LEARNING FROM LOS RAMBLAS

by

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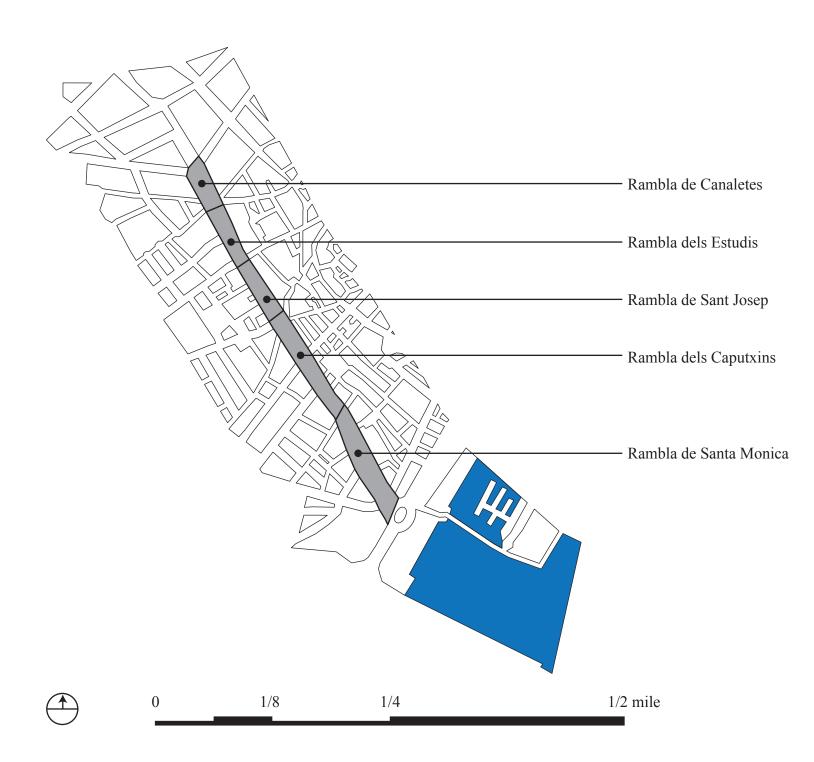
Abstract

This report seeks to create a catalogue of urban design elements that can be used as a professional reference for practicing planners. It will use the Ramblas, a series of streets in Barcelona as the area of study to understand how urban design elements can be successful. The historical evolution of the streets and how they developed into what they are today is presented. It is not suggested that the Ramblas would be recreated in another context but instead elements would be understood for their value and use within their context. Those elements will be catalogued to create a set of best practices that can be taken and used for other contexts to create successful walkable places.

There are many great historical streets that have sustained themselves over long periods of time. These streets hold elements that are synergistic in nature. For a street to remain vibrant, active, and economically viable there are many elements that are required. The Ramblas, a series of short streets in Barcelona, Spain, is used as a case study to investigate how a series of streets can sustain a high level of walkability, activity, and traffic. The streets consist of Rambla de Canaletes, the Rambla dels Estudis, the Rambla de Sant Josep, the Rambla dels Caputxins, and the Rambla de Santa Monica. These streets have developed into what they are today over a better part of two centuries. An historical account will be presented in how the organic nature of their development progressed. The reports then compares the streets to discover which streets are more successful and what aspects of the street contribute to their success. The Ramblas, some of the most active streets in Europe are located in the historical area of the city. The streets divide Barcelona's gothic barrio and its historical quarter terminating to the east in the Mediterranean Sea. Collectively, the streets are approximately 1.2 kilometers in length. The streets contain vendors, a high level of pedestrian activity, shops, and restaurants. In addition, the streets are paved with a mosaic by Juan Miro and a statue of Christopher Columbus that terminates the street. The street organization gives priority to the pedestrian connecting the urban center, Placa Catalunya, to the harbor plaza. People walk in the middle of the street in a large tree lined promenade while vehicular traffic is on the outside with smaller walkways adjacent to the buildings. Although the street gives more importance to the pedestrian instead of the car it is still a very active street that draws thousands of people daily.

Sec. 1.1 Context of the problem

The question is posed, how can a series of streets that gives priority to the pedestrian be successful? What elements are needed in order to produce and sustain a street such as this? Does the street have to have historical and cultural significance to draw enough activity? In addition, how do these streets contribute to the successful network of infrastructure in Barcelona? These questions become increasingly important to understand how a set of streets are successful on a global scale. Furthermore, a closer analysis defines each aspect of each street within the Ramblas to express the success or failure of the street. Although these elements will be extracted, they are not suggested to be used in other contexts exactly as they are in the Ramblas. Instead, the elements are appreciated for their significance within their context and seen as tools for good urban design. The elements would be investigated as best practices for urban design.



Sec. 1.2 Deliverable

From the analysis a catalogue of best practices for creating a street that is walkable is sought. Diagramgs are produced to show the organization of the Ramblas using various formats from books such as ;Learning from Las Vegas by Robert Venturi (1977), Kevin Lynch's Image of the City (1960), the Placemaker Method by Marichela Sepe (2009), and William Whyte's methodology in Social Life of Urban Spaces. Furthermore, it looks at how the streets have developed over time and what infrastructural connections have been created as a result of the Ramblas. By understanding the role of each element, a system of relationships is defined. Specifically, it looks at the urban design elements, the facades, clusters of pedestrian activity, directional space, speed, symbol, connections, networks, and non-verbal messages of the space. After researching the characteristics, the relationships of each is then identified to understand their independent or dependent character. Next, pedestrian and vehicular densities and interactions would then be documented to understand how they interact with the urban landscape. Those elements are looked at to see how they interact with the space which is necessary to produce a walkable, dense, vibrant street.

Once all data is collected and organized the elements are used to answer the previous stated questions. The Ramblas is diagrammed illustrating each element and their placement. Diagrams are also produced to show where edges, nodes, and landmarks are placed and how it contributes to the walkability of the street. This reveals what level of importance each aspect of the street plays and if they are all necessary in creating and sustaining a walkable urban environment within a single street.

Ch.2 : Background

Sec. 2.1 Historical Background

Originally where the Ramblas is today a medieval wall stood separating the Gotic (Old) District and the El Raval (New) district. The first major transformation of the Ramblas began with the removal of the walls in 1854. This removal of the walls took twelve years. During the removal in 1859 a competition was given for the redevelopment of the city. The two major plans proposed were by Ildefones Cerda and Antonio Rovira y Trias. A major note in the Cerda and the Rovira plan that greatly influenced the success of the Ramblas is that the northern beginning of the Ramblas, Placa Catalunya, was planned as a major nodal component of the city's extension. In addition, Passieg de Gracia terminates into Placa Catalunya. Passieg de Gracia, at 180 feet wide carries a large amount of traffic that aides in creating a center for diverse multi-modal activity within Placa Catalunya.

Ildefones Cerda won the competition and his plan was implemented in expanding the city, connecting the two districts, and implementing his Manzana block¹. Cerda's plan called for 35 meter wide streets that were seen as a way to allow people more cubic space when walking that would result in a higher standard of living. Cerda's plan was an extension of the city expanding the current layout of Barcelona utilizing large blocks approximately 50 to 80 Meters wide.

Sec. 2.1.1 Rambla de Canaletes

The Ramblas begin directly south of Placa Catalunya. The name of the street comes from the Canaletes fountain or Font de Canaletes. The fountain was the result of a street beautification project in preparation for the 1888 World Fair that was carried out by architect Pere Falques². The fountain acts as a meeting place for locals and a place to celebrate soccer match victories.

Sec. 2.1.2 Rambla del Estudies

Rambla del Estudies continues the ramblas to the south of Rambla de Canaletes. The street was named after the university that was demolished in the mid 19th century³. The university was the main school at the time. Phillip V abolished the university and made it the center for his political headquarters. Now the street holds many bird merchants and some locals refer to the street as La Rambla dels Studies Ocells. This name also comes from the large amount of sparrows that nest themselves in the buildings.

Sec. 2.1.3 Rambla de Sant Josep

Continuing down the ramblas is the Ramblas de Sant Josep. The street is also known as Rambla de Flores for the large amount of florist stalls that occupy the street. In the 19th century it was the only place in Barcelona to purchase flowers. As well as the flower vendors along the street it shares with Rambla de Caputxins the main entry into the Boqueria Market which was originally called the Mercat de Josep. The market dates back to the 1200s. Currently the market is an international tourist attraction. It is an integral part of what has made the Ramblas successful. It is arguably one of the best markets in Europe . The market's entry is marked by a mosaic by Juan Miro inset in the the promenade.

¹ Wynn pg.188

² http://www.bcn.cat/parcsijardins/fonts/EN/canaletes.html

³ http://www.laramblabcn.com/es rambla estudis.html

Sec. 2.1.4 Rambla de Caputxins

The Rambla de Caputxins continues the ramblas to the sea. The name comes from the Capuchin Monastery¹. The beginning of Rambla de Caputxins is marked by a mosaic in the ground by Jaun Miro. Rambla de Caputxins was the first street of the Ramblas created once the old city wall was destroyed². It was a place for the bourgeois to stroll after a night of the arts where the Teatre del Liceu opera house is now located. The placement of the opera house created a place for high society.

Sec. 2.1.5 Rambla del Santa Monica

Continuing down the ramblas is Rambla de Santa Monica. Like the other Ramblas this street was named after a convent along the street. At the end of Rambla de Santa Monica stands a 60 meter tall statue of Christopher Columbus that is presumed to be pointing at the New World. It was erected in 1888 for the World's Fair like the Font de Canaletes. Rambla del Santa Monica is the widest street of the ramblas. It is often used for weekend artisan fairs maximizing its space.

1

http://www.aviewoncities.com/barcelona/rambla.htm

² http://w3.bcn.cat/turisme/0,4022,495525130 783965815 3,00.html

The Ramblas in Barcelona include many different aspects of urban design that allow for literary interpretation.

These different readings supply a framework for understanding the urban design of each street within the Ramblas through different methodologies and scales. The readings provide examples and tools on how to carry out the analysis and develop a methodology that is contextual, effective, and comprehensive.

Sec 2.2.1 Precedence

Allen Jacobs (1993) provides an analysis of the physical aspects of the Ramblas in his book Great Streets. The book contains diagrams, sections, perspective sketches, and plans that illustrate the streets. This is extremely helpful in analyzing the physical nature of the street. This study is used as a way to illustrate the current physical elements. The book then describes how these characteristics have led to community interaction and civic pride. This account is a great contribution to the study due to its accurate description of the physical aspects.

In The Image of the City by Kevin Lynch (1960) a list of key elements is provided to analyze the urban context. Those elements consist of paths, edges, districts, nodes and landmarks to define a space. Lynch uses a process of diagramming urban spaces with symbols to identify the various aspects. These elements he sees as being essential to creating a strong image of a city. This is created through the various images the city produces and expresses. These tools are used in the analysis process.

Marichela Sepe's (2009) paper develops an extensive investigation of the Ramblas. The paper analyzes the Ramblas using a process called Placemaker. It analyses the streets by five different aspects. These aspects consist of prior perception, urban design elements, sensational qualities, and a questionnaire surveying perception of the streets. Similar to Lynch's methodology maps are then made using a coding system to identify each of the aspects graphically. This study was used as an experiment using the Placemaker method in the Ramblas. Although this does provide a basis for my investigation of the Ramblas it does not examine other main streets that terminate or cross the Ramblas contributing to its use. This study strives to further the analysis to look at the sequence, programming of open space, and to develop tools for analysis that are contextually significant based on each street.

Learning from Las Vegas by Robert Venturi (1977) provides another approach for analysis that focuses on investigating space through symbols, speed, and scale. It uses symbols, speed, and scale to rate paths, networks, programming, and identity. Las Vegas is used as the laboratory for this investigation. It then goes on to analyze the Las Vegas strip through a binary system. This system consists of looking at space due to people going or staying, sense of clarity or ambiguity, cooperation or competition of commercial activity, and community or rigid individualism. The Ramblas contains many historical symbols. This helps to understand and define the organization of the space to communicate meanings through symbolism and history. The method of analysis becomes applicable to the similarity of the Ramblas being seen as a strip of successive streets that each hold an identity just as the Las Vegas strip is broken apart by its signs or symbols.

In The Social Life of Small Urban Spaces by William Whyte (1980) a photographic methodology is used to document and compare plazas. He compares how people use plazas, how often, and what aspects are used more than others. He also looks at which plazas are more successful than others. He does this through visual observation and using photographic and video surveys to support his findings. Although Whyte primarily focuses on plazas his methodology is useful in comparing the Ramblas to discover the successes of and what aspects make them successful.

Jon Lang (2005) provides an overview of urban design drawing from case studies to define his position. This contribution becomes important due to the emphasis he places on the spaces between the building and the street. He categorizes urban design projects are categorized within procedural types such as total urban design, all of a piece, piece by piece, and plug-in. Furthermore, urban design projects are then defined as product types such as new towns, precincts, or infrastructure. The Ramblas fits into the procedural type as plug-in urban design that could be seen as infrastructure as well as a precinct. It has only now been seen as a precinct due to its large attraction to tourists and its varieties of shops and eateries. Then Lang defines urban design by following either empirical ideals or rational ideals.

Using Lang's method of identifying urban design types becomes very helpful in understanding what role the Ramblas plays in Barcelona. Defining its role in the city will attempt to give clarity to what has made it successful. This is important in appreciating the contextual significance of the Ramblas and their placement within Barcelona. This placement further explains how it has relieved traffic as well as connected a historically significant space with beachfront along the Balearic Sea.

Each reading touches on a different aspect of the research that contributes to the overall body of work. Building on previous work and methodology guides the process and application to develop tools that will develop the intent of the paper and how it can be achieved.

Sec. 3.1 Methodology

An analysis of each street along the Ramblas is documented. This is done in hopes create a clearer depiction of the elements necessary for successful streets. In addition, it informs how the streets work with or against each other to be successful. Following the historical account, four methodologies are used to analyze the Ramblas. Each builds on prior academic knowledge stated within the Literature Review Precendence.

An historical account of the streets is documented first to understand the organic nature in which the Ramblas have developed. This development, which took place over the better part of four centuries, created urban connections by extending the streets out into the harbor. Each street holds an historical value. That will be documented and what time it came to be a part of what the Ramblas are today.

The first method of analysis used will follow Kevin Lynch's work done in The Image of the City (1960). His methodology will be used to document where the paths, edges, districts, nodes and landmark exist on the Ramblas. This data will be gathered through a visual survey and documented on paper through diagrams using symbols. Each street will be observed at different times of the day to discover if these aspects change or are fixed. In addition, a catalog of these aspects will be produced to show which street contains more or less of these aspects.

The next methodology will be a process of validating the aspects that were documented in Marichele Sepe's (2009) paper. The paper analysis the physical elements of the Ramblas further by considering perceptual qualities of the streets as well as the physical. First, the diagrams produced within the paper will be taken to the area of study to be verified. Secondly, a survey of aspects that may have been overlooked will be documented to create a current picture of the streets using the diagramming system used in Sepe's Placemaker Methodology (2009).

Jon Lang defines urban design through a typology of procedures and products. The Ramblas is an example of Infastructure design. It was a result of creating a street that provided access from Placa de Catalunya to the sea front. It used ideas from the City Beautiful movement in which beatifying the street with monuments such as the Font de Canaletes and street trees to create an enjoyable space. The approach was Empirical in nature set out by the current political power. The street is a form of Plug-In uban design "where elements of infrastructure are plugged into an existing city in the hope of of spurring new developments or providing some public amenity." It has been successful in providing this amenity not only to the locals but providing a global amenity for tourist and the local economy.

Robert Venturi's methodology is then used containing a visual survey of how people move through the Ramblas.

The main symbols of how Venturi describes a strip in addressing speed, scale, and symbols is applied to the Ramblas.

Areas of the street are diagrammed locating each of those aspects to illustrate perceptual cues as well indirect communication that the Ramblas holds.

Using William Whyte's method a photographic survey is taken of both sides of the streets creating a picture of the entire Ramblas. From those pictures an account of the aspects of each street and how they are used for people that walk or drive. After gathering and analyzing the visual survey, a comparison of each street along the Ramblas is then developed. The aspects compared will be use, seating, bulk, density, choice, space, flexibility, and shade.

Lastly a programmatic analysis of the surrounding factors around the Ramblas is considered. These influxes of various forms of traffic is understood to consider how they affect each street. The placement of the Ramblas within Barcelona through this process contributes to the surrounding streets.

The Ramblas contain very complex set of characteristics. Using multiple methods of analysis, the paper strives to answer what elements contribute to its success. The multiple methods hope to uncover a methodology that is all encompassing when analyzing good streets.

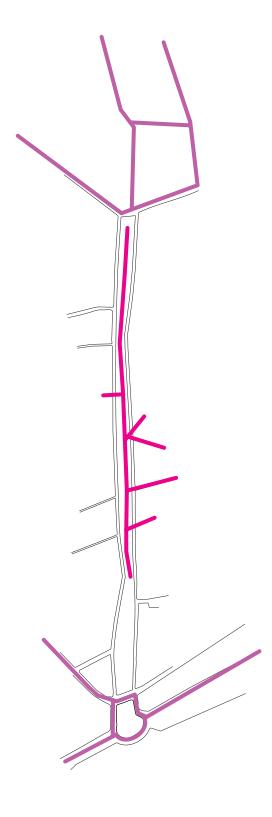
Ch. 4 Analysis

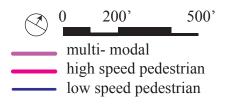
Sec. 4.1 Robert Venturi Method

Sec. 4.1.1 Speed

Foot traffic varies greatly as one moves down the Ramblas. Streets that bisect create points of interaction and choice revealing the tourist or local. Speeds of each street create different levels of awareness and interaction. As it is often told by tourist to be weary of pick pockets along the Ramblas the speed of the street in many guides and directs the pedestrian as they move.

The Ramblas de Canaletes has one of the highest speed of multi-modal traffic. This is due to it terminating into Placa Catalunya. Placa Catalunya is an extremely dense traffic area carrying multipe lanes of cars as well as buses that connect to th El Prat airport and a point of bike share. At southern edge of the ramblas is another multi-modal street, Passeig de Colom, that carries high volumes of traffic. The vehicular traffic creates a slower pedestrain movement. Historical buildings and monuments slow pedestiran traffic due to tourist and tour guides. This creates congestion and slowed speeds of pedestrian movement. Movement is accelerated but a heighteened sense of awareness is created due to having to maneuver around the collection of people. Many inlets cross the promenade that are designated for only pedestrian movement.

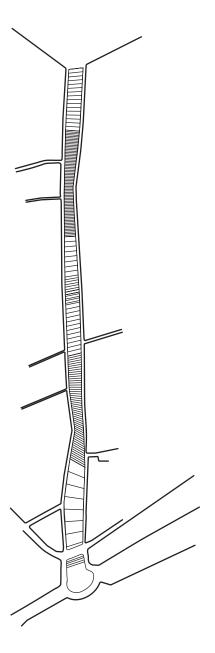




Those streets also work as service entries for businesses along the Ramblas and adjacent streets. This shared use of vehicular and pedestrian traffic along such narrow streets is functional due to the low use of vehicular traffic. Multiple speeds of vehicular and pedestrian traffic tells of how a very active set of streets can be shared by the automobile and the pedestrian.

Sec. 4.1.2 Scale

The street varies in width through sections of the ramblas. This variation creates a scale of open space, movement, and opportunities for rest. The diagram displays how the scale is high or low along the ramblas based on the closeness of each line. Vendors are placed at regular intervals. The change in street width with the vendors contributing to the constricting of space create different scales of interaction and space. At the north end of the ramblas the scale of interaction is open and loose due to its adjacency to Placa Catalunya. The space becomes more confined and the streets starts to collect various commercial uses and merchants that cause a more intimant space. This heightens the awareness and creates a higher level of interaction due to the level of distance between pedestrians being reduced.





Entrances into major tourist attractions cause buildup of on lookers which also reinforce the idea of how congestion reduces scale and heightens awareness. In addition this collection of people causes the pedestrian to make choices due to the pedestrian traffic that is constant.

Sec. 4.1.3 Symbols

Each street along the Ramblas contain symbols that give identity. This identity is used as a locator and points of identity. Some of the streets contian more obvious elements that create identity but each has at least one significant element that contribute to it.

Rambla de Canaletes is identified through it's adjacenty to Placa Catalunya and it containing the Font de Canaletes. This fountain is used as a place for meeting of soccer fans after victories. It was placed in the early 19th century as a part of the Worlds Exposition.

Rambla del Estudis was named after the former university. Now the street is seen for it's many animal vendors that sell small animals such as birds and other small pets. This reflects the large animal lover culture that is a strong part of the Catalonian culture. Often the street is referred as La Rambla dels Studies Ocells by the locals due to this.

Rambla de Sant Josep is most often referred to as the Rambla de la Flores due to the many floral merchants that line the street. Flowers, seeds, and bulbs are sold by these vendors. The numercous vendors create a floral essence that can be smelled through out the ramblas as the wind carries their fragance down to the sea.

Rambla de Caputxins most notable characteristic is the large inlaid mural in the promenade by Juan Miro. The mural expands over the promenade revealing the strong pride the Catalonian people have of Miro's art. This acts as a way one locates themselves along the ramblas.

Rambla de Santa Monica is the widest promenade along the ramblas. This allows for weekend fairs that contain vendors of art and jewelry. This stretch of the Ramblas terminates into the Colon Monument. This monument marks where the ramblas meets the sea.



Rambla de Estudies (Speed)

Rambla de Sant Josep (Symbol)



Rambla de Caputxins (Symbol)



Rambla de Santa Monica (Scale)





Rambla de Canaletes (Symbol)





The promenade shown as the Major Path becomes a collector for different modal movements that bisect it.

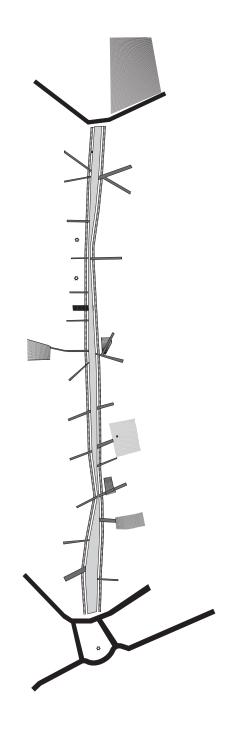
Places of rest are offered to the pedestrian that are shown as nodes in the diagram. Places of rest are placed at intervals of 150' to 250' but are then offered at longer intervals that are a little less than a quarter mile.

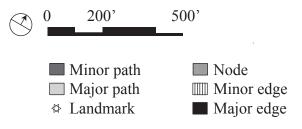
Large roadways carry multiple forms of transit define the edges of the promenade to the north and south.

These are shown in a solid black line.

Landmarks are placed at intervals which allow for viewing without too much clustering of onlookers. Landmarks are also placed within nodes creating places of interest, meeting, and rest. These act as place identifiers while people wait to meet.

Nodes of activity consists of small plazas, entry points to major tourist attractions and major adjacent plazas such as Placa Real. Nodes act as places of gathering that force the pedestrian to decide to enter adjacent zones or offer rest within the node. Most nodes along the ramblas are points of entry. Places of rest are tucked away but not strongly delineated from places of movement.





Sec. 4.3.1 Rambla de Canaletes

Ramblas de Canaletes is argueably the beginning of the ramblas. It receives traffic from the Placa Catalunya. It is the only street along the ramblas that contains furniture seating. The seating is fixed and oriented to the interior of the street. At first glance it contians the most active metro entry and exit point that is provided among all the streets that make up the Ramblas. Lke many of the other streets it contains a permanent street merchant that offers souveniers and news. Clothing retail, restaurants, and hotels line the perimeter of the street. The street is historically known for the Font de Canaletes. It is one of the shortest measuring at approximately 300 feet long. The street is also one of the widest streets along the ramblas.

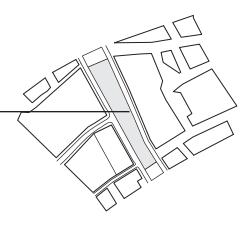


Sec. 4.3.2 Rambla del Estudis

Moving to the the south is Rambla del Estudis. The commercial activity of the merchants focuses on the tourism market providing exursions and tours. Specialty food shops are also located on the street providing deserts and snacks. Sitting or places of rest are not offered. The street does not promote stopping and most people peruse the outdoor stands and move along. Pedestrian traffic moves mostly to the south and there are no major streets that bisect the street causing traffic.

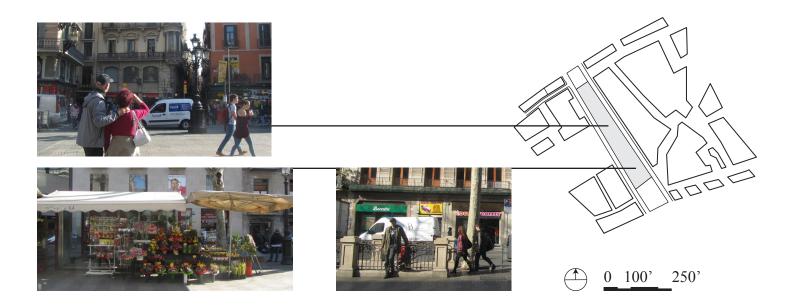






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Rambla de Sant Josep is most commonly known as the Rambla de la Flores. Permanent flower stands line the perimeter of the promenade. Florist maintain hours from the early morning to the late evening. The primary use of the street is the sell of floral arrangements, seeds, and bulbs. Street vendors are not as numerous as other streets allowing for places of pedestrian gathering to take in the historical facades that serve as a background to the streets. A metro station entry is located on the street providing a place of leaning and people watching.



Sec. 4.3.4 Rambla del Caputxins

Where Rambla de Sant Josep ends and Rambla del Caputxins begins is the Juan Miro mosaic that is inlaid in the promenade. This acts as a locational device. This public art covers a large space allowing pedestrians to stop. People stop in groups of various sizes. Places of sitting are offered at the price of a cup of coffee or dining experience. This is the beginning of the outdoor dining that is located on the perimeter of the promenade. People watching is popular if only for a short break from the walk down the ramblas. Carrer de Ferran bisects Rambla de Sant Josep. Carrer de Ferran is a high traffic pedestrian street that extends to surrounding attractions. At this point pedestrians often stop to reorient themselves. Stick signs help to guide this reorientation. In addition high amounts of traffic move in and out of this section of the street due to it's adjacency to Placa Real.



Sec. 4.3.5 Rambla de Santa Monica

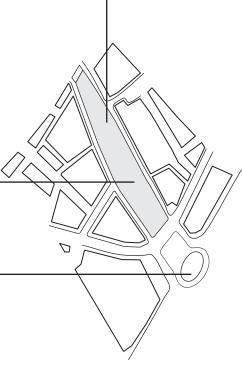
Ramblas de Santa Monica terminates the successive ramblas. It is the widest of the streets. It contains the least amount of permanent commercial activity. Outdoor dining is provided as with other streets on the ramblas. It was observed to contin the least amount of patrons. Pedestrian activity was seen to be much lower than other streets on the ramblas. The wide expanse of street and lack of permanent commercial structures allows for a flexible use of the space. On weekends the space is used for artisans and other vendors to display their goods for sales. During the week the street feels less active and lively due to the temporary commercial activity. The street terminates into the Colon de Monument, also known as the Columbus monument. This can be seen from Rambla de Canaletes. People almost always stops to photograph the statue and sculptures that lie at its base.





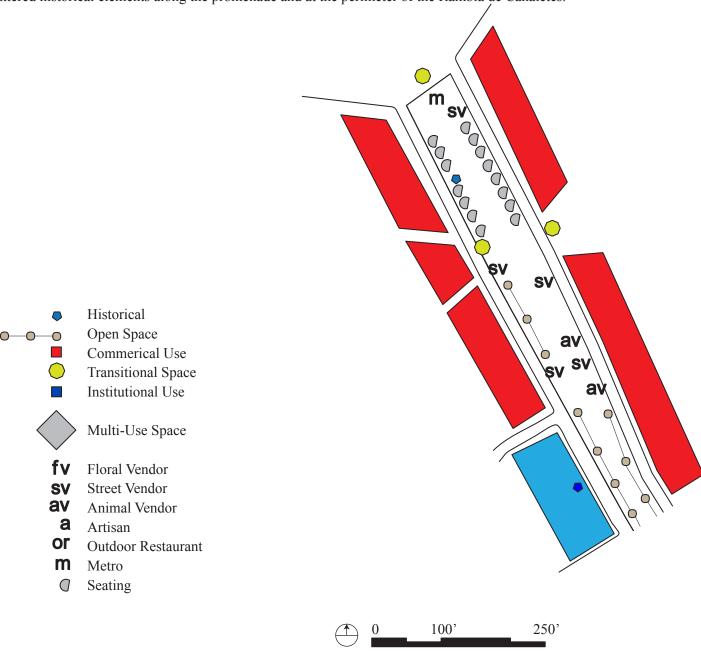






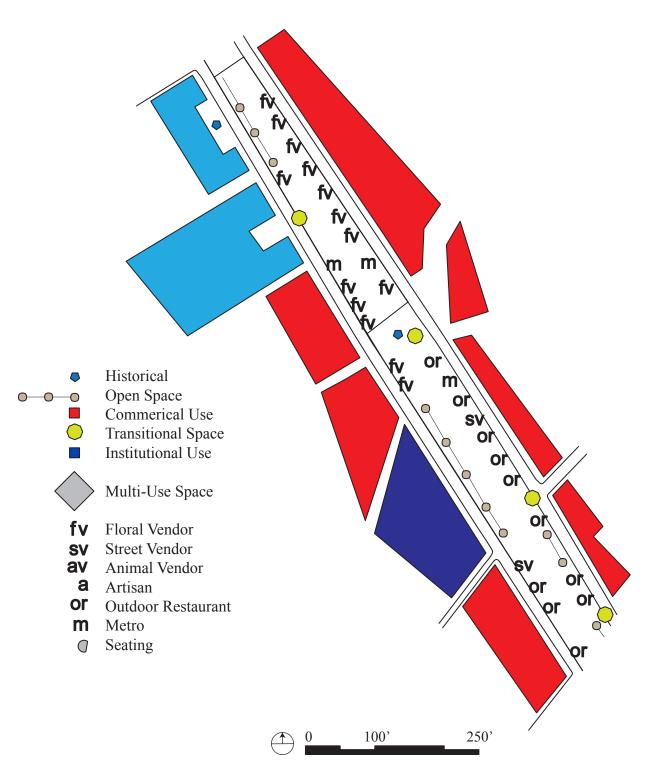
The Plecemaker Method uses a coding system to analyse the Ramblas. This coding system uses a list of symbols to describe the space. The analyses verifies those findings and expand on what can be learned from the system and what can be added to present a sense of how the streets have changed and or what can possibly be added to the system. The coding system has been consolidated to emphasize aspects of the Ramblas.

Beginning at the north of the ramblas at Rambla de Canaletes the business use is primarily commercial. From observation during the analysis the uses at the ground floor were observed to be primarily commercial with hospitality and scattered historical elements along the promenade and at the perimeter of the Rambla de Canaletes.

