

THE CITY, THE SEA, THE PLAN

Representations of urban plans: perception of the relationship between Palermo and the sea during the regeneration of the urban waterfront

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Cette communication vise à identifier, par l'analyse des réactions suscitées par un projet de réaménagement du front de mer urbanisé de Palerme, la perception que les Palermitains eux-mêmes se font de la relation de leur ville avec la mer, et la relation qui existe entre le projet urbain et leurs aspirations. Sur un échantillon donné, nous avons défini une méthode de recherche impliquant les disciplines de l'histoire sociale et celles de l'aménagement du territoire. Les cartes mentales se sont avérées être le meilleur instrument d'analyse, susceptible d'identifier des thèmes majeurs que la planification ne peut négliger, mais aussi le point de départ d'une représentation synthétique de l'environnement de l'enquête. Ces représentations cartographiques constituent un puissant outil de communication entre recherche sociale et planification, dans la phase complexe de l'élaboration du projet urbain.

An urban regeneration plan is going to be realized on the waterfront of Palermo: are the inhabitants aware of what it means for their city identity? Is there any difference between the plan vision and the inhabitants' perception about the city-port identity? These questions are the main issue of the research I conducted for my Master's degree thesis, and I will try to trace the steps of my analysis. I will first focus on the urban waterfront topic, and the reasons why I decided to analyse this area. Then, I will describe the area in which I conducted the empirical research: the Sicilian city of Palermo and its urban waterfront. I will carry on explaining how my research has gone on, and I will close with a presentation of possible future research projects.

Why the urban waterfront?

The first step of my research was to try to answer these questions: what is an urban waterfront for me, as a geographer? Which could be a functional defini-

tion? So I was looking for a synthetic, but functional, definition to explain how complex this phenomenon is: in my opinion, the urban waterfront can be defined as an area in which it is possible to act to restore the useful relationship between cities and ports, that in the recent past has been lost, in order to find again a unity of space, society and identity, in the city¹.

Then I tried to understand why those areas have created such a great interest. I focused on the recent history, to analyse some urban waterfronts and some regeneration projects, and the common characteristics among them. I defined three value-maker elements, that, in my opinion, have created great interest on urban waterfronts from the '70s and onward:

- Centrality: City—ports have their heart and origin in their ports, and nowadays these are in a very privileged position, as they are very close to the city-centre.
- Proximity to the sea, which has always attracted people, and so adds value to the location².

¹ The main focus is, in my opinion, the idea of "interface", often used to define the urban waterfront areas: first of all, "interface" means that there is a relationship between two different objects, the city and the port, but it's not possible to distinguish between the identity of the city and the port's one. "Interface" means even that there are melting phenomena, or "osmosis" phenomena: these areas fell into disuse because they became "urban-break areas", reasons of divisions inside the city, of isolation and social hardships. This is why I think that just "interface areas" is not the best definition for urban waterfronts. So I decided to look for a new definition, analysing the process that led to the "birth" and evolution of so particular places like urban waterfronts are. Some references about the evolutions of urban waterfronts are : Alemany 1999; Hoyle 1988; Hilling 1988; Lucia 1988; Pieprz 2001; Vallega 1992.

² " The port is not the last point of city next to the sea, it is not a "waterfront" (a diverting and hypocrite term, when it is referred to a portual area), but it is a connecting place between the water and the urban land: actually an "in-between" place, with relationships and exchanges with both landscapes. [...] The port is theartificial place of a moving centrality [...] that is in conflict with the solid centrality of the city, but is also a challenge for it." (Boeri 1999 p. 47) (translated by the author).

- Variety: Over the centuries, harbours developed a lot of different uses and activities, so that now there are different kinds of buildings, with all kinds of functions.

Because of these three characteristics, and because they are now disused areas, urban waterfronts have very big potentials, that I suggest can be classified according to the scale at which they operate:

- Urban scale, because it is the birth-scale of urban waterfronts. At that scale, there are different types of opportunities, in relation to:

- the “city-port” as an identity for the city, which collapsed when the dockland was abandoned, but it can be re-enacted with a new presence and the creation of a new relationship with the sea³;
- the real-estate value, because of the privileged location by the sea and near the city-centre and, often, because of the specific characteristics and quality of the buildings (Alemany 1999; de Solà-Morales 1999; Pieprz 2001);
- the social revival of the dockland, essential because of the degrading that occurred when the harbour areas fell into disuse (de Solà-Morales 1999; Lucia 1988; Moretti 2001; Hilling 1988; Vallega 1992).

- Regional scale, even if it still has not happened very often until now, city-ports that are close to each other can implement strategies of partnership to develop activities such as tourism, maritime transports and environmental planning (Pieprz 2001; Viola 2007).

- Global scale: urban waterfronts are, from their origin, privileged places of relationships and sharing not only of goods but also of information, ideas, etc., and city-ports have the ability to become vital hubs in the global exchange network (Pieprz 2001; Garcia 2007).

Palermo: Where? What? When? Who? Why?

The urban history of Sicily has always been tightly linked to its role in the Mediterranean trade exchanges, and so is the identity of its city-ports. Palermo is mainly a city-port: it was born as such and

later developed around the historical port and the dockland (near the city-centre and all around the gulf). During its long history the urban shape and the port shape have always influenced each other, mainly because of the change of the coastline throughout the centuries.

It is possible to identify different phases in the history of urban development, even if it is not possible to distinguish them in the urban shape nowadays:

- Panormos - the origins: Palermo originated (in the 8th century b.C.) from a little settlement of Phoenicians, born around the main port (*La Cala*) (fig. 1). The whole head-land was fortified, zoning the city into two parts (the *Paleapoli* – the old town, and the *Neapoli* – the new town), as it will be until the Arabic period. Until now it is possible to identify the ancient road system called “fish-bone”: a main road from the castle to the sea (*Il Cassaro*), with little parallel streets crossing the main one.

- Balarm – within the walls: Under the control of Arabic people (827 – 1091 A.D.), Sicily experienced a period of richness and development. Palermo became the chief town of the domain. The urban shape was transformed and remained basically unchanged until the 18th century. A castle was built to defend the port, and a new district (*al Halisah – la Kalsa*) was laid-out for the elite. A big wall-system was built around the new town.

- From the 16th century, the new government of the Aragonese (kings from Spain) made several changes in the urban shape of Palermo and of its port. The walls were reinforced and enlarged. Because of changes in the coastline, it was necessary to build a pier (called *Molo Sud*) to protect the port and make it safer.

- Palermo – expansion outside the walls: From the second half of the 17th, and mainly in the 18th century, Palermo expanded outside its walls, in the countryside nearby. In the city-centre, urban plans and actions were more innovative: Palermo became a *Belle Epoque* city. The city grew away from the port and the dockland, that began to develop separately. A new pier was built in the northern part of the gulf, and a lot of innovative actions were planned.

- The sack of Palermo – the second half of the 20th century: After World War II, the administration approved a reconstruction plan: the city-centre and the waterfront were abandoned in favour of new

3 In my opinion there are two levels of identity: the “external identity” of the city-ports, as they are related the one to the other; the “inner identity” of each city-port, because of its own history. Cf. Vallega 1992.

development areas, but without a global strategy plan. Little by little, the port slowly became definitively separated from the city. The dockyards, built during the first years of the 20th century, developed and expanded a lot.

- The spring of Palermo: It was not until the '90s that a real urban plan was designed, based on a global strategy of territorial development: just speaking about the waterfront, in those years, the administration built a garden on the seaside (*Villa a Mare*) (fig. 2), which is now the only place by the sea where inhabitants can actually go for a walk, or *passeggiata*. But unfortunately, this did not last long, it was just a short digression.

- The recent years: From the beginning of the 21st century, the new administration did not continue this policy of territorial development. In September 2008 the administration approved a «*Piano Strategico per "Palermo Capitale dell'Euromediterraneo" per la riqualificazione, lo sviluppo e la promozione del territorio metropolitano della città di Palermo*» (Strategic Plan for Palermo "Capital City of Euromediterranean region", for redevelopment and promotion of Palermo urban territory). It is divided in four phases, and we are now in the analysis phase (the first one). But really, nothing has yet begun, mainly because of the economic problems of the city-council.

