

Urban Variation

Utopia, Planning and Practice

Edited by Per Cornell,
Lars Ersgård and Andrine Nilsen



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ANDRINE NILSEN

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THE TABARKINIAN TOWNS IN THE MEDITERRANEAN AREA

GIORGIO VERDIANI

Introduction

For centuries the expansion of commerce in the Mediterranean area was based on the connection offered by the sea, the people travelling from Gibraltar to Nikomidia, and the movement of wares, settlers, animals and precious items from the Italian to the African coast, bringing them from one market to the other and from old well known places to new exploitation areas. Most of the time the reason for moving people was for commerce or due to the need to find new occasions in new places, but whatever the reason for moving them was, the places they reached enriched them, and in the same measure they influenced that same place by leaving significant traces in it. Sometimes history was not gentle to the settlements of the people arriving by the sea: local population insurrections, piracy, disasters, wars, and changes in commerce trends caused them to be abandoned and often forgotten and/or destroyed. The remains of the settlements are often the subject of legends and tales, sometimes they survive as the background of people and as the base of their traditions. This relationship between tangible and intangible heritage is a part of the story of the Tabarkinian settlements in the Mediterranean

and the exceptional events that happened over centuries have created a rare occasion to read and interpret the values of a population across time and countries. The main argument in this story is not the birth and the development of a single town, but the way the Tabarkinian people's community values declined, in the meaning of their urban and architectural choices as well as their dialect and their "vision" of their Genoese origins, adapting their logic to their original home town: in the northern Africa coast, on St. Peter island, or in the Spanish land.

Historical Events: a synthesis

Genoa had control of the North African coast in the middle of the fifteenth century, as a consequence of its strong presence in that area it obtained the privilege to fish and to trade the coral along the coast of Ras Ajebel from the Tunisian Bey; this was quite important, because the coral was considered a rare treasure and it was not easy to find in the northern parts of the Mediterranean sea. The presence of people from Italy, traders, fishermen, artisans, sailors, but also soldiers and farmers, created a more stable situation in that area, with the development of various spontaneous settlements along with some classical and well recognizable plots, the houses were structured according to the logic of the "small town along the seaside" and organized around a church, with warehouses and a common small walled citadel with a tower to control the sea and the surroundings while defending the colony from pirates. The presence of pirates is well known for centuries all around the Mediterranean area. At the time of the beginning of the Tabarkinian epic deeds, pirates were one of the factors influencing moving choices and resources.

While from one side they were well feared by people living along the coasts because of their merciless intervention and the way they used to operate: with heavy destruction, kidnapping, fierce stealing. For this reason and this well motivated fear, all the towers were able to communicate with each other, and the small fortress was capable of containing the entire population. It is often possible in the Mediterranean area to find walled churches, converted into a sort of small fortress, which was capable of contributing to the defense of people in case of an attack from the sea. This is not strictly the case of the Tabarkinian towns, but it can help to understand the state of fear and continuous emergency that the people all along the Mediterranean coast lived under for centuries because of the piracy menace.

In the first half of the sixteenth century the Spanish Crown began a military campaign in this area in order to hold back the Muslims and fight the presence of piracy all along the African coast. The poor monitoring of that coast and the support and relationship of some of the local governors with the pirates made the African Mediterranean a place for recovering ships and established headquarters. Tabarka, a location highly considered for its richness in coral, became the “center” of the Christian-Muslim rivalry. The island of Tabarka was not under the control of the Tunisian people, but it was exploited by a colony of Genoese people: the operation was driven by the Genoan Lomellini family, a contractor with the Tunisian Bey.

The strategic “border” which Spain wanted to establish passed across this island, so a negotiation to plan the presence of the Spanish fleet was planned with the Genoese families. The first contract was signed in 1547 between the Spanish monarch and Genoese Lomellini and Grimaldi families. The renewal of the exclusive agreement with

