



La Comisión  
Europea



Educación y cultura

# Cultura 2000

*Landscape and Cultural and Economic Resource  
in European Archeological Sites.  
General Evaluation.*

## LANDSCAPE AND CULTURAL AND ECONOMIC RESOURCE IN EUROPEAN ARCHEOLOGICAL SITES.

### GENERAL EVALUATION

#### Project.

Since its founding in 1990, the Andalusian Institute of Historical Heritage (AIHH) has adopted a wide-ranging view of the concept of "cultural asset". Cultural assets are considered to be just one of the many elements that make up an environment or "cultural landscape" of which they are an integral part. For this reason, and as one of the earliest initiatives of the Institute, an experimental project in preventive conservation was organized in 1992-93 at the Royal Chapel of Granada, located in the Cathedral of Granada, Spain. The project received collaboration from the Royal Belgian Heritage Institute, the Central Institute for Restoration of Rome, the Université Libre of Brussels and the University of Granada in order to protect a collection of Queen Isabel the Catholic's art objects and whose origins could be traced to a number of European places. This initiative, therefore, is illustrative of how the Andalusian Institute of Historical Heritage has, from the very time of its conception, felt a calling towards collaborative efforts which reflect the view that historical assets are a product of many converging cultural factors.

The complex relationship existing between a cultural asset and its surroundings was also dealt with by the AIHH through a project entitled ALLIANCES FOR CONSERVATION, which arose as an idea for an exhibit held at the World Heritage Cities Encounter held in Evora, Portugal in September 1997. The project was led by the Andalusian Regional Ministry of Culture, represented by the AIHH and supported by the Getty Institute for Conservation and the Town Council of Evora.

The exhibit focused on the different problems posed by tourism in relation to cultural heritage in four very specific enclaves: the Basilica of St. Anthony of Padua, the Mayan Indian world, the town of Nazareth and the Alhambra Palace-city of Granada in Spain.

The exhibit delved into the phenomenon of mass tourism and how it tends to drastically alter both monuments and their surroundings. The solutions to this challenge lie in defining a new relationship between conservation of cultural assets and sustainable development.

The idea behind the Culture 2000 Project was to consider historical and cultural assets at a number of European archeological sites within their decisively regional contexts. The project rests upon the basic conception that the conservation or deterioration of a particular cultural asset depends heavily on the nature of its surroundings and the manner in which local inhabitants interact with it.

Given its commitment to conservation and protection that the Andalusian Institute of Historical Heritage has acquired from the outset, together with its desire to endow its activities with a more globalized approach, the project formulation was not a change in its direction but rather a way of broadening the scope of the Institute's strategies.

The fact that Culture 2000 is a transnational programme allows for our view to be shared and contrasted with other European members with many of the same needs and concerns in this area. If we compare the project's development to embarking on a journey to a chosen destination, we feel enriched by the thought that the voyage is not taken alone but with the support and collaboration of those who pursue the same objectives.

## **Objectives**

The *Landscape Laboratory and Cultural and Economic Resources in European Archeological Sites* pertaining to the Culture 2000 programme, attempts to draw the attention of society at large, involving citizens more directly in a greater appreciation for the conservation of the cultural assets around them. All sectors of society are encouraged to participate together with institutions and organisations involved with cultural heritage. Their focus on monuments as an integral part of the physical, natural and social environment within which they were created leads to a better understanding of the interdependence of these realms.

In addition, our aim is to establish a solid foundation for the concept of "Laboratory" to endure as a place for encounter and experimentation to take place at historical enclaves. While constituting an alternative to more passive forms of presentation, the Laboratory fosters the sharing and contrasting of scientific research with other European partners so that, with the sum of experiences, Europe can promote solidarity in safeguarding its cultural diversity.

In sum, by linking cultural heritage with its surrounding context and creating supporting alliances, the aim is to help citizens view culture as a way of strengthening their own identities and awareness of the environment in which they live.

## **Results and Impacts.**

The results that have been reached are due largely to the analyses carried out in each of the four enclaves, the use of new tools to this end and to experimentation in the form of workshops, discussion groups, etc. The experience as a whole possesses great potential for the future, both in terms of the archeological sites analysed as well as other cultural assets with significant regional implications.

The Archeological Complex and its surrounding area were the object of numerous activities which have had positive results from several standpoints. For example, area youth participated in workshops aimed at bringing them closer to the cultural heritage of their surroundings by interacting with specialists in an open context.

The concept of "Laboratory" was consolidated so that experts from various disciplines could study ways to envisage more sensible ways to use and enjoy cultural heritage. Social and economic forces, and among them, the tourist industry, which plays an extremely important role in the Andalusian economy, sees how an archeological complex can draw even greater attraction by caring not only for the isolated element but rather all that surrounds it, respecting its historical, aesthetic and cultural values which together create a unique landscape.

Definitely for the determined usage of methods which associate landscape values and cultural resources within a given territory, by going beyond the strict boundaries of the monumental object per se. It is quite the contrary to the approach of many other studies which deal over and over with the object without considering what occurs around it.

Likewise, it was equally important to raise the awareness of society at large that a cultural asset is part and parcel of a much wider setting. Each and every element of a particular landscape as well as the events that occur within it create an impact on all the others. Therefore, the results are aimed at being the start of a series of ongoing and permanent steps towards a more solidly-based, logical, and respectful relationship of solidarity between man and cultural assets.

The results attained have surpassed our expectations in terms of the specific activity on landscapes and regarding the organization of youth workshops. We encountered greater difficulty in analysing cultural resources, perhaps due to the extremely complex aspects involved in the study of cultural heritage where there are intricate anthropological, sociological and economic conditions, among others, which condition man's relationship to his surrounding environment.



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# Cultura 2000

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*Landscape and Cultural and Economic Resource  
in European Archeological Sites.  
Main Results.*

## **LANDSCAPE LABORATORY AND CULTURAL AND ECONOMIC RESOURCES IN EUROPEAN ARCHEOLOGICAL SITES.**

### **MAIN RESULTS**

The project's effects have always been viewed as being long-term in nature. That is, the objectives are focused on the adoption of a new approach towards the conservation and enjoyment of our heritage from a perspective rooted in the sustainability of processes instigated by man. Likewise, for the teams of professionals involved in this experience, new and alternative roads have been paved for a more adequate assessment of cultural assets in a given territory while working with the economic forces and local population of those places. It is hoped that these considerations gain the acceptance of all sectors of society so that the effects can become even more lasting.

The effects can be evaluated over time through three mechanisms that were assayed during the project:

- the landscape laboratory as a point of encounter and experimentation in all areas that converge in a cultural heritage setting.
- the centre for heritage resources which serves as a liaison between heritage, the economy and society in processes for sustainable development.
- the art workshop which allows for new perceptions of the keys to cultural heritage to be expressed from a contemporary viewpoint.

### **Transnational legacy of the project.**

The most significant aspects have been:

- to verify methodological applications in different regional and social environments.
- to adapt that methodology to new ideas contributed by teams of experienced specialists from different countries.
- to widen concern for the relationship between cultural assets and their surroundings in contemporary Europe, which lends importance to finding appropriate solutions for landscape conservation in harmony with the local inhabitants and the directives of the European Convention on Landscape.

The relationship with the project partners was excellent throughout the entire year of programming which has, in turn, led to the forming of closer ties of friendship on a more personal level. This level of affinity is always favourable when considering future collaboration.

### **Socio-economic results.**

The possibility of integrating cultural resources with social and economic development from a sustainable perspective. We believe that this is the most complex part of the project. Thus, it would be advisable to carry out ongoing experimentation in order to find means of integration which benefit both cultural assets and the citizenry.

In our work with the population living near Archeological Complexes, we have often felt that there is no clear perception of the possibilities within their reach to contribute to greater well-being. There is, at times, a certain degree of mistrust towards the sites due to the conflict of interests arising from wanting to preserve a site and the difficulties posed by intensive development, which may have long-lasting detrimental effects.

There is obviously much left to be done.

### **Political legacy of the project**

The possibility of administrative intervention in this cause, borne of the exercise of public liberties, in order to devise a harmonious pattern of development for European landscapes. This is one of the most concerning issues of the century if we consider the problems of land occupation in Europe throughout the 20<sup>th</sup> century.

### **Theoretical legacy of the project**

Theoretically speaking, the numerous manifestations of cultural heritage from any era, which often serve as an "introduction" to a country, must be maintained in balance with their environment. Conservation and valuation of objects are not possible if they must coexist with deteriorating surroundings and local inhabitants having to adapt to aggressive social and economic situations.

It is defensible to argue in favor of procedures which function in various European countries and can be conveyed to other nearby countries, especially those in the Mediterranean Basin.

### **The artistic legacy of the project.**

The artistic legacy can be found in a number of areas:

- The use of graphic instruments in order to express the features of cultural heritage and the conflicts to which it is subject during regional development. This allows for photography, drawing, video and computer animation, etc to find new forms of expression. There is still much to be done but we feel that this constitutes a new crossroads for artists, specialists and the public to share in the experiences offered by cultural heritage.

- Cultural heritage is conceived as a set of manifestations of the highest aesthetic, historical and social value. However, it is not often referred to in artistic expression or in education as a way of interpreting the past through contemporary ways and means. The Landscape Laboratory, core to the Culture 2000 project, has allowed us to demonstrate, through the plastic arts workshops, that heritage allows for a dynamic relationship to exist, no matter when it was created, and that the perception and appreciation for it deepens when an attempt is made to approach it through artistic or literary means.

### **Legacy of the project concerning enabling public access and models of participation**

The project considers the public as being a dynamic factor in efforts to preserve and promote understanding of cultural heritage. The public in general, but youth and minorities in particular, are openly invited to deepen their knowledge about cultural heritage and to discover the unique ties they have with it. Similarly, useful and comprehensible information is provided to the public to bring them closer to cultural heritage and encourage them to collaborate actively with other sectors of society in its valuation and protection.



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# Cultura 2000

*Landscape and Cultural and Economic Resource  
in European Archeological Sites.  
Final Report.*

### ***General Summary***

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## *Introduction.*

European Union. Programme Culture 2000  
Landscape and Cultural Resources Laboratory in European Archaeological Sites  
Spain: Andalusian Institute of Historical Heritage (Seville)  
Greece: 9<sup>th</sup> Ephoreia of Byzantine Antiquities (Thessaloniki)  
Italy: Cortona Municipality in Tuscany (Arezzo)  
Portugal: Portuguese Institute of Architectonic Heritage (Lisbon)

IAPH  
NOVENA EPHOREIA BIZANTINA  
COMUNE DI CORTONA  
IPPA

The Landscape and Cultural Resources Laboratory in European Archaeological Site belongs to the Field 1 of the call corresponding to year 2001. *Initiatives devoted to the assess of the European common heritage (real state, personal property, architectonic or archaeological heritage)*, and more specifically to the paragraph "European Laboratory of the Heritage"

In this new century it becomes necessary to establish the relationship between monuments and environment from a holistic perspective, taking into account the topography, infrastructure, buildings, habitat, natural environment and climate, the constitutive elements of the place and a balanced socio-economic development.

If we consider the environment as a tool of understanding, analysis and confluence of all the factors determining a territory (which might be stable or suffers from transformations through human decisions); if we recognise the increasing importance of the reciprocal interdependence among the environment and all the elements that constitute the cultural heritage, to the extent that they become inseparable; it seems to be appropriate to carry out tasks of defining, studying, preserving, and protecting of all the elements. All of it should be done in the frame of a complex that involves necessarily the territory.

The sensitivity of the public is progressively acquiring new dimensions due to the transformations experimented by the environment through direct or indirect actions affecting in a determining way the material or immaterial heritage of the area.

Currently the conditions in the morphological transformation of the landscape are due mostly to the economical development and the ground use. If we do not set out a dialogue between the cultural heritage and the new ways of acting on areas of a given dimension, we will hardly maintain the heritage in good conditions to be enjoyed and used by the society.

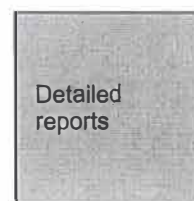
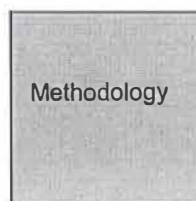
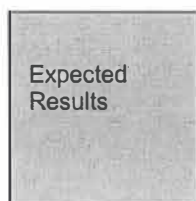
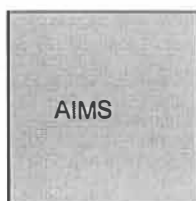
The project aims, on the one hand, to facilitate the interpretation of the area of the Archaeological Complexes as cultural landscape, resulting from the dialogue existing between them and the numerous past generations. On the other hand, the project intends to create new ways, involving the population, to protect and preserve them.

The idea emerges from an innovative approach, since the environment and its resources are used to promote a holistic interpretation of the cultural heritage and its context by involving the population and by experimenting from two perspectives: the scientific-technical one and the cultural one.

The Landscape and Cultural Resources Laboratory in European Archaeological Site has an experimental character and is carried out in the following areas:

- The Archaeological Complex Baelo-Claudia (Cádiz, Spain),
- The Acropolis of Thessaloniki (Greece),
- The Archaeological Park of Cortona (Italy),
- The Archaeological Complex of Mirobriga, Alentejo, Portugal

**If you want to know more...**



## **AIMS**

- Preparation of the cartography of the area of the archaeological complexes, including the constitutive elements of the territory: topography, climate, natural environment, etc..
- Creation of a history of the landscape of the archaeological complexes by collecting information, especially graphic one (photography, drawings, plans) in collaboration with the local population. Thus culture would serve as a means of promoting the acquisition of knowledge and social participation.
- Determining the main risks from which the landscape might suffer: natural elements and human activities.
- Definition of strategies to preserve and reassess every archaeological complex.
- Creation of an experimental model that works as a frame where we can study different types of risks, protection measures, action on the environment,... This could serve as a means to divulge the scientific-technical knowledge in terms of heritage preservation.
- Organization of activities for children and young people focused on studying and understanding the environment, where visual artists could take part as teachers (painting, photography, sculpture, electronic design,...) We will carry out exchanges among the countries involved in the projects.
- Creation of an inventory of the *cultural resources* concerning the archaeological complexes in order to call for proposal oriented to a sustainable development, which try to reassess and divulge information about the cultural heritage.
- Creation, in the future, of an experimental platform of communication through the Internet, assisted by the new technologies and the participation of the involved entities (artists, local population, etc..)
- Use of this experimental laboratory during the organized visits to the archaeological complexes, by involving the tourist authorities in a new way of presenting the values of the cultural heritage.

## **EXPECTED RESULTS**

- We intend to make the population, institutions and other entities take part in activities concerning the cultural heritage. The cultural heritage has to be understood in a holistic way, observing the monument inserted in the natural environment, in the middle of human activities, that build up towns around the monumental milestones.
- To gather information, that can be used and understood by the public, and other entities involved. That would mean to bring the cultural heritage and the society closer, whereas the specialists can work in an open context.
- Building up the foundations of the concept "laboratory" as a meeting and experiment place in the heritage area. This would substitute, or would serve as an alternative to, other options that try to show the value of the heritage.
- Building a base for scientific studies on the landscape according to the lines established by the "European Landscape Conference". Thus the future interpretation of the landscape can be made upon a structural basis and could provide for a more logical understanding of the European territory.
- Territorial links will originate. This fact, together with the accumulation of experiences, might promote solidarity in the European space and guarantee the cultural diversity.
- On establishing relations between the cultural heritage and the territory, and on reinforcing alliances about itself, the population -especially young sectors and minorