

LANDSCAPE PREFERENCE IN THE “MUNICIPAL PARK RUDOLFO ARNO GOLDHARDT” OF PANAMBI/RS

PREFERÊNCIA DA PAISAGEM NO PARQUE MUNICIPAL RUDOLFO ARNO GOLDHARDT DE PANAMBI/RS

*Samara Simon Christmann
Eliane Maria Foletto*

ABSTRACT

This article aims to analyze one of the main open spaces dedicated to leisure and recreation of the population of Panambi/RS: the Municipal Park Rudolfo Arno Goldhardt. It seeks to evaluate it through landscape preference - which can be replicated in other open spaces - through photographs and questionnaires with a qualitative-quantitative approach, which explore the perception and opinion of the population. At the end, it seeks to contribute with recommendations that subsidize its management and territorial planning, with the purpose of valorizing local potentialities, investing in fragilities, enabling better ownership and identity, and promoting environmental conservation.

Keywords: Open spaces. Landscape Preference. Questionnaires. Parks.

RESUMO

O presente artigo busca analisar um dos principais espaços livres dedicados ao lazer e recreação da população de Panambi/RS: o Parque Municipal Rudolfo Arno Goldhardt. Procura-se avaliá-lo por meio da preferência da paisagem – que pode ser replicado em outros espaços livres –, através de fotografias e questionários de abordagem quali-quantitativa que exploram a percepção e opinião da população. Ao final, procura-se contribuir com recomendações que subsidiem na sua gestão e planejamento territorial, com o objetivo de valorizar as potencialidades locais, investir nas fragilidades, possibilitar melhor apropriação e identidade e promover a conservação ambiental.

Palavras-chave: Espaços livres. Preferência da Paisagem. Questionários. Parques.

1 INTRODUCTION

Urban parks are elements of the urban landscape that permeate the built space, constituted by a specific territory. They are considered leisure spaces and public facilities, as well as symbols of modern city architecture, with ideals that spread to the contemporaneity. One of their purposes is to serve as many people as possible, and that is why, remarkably, they add as many programs of activities as possible, a factor that differentiates it from the squares besides the aspect of extension/area.

Therefore, it is possible to define the park as a free public space formed by vegetation and aimed to the leisure of the urban mass (MACEDO; SAKATA, 2010, p.13), regardless of its type (ecological, thematic, urban, etc.), and incorporating conservation intentions. And, regarding its surface area, it can cover several sizes, with the urban park being surrounded by the urban fabric and allowing access to visitors in different sectors (MASCARÓ, 2008).

136 According to Macedo et al. (2009), parks have become one of the main weekend leisure spaces for large contingents of the population, with significant expansion throughout the country. In this respect, these environments constitute landscape and urban units, which seek to promote sociability (encounter, movement, permanence, rest), scenic appreciation, its use and conservation, exalt environmental potentials, build a local identity, contact with green areas, environmental quality and life quality to the population.

In this way, intra-urban open space can be defined by all areas not contained by dwelling and work buildings or intended for some type of outdoor urban use, whether public or private, and which configures spaces within the urban fabric, such as streets, yards, uncovered parking areas, gardens, empty lots, squares, parks, rivers, lakes, fields, woodland, forests, urban voids, etc. (MAGNOLI, 1982; MACEDO, 1995; MACEDO; ROBBA, 2002).

When they became aware of the importance of leisure and recreation spaces for citizens and cities, they questioned the

physical and environmental characteristics of the Municipal Park Rudolfo Arno Goldhart of Panambi/RS, as well as their use /activity patterns, the perception of the population regarding the open space, and the needs of most users in terms of leisure and recreation.

This research - which integrates part of the dissertation "Open spaces of Panambi/RS: from analysis and perception to landscape management", of the Postgraduate Program in Geography of UFSM, at master's level - aimed to analyze the Municipal Park, considering its physical-environmental aspects (natural resources, physical structures, urban furniture and infrastructure), characteristics, functionalities, and ways of using it, as well as to evaluate it through preference of the landscape, through the perception and opinion of the population, and to contribute with guidelines/recommendations that subsidize the management and territorial planning of future interventions and maintenance.

2 LANDSCAPE PREFERENCES

The perception of the landscape places under the same label the different perspectives of the study environment-behavior, mainly in the areas of geography and architecture. In this regard, studies of the relationship between the human being and the environment, through mental processes, are called environmental cognition, in which perception is one of these stages (PEREIRA, 2012), and will result from the association of the physical environment with the perceived environment (according to individual experiences).

Thus perception comes from this sensory contact, with direct action and an immediate response to preference, and there is an assessment of the perceived space and its qualities (KAPLAN, 1985), which can be externalized/transmitted positively or negatively. Therefore, perception is subjective, because it is conditioned to particular factors of each individual, educational and cultural factors, and emotional, affective and sensitive

factors, derived from the observer's relationship with the environment (BIONDI; KOZERA; VIEIRA, 2007, p. 422).

In this subjectivist concept, the importance for the environmental planning is emphasized when considering the perception as an important element of social representation of the population about its surroundings. Thus, it is possible to understand how society conceives, perceives and transforms nature, through its activities, uses, meanings and identity. According to Veras (1995) apud Rodriguez and Silva (2013), this mental image is reflected in the use and management of its space, landscape and territory.

For Bernáldez (1985) the study of perception is of great importance, since it allows us to understand cultural phenomena, to interpret symbolism in the urban environment, but also to recognize the natural resources and the heritage they can represent. In addition, such research is necessary to update the uses that are assigned to a landscape, its resources, and above all, to provide their balanced development.

In an empirical and sensorial perspective of valuing the experience of the individuals in relation to a landscape, that seeks to understand their perception, the study of the landscape preference is emphasized here. It is generally a comparative exercise that takes into account human sensitivity and perception, of aesthetic and psychological order, to understand the preferences and relations between one or several landscapes and the human being (BOLÓS, 1992).