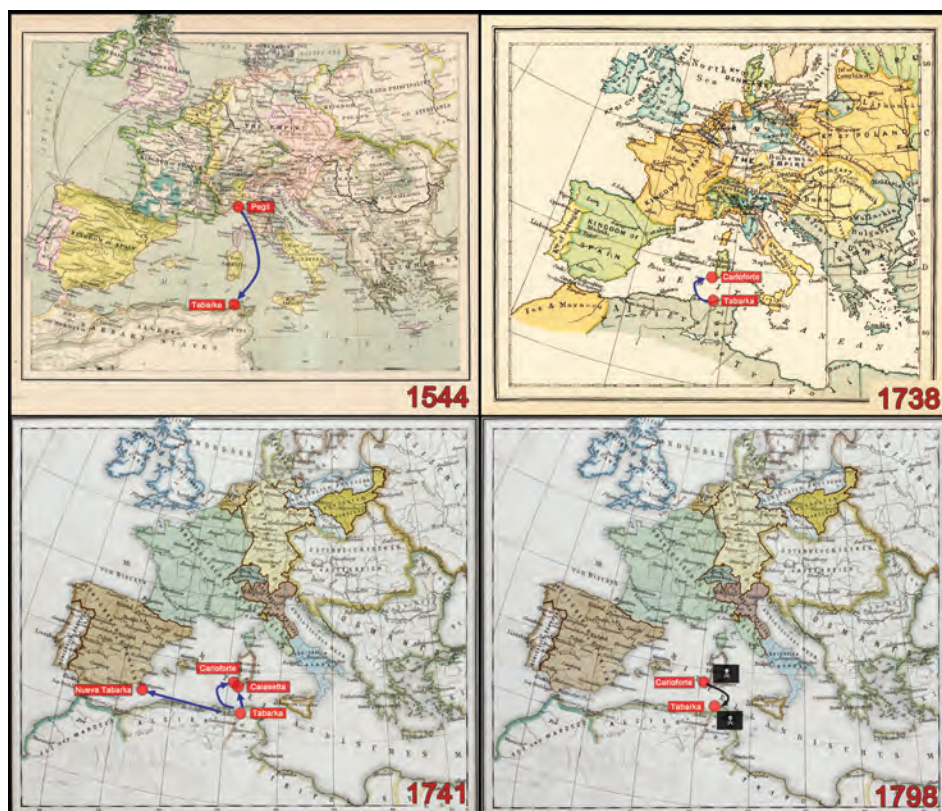


Figure 1: The main movement of the Tabarkinian people in the Mediterranean area.

the Lomellini di Tabarka is dated to 1560. The agreement allowed them to settle on the island with a presence legally defined by a concession about fishing and coral trading. In exchange they had to pay to the Spanish Crown a tax of a “fifth” of their earnings. They had the right to appoint a Governor of the island, who had to swear allegiance to the Catholic king and rule in accordance to the laws of *Castile*. A fortress dedicated to St. George was then built on the top of the island. So it began that the two century long period of Spanish government, the *Società Ligure di Storia Patria* (Ligurian Society of National History)² in its analysis

about the Tabarkinian settlements has defined the Spanish period of the Tabarka Island as a “community-garrison of fishermen, craftsmen, soldiers and religious”.

All across the seventeenth century, under the rules and guides based on the economic operations of the Lomellini Family, a large part of the people living in Pegli, near Genoa, migrated to Tabarka Island. They were sent to Tarbarka to work as coral fishers and they subsequently fully colonized the small island. In the following century Tabarka became heavily overpopulated while the coral reefs decreased, the problem of the number of people leaving there was quite dramatic, it became so difficult to accept new inhabitants that the community adopted some extreme rules, for example, if a couple decided to get married would have to migrate away in order to have children.



Figure 2: *Tabarka in an ancient representation (a drawing named “Veue de l’Isole de Tabarque” from the Paris National Library; “Cartes et Plans” section, Pf. 105, D1 3D) and as it appears today.*

In addition, the difficulties of the population were exacerbated when the area began to have trouble with pirate incursions and the local governor. The presence of foreigners and the existence of an outpost in such a strategic position was more and more disapproved of by the Tunisian Bey.

In the middle of the eighteenth century, King Carlo Emanuele III of Savoia decided to offer the population living on the Tabarka Island the opportunity to migrate to the southern part of Sardinia to continue their work on a completely uninhabited new island called San Pietro. The San Pietro island, positioned in front of the Calasetta and Portoscuso settlements on the western coast of the main island, had never seen a real human population. The Romans themselves named it “accipitrum insula” (the island of the hawks) testifying to the fact that only birds were able to live there. Over time the island has had minimal relevance in historical events, and has mainly been linked to shipwrecked disasters and stories (legends) of hermitage. So, at the time of the king’s offer the island was uninhabited, but there were two reasons for this offer: on one side it was an attempt to support the re-population of the Sardinian island, where the population had been reduced to almost 300,000. On the other hand it was also an opportunity to block the presence of pirates in the San Pietro bays.