The Strategic Plan states that the waterfront is one of the transformation areas: a Masterplan was laid-out in 2007, as a scenario for the port development. In 2008 the administration presented a Port- Plan based on these principles: developing sea-freight activity; developing relationship with the territory; revitalising the urban waterfront. The project is "to make Palermo a creative city-port, according to its liquidity, based on the waterfront as an incubator of identity"; so that the city can regenerate itself.

It was necessary to plan the rebirth of the urban interface between the city, the waterfront and the port. The planners split the relationship between the city and the port in three categories, corresponding to three different areas:

- The liquid port: in this area the relationship with the city is stronger, the harbour is melted with the city. It is dedicated to leisure boating and cultural events.

- The permeable port: it is separated, but still connected with the city and its infrastructures. It is the harbour for travellers and cruise passengers.

- The stiff port: it is the real harbour system, the commercial port protected and separated from the city so that it is safe and efficient.

The plan identifies many interface areas along the waterfront, with the goal of giving back to the inhabitants the whole coastline and of building for them a renewed relationship with the sea, for example through a better transports system⁴.

The research questions and method

The first step was to research if inhabitants are aware of this urban debate, and how much do they know about it. First of all, it's not simple to gather data on issues such as "what do people really know", and also, as I decided to use the mental mapping method, I realized that if it is very difficult for a professional cartographer to represent changes as they are occurring in a territory, for a non professional one it is almost impossible. So I decided to change a little bit my project.

One of the most important problems, approaching urban waterfront studies, is to define the area of study. So my questions became: what is the urban waterfront of Palermo? Which area is the most linked to the sea? And why? Along the waterfront of Palermo, I selected a restricted area which was adapted to my research agenda and its practical conduct: I thus chose to only study the city-centre, the area located inside the town's walls. I decided to interview a sample of people as diverse as possible: my only criterion was to chose people who attended the area for different kinds of reasons (job, school, leisure, etc.). I'm sure that this sample was not representative, but my main goal was to set up a method, as I'll show later. Obviously, to have a more complete view of people's awareness of urban plans in a city as big and complex as Palermo, one would need to interview a much wider sample of inhabitants.

I started with interviews, divided into three parts reflecting the three kinds of information I wanted to gather:

- Sociological and demographic data, necessary to define the sample.

- Mental maps: the question was: "draw the part of the city you feel is linked, somehow, to the sea", to define what was perceived by the people as the urban waterfront.

- A broader set of questions addressing the changes taking place in this area, operations that were now happening and those that had taken place in the last ten years: people were asked to identify actors, times, zones, kinds of interventions, etc.

4 Carta 2008, Piano Strategico – Documento di impostazione scientifica.

The environmental image of the waterfront of Palermo

I collected twenty maps, that generated results rather unexpected. First of all, it is very interesting to compare where the Portual-Plan will act, and where inhabitants think that the waterfront is: it is easy to see that only the “Liquid Port” is part of what is identified as “waterfront”. The “Stiff Port” and the “Rigid Port” do not exist in people’s representations. So it is extremely important to work on the “interface areas” that are the real waterfront, places where it is possible to find a real relationship with the sea.

Among the issues that emerged during the interviews, I think that three are the most important ones, because the whole sample mentions them in a similar way:

- The role of the administration. I would never have thought that the town council, elected for the second time just one year and a half before, had so little popularity: nobody appeared pleased. **Marco** (fig. 3) has a shop, along // *Cassaro*; he is a jewellery-maker. He is married and has two sons. During the interview he said many times: “Palermo has a harbour just on the map! The administration does nothing to join the city and the sea, the administration does nothing at all”. He told me about some interesting experiences of associations that organize activities for children in the city-centre, to let them know and love their city. But, he said, the administration and the mayor are their most important opponents. The waterfront in his map is just what he can see from his shop: the old harbour, the disuse and the degrade action.

- The role of public spaces and of “neighbourhood identity”. Mainly old established residents in *La Kalsa* feel their neighbourhood as a big common space, but just for them. I think that this perception of the neighbourhood can be compared to that of a big apartment building. These elements are very embedded in the urban identity, and I think that it is important to remember it during the planning-process. In my opinion **Salvatore’s** (fig. 4) map is one of the most interesting. He has a shop that his father and his grandfather had before him in the main street of *La Kalsa*. The first thing that arises from his representation is that his neighbourhood is closed: it’s something like a castle, as it was when it was built by the Arabic people. The city disappeared and there are

only the sea and Monte Pellegrino, a very important hill for Palermo: the most important holy place and one of the capes that close the Gulf.

