

# Understanding Appropriation and Activity Support: From Informal Sport to Crime Prevention Through Environmental Design.

Examples from Barcelona, a Waterfront City.

Marcus Willcocks


**Safer Sustainable Cities, Swansea 6th June 2008**

Design Against Crime Research Centre



Arts & Humanities  
Research Council

The Grippa research programme, mainly funded by AHRC, is a collaboration between the Design Against Crime Research Centre, Central Saint Martins College of Art & Design, University of the Arts London, and the UCL Jill Dando Institute of Security and Crime Science. Papers and other materials from the programme are at [www.grippaclip.com](http://www.grippaclip.com) and wider practical and research material on preventing bag theft at [www.inthebag.org.uk](http://www.inthebag.org.uk)



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1. Swansea & Barcelona ... waterfront cities
2. A potted urban history of the 'Barcelona model'.
3. CPTED, the Barcelona way.
4. Informal Sport in Barcelona.
5. Conclusions: Activity Support vs Appropriated Cities.

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# 1. Two waterfront cities.

## SWANSEA

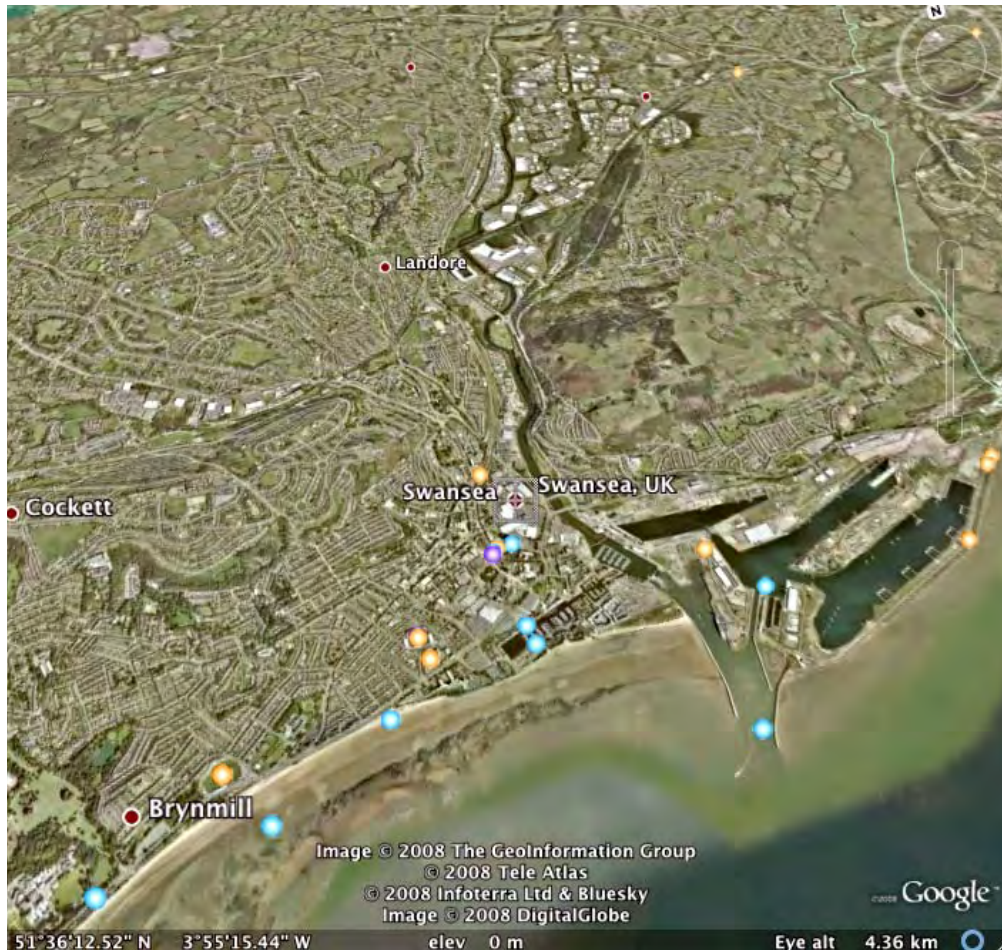
Land Area    378 km<sup>2</sup>  
Population   270,506 (2006)  
Density    601 hab./km<sup>2</sup> (2006)  
City ranking (in Wales): 2  
Sea: Swansea/ Gower Bays  
(Bristol Channel)  
Rivers: Tawe and Loughor

## BARCELONA

Land Area    100.4 km<sup>2</sup>  
Population   1,605,602 (2006)  
Density    15,969 hab./km<sup>2</sup> (2006)  
City ranking (in Spain): 2  
Sea: Mediterranean  
Rivers: Llobregat and Besòs

