Scientific Journal of Applied Social and Clinical Science

TRANSFORMATIONS
OF THE PUBLIC SPACE,
TOWARDS THE CITY
FOR THE PEDESTRIAN.
CASE ``PASEO
BANDERA SANTIAGO``
OF CHILE

Hernán Alejandro Elgueta Strange

``Universidad de Chile``, Faculty of Architecture and Urbanism, Department of Architecture Santiago de Chile

ORCID: 0000-0002-4119-7423



All content in this magazine is licensed under a Creative Commons Attribution License. Attribution-Non-Commercial-Non-Derivatives 4.0 International (CC BY-NC-ND 4.0).

Abstract: The revitalization of public spaces in urban centers is possible to develop through alternative urbanism which seeks to improve depressed spaces that affect the environment and the City. Through an architectural intervention, the Paseo Bandera temporarily managed to revalue the public space through its pedestrianization and design. Such was the contribution of Urban Quality that it became a permanent intervention based on the appropriation of citizens.

Keywords: ''Paseo Bandera'', Pedestrian promenade, alternative urbanism.

INTRODUCTION

- 1. The centers of the cities are points where diverse activities are concentrated and come together, sometimes the powers of the state, public administration buildings, financial centers, private companies, etc., are also usually a pole of tourist attraction, for Therefore, they tend to concentrate different uses. This causes a large part of public transport to converge from various areas of the city, housing people on a daily basis, either permanently or as a floating population.
- 2. The public space in these areas is complex since it must allow the interaction of various flows of both vehicles and people, an interaction sometimes excessive that produces crowds and multiple congestions. Situation that is attractive for the development of both formal and informal trade.
- 3. In recent times, urban centers have begun a revitalization through changes in their structures where the reorganization of flows and transformations of public space have been a concrete action to value their buildings and give way to new understandings in the use of the spaces.
- 4. One of the most used strategies has been that, from a regulatory modification process, to transform the public space where the roads were initially projected for a vehicular and

pedestrian flow, its use is modified towards an exclusively pedestrian road, which leads to to a change in the interaction of their living, allowing to value the heritage and, above all, order the exchange between the different inhabitants. Gehl (2014) affirms that the greatest attraction of a city is the people and states that most people would choose the street where there is more activity, since the walk would be more interesting and also provides a greater sense of security since people seek the presence of others.

- 5. The public space is a regulated space since from the planning the different uses that it can support are established, but it also seeks to determine the configuration of the space as part of the urban Picture that is sought to be established.
- 6. The quality of the public space defines how the spaces work, where factors such as the human scale, among others, must be considered in the design of a pedestrian public space. (Gehl j., Gemzoe l., Kirknaes s., Sternhagen b., 2006) establishes 12 criteria that allow evaluating the quality of pedestrian public space in cities, these serve to ensure that places are comfortable and attractive for more people carry out activities in them. (Table 1).

But this space, especially in urban centers, also houses uses that are not considered, such as informal commerce, which is installed in public spaces where large pedestrian flows occur, causing a reduction in its dimensions. There are also new situations, such as the remote office or Delivery, which has provided new ways of inhabiting the city, especially with the COVID -19 pandemic, but these are installed and appropriated as an activity in the public space.

Studying the complexity of pedestrian pathways in the public space and how they must consider all those involved, especially in urban centers, allows us to analyze designs and opportunities to value our cities and their heritage.

PEDESTRIAN WALKS IN SANTIAGO DE CHILE

Santiago de Chile in its urban center for more than 40 years, since they began to implement strategies for the conversion and transformation of mixed mobility roads, that is, roads that interact with public transport, private transport and pedestrians, to a mobility exclusively pedestrian.

PASEO HUÉRFANOS

The ``Paseo Huérfanos`` together with ``Paseo Ahumada``, they are considered the commercial axis of the center of Santiago.

On February 5, 1973, ``Paseo Huérfanos`` became a pedestrian promenade in the Mac Iver-San Antonio section, then in 1979 the section between San Antonio and Teatinos was pedestrianized. (wikipedia 2022)

PASEO AHUMADA

On February 1, 1977, the first construction works on Paseo Ahumada began, concluding on November 22 of the same year. (Wikipedia 2022)

"This is beautiful. Very nice. The atmosphere feels cool and I imagine that in summer everyone will want to be in these corners." Description of a 15-year-old girl from Paseo Ahumada to "El Mercurio" on November 24, 1977 (Chavez M., 2017).