In fact, the isolation and the total absence of population made this island a perfect place to hide and recover. The main San Pietro bay was placed on the eastern part of the island, protected from the main wind, the “Maestrale” (Mistral), so it was an ideal shelter to bring a ship in to protect it from an incoming storm.

The colonization of San Pietro was carried out over a few years, at first some small groups of people from Tabarka visited the area and took the time to evaluate the possibilities. The new town, named Carloforte, was built according to the plan of the engineer Augusto La Vallée.

It is worth noting that the concept of “new town” was more than a simple act of foundation. It was based on one of



Figure 3: Map of the town centre of Carloforte

the very first “construction plans” ever applied, establishing the shape of the blocks, their surface, the road asset and the subdivision of the properties. This undoubtedly makes Carloforte a real “early modern town”, with a planned development and a specific agreement between the settlers and the government of the land.

The project of the new town not only included houses, social architectures and farms; but the agreement with the king also stipulated the requirement for the building of a new fortress and a complete wall system to protect the town. The town was officially founded on the 17th April 1738, over a quite short time period almost all of the fortress was completed and a large number of people from Tabarka moved there to establish their houses and

start their activities. It was the right choice, because in the 1741 the town of Tabarka was completely destroyed by pirates. The news of the destruction reached the settlers in Sardinia, and the reason why the Tunisians decided to move so strongly against the small island can probably be found in the negotiations the Lomellini Family was having with France, who were planning to sell them the use of the almost abandoned island. It is likely that this situation drove the Bey to call for the destruction of all the structures on the island denying any possibility for further usage by anyone.

But the worst misadventure for the Tabarkinian people was still to come: the wall was still open on the harbor and was an easy target for the pirate incursion of 1789. A complex history of kidnapping and slavery followed, in which a large part of the population from Carloforte and Tabarka were taken by pirates and sold as slaves on the Tunisian market. More or less 800 people were kidnapped. The reason for this heavy action can only be imagined, but it was probably a retort against the presence of the settlement of the island. A number of the kidnapped people were set free by the efforts of various European countries (a sort of prior European collaboration in an international operation), and between the end of the eighteenth century and the beginning of the nineteenth century, almost the all of them returned from slavery. Some went back to Carloforte, others to Calasetta and another group founded a new town, Nueva Tabarka on an island on the Spanish coast. This particular choice was mainly due to the long needed liberation of the slaves. The whole operation was carried out over almost 15 years; for this reason, the muted condition of the towns and their capability to receive a large number of refugees along with their domestic conditions were often not the same as at the time of their kidnapping.

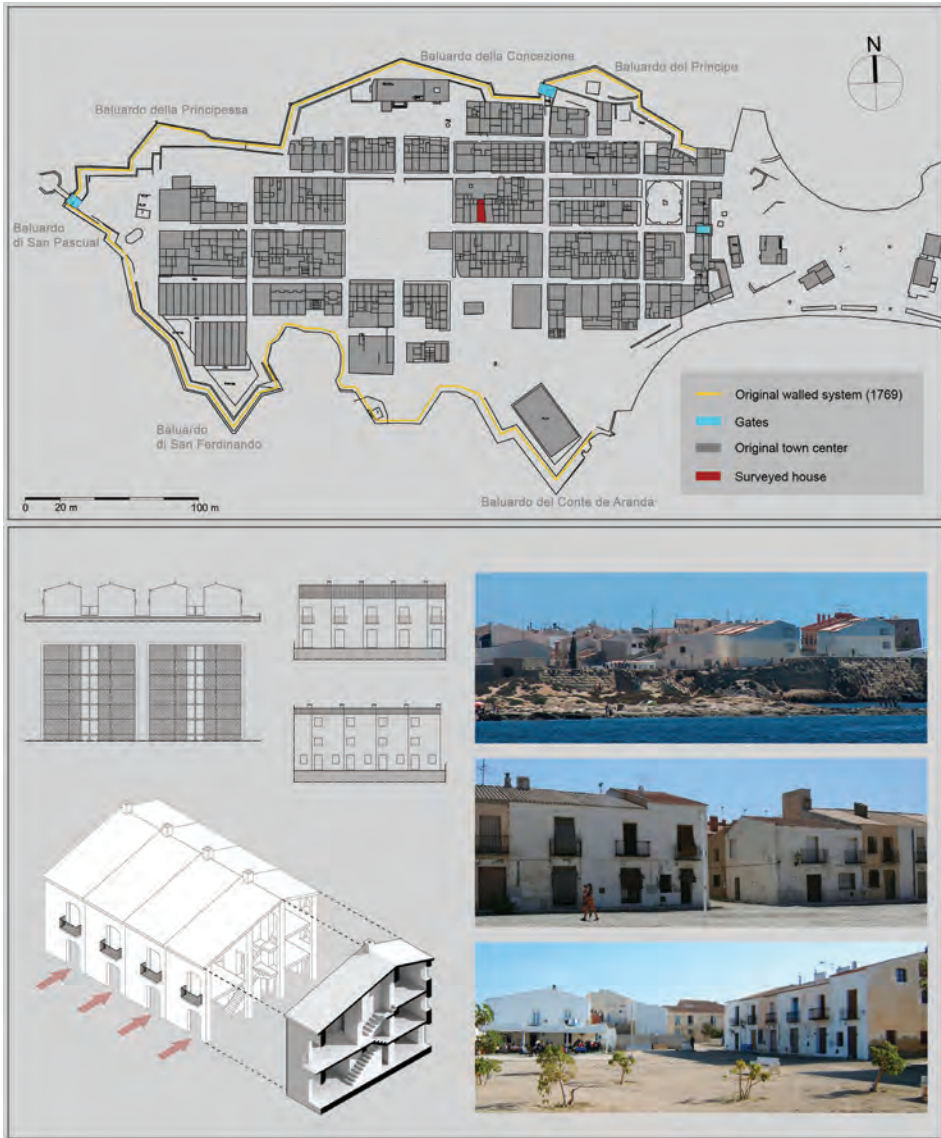


Figure 4: Nueva Tabarca: map of the settlement and analysis of the housing

But almost all of them came back to their land and contributed to the development of each town. The “Nueva Tabarca” settlement was founded as a new town, so it is possible to imagine that it was in the need of offering “familiar” conditions for the new inhabitants, and therefore the town model is somehow connected to their previous (in slavery) habits.

Up until now, studies have underlined the continuity of historical, linguistic, economic, sociological and cultural development of the settlements of Carloforte, Calasetta, Pegli and Nueva Tabarca; this proves the sense of affiliation of their inhabitants to a unique community.³ The settlements are always built according to traditional plans and present the common characteristics of a various range of small towns with the typical relationship between houses/church/administrative buildings that are possible to recognize in an enormous number of European settlements. The study of the ancient cartography can confirm this and can give some interesting suggestions about the original Tabarka.⁴ Therefore it is presumable that this heritage has also expressed itself in the shapes of the housing, in particular in the formal, constructive and typological characters of the residences and of the fortifications. All the centers of new edification were in fact realized on the urban design made by military engineers and subsequently edified by the colonists with constructions belonging to their traditions. This aspect is not secondary inside the general dynamics that have interested the new-built settlements following the so-called “tabarkinian diaspora”, but it hasn’t been sufficiently investigated yet. The research project presented here was developed in partnership between the *Dipartimento di Architettura* (Architecture Department) from Florence

University and the *Departamento de Expression Graphic* (Graphical Expression Department) from the Valencia Polytechnic University, and it is aimed at recognizing the fundamental characteristics of the Tabarkinian architecture, its constants and its variables.

A Survey And Investigation Project **Tabarkinian traces: from intangible to tangible**

Historians define the so-called “Tabarkinian house” as a building made of stone, with a square plan, on one floor, which is covered by a single pitched roof. But there is a lack of confirmation on Tabarka Island, from which the name of this building typology takes its origin; thus it is possible to find some examples (commonly called “baracca”) in the rural environment on the islands of San Pietro and Sant’Antioco in Sardinia. It is however presumable that these small buildings were the house-type found in the urban environment.

Nowadays the fortress of *San Giorgio* in Tabarka and the remains of some minor buildings are the only testament to the presence of a town. The original documents about the settlement are not descriptive enough to give a clear image of the place or to allow a direct reconstruction hypothesis. With the exception of the castle, planned by military engineers of the Crown, the structures inherited traces of the settlement and existing buildings, where houses were built by the settlers themselves. The type of housing in use should meet the logical constraints of simplicity, economy and functionality, using models coming from rural origins in a traditional way which were easy to self-construct in order to realize the “baracche”.

While in Nueva Tabarca the “baracche” actually formed the urban structure, Carloforte had a different economic situation and a very close tie-up with Genoa -still seen as a sort of “motherland”- which induced the transformation of the original model into the example of the Genoese building trade. It is logical to find practical and aesthetic solutions in arts, architectonic and urban plots coming from the same solid heritage. The poor economic condition of Nueva Tabarca barely reduced the transformation of the downtown, preserving most of the houses in their original (or almost original) aspect. The whole town of Nueva Tabarca still appears as it would have been at the time of the arrival of the refugees returning from slavery.

The first step to approaching this research was to gather the existing studies and being an articulated survey campaign to develop a clear and solid base of knowledge.

Project development

When planning an investigation of urban and architectural features, the towns of Pegli, Tabarka, Carloforte, Nueva Tabarca and Calasetta bring up very different conditions:

- Pegli was transformed after it blended into Genoa’s urban pattern. Heavy adjustments to its roads barely changed its relationship with the sea and changed the perception of the original “ground” by making it drop down an entire building level;
- Tabarka shows only poor remains of the town; although the fortress is still standing it is considered a military area with no easy access to anyone;

- Carloforte shows a very interesting town with two different urban patterns: one in the planar part of the town on the waterfront, and another used where the buildings were built over the terrain in the northern part. The transformations of the original housing typology are often heavy, but it is still possible to find well preserved or partially preserved samples;
- In Nueva Tabarca and Calasetta the typology used for the agrarian settlements is applied to develop the original structure of the town, with simple but still well readable solutions.

The target of this project was to find constants and variables in the architectonic and urban environment. This was done according to an articulated development process, where the entire urban contest was deeply analyzed. The investigation took care of some “relevant” elements, like the environmental sections, the overall structure of the town plan, and the study of the cartography and of the previous investigations. It was necessary to interpret the characterizing details, the chromatic features and the visual “noise” caused by disturbing elements.

To operate this investigation the tools were the photographic survey, with a further image analysis to focus and to extract specific trademarks, and a digital survey using 3D laser scanner technology to produce a complete detailed three dimensional image of the whole town, with all its meaningful features. Starting with this data, a simple and complete database was developed, which was also useful for organizing the base information for the whole research group.

Approaching To The Theme: Carloforte Digital survey

After a first extended phase dedicated to inspection and sources gathering, a survey campaign in Carloforte based on a 3D laser scanner with topographical support was carried out in June 2010. A classic survey scheme for this kind of work was adopted, using a Phase Shift Scanner, a Cam2 Faro Photon 8080, supported by a specific topographical network.

This kind of scanner works very quickly, with a very good accuracy even over long distances and it is well suited to perform urban survey in a small town center like Carloforte. The topographical network, working as a connection for each single scan is a fundamental step to allowing quicker procedures and to get the full benefit from the 3D laser scanner's characteristics.

The 3D laser scanner campaign covered the whole town center between the "via XX Settembre" in the South, the Civic Museum in the North, the sea in the East and the town's church in the West. This produced good coverage of all the main aspects of the town, with both regular and non-regular urban patterns, from entire buildings to the architectonic details. It has created a complete three dimensional image of the town, with all its qualities, the main elements of its pathologies, and their level of decay.

A separate digital survey session was dedicated to the interesting rural settlement named "Le Tanche". As previously stated, it is still possible to find good samples of rural and original housing in this settlement. An articulated campaign of inspections was planned for the towns of Pegli, Tabarka, Nueva Tabarka and Calasetta, where a generous photographic survey was carried out

and a lot of suggestions and impressions were gathered. A select set of cartography, books, old pictures and various multimedia materials have been collected and composed in an accessible archive where they work as a common information base for the whole research group. A further step in the project development was the selection of specific themes, focusing on the most meaningful common characteristics between the studied settlements.



