Southern Area of the Greek Agora in Kos. Archaeological park project.

Annalisa Ferrante
Polytechnic of Bari
4, E. Orabona st., 70126, Bari, Italy
annalisaferrante87@gmail.com

Stefania Lamaddalena
Polytechnic of Bari
4, E. Orabona st., 70126, Bari, Italy
lamaddalena.ste@libero.it;

Francesca Liuni
Polytechnic of Bari
4, E. Orabona st., 70126, Bari, Italy
fra.liu@hotmail.it;

Mariangela Messina
Polytechnic of Bari
4, E. Orabona st., 70126, Bari, Italy
marangela87@hotmail.it

, Cristina Piccolomo
Polytechnic of Bari
4, E. Orabona st., 70126, Bari, Italy
crispicco@yahoo.it

ABSTRACT
The project, included in a degree thesis held at the Polytechnic of Bari, is a plan for an archaeological park set in the area of the Hellenistic agora of Kos (Greece). The proposal is based on a preliminary historical research, in these years carried out by prof. G. Rocco e M. Livadiotti, focused on the reconstruction of the ancient form of the large agora (IV-II cent. B.C.). The study analyses the remains of building structures and architectural fragments discovered in six different diggings. Our project goals are: 1) to allow visitors to understand the original plan of the city, although the deep contrast with the current urban tissue; 2) to redevelop the six archaeological sites analysed in order to make the remains of the ancient agora accessible to the public and, moreover, to allow to consider them as elements of a single monument.

The planning is developed at urban scale and involves enlargement and redefinition of the excavated portions, creation of accesses and footbridges and eventually anastylosis in situ of some remains. Other relevant features of the project are: 1) the building of retaining walls made of concrete covered with a earth mixture which makes wall surface similar to the ground; 2) the insertion of
vegetation in some specific areas which, on one hand, functions as enclosure and visual barrier to modern city and, on the other, it works as instrument to highlight the most important streets of the ancient city. Since it’s not allowed to build in archaeological sites, it’s chosen to use green-system to configure three-dimensional space. Therefore, control and knowledge of the specific form of woody species play an important role in the project.

**KEYWORDS:** Architectural History, Historic Preservation, Archaeology, Museology, Archaeological Park Project.

1 INTRODUCTION

The starting point and, at the same time, the first obstacle to the archaeological areas’ design is to define the meaning given to History. This antithetical principle has its roots in the long-held idea that not only is the historical truth what virtually happens but it also is what events we consider relevant for us. Namely, the viewpoint of the present rules that of the past (Gregotti, 2013). Therefore, when we try to match archaeology and planning we should always take into consideration that we are simply able to have a “partial gaze” on the preserved evidences and besides, we should succeed in making this personal perspective the means to minimize the gap which divide the current scholar or visitor and the ancient designer or user. Moreover, archaeology and architectural design stem from two utterly different formae mentis: as archaeology preserves, architecture transforms. Accordingly, the essential goal of the architectural landscape design should be to link these two ways of interpreting the past, knowing that there are not “neutral gazes” or objective reconstructions. Thus, architect has to reshape the antiquity by fathoming and preserving building fragments in the way of expressing his own “critical-preservative” perspective. The latter is based on some of the already-recognized functions which archaeological restoration should aim to: legibility, usability, preservation in situ and anastylosis.

The word legibility means that a project developed in an archaeological area has to allow visitors to comprehend the distinction between the ancient remains and the new intervention, whereas, thanks to the usability, the archaeological site is open to the public and hence, it gains a new life due to the maintenance needed to guarantee touristic use. Additionally, the preservation in situ, that is leaving ancient remains where they have been originally found, and anastylosis are based on the same principle: the awareness that the uniqueness of an architectural fragment is essentially constituted by its relation with the places and if you isolate it, you lose at least half of its value.

The project elaborated for the agora of Kos uses all of these principles to draw an archaeological park’s design which seeks to reconstruct the shape of the Hellenistic agora by reconnecting the six excavation areas located in the city. The proposal, included in a degree thesis held at the Polytechnic of Bari, is based on a historical research carried out by prof. G. Rocco e M. Livadiotti over the years and focused on the reconstruction of the ancient shape of the agora (IV-II cent. B.C.). The Greek agora was an “L-shape” square composed by a northern three sided colonnade and a southern stoà which closed this space and was separated from the main square by the plateia (Rocco, Livadiotti, 2011; Rocco, 2013). The latter was the principal arterial road of Kos, along with its orthogonal heading to the North, and it was parallel to the southern stoà.