- The problem of transport. The inhabitants feel the most important axis (*Via Crispi – Via Cala – Foro Italico*) (fig. 5) as a clear dividing line, between the harbour area and the rest of the city, a border that none of the perpendicular roads can overcome. I think that it is important to consider these elements if a planning process has to be undertaken to increase the “use” of this area⁵. **Gilda** (fig. 6) is a teacher, she is married and has two children. She lives on the waterfront, but she said that there is no relationship between Palermo and the sea, that a waterfront doesn’t exist at all. Her perception of the sea is linked just to transport, to the big, uncomfortable, dangerous road that she has to pass every day, on her way to work. And, in my opinion, the presence in her map of different “scenes” is very interesting: the map became a path.

I later divided the maps into two different groups, according to how the urban waterfront was defined:

- Group 1 is more frequent in the older part of the sample (40 years old and more). In this group the idea of a “link” between the sea and the city emerges, but for some ones this connection is limited to “*La Kalsa*” (that’s mostly residents’ of *La Kalsa*’s perception) while for others it extends to the whole city-centre (that’s mostly the perception of those who come to the waterfront just to work, and have an ideal view of the city). In any case, the waterfront is limited to the area linked to the sea. Here are some examples, and I’ll focus in particular on the Elena’s one. **Elena** (fig. 7) is a student and lives in the city-centre. For Elena, Palermo is the waterfront, and the waterfront is Palermo. She told me that it’s very difficult to have a relationship with the sea, but her map shows something different: I think that her map is mainly a wish or a project. It’s almost a postcard; the view point is outside, as if she was making a real map, an objective map! And in this representation it’s possible to find lots of symbolic elements of the city: the theatres, the skyscraper, etc. Palermo and the waterfront are what we want them to become, are what we make them. This is a real project.

- Group 2 is mostly found among younger people (under 40 years old) and all the non-residents. There, the vision is that of an obvious division

⁵ The problem of transports is very important in every city, nowadays, and it’s even more important in waterfronts regeneration process: to make a new connection between the city and the portual area it is necessary to plan a good road and transport system. For instance, a system of perpendicular roads should be created, to ease the access to the coastline. Cf. de Solà-Morales 1999; Pieprz 2001; Portas 1997. For the transport and road system in Palermo, cf. fig. 1, 2, 5.

between the city and the port. Those interviewed underlined the division, and the city disappeared completely. Also, to them, the waterfront includes the whole Gulf of Palermo. Here are some examples, and I'll focus on one of these. **Giovanni** (fig. 8) is retired, and likes to spend some hours fishing along the *passaggiata* of the *Villa a Mare*. His map is perfect: he draw each element of the coastline as if he was looking at a map. But when I asked him: "Where is Palermo?, —the question was: tell me which part of the city you feel is linked to the sea"—, he answered "only the real coastline is linked to the sea; Palermo was born and grew up thanks to his Gulf, but nowadays Palermo doesn't care about it. Lots of possibilities are connected with the sea, but we look at the inland, not at the sea".

It is possible to create a consistent environmental image from these maps, that, in my opinion, could be used in an introductory analysis for a planning process. It was evident in the interviews that a bigger presence is not enough to make a link to the sea and to find again the identity of city-port. It is necessary to find a functional link. At the end of my analysis, I made three maps trying to put together all the elements collected during the interviews. These representations come from the subjective mental maps of the sample; but they are much more abstract, their goal being to work as a link between the "mental maps" of ordinary people and the "scientific" representations of the planners.

A step backward, a step forward.

Now, I would like to take a little step backward to speak about the theoretical framework of my research. I started my research thinking about the value of a socio-cultural geographic approach in planning studies. In my opinion, it mostly lies in the analysis of what has always been its subject of study: the geographical representations. As a consequence, I decided to analyse the relationship between contextual knowledge of territories and "ordinary" representations. In particular, I studied the role of perception in the creation of urban identity and in planning. Looking for a meeting point between techniques and reality, I relied on Kevin Lynch's studies on mental mapping, and, later, studies on Parish Maps, as well as on some Italian research conducted in Milan and in Piemonte.

My goal was to look for a method and a tool to bring the planning process closer to inhabitants. But to make the research profitable it is necessary to return to the technicians, to the planners. I think that the challenge for geographers is to try to act as a link between the social reality and the pure science. Communication is at the heart of every planning or

governmental project. Involving the inhabitants in the process will be more than useful, if both administration and inhabitants try to know each other. But it is necessary that each inhabitant increases his own sense of territory.

Translating a perception, an image, on a map is a big challenge, but it can be very fruitful for urban studies. Considering the difficulties, often met, in the "communication step" of a planning process, and in spreading the analysis results to territorial actors, I tried to play the role of a "translator" of some sort, between these two kinds of knowledge. It is an ambitious project that I am planning to further develop in my Ph.D. Research. There are lots of researches about participatory cartography, but that's not my main interest. Map is just a map: even if it is the result of a participatory process, my influence, as a cartographer, will be strong. This is why I would like instead to start from mental maps, because I think that each representation has a great "planning potential": each representation had someone's world-vision inside, and someone's projects, wishes, opinions, etc.

In particular, my interest is in focusing on the possibility of making a synthetic representation that can be a useful tool in the planning process. To let inhabitants be cartographers is not enough. I think that the most important challenge is to find a synthesis of the information gathered through the interviews and the mental maps. So many topics arise, that I shall discuss in my Ph.D. Thesis:

- Which characteristics should these representations have? I would like to start from the method that I used to make the maps at the end of my research on the waterfront of Palermo, and from the experience in mapping that I have gained during the first three years of the project "Mapping the world" (www.cartografareilpresente.org): a cartography that focuses first on communication, and not on the rules of technical representations, that wants to be an image of the world. A cartography that wants even to be art and communication tool

- Why should this cartography be integrated in planning processes? I think that the big communicative potential is the most important characteristic of this kind of maps: I think that it's possible to use this kind of cartography at least in three different phases of the planning process:

- Communication with inhabitants, useful for the field work and the analysis that are necessary before the plan is drawn.
- Communication between different territorial scientists: planning is a multidisciplinary action,

during the planning process many different scientists need to collaborate and often they don't speak the same "language": social scientists, architects, urban planners, etc. A cartography that looks for different rules in order to be efficient, in my opinion, could be a good "common language".

- Communication of the finished plan to inhabitants, in order to understand if it could be a good match point between inhabitants' vision and projects and planners' vision and projects.

I think that this method, this different kind of cartography could be the starting-point.

Bibliography

VV. AA., 1999, *Urban Waterfront Manifesto*, *Portus*, n° 3-4.

Alemaný J., 1999, "Economic Aims and Goals of the Port Reforms", *Portus*, n° 3-4, September – December 1999, p.35-38.

Alemaný J., 2006, "Gli obiettivi economici della rivitalizzazione dei waterfront", in Mostra Internazionale di Architettura, 10, Venezia, *Città-Porto = City-Port*, Venezia, Marsilio, p. 61-63.

Boeri S., 1999, "Between Port and City", *Portus*, n° 3-4, September – December 1999, p. 46-49.

Bruttomesso R., 2006, « Spiegare il Porto alla Città », La Biennale di Architettura di Venezia a Palermo, *Portus – La relación puerto ciudad y la reorganización de las zonas urbano-portuarias*, n. 14, p.33-39.

Carta M., 2008, *Città liquida - Il nuovo Piano Regolatore Portuale di Palermo*, http://www.unipa.it/~mcarta/PRP/prp_pa.html.

Carta M., 2007, *Creative City*, Trento-Roma, List.

Carta M., 2007, *Porti & Stazioni Palermo – Processi strategici di rigenerazione urbana*, http://www.unipa.it/~mcarta/PIAU/piau_pa.html.

Carta M., 2006, « Waterfront di Palermo: un manifesto-progetto per la nuova città creativa », *Portus – La relación puerto ciudad y la reorganización de las zonas urbano-portuarias*, n. 12, p.84-89.

Carta M., 2006, « Waterfront Palermo: un manifesto-progetto per la nuova città creativa », in Mostra Internazionale di Architettura, 10, Venezia, 2006, *Città-Porto = City-Port*, Venezia, Marsilio, p. 233-235.

Ceccarelli P., 1997, "Ripensando con nostalgia a quello che i waterfront avrebbero potuto essere", *Aquapolis*, n° 2, p.24-26.

De Solà-Morales M., 1999, « Cinque domande sul progetto dei porti urbani », *Portus*, n° 3-4, p.17-22.

Dematteis G., 1995, *Progetto Implicito. Il contributo della geografia umana alle scienze del territorio*, Milano, FrancoAngeli.

Hilling D., 1988, "Il cambiamento socio-economico nel quartiere marittimo: la scomparsa della "città del marinaio"", in Hoyle B., *Revitalising the Waterfront: International Dimensions of Dockland Redevelopment*, trad. it., Lucia, M. G. (edited by), 1994, *Aree portuali e trasformazioni urbane*, Milano, Mursia, p. 37-51.

Hoyle B., 1988, "I meccanismi dell'evoluzione dell'interfaccia porto-città", in Hoyle B., *Revitalising the Waterfront: International Dimensions of Dockland Redevelopment*, trad. it., Lucia, M. G. (edited by), 1994, *Aree portuali e trasformazioni urbane*, Milano, Mursia, p. 21-33.

Hoyle B., 2006, "Sotto l'occhio del tempo", in Mostra Internazionale di Architettura, 10, Venezia, 2006, *Città-Porto = City-Port*, Venezia, Marsilio, p.165-170.

Lacagnina D., 2006, "Il mare di Palermo, una lettura particolare", in Mostra Internazionale di Architettura, 10, Venezia, 2006, *Città-Porto = City-Port*, Venezia, Marsilio, p. 233-235.

- Lemaire O.**, 2007, "The territory of Cities, the Territory of Ports, what future do they share?", *Portus*, n° 13, may 2007, p.72-75.
- Lucia M., G.**, 1988, "Waterfront: una nuova frontiera per le città d'acqua", in Hoyle B., *Revitalising the Waterfront: International Dimensions of Dockland Redevelopment*, trad. it., Lucia, M. G. 1994, (edited by), *Aree portuali e trasformazioni urbane*, Milano, Mursia, p.11-18.
- Lynch Kevin**, 1960, *The image of the city*, trad. it. Ceccarelli, P. (edited by), 2004, *L'immagine della città*, Venezia, Marsilio.
- Moretti M.**, 2001, "Aquatic Components in Waterfront Planning", *Aquapolis*, n° 1-2, may - June 2001, p.4-5.
- Pavia P.**, 2006, "Il porto come parco", in Mostra Internazionale di Architettura, 10, Venezia, 2006, *Città-Porto = City-Port*, Venezia, Marsilio, p. 171-176.
- Piano Strategico** per "Palermo Capitale dell'Euromediterraneo1" per la riqualificazione, lo sviluppo e la promozione del territorio metropolitano della città di Palermo, Documento di impostazione scientifica – visione guida e primi indirizzi strategici,
http://www.pianostrategico.comune.palermo.it/index.php?module=Downloads&func=prep_hand_out&lid=2.
- Piano Strategico** per "Palermo Capitale dell'Euromediterraneo1" per la riqualificazione, lo sviluppo e la promozione del territorio metropolitano della città di Palermo, Piano di Comunicazione,
http://www.pianostrategico.comune.palermo.it/index.php?module=Downloads&func=prep_hand_out&lid=7 .
- Pieprz D.**, 2001, "Regenerating the recovered Waterfront", *Aquapolis*, n° 1-2, p.34-41.
- Portas N.**, 1997, "Riflessioni sulle recenti trasformazioni dei waterfront", *Aquapolis*, n° 2, p. 27-34.
- Revestido García M.**, 2006, « Communication, Ports, and Port-City Relations », *Portus – La relación puerto ciudad y la reorganización de las zonas urbano-portuarias*, n. 14, p. 8-15.
- Vallega A.**, 1980, *Per una geografia del mare. Trasporti marittimi e rivoluzioni economiche*, Milano, Mursia.
- Vallega A.**, 1992, *The changing waterfront in coastal area management*, Milano, FrancoAngeli.
- Vinci I.**, ed., 2005, *Il radicamento territoriale dei sistemi locali*, Milano, FrancoAngeli.
- Viola P., Grimaldi F., Olivieri M., Rigoni A.**, 2007, "I Piani Regolatori Portuali in Italia", *Portus*, n° 13, p.4-9.