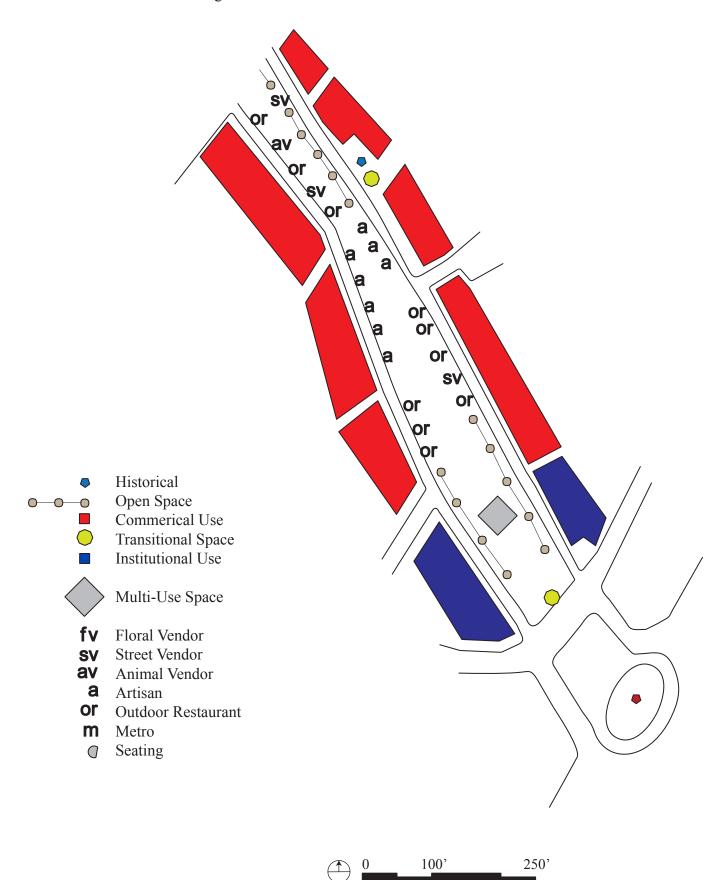


Sepe, Marichela. 2009 PlaceMaker method: Planning 'Walkability' by mapping place identity. Journal of Urban Design 14, no. 4:pg.

This shift in use may be due to the increasing value of the area due to the rising tourism market. Pace at the north of the ramblas is diagrammed as being regular. The pace was perceived as having a regular amounts of traffic but large amounts of people exiting the subway increased the pedestrian pace causing the pace to become irregular. Opening up to the Placa de Catalunya there was definitly permanent visual percection to the north as well as the south and with the plaza and the southern streets. Transient sound perception was observed and was seemingly a result of two streets on each of the ramblas that terminated at the same point bisecting Rambla de Canaletes. This results in a lively space that feels active and vibrant.



Vendors are grouped together by the goods they sell. This lends itself to enhance the identity of the place but also increases the value of the place and goods offered. This increased value is a result of the increased selection offerced from the clustering of merchants.



Sec. 4.5 Urban Design Elements

Principles of urban design that are present in the Ramblas are identified to understand how they have contributed to the success of the street. The basic principles discussed form the built environment, the streetscape, and the facades of buillding facing the ramblas.

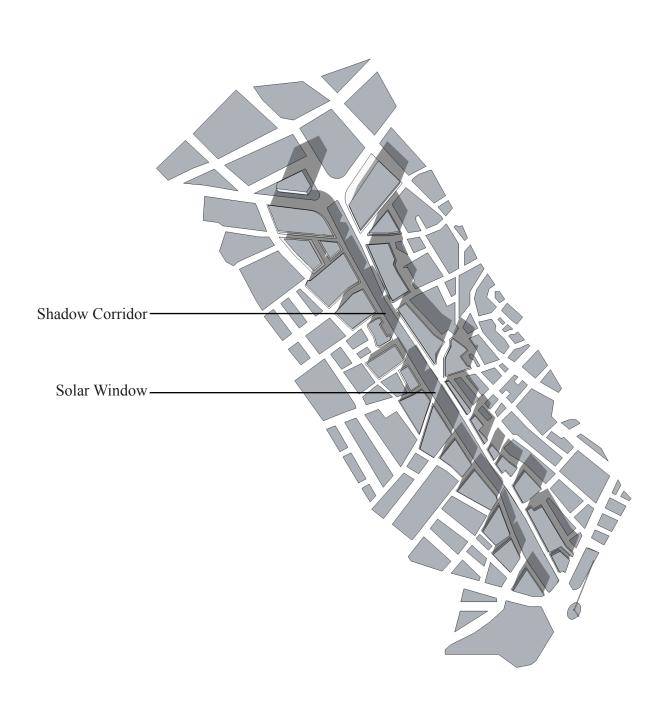
Sec. 4.5.1

Generally the form of the buildings only reach four to six stories. The varying heights add to the variety and give identity to place and entry. Keeping the building heights lower than 60-70 feet allows for sun light to reach the street during the winter months. This provides for options for cooler days and hotter days providing shade in summer months and warmth in winter months. During the analysis, in March, this was observed. Photographs were taken at the same location and time of day to compare how the building height offers choices for users.

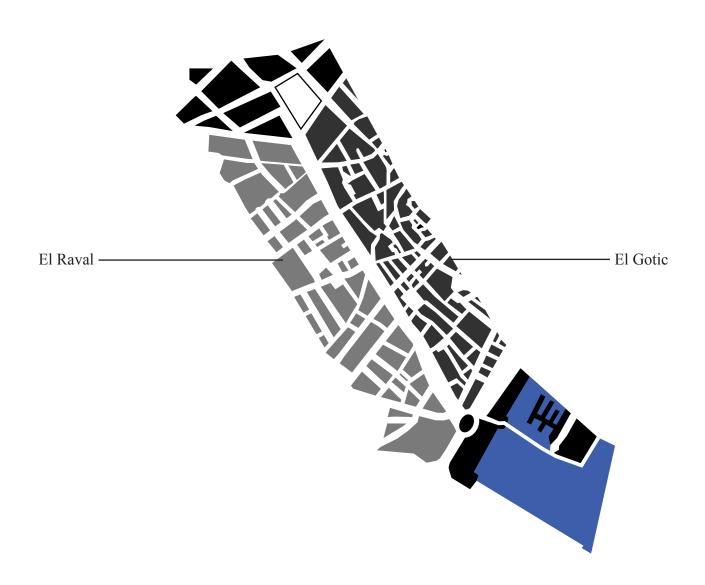




This was accomplished due to the relative height of the building to the width of the street. In the diagram produced through Sketchup modeling software an analysis was done of how the urban form offers light to the street during the winter months by partially shading the promenade. In addition, with the blocks being broke up it allows light to pass through creating solar windows in which light is allowed to reach the promenade.



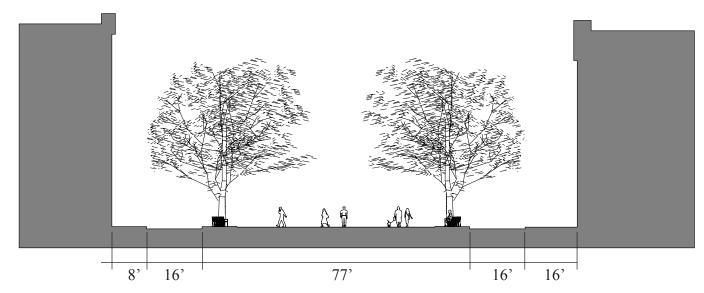
The width of the street offers identity to area of Barcelona. Most of the streets within El Ravel and El Gotic are still relatively old, narrow, and dendritic. With the ramblas being so wide it separates itself from adjacent streets creating a clear definition of where the old and new district begins and ends. This delineation of street is another aspect that gives the ramblas identity and place. The street acts as a linear gateway separating the two districts "and so the Ramblas exist in contrast to it's surroundings."¹



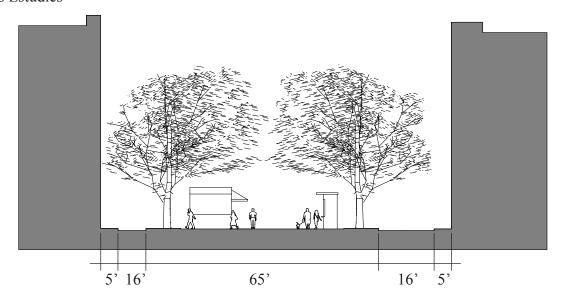
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The width of the street creates different spatial effects for the pedestrian. Along the interior of the street crosswalk widths are minimized to encourage people to walk in the middle of the street on the promenade. Street widths are large near Rambla de Canaletes to receive the high amounts of traffic from Placa de Catalunya. Vehicular traffic is one way on each side. At sections of the street the roadway is reduced to a single lane. This causes traffic to slow making for a safer crossing. In addition it causes drivers to be aware of possible changes that may occur on their route. As the street narrows the street trees move closer together causing a canopy for shade during the summer months. This variation creates an organic feel of being in a forest. Although the street trees are seemingly placed in set intervals they are not. They vary from 18' to 22' in spacing. There is still a perceived order in their placement.

Rambla de Canaletes



Rambla dels Estudies





Physical elements along the Ramblas support a pedestrian activity through texture, scale, and variety. These elements tie the successive streets together creating continuity. In addition they support pedestrian activity by communicating the direction of local tourist attractions.v

Signage of tourist destiations offer directional devices at the pedestrian scale. Signs provide text at a scale for the walker and are placed at a legible height. This is another device that gives priority to the pedestrian

as he or she travels.

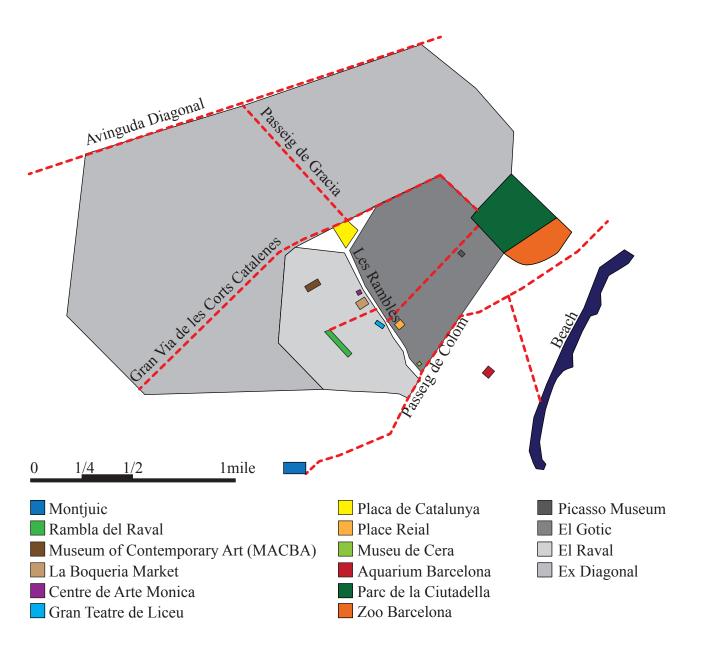
The texture of the paving of the Ramblas is continous throughout all streets. This physical device connects all of the streets giving it continuity and location within the larger context of the two districts. Therefore one knows when they have entered or crossed one of the streets along the Ramblas.





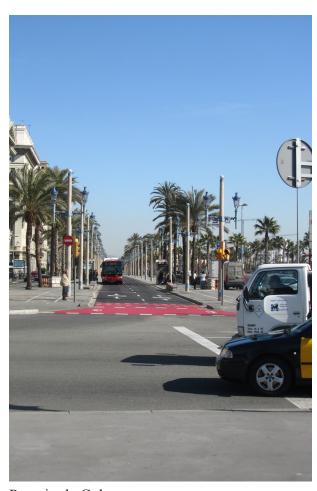
Sec. 4.6 Surrounding Land Uses





Within a close proximity of the Les Rambles uses contribute to the activity of the street. Tourist attractions are located in all directions. Tourists cross the Rambles and walk along it to reach these attractions. Districts such as El Raval, El Gotic and Certa's urban designed Ex Diagonal provide housing surrrounding the Ramblas to the north, south, and west. Multiple museums such as the MACBA, Picasso Museum, and Museu de Cera are located within less than a mile. Thei location causes traffic on the Rambles. Montjuic, a mideval castle, is located to the west with a beach to the south offering dining and Barcelona's aquarium.

Major thoroghfares are located to the north and south of the Rambles. Avenguda Diagonal is high traffic street that connects to other parts of the city. Passeig de Gracia, one of the widest streets in the world, receives traffic from Avinguda Diagonal and then that traffic moves down in Placa de Catalunya. Placa de Catalunya which alos receives traffic from the Barcelona's airport from Gran Via de les Corts Catalenes. Passeig de Colom is the major street along the coast that connects the city.



Passeig de Colom



Placa Reial



MACBA

Museums, parks, markets, and historical buildings surround Les Rambles on all sides causing high amounts of traffic. This creates a situation in which tourists and locals are constantly using the streets to reach their destination. The Rambles are important for what they contain and offer but their location within the city is a major component of their success. Without these surrounding uses the Rambles would not carry as high amount of pedestrian traffic as it does now.



Parc de la Ciutadella



Montjuic



La Boqueria Market



Museu de Cera

4.8 Lessons Learned

The streets teach hard and soft lessons at different levels. Hard lessons are lessons that would not be easily transferrable. While soft lessons are aspects that can be transferred individually with higher success.