The current background of the project has both positive and negative aspects. First and foremost, today the two aforementioned main streets are still preserved and the orthogonal one links the center of the city (North) with the current area of Casa Romana/Central Thermae (South). Namely, the old road network coincides with the new one. Furthermore, there is a low housing density and the bulk of the central areas are public-owned and fitted out with green public areas. All of these features make the landscape design easier because of the possibility to exploit and enclose the already-existing facilities. Is spite of this, the present urban tissue creates some disadvantages. First, the six dig areas are placed far from each other and, moreover, they are crossed by driveways which make the legibility of the ancient settlement difficult due to the fragmentary arrangement of the principal archaeological sites. Secondly,
edges, accesses and didactic signs have been modified over the years. Thus, there is a disorganized stratification of interventions which solely contribute to muddle the necessary comprehension of the whole Hellenistic agora. To conclude, the proposed plan involves the building of an archaeological museum lied on the ancient remains nearby Casa Romana. This architectural design aims to suggest a possible way to construct on these kind of areas by analyzing similar works. Thus, the design represents the closing knot of the entire architectural research because its approach summarizes the mentioned chosen methods and even focuses on the only generally sharable principle: the partiality of the scholar’s gaze.

2 ARCHAEOLOGICAL PARK DESIGN

2.1 Critical analysis of current situation

The subject of archaeological areas design has been at the heart of a lot of muddled and even contradictory experiences. Nevertheless, within this wide range, it is possible to develop a critical reflection about intervention methods and to define action criteria useful to those who work in this field. In the matter of regarding Kos, where archaeological evidences surround the modern city, the architectural project acquires urban dimension and it is the halfway point between creation of an archaeological park and arrangement of an urban fabric’s part.

Therefore, going into more details, it is possible to find several fields of action, by which the intervention may be organized. The large-scale design has to be a part of a planning pertaining the whole territory, taking into consideration future excavations. There are various examples in this respect, especially in Greek areas where preservation strategies pay serious attention to the evidences of the past (Varagnoli, 2005). We could cite the Leo von Klenze design for Athens, which involved an urban and architectural connection among the different areas of the ancient city and even the latter’s delimitation, although it was elaborated in the 19th century (Korres, 2002). Furthermore, the relation between city and excavations is really important and it has to be solved by seeking to conciliate claims of History and those contemporary. Indeed, at city planking level, it is possible to modify urban traffic flows or to redesign the roadway cross-sections in order to improve use and legibility of the ancient core without involving dynamics of modern urban settlement. In Argos something similar has been realized both, at the large-scale, by involving connecting roads with other archaeological sites and instead, at the city-scale, by pedestrianizing the provincial road dividing agora and theater or by converting other main arterial routes into promenades or streets with a secondary use (Chlepa, 2005). At the same time, the evidences of Ottoman and neoclassical city have been enhanced. The numerous similarities with the case of Kos make this project an interesting food for thought. There are a lot of comparable experiences even in Italy, such as the connection between acropolis and historical centre of Chieti, realized by using specific paving material (Campanelli, 2005).

The design of urban archaeological areas has to complement each dig with the surrounding context, avoiding the isolation and the resulting sensation those places are unrelated with the background as it occurs, for example, in Rome nearby the area of Augustus Mausoleum and the sacred complex of Largo di Torre Argentina (Treccani, 2010). Thus, it is necessary to pay attention to the design of edges and contact points with city as it has been done in Chieti, where building structure, green boundaries design and elimination of architectural barriers are the main goals of the project. Moreover, we need to thoroughly analyze accesses due to the fact that they are both rest areas and walkways useful to guarantee a correct use and comprehension of the old finds. Such goal may be achieved in some different ways. For instances, Pikionis (Ferlenga, 1999), reshaping the path towards Athens Acropolis, uses the pathway design to represent the ascent to a holy place. Still, in the restoration of the ‘Trajan Market, paths and structures are legible thanks to the paving material and chromatic distinction (D’Aquino, Franciosini, 2009), whereas, in Metaponto excavations (Mertens, 2002), the Temple A surface has been partially covered with greensward from which foundation remains emerge and, moreover, the digs of naos and
peristasis of the Temple D have been filled with gravel. Instead in Argos, the understanding of the different part of the archaeological site has been made easier by recreating the original paving planking level and by reusing the ancient accesses and paths.