Figure 5: *Topographical and 3D Laser Scanner survey in Carloforte downtown and in the “Le Tanche” settlement*

The next phase of the data treatment produced good quality and easy to use drawings and correlated all the gathered information with them. It is worth noting that the specific photographic survey of the surveyed area was complete enough to allow good mapping of all the building fronts.

This was quite an important element, because the 3D laser scanner survey, even though it was complete and well done, was not able to give the full detailed description of colors or minor elements. The short time available



Figure 6: *Graphical presentation of the fronts in the Carloforte downtown*

with the scanner was not enough to operate a full and complete collection with an attached camera. Once more, the integrated/attached camera is well known to produce various “unwanted” issues, so a separate, specific, photographic survey had been preferred since the first stages of the survey campaign.

According to the overall project plan, the post processing of all the data was mainly to produce 2D drawings with the general 3D model remaining at the level of the global point cloud. A complete modeling of the whole town center, even with a spectacular result, was not considered to offer the sought after support for the investigations given the time available for the research.

Overall, to better understand and to present this urban story efficiently, some versatile three dimensional models were developed with the aim of correctly showing the main phases of the town’s origin from the Pegli migration.



Figure 7: *One of the graphical layouts presenting the analysis of the Carloforte downtown*

The graphical reconstructions were organized according to four main graphical guidelines: 1) point clouds, with the extraction of orthographic projections of building fronts along the streets of the surveyed area. 2) Photo plan of all the fronts, corrected and integrated according to each point cloud front. 3) CAD Drawings with full line weight hierarchy based on the two previous restitutions, detailed and completed by observing the full photographic campaign and the graphic annotations taken during the survey campaign.

The full restitution of all the building fronts creates a complete base for any further study and presents their geometrical features, colors, and specific details. It is therefore easier to read and identify the elements of the “Genoese style” applied on the town center, with the choice of colors, details and dimensions of the elements



Figure 8: Graphical analysis of one of the façade surveyed in the Carloforte town center

thereby changing each front from its original, practical and essential shape to an enriched one, passing from the typical “white and grey” aspect of the first settlement to a rich and colorful parade of fronts. The introduction of balconies, of more cured windows and an increase in the height of the buildings gave more quality and variety to the urban context; but the saturation of the inner courts and the making of rooms without any openings often created a lowering in the environmental quality of the buildings with the increase of humidity and the creation of dark and poor spaces.

Because of the private use of the most of the buildings in the surveyed area, only a few of them were measured inside. But thanks to the support of the Municipality technical office, a good quality map of the ground floor was created. This was completed by integrating existing maps with the new digital survey.

This allowed a comparison between the older drawings with the new ones, confirming the idea that the original blocks were preserved in their subdivision with some

intervention to unify more than one lot to create a single unit capable of being converted into a more spacious (and comfortable) palace.

Finding the constants

Using the new plan of the town center, when compared to the various settlements of the Tabarkinian people, it is now possible to develop some considerations about the common elements of their original architecture. The typology used in the first houses built in Carloforte was chosen by the settlers themselves. Today there are hardly any traces of them, although - as it is possible to see in the photographic documentation from the mid nineteenth century - it is possible to say that it was the same type of house that still populates the rural area of the island, the so called "baracca". This is a simple construction, a square of five to six meters with a single internal space. The main façade has a single opening to access the housing, and is topped horizontally at about three and a half meters in height above the level of access. The interior is a single space, covered by a single pitched roof and split in two parts by a small wooden slab which forms a loft. Entering from the front door leading out to the street there is the kitchen with a fire and fireplace on one side, and steps to access the attic to the other. The remaining space is occupied by the living-room, while the bedroom is located upstairs, ventilated by a window on the rear façade. The typology is completed by a cistern located under the terrace outside the entrance, it receives the rainwater collected on the roof through a system of gutters and downspouts. The restoration was limited to a small "Butron" next to



Figure 9: The “Church of the slave” in the Carloforte town center, the church was established after the return of the kidnapped people from slavery, it contains a wooden statue of Saint Mary with Jesus found by the refugees on a beach and brought with them following their return from Africa.