Soft lessons that are shown to deal with the architecturral style of facades, tree placement, signage, and operable bollards. Varying the facade styles gives identity to large blocks that face the Rambles. The styles tell a story of the history of the building and the space. Tree placement varies from 18 to 20 feet. This gives enough space to create a canopy for pedestrians. Also by the varrying distances slightly it is still perceieved as organized but with variation. Signage is placed at a low enough height to be legible by the pedestrians and the text is at a scale that further reinforces this. Bollards are placed at points where streets bisect the Ramblas. This stops traffic from crossing the Ramblas and gives security for pedestrians. When needded the bollards lower allowing emergency vehicles to crooss the Rambles.

Hard lessons that are revealed deal with how land use is extremely diverse, street vendors that are open twenty-four hours a day, and how such a long expanse of space is dedicated to pedestrians. These lessons are hard to tranfer to other locations. All streets along the Rambles contain vendors of goods. These vendors are open almost all hours of the day and night except for a few in the early morning. This is supported by the denser urban space as shown below in the comparison. The uses along the Rambles are very diverse. With such a successful tourism market the Rambles are able to close off the streets to cars within the promenade. Without this market a it would be difficult to support the businesses along the Rambles. A comparison of a walkable street in Texas that has various festivals is shown below.

Not all aspects of the Rambles can be transferred to other urban environment. The use of the land along and around the Rambles plays a vital role in supporting the toursim market. On the other hand architectural facade styles that vary can be trasferred. It is suggested that the Rambles be appreciated for it's qualities but understood that not all aspects can be transferred.

Main st. Grapevine, Texas



Les Rambles



Ch. 5 Conclusion

The Ramblas became an international tourist destination from development and investment dating back to the 19th century. The streets are shared by locals and tourist. The Ramblas is set apart from other streets in the world due to it giving priority to the pedestrian over the car. The social use and the physical design of the space work together to produce a series of successful streets that nurture pedestrian activity. Often when traveling to a destination the car is considered the first means of transportation. These streets rethink that notion by creating a safe, memorable, interactive walking experience. They set an example of how pedestrian activity can be successful and preferred.

Sec. 5.1 Historical

The Ramblas began its development in 1854 with the removal of the wall that divided the old and new district in Barcelona. The space that was alocated for the streets was the left over space between the districts where the wall once stood. The Ramblas social and physical character is a reaction to the pressures of the adjacent streets and districts making them very organic in character. As each street along the Ramblas developed each took on its own identity from historical events such as the 1888 Worlds Fair, or major Institutions, or by the goods that were sold. This is an example of how great streets are not made within a short amount of time but evolve over time reflecting the history of its culture and society.

Sec. 5.2 Pedestrian Priority

Firstly the automobile is not given as many amenities as the pedestrian. Using Rambla del Estudies as an example the amount of street width given to the car is 32 feet while the amount given to the pedestrian and merchants is 75 feet. By purely giving more area to the pedestrian expresses how the use of the street is intended. In addition signage on the street is set at the pedestrian level using stick signs that direct to different attractions to the area. Text is legible when standing within 3 feet and set at heights legible to the pedestrian. Merchants along the promenade serve the pedestrians with parking for vehicles minimized. Within the promenade shaded and unshaded seating is offered.

As one moves south along the Ramblas a great amount of control is exhibited on the pedestrian and the driver to promote pedestrian activity. The promenade is lined with lanes that constrict from two to one lane for the automobile. This causes the driver to be more aware when driving of possible lane changes which results in a safer walking experience. On the exterior of the streets are small sidewalks. This indirectly forces pedestrian traffic to the inner promenade.

As a result a people are suggested to walk on to the inner promenade to view the various goods being sold that transcend culture such as art, flowers, jewelry, and animals. The pedestrian is also controlled as he or she moves through the promenade by the width of the street changing.

Sec. 5.4 Sensory Engagement

The Ramblas creates a heightenend sense of awareness as a result of how the streets engage the different senses at the scale of the pedestrian. Various elements on the street produce this reaction. The variation in the street width creates a promenade merchants, historical objects, and entry points cause a build up of pedestrians. The walker then changes his or her route to accommodate their journey to peruse the goods or stop to take in the the history or enter a bisecting street to continue to their destination. This takes place at different levels throughout the streets causing a constant heightenend awareness through variantion. Less control is placed at the southern part of the Ramblas on Rambla de Santa Monica due to less merchants and a larger streetscape.

Senses are engaged through spatial control but are also engaged through smell, touch, and sight. The flower merchants on the street engage the sense of smell. As the wind moves back and forth on the Ramblas to the bay it carries the floral smell through out the Ramblas. As the train moves below the Ramblas it vibrates the street above slightly engaging the walker. Sight is constantly engaged through historical architecture, artists selling their work, people watching, and outdoor dining offering local cuisine.

In addition to navigating through the streets to take in all that is offered when walking theft is also a common occurrence that is warned of by locals. Often tourists can be seen clutching their purses or bags revealing their awareness of potential theft. This danger or risk is overcome by tourists that continue to experience the streets.

Each street along the Ramblas contains a clear identity. Merchants of similar goods hold outdoor stands and semi-permanent structures give identity to the particular street in which they reside. As the traveler walks south within the promenade from Rambla de Canaletes they first experience the Font de Canaletes and small booths selling excursions while people watching takes place where fixed seating is offered. Once arriving on the Rambla de Estudies the pet merchants display small animals for sale. Then entering Rambla de Sant Josep florists line both sides of the promenade creating a floral aroma that carries south to the bay as well as a sea of colors that fill the street. Arriving on Rambla de Caputxins outdoor dining is offered along the perimeter of the promenade with areas of artist booths dispalying their work. Arriving to Rambla de Santa Monica the street widens to offer an abundance of space. On the weekends the street fills with a temporary tents that house merchants selling jewelry and art. Each street offers a different type of good giving it identity.

Sec. 5.6 Urban Design

Many elements contribute to the success of the streets. The form of the buildings create options for the pedestrian to receive light during winter months or be shaded by the trees or building for shade. The texture of the pavers connects the successive streets giving continuity to the different streets. Facades vary creating a backdrop for the streets telling of the historical evolution of the streets and the past buildings that have defined sections of the streets.

Sec. 5.7 Summary

The Ramblas offers an identity that is world renowned through social, physical, and economic aspects for the pedestrian. These aspects can be appreciated by a range of cultures. This has lead to global attention. Pedestrian activity is given importance above all else as the promenade offers a safe enjoyable experience for walking. By understanding how streets can be successful in providing an enjoyable walking experience elements can be translated to accomplish aspects of what the Ramblas are today.

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