Besides, a main role is fulfilled by the greenery. Once warded off the threat of invasive roots by selecting species according to their growth’s features or by using buried vases, the vegetation may be effective for two reasons. On the one hand, it limits sun and wind exposure, it holds excavation soil and it is useful for storm sewer; on the other hand, it facilitates monuments’ legibility (Ferroni 2005, Marino, Gaudio, 1997). The using of greenery to suggest didactic-reconstructive schemes has been proposed by Giacomo Boni for the arrangement of Roman Forum (Boni, 1891) and it has been tested by Antonio Muñoz in order to symbolize the colonnade of Roman Venus temple (Muñoz, 1935). Whereas Pikionis, in Athens, has integrated his own design with the surrounding landscape by planting native species considered suitable to those holy places during the ancient age. The last aspect regards the communication with the public. The wide range of possible options involves both didactic system and even anaastylosis.

Thus, we want to mention relevant solutions which have some similarities with Kos. For example, the restoration of the access flight of stairs of the so-called Tempietti of Chieti which has been realized with modern and reversible materials or the “philological reconstruction” made in Metaponto by Mertens where the composition of the preserved though full of blank elements allows a correct comprehension of the order of architecture. To conclude, it is essential to highlight that the above explained analysis is not an attempt to promote the mentioned examples as universally recognized models, but it seeks to propose food for thought on the intervention methods which, however, needs to be inflected on a case by case basis, portioning the design choices on the strength of the surrounding context.

2.2 Design choices

The main goal of the architectural design is to make archaeological remains legible by guaranteeing both full usability and correct intelligibility. Therefore, the primary need to amplify, if it is possible, the excavations’ trenches seems essential, especially in the southern part of the city, between the so-called Casa Romana and the area of Dyonisos’ altar and Attalid’s temple, where the elimination of the street which currently divides these two zones allows the creation of walkways with a low ecological impact (Figure 1). The digs’ soil is treated with specific expedients useful to hinder native vegetation growth and, additionally, the various color tones dying chosen project materials are exploited to put in evidence the areas with different functional features. To realize this, Levostab is opted for, an ecofriendly soil stabilizer and consolidator suitable to assure compactness and durability.
After completing the enlargement of trenches, the necessity to delimit and make usable such zones arises. The designed solution involves the insertion of two types of edges. The first one corresponds to the excavation area’s perimeter; the second one is dependent on the already-existing and unchangeable current road network. This type of border is arranged in sloping plane which gradually integrates in the archaeological environment in a way of being walkable for visitors without spoiling topographical context. Along the edges, there is a small retaining wall made of concrete plus layers of soil (Graduation Thesis Lab Kos I, A.Y. 2004-2005) which marks the western side of excavation and arrives until existing housing units. According to the new project, the same structure is located in the archaeological areas where the first type of edges’ design is considered the best option. Moreover, the boundary constructions, built by Italian draftsmen during the first half of the last century, are preserved (Livadiotti, Rocco, 1996). For the purpose of redefining urban paths by a new viability design and a thorough reshaping of road cross sections, it is made necessary to elaborate a specific project of excavations access and tour for visitors. The design schedules the realization of wooden walkways which run alongside the border. This path is provided with a series of didactic signs close to each dig area’s entries settled in order to invite visitors to retrace the original streets of the ancient agora. These wooden footpaths have different features depending on the archaeological zone which they belong to. Indeed, in the western side, this element is located at a lower level than the ground one and, due to its height, visitors are allowed to avail excavation area in two different ways: as mere watcher, thanks to benches overlooking the archaeological site, or as real visitor by starting the historical tour. In the northern side, the same type of structure is used to create a footbridge to connect two parallel arterial roads by integrating load-bearing elements and wooden functional parts. The footpath marks the eastern neat line where there is an access placed nearby old Italian wall (Figure 2).

Furthermore, another fundamental part of this architectural design is the landscaping project realized by linking aesthetic-functional and historical aspects: the tree planting at ground-level allows to highlight the ancient plan without tampering with excavation terrain. The setting of oleander trees in the place of Greek colonnade and the succession of ferns and hedges to symbolize the original entries are two expedients useful to blend in historical features and landscaping intervention. Not only is the aim of these to improve the beauty of the city, but it is also to substitute historical elements in order to do a sort of synthesis between culture and environmental context, by respecting privacy needs of people who live near to the archaeological site. The historical-visual reconstruction is corroborated by recovering architectonic fragments belonging to old colonnade. Some of these stone elements are fitted back together to build up
again two columns of the original southern stoà in the way of “musealization” and visualization, as it has been done along the western perimeter (Graduation Thesis Lab Kos I, A.Y. 2004-2005), completing the research beginning during the previous excavations (Morricone, 1950). The design completes an already started project, recently realized by the Archaeological Institute of Aegean Studies of Rhodes on a proposal by the Polytechnic of Bari (Eleutheriou, Netti, 2011).

2.3  Building in archaeological areas

The landscape design on archaeological sites ultimately involves the realization of a closed air-conditioned space useful to the exhibit of ancient finds. The project area, city-owned, is a white area and it still has to be excavated. It is close to the archaeological park, southwest of the agora, where in the Hellenistic period the rectangular insulae of the ancient urban fabric were probably located. Not only is the new construction an exhibition complex, but it will also englobe and “musealize” in situ some archaeological remains that today are partially visible. This occurrence represents both a restriction and a great challenge. Indeed, the design choices will depend on theoretical observations pertaining to the relation between the shape of “the new” and that of “the old” and, moreover, the positioning of connection ground-structure.

Thus, before finding a solution to this specific problem (it will be completely solved only when the analysis will be completed), a lot of possible approaches to the themes design have been analyzed. A comparison abacus (Figure 3) has been drawn up which we will try to summarize below, knowing that it is not possible to take into consideration the countless aspects of such a broad topic herein. The abacus compared neither design purposes (some of them are virtually aimed at protecting excavation, instead, others at constructing on new building preexistences in order to satisfy exhibition functions) nor the kind of preexistences sat in the project area (more often than not, they are archaeological remains but there are also medieval ones) or design aesthetic quality and efficiency. Actually, what we would like to highlight is the different theoretical approach in the planning; each part added to any preexistence marks the starting point of a new construction phase and hence, we have to ask ourselves how this new part should reckon with the past, especially if its traces are preserved in the form of ruin (to examine in depth the concept of ruin and the link between lost entirety and fragmentary nature of finds, refer to Musso, 1997).

![Figure 3: Abacus of the different ways by which the new buildings relate to the ancient remains. Starting from left: 1-2, F. Minissi, Enna; 3-4, D. Gatermann and E. Schossig, Xanten; 5, R. Moneo, Merida; 6-7, P. Zumthor, Coira; 8-9, P. Zumthor, Colonia; 10, G. Grassi, Sagunto; 11, S. Fehn, Hamar; 12 R. Piano, Pompei; 13, F. Ceschi, Messina; 14, J. L. Carrilho da Graça e J. Gomes da Silva, Lisbona.](image-url)
Accordingly, the abacus highlights two opposite and antipodal positions regarding this. The first one is that supported by those who suggest a philological reconstruction of the original ancient shapes (even by using materials and techniques which make the intervention visible). The second idea is based on a free intervention devoid of “overwhelming fear” for the past. Villa del Casale at Piazza Armerina (Enna) realized by F. Minissi and the design for the Große Thermen in Xanten (Germany) planned by D. Gatermann and E. Schossig belong to the first group. Both of these designs seek to rearrange the original space by modern translucent structures lying on overbuilt ancient walls. Nevertheless, in these two projects it is possible to see the ancient planking level only from above, by overbuilt pathways which create points of view far cry from the original ones (Ruggieri, Tricoli, Sposito, 2004). Unlike these, plans like that of R. Moneo in Merida show a free and confident approach to the design: the arrangement of the new walls doesn’t retrace the ancient attitudes and it destroys the intercepted preexisting walls. The antiquity is rather “commemorated” by using shapes and material that reinterpret Roman architecture in a modern way (Dal Co, 1985). P. Zumthor in Colonia (Baglione, 2007), G. Grassi in Sagunto (Ranellucci, 1996), S. Fehn in Hamar (Norberg Schulz, Postiglione, 2007) realize structures directly lying on preexisting walls’ summit in order not to rebuild the antiquity but to emphasize its picturesque traits, seeking to give it, thanks to their “personal poetry”, innovative importance and sacredness to those places.

Besides these two extreme stances, there are a lot of intervention classifiable as halfway. We could cite great roofing of F. Ceschi in Messina (Web-1) or that of R. Piano in Pompei (Basso Peressut et al., 2007) where, in spite of steel shapes explicitly modern, we are able to note a sensible attention to the preexistences due to the choice of using a ground-connection reversible and with a low impact. P. Zumthor in Coira (Zumthor, Baglione, 2006) creates soberly geometrical spatiality, very different from ancient ones. It seems as if he would like to create a sort of opaque and “neutral background” which marks out the ancient ruins and allows a clear legibility of them. In Lisbon, the architects J.L. Carrilho da Garça and J. Gomes da Silva plan on ancient domus’ foundations and suggest the original spatiality by constructing white walls “hanging” on ruins (the design of only six ground-connections shows great respect for the antiquity).