the entrance, evacuating sewage directly overboard. The walls were built with masonry and floors with stout wood girders: boards in the attic, while slats, reeds and tiles are used for the roof. This typology, although particularly suited to the site, is similar to other rural styles that can be found in the Mediterranean. However it is interesting to consider the way that they are aggregated to form villages. It could be particularly enlightening to analyze the laws of aggregation of the village “Le Tanche” as it consists of a set of huts clustered along a road. The main development of this kind of house is the creation of two to three floor houses (most of the time with only two floors), occupying

the same lot, characterized by the same distributive logic and similar technical solutions. Overall it is worth noting that the staircase inside the house connecting the two floors is always straight, narrow, with no middle landing at all. This is not casual or due to economic choices, it is clearly a form of defense for the upper floor. If an invader reaches the entrance, the people in the house can run upwards and block the enemy with ease.

Finding the variables

To enhance the interpretation of the urban patterns, it is worth stating that all these towns are “new towns” and they have the specific characteristics of these kinds of settlements, so this must be kept in consideration when reading and understanding the relationship between common choices and the specific elements of the landscape and environment which may have influenced the settlement variables. Unlike the houses, edified directly by the settlers, the urban plan and the fortification systems -although used by the settlers- were designed by military engineers chosen by the state. This fact created project choices reflecting, in some precise details, the language style of each of the designers original towns, and does not give evidence of typical Tabarkinian character. Overall, the classical “best result with a minimal effort” logic is always present in each project, the housing is located in an almost flat area, and the fortress was arranged at the top of the hill and had good views over the sea and the land around. The walls were developed where the ground was more robust and when possible the stone outcrops are reached and included in the wall scheme to reduce the need for construction.

The walls are obviously optimized for defense according to the kind of enemy weapons. A clear example of this choice can be found in Carloforte where the walls facing the interior parts of the island were designed to protect from an infantry assault and not from a cannon attack.

Conclusions

The research is now completed and has reached a useful result. The completed gathering data phase allowed the production of some useful drawings and analysis. This set of data has made it possible to say that the overall mosaic of traces shows some possibilities of a contribution to a better reading of the Tabarkinian towns. A very important aspect is the evolution of the settlement: it now appears quite clear how the “typical” rural housing was the first step of all these towns, with a construction of the urban structure starting from a simple group of houses, which defined a continuous façade and allowed an easy subdivision of the properties. Later, with the growth of the population and when the need arose, the original houses were reconstructed and replaced by larger and more comfortable and enhanced buildings. The architectural and urban reading of the Tabarkinian towns was never carried out in such a deep way until this research, so the main contributions developed here can be recognized in a detailed survey that “freezes” the image of the town center of Carloforte in the summer of 2010, and offers a very complete architectural reading of its urban phenomena.

References

- AA.VV., 1981. *Catalogo delle Ville Genovesi*, “Villa Lomellini” record “Il Konak”, Genova.
- AA.VV., 1976. *Vecchia Sestri, Pegli, Voltri*, Genova.
- Agus D., 1988. *Storia religiosa di Carloforte: dalla fondazione ai nostri giorni*, “della Torre” Publishing, Cagliari.
- Aste G., Cambiaggio R., 1992. *Carloforte: la città e la storia*, “della Torre” Publishing, Cagliari.
- Bono S., 1957. *Carloforte tra Settecento e Ottocento: cinque anni di schiavitù per i Carolini: dalla cattura alla liberazione (1798-1803)*, AM&D Publishing, Cagliari.
- Chiozza G., 1957. *Tesori d'arte ignorati a Pegli*, “Il Lavoro” 31 agosto.
- Conte A., 1958: *Carloforte ovvero un lembo di Liguria in Sardegna*, Tip. P. Valdes.
- Dufour Bozzo C., Marcenaro M., 1990. *Medioevo demolito. Genova 1860-1940*, Pirella Editore, Genova.
- Ferraro G., 2003. *Vocabolario tabarkino-italiano: ricavato dal Dizionario tabarkino-italiano di Vallebona con varianti e arrangiamenti*, “del Parteolla” publishing, Dolianova.
- Gonzalez Arpide J.L., 2002. *Los Tabarquinos*, Instituto Alicantino de Cultura Juan Gil-Albert.
- Juan Vidal F., Merlo A., Rodríguez-Navarro P. and Lara Ortega, S., *Las vistas de Tabarca*, in Archè, num. 6-7 (2011-2012), Instituto Universitario de Restauración del Patrimonio, Universitat Politècnica de València, 2013, pp. 183-194
- Luxoro E., 1977. *Tabarca e tabarchini: cronaca e storia della colonizzazione di Carloforte*, Cagliari.
- Magnani L., 1987. *Il tempio di Venere. Giardino e villa nella cultura genovese*, SAGEP Publishing, Genova.
- Piccinno L., 2008. *Un'impresa fra terra e mare: Giacomo Filippo Durazzo e soci a Tabarca (1719-1729)*, Milano.
- Podestà F., 1884. *L'isola di Tabarca e le pescherie di corallo nel mare circostante*, in ASLSP, XIII.
- Riggio A., 1943. *Genovesi e Tabarchini in Tunisia settecentesca*, in *Giornale storico e letterario della Liguria* », nuova serie, XIX, Società Ligure di Storia Patria.
- Simeone N., 1988. *Antologia carolina: ambiente, storia, personaggi e folklore di Carloforte*, “della Torre” Publishing, Cagliari.