The Paseo Ahumada as a pedestrian promenade is transformed as a result of stopping the progressive exodus of commerce from the center of Santiago to Providencia. Since its inception, it has been connected to mass public transportation systems, through an access to the Universidad de Chile station on metro line 1, inaugurated on March 31, 1977.

"PASEO ESTADO"

In 1999, as a result of improvements in the center of Santiago, both the Huérfanos promenade and the smoked promenade had their last major remodeling. The pools and planters were removed in addition to replacing their pavement. Along with this intervention, Calle Estado was incorporated as a pedestrian promenade (M. De Santiago 2016).

``PASEO BANDERA``

Paseo Bandera is the last to be incorporated into the system of pedestrian pathways in the urban center whose intervention in 2017 originated as a transitory one for the purposes of the construction of line 3 of the metro, however, as a result of great acceptance by citizenship on August 31, 2018 officially became a permanent pedestrian path. Situation that stands out for the type and level of intervention that breaks into the historic center and therefore has relevance as an object of study in a sector that has a daily flow of close to two million and continues to be a relevant and neuralgic point of the center urban of the city of Santiago.

``PASEO BANDERA``

In the historic center of the commune of Santiago de Chile, Bandera street is located, which has a privileged location given its proximity to the civic quarter, a place recognized for being one of the most important in Chile, it is a nearby road with the main roads pedestrian streets of the city such as Paseo Ahumada, Paseo Huérfanos and Paseo Estado.

In May 2013, the Ministry of Transportation and Telecommunications prohibited the circulation of motorized vehicles in some sectors of Bandera street due to the construction of Line 3 of the Santiago metro, it would then remain abandoned for about four years after being a street of transcendental use

Traffic protection.	Safety in public spaces.	Protection against unpleasant sensory experiences.	
Spaces to walk.	spaces of permanence	A place to sit.	
Possibility to Observe.	Opportunity to talk.	places to exercise	
Human scale	Possibility of taking advantage of the weather.	Good Sensory Experience	

Table 1: Gehl evaluation criteria Quality of pedestrian public space.

Source: Own elaboration based on the criteria of Gehl el al.

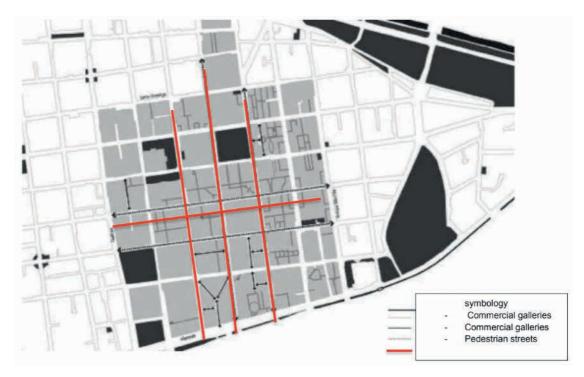


Figure 1: Pedestrian walkways in the center of Santiago Source: Own elaboration from Mora and Herrmann map



Picture 1: ``Paseo Huérfanos`` Source: self made



Picture 2: ``Paseo Ahumada`` Source: self-made

in terms of roads for the city of Santiago.

It is one of the few roads that has an underpass as a crossing of the Alameda, it also has about 30 km of extension connecting the center with communes that border the south and north of the city.

In 2017, the municipality of Santiago requested the RM transport SEREMI to temporarily allocate Bandera Street as a pedestrian walkway. Urban deterioration, security conditions among others were the arguments used. On November 10, 2017, the authorization was granted through Exempt Resolution Number: 7,397, allocating the San Diego Bandera axis, between Padre Alonso Ovalle and Compañía to pedestrian traffic. An opportunity then arises not only to use this section as a pedestrian but to carry out an intervention managed by the Municipality of Santiago to implement "El Paseo Bandera" (Carreño, F.2020)

The empowerment of the pedestrian promenade was carried out through an urban intervention allowing the exclusive circulation of the road to be allocated to pedestrians, but the proposal also had the purpose of improving the quality and safety of movements in the downtown area, therefore an experiment of Alternative urbanism.

