The Study of the Public Space

Degree in Architecture_University of Alicante (Spain)

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CREDITS

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Front and back cover pictures:
Piazza del Campo, Siena (Italy)
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CONTENTS

PREFACE

This publication compiles the Urban Planning 2 teaching material for the academic year 2013-2014. It includes the course´s syllabus, theoretical background and instructions for practical exercises.

Urban Planning 2 belongs to the Urban Planning and Land Management Department at the University of Alicante and is offered during the first semester of the third year of the Degree in Architecture.

The subject addresses a monographic programme on the study of the public space: its importance and relevance in the city, the various elements comprising it and the social, functional and perceptive possibilities it offers. This publication includes graphic documentation used as supporting material for the theoretical and practical lessons, as well as for the students' engagement with the course topics.

The methodology employed throughout the course combines the use of new technologies and the classical —still applicable— theories suggested by the most relevant experts in the field.

Alicante, February 2014

BUILDING AND URBAN DEVELOP-MENT DEPARTAMENT
Urban planning and Land Management Area

URBAN PLANNING 2 - 20524
Academic year 2013-2014

SUBJECT CONTEXT

Urban Planning 2 belongs to the Urban Planning and Land Management Area. The subject is offered during the first semester of the third year of the Bachelor Degree in Architecture, previous to Urban Planning 3. As a continuation to Urban Planning 1, Urban Planning 2 improves knowledge and provides strategies related to the urban public space.

SUBJECT OBJECTIVES / COMPETENCES

- Introduce the students to the analysis, study and design of urban public space and its use in relation to the city.
- Apply a specific work methodology that will foster reflection on diverse aspects related to the public space materialization.
- Familiarize students with techniques and concepts in the field of urbanism, highlighting its aesthetic and technical linkage.
- Promote interest and understanding of the city from a public space perspective.

CONTENT. BRIEF DESCRIPTION.

The Urban Planning 2 course focuses on the study of urban public space considering different perspectives. Diverse methods are used to provide a complete and complex approach to the meaning and qualities of the city's public open space.
Furthermore, the course offers design guidelines and tools to address public space intervention projects.

THEORETICAL AND PRACTICAL CONTENTS

I.- The analysis of public spaces:

- The city's public space. What makes it relevant?
- The elements of public space. What do they represent?
- The use of public space. What possibilities does it offer?
- The functionality of public space elements. What do they contribute to?
- The perception of public space. What makes public spaces attractive?

II. The public space project.
The proposed objectives for the practical exercise reflect the theoretical content of the course:

A. Identify the city's representative public spaces.

B. Analyze public spaces through methods and criteria identified in the specialized bibliography.

C. Learn how to elaborate discussion criteria and detect inherent qualities of relevant public spaces.

D. Understand which parameters, variables and criteria are most utilized in the study and design of the urban public space.

E. Define public space improvement strategies for the consolidated city.

F. Design attractive and successful public spaces.

LEARNING PLAN

Classroom activities include a diversity of design and analysis exercises elaborated in a team-based learning workshop. The exercises will be developed in three phases:

Phase 1. Review theoretical principles and explain and approach methodological guidelines.

Phase 2. Develop exercises through individual or group-based practical workshops.

Phase 3. Present conclusions, share experiences and discuss results.

1. TYPES OF ACTIVITIES

TEACHING ACTIVITY	METHODOLOGY	IN-CLASS TEACHING HOURS	DISTANCE-BASED HOURS
CARTOGRAPHY PRACTICAL EXERCISE-MAPS	Explain theoretical content and methodological guidelines by the faculty members. Develop practical exercises. Exchange and debate conclusions.	60	90
TOTAL		60	90

K   K

2. WEEKLY DEVELOPMENT OF ACTIVITIES

WEEK	IN-CLASS WORK DESCRIPTION	WEEK	IN-CLASS WORK DESCRIPTION
01	Introduce and present course. Develop of a subject-related exercise.	09	Theoretical presentation and practical exercise description. INTRODUCTION II. Participate in workshop activities.
02	Theoretical presentation. Describe and develop methodological guidelines and practical exercises. 01	10	Continue in-class workshop activities.
03	Theoretical presentation. Describe and develop methodological guidelines and practical exercises. 02	11	Continue in-class workshop activities.
04	Theoretical presentation. Describe and develop methodological guidelines and practical exercises. 03	12	Continue in-class workshop activities.
05	NO CLASS. REGIONAL PUBLIC HOLIDAY.	13	Continue in-class workshop activities.
06	Theoretical presentation. Describe and develop methodological guidelines and practical exercises. 03	14	Continue in-class workshop activities.
07	Theoretical presentation. Describe and develop methodological guidelines and practical exercises. 03	15	Reflect and debate results. Conclusions of end of course.
08	Develop methodological guidelines and practical exercises. Exchange and debate conclusions.		

EVALUATION

1. GENERAL EVALUATION

The students' progress is assessed continuously throughout the course.
Attendance is obligatory to all programmed classes (at least 80%).
Diversity of in-class activities are scored throughout the semester.

To pass the course, it is essential to hand in each exercise, as well as giving a public presentation of those required to do so. The final grade will be equivalent to the weighted average, according to the percentage rate of each individual exercise. A minimum punctuation (4 out of 10) for each section of the course is considered to obtain the above mentioned weighted average.
Academic year 2013-2014

2. EVALUATION TOOLS AND CRITERIA

TYPE	DESCRIPTION	CRITERIA	PERCENTAGE
CONTINUOUS EVALUATION	SECTION I - ANALYSIS	Resolve proposed exercises. Submit documentation and results.	35
CONTINUOUS EVALUATION	SECTION II - PROYECT	Resolve proposed exercises. Hand in project documentation.	40
CONTINUOUS EVALUATION	INDIVIDUAL ACTIVITIES	Develop proposal and present activities.	25
TOTAL			100

THEORETICAL CONTENT

01_What is a mental map?

This reflexion intends to make us realise how we are related to the TERRITORY and ultimately, to the PUBLIC SPACE.

Fig. 1: Paleolithic settlement map. Petroglyph in Bedolina, Val Camonica, Italy. F. Careri, 2003.

The image above corresponds to one of the first mental maps, showing a system of everyday routes and paths. This map shows the author´s PERCEPTION of the surrounding territory. It was made about 10,000 years ago and it is engraved in a rock in Bedolina, Val Camonica, Italy.

As we can see, this map represents a system of lines and connections that lead to places where different types of activities were held. The curved lines most likely represent slopes, path diversions, hydrographic forms, terrain accidents, etc. We can also appreciate scenes of human activities, animals and farmland crops.

This map is a representation of what a paleolithic man –the author- considers SIGNIFICANT routes and places of the known territory.

-SCALE- Equivalent to that of the city.

-EVERY DAY LIFE ROUTES – Well known and identified paths and routes.

-MODE OF TRAVEL/ TRANSPORTATION – By foot.

-SPEED OF TRAVEL – 5-8 km/hr.

Even today, we are capable of identifying our surrounding environment in a better or worst way, depending on the scale we are talking about.

For example, the HOUSE, or better called HOME, represents the centre of our universe. The proximity to all elements of the house and their human scale allows us to remember where everything is located. Every detail, for example, the wall colors or the window size are probably well identified by us as we have lived close to those elements for a certain amount of time.

The next level is the STREET, which represents the basis of our experience of cities. On this scale, we are able to remember where the garbage container is or how the trees project a shadow on the floor. As we walk down the street, we perceive the objects and things surrounding us because they are still quite close to our being.

The next level is the CITY. It is the urban level where almost everything is built and created through human effort and purpose. On this scale, we might know where the place of work is located and the route to get to a friend's house, but it would be impossible to know, for example, where every garbage container is.
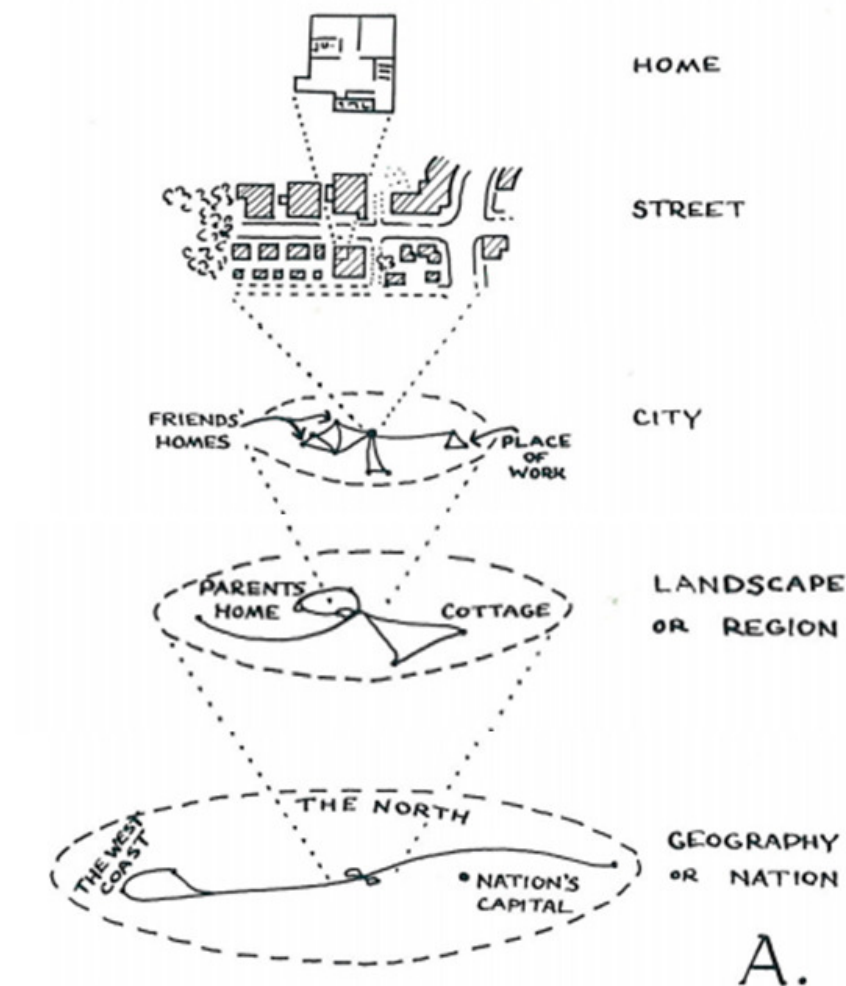
The next level is the REGION

Fig. 2: The different scales of the public space experience. E. Relph, 1980.

or LANDSCAPE. At this scale we might only be able to recognise where the edge of the city is, and some important and meaningful places, for example, the location of our parents' home in relation to the industrial park of the city.

The next and last level shown on the picture is the COUNTRY scale, from which we might be able to identify the north, the

west coast, etc.

At this scale it is impossible to identify detailed information, just because it is beyond our direct experience.

The structure of this image reflects both a change in scale from the largest to the smallest extent and an increasing in humanisation of space.

This structure of urban scales can be exemplified by how the cartographical information is shown in GOOGLE MAPS.

When we visualise a whole COUNTRY, the limits, the name and the general geometry are shown.
In the case of Mexico, the orographic systems and the Sierra Madre mountains, can be distinguished at this scale.

If we zoom in and approach the REGION scale, we are able to identify the different urban areas, the territorial boundaries of Mexico city and the co-nurbated area formed by the same city with its surrounding municipalities.

Zooming in even more, we visualize the CITY scale, where we can distinguish the most important axis and the great open spaces contained within the urban pattern.

Finally. the smallest scale available in GOOGLE MAPS, is that of the STREET where we have a more detailed view of what happens in a street or a neighborhood. Here we are able to distinguish for example, the volumes of buildings, lanes of trees, street widths, etc.

It is not until we are down to the street scale, when GOOGLE MAPS allows the option of a STREET VIEW image of the space.

What we can deduce from this is that the smaller and closer the scale is to us, the more detailed information we can get from our surrounding environment.

Fig. 3: From the city of Mexico to the street. Source: Google Earth.

Getting back to the city scale, the author Guy Debord[1] proposes a disjointed map of Paris.

On his map we can see that there are a series of clustered neighbourhoods and streets that are significant or relevant to the author.

However the routes that connect these clusters are replaced by red arrows in an effort to represent the itineraries' lack of interest.

Debord's map shows a desintegrated city map where only few neighborhoods are SIGNIFICANT to the city life, and whatever happens in between these neighborhoods is not relevant enough to be included in the map.

All this can be exemplified with touristic maps. When we visit a city, we try to see as many ICONIC portions of the city as possible, but most of the time, the road (path/route/itinerary) we walk or drive to go from one place to another does not provide valuable information to our experience, and therefore, it is not relevant to us and, thus, does not stay in our memory.
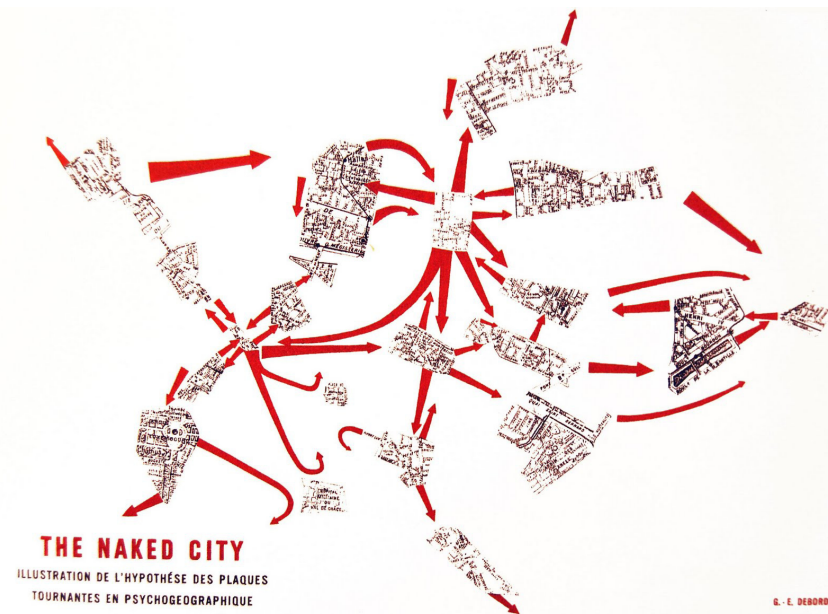

Fig. 4: Naked City
Psychogeographic map of Paris.
Guy Debord, 1957.

Fig. 5: New Babylon
Map of Paris and its surroundings
Constant, 1963.