The proposed project of a new museum on archaeological area of Kos tries to be a part of “soft” intervention genre. The adopted approach is partly reconstructive because the new building, due to its outer volumes, recalls the ancient block’s shape and hence it helps visitors to understand the Hellenistic urban layout. Conversely, the interior is contemporary but it seeks to be respectful of antiquity by adopting some expedients: museum’s didactic and exhibition places are overbuilt and located along the perimeter of remains, creating a sort of neutral and homogeneous background around those finds. The latter, placed at a lower level, are protected by a great roofing without intermediate supports and fitted out with big skylights arranged in order to correspond to the ancient open spaces. The pinpointed supports sat on the edge delimit ancient walls and, moreover, the foundation of overbuilt parts lies on layers of fill which protect excavation soil. In some places, it is possible to go down from the museum level to dig’s planking level in order to observe the exhibition of materials found in situ (Figure 4).
3 CONCLUSION

Pedestrianizing 360 meters of driveways, realizing about 15200-squaremeters archaeological park added to a 67300-squaremeters already-arranged archaeological sites located in the center of the city, creating a linear “historical path” fitted out with a suitable didactic system and exhibit structures related to the excavations are all daring and costly choices. Why should the public administrations burden themselves with such troubles, since in this Greek isle tourism makes the local economy thriving? Would such investment by the community be advantageous? In brief, what this design would like to highlight, consistent with the modern theories on “public archaeology” (definition based on Liverani, 2011), is that the research in the framework of archaeology has not to be neither “pent” in the academic world nor prerogative of researchers; indeed, if the research results were aptly published and popularized, they would be able to increase the economic and urban development. There are a lot of successful examples in this sense (Lapi Ballerini, 2012) but, nevertheless, it may solely ensue from a forward-looking and organic planning aimed to create an homogeneous and systematic urban view by linking the existing scattered interventions. To this end, it is essential to promote communication and interaction among all people which should be engaged in this process: designer-urban planner, archaeologists, researchers, institutions, local administrators, stakeholders. The goal of this work would be focused on making people aware, involving, educating, increasing the users and passionate public.

Therefore, it is clear that historians have to progress and to be open to the new frontiers of communication and fruition technologies (Bonacchi, 2009) in order to succeed in displaying the research’s outcome to a target as extended as possible. They could manage to do this, first of all, by using a technologic didactic-system full of understandable images and three-dimensional reconstructions of the ancient configuration which makes the comprehension of evidences easy even by inexpert people. Moreover, in the way of avoiding the risk of exaggeration, the proposed reconstructions have to be closely related with material data: the reality exhibited in situ has to be potentially “integrated” and it has to be displayed to the public in its original collocation (Pruneti, 2012). Furthermore, it is to be hoped that
the graphic rebuilding of the antiquity will turn into an out-and-out tangible redialing in situ (assuming that the numbers of found fragments will be sufficient to justify this kind of operation) and, additionally, the intervention (necessarily reversible) will be based on not approximate reconstructions of the past.

Regarding Kos, the anastylosis interventions are essential to help visitors to vie the excavations, even though they are far from each other, and to understand the real width of the ancient monuments. The realization of a new exhibit building, useful to “musealize” in situ the dig area and its own finds, entitles visitors to experience something engaging and with a strong effect.

The experience, meant as participation and dynamic usage, is the basic features of the current cultural tourism and, plus, the above-mentioned initiatives represent the “good practice” of the “educational archaeology” (Brunelli, 2013). We use the word “educational” due to the fact that this kind of archaeology aims to the learning and, to be more precise, not only to the formal learning prevailing in schools but also and especially, to the learning occurring in informal settings, as museums or archaeological sites. Thus, thanks to the guide of skilled archaeologists which make their knowledge available to the public by telling stories or simulating real and hypothetical reconstructions, the visitors make themselves aware of the historical data and even the inner sense of excavation.

4 ACKNOWLEDGEMENTS

Thanks to Prof. Giorgio Rocco and Prof. Monica Livadiotti for the historical research, to Prof. Claudio D’Amato Guerrieri for the contribution to the architectural design and, finally, a special thanks to Ph.D Rossana Carullo and Prof. Roberta Belli for their essential support in the elaboration of the archaeological landscape design. Finally, the paragraphs are written by: 1. Francesca Liuni; 2.1. Annalisa Ferrante; 2.2. Mariangela Messina; 2.3. Stefania Lamaddalena; 3. Cristina Piccolomo.

5 REFERENCES


Livadiotti, M., Rocco, G., (Eds.), 1996. La presenza italiana nel Dodecaneso tra il 1912 e il 1948. La ricerca archeologica, la conservazione, le scelte progettuali (Catalogo della Mostra), ed. De Prisma, Catania.


Web:- http://www.francoceschi.it/patti1.htm