Alternative urbanism focuses on the intervention, its duration and who is responsible (Escobar A., Cabrera J.E., Mendez L. 2021) The ''paseo bandera'' arises as a cooperation between private companies through financing from Banco Santander and Carlsberg, El design of Estudio Victoria and the municipal management of what is considered as Urban Acupuncture or Participatory Urbanism. (Escobar et al. 2021)

On December 20, 2017, the Paseo Bandera is inaugurated, whose main characteristic is the design, that is, 3,300 m2 of intervention are executed with paint at floor level, green areas, bicycle racks and areas for work meetings.

This intervention arises under the pretext of avoiding deterioration by recovering what had been used mainly as parking.

The implementation of Paseo Bandera allowed its appropriation by citizens, increasing its pedestrian flow by 325%, more than 88,000 people daily. The trade in the sector managed to recover sales by 40%, and increase its transactions by 20%. (Ministry of Transport, 2018), the levels of insecurity, etc., were reduced, without a doubt an improvement of the Public Space and of the City.

After the appreciation of those who have found a new place of recreation on Paseo Bandera, the Municipality of Santiago asked the Ministry of Transportation to permanently maintain the intervention and increase the pedestrian promenade to nearly 10,000 m2.

On August 31, 2018, the Ministry of Transportation and Telecommunications through Exempt Resolution Number: 5,506 specified the authorization of the Bandera pedestrian walkway permanently along with increasing its surface area. The decision responds to a new way of building a city where the beneficiaries are pedestrians.

On December 20, 2018, the second section of Paseo Bandera is inaugurated with the largest floor mural in Latin America of more than 10 thousand square meters. (Municipality of Santiago, 2018), but it has been transformed into an urban laboratory testing new technologies, parking sensors and air quality measurement systems, interactive smart lighting totems.

At the end of 2019 in the City there were a series of incidents as a result of the claim of citizenship, a situation that directly affected public spaces, especially those in the urban center, however this intervention had a minor deterioration impact as a consequence of these demonstrations (Pallarés, Pallares, & Lou, 2020) which is presumably the level of roots



Picture 3: ``Paseo bandera``
Source: self-made



Picture 4: ``Paseo bandera`` Source: self-made

and identity that Paso Bandera had reached in the short term.

ANALYSIS OF ``PASEO BANDERA``

The results of the Paseo Bandera have been obtained to date from surveys and surveys carried out by the Municipality of Santiago (2018), therefore it is relevant to verify the benefits obtained from the approaches of Gehl (2006) that allow evaluating the quality pedestrian public space in cities.

In order to objectively analyze the approaches or principles, a basic evaluation scale will be used through an initial assessment to determine the degree of quality of these spaces. According to Gehl's approaches, a quality pedestrian public space must contain the 12 aspects to be evaluated (Martinez, 2013). Considering the following evaluation criteria (Table 2), the evaluation could obtain a minimum of 0 points and a maximum of 24 points.

Then, with the score obtained, it is divided by the maximum score in order to determine a percentage factor as a result, which values the level of quality of that public pedestrian space.

EVALUATION OF PRINCIPLES TRAFFIC PROTECTION

The Paseo Bandera permanently eliminated vehicular traffic between the streets Padre Alonso de Ovalle and Calle ``Compañía de Jesús``, allowing free pedestrian walks on this section of the road, which ensures the protection of pedestrians against traffic. (Meets 2 points)

SECURITY IN PUBLIC SPACES

In the sector, various activities are carried out during the day, both commercial and financial. There are also some restaurants and offices in general, however, at night the conditions are not the safest since, despite having smart lighting throughout the promenade, it does not have a permanent nighttime activity offer, therefore, the conditions are considered to be there, but not yet complete security. (Meets relatively 1 point)

PROTECTION AGAINST UNPLEASANT SENSORY EXPERIENCES

The intervention of the Paseo Bandera is in the open air between the existing highrise building, which allows places with sun and shade during the day, on the other hand, it has vegetation that helps environmental conditions, there are no protection elements (shades or other elements) for a comfortable sensory experience. (Meets relatively 1 point)

SPACES FOR WALKING

This Public Space has a diversity of situations or activities on its route, but always leaving attractive places to walk, in addition to being part of the historic center, it has interesting facades of some buildings and regular surfaces that guarantee universal access. (Meets 2 points)

SPACES OF PERMANENCE

The design contemplates spaces that develop different types of permanence, both group and individual, allowing various types of interaction and appreciation of the environment. (Meets 2 points)

A PLACE TO SIT

It has traditional urban furniture and furniture designed for the walk, from an ephemeral architecture that creates spaces for standing both standing with back, sitting with support and without support, with straight and curved surfaces. Therefore, the place

Score	Evaluation criteria	
0 points	It fails	
1 points	It complies relatively	
2 points	It complies	

 Table 2: Evaluation scale according to quality appreciation of pedestrian public space.