- Stringa P., 1982. *Genova e la Liguria nel Mediterraneo - insediamenti e culture urbane*, SAGEP Publishing, Genova.
- Torchia A., 2003. *Carloforte: Isola di San Pietro*, Recco 2003.
- Toso F., 2001. *Isole tabarchine: gente, vicende e luoghi di un'avventura genovese nel Mediterraneo*, Genova.
- Toso F., 2003. *I tabarchini della Sardegna: aspetti linguistici ed etnografici di una comunità ligure d'Oltremare*, Genova.
- Vallebona G., 1988. *Carloforte. Storia di una colonizzazione*, Cagliari, Biblioteca Lettere, dip. DISAM.
- Vallebona G., 1975. *Evoluzione della società carlofortina*, Cagliari, Editrice Sarda Fossataro.
- Merlo A., Verdiani G., Juan Vidal F., 2010. *Digital Survey for the Study of Intangible "Tabarkinian" Traces: The Case of Carloforte in Sardinia*. In: Euromed2010 Cultural Heritage, Limassol, Cipro, 8-13 November 2010, vol. Euromed2010 3rd International Conference dedicated on Digital Heritage, Short Papers, pp. 47-51.
- Verdiani G., Iurilli S., Lavoratti G., 2010. *Modelli digitali per lo studio del Patrimonio Intangibile: il caso di Carloforte, Sardegna*. In: E. Mandelli (editor), *Il modello in Architettura, cultura scientifica e rappresentazione*, pp. 137-146, Firenze: Alinea.

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Notes

1 It is possible to find the use of the word “Tabarka” and “Tabarkinian” as well “Tabarca” and “Tabarchinian” this is due to the transformation of the term in Italian and Spanish language. Sometimes it is possible to find the use of “Tabarkinian” when referring to the people from Italy and Spain while “Tabarchinian” is used for the Italian and Spanish settlements.

2 Società Ligure di Storia Patria, <http://www.storiapatriagenova.it/>

3 It is important to note that the specific “slang” of this community may recall the Genoese one and that even if in front of various and numerically meaningful migrations (like those from the southern and central parts of Italy) in the community, it has well preserved the original slang, demonstrating a very strong identity and capability to include and absorb external contribution without evident transformation.

4 For a detailed analysis of the cartography of the settlement in Tabarka: Juan Vidal F., Merlo A., Rodríguez-Navarro P. and Lara Ortega, S., “Las vistas de Tabarca”, in *ARCHÈ*, num. 6-7 (2011-2012), Instituto Universitario de Restauración del Patrimonio, Universitat Politècnica de València, 2013, pp. 183-194. ISSN: 1887-3960

Urban Variation - Utopia, planning and practice

The Urban Variation conference, held in Gothenburg in 2013 was a productive and interesting event. Much of the debate on the urban starts with the idea that the concept corresponds to a phenomenon which is easy and simple to define; actually, it is often taken for granted that we “know” what it means. However, only a brief look at the varied debates on large and densely habited settlement sites demonstrates that this is not the case. In general, the attempts at definition are based on particular historical and geographical cases, and difficult to apply outside these cases. Further, a renewed look at the period chosen and the geographical space in question often in itself question the established definition.

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