The term preference is used in the study of landscapes, which shows the taste, pleasantness and appreciation of landscape by people (KARJALAINEN, 2006 apud ANDRÉ; SCHARZ; SEVEGNANI, 2008). For Tuan (1975), in addition to reflecting the preferences of their observers, the landscapes evoke their feelings, such as welcome, tranquility, insecurity or fear.

Kaplan (1985) points out that in these types of research, there are implications of the results in landscape architecture, such as the arrangement of constructed or natural elements in the space, which is a core factor of human preference, and which

may result in landscape alterations. However, care should be taken to ensure that this set of knowledge obtained can assist in decision-making, management and planning. For this, it is necessary to consider responses of the public participation with the particularly highlighted and important characteristics and opinions of the landscape, asking what their uses and positive and negative aspects are (KAPLAN, 1985).

The analysis of preferences of a landscape can provide parameters for the management of a territory, define priorities for action or conservation, and also subsidize interpretation and awareness strategies about it. Therefore, according to Pereira (2012), the landscape preference is constituted by interpretive and evaluative affective evaluation processes, which are very important for environmental assessment.

Apart from that, in environmental perception studies, aesthetic judgements, through simulation of landscape images, can provide an adequate measure of landscape quality. In this respect, statistic techniques can be used to mathematically determine existing relationships between landscape components and the scenic preferences of observers (PEREIRA, 2012, p.60).

There is a close relationship between the design of the built and unmanufactured urban space, the perception of the landscape and the environmental quality, the formation of an image of the city, landscape composition, symbolic identification, and appropriation of spaces with its definition (SANTIAGO, 2009). Therefore, open spaces as urban life integration elements need to be valued and qualified.

The stage of this research on perception will be based on an evaluation through the general public associated with photographs, added to the questions of use, qualities and opinions regarding open spaces. It will seek information on the relationship between the landscape and the human being, the current conditions of open space and future expectations.

3 THE MUNICIPALITY OF PANAMBI/RS

The municipality of Panambi is located in the northwest mesoregion of Rio Grande do Sul (Figure 1), at the geographic coordinates 28°17'33" south latitude and 53°30'06" west longitude, at the junction between two of the state's main highways: BR-285 and BR-158. Its formation took place from the end of century XIX and the beginning of century XX through the migratory flows, mainly with the German origin colonization.

With an official installation decreed in 1955, it has 38,058 inhabitants (according to the IBGE Demographic Census, 2010), with 90.81% of its population concentrated in the urban area. The municipality develops in the educational area and expressively in the industrial area, being one of the main metal-mechanic poles of Rio Grande do Sul.

Regarding its urban layout, it developed according to the topography of the city, characterized by hills and valleys, in a

138

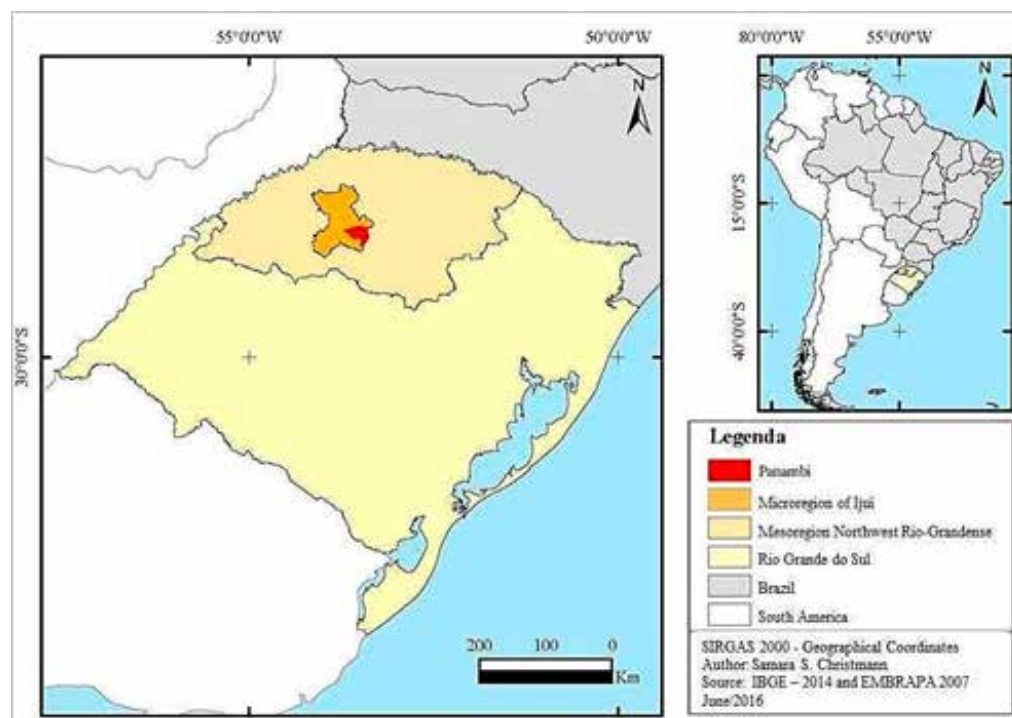


Figure 1. Municipality of Panambi /RS.
Source: Author on the ArcGIS platform, 2016.

linearity in the north-south direction, with vast visualization of vegetation (a striking and representative feature in Panambi, both in public and private spaces). Through the city there are several streams and River Fiúza that also permeates the urban park, therefore, its territory has an area of native forest - an APP (Permanent Preservation Area).

The city has only one urban park, the Municipal Park Rudolfo Arno Goldhardt - object of this research -, that is located in the downtown district of Panambi/RS, along with four other open spaces of leisure and recreation, which are composed of squares, as it can be seen in Figure 2.

About Panambi downtown, it is worth noting that this is the fourth most populated neighborhood (of the twenty-seven existing districts - law of delimitation created in 1986) of Panambi (IBGE, 2010), with 2847 inhabitants, which represents 8,24% of the population in the urban area. Core of central expansion, intensification of population and activities, it is emphasized that this neighborhood has a commercial, service and residential character. It is a tourist area with emphasis on the Municipal Park Rudolfo Arno Goldhardt (including the Museum), River Fiúza, the Plaza Eng^o Walter Faulhaber, some religious temples (Catholic, Baptist and Lutheran denomination), two cultural

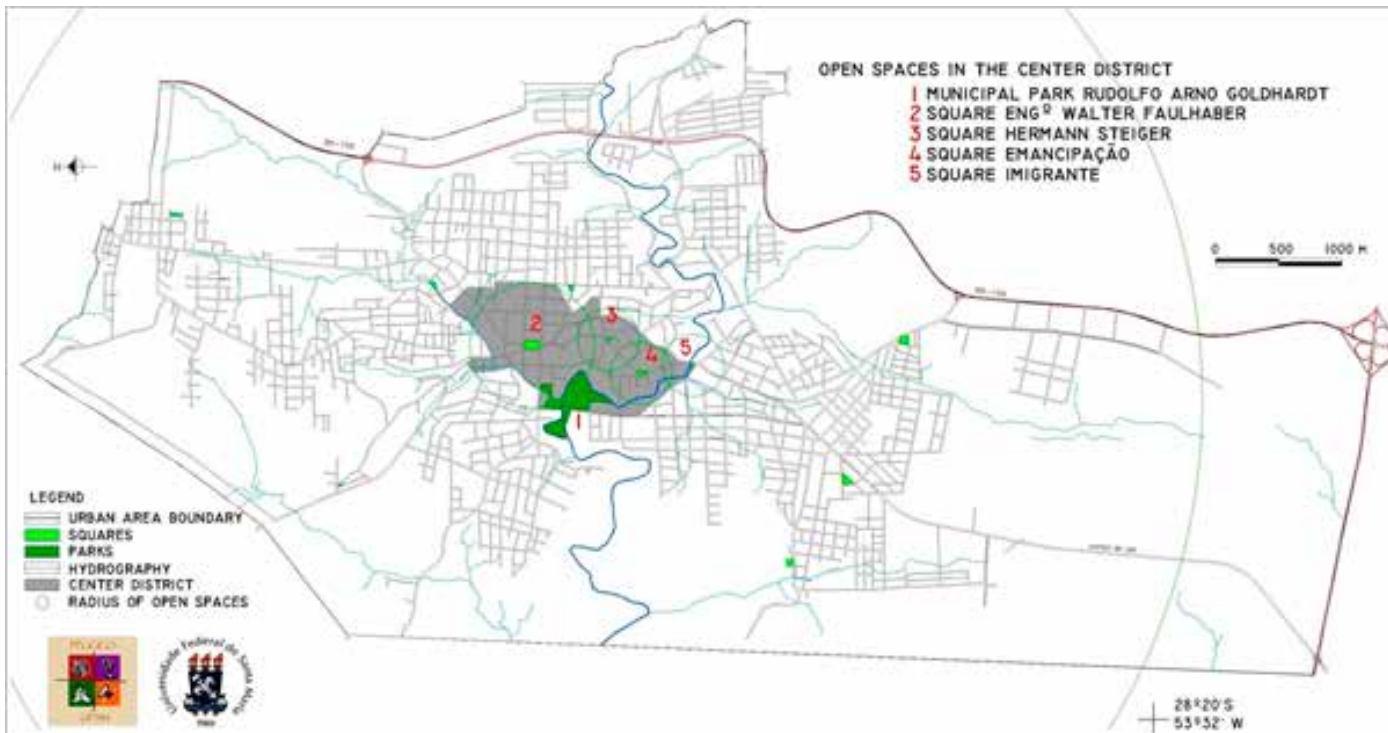


Figure 2. Location of leisure and recreation spaces in Panambi downtown.
Source: Adapted from the Urban Map of the Master Plan of Panambi - RS (2008).

assets registered by the municipality: Building Rudi Arnoldo Franke, the “Castelinho”, and the Monument to the Immigrant at the Plaza of the Immigrant.

4 METHODOLOGY

This paper was based on three stages. The stage of open space analysis sought to register the types of connectivity and accessibility, physical and environmental conditions, infrastructure, environmental and built resources, relation with the immediate surroundings, landscape composition, functionalities, types of use and activities in the Municipal Park. For this, historical researches and a field research were carried out at the Panambi Museum (MAHP), characterizing the open space, based on the observation of the researcher (through qualitative steps/topics developed by Pippi et al., 2011).

Then, the article was submitted to the landscape preference, which links the empirical and sensorial aspects, the scientific, and quantitative-qualitative (subjective assignments of sense to the landscapes and measurement of phenomena, with the collection of numerical data and statistical tests).

The study of the landscape preference of Panambi Municipal Park was based on data collection in the field and with the use of photographs, in which a valuation is determined by observers through visualization of landscape substitutes (images that simulate the real environment), such as the photographs (MARENZI, 1996; PEREIRA, 2012). This way, the most different representatives of society in general were admitted to carry out their assessment.

With this in mind, numerous diurnal photographs were taken in the most diverse possibilities and perspectives for each category of landscape. It should be noted that they were obtained at the same times and with similar weather conditions (clear sky) for the Park, on 03/11 and 07/11/2017, between 9:00 a.m. and noon.

Therefore, due to the diversity of activities in the Park, 241 photographs were taken, of which fourteen photographs were

selected, which were subdivided into ten categories (activities/sectors/uses of the park): access; main buildings (2 subcategories: gymnasium and hall of events); sports areas (4 subcategories: central area for sports and recreation, sports field, exercise area, sports fields, and skate park); amphitheater; playground; outdoor gym; House of the Ethnicities; tracks; gourmet space; River Fiúza (that interconnects the areas of the park).

A 14-megapixel Kodak camera was used in the photographic records, and their printing, to be handled with the interviewees, was photo paper quality, size 10x15 centimeters.

In order for the observers to assign their perceptive valuation of preference, a classification was elaborated (Figure 3) to order the landscape photographs, in which each respondent assigned a value from one to five for the images (Classes 1 to 5).

Class 5	Very High Preference
Class 4	High Preference
Class 3	Medium Preference
Class 2	Low Preference
Class 1	Very Low Preference

Figure 3. Landscape Preference Classes.
Source: Author, based on Kaplan (1985), Marenzi (1996) and Pereira (2012).

Associated with the perceptive study of landscape preference, there was a continuation of the questionnaire (APPENDIX A), which requested information on the profile of the user interviewed, and other questions to apprehend the particular opinion about the landscape in question.

This questionnaire was organized based on papers done with quantitative and qualitative methodologies of interaction with the users, of analysis of open public intraurban spaces, by the Quapá-SEL Research Group of the Santa Maria Nucleus, laboratory PARQ - Landscaping and Architecture of Architecture and Urbanism course at UFSM (PIPI et al, 2015).

According to Pippi et al. (2015), the objective of the application of such research of interaction with users of a qualitative-quantitative approach, with open and closed questions, conceives the recording of the information of who the interviewees are; if they use the environments of open spaces and how their relation with their landscapes is; what the activities developed are; and how physical-environmental characteristics affect the use and appropriation of the space. Therefore, the application of this tool followed the annotation of social variables (user profile, frequency of use, type of use/activity, relation with the space).

The qualitative stage of the instrument consisted of open questions that contributed to the understanding of motivations, emotions, perceptions, positive aspects, negative aspects, activities/patterns of use and preferred environments (PIPPI et al., 2015, p. 152) and suggestions for the landscape. There, the questions were approached with the purpose of ascertaining satisfaction, desires, bonds and identity with the open space. And the quantitative part consisted of closed questions with questions of multiple choice and simplified language, which collected information such as the type of activities and use, intensity and frequency of use in the landscape, as well as information on the profile of the interviewees.

It was adopted that for each category of the open space photographs chosen, there would be ten sample questionnaires, which resulted in 100 questionnaires, applied from the beginning of November 2017 until the middle of December 2017. Therefore, the collection of data was practically applied to citizens who were in other places (other than the landscape under study), such as institutions, shops, residences and services of the surroundings, but used the landscape at least once a year.

With these data collected, the research proceeded with its analysis: reading the questionnaires; organization, categorization and tabulation of data; and writing of the obtained data. Through an average of each photograph, and all other social or landscape issues, a data matrix was elaborated in an Excel

spreadsheet, which enabled the elaboration of graphs, statistical tables and their description, for the establishment of the results and discussions.

The purpose of this data analysis was to know the preference for the environments/places in the open space landscape (which environments are more or less preferred/pleasant/usual), what the most performed or preferable activities in the open space are, and what are the considerations/adaptations or necessary improvements/opinions about the landscape categories of the open space, or the landscape itself.

This way, the last stage of the paper consisted on contributing with measures that subsidized the management and territorial planning of future interventions and maintenance of the park. Their conflicts and weaknesses, and the potential for investment were considered through recommendations for the landscape, based on the analysis of the open space, and the data collection with the interviewees.

5 THE MUNICIPAL PARK RUDOLFO ARNO GOLDHARDT

5.1 CHARACTERISTICS AND ANALYSIS OF THE MUNICIPAL PARK

The Municipal Park Rudolf Arno Goldhardt is an urban park known as “gymnasium”, which covers a large part of the central area of the municipality, not only the Center district, but also a portion of the Park “Moinho Velho” neighborhood (Area 2 and Area 3 of Figure 4). Its territory is structured by several areas that are cut and bordered by River Fiúza or its tributary, Stream Moinho, and contemplates a harmonious relationship with the biophysical system, intense native and exotic tree vegetation (and others such as palms, shrubs, herbaceous and coverings) with good conservation status and also modified, as shown in Figure 5. It has an area of approximately 9ha, where its extensions have been acquired, added and considered as of public utility over the years.



Figure 4. Municipal Park - areas and identification.
Source: Adaptation by the author of the photo provided by MAHP - Panambi.

A landscape of great environmental relevance, green infrastructure, aesthetics, conservation of natural resources, leisure/recreation/sports, culture, circulation and with great potential for education (which is already disseminated by schools), is used by all age groups, domestic animals and also for several attractions and local/regional gatherings.

The main access is located in Area 1 through Konrad Adenauer Avenue, in an entrance of German architectural style, built in 2004. There is another access on the same avenue - for the sand courts and the gym - and one on Andrade Neves Street - through the Producer's Fair, and other linking trails between vegetated areas. Both pathways are arterial with intense flow and asphalted. In Areas 1 and 2 the Park has operating areas



Figure 5. Photographs of the Municipal Park. Captions according to Figure 4.
Source: Author's collection, February and March, 2017.

from 6:00 a.m. to 10:00 p.m. Areas 4 and 5 remain open and area 3 does not currently allow access (bridge constantly destroyed by the dynamics of River Fiúza).

The Area 5, known by the Producer's Fair land (an architectural complex inspired in Germanic characteristics that holds, from Tuesday to Saturday, the agricultural fair by local vendors), is used as a place of transition for the other areas of the Park, which creates an important link between areas of preservation with sports and leisure activities. In addition, this area has a skate park, which was inaugurated in 2013.

In August 1974, Municipal Law No. 373/74 authorized the Municipal Executive to purchase the initial area and form the

budget for the construction of the Municipal Gymnasium of Sports (Sports Pavilion). Its conclusion occurred in the year 1981, and there they hold municipal sports competitions and weekly games. Thus, the Park was named Rudolfo Arno Goldhardt by Law no. 1,434 only in the year 1995, and is maintained by the City Hall.

Regarding the island surrounded by River Fiúza (Area 3), it did not have this island character until the year 1986, when its dynamics was changed and the channel between Area 2 and 3 was opened for a better flow of the river. Area 2 is intended only for trails, conservation and contemplation of the landscape.

According to Macedo (2002), in Brazil, since the 1970s, the use of remnants of native forests for the implementation of urban parks has become common. Therefore, the scenic and environmental value is perceived as the object of preservation and conservation projects for the use of recreational activities. This objective was in planning with the purchases of the land for the implementation of the Park.

Among the areas that are cut by River Fiúza, there are two accesses on footbridges over the river, built between 2001 and 2004. One of them, catwalk 2 (according to Figure 4) has often been rebuilt, due to the intensity, strength and dynamics of the river, especially in times of flood, which makes the park a region that is flooded and vulnerable. In these moments, too, much of the park, near the banks of the river, are flooded and become muddy, reason that attracts or repels its users.

The urban furniture are benches, payphones, a few informative signs, water fountains, toys, trash cans, sculptures, signs, fences and closings in parts of the territorial limits, and tables in a regular state of conservation. The pavement is predominantly concrete and concrete cobblestone, besides natural trails on the ground.

In the Municipal Park, there is a trail with an extension of more than 1,000 meters, which in its initial stretch (approx. 600 meters) was delimited with gravel until 1992 and concreted in the year

1997, a period when the luminaires were also installed along the way. Nowadays, this trail attracts a great number of people to carry out their walks and jogging through the vegetation and bordering River Fiúza.

Between the years of 1994 and 1995 the Farroupilha Hall was constructed and became a seat for diverse events. At the end of 2017, it was closed due to the conditions of the roof and is in the process of being reconstructed. To the bottom of this building, there is the bathroom area and also covered grills, which are in the most precarious conditions of maintenance.

In 1995 the Museum and Historical Archive Professor Hermann Wegermann installs itself in an upper part of the building of the Sports Gymnasium. Without adequate accessibility for the public (because it is located on the second floor, with access by a metal staircase), the MAHP came about through the initiative of a group of teachers from school Colégio Evangélico Panambi (CEP) in 1968. It intends to keep alive in memory of Panambi its economic, cultural, religious, social and political context. Therefore, it is a great source of research and a place of much visitation in the Park.

Also, in the year 1995 is the inauguration of the Amphitheater Maestro Molz, which allows theatrical and musical performances outdoors, but it is rarely used. In the Hall of Events, built and expanded in parts (with completion in 1995), the most diverse attractions and municipal and local events are held, and it also hosts DESTUR, Department of Tourism. And the Department of Sports and Leisure is located at the back of the Gym.

In this regard, the municipality, which has valued music since its colony time, has also institutionalized events at the municipal level, the Festival of Sacred Music; the gaucho music festival "Moinho da Canção Gaúcha"; and the Oktoberfest Event - considered Cultural Heritage of Panambi-, which are references of events held in the park. Among other activities included in the Calendar of Events of the Municipality of Panambi, which are held in the park are: Meeting of Choirs, Ecumenical Worship,

Draft Beer Ball, Exhibition of Works of different Schools, Book Fair, Handicraft Fair, National and International Congresses, and Senior Citizens Meeting.

In the year 2002, the area where buildings with architectural characteristics of ethnic groups (Regional, Germanic, Dutch, Portuguese, Italian) would be built was purchased, which make up the so-called Condominium Park of Ethnicities and Social Entities. On this set, it is said that it is little used and its constructions were not properly completed.

About Health Gyms, it is emphasized that one is located next to the Ethnic Houses and was installed in 2008, and the other set is near the sand courts and was built in 2011, and the use is intense by the public.

The urban park hosts the annual Book Fair around the months of August/September. With this characteristics, in 2014 the well-known Industry of Knowledge was inaugurated, construction with architectural characteristics inspired by books and knowledge acquisition, which was implemented through a partnership between the City Hall (by SMEC – Municipal Department of Education and Culture) and SESI. The place attracts and seeks to instigate mainly children and adolescents for reading and knowledge acquisition.

In addition, there are other active leisure, recreation and sport activities, such as playground, athletic field, athletics track, and passive activities in various areas with tables, grills and spaces for socializing, family lunches and meetings of the population.

With all this, we can see that this park has several anthropic alterations, which were carried out in order to provide citizens with an area of leisure, culture, sports, recreation, contemplation of River Fiúza and the surrounding biophysical system, preserving its banks and natural landscape. It is for all of these characteristics that it can be affirmed that the Municipal Park is an open space of great attractiveness for the local and regional population.

5.2 LANDSCAPE PREFERENCE OF THE PARK

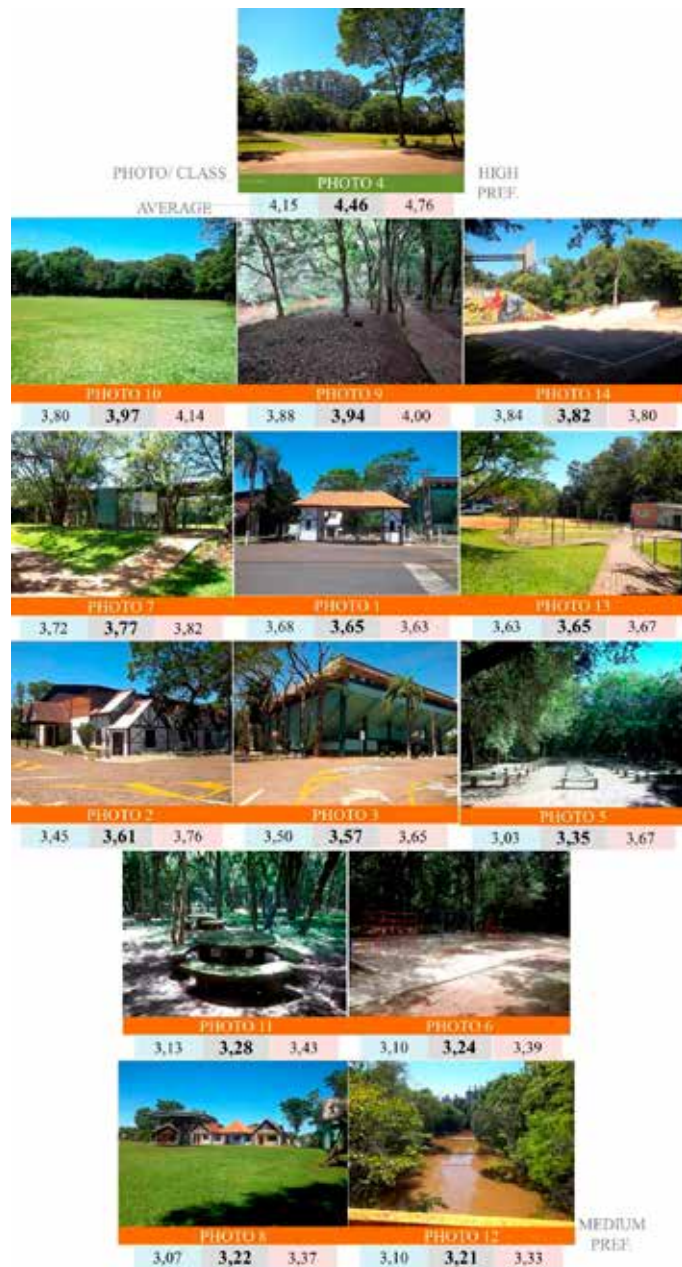
The 100 questionnaires for the Municipal Park were mostly applied in commercial, institutional and service areas. Therefore, according to Figure 6, a similar collection was obtained in the gender categories (female: 51, male: 49), among the age groups, and the average between gender and age groups. In the education category, primary education (42.16%) and full-term (19.61%) rates prevailed.

	AGE (YEARS)	QUANTITY INTERVIEWED. (N°)	AVERAGE AGE (YEARS)	SCHOLARITY				
				BASIC	COMPLETE HIGH	COLLEGE INCOMP.	COLLEGE	POSTGRAD.
MEN	10-17	15	14,26	100,00 %				
	18-44	17	33,00		29,40%	11,75 %	35,30 %	23,55 %
	+ 45	17	53,58	29,40 %	41,20 %		17,65 %	11,75 %
	MEN AVERAGE	TOTAL 49 MEN	33,61	43,14 %	23,43 %	3,93 %	17,65 %	11,75 %
WOMEN	10-17	17	15,52	100,00 %				
	18-44	17	32,76	5,89 %	23,83 %	29,40 %	23,83 %	17,65 %
	+ 45	17	52,65	17,65 %	23,83 %	5,89 %	29,40 %	23,55 %
	WOMEN AVERAGE	TOTAL 51 WOMEN	32,74	41,18 %	15,69 %	11,76 %	17,64 %	13,73 %
TOTAL AVERAGE	TOTAL 100	33,17	42,16 %	19,61 %	7,35 %	17,65 %	12,41 %	

Figure 6. Profile of the Park's respondents.
Source: Author, 2018.

In the park landscape preference valuation, a ranking was established (Figure 7) with the total overall average of valuation that the fourteen photographs obtained. Below each photo is the average of the general valuation, and the averages differed between the genres (on each side of the general average, distinct by colors).

Therefore, among the photos of the ranking, the first one reveals the central area of sports and recreation, a place that brings together the largest number of users in the whole park, which is widely used by families, as well as having a pleasant aesthetic look. Next, the four average-preference photos are from sports and exercise areas: the sports lawn, the trail, the skate park, and the outdoor gym. The second set of average preference contains photographs with a wider range of



buildings, such as the entrance gate, an exercise room and sports fields, the Hall of Events and the Gymnasium. Then, the third set demonstrates photographs with more closed and shaded areas: the amphitheater, the gourmet space and the playground.

Finally, among the last photos valued, there are the lawn with the House of the Ethnicities (in which respondents rarely use, repair or see a sense of existence) and River Fiúza, which cuts across the various areas of the Municipal Park (and was reminded bad aesthetics caused by garbage on the banks, and the catwalks, which are then interrupted). It is also noted that the agreement between the genders was greater in pictures 14, 1 and 3, which represents the skate park, the main access and one of the exercise and sports areas.

With all of these, a map (Figure 8) was elaborated out of the most preferred areas of the citizens by the categories/subcategories of the landscape from the assigned Preferred Classes, representing the views or areas valued by the users.

Following the analysis of the data, a summary is presented in Figure 9 with the other main information collected from the questionnaire applied in the park - including the main recommendations, which are described below. The complete data set can be viewed in APPENDIX B (it's written in Portuguese).

Figure 7. Ranking of Landscape Preference.
Source: Author, 2018.



Figure 8. Preference Class according to the photographs.
Source: Author, 2018.

From the data collected in the Municipal Park, it is perceived that due to the well-being and tranquility and diverse possibilities of activities that this territory offers, it attracts the mass public, mainly among family and friends, on weekends, and for a long period of time, to enjoy the landscape, to have greater contact with nature and social interaction, for leisure and recreation, to practice exercises and sports, and also to participate in events.

Open Space	Municipal Park: Rudolfo Arno Goldhardt
Main features	Urban park of approx. 10 ha., structured by several areas that are bordered by the river Fiúza or affluent
Quantity. questionnaires applied	100
Higher frequency of use	1-3x per week / 1-3x per month; weekends; with family and friends; from 5 pm to 8 pm; 1-2h stay
More performed activities	Appreciation, contact with nature, observations (landscape, fauna, people), social interaction, events, exercises, and meals
Landscape Preference Index (photos)	3,63 (men average: 3,50) (women average 3,74)
3 most preferred landscapes	Central area of sport and recreation; sports field; trail
Satisfaction with quality and public management	Medium-high
7 main keywords	Nature; welcoming; beautiful; Exercises; fun; tranquility; recreation
Main positive aspects	Nature; activ/exercicios; trail; courts / sports; socializing
Main negative aspects	Toilets; vandalism; dirt; infrastructure; urban furniture
Main feelings aroused	Welfare; tranquility; happiness; satisfaction
Possibilities for future activities	Gourmet space; cycling track
Main aspects to investments / weaknesses	Infrastructure; urban furniture; lack of regulation of use; maintenance /cleaning
Potentials	Sports, recreation, tourism; educational and landscape conservation
Recommendations	Cycling track; gourmet area; playground, environmental education; physical structure and furniture; maintenance / cleaning

Figure 9. Synthesis of Park information.
Source: Author, 2018.

The keywords defined by respondents only confirmed these uses and park preferences. Landscape Preference has shown, through photographs, that respondents rated the sports environments better, followed by buildings, and other places that are undervalued in their structure and use. And from these photographs, the most representative ones of the park are also some of the exercise areas, sports and the singular and intense uses buildings, like the gym, and the Hall of Events.