1 Debord was part of the situationist movement. The movement distinguished important or meaningful city spaces in maps.
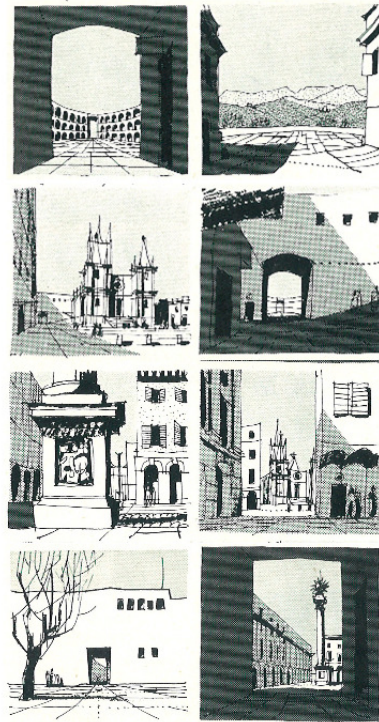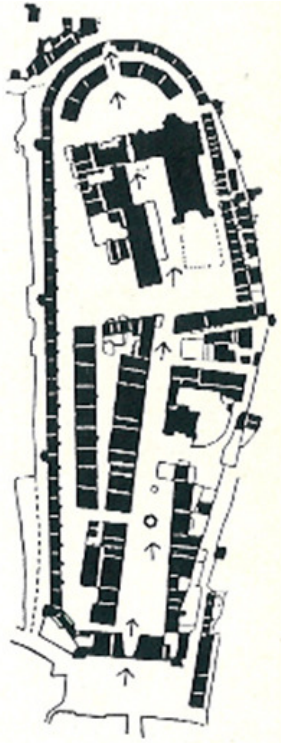
Fig. 6: Serial vision.
G. Cullen ,1974.

Let us imagine that the urban setting of the images above represents one of Debord's SIGNIFICANT neighborhoods. As we walk from outside to inside and longwise through this historic complex, we visualise a sequence of picture-like images. This is what Gordon Cullen calls "SERIAL VISION".

As we walk through the complex, we will most likely experience a pleasant sensation due to the fact that there are interesting volumes and shapes that project shadows, and these provide qualitative information to the place itself. There is a big possibility that these images will remain in our cognitive information.

The "good experience" of walking through this SIGNIFICANT public space happens because:

-IT HAS A CLOSE HUMAN SCALE
-THE SPACE IS TRAVELLED BY FOOT
-THERE IS A GOOD QUANTITY AND QUALITY OF THE VISUAL INFORMATION.

All these aspects are decisive on whether or not this space will remain in our memory.

If we go back to the CITY SCALE and analyse the NON-SIGNIFI-CANT public spaces in a mental map, we can take drawings such as the one shown in this page called "the progress of sickness" by Januz Deryng.

The author represents with black dots, just like cancer-like tumors of different sizes, the NON-SIGNIFICANT spaces as consequence of the insertion of the vehicle in the cities.

The spaces associated to the vehicular system (for example car park, wide roads, etc) are, to Deryng's eyes, the main reason for the proliferation of NON-SIGNIFICANT urban spaces.

If we were to get a closer look at the STREET SCALE of one of these NON-SIGNIFICANT public spaces, we would find that many, if not most, of the city spaces do not offer valuable visual information.

Le progrès de la maladie.

Fig. 7: The progress of the sickness in Paris
J. Deryng, 1964.

The images below show an example of a NON-SIGNIFI-CANT public space.

If we take the CULLEN's SE-RIAL VISION method to analy-se the road taken as example, we can see that the information is pretty much the same in the three images.

THAT OUR FIELD OF VISION CANNOT CAPTURE ENOUGH DETAIL OUT OF THEM.

-THE VEHICULAR SPEED TRAVEL (60KM/HR) DOES NOT ALLOW EYES TO CAP-TURE DETAILED INFORMA-TION OF WHAT HAPPENS, especially if the information is not relevant or interesting.

Fig. 8: Serial vision
The boulevard connecting Alicante and S. Vicente del Raspeig
Source: Google Street.

Some of the reasons behind this is:

-THE LACK OF QUALITY AND QUANTITY OF THE VISUAL INFORMATION.

-THE SPACES ARE SO OPEN

Unless the street is part of a daily basis route or there is a meaningful or exceptional oc-currence, the surrounding road elements would (most likely) not remain in our memory.

TO SUM UP

What is a mental map?

It is a two-dimensional personal interpretation of what happens in the three-dimensional space.
It is the diagram or drawing where the information stored in our memory is represented. The mental map shows what is relevant or interesting to us.

What does the content of a mental map depend on?

-On the scale of the space.
-On the frequency and knowledge of a certain place or route.
-On how well we know that space, or how familiar it is to us.
-On the travel mode choice.
-On the qualitative and quantitative content of the space.
-On the travel speed.
-On the personal meaning that we have attributed to the space, according to our culture, experience, criteria, observation level, etc...

What is the relevant information of a mental map?

-The delimitation of the space to analyse.
-The completeness of the personal cognitive information about the analysed space.
-The information related to the perception of the space: feelings (nervousness, anxiety, etc.) and sensations (smells, textures, etc.)

The information of a mental map is relevant to acknowledge how a space is perceived.

Fig.9: Source: El País, 30th May 2013
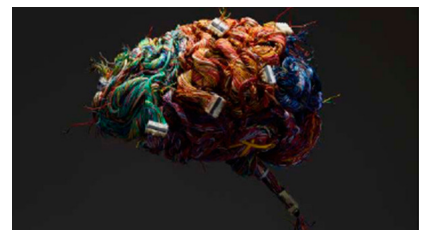
"The navigation through the space is based on the sequential activation of the hippocampus neurons..."
Source: El País, 30th May 2013

02_Which are the successful public spaces of the city?

Why is it important to identify the significant public spaces of the city?

The identification of the city's SIGNIFICANT public spaces will allow us to analyse the elements that ensure their success.

>What particular physical characteristics do successful public spaces have?
The physical characteristics of public spaces condition the way they are used. The spaces are used because they allow to do so.

>How are successful public spaces used?
The way public spaces are used is a key indicator of how people perceive those spaces.

>What kind of opportunities do public spaces offer?
The opportunities for developing one or more activities in successful public spaces depend on physical configurations and the mental image that users have of those spaces.

>Who uses successful public spaces?
The variety of user profiles in a public space is an indicator of how these spaces are perceived by people. For example, if there are families with young kids playing around it means that the space is perceived as safe, or if the public space is frequented by older people, the space is most likely perceived as accessible.

The picture shown on the left was taken at the market square of Alicante. It is a successful urban space, just because it is used by a diversity of public profiles. If we were to respond to the same four previous questions:

>What particular physical characteristics does the plaza have?
 -Its rectangular, has an open configuration and allows different activities to happen.
- The plaza possesses climate protection elements.
- It is a contained space, defined by commercial activity areas such as: bars, florist stands and the city's main market.
-Visually and physically accessible.

Fig. 10: Market square of Alicante.
Source: by the author

>How is the plaza used?
-As meeting / gathering point.
-It hosts events, artistic and political protests.
-It is used as an informal football court.
-It is used as a place where people can spend few hours just seeing other people passing by.

>Who uses the plaza?
-Kids, adults, families, the elderly, young people, the homeless, etc...

>What kind of opportunities does the space offer?
-The spatial configuration allows activities such as playing, gathering, passing by, sitting in open bar terraces, public seating, etc...

A SUCCESSFUL PUBLIC SPACE
⬍
A PUBLIC SPACE WHICH IS USED

The methodology -considered for this course- to identify successful public spaces is based in two main concepts: the relation between public spaces and the city's structure and the relation between public spaces and the users.
The first method is a carto-graphy-based study following Lynch's book "The Image of the City". This analysis will give us an overview of how the city works as a whole, identifying the elements relevant to the city's structure.
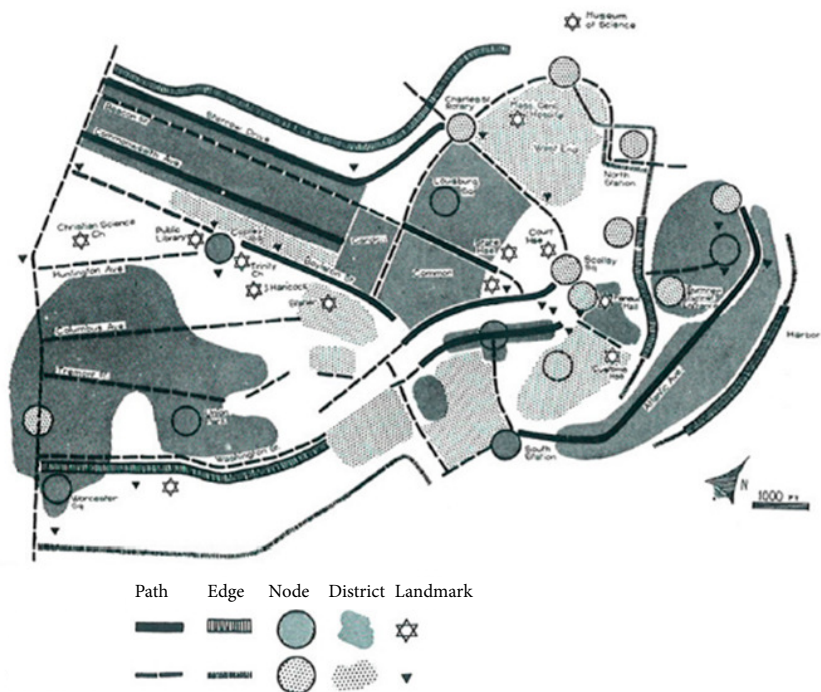
Fig. 18: *The visual form of Boston as seen in the field.*
K. Lynch, 1985.

The second method, is a perceptual study. The objective is to identify which places are relevant to citizens and users of the city. The method introduces the use of new technologies and public social networks as a public, open and up-to-date information source where is possible to know how people feel about public spaces.

Fig. 11: *Foursquare's logotype.*
Source: http://foursquare.com

03_The city at human scale : The elements of public space

Why do some open public spaces work and why others do not?
What physical factors contribute to the success of public spaces?

THE SOCIAL LIFE OF SMALL URBAN SPACES. By William H. White.

The mentioned video is a fragment of William H. Whyte's classic 1980 study of New York's plazas.
The aim of the study was to find out why some open public spaces work and why others do not.

This is an illustrative study because it is all based on observation and basic understanding of human behaviour.

Time-lapse filming, interviews and surveys were some of the tools used to detect which are the main attributes and qualities that a public space should have to provide for a warm livable environment.
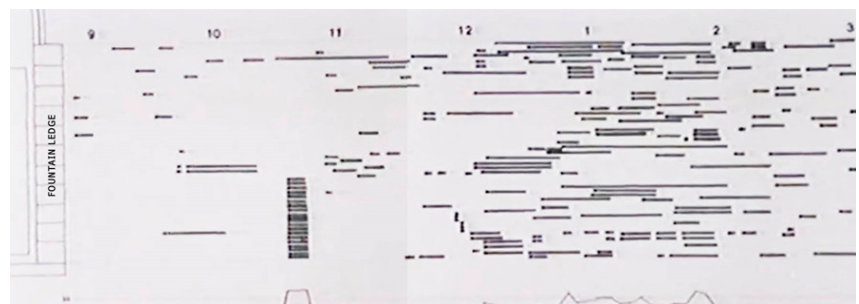
Fig. 12, 13: The social life of small urban spaces.
W. H. White, 1980.

04_The perception of public space: What makes it attractive?

The perception process starts with the person itself.

>A person receives stimulus -through the senses- of its surrounding environment and processes the information according to his/her personal background: culture, previous experiences related to the space, functional routines, etc...

What we perceive of a space is result of all the above mentioned processed information.

A unique and personal perceived reality of the space is owned, for example, if a square is perceived by one person as pleasant, or a sidewalk as accessible, or a street as safe, it does not mean that other person will have the same perception.

>The opportunities that a person finds on the space are consequence of the perceived reality. For example, sometimes we don't feel like sitting and staying at a plaza, not because its seats are uncomfortable, but because the perception we got from that space is that it is dirty or dark. It means that the opportunities that a place has to offer are not only a consequence of individual elements or objects, but a series of factors that influence our decision on whether or not we want to spend time in a space.

>At the end of the process, what all we must look for is that people perceive the opportunity to perform a diversity of actions / activities within public spaces.

Public space

A person

+

Physical Urban Environment

Perception

Opportunities

Action:
- Activities
- Movement in space
- Frecuency and leght of stay
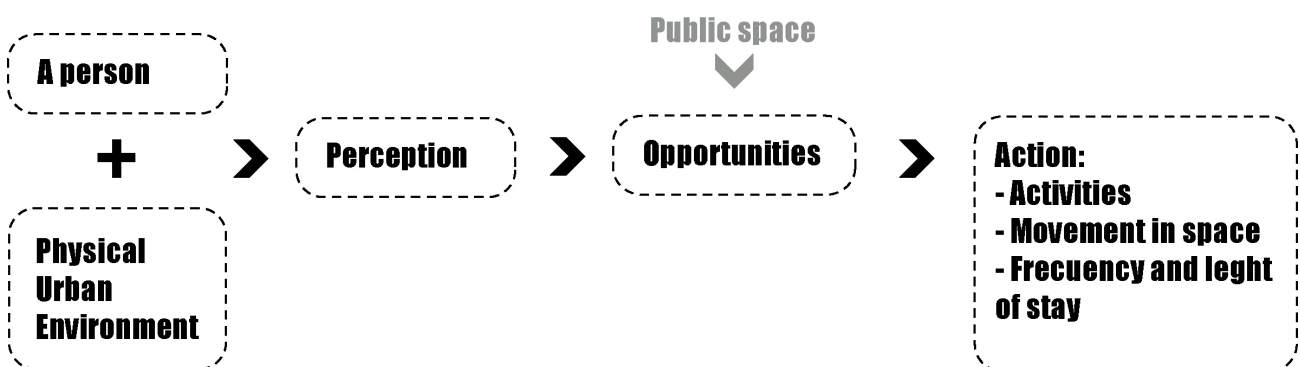
"If a person perceives a space as pleasant, he/she will perform action(s) on it"

Fig. 14: Source: by the author

HUMAN MOBILITY, SCALE AND SENSES.

To understand how the perception works, as a starting point we must understand how humans are capable to interact with their environment. We need to consider the biological capacity to develop certain activities, behave and communicate with and within the built environment.

From urban spaces, what is mostly perceived largely depends on:

-WHAT OUR FIELD OF VISION IS CAPABLE TO CAPTURE
- THE PROJECTED SCALE OF BUILDINGS OR CITY OBJECTS (HUMAN SCALE OR CAR SCALE)
- THE TRAVEL SPEED

While our feet can walk or run forward with ease, they move backwards or sideways with great difficulty. Our senses have also developed to allow slow, forward movement on largely horizontal surfaces.