Source: Wikipedia

# Two waterfront cities.



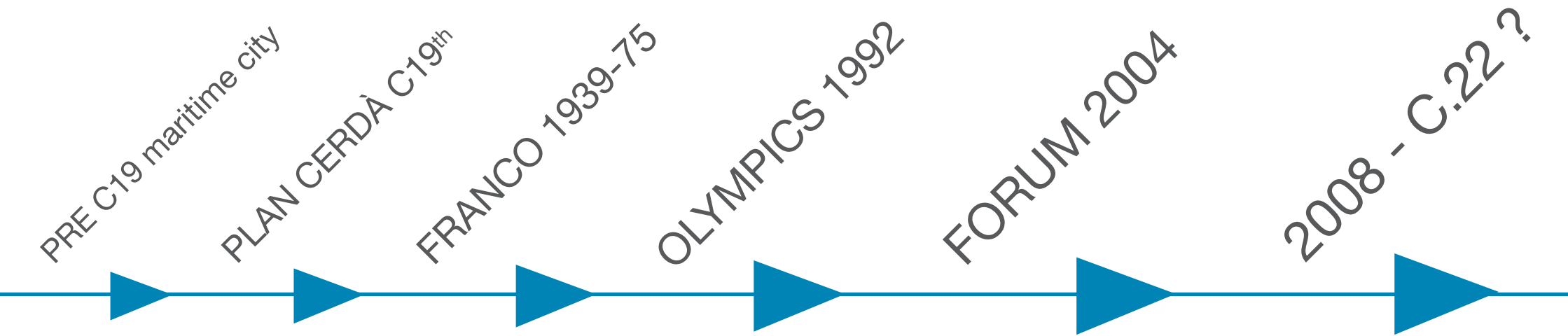
**SWANSEA** 600 hab./km<sup>2</sup>



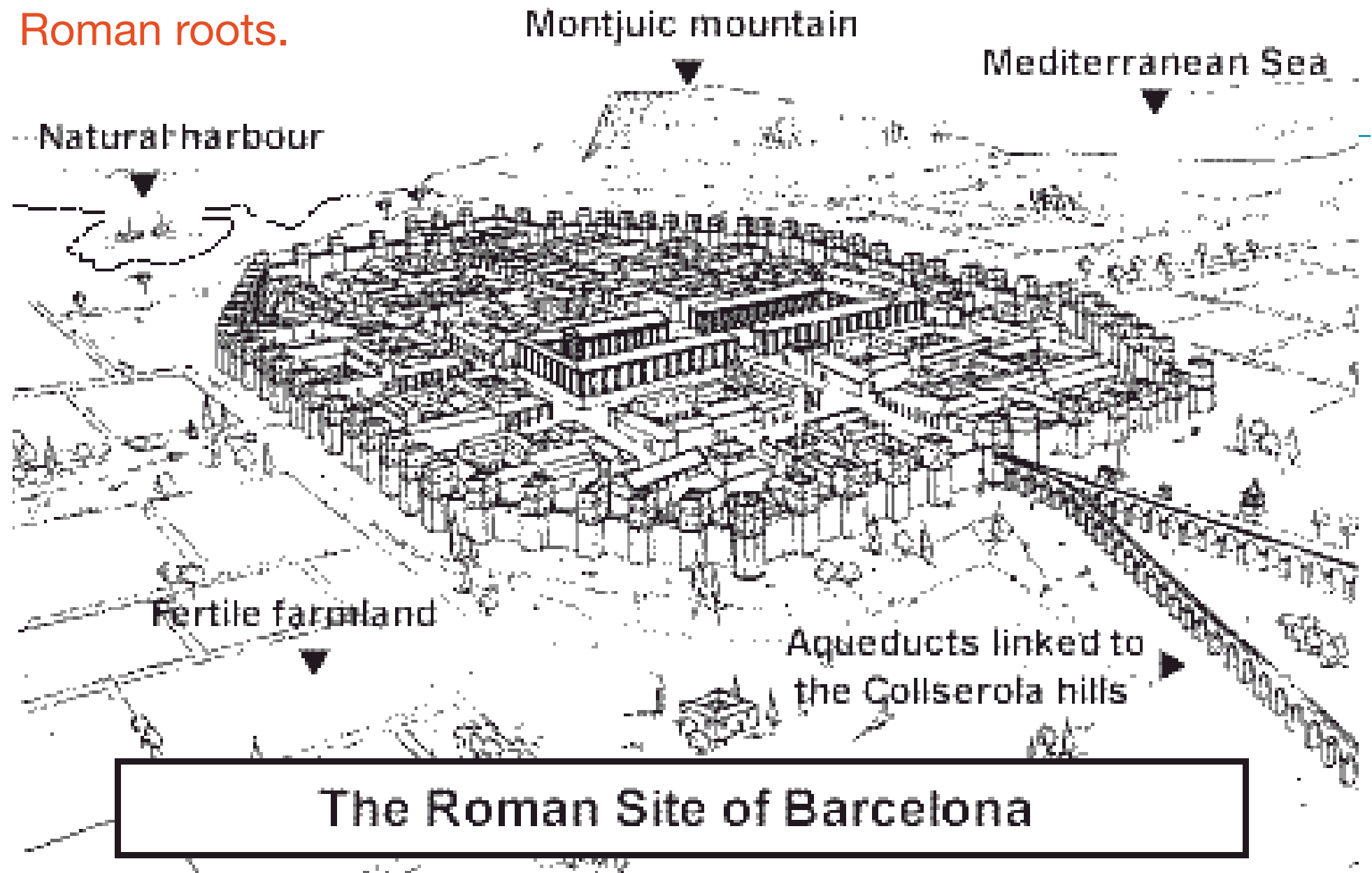
**BARCELONA** 16,000 hab./km<sup>2</sup>

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## 2. The 'Barcelona model' - a potted urban history.



## Roman roots.





## Pre C.19th: a city of sea trade.



*Barcelona, A Waterfront City: from informal sport to CPTED; Understanding appropriation and activity support.*  
Marcus Willcocks. © June 2008. Safer Sustainable Cities, Swansea.

## C.19th: L'Eixample - The 'Expansion' by Idefons Cerdà.



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## A grid following a grid ...





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## A safe and sustainable structure for C.21 living ? ...



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## A safe and sustainable structure for C.21 living ? ...



Port Vell, 1918



Port Vell, 2008

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M. DELGADO: *What exactly is “the Barcelona model”?*

*“The real Barcelona is very different to the Barcelona model, defined by urbanists, managers and politicians... (with their) pretensions to ‘urbanise’ life itself, or ‘domestify it on a city scale’ ... We have to challenge the ‘perfect city’ to think in social realities, which are unmeasured, conflicting and unpredictable”*

Manuel Delgado *The Lying City* (2007, La Ciudad Mentirosa),



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## A safe and sustainable structure for C.21 living ? ...



2006.

## Appropriation in Barceloneta ...

2006.



1966.



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# Appropriation

*“We adjust the purpose or context of things in order to achieve our objectives.” (Ideo, 2005)*

*“The appropriated is that which puts itself at the service of human needs; that which is owned, adequately” (Delgado, 2001)*





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## La Mina, 1960's - present day.





# The Olympics, 1992



# Olympic transformation, 1980's-90's



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## Olympic transformation, 1980's-90's

### Aims of Maragall:

- To put Barcelona on the international map!
- To develop a Strategic Plan, that could support local needs and sectors as much as global commercial sectors.
- To achieve 'Global Cohesion' thanks to the city's internal diversity.
- To be competitive to attract research, technology, culture, infrastructure of communications, tourism and more ...

(Pascual Maragall, Mayor of Barcelona, 1982 - 1997)



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# Olympic transformation: The Strategic Plan, 1987





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# An olympic transformation: 150 public spaces project





# An olympic transformation: new beaches



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## Twenty years later ...

*“Barcelona has kept the momentum by constantly creating new targets, by drawing on international advisors, and by asking an international panel of architects, artists and designers to vet all new projects.”*

Richard Rogers and Anne Power, *Cities for a Small Country*, 2000.

## Forum 2004.





# Forum 2004.



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### 3. Crime Prevention Through Environmental Design (CPTED), the Barcelona way.

*“The first thing to understand is that the public peace... is not kept primarily by the police, necessary as police are. It is kept by an intricate, almost unconscious, network of voluntary controls and standards among the people themselves... No amount of police can enforce civilization where the normal, casual enforcement of it has broken down”.*

Jane Jacobs 1961, Death and Life of Great American Cities

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## The ‘secret’ of the model ...

*“The secret of Barcelona lies in key ideas: going with the grain of the existing city, which is dense, compact, old and bounded by mountains, rivers and sea. ... using the development of public spaces throughout the city as a way of involving citizens of all incomes and classes; delivering local projects in every neighbourhood within a much bigger strategic plan; making people involved and proud of their city ... and using the highest design talent.”*

Rogers and Power (2000).

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# Crime Prevention Through Environmental Design.

Goal: “To create an environment where the design and use can lead to the reduction in the fear and incidence of crime and an improvement in the quality of life”.

Principles include:	Defensible space	Activity support
	Broken window syndrome	Access control
	Surveillance	Territorial Support
		Staff management
	Maintenance	



## CPTED, the Barcelona way.

PublicToilets and clean beaches campaign: Maintenance, Activity Support and Natural Surveillance.




# Responses to graffiti

Maintenance, Tolerance/Activity Support, 2005-8.

**Quin residu vols llençar?**  
Selecciona un residu

**BCNeta!**

**Pintades i grafits**



A BCNeta! disposem d'equips especialitzats que s'encarreguen de treure les pintades i grafits que apareixen a les parets dels edificis de la ciutat i al mobiliari urbà.

La responsabilitat de la neteja de la façana és de les comunitats de propietaris dels edificis. Malgrat això, l'Ajuntament actua sobre les pintades que es consideren ofensives o que es troben en edificis de propietat municipal.

Des de l'Ajuntament oferim a les comunitats la contractació d'un servei de manteniment que inclou:

- **dues neteges** programades anuals;
- **la prioritització d'actuació** en cas de pintades.

[Consultar Preus \(pag 39 a 45\)](#)

Tècnicament, **les pintades es poden treure per tres sistemes**, en funció del suport:

- pintant-hi a sobre utilitzant el mateix color que el de la paret;
- amb aigua a pressió;
- amb sorra a pressió.

Barcelona, A Waterfront City: from informal sport to CPTED; Understanding appropriation and activity support.  
Marcus Willcocks. © June 2008. Safer Sustainable Cities, Swansea.



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## Responses to graffiti

Maintenance, Managment, Territorial Support & Capable Guardians, 2008 and on.



New strategy in Ciutat Vella to clean graffiti private facades too, from July 2008.



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# CPTED, the Barcelona way.

## Natural Surveillance.





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## CPTED, the Barcelona way.

Defensible Space.



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## CPTED, the Barcelona way.

*“using the development of public spaces throughout the city as a way of involving citizens of all incomes and classes; delivering local projects in every neighbourhood within a much bigger strategic plan; making people involved and proud of their city ... **In the 1990’s crime fell in every neighbourhood in Barcelona, including the poorest.** A 1998 survey of residents found a much greater sense of belonging since the changes, particularly to their immediate neighbourhood.”*

Rogers and Power (2000).

## CPTED, the Barcelona way.

*2006: “Burglaries have decreased (by 19.9%), but the number of reported thefts (robberies without violence), have increased sharply to 13,686 (8,958 in 1996). Other crimes have stayed relatively stable, e.g. robberies with intimidation (10,766 in 2001) and vehicle theft (7,774 in the same year).*

Geography Field Work research agency, 2006.





# CPTED, the Barcelona way. Activity Support.



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## CPTED, the Barcelona way. Activity Support.





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## CPTED, the Barcelona way. Activity Support.





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## CPTED, the Barcelona way. Activity Support.



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## CPTED, the Barcelona way. More sustainable?

- Local and International events are used to enhance prestige, attract private investment and to focus and motivate the city's workforce and events-buildings are designed to last.
- The use of low-paid immigrant labour and multiple sub-contracting in the construction industry.
- City as the sum of its neighbourhoods, rather than comprising of distinct parts ... to discourage bit-meal approach to regeneration and instead emphasizes the building of communities.
- Public intervention is linked to the demands of the local community.
- The introduction of mixed new land uses into an area, including service industries, office and retail, private and public housing.
- The encouragement of innovative architecture and thinking.
- A block on new out-of-town shopping centre developments.
- A deliberate policy of introducing a new social mix into all neighbourhoods.
- The creation of new communal open spaces in strategic areas to encourage social mixing. The open spaces are created well before new building development commences.
- A flexible rather than rigid approach to planning.
- A policy of spreading new retail and service industries throughout the city, particularly in central areas to retain vibrant communities.

*The Barcelona Regeneration Model*, Geography Field Work.

# CPTED, the Barcelona way.

Surveillance: Plaza George Orwell.





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## CPTED, the Barcelona way.

### Broken Windows Syndrome.



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## CPTED, the Barcelona way.

Broken Windows Syndrome or interpretations of space?



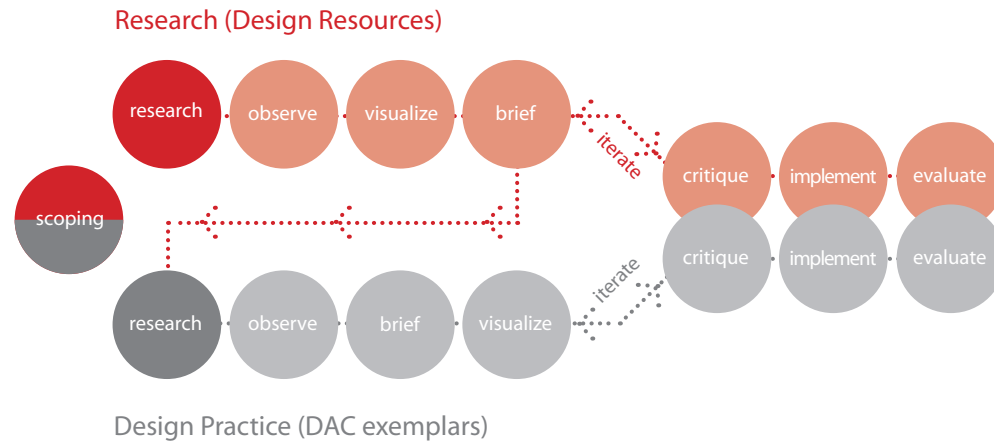
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## City Responses : CPTED via “Grippa BCN”





# Scoping and Research



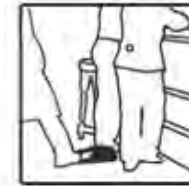
## Modus Operandi



**Dip**



**Lift**



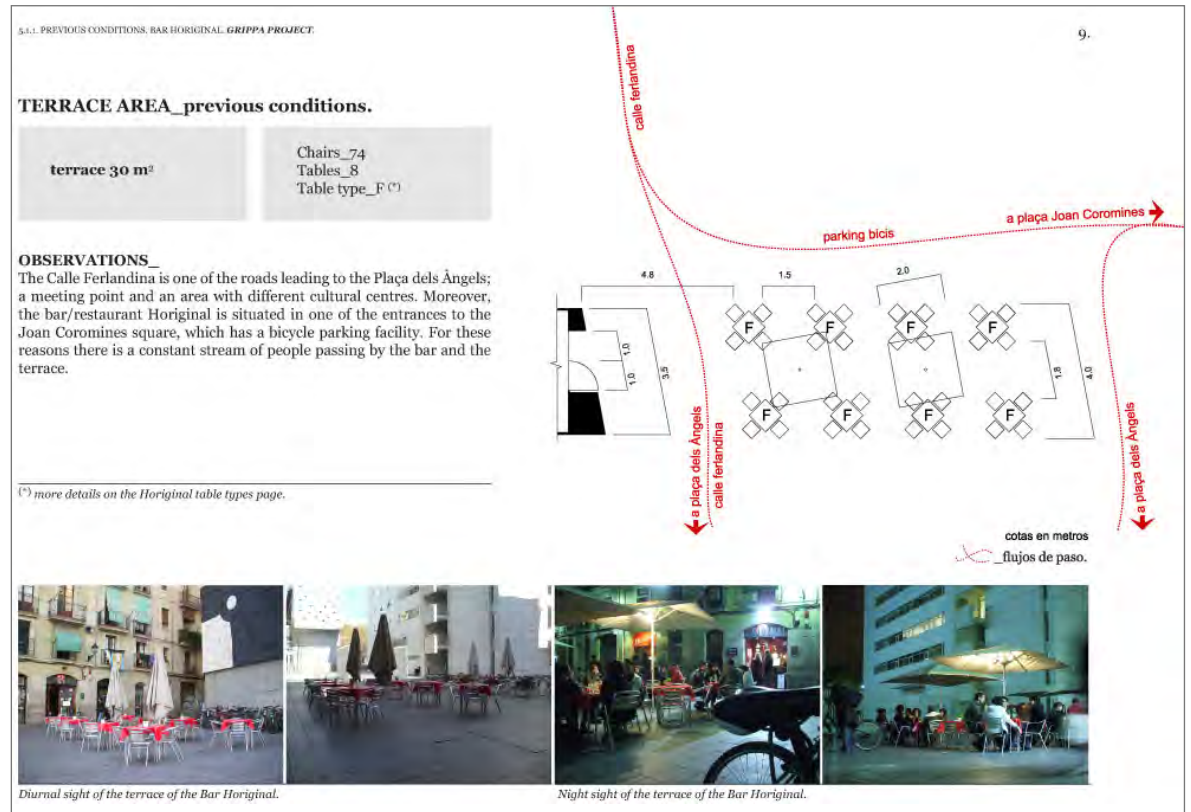
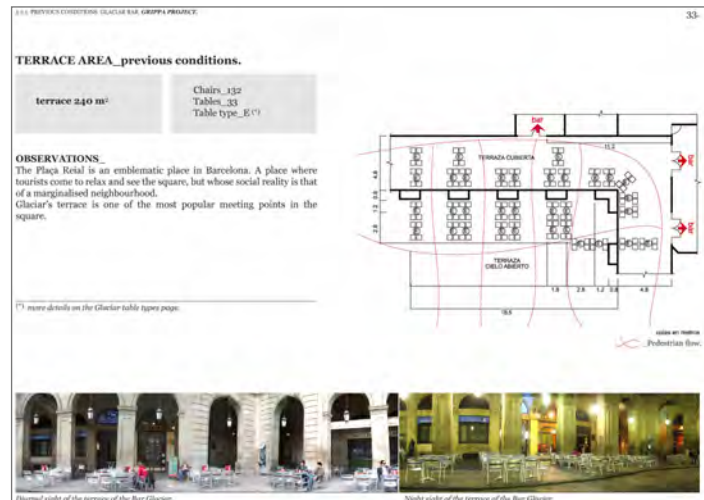
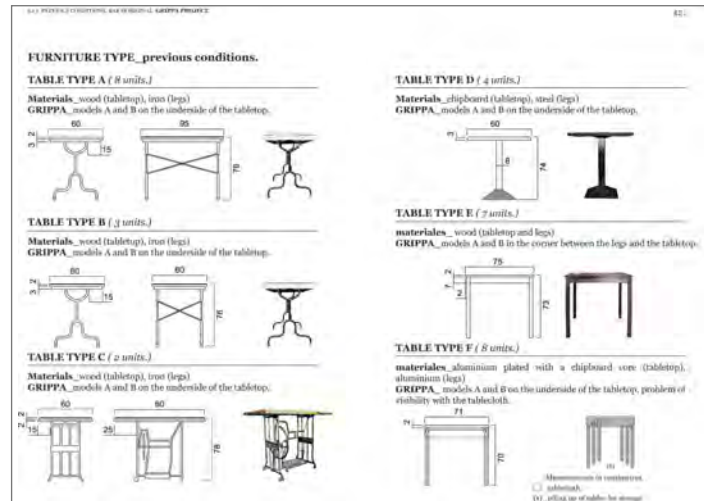
**Slash**



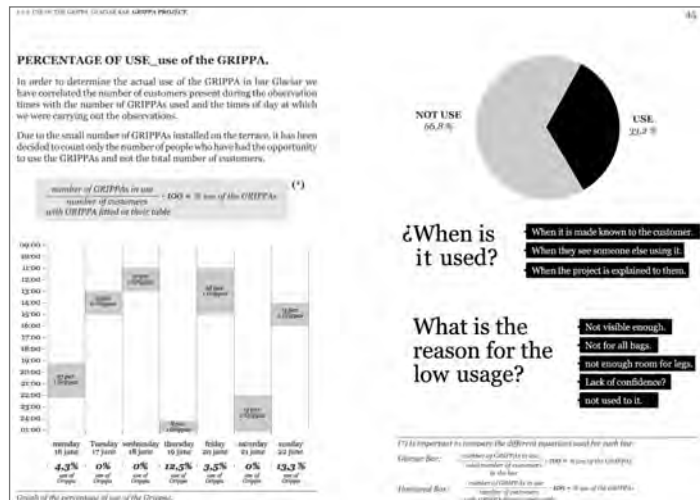
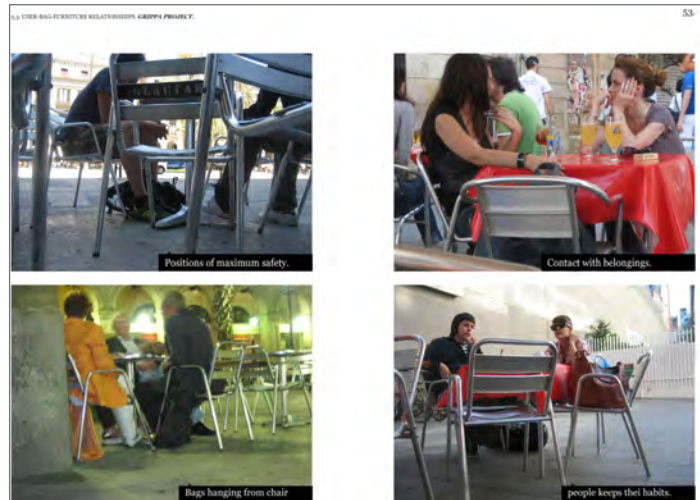
**Grab**



# Observations and Research



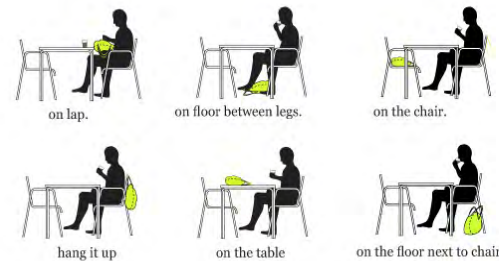
# Visualisation & Briefing



## 5.3. USER-BAG-FURNITURE RELATIONSHIPS.

Before installing the GRIPPA, there was an observation phase where customers were observed in order to find out how they looked after their belongings on a spontaneous, informal and personal level.

We found 6 different ways in which people generally left their bags, the safest being where the user remains in constant contact with their belongings (keeping them on their person or on the floor between their



Posiciones más comunes de colocación de los bolsos.

legs) and the least secure being those who appear to completely forget about the whereabouts of their bags (hanging them off the back of their chairs or leaving them on the table).

Obviously, the aim of the GRIPPA is not to change the habits of those who are already careful with their belongings but to target those who do not tend to watch their bags so instinctively.





# Implementation Iterations

5.1.2. COMUNICACIÓN.

Sticker on the bar's main door.

Special GRIPPA flyers for the tables and for the terrace chairs.

GRIPPA flyers for the tables.

Posters in the toilets.

BAR AREA\_use of the GRIPPA.

bar (sq m):

- chair: 47
- Tables: 12
- Table type: JLC

Number of GRIPPA: 16 units Type A (green) / 6 units Type A (red)

7 units Type B (green) / 8 units Type B (red)

47 GRIPPA/47 units

47 GRIPPA/47 units

OBSERVATIONS:

The high summer temperatures inside the bar mean that it is not used much by the customers.

Plan of the use of the GRIPPA and the disposition of the GRIPPA in the bar.

6. CONCLUSIONS, GRIPPA PROJECT.

GRIPPA type A

GRIPPA type C

GRIPPA type B

GRIPPA tipo D

GRIPPA type A

{ Difficult to hang up and take off. Closing system seems to be more secure. }

{ Add a spring for better closing. }

GRIPPA type C

{ Very easy to take the bag off. Big size. }

{ Close the hook. }

GRIPPA type B

{ Difficult to hang up thick handles. }

{ Use vertical version to make it easy to use. }

GRIPPA tipo D

{ Very easy to take the bag off. Big size. }

{ Close the hook. }

# Implementation & Critique



Proyecto Grippa, Encuesta Usuarijs

Bar: ☒ Glaciar ☐ Marjinal ☐ Bar. ☐ Restaurante. Hora: 11:00

Lugar: ☒ Terraza ☐ Interior

Edad: 30-40 Años Sexo: ☐ Mujer ☒ Hombre

Residencia en Barcelona: ☐ Si ☒ No Barrio: ☐ No

Utilidad del Bar: ☐ Si ☒ No

1. ¿Qué opinas de la Grippa? Buena, sencilla, cómoda, práctica.

2. ¿Ha servido la Grippa? Sí, me ha servido para no tener que sentarme en una silla.

3. Normalmente, ¿cuánto tiempo aguantas en la silla cuando estás en un bar? Cuando voy a tomar algo, aguantando un momento.

4. ¿Ha servido alguna problema cuando la Grippa? No, no.

5. Valora las siguientes afirmaciones:

	Si	No	Reservar	Observaciones
a. La Grippa es fácil de usar.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b. La Grippa es útil.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c. La Grippa es fácil de llevar en la Grippa.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d. La Grippa es fácil de limpiar.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
e. La Grippa es fácil de guardar.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
f. La Grippa es fácil de usar en la Grippa.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
g. La Grippa es fácil de usar en la Grippa.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
h. La Grippa es fácil de usar en la Grippa.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
i. La Grippa es fácil de usar en la Grippa.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

6. La comunicación ayuda a:

a. ... mejorar la Grippa. ☒ Si ☐ No. ¿Por qué? Porque me ha servido para no tener que sentarme en una silla.

b. ... mejorar la comunicación. ☒ Si ☐ No. ¿Por qué? Porque me ha servido para no tener que sentarme en una silla.

7. ¿Crees que vale la pena usar la Grippa? Sí, porque me ha servido para no tener que sentarme en una silla.

cr@isel GLACIAR ELISAVA

Proyecto Grippa, Encuesta Usuarijs

Bar: ☒ Glaciar ☐ Marjinal ☐ Bar. ☐ Restaurante. Hora: 11:05

Lugar: ☒ Terraza ☐ Interior

Edad: 30-40 Años Sexo: ☐ Mujer ☒ Hombre

Residencia en Barcelona: ☐ Si ☒ No Barrio: ☐ No

Utilidad del Bar: ☐ Si ☒ No

1. ¿Qué opinas de la Grippa? Buena, sencilla, cómoda, práctica.

2. ¿Ha servido la Grippa? Sí, me ha servido para no tener que sentarme en una silla.

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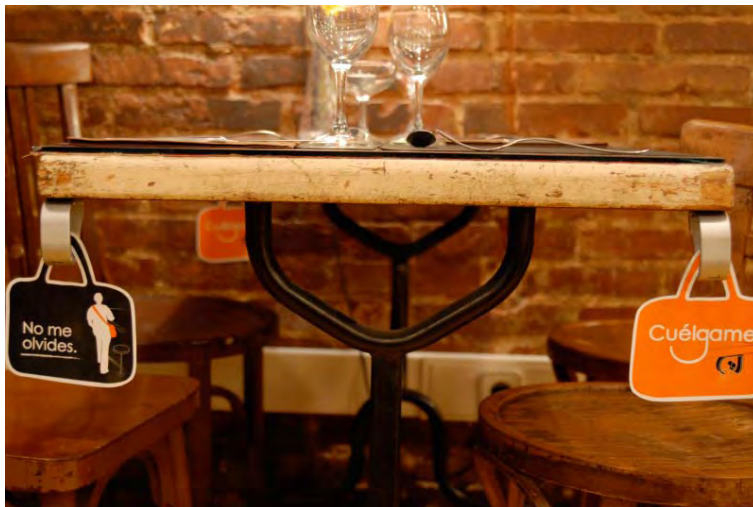
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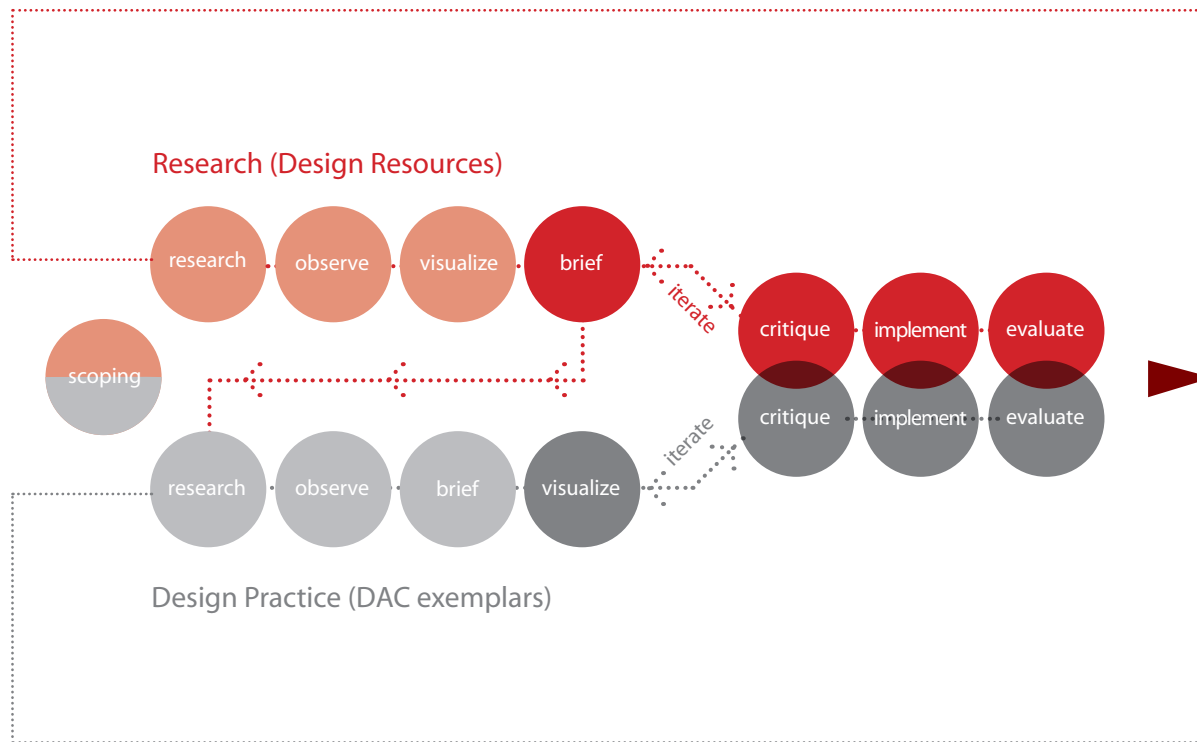
b. ... mejorar la comunicación. ☒ Si ☐ No. ¿Por qué? Porque me ha servido para no tener que sentarme en una silla.

7. ¿Crees que vale la pena usar la Grippa? Sí, porque me ha servido para no tener que sentarme en una silla.

cr@isel GLACIAR ELISAVA



# Refine via Iteration, Critique & Re-iteration





# City Responses

Civic code, 2005 (ordenances de civismo).

**Measures to encourage and guarantee peaceful coexistence and respect in Barcelona**

**Behaviour in public areas that may be subject to sanctions under the new city by-law for respecting public areas**

**A new city by-law to combat anti-social behaviour**

As of this year, 2006, the city of Barcelona has introduced a new municipal by-law that regulates and fines those people who make improper use of the city's public space. This by-law is applicable to everyone in the city of Barcelona, whether tourists or residents. Everyone must respect the general norms for peaceful coexistence.



Ajuntament de Barcelona

## Improper Conduct

### Unlicensed street trading



In the city of Barcelona, buying and selling items in public space without a permit –CDs, DVDs, clothes and accessories, sun-glasses, drinks etc.– is an infraction. Both sellers and buyers can be penalised by police officers with fines that can be as high as 1,500 €.



### Consumption of alcoholic drinks

Consumption of alcoholic drinks in squares and streets where this might cause a nuisance, and using bottles or cans when not at an authorised pavement bar or café table, can be fined by up to 1,500 €.

### Urinating in the street



Relieving yourself in the street, showing very little respect for other people and for the upkeep of public space, is punished with fines that may be as high as 1,500 €.

### Offering and requesting sexual services

In Barcelona, offering or requesting sexual services in public space (when this occurs within 200 metres of a school, for example) is punished with fines that may be as high as 1,500 €. Persons offering sexual services in the street are welcome to register on social welfare programmes.



### Graffiti and scrawling on walls

Writing or painting graffiti on any item of public property, whether walls of buildings, transport, street furniture, monuments etc., is an infraction that can be punished by fines of up to 3,000 €. Wherever possible, the police officers will oblige infractors to clean off the graffiti they have painted.

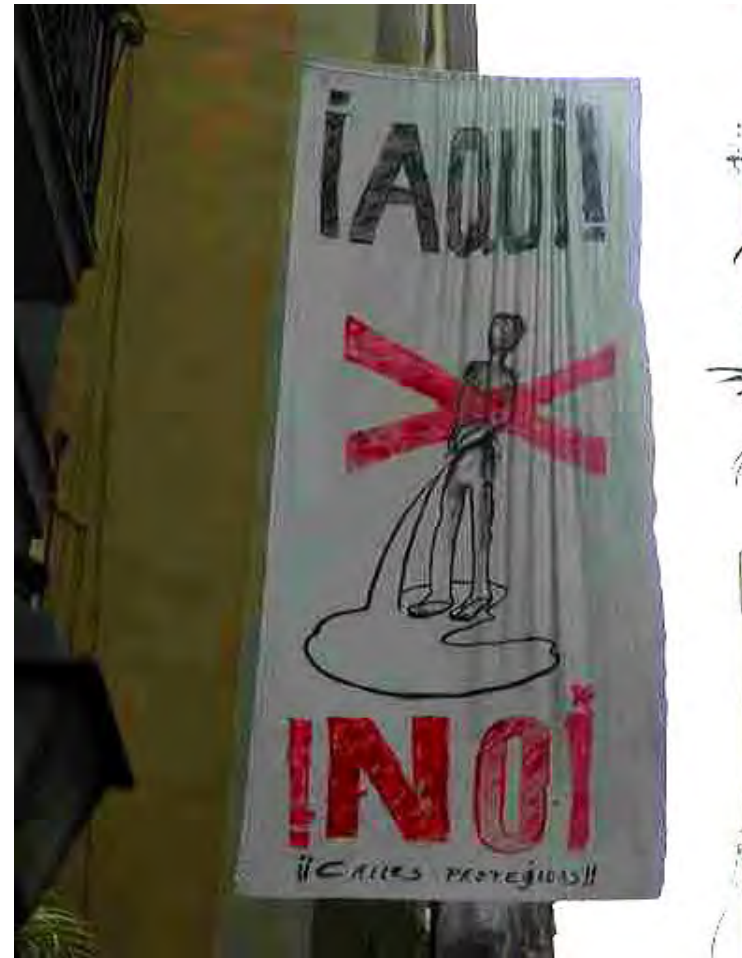
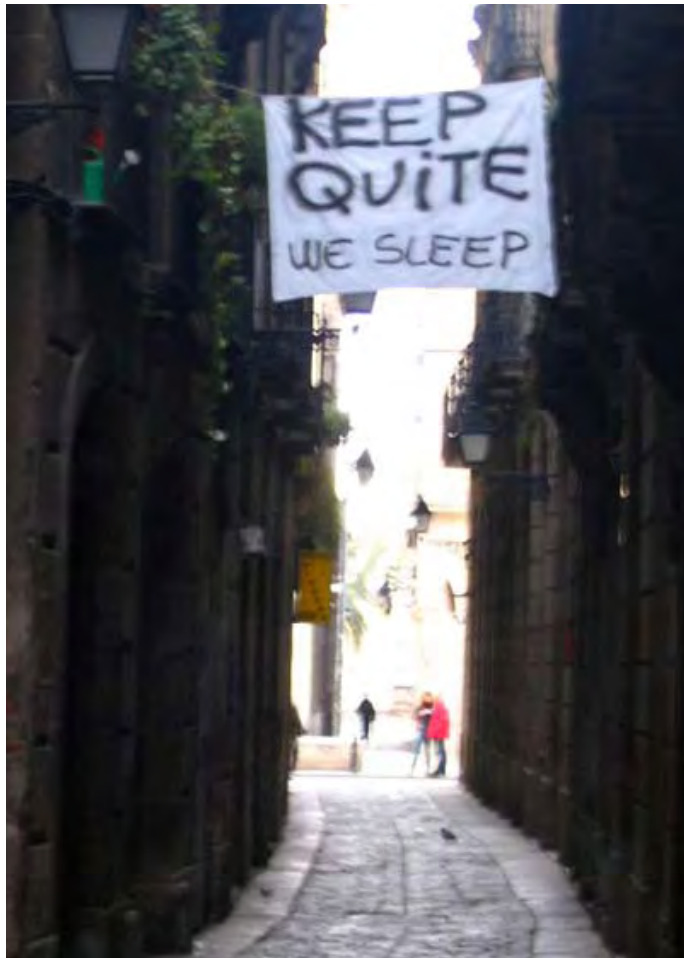


### Gambling on the street

For your own safety and for the benefit of all, do not be tempted by street gambling, such as the "trile" on the Ramblas, or tricksters. Avoiding this will also improve the circulation of people on the streets. The police can give fines of up to 3,000 €.

# Citizen's Responses

Neighbourhood interventions.



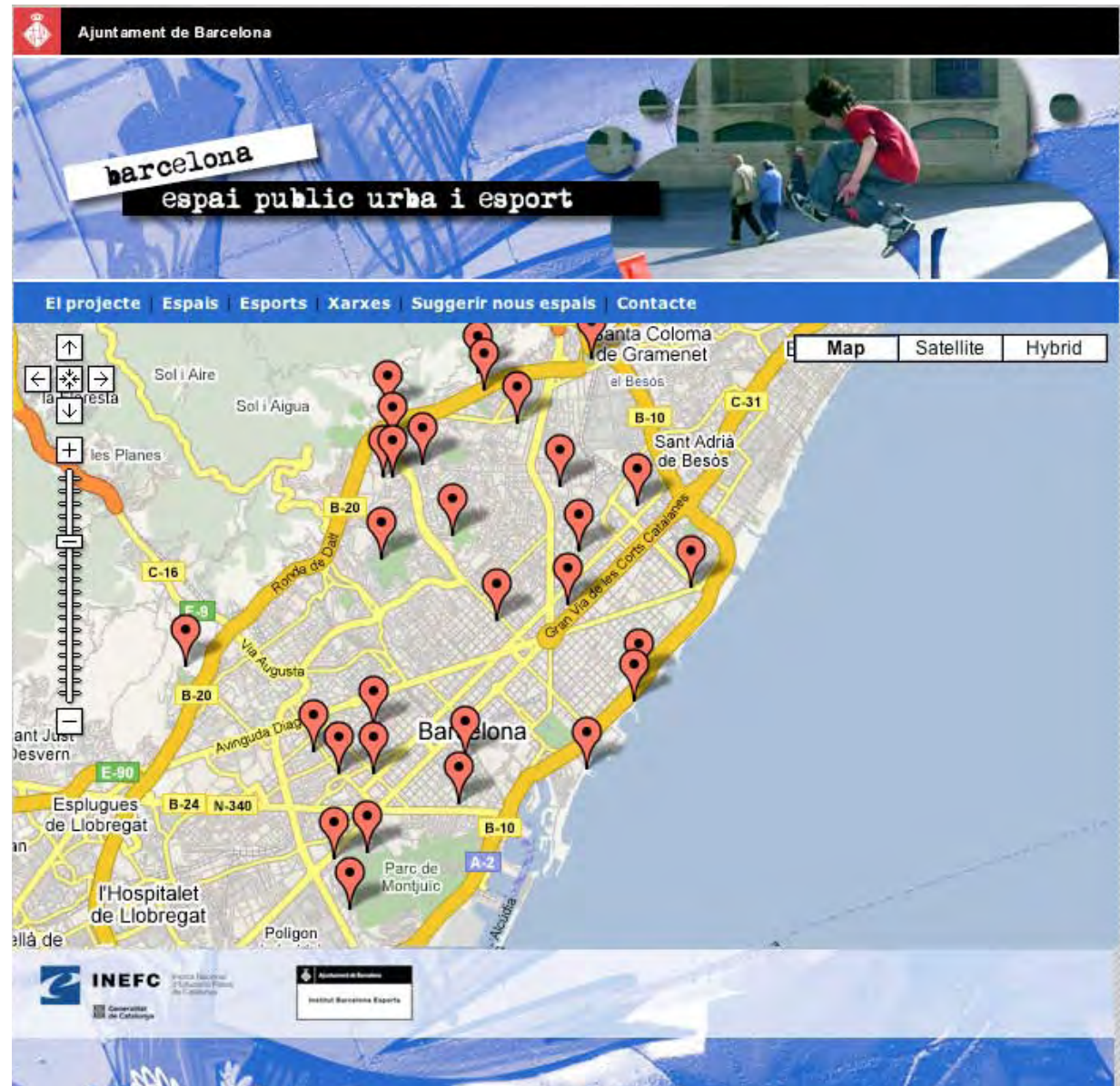
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## 4. Appropriations of Informal Sport in Barcelona.





# Sport and Public Urban Space as Generators of Social Networks.



# The Visual Codes of Sport in Public Space





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## The Visual Codes of Public Spaces Designed for Sport.





## Promotion of legitimate activity?





*Barcelona, A Waterfront City: from informal sport to CPTED; Understanding appropriation and activity support.*  
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**OFFER OF THE  
ENVIRONMENT**  
(activity support)

+

**INTERPRETATION OF  
VISUAL CODES**  
(user / social  
network)

=

**PRACTICES WITHIN  
THE SPACE**  
(activity)

## Spaces not designed for sport: promotion of illegitimate activity?

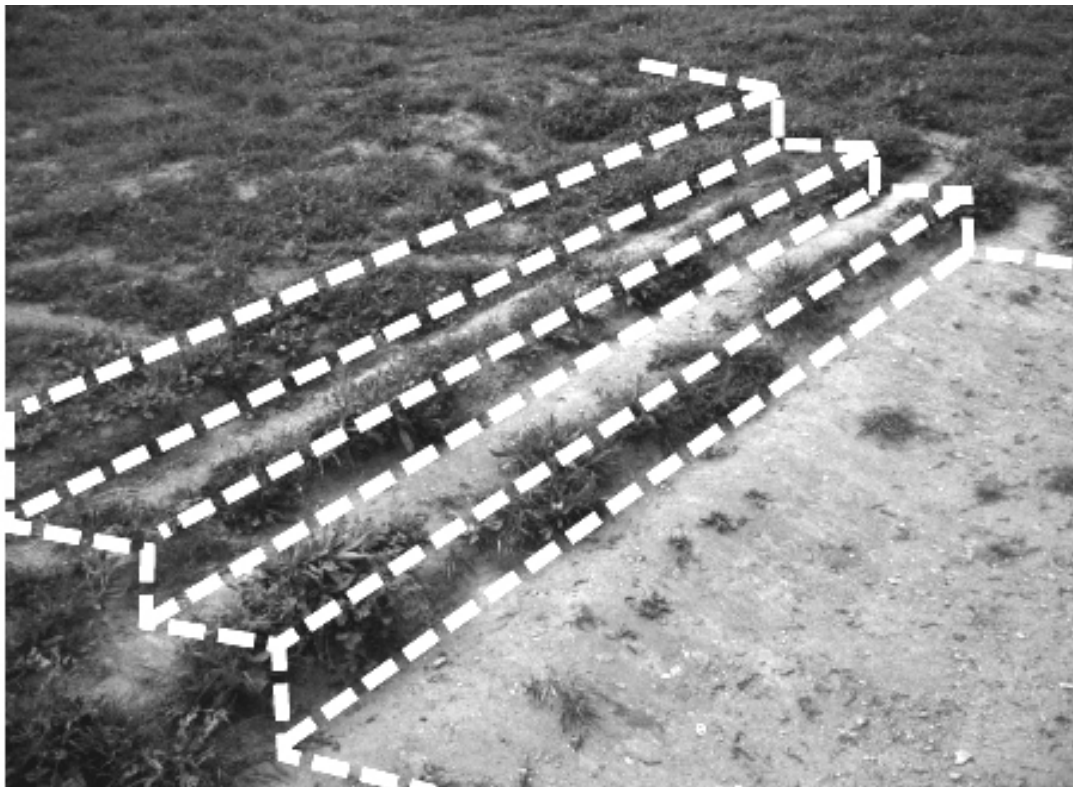
Example: Ecuavoley





## Spaces not designed for sport: promotion of illegitimate activity?

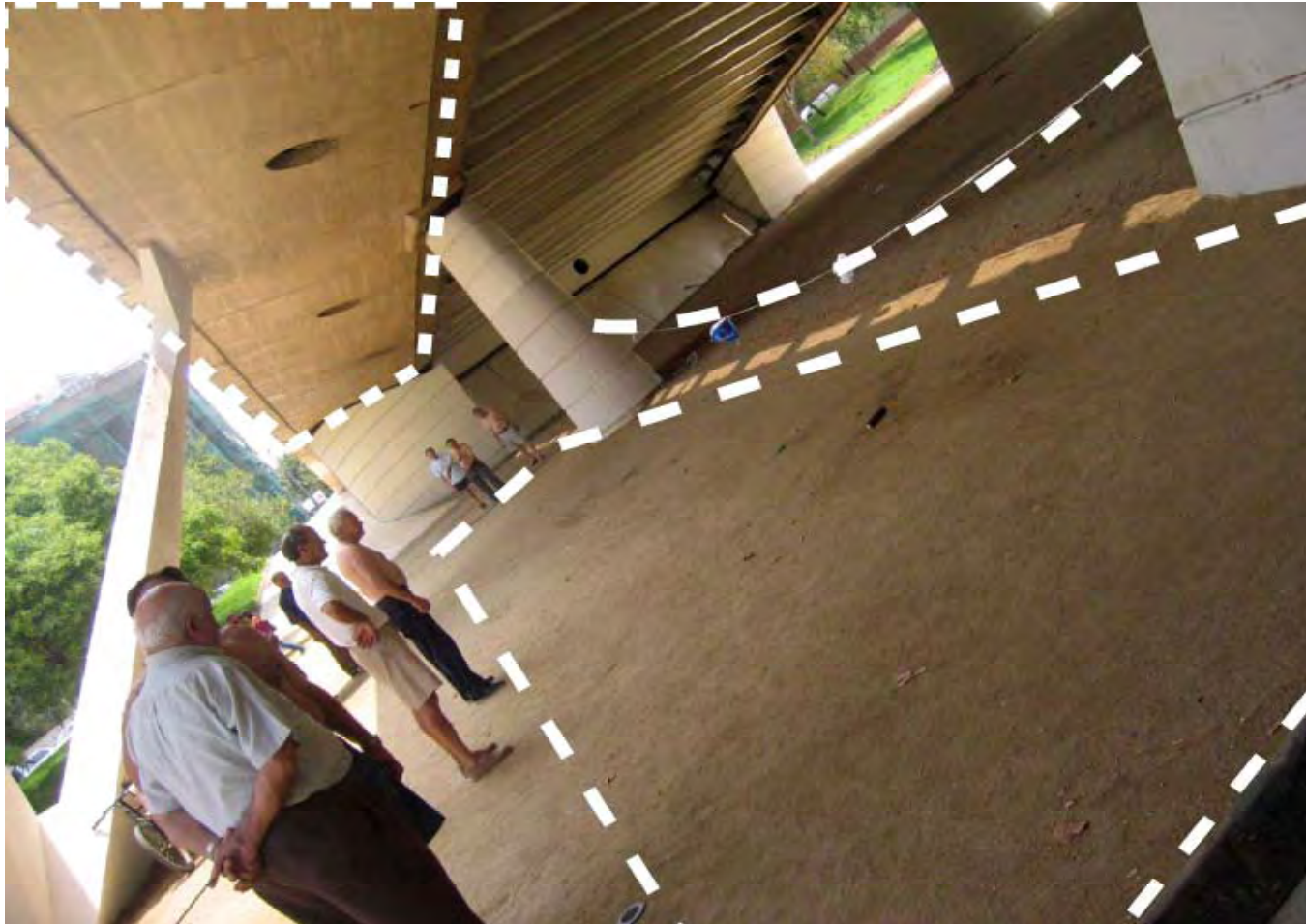
Example: Ecuavoley



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## Spaces not designed for sport: promotion of illegitimate activity?

Example: Tanguilla





## Spaces not designed for sport: promotion of illegitimate activity?

Example: Tanguilla







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## 5. Activity Support vs Appropriated Cities.



[http://www.girardin.org/fabien/tracing/media/bicing\\_small.mov](http://www.girardin.org/fabien/tracing/media/bicing_small.mov)

## Example Bicing: 6,000 bicycles.





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## Example Bicing. 1 million uses in 18 months.



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## 5. Conclusions:



[http://www.girardin.org/fabien/tracing/media/bicing\\_small.mov](http://www.girardin.org/fabien/tracing/media/bicing_small.mov)

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# Conclusions:

## The details matter!

Urban Acupuncture can help sustainable responses :

*“One pinch hurts less (and allows us to learn) ...*

*How can we learn to love our cities through design (and make them last)?”*

Jaime Lerner, 2004



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## Conclusions:

We need to design cities to promote positive city life.

We need to design environments that provide for these things and that can help reduce conflicts, not to increase them... Less crime doesn't have to mean less design!

The better we get to know the users and uses of our cities, the better we can respond with **appropriate** interventions.

Both **Activity Support** and **Appropriation** are part of the social capital of our cities.