Figure 1 : La Cala – the ancient harbour



Figure 2 : Villa a Mare



Figure 3 : Mental map – Marco



Figure 4 : Mental map – Salvatore



Figure 5 : Via Crispi – the problem of transports on the waterfront

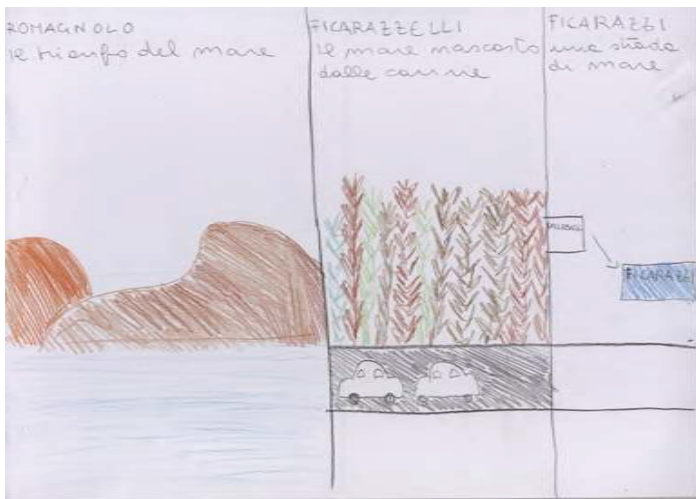


Figure 6 : Mental map – Gilda

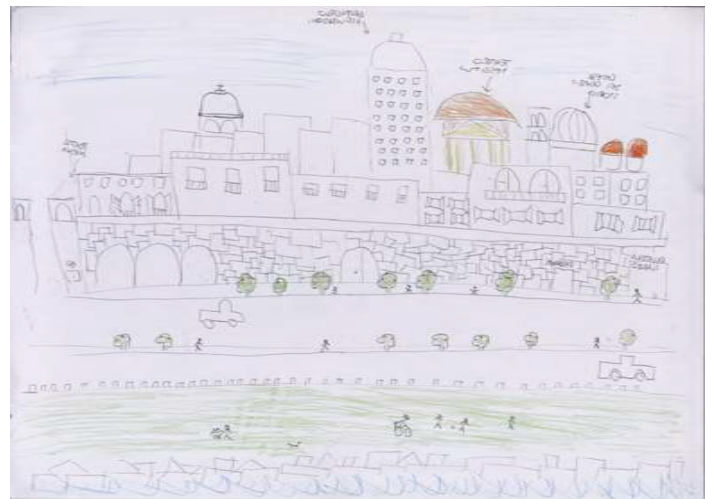


Figure 7 : Mental map – Elena

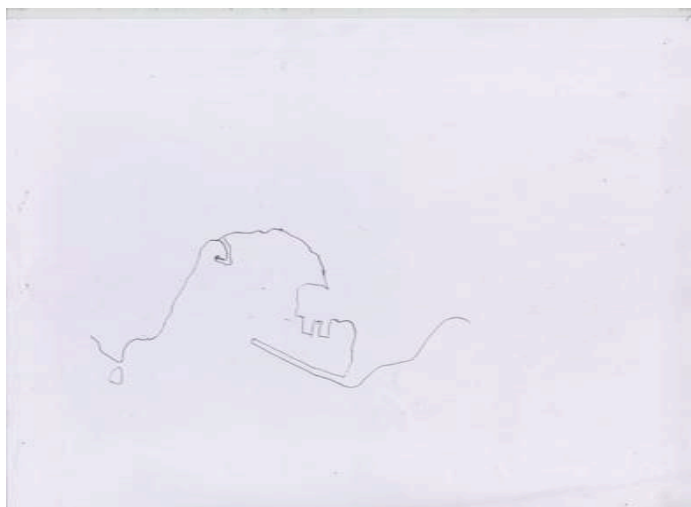


Figure 8 : Mental map – Giovanni