Walking speed: 5km/hr
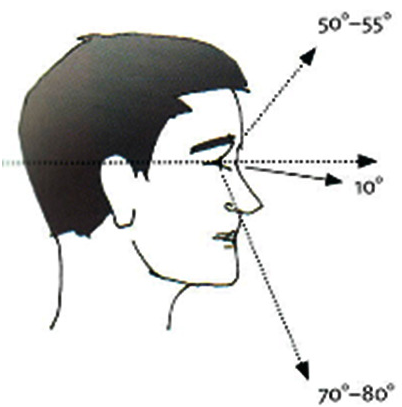
Fig. 15: Cities for People J. Gehl, 2010.

Edward T. Hall recognises on his book *The Hidden Dimension* that the sensory development is closely tied to evolutionary history and can be simply classified into the DISTANT senses (seeing, hearing and smelling) and the CLOSE senses (feeling and tasting) which are related to the skin and muscles and thus the ability to feel cold, heat and pain as well as texture and shape.

Sight is the most highly developed of our senses. Our sense of sight has evolved to enable us to walk on a horizontal plane.
We do not see much above us and only slightly more when we look down in order to avoid obstacles in our path. In addition, we typically bow our heads 10 degrees while we are walking.

Fig. 16: Cities for People
J. Gehl, 2010.

Appreciate details, communication is intensified

Social field vision threshold: see people moving

Jan Gehl, author of the book *Cities for People points out* the following considerations regarding social interaction:

SOCIAL FIELD OF VISION: HORIZONTAL

>Between 0-7 metres, all of the senses can be used, all details experienced and the most intense feelings exchanged. Conversations and close communication is possible. The shorter the distance, the more detailed and articulated the conversation can be.

>At a distance of about 22-25 m, we can accurately read facial expressions and dominant emotions. We can tell if the person is happy, sad, excited or angry. This distance is relevant to the activity of "seeing people passing by".

>Between 50-70 m we can recognise a person. Hair color and characteristic body language can also be read from this distance.

>At a distance of 100 m, we can see movement and body language in broad outline.

The limit of the social field of vision is 100m.

The 100 m distances enables onlookers to stand in one corner and get a general view of what is going on in the square. With few paces into the square and at 60- 70 metres they can begin to recognise people and thus see who else is there.

SOCIAL FIELD OF VISION: VERTICAL

The whole account of the horizontal sensory apparatus is key to how we experience space, for example, how much of buildings pedestrians experience

when walking along streets.

As humans, the higher up, the more difficult it is to see. We have to move further and further back to look up, distance becomes greater and greater and what we see and experience diminishes.

Low buildings are frequently part of our natural field of vision, but if we walk next to a tall building, from certain height, we simply do not perceive it.

The impact of the experience of low-rise and tall buildings in cities is quite different. In general, the upper floors of tall buildings can only be seen at a distance and never close up in the city scale.

Communication from tall buildings to their surroundings is correspondingly excellent from the two lower stories and feasible from the third, fourth and fifth floors. Contact with the city quickly dissipates above the fifth floor, with the contact interface changing to clouds and airplanes.
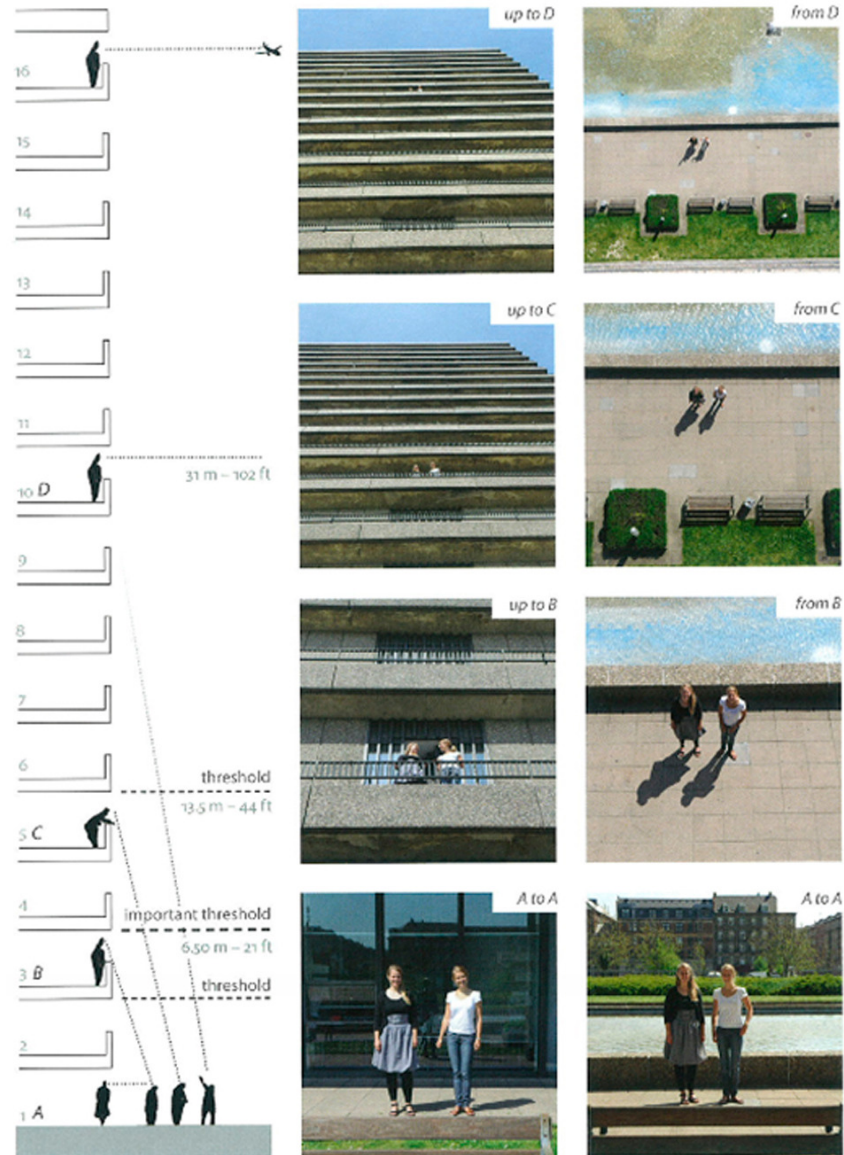
Fig. 17: Cities for People
J. Gehl, 2010.

THE EDGE

The edge is the space where the building and the city meet.

The edge is where people stay for a while, they stop/stand at places along the edges. When we stand by the edge, we are not in the way of pedestrian traffic and we can stay rather quietly and discreetly.

The preference to stay at the edges of a space is closely tied to our senses and social contact norms.

The "edge effect" -as Jan Gehl calls it- is more significant when facades have details and elements that allow people passing by to interact with them.

Local climate is often better at the edges of city space because the person is protected by the façade elements to some degree.

Edge provides a number of important benefits:

- SPACE IN FRONT TO WATCH EVERYTHING.
- BACK COVERED SO THAT NO SURPRISES WILL COME FROM BEHIND.
- GOOD PHYSICAL AND PSYCHOLOGICAL SUPPORT. WE CAN STAND IN NICHES AND REST AND LEAN UP AGAINST A WALL.
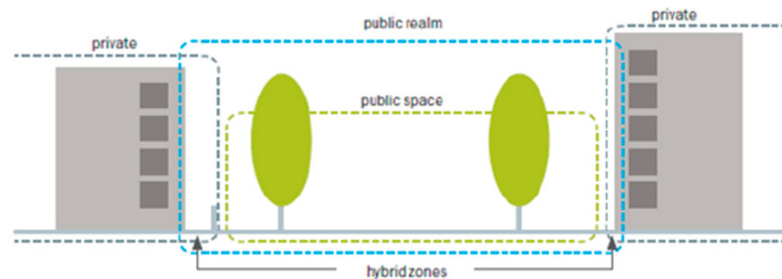
Fig. 18: M.V.T.H. Glaser, 2012.

Chatting by   Entering and leaving   Walking alongside

Standing alongside   Taking a break by   Standing in doorways

Shopping next to   Interacting with   Looking at displays with
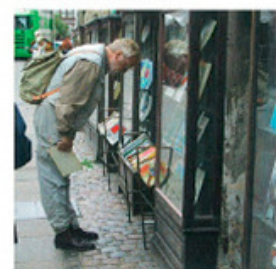
Sitting on   Sitting next to   Looking in and out of

Fig. 19: Cities for People
J Gehl, 2010.

The edge (container)

a."The edge effect". Spaces with magnetic attraction for people.   **Qualitative**

It offers a variety of staying possibilities. It is the best place to see the activities happening in the public space.

b. Edges that define space   **Qualitative**

Edges make a vital contribution to spatial experience and to the awareness of individual space as a place. In a public space surrounded by buildings, ground floor edges intensify the staying opportunities since they are the best place to look at the rest of the space.

c. Edges as an exchange zone   **Qualitative**

The edge along ground floors is also a zone in which doors and exchange points between inside and outside are located. Activities inside the buildings can move out into the common space of the city.

d. Opportunities to stay, sit and wait   **Qualitative**

The edge as a discrete place to stay at.

e. The edge as prime location for longer stays on benches or at sidewalk cafes   **Qualitative**

f. Protected-back feeling and senses towards the front   **Qualitative**

Our frontal sensory apparatus can comfortably master the situation while our backs are protected.

g. Climate protection elements   **Qualitative**

Fig. 20: Compilation of indicators by the author, based on theories from Whyte and Gehl.
Source: by the author.

Fig. 21: Particularities of the city edges. "Cities for People" J. Gehl.

Fig. 22: Rome, Italy
Source: by the author.

OPPORTUNITIES TO SEE

Visual contact between outside and inside adds opportunities for experience. A wide spectrum of visual experience while being in public spaces must be ensured without compromising the private domain.

Consider lines of vision between inside and outside to provide interesting visual exchange and stimulate activities to happen at the border space.

Quality of visual information must be taken into account because it is determinant in how long a person stays out in the public space.

Fig. 23: Compilation of indicators by author, based on theories from Whyte and Gehl.
Source: by the author.
Fig. 24: Visual exchange.
J. Gehl, 2010.

Fig. 25: Siena, Italy
Fig.26: Rome, Italy
Source: by the author.

Opportunities to see

a. Reasonable visibility distances — Quantitative

At 100 m = people's movement can be perceived
At 25 m = Facial expression and emotions can be read. At max 25 m, it is possible to comfortably watch other people passing by.

b. Unhindered sightlines — Qualitative

People would not be attracted to the space if there is not enough visibility to it. Plazas at higher gradient are visually more accessible from the street level.

c. Visually-appealing information within the field of vision — Qualitative

Consider human's sense of sight capabilities:
-Maximum 50 - 50° up, from the horizontal plane.
- Natural walking view angle 10° down from the horizontal plane.
- Maximum 70- 80° down, from the horizontal plane.
The first two building floors allow for vertical / horizontal social communication.
At the 3rd. and 4th building floors, the communication can be " possible":
From the 5th floor up there is no communication with the street level.
Buildings with 4-5 levels take part of the pedestrian's field of vision. Interaction between building façades and the street plane

d. Good lighting to "see" — Qualitative

Light quality and quantity influences the sense of feeling safe and oriented. Good lighting enhances the visual quality of public spaces at night.

e. Ground floor activity — Quantitative

Minimum 50% of ground floor façade uses reserved to commercial or services use. Excluded uses: for example, bank and loan offices, travel agencies or other facades with no activities inside. Included uses: libraries, museums, art galleries or other cultural activities. The transparency of facades must allow relationship between interior and exterior spaces.

OPPORTUNITIES TO SIT

Even when there are many city elements that do not stimulate people to stay and sit, the human being is so adaptable that we can manage to sit and rest for a while in almost any place.

The comfort of seating influences the choice of seating and length of stay. A sufficient and varied selection of seating in the city can offer a wide range of opportunities with a combination of primary and secundary seating.

Primary seating consists of actual furniture with backs and arms: city benches, freestanding chairs and café chairs.

In all cases the backs and arms of the seating will only contribute to comfort if people want to stay for a while or for the senior who need support while seated and when sitting and getting up again.

The seating design also impacts on comfort, of course, as do the materials, insulation and water-repellent properties of the seats.

We all appreciate a bench to rest when we are walking up in a long sloped road

A flexible configuration of seating as part of the pedestrian landscape invigorates social interaction.

Fig. 27: Naples, Italy
Fig. 28, 29: Mexico DF
Source: by the author.

Fig. 30, 31, 32: Cities for people.
J. Gehl, 2010.

Secondary seating options are often needed, places where people can informally and spontaneously sit to rest or look around.

A great variety of objects can be used to sit on: pedestals, steps, stones, bollards, monuments, fountains or the city floor itself. On days when seating is in high demand, secondary seating can make a valuable contribution to the city's total seating selection.

People want to sit near other people, but not too close. The best places to sit almost always combine many advantages and few disadvantages.

When local climate, placement, protection and view join forces, the seating place provides meaningful and pleasant experiences.

Fig. 34: Compilation of indicators by author, based on theories from Whyte and Gehl.
Source: by the author.

Opportunities to sit

a. Primary and secondary seating zones — Qualitative

Primary seating: furniture with back and arms. Secondary seating: elements that can be used for short stays: pedestals, steps, stones, bollards, monuments, flower pots, etc. The use of both types of seating enhances the staying opportunities.

b. Take advantage of the views, climate and people — Qualitative

c. Good quality seating zones — Qualitative

The general requirements for a good place to sit are: a pleasant microclimate, good placement preferably at the edge of the space with your back covered and facing spaces with activity, a good view, an appropriately low noise level to allow conversation and no pollution.

d. Seats to rest — Qualitative

The comfort of seating influences the choice of seating and length of stay. The more comfortable the seating is, the longer the stays.

e. Flexible seating: socially comfortable — Qualitative

Seating that allows to sit in front of someone, back to back, in groups, etc. Moveable chairs provide flexibility to arrange the social space needed for specific situations.

f. Adequate seating dimensions — Quantitative

Seat height: elements between 30- 90 cm. Optimum 43cm.
Seat depth: minimum 75- 90 cm without back to allow two people back to back. Minimum 40 cm with back.

g. Quantity of seating space — Quantitative

Minimum 5% of the total seating with back rest.
Minimum 10% of the total plaza area should be "sittable".

Fig. 35: Bologna, Italy
Source: by the author.

TRAFFIC AND ACCIDENT PROTECTION

In recent decades, ideas about traffic reorganisation and traffic integration have spread more widely around the world.

The latest addition to the category of types of streets is shared streets, which function remarkably well if they are interpreted as streets on which pedestrians have a clear first priority.

Vehicular traffic and accidents protection

a. Speed limit due to vehicular traffic restriction — Qualitative

Automobile, bicycle and pedestrian traffic integration as a measure to reduce vehicular traffic speed. Vehicular access restriction and low speed policies.

b. Pedestrian priority — Qualitative

c. Bicycle lanes and infrastructure — Qualitative

d. Avoid obstacles that interfere with continuous pedestrian flows — Qualitative

Street objects must not interfere with pedestrian natural trajectories. Avoid unnecessary red lights that over control pedestrian natural movement and flow.

Fig. 36: Compilation of indicators by author, based on theories from Whyte and Gehl. Source: by the author.

Fig. 37: Seville, Spain
Source: by the author.

Fig. 38, 39, 40: Cities for People
J. Gehl, 2010.

One-way streets: greater traffic capacity and more speed, but a noisy and aggressive traffic environment follow (New York City).

...or two-way streets with two lanes for cars, bicycle paths, trees and a median strip: a more attractive, safer street (redesigned city street in Copenhagen).

ACTIVITIES

Stationary activities can be described very simply on a scale according to the degree of necessity.

First, we find the NECESSARY activities that are not particularly dependent on city quality: street trade, cleaning and maintenance. Goods are carried back and forth, and people wait patiently at intersections and bus stops. These activities are an integrated, non optional part of everyday life.

Second, the OPTIONAL activities are recreational staying activities, including the many stays on benches and café chairs so that people can survey the city and follow city life. Here the quality of the situation, weather and site are decisive.

And third, the SOCIAL activities include all types of contact between people and take place everywhere where people goes in the city.

The connection between outdoor quality and outdoor activities is represented in the graphic. An increase in outdoor quality gives a boost to optional activities in particular. The increase in activity level then increase a substantial increase of social activities.

City quality is so crucial for optional activities that the extent of staying activities can often be used as a measuring stick for the quality of the city as well of its space. Many pedestrians in a city are not necessarily an indication of good city quality –many people walking around can often be a sign of insufficient transit options or long distances between the various functions of the city.
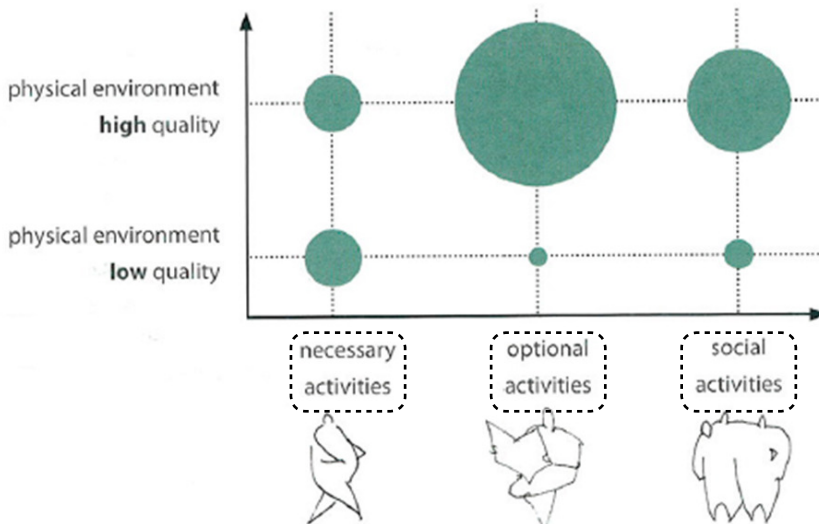
Fig. 41: Cities for People
J. Gehl, 2010.

SUCCESSFUL PUBLIC SPA-
CES

OPTIONAL + SOCIAL ACTIVI-TIES

- SOCIAL ACTIVITIES:
> Find other people
> See other people
> Listen to other people

- TRIANGULATION

Triangulation happens when some kind of external stimulus (a person, an object, an action, etc.) causes social interaction between two or more strangers. The interaction could simply consists in a comment about a street performance or a sight/ smile exchange while waiting in line at the food kiosk.

- FOOD

Food vendors are a good incentive for people to stay at certain plazas. William Whyte explains that food attracts people that attracts people. He also noticed that grouped tables, located next to eachother, are more successful than those spread out over the space.

The author also recommends that the 20% of the total space area should promote coffee stands and food businesses and that kiosks must not exceed 14m2.

Fig. 43: Cities for People
J. Gehl, 2010.
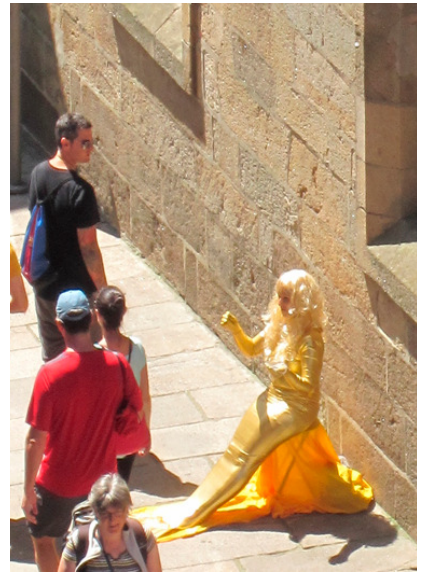
Fig. 42: Siena, Italy
Fig. 44: Santiago de Compostela, Spain
Source: by the author.

- CONFORT

The more comfort provided by the space, the more staying activities will happen.

OPPORTUNITIES TO ENJOY THE POSITIVE ASPECTS OF CLIMATE
· Sun/shade
· Heat/coolness
· Breeze

POSITIVE SENSORY EXPERIENCES
· Good design and detailing
· Good materials
· Fine views
· Trees, plants, water

PROTECTION AGAINST UNPLEASANT SENSORY EXPERIENCES
· Wind
· Rain/snow
· Cold/heat
· Pollution
· Dust, noise, glare

OPPORTUNITES FOR PLAY AND EXERCISE
· Invitations for creativity, physical activity, exercise and play
· By day and night
· In summer and winter

Fig. 45: Santiago de Compostela, Spain
Source: by the author.

Fig. 46,47: Cities for People
J. Gehl, 2010.

ACCESSIBILITY: Physical and
psychological barriers

Fig. 48: Rome, Italy
Fig. 49: Siena, Italy
Fig. 50: Naples, Italy
Fig. 51, 52: Mexico DF
Fig. 53: Bolonga, Italy
Fig. 54: Mexico DF
Source: by the author.

05_The elements of public space: What they represent

We will first approach the public space's physical environment matters to then, be able to understand how and what is perceived from it.

- THE FIGURE /GROUND PLAN of public spaces.

The idea of solid/void is closely related to the idea of figure/ground.

The map shown below, better known as "the Nolli map", is a 1748 figure/ground plan of Rome where the representation is quite particular.

The empty / white space represents, not only and strictly the open-public spaces as such, but also those built spaces that are accessible to the public on a regular basis.

Churches and all community accessible building interior squares are included on the plan.

Nolli considers important to include main floor building spaces of the built environment as they are accessible to the public as well.
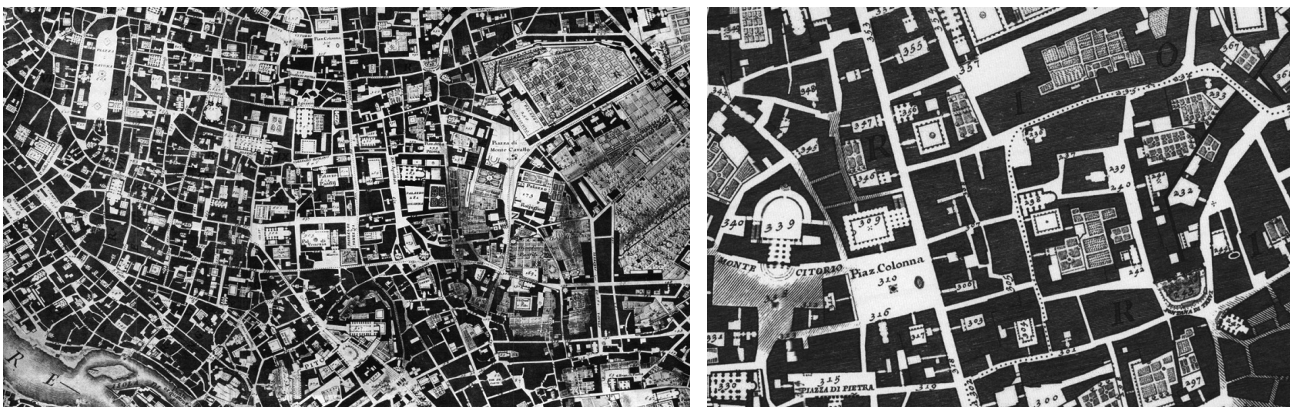
Fig. 55, 56: Nolli map of Rome.
Source: http://nolli.voregon.edu/preface.html

The author of Learning from Las Vegas (seventies), Robert Venturi, creates a Nolli map of the city's most important street: Las Vegas Strip

If we compare it to the original Nolli map, the churches would be represented by hotel entrances where grand casinos are.

The figure/ground map from Venturi highlights the difference in proportions between the public spaces (gray) as such, and the spaces where the relational and the lengthy stay spaces are (white).

This provides an interesting thought about public space definition.

The purpose of this course is only to analyse the urban space that, limited by architecture, can be considered as public space. In other words, the spaces open to all people.

ONE MILE

2. Map of Las Vegas Strip
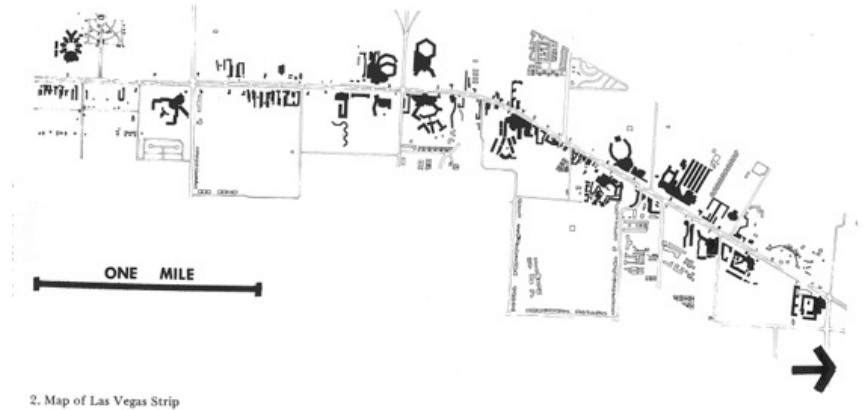
Fig. 57, 58: Las Vegas strip in a "Nolli map" graphic representation.
R. Venturi, 1972.

URBAN PLANNING STRATE-GIES AND THEIR INFLUEN-CE ON PUBLIC SPACE

The built volume is important not only to study if the space is perceived as large or small, limited, congested, etc., but by its height and width ratio.

How does the building height and volume affect the perception of public spaces?

Jan Gehl compares the city from 1900 to the current developments.

New residential areas are sparsely populated. A century ago seven times more people lived in the same amount of space.

On historic downtown areas, a larger people affluence produces livelier public spaces which consequently invites more and more people to use them. [William Whyte: People are attracted by other people]

Therefore, high building densities encourage the existence of successful public spaces.
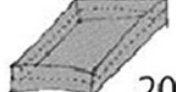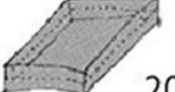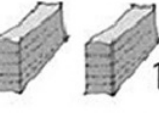
	1900 Old city areas	2000 New city ares (high density)	2000 New city ares (low density)	2000 New city areas (suburbs)
Average size of household	4 people	1.8 people	2 people	2.2 people
Average dwelling area per resident m²/sq. ft.	10/110	60/650	60/650	60/650
Floor to plot ratio	200%	200%	25%	20%
Number of dwellings per hectare	475	155	21	8
Number of residents per hectare	2,000 persons	280 persons	42 persons	17 persons

Fig. 59: Cities for People
J. Gehl, 2010.

RELATION BETWEEN STRATEGIC POINTS OF INTEREST AND ATTRACTIVE ACTIVITY LOCATION

Public space and its relation to the city. Is the public space location within the city relevant to its success?

It is not only important that public spaces are visited by a certain amount of people that live and work nearby, but also, the

therefore, attractive activities.

But what happens when the commercial activity closes up? Is it enough to provide attractive main floor building uses surrounding public spaces, in order to guarantee their success?

Other examples would be: the seafront promenades, boardwalks or *paseos* and the Santa Bárbara Castle view framed by the city's architecture.

Fig. 61, 62: Benidorm, Spain
Fig. 63: Alicante, Spain
Source: by the author.

Fig. 60: Avenida Maisonnave. Alicante. Source: Google Earth.

location of the space and the building uses surrounding it.

An example of this is Maisonnave avenue, in Alicante.

We can suggest that it is a successful public space because of two conditions:

1_It possesses attractive building uses at both ends of the street.

2_The street has a good amount of commercial building uses,

Other attracting element different than commercial: attractive landscape.

- Enjoy views of natural surroundings.

- A viewpoint from where to look over the city.

These examples improve the walking route quality and experience, and attract people with the possibility to become successful public spaces.
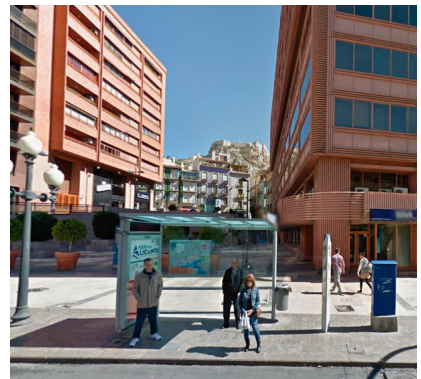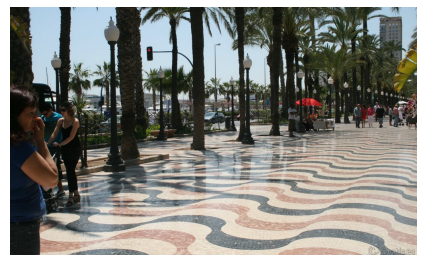
44

QUANTITY vs QUALITY

Public space scale analysis criteria.

Up to now, we have reviewed the aspects that affect public spaces but that are not directly related to our professional intervention. We have addressed the overall experience of the city design. But, what happens at the street , *plaza* or *paseo* scale?

>On which criteria should we base the public space success evaluation? Quantity vs Quality.

>Does the quantity influence the quality?

>If we provide more quantity of pedestrian public spaces, does it mean we will have a better city quality?

Jan Gehl observed in Copenhague that the more pedestrian priority city surface there was, the more new activities were developed into that space and therefore, the more it was used. The slide is showing Gehl's study on public spaces that have increased in both quantity and quality.

An example of this could be Santa Pola in Alicante, Spain.

A new boulevard has been built next to the port. Even when population has not increased much, the new space has been adopted by the city inhabitants as a gathering space, without undermining the rest of the existing public spaces.

