Acesso em: 05 jul. 2021.

INSTITUTO DO PATRIMÔNIO HISTÓRICO E ARTÍSTICO NACIONAL. **Inventário de Configurações de Espaços Urbanos (INCEU)**: manual de aplicação. Brasília: IPHAN: 2001.

LANDIM, Paula da Cruz. **Desenho de paisagem urbana**: as cidades do interior paulista. São Paulo: Editora UNESP, 2004.

LUCA, Virgínia Gomes de. O Patrimônio Arquitetônico e a Paisagem Cultural em Sítios Históricos Rurais de Imigração Italiana. 2007. 206 f. Dissertação (Mestrado) - Curso de Arquitetura e Urbanismo, Universidade Federal de Santa Catarina, Florianópolis, 2007.

MELLO, Fernando Antonio Oliveira. **Análise do processo de formação da paisagem urbana do município de Viçosa, Minas Gerais**. 2002. 120 f. Dissertação (Mestrado) - Curso de Ciência Florestal, Universidade Federal de Viçosa, Viçosa, 2002.

PARFITT, Claire Morrone; COSTA OLIVEIRA, Ana Lúcia; PENNING, Dionis Mauri Blank. Patrimônio arquitetônico cultural: o caso de Pinheiro Machado/RS **PASOS**. **Revista de Turismo y Patrimonio Cultural**, vol. 13, núm. 5, out. 2015, pp. 1113-1127

PLETSCH, José Raimundo. **Apontamentos sobre o passado de Crissiumal**. Ijuí: Sedigraf, 1995. 190 p.

SCHWANKE, Teresinha Maria Lippert; POHL, Vera Lúcia Bagetti. Da Criciúma a Crissiumal. **Três de Maio**: Setrem, 2007. 164 p.