Some potentialities were also highlighted, both in the matter of suggestions of activities that may be carried out in the park, and in aspects that require investments. It is worth noting the usage potential of sports, recreational, educational (Museum, River and biodiversity), and landscape conservation (natural resources).

It is possible to mention as a potential implementation, the construction of a bike rack and a cycling track, since there is no track aimed only to cycling - which generates conflicts between cyclists and pedestrians -, and there is a territorial area for its effectiveness, such as in the vicinity of the House of Ethnicities, or on the edge of the existing trail. Therefore, each activity/sport would have an exclusive track.

Also, there is potential in the leasing of a gourmet space, aimed to serve snacks and basic beverages, since there was a considerable percentage of respondents who eat meals in the park, and for the long time (between one and more than three hours) users. The House of Ethnicities could be used, where it was suggested assignment of use, and / or the area next to the skate park.

There is also a need to maintain, renovate and expand the playground options, as the playground is a fun reference for children and is limited in size. In addition, it is interesting to identify with age instruction for toys, and safety boundary barriers between them.

Adventure activities were also remembered, such as climbing (installation began in February 2018 on one of the gymnasium walls), tree climbing and zipline. The options need professional follow-up, but they have potential in terms of the slope towards the river, and the existence of tall trees and in diversity, which could be added to a knowledge about the fauna and flora.

Another relevant idea is the possibility of having some kind of identification (for instruction), on the existing trails, about the biodiversity present on the site and ways of conserving/preserving them. With this, it is considered the use of the natural examples, as a means of valuing, conserving the environment,

and instigating the playfulness of users of the open space. Other instruments for environmental education can also be evaluated regarding the river Fiúza, as it attributes scenic visual and is the source of water supply for Panambi.

In addition, it was observed that satisfaction with quality and management in this open space are good, and many positive aspects are manifested in this regard, appreciating nature conservation, and the various possible uses. However, the negative aspects and the suggestions for investment denounce the fragile points of the park.

Among these weaknesses are mainly the conditions of infrastructure (physical structure) and furniture - basic and important structures for public comfort. Furniture was reclaimed: more benches, bins and lighting scattered throughout the park; drinkers in other areas; and cleaning of tables/benches in the gourmet space (covered by mosses and vegetation). Also, actions such as cleaning, hygiene and maintenance of bathrooms, which is basic to set the time spent in the landscape, and is considerable in the satisfaction of users.

In the manifestations in relation to the other constructions, the interviewed asked the maintenance, painting and acoustic quality (in the events), of the Hall of Events and Gymnasium, and the accessibility of the Museum - that is currently through stairs and without elevator. Moreover, accessibility for people with disabilities is not guaranteed (no tactile floor, instructions, paving).

The open space is identified externally with one of the tourist signs, just near the main access. Therefore, it is suggested to deploy a visible external identification plate, and even, internal identifications (with specifications) of the available activities and environments.

As for sports activities, the conditions of the courts, goals (without nets) were recalled, as well as the need for marking the sports field and nets in the volleyball courts. In the exercise areas, it was indicated to widen the trail (approx. 1.50m wide), due to

the difficulty of flowing on days of intense use - which is shared with walking, running, pedaling, and using other toys. However, as described in the previous paragraph, with the identification of permitted uses and inspection, it can be solved.

It is also worth mentioning the construction of footbridges that are more resistant to the actions of the waters, due to the fact that they are widely used by users to transit between the various areas of the park. Another concern is a better conditioning of the entrance of vehicles and pedestrians, and regarding the few places in the parking lot of such a large park.

Such comments, indications and recommendations can add quality to the Municipal Park, if public management can mobilize, value its potential and meet the desires and dissatisfaction of so many citizens. Also, the open space may become a reference of use for the region, since there are no urban parks in the neighboring municipalities.

6 CONSIDERATIONS

In view of the research carried out, a large set of information about the characteristics and perceptions of the Rudolfo Arno Goldhardt Municipal Park was obtained, which integrates a system of open spaces in the Downtown area. Therefore, it was noticed that the Municipal Park is a landscape of great use in the municipality of Panambi/RS.

Also, identity/appropriation was felt in relation to the interviewees, during the field researches. This study had an extended time of application of the 100 questionnaires, however, there were no great difficulties in its course. It should be noted that virtually, all citizens who were approached agreed to collaborate with the study.

In addition, regarding the study of empirical perception, the subjectivity that influences the data collected is again highlighted. That is, the same research, at a different station, at a different time, with different people could or could not proceed

in differentiated sets of data and recommended investments.

However, it was understood through this interpretative and evaluating process of the landscape, how society has used open space and how it recognizes it. In addition, how landscape architecture can be altered and qualified through the data collected, through recommendations of the population interviewed.

With this in mind, it is believed that the Landscape Preference research method with the questionnaires was of great value when adding the valuation of local photographs by preference classes to the research of Pippi et al (2015). Because, by favoring visual sensory experience in the handling of photographs, results can be achieved very close to reality (BERNALDEZ, 1985). It also contributes by introducing the level of users' satisfaction with the quality and management of the landscape, and the investments that citizens consider relevant to the landscape.

In view of this, it is believed that the research / diagnosis of the park sought to recognize the existing resources and uses that are attributed to the landscape, and formed a more urgent and relevant composition of recommendations, with the purpose of contributing to landscape management, in the areas of valorizing local potential, investing in fragilities, enabling better ownership and identity, and promoting environmental conservation, and directing them largely to the needs of users.

Therefore, it is hoped that the recommendations and suggestions can be evaluated by public management, and it is hoped that the park and other open spaces will fulfill their function in the city and maintain balance in the urban environment, with comfort and life quality to the citizens. In this respect, it is considered that this methodological procedure can be replicated in other open spaces, respecting and adding other issues inherent to each area, as well.