Source: self made

Criterion	It fails	It Complies relatively	It Complies
Traffic protection			2
Safety in public spaces		1	
Protection against unpleasant sensory experiences		1	
Spaces to walk			2
Spaces of permanence			2
A place to sit			2
Possibility to Observe			2
Opportunity to chat			2
Places to exercise.	0		
Human scale			2
Possibility to take advantage of the weather		1	
Good Sensory Experience			2
Sub total		3	16
Total	19		

Table 3: summary evaluation according to quality appreciation of pedestrian public space.

Source: self made

offers various spaces for rest. (Meets 2 points)

POSSIBILITY TO OBSERVE

Pedestrians being able to use the entire road allows them to distance themselves from the building and be able to appreciate and observe the environment. It is a diverse building and in some patrimonial cases. In addition, at the crossing points, the furniture elements are distanced, which helps visibility and observation (Meets 2 points)

OPPORTUNITY TO TALK

The public space was designed in order to produce different environments for the interaction of the different users who cross the place daily, through furniture that allows the possibility of conversation. (Meets 2 points)

PLACES TO EXERCISE

This Pedestrian walk does not contemplate the activity of exercise or with the infrastructure or some type of equipment. Most likely, given the uses and activities of its environment, this type of place is not optimal. (Does not meet 0 points)

HUMAN SCALE

The Paseo Bandera is a road approximately 15 meters wide contained between buildings of more than 30 meters, however, the intervention of the public space gives it a spatial character on a human scale where all its elements have visual limits and its equipment is designed Mainly on the pedestrian. (Meets 2 points)

POSSIBILITY TO TAKE ADVANTAGE OF THE WEATHER

Santiago has a Mediterranean climate, but with very marked seasons in both winter and summer. Paseo Bandera does not have protection elements except those provided by the built environment. (Meets relatively 1 point)

GOOD SENSORY EXPERIENCE

The project contemplates, from its design, to be a sensory experience based on the different colors, permanent and itinerant interventions that change as one walks along this road. It is a place that even reduces the speed of pedestrians, encourages permanence in the place, with comfortable urban furniture, with design and quality. (Meets 2 points)

After analyzing each point, we can indicate that Paseo Bandera obtained 19 points out of 24, a relationship that determines that this pedestrian public space is quite close to quality according to Gehl's parameters.

Such has been the impact that it has caused in the citizens that this indicator only confirms the good acceptance by the citizens and the appropriation of it.

CONCLUSIONS

Cities and especially their urban centers are complex systems. Sometimes there are works to improve its infrastructure, activities break in, which means looking for ways of mitigation so that the impact during the development of the works is as little as possible. (Pallarés et al, 2020) But from Alternative Urbanism the areas depressed by the works, which affect sales and produce negative externalities, can be oriented as opportunities where the design of urban acupuncture or participatory urbanism appear as a transitory alternative or permanent to value.

According to Junginger (2016) the principles and methods of design are changing the way of understanding public policies. New design methodologies and approaches are strengthening public policies by giving shape to these guidelines, through their execution through actions, especially when they make decisions and seek to solve problems such as a

public policy, a product or a service.

Today the public space is a place that allows the installation of artistic interventions, managing to activate changes in social interaction that enrich the lives of communities and people. It also impacts social and cultural dynamics favoring collective habits (Pallarés et al, 2020)

Paseo Bandera made it possible to demonstrate the great social profitability of recovering underused spaces through strategic interventions such as not only temporarily changing its use to pedestrian use, but also adding value with an attractive and innovative design. For the Municipality, the success of the project far exceeded expectations, the promenade immediately became a highly recognized space, a media landmark and a benchmark for the recovery of many other public spaces. (Municipality of Santiago, 2019)

It must be noted that the intervention of Paseo Bandera has its first prize in the "2018 city award" contest in the Public Urban Project Category (Municipality of Santiago 2018). This category will consider all kinds of development initiatives that improve the space for public use. Additionally, projects that generate transitory urban interventions in the public space that have generated a relevant impact are allowed.

It also achieved another public recognition, being a finalist for the 2018 Avonni Award, in the category "Public Innovation Government Laboratory", this category rewards the most innovative programs, services, equipment or processes that come from the public sector, both internally and in collaboration. with the private sector, academia and/or civil society.

REFERENCES

CARREÑO, F (2020) Innovación, diseño y creación de valor público a nivel local. Tesis Magister en Gobierno y Gerencia Pública. Instituto de Asuntos Públicos. Universidad de Chile.

CHAVEZ M., (2017). Los cambios de Ahumada a 40 años de su inauguración. Diario el Mercurio, http://www.economiaynegocios. cl/noticias/noticias.asp?id=419854 viernes, 24 de noviembre de 2017 visitado el 04 agosto 2022.

ECONOMIA Y NEGOCIOS. (2018) 35 finalistas van por el Premio Nacional de Innovación Avonnihttp://www.economiaynegocios.cl/noticias/noticias.asp?id=513168 visitado el 07 agosto 2022

ESCOBAR A., CABRERA J.E., MENDEZ L. (2021) Los ubanismos alternativos: Una aproximación a las practicas ciudaddanas de intervencion al espacio publico en Bolivia. Investigacion & desarrollo, Vol 21, N°2, 63-94

GEHL J., GEMZOE L., KIRKNAES S., STERNHAGEN B., (2006) New City Life Published by Arkitektens Forlag - The Danish Architectural Press, 2006 | ISBN 8774073656

GEHL, J. (2014). Ciudades para la gente (1º ed.). (J. Décima, Trad.) Ciudad Autónoma de Buenos Aires, Argentina: Infinito

JUNGINGER, S. (2016). Diseño en la hechura e implementación de políticas públicas. En G. Cejudo, M. Dussauge, & C. Michel, La Innovación en el Sector Público: Tendencias internacionales y experiencias mexicanas (pág. 304). Ciudad de México, México: Instituto Nacional de Administración Pública y Centro de Investigación y Docencia Económicas.

MARTINEZ, C (2013) 12 criterios para determinar un buen espacio público. https://www.plataformaurbana.cl/archive/2013/04/22/12-criterios-para-determinar-un-buen-espacio-publico/ revisado el 30 julio 2022

MINISTERIO DE TRANSPORTE (2018). Calle Bandera seguirá como paseo peatonal y podría extenderse a San Diego con un centro cultural. https://msgg.gob.cl/wp/2018/09/02/calle-bandera-seguira-como-paseo-peatonal-y-podria-extenderse-a-sandiego-con-un-centro-cultural/ visitado el 30 julio 2022

MORA R., HERRMANN G. (2016) Flujos peatonales y vitalidad urbana : el caso de las galerías comerciales del centro de Santiago. Santiago : RIL, 59-77.

MUNICIPALIDAD DE SANTIAGO (2016) Calles con Historia. Paseo Estado https://web.archive.org/web/20160309225744/http://www.municipalidaddesantiago.cl/categorias/home/la-comuna/historia/calles-con-historia/paseo-estado visitado el 04 agosto 2022

MUNICIPALIDAD DE SANTIAGO (2018) Comienzan los trabajos de la segunda etapa del Paseo Bandera. https://www.munistgo.cl/comienzan-los-trabajos-de-la-segunda-etapa-del-paseo-bandera/ visitado 25 de julio 2022

MUNICIPALIDAD DE SANTIAGO (2018) Municipio obtiene "Premio de la Ciudad 2018" por proyecto del Paseo Bandera https://www.munistgo.cl/municipio-obtiene-premio-de-la-ciudad-2018-por-proyecto-del-paseo-bandera/ visitado el 07 agosto 2022

MUNICIPALIDAD DE SANTIAGO (2019) Plan integral de movilidad 2019 - 2029. https://issuu.com/munistgo/docs/pim_2019-2029_final?e=8313693/70339752 visitado 25 de julio 2022

PALLARÉS, M., PALLARES, M. E., & LOU, J. C. (2020). Arte Urbano: Aporte a la construcción de espacio público. tsantsa, 275-287.

WIKIPEDIA, Paseo Huerfanos, https://es.wikipedia.org/wiki/Calle_Hu%C3%A9rfanos visitado el 02 agosto 2022

WIKIPEDIA, Paseo Ahumada, https://es.wikipedia.org/wiki/Paseo_Ahumada visitado el 02 agosto 2022