> The increase of pedestrian surface increments the quantity of activities and therefore, the public space use

Fig. 64: Life between buildings. J. Gehl, 2006.
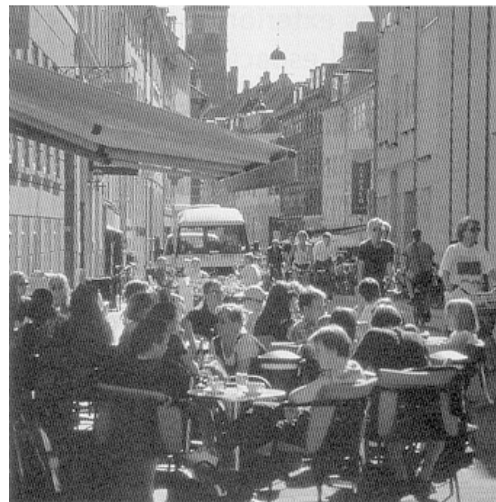
A cada mejora de la calidad en Copenhague le ha seguido sin tardanza un aumento en el uso de los espacios públicos. Las mejoras han hecho sitio, literalmente, a una gama mucho más amplia de actividades. Aunque la población de la ciudad no ha aumentado, sí lo ha hecho el interés en usar los espacios públicos de modo pasivo y activo.

1968
zona peatonal: 20.500 m²
12,4 m² por actividad

1986
zona peatonal: 55.000 m²
14,2 m² por actividad

1995
zona peatonal: 71.000 m²
13,9 m² por actividad

VEHICULAR TRAFFIC vs PE-
DESTRIAN TRAFFIC

>On which criteria should we
base the public space success
evaluation? Vehicular traffic vs
pedestrian traffic.

The more pedestrian traffic
there is, the better quality of
experience the public space is
able to offer.

Minimising, or even avoiding,
vehicular traffic, would (most
likely) generate better quality
of public spaces.
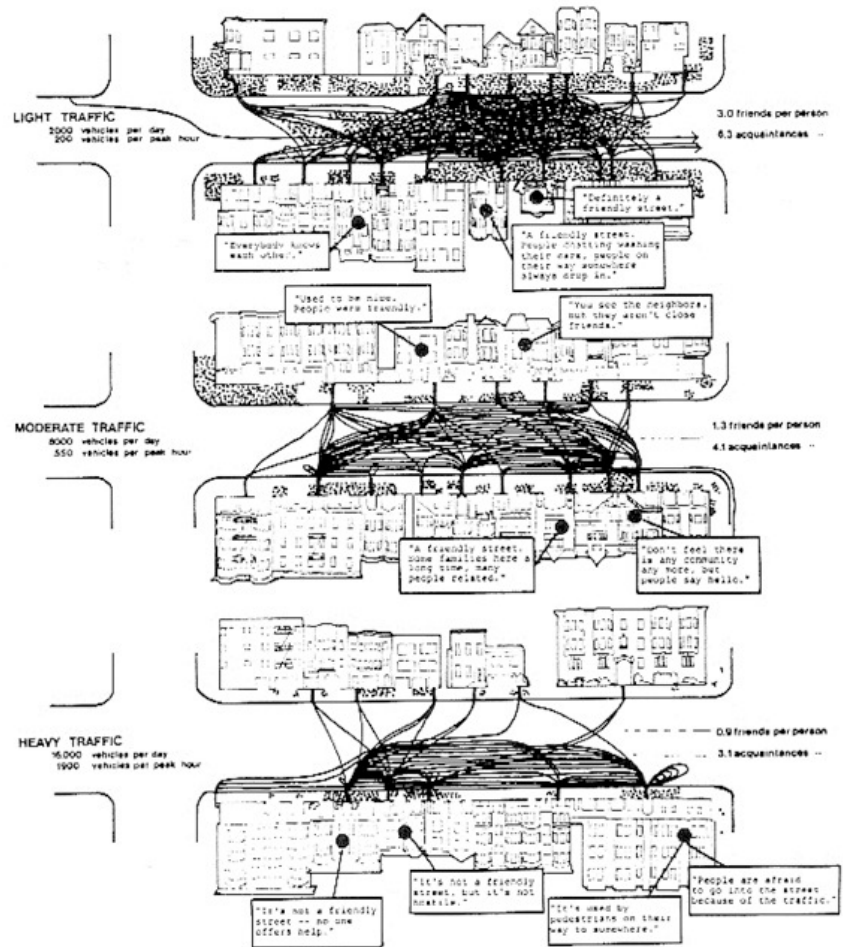
*65: Record of public space interior-
exterior activities.
D. Appleyard, M. Lintell, 1972.*

*Fig. 66: Calle San Francisco. Alicante.
Source: by the author.*

HUMAN SCALE

Indicator that analises how the physical factors affect the success of public space.

If we compare the two images on the right, we can see that the streets are lived in a very different way because they respond to two different scales.
The first street case (Fig. 63L) can be perceived at the human dimension. At walking speed, we are able to appreciate details and all the space remains contained in our field of vision, therefore, the whole scene takes part of our experience.

**Moreover, observe the vertical lines of the facades that allow to have visual pauses along the way (63L).

Fig. 67: Cities for People
J. Gehl, 2010.

The opposite happens on the second street case (Fig 63R) where the buildings are so big and undetailed that our field of vision cannot contain the overall shape. The building façade has no detail and therefore does not provide an opportunity of interaction between the pedestrian and the space.

The horizontal proportion of the building façade fools our perception into feeling that the road is much longer than it really is. No visual information is provided to the pedestrian, therefore, the walking experience on this street is boring.

The plaza/paseo (content)

a. Dimensions   Quantitative

The longest distance must be less than 100m. Activities occurring within the space can be seen from any other point of the space.

b. Small spaces within the space   Quantitative

Squares often approach 40x80m in size. People can take in the entire scene, seeing the space itself and the faces of other people when they walk through the space.

Fig. 68: Compilation of indicators by author,
based on theories from Whyte and Gehl.
Source: by the author.

Using small bushes and umbrellas, this café is trying to create a useful small scale in a much too large city space (St. Pölten, Austria).

Middle left and right: when all dimensions are too large, it is difficult and often impossible to get the important small scale to function afterwards (Eurolille, Lille, France).

Fig. 69: Cities for People
J. Gehl, 2010.

On the first image to the left, the terrace umbrellas and the vegetation try to generate a human-scaled space within a bigger plaza space.

The images below show the scale of the public space elements in comparison to the anthropomorphic scale. There is no defined limit to the field of view, the space is too wide and open, so people are most likely to feel tiny and lost within the huge space.

J. Gehl notes that historical city streets usually are 3,5,8 or 10 m wide to allow a circulation flow between 2400 to 7800 people per hour. Plazas 40 x 80 m size offer the possibility to visually cover the entire sceen and appreciate people's faces while developing any activity in the plaza space.

The size of the spaces is a crucial factor for wellbeing and for the function of the space as a framework for human activities.

In the Tuscan town of Siena, the main square, Piazza del Campo,

Fig. 70: Piazza del Campo. Siena.
Source: Google Earth.

is a large space. It is longer on the Town Hall side, 135 metres and 90 metres on the other dimension. A row of bollards just inside the perimeter creates a sub-space at about 100 metres distance of experience. The middle of the square, which is sunken, provides a perfect view and a space for activities.

Piazza del Campo in Siena demonstrates that large spaces can also have a human dimension, provided they are carefully designed.

Façade details, inventory and equipment also provide support points for staying in the edge zones of public space.

Bollards at the Piazza Del Campo in Siena, are good example of the support function for city life. A good deal of all the activities in the Campo take place near, around or leaning on one of these bollards. On a good day in Siena it is impossible to find a bollard that has not already been claimed for support. If all the bollards of the plaza were suddenly removed, a great deal of activities happening at this public space would disappear and thus, the activity level of the entire plaza would drastically drop down.

The picture shown was taken from Google Earth –dated on a mid summer afternoon-.

The edge (container)

a."The edge effect". Spaces with magnetic attraction for people. — Qualitative

It offers a variety of staying possibilities. It is the best place to see the activities happening in the public space.

b. Edges that define space — Qualitative

Edges make a vital contribution to spatial experience and to the awareness of individual space as a place. In a public space surrounded by buildings, ground floor edges intensify the staying opportunities since they are the best place to look at the rest of the space.

c. Edges as an exchange zone — Qualitative

The edge along ground floors is also a zone in which doors and exchange points between inside and outside are located. Activities inside the buildings can move out into the common space of the city.

d. Opportunities to stay, sit and wait — Qualitative

The edge as a discrete place to stay at.

e. The edge as prime location for longer stays on benches or at sidewalk cafes — Qualitative

f. Protected-back feeling and senses towards the front — Qualitative

Our frontal sensory apparatus can comfortably master the situation while our backs are protected.

g. Climate protection elements — Qualitative

Fig. 71: Compilation of indicators by author, based on theories from Whyte and Gehl.
Source: by the author.

People walk by the edge and stay under the building shade.

This is how borders or "public space edges" influence our way of interacting the city.

Since public spaces' "edges" have the quality of providing a perceived micro-climate, even when there is no direct shade on the edge's area, people walks along the edge and feels protected.

GOOD QUALITY WALKING OPPORTUNITIES

What characteristics do the good quality walking routes have?

The Marques de Campo av. in Denia, Spain (Fig. 68) has a space dedicated to pedestrian circulation with well defined functional strips:

1_Building-related strip (0.5 – 07 m) that allows people to stop by and see through the commercial display, open a door, get in and get out of buildings, etc.

2_Circulation-related strip (min. 3 m)

3_Parking-related strip that offers protection to pedestrians from the opening and closing of car doors, and supports other functional street needs such as: lighting, vegetation, shading structures, waste collection, primary seating, etc.
Shadows from the parking-related strip are projected over the walking strip.

The street must be accessible to all and allow equity access to public spaces.

The stairs can be perceived as barriers by impaired, handicaped, aged and very young people. Most of the times, stairs could be avoided.

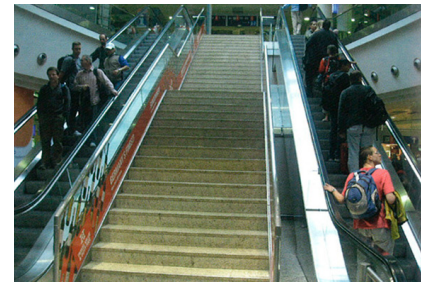People's natural choice would be to go up the electic stairs or take the shorter route, or... etc.

Fig. 73: Cities for People
J. Gehl, 2010.

As the image below shows, most of the times people prefer to walk through a longer-provisional ramp rather than a shorter flight of stairs.

Fig. 74: Cities for People
J. Gehl, 2010.

Fig. 72: Marqués de Campo Avenue
Denia, Spain
Source: Clara García Mayor

Few examples of good quality walking opportunities

The Vitoria (Spain) historic downtown is located on a promontory. Mobile ramps were designed and built to provide access to the top of the hill where the main square is.

People's natural choice is to go up the hills taking the mobile ramps.
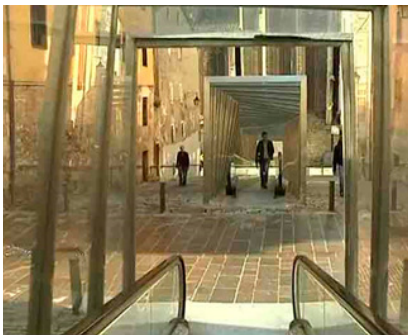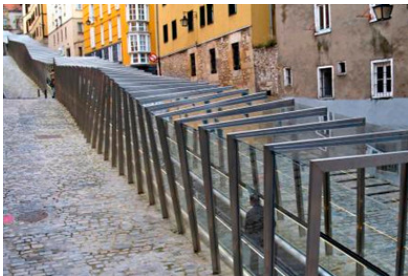
An elevator was designed to provide access from the train station to the historic area of Teruel.

The examples shown on the pictures below provide alternatives to access different street levels of the city.

The historic downtown can be accessed from the train station in a lift, however the plaza is always empty because the space does not offer any opportunity for staying activities.

As noted by Gehl "nothing happens, because nothing happens, because nothing happens".

Fig. 76: Óvalo Promenade. Teruel.
Source: http://b720.com

Fig. 75: Mobile ramp. Vitoria.
Source: http://lostonsite.com

The pictures below (Fig 73, 74) show example of how streets should NOT look like.

Fig. 77, 78: Orihuela Costa, Spain
Source: Clara García Mayor

Physical qualities that provide interesting walking experiences.

The transparency, permeability and details of building façades provide visual information to the people walking by. Pedestrians have visual access to almost everything inside the private space.

Humans are curious by nature and our sight is dragged into open spaces.

Fig. 79: Cities for People
J. Gehl, 2010.

The route length: we always try to take the shortest way.

If the walking route is not direct, maybe a detour would not matter if there are interesting things to see or experience on the way.

Fig. 80: Cities for People
J. Gehl, 2010.

The circulation priority must be established.

The small picture on the left shows a clear car priority intersection. A pedestrian will naturally stop when walking by the intersection.

The small picture on the right shows a pedestrian priority intersection. The car driver will naturally stop and drive up and down the sidewalk level. The pedestrian has a continuous path to walk by but car does not. Psychologically speaking, a safety feeling is perceived by the pedestrian.

These are "calming traffic" techniques.

Fig. 81: Cities for People
J. Gehl, 2010.

Finishes and materials

The functionality of walking routes is a crucial factor on whether or not the public spaces will be used for staying activities.

 The pavement finishes must be designed according to the activities, uses, user profiles, etc.in order to be inviting and provide a comfortable experience.

Fig. 82: Cities for People
J. Gehl, 2010.

URBAN PLANNING 2
PRACTICAL EXCERCISES

Ex. 1_Lynch's methodology studying the image of the city

Due date: 25th September 2013

Objective >

Study and analyse the city, based on the image interpretation methodology proposed in Kevin Lynch's book "The Image of the City". To this effect, five elements will be distinguished and identified: path, border, node, district and landmark.

Material >

A cartography (.dxf) of the two corresponding cities will be provided to every team. Both cartographies will be accessible through GOOGLE DRIVE.

Each cartography is composed of the following three files:
1. CONSTRU. Buildings, blocks and/or plots.
2. ELEMLIN. Sidewalks, reliefs, stairs and others.
3. LIMITES. Territorial city limits.

What to do? >

Part 1.(CAD) - Merge the three files (constru, elemlin, limites) into one (.dwg). The elements of each file MUST be distinguished as three different layers named after the original file name.

To achieve this, it is required to copy/paste from one file to another, making sure that the layers are pasted correspondingly based on its ORIGINAL COORDINATES.

The resulting TWO .dwg cartographies (one per each city assigned to the team) will be used THROUGHOUT THE COURSE.

Part 2.(CAD)- Study the two assigned cities by applying Lynch's methodology. Distinguish the elements of the city using the icons and CAD layers as follows.

Identify PATHS, BORDERS, NODES, LANDMARKS and DISTRICTS of each city, using the icons proposed in the file named: LYNCH CODE.DWG. The file is available on the Google group announcement called: CLASS MATERIALS 18.09.

Please ensure that the graphic format and layer properties are kept as suggested below and in the LYNCH CODE.DWG file.

Fig. 3 La forma visual de Boston sobre el terreno
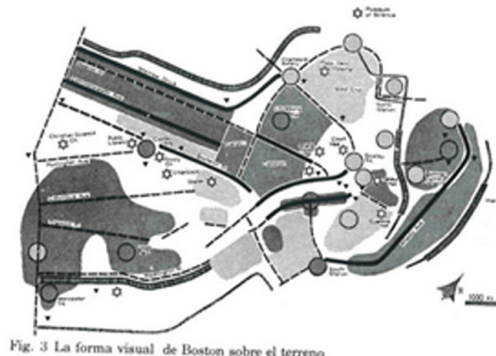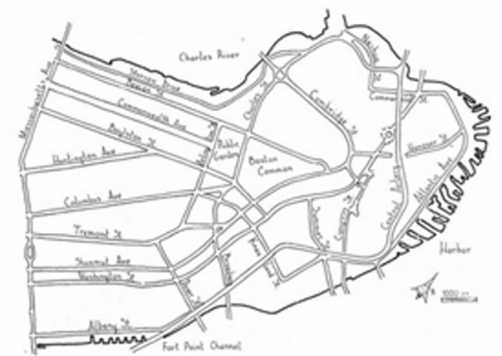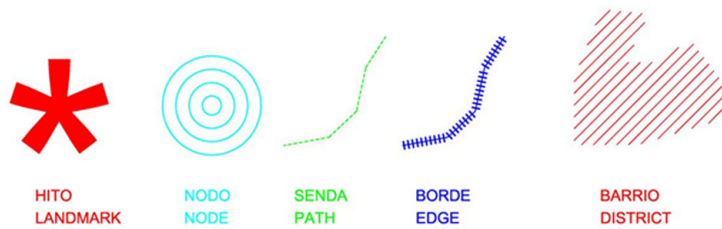
Just as Lynch's city studies, the SCALE OF STUDY is of the CITY

Part 3. Print a .pdf file of the resulting image of each city. Both files need to be uploaded to the collaborative GOOGLE DRIVE folder, named after the group number.

To hand in >

1. SAVE and KEEP both .dwg cartography files. You will be requested to hand them in at the end of the course.

2. Each team must upload 2 .pdf files (as a result of the Lynch's analysis of both cities) to the collaborative GOOGLE DRIVE folder.

Ex. 2_Foursquare methodology to identify successful public spaces of the city
## Due date: 25th September 2013

Objective >

Identify and locate the successful public squares (plazas) / boardwalks (paseos) of the city.

Material >

1. Information from web: http://www.foursquare.com
2. WORD, EXCEL and PHOTOSHOP file templates available on the Google group announcement called: CLASS MATERIALS 18.09.
3. Cartography developed for exercise 1.

What to do? >

Part 1. Introduce the two words paseo and city name correspondingly, in Foursquare webpage (www.foursquare.com)
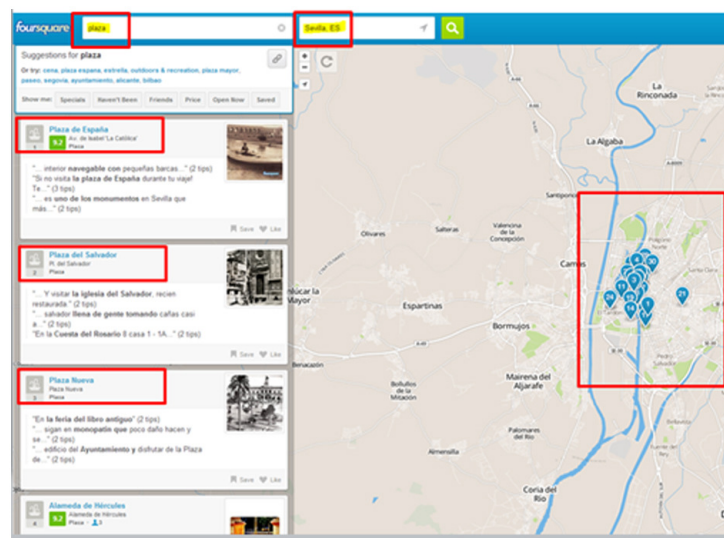
Part 2. Identify the paseos included on Foursquare's website. Fill in WORD, EXCEL and PHOTOS-HOP templates accordingly with the required information.

a. EXCEL template:
All paseos must be listed and hierarchically ordered by the number of visitors. Afterwards, the area of the paseos will be calculated with a polygon (part 3 below) drawn in the corresponding CAD file. Provide detailed information on the 5 paseos with the most number of visitors, as shown on the following printed screen.

b. WORD template:

The word document must include copy/pasted print-screens of the obtained Foursquare results. The consulted date, search words, and the full name of the 5 paseos with the most visitors (hierarchically ordered) will accompany the print screens.

ex. Search words: paseos and Sevilla. Date consulted: September 20th, 2013.
 #1 Plaza de España.

c. PHOTOSHOP template:

Copy/paste the images shared by Foursquare users for each of the detailed 5 paseos. Make sure the images correspond to the "common themes of pictures" section included in the EXCEL file. The size of each picture must be 2x2 cm, configuring a grid of 3x6 pictures.

The information should be arranged to fit in A4 (.jpg) file format.

The consulted date, search words, and the full name of the 5 paseos with the most visitors (hierarchically ordered) will accompany the set of pictures.

ex. Search words: paseos and Sevilla. Date consulted: September 20th, 2013.
 #1 Plaza de España.
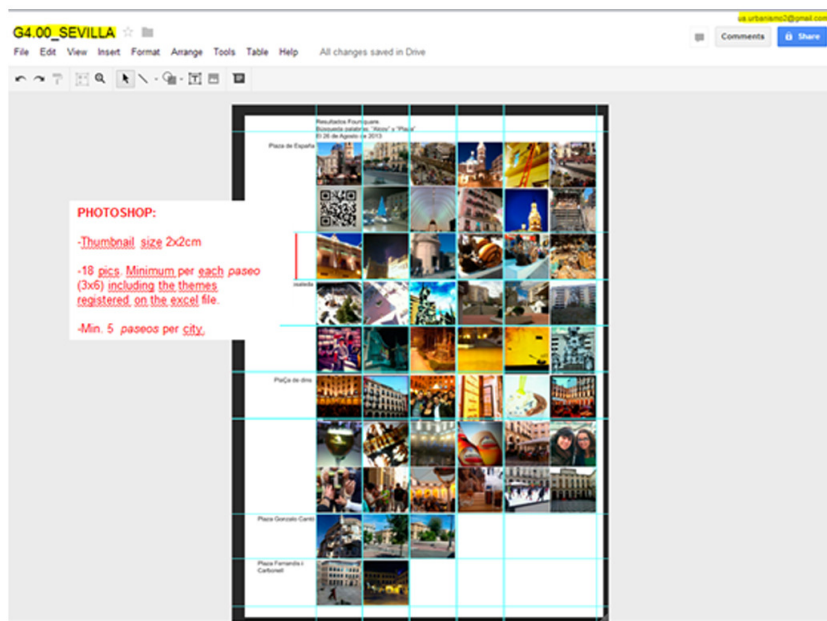
Part 3. Draw, in the cartography CAD file (exercise 1), a polygon defining the shape of ALL paseos listed in the first column of the WORD file. The area obtained from measuring each polygon must be added to the EXCEL file.

Please make sure that the polygons are drawn and saved in an independent layer of the cartography from exercise 1.

To hand in>

All teams must upload to the collaborative GOOGLE DRIVE folder, the set of completed WORD, EXCEL and .JPG files.

There must be 2 sets of files, corresponding to the 2 assigned cities.

Ex. 3_The elements of public space – A PHYSICAL ANALYSIS

Due date: 16th October 2013

Objective >

Identify and graphically represent the physical elements that configure the studied relevant public space.

Material >

1. A **copy of the cartography** of the two corresponding cities from exercise 1. *[Make sure you save and keep the drawing developed for exercises 1 and 2. They will be handed in to the professors at the end of the course]

What to do? >

NOTE: tasks described in this document will be developed for both relevant public paseos you have found in Foursquare. NEARBY CITIES data will be collected on site visit, and FARAWAY CITIES data can be collected using Google Maps, Google Earth, Bing, Google Street View, Panoramio,...or any other source you may find available.

Task 1.
If the studied public space is a plaza: [Group 1 and Group 2]

 1. Draw up a 400x400 m square on the city's cartography, keeping the studied plaza centred.
 2. Delete the rest of the CAD drawing, leaving only the base information inscribed in the 400x400 m square. (Layers ELEMLIN, CONSTRU and LIMITES).

If the studied public space is a paseo or any other linear public space: [Group 3 and Group 4]

 1. Draw up a rectangle 400 m wide and lengthwise the size of the linear public space.
 2. Delete the rest of the CAD drawing, leaving only the base information inscribed in the rectangle. (Layers ELEMLIN, CONSTRU and LIMITES).

Task 2.
Elaborate a figure and background floor plan. Hatch the built mass portion of the selected area (task 1), leaving the open space empty. The hatch must be drawn in a layer called "FF".

Task 3.
Draw up on the public space floor plan the following elements, ensuring the proper layers are used.

NOTE: this element-detailing task will be developed only for a 100 m square/rectangle inscribed in the previously addressed 400 m square/rectangle.

 1. Layer EDIF_PARCELAC : draw up only plot lines.

2. Layer EDIF_USO : hatch according to building uses. An example of this is provided on the CAD file called: "DATOS FISICO"

3. Layer EDIF_LIMITEEP: draw up the public space enclosure line (the eye height façade elements) according to the established criteria found in the CAD file called: "DATOS FISICO". Building accesses and façade openings must be drawn up indicating what kind of building main floor- use they give access to.

4. Layer EDIF_ALTURAS: hatch and distinguish all building heights correspondingly, following the established layer criteria found in the CAD file called: "DATOS FISICO".
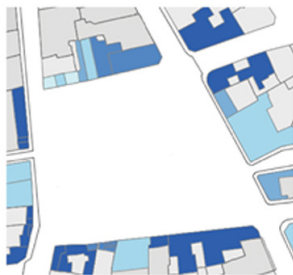
5. Layer VIA_PEATONAL: identify and indicate which are the pedestrian priority roads. The established layer criteria can be found in the CAD file "DATOS FISICO".

6. Layer VIA_RODADO: identify and indicate all car traffic related elements such as horizontal/vertical signs, road dividers, …

7. Layer USO_ZONAS: identify and indicate the public space zones that are related to main floor building uses such as: restaurant terraces, kids' playground area, non-walkable / non-

accessible areas, etc... Add the corresponding text to describe each of these areas.

8. Layer USO_DETALLES: draw up all the details / objects associated to the horizontal plane: curbs, stairs, ramps/slopes, differentiate floor levels, etc...

9. Layer MOB_ILUMINACION: draw up all urban furniture/ elements that contribute to the public space's night lighting.

10. Layer MOB_RESIDUOS: draw up all elements that are used as waste collection: waste bins, waste containers, etc...

11. Layer MOB_VEGETACION: draw up all landscape / vegetation elements such as: gardens, planters, flower beds, tree trunks...

12. Layer MOB_PROY VEGETAL draw and hatch the approximate tree shade projection. A Google earth .JPG (x-ref into CAD) image can be useful to define the treetop diameter, and thus, the approximate shade it projects over the public space.

13. Layer MOB_ASIENTOS: draw all urban furniture / seating elements that have been placed for that purpose.

14. Layer OTROS ELEMENTOS: draw all other elements of the plaza. Ex. fountains, sculptures, kiosks, etc.

To hand in >

Upload to the shared GOOGLE DRIVE folder the following set of files on .PDF format.
Make sure you upload one set PER studied public space (2 sets total). Use the scale that best suits your drawing presentation.

1. FLOOR PLAN 1, with layer FF active.
2. FLOOR PLAN 2, with layers EDIF_USO and EDIF_PARCELAC active.
3. FLOOR PLAN 3, with layers EDIF_ALTURA and EDIF_PARCELAC active.
4. FLOOR PLAN 4, with layers EDIF_LIMITEEP + VIA_PEATONAL and VIA_RODADO active.
5. FLOOR PLAN 5, with layers USO_ZONAS and USO_DETALLES active.
6. FLOOR PLAN 6, with layers USO_DETALLES, MOB_ILUMINACIÓN, MOB_RESIDUOS, MOB_VEGETACION and MOB_ASIENTOS active.
7. FLOOR PLAN 7, with FLOOR PLAN 6 layers active adding MOB_PROY VEGETAL.

Make sure you include GRAPHIC SCALE, NORTH and TEAM NUMBER to all of your files.

PLEASE delete the original .dwg cartography we uploaded to your Google DRIVE, this will free up some DRIVE space and ensure we can exchange information with you.

Ex. 4_The elements of public space – AN ANALYSIS OF HOW THE SPACE IS PERCEIVED

Objective >

Identify the general and particular physical features of the studied plaza through observation, measurement and data collection during a field trip.
Recognize how the plaza is perceived by interviewing users during the field visit and by observing how people interact with and within the space of study.

Material >

Field visit recommended material:
      - Camera
      - Few printed off copies of the plaza to note elements dimensions and location
      - Measuring tape
      - 15 printed off copies of the interview PDF format template named: "EN_Exercise 4_INTERVIEW template"
      - Notebook

What to do? >

Through observation, data collection, drawings (schemes) and photographs, information on the following concepts must be obtained:

      1. Regarding the USER PROFILES – Who visits the plaza?

- Identify and list all user profiles of the plaza. Take **photographs** of all listed user profiles.

      2. Regarding the ACTIVITIES – How do people interact with and within the plaza?

- Identify and list all activities happening in the plaza the day of the field visit —Stationary and non-stationary activities—. For example: playing with... (sculptures, stairs, fountain, etc...), looking at... (people, commercial storefronts, etc.), siting on...., walking by....
All activities listed must be documented by on-site taken **photographs**.

- Duration of activities. How long do people stay at the plaza?
- Routine or regular activities: through observation, you may be able to note if there are certain activities that could possibly be part of a routine: for example, young people gathering the plaza at 6:00 p.m. on a Saturday, old people walking by after 11:00 a.m...etc.
- What is the favorite sitting spot from where people watch other people?

- Which is the most attractive commercial storefront? And which one is the most visited one?... Are they the same?
- Are there any small commercial establishments? Any food / refreshments or information Kiosks?

3. Regarding the OPPORTUNITIES – What opportunities does the plaza offer?

Through **OBSERVATION, PHOTOGRAPHS** and onsite **MEASUREMENTS** identify and locate architectural / natural elements of the plaza.

-**SITTABLE SPACE**: seating configuration, size and location

How and where do people sit? Are seating areas flexible enough to allow different configurations and social interaction?

- Which is the most significant restaurant or bar / coffee place to the plaza's social life?
- Greenery and trees: type, size, shading capacity, etc.
- Other architectural elements such as: stairs, fountains, sculptures, difference in floor levels, materials..
- Weather protection elements.

4. Regarding the MOVEMENT OF PEOPLE inside the plaza

- Sketch over the plaza´s floor plan, people´s movement inside the plaza: from where do they enter the plaza, which way do they go from one corner to the other, is there a preferred route?

Register people´s movement during a time-lapse of one hour. For example:
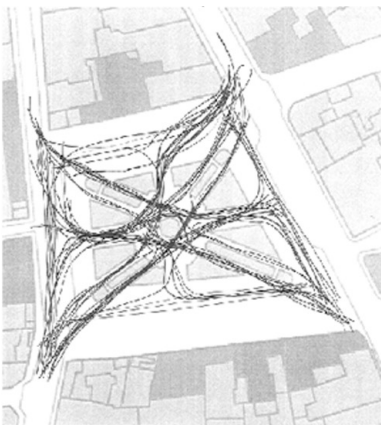
One line represents one person (or a group walking together) walking through the plaza. Saturday, 20th June, 2013. From 10:00 to 11:30 a.m.

Note if there is any obstacle that interferes with people´s movement throughout the space. On the picture below, an obstacle (tree) can be appreciated, but it does not seem to interfere with people´s natural circulation.

5. Regarding other possible ELEMENTS worth considering.

- Temperature
- Door Façades
- Building heights
- Balconies
- User profiles (diversity, ages, etc)
- Quantity of people
- Quality on the plaza's materials (floors, furniture, etc)

- Wind
- Sun
- Topography
- Views
- Trees
- Flowers
- Shrubs
- Crosswalks

- Bicycle facilities (storage, paths)
- Quantity of cars
- Parking
- Pavements
- Benches
- Traffic lights
etc...

6. Regarding people´s PERCEPTION of the plaza. Interviews.

- Onsite interview to 15 people, using the PDF form template called: "EN_Exercise 4_INTERVIEW template"
- Interviews must be individual or, if made to a group of people, ages and sex of each person should be registered.
- Interview results are to be compiled in the Excel template file called: "EN_Exercise 4_INTERVIEW templates_Results"
- Write down and register any additional comments about the plaza from the interviewed people.

7. All Photographic material must be uploaded and georeferenced on PICASSA (Google)

Objective >

Evaluate qualitative and quantitative physical and perceptive aspects of both relevant public spaces studied by each team.

Material >

1. **Physical data** collected for exercise 3.
2. **Perceptual data** collected for exercise 2 and 4 (interviews, images, comments, user profiles, people's movement and activities in the space, etc...)

What to do? >

Calculate and evaluate each one of the indicators, and their sub-indicators, proposed below. Results and conclusions must be based on the course's theorical concepts and criteria discussed in class (23rd and 30th October 2013).

Each indicator and its respective sub-indicators will be objectively evaluated (not personal opinion) and justified through the use of all previously collected data and material (exercises 2, 3 and 4).

The evaluation of each indicator and its results must be graphically represented using drawings, plans (including dimensions, explicative notes, scale and north), schemes, graphs, details, photographs, etc..
The use of written phrases must be restricted to the minimum.

An example of the above is: let's say you want to analyse the sub-indicator "good lighting to see". You could evaluate and justify this indicator through the use of night pictures and the resulting values from the interviews' question concerning the lighting of space. In this case, the interviews data represents an objective data obtained from public opinion.

NOTE: Each indicator and sub-indicator must be applied to both relevant public spaces studied by each team.

To hand in >

The hand in format will be defined by an Adobe InDesign template – the software can be used through the virtual campus (virtual classroom)-.

INDICATOR 01. GENERAL CONTAINED SPACE EVALUATION.

Evaluate the following parameters and aspects according to the established reference criteria.

The plaza / paseo *(content)*

a. Dimensions — Quantitative

The longest distance must be less than 100m. Activities occurring within the space can be seen from any other point of the space.

b. Small spaces within the space — Quantitative

Squares often approach 40x80m in size. People can take in the entire scene, seeing the space itself and the faces of other people when they walk through the space.

INDICATOR 02. THE CONTAINER: THE EDGE.

Evaluate the following parameters and aspects according to the established reference criteria.

The edge *(container)*

a."The edge effect". Spaces with magnetic attraction for people. — Qualitative

It offers a variety of staying possibilities. It is the best place to see the activities happening in the public space.

b. Edges that define space — Qualitative

Edges make a vital contribution to spatial experience and to the awareness of individual space as a place. In a public space surrounded by buildings, ground floor edges intensify the staying opportunities since they are the best place to look at the rest of the space.

c. Edges as an exchange zone — Qualitative

The edge along ground floors is also a zone in which doors and exchange points between inside and outside are located. Activities inside the buildings can move out into the common space of the city.

d. Opportunities to stay, sit and wait — Qualitative

The edge as a discrete place to stay at.

e. The edge as prime location for longer stays on benches or at sidewalk cafes — Qualitative

f. Protected-back feeling and senses towards the front — Qualitative

Our frontal sensory apparatus can comfortably master the situation while our backs are protected.

g. Climate protection elements — Qualitative

INDICATOR 03. OPPORTUNITIES TO SEE.

Evaluate the following parameters and aspects according to the established reference criteria.

Opportunities to see		

a. Reasonable visibility distances — Quantitative

At 100 m = people's movement can be perceived
At 25 m = Facial expression and emotions can be read. At max 25 m, it is possible to comfortably watch other people passing by.

b. Unhindered sightlines — Qualitative

People would not be attracted to the space if there is not enough visibility to it. Plazas at higher gradient are visually more accessible from the street level.

c. Visually-appealing information within the field of vision — Qualitative

Consider human's sense of sight capabilities:
-Maximum 50 - 50° up, from the horizontal plane.
- Natural walking view angle 10° down from the horizontal plane.
- Maximum 70- 80° down, from the horizontal plane.
The first two building floors allow for vertical / horizontal social communication.
At the 3rd. and 4th building floors, the communication can be " possible":
From the 5th floor up there is no communication with the street level.
Buildings with 4-5 levels take part of the pedestrian's field of vision. Interaction between building façades and the street plane

d. Good lighting to "see" — Qualitative

Light quality and quantity influences the sense of feeling safe and oriented. Good lighting enhances the visual quality of public spaces at night.

e. Ground floor activity — Quantitative

Minimum 50% of ground floor façade uses reserved to commercial or services use. Excluded uses: for example, bank and loan offices, travel agencies or other facades with no activities inside. Included uses: libraries, museums, art galleries or other cultural activities. The transparency of facades must allow relationship between interior and exterior spaces.

INDICATOR 04. OPPORTUNITIES TO SIT.

Evaluate the following parameters and aspects according to the established reference criteria.

Opportunities to sit

a. Primary and secondary seating zones — Qualitative

Primary seating: furniture with back and arms. Secondary seating: elements that can be used for short stays: pedestals, steps, stones, bollards, monuments, flower pots, etc. The use of both types of seating enhances the staying opportunities.

b. Take advantage of the views, climate and people — Qualitative

c. Good quality seating zones — Qualitative

The general requirements for a good place to sit are: a pleasant microclimate, good placement preferably at the edge of the space with your back covered and facing spaces with activity, a good view, an appropriately low noise level to allow conversation and no pollution.

d. Seats to rest — Qualitative

The comfort of seating influences the choice of seating and length of stay. The more comfortable the seating is, the longer the stays.

e. Flexible seating: socially comfortable — Qualitative

Seating that allows to sit in front of someone, back to back, in groups, etc. Moveable chairs provide flexibility to arrange the social space needed for specific situations.

f. Adequate seating dimensions — Quantitative

Seat height: elements between 30- 90 cm. Optimum 43cm.
Seat depth: minimum 75- 90 cm without back to allow two people back to back. Minimum 40 cm with back.

g. Quantity of seating space — Quantitative

Minimum 5% of the total seating with back rest.
Minimum 10% of the total plaza area should be "sittable".

INDICATOR 03. OPPORTUNITIES TO SEE.

Evaluate the following parameters and aspects according to the established reference criteria.

Good quality walking opportunities

a. Enough space to walk — Quantitative

Minimum sidewalk dimension: 3 m. (13 pedestrians per minute per meter)

b. Avoid obstacles and barriers that interfere with pedestrian flow — Qualitative

c. Accessibility — Quantitative

Minimum steps dimensions: 28 cm depth, 19 cm height. Gradient difference must be less than 90 cm from sidewalk level. Disabled access minimum 1,5 m width. Maximum 1/12 ramp slope. Uniform and consistently even nonslip surfaces.

d. Accessible distances — Quantitative

Plaza/ paseo should be at a walking distance of 500 m or more if the route is interesting, and 200 -300 m maximum if there is not enough visual information.

e. Good lighting — Qualitative

Façades, niches, corners and important routes should provide enough lighting levels in order to give pedestrians a sense of "safety". Pavement, other surfaces and stairs must be well lit.

f. Interesting façades: rhythm and design — Qualitative

In a 100 m / 80 seg pedestrian speed, the façade rhythm should contain "things to see" at every 5 seg.

ACTIVE FAÇADE:
- Small units, many doors (15 – 20 doors per 100 m)
- Large variation in function
- No blind and few passive units
- Lots of character in façade relief
- Primarily vertical façade articulation
- Good details and materials

FRIENDLY FAÇADE:
- Relatively small units (10 – 14 doors per 100m)
- Some variation in function
- Few blind and passive units
- Façade relief
- Many details

MIXED FAÇADE:
- Large and small units
- Modest variation in function
- Some blind and passive units
- Modest façade relief
- Few details

BORING FAÇADE:
- Large units, few doors (2- 5 doors per 100m)
- Almost no variation in function
- Many blind or uninteresting units
- Few or no details

INACTIVE FAÇADE:
- Large units, few or no doors (0- 2 doors per 100m)
- No visible variation in function
-Blind or passive units
-Uniform façades, no details, nothing to look at

g. Diversity of route possibilities — Qualitative

Provide circulation alternatives to pedestrians. Segment long routes and open or close views to avoid boring and monotonous walks.

INDICATOR 06. VEHICULAR TRAFFIC AND ACCIDENTS PROTECTION.

Evaluate the following parameters and aspects according to the established reference criteria.

Vehicular traffic and accidents protection

a. Speed limit due to vehicular traffic restriction — Qualitative

Automobile, bicycle and pedestrian traffic integration as a measure to reduce vehicular traffic speed. Vehicular access restriction and low speed policies.

b. Pedestrian priority — Qualitative

c. Bicycle lanes and infrastructure — Qualitative

d. Avoid obstacles that interfere with continuous pedestrian flows — Qualitative

Street objects must not interfere with pedestrian natural trajectories. Avoid unnecessary red lights that over control pedestrian natural movement and flow.

Aspects to consider for the PHASE 1 final hand in.

Handing in material will consist of:

1. Two InDesign files including all the corresponding hand in set of sheets (one file for each city). The InDesign files should be named as: city+group number (e.g. "Soria G5.02").

2. Two folders named as: city+pictures+group number (e.g. "Soria Pictures G5.02") where all images attached / referenced to In Design files will be collected (one folder for each city).

3. Two.pdf files printed off from the InDesign files (one file for each city). Files must be named as: city+group number (p.e. "Soria G5.02")

In order to formalise the PHASE 1 hand in, you can download the Adobe InDesign template shared in the Google Drive "downloads only" folder. It is compulsory that ALL the material you have worked on is presented and adjusted to the template format.

Essential requirements:

- Use the InDesign template and adjust, as much as possible, to the requested format. Make sure you respect the proposed font size and type (ARIAL).

- Complete each and every template section with OBJECTIVE information. If, by any chance, you are missing information to complete one section, make sure you point that circumstance out, highlight the challenges and justify the missing of information.

-A good portion of the hand in grading will correspond to drawings and other information's legibility. The scale of texts, dimensions, legends, north and other elements with respect to the rest of the information must be carefully considered.

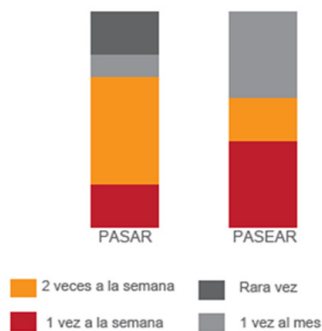## Possibility of customisation to suit your information

- 2 to 4 sheets can be used to develop each required indicator / section.

- There is a "proposed indicator" sheet where you can develop those particular matters that are relevant to your studied public space.

-The information used and elaborated to justify each section is left open (unless noted in the template) and must be graphically adequate to express such justification.

The information, results and conclusions must be synthetised into graphics, drawings, tables, diagrams, pictures, etc... Written information is limited to amounts strictly necessary.
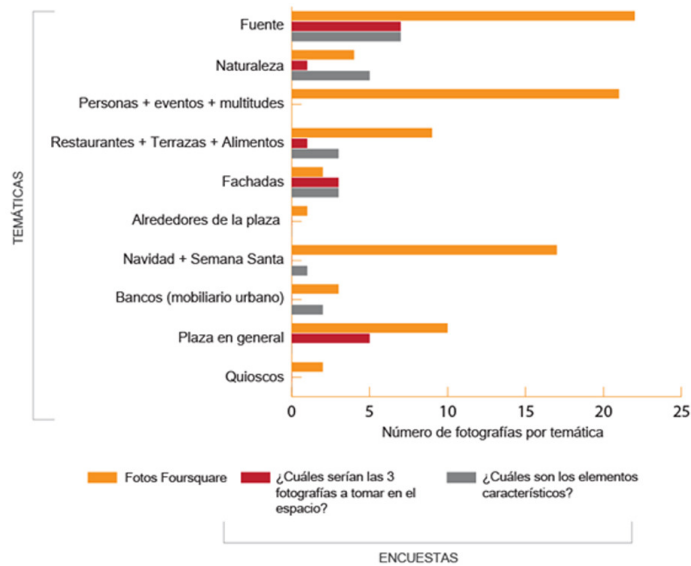
All kinds of diagrams, tables or graphics are allowed. Another example is the following:
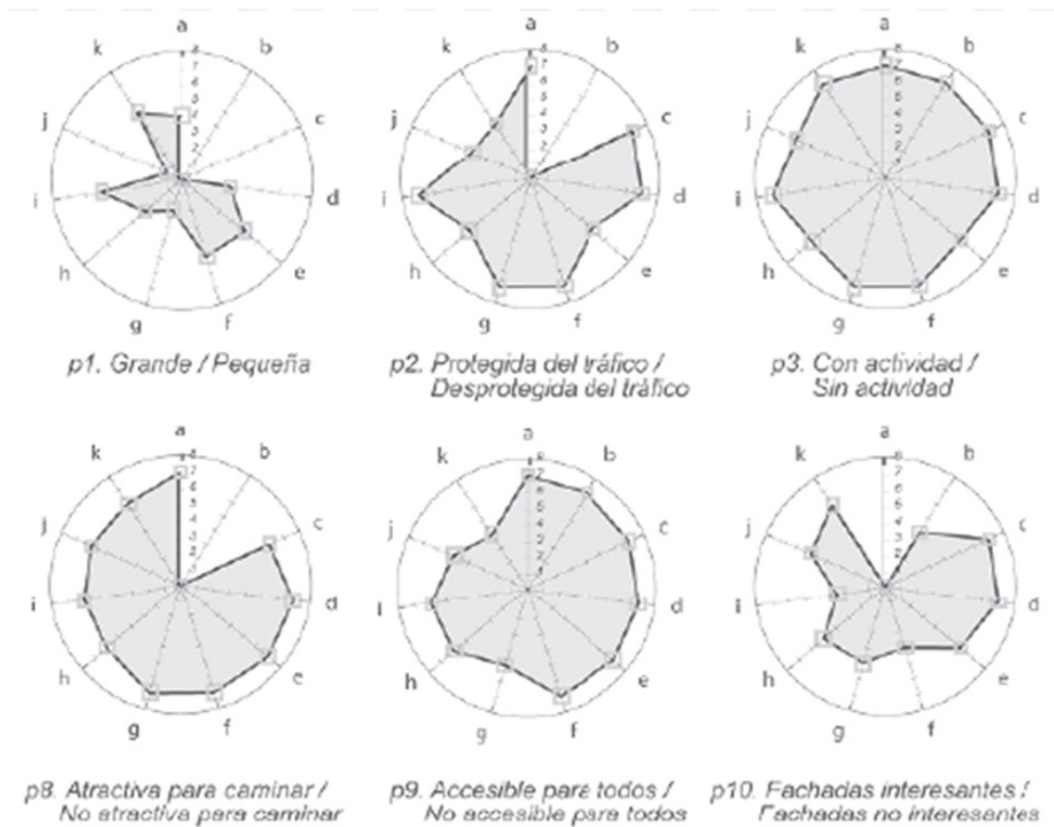

In any case, **the graphic representation of data is free and can be developed to better suit your explanations.**

However, the format to hand in is restricted to what is requested in the InDesign template.

INSTRUCTIONS ON HOW TO REPRESENT THE RESULTS FROM INTERVIEWS (Nearby cities): The public space perception.

The following descriptive model will be used to represent the perceptual interview data:

p1. Grande / Pequeña

p2. Protegida del tráfico / Desprotegida del tráfico

p3. Con actividad / Sin actividad

p8. Atractiva para caminar / No atractiva para caminar

p9. Accesible para todos / No accesible para todos

p10. Fachadas interesantes / Fachadas no interesantes

The CAD file called: "plantilla GRÁFICOS ENTREVISTAS.dwg" contains a template that can be used to create a set of polygons that will graphically show the interview results.

Each circle represents the "paseo/plaza" perception of one adjective.

Each letter-named radius represents each interview you made. If you were able to register 15 interviews, then you will show 15 letter-named radiuses as shown in the CAD file.

The 0 to 5 value that was obtained out of each interview adjective, will represent one polygon corner. Then, each polygon shape represents the perceived tendency of one adjective.

A close-shaped polygon, next to the 0 radius value, suggests that the overall perception is related to the second adjective. An open-shaped polygon, next to the 5 radius value, means that the overall perception is related to the first adjective.

INSTRUCTIONS AND OBSERVATIONS ON HOW TO REPRESENT THE RESULTS:

InDesign template file name: U2_Template.indd

—Master page
The group number, team members' names and last names, and the plaza and city names correspon-
ding to each exercise must be modified accordingly on the document's MASTER PAGE.
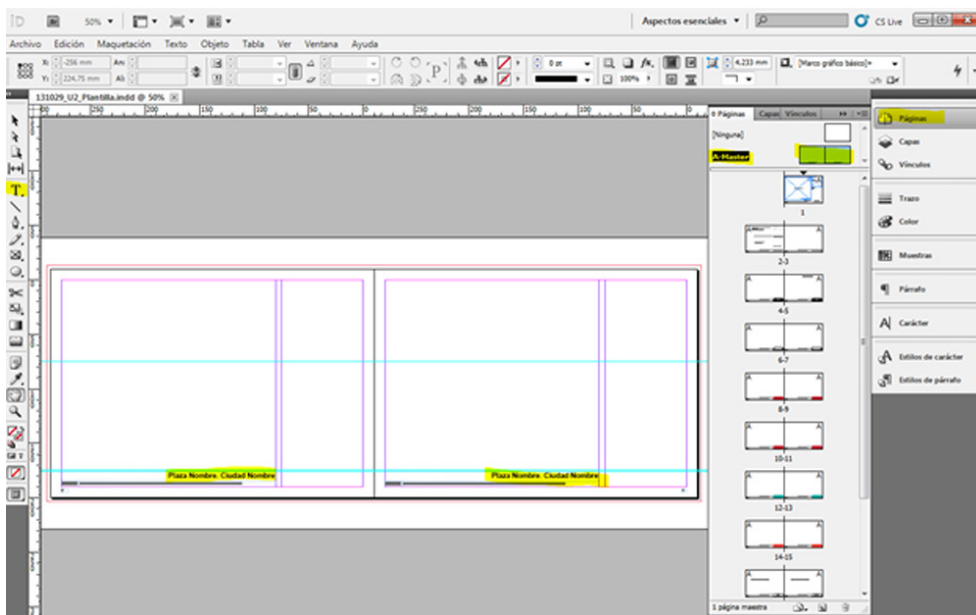
Furthermore, the template comprises the following sections:

—Lynch map
The only sheet where the team members' names and the city name WILL NOT be updated is that of
the Lynch map. They should be manually modified by double-clicking each text box.
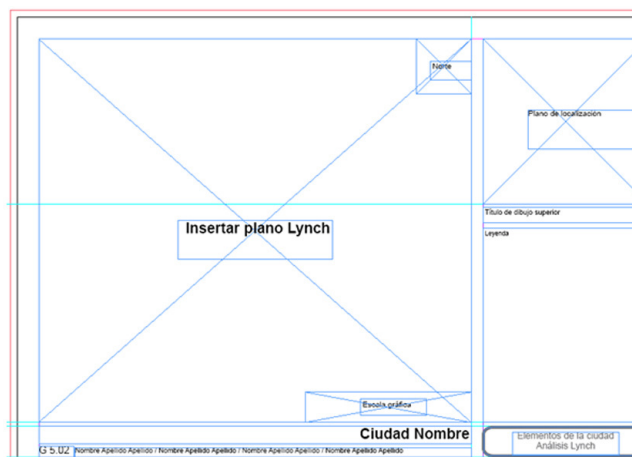
—Public space case study selection: FOURSQUARE results.

The case study selection sheet comprises the information obtained from FOURSQUARE.
If the public space of study was selected by any other means, the sheet MUST contain graphic representation (schemes, pictures, diagrams) that explains and justifies why and how the case study was selected.

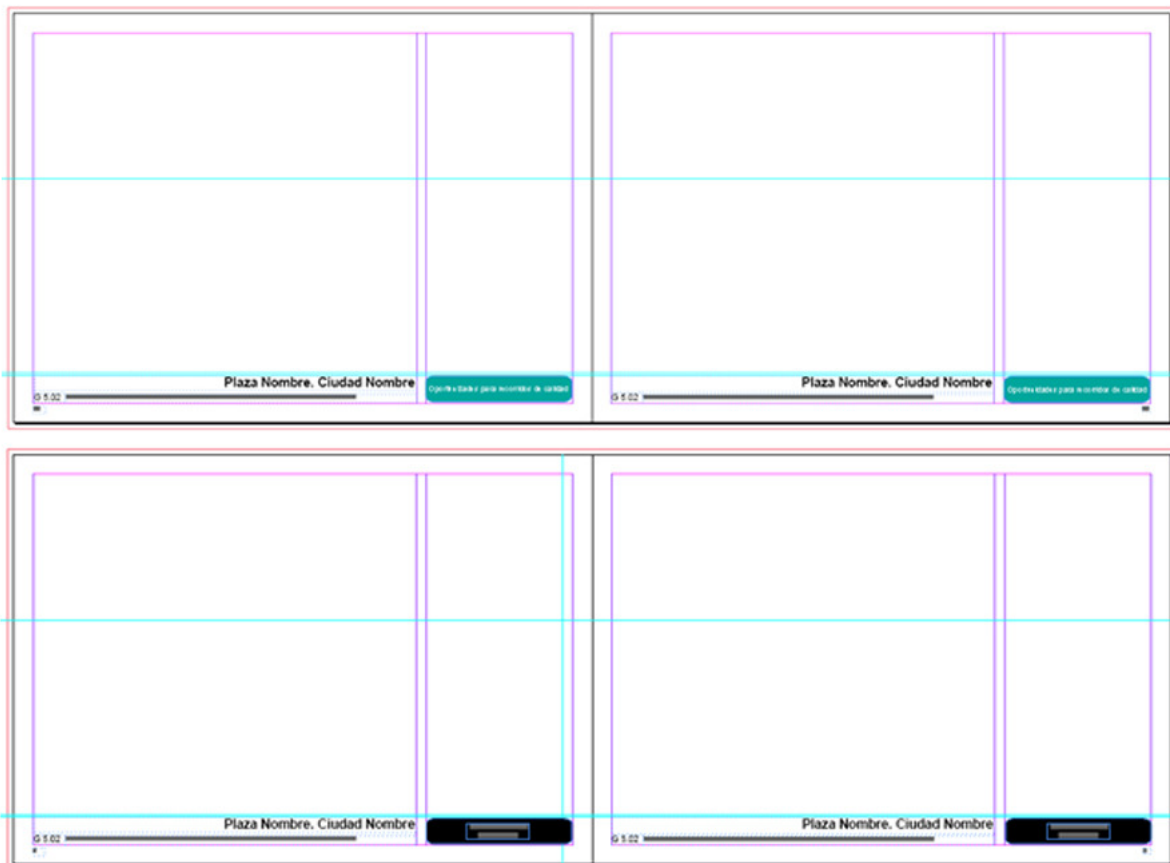—Figure and ground map.-

The figure /ground map must be BLACK AND WHITE.
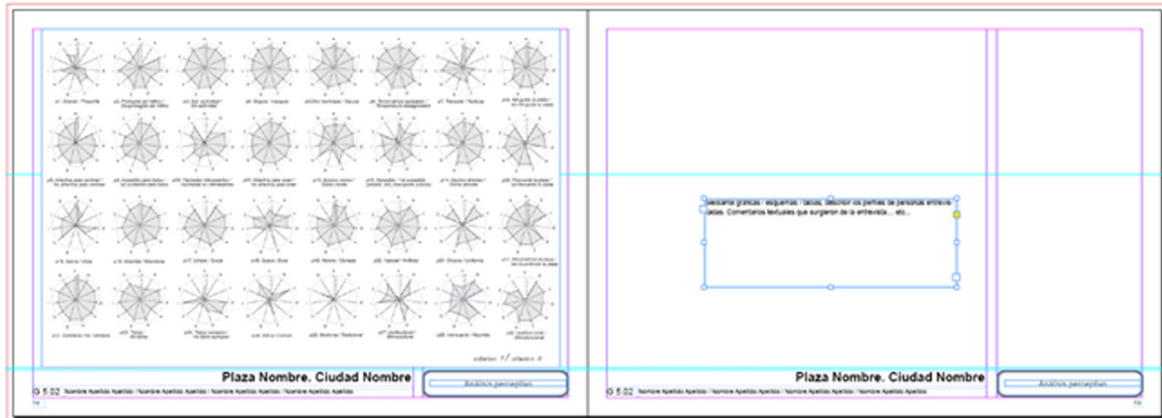
—Activities and user profiles.
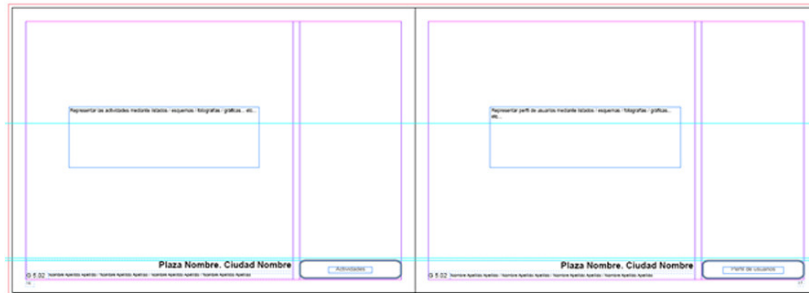
—Indicators:
Minimum 2 and maximum 4 sheets per indicator. The study of each indicator should contain information about its sub-indicators.

Perceptual analysis:

Interviews (nearby city) / comments, pictures, tips (faraway city)


Physical analysis (Images).

Predetermined paragraph styles
The InDesign template file already has a predetermined paragraph and font style that must be used throughout. The paragraph styles are shown below.

Note: the "NORMAL" (ARIAL) style must be used to all informative paragraphs.
On each specific case, the size letter can be scaled accordingly to improve legibility and harmoniously relate to the rest of the information.
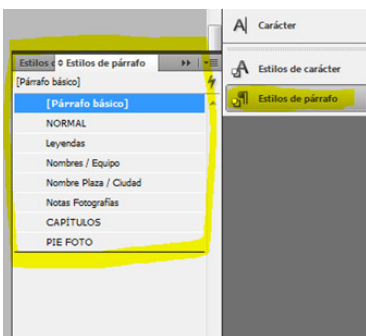
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This publication addresses the study of the public space: its importance and relevance in the city, the various elements comprising it and the social, functional and perceptive possibilities it offers.

This work compiles the Urban Planning 2 teaching material for the academic year 2013-2014. It includes the course´s syllabus, theoretical background and graphic documentation used as supporting material for the theoretical and practical lessons, as well as for the students' engagement with the course topics.

The methodology employed throughout the course combines the use of new technologies and the classical —still applicable— theories suggested by the most relevant experts in the field.

Urban Planning 2 belongs to the Urban Planning and Land Management Department at the University of Alicante and is offered during the first semester of the third year of the Degree in Architecture.

Alicante, February 2014