BIBLIOGRAPHICAL REFERENCES

ANDRÉ, Pierre; SCHWARZ, Maria L.; SEVEGNANI, Lucia. Preferências e valores para com as paisagens da Mata Atlântica: uma comparação segundo idade e o gênero. *Revista Caminhos da Geografia*, Uberlândia, v.9, n. 16, p. 114-132, jun. 2008. Available in: < <http://www.seer.ufu.br/index.php/caminhosdegeografia/article/viewFile/15797/8930> >. Access in: 20 jan. 2017.

BERNÁLDEZ, Fernando G. *Invitación a la ecología humana: la adaptación afectiva al entorno*. Madrid: Tecnos, 1985.

BIONDI, Daniela; KOZERA, Carina; VIEIRA, Carolina H. S. D. Preferência visual de paisagens do Parque Municipal do Passaúna, Curitiba, PR. *Revista Paisagem Ambiente*, n.24, p. 421-430, 2007. Available in: < <http://www.revistas.usp.br/paam/article/view/86816/89815> >. Access in: 20 jan. 2017.

BOLÓS, Maria. *Manual de ciencia del paisaje: Teoría, métodos y aplicaciones*. Barcelona: Masson S. A., 1992.

KAPLAN, Rachel. The analysis of perception via preference: a strategy for studying how the environment is experienced. *Landscape Planning*, Amsterdam, v. 12, p. 161-176, 1985. Available in: < <https://deepblue.lib.umich.edu/bitstream/handle/2027.42/25604/0000151.pdf?1> >. Access in: 01 jul. 2017.

MACEDO, Sílvio S. Espaços livres. *Revista Paisagem e Ambiente*, São Paulo, n. 7, p. 15-56, jun. 1995.

MACEDO, Sílvio S.; ROBBIA, Fábio. *Praças Brasileiras*. São Paulo: Edusp, 2002.

MACEDO, Sílvio S.; SAKATA, Francine G. *Parques Urbanos no Brasil*. 3. ed. São Paulo: Edusp, 2010.

MACEDO, Sílvio S. et al. Considerações preliminares sobre o sistema de espaços livres e a constituição da esfera pública no Brasil. In: ANDRADE, Rubens de; SCHLEE, Mônica B.; TÂNGARI, Vera R. (org.). *Sistema de espaços livres: o cotidiano, apropriação e ausências*. Rio de Janeiro: Universidade Federal do Rio de Janeiro, Faculdade de Arquitetura e Urbanismo, Pós-Graduação em Arquitetura, 2009. p. 60-83.

MAGNOLI, Miranda M. E. M. *Espaços livres e urbanização: Uma introdução a aspectos da paisagem metropolitana*. 1982. Thesis – Faculdade de Arquitetura e Urbanismo, Universidade de São Paulo, São Paulo, 1982.

MASCARÓ, Juan L. (org.) *Infra-estrutura da paisagem*. Porto Alegre: Masquatro Editora, 2008.

PEREIRA, Frank G. *O pampa como bioma e paisagem cultural: um estudo de percepção ambiental e preferência paisagística*. 2012. Dissertation (Geography) – Universidade Federal do Rio Grande, Rio Grande, 2012.

Plano Diretor Participativo de Desenvolvimento Municipal de Panambi – RS. 2008.

MARENZI, Rosemeri C. *Estudo da valoração da paisagem e preferências paisagísticas no município de Penha – SC*. Dissertation (Forest Sciences), Universidade Federal do Paraná, Curitiba, 1996.

Museu e Arquivo Histórico Professor Hermann Wegermann – MAHP. *Panambi: De Colônia a Município*. 2 ed. Panambi: Bühring Ltda., 2014.

PIPPI, Luis G. A. et al. A dinâmica dos espaços livres intra-urbanos da cidade de Santa Maria-RS. *Revista Paisagem e Ambiente*, São Paulo, n. 29, p. 189-226, 2011. Available in: < <http://www.revistas.usp.br/paam/article/view/85315> >. Access in: 27 sept. 2016.

PIPPI, Luis G. A. et al. Utilização de multimétodos de caracterização e análise da paisagem e dos espaços livres intraurbanos de Santa Maria - RS. *Revista Paisagem e Ambiente*, São Paulo, n. 36, p. 139-175, 2015. Available in: < <http://www.revistas.usp.br/paam/article/view/103858> >. Access in: 27 sept. 2016.

RODRIGUEZ, José M. M.; SILVA, Edson V. A. *Planejamento e Gestão Ambiental: subsídios da geocologia das paisagens e da teoria geossistêmica*. Fortaleza: Edições UFC, 2013.

SANTIAGO, Alina G. As formas de uso no sistema de espaços livres: evento e cotidiano no espaço central de Florianópolis. In: ANDRADE, Rubens de; SCHLEE, Mônica B.; TÂNGARI, Vera R. (org.). *Sistema de espaços livres: o cotidiano, apropriação e ausências*. Rio de Janeiro: Universidade Federal do Rio de Janeiro, Faculdade de Arquitetura e Urbanismo, Pós-Graduação em Arquitetura, 2009. p. 228-239.

TUAN, Y. F. *Topofilia: Um estudo da percepção, atitudes e valores do meio ambiente*. São Paulo: Difel, 1980.

Samara Simon Christmann

Federal University of Santa Maria, Postgraduate Program in Geography. Architect and Urbanist. Master in Geography. Luiz Felipe Schmidt Street, 123. CEP: 98280-000, Panambi, RS, Brazil. CV: <http://lattes.cnpq.br/1715281920824293> Email: samara.s.c@hotmail.com

Eliane Maria Foletto

Federal University of Santa Maria, Postgraduate Program in Geography. Doctor. Professor in Geography at UFSM. Campus of the Federal University of Santa Maria, Building 17/room 1132. CEP: 97105-900, Santa Maria, RS, Brazil. CV: <http://lattes.cnpq.br/8174927772410793> Orcid: <http://orcid.org/0000-0003-22-5-7801> Email: efoletto@gmail.com

ACKNOWLEDGMENTS

The author thanks the “Coordenação de Aperfeiçoamento de Pessoal de Nível Superior” (CAPES) for the financial support.

Editor's Note

English revision: Hugo Karrer

Submission : 03/04/2018

Acceptance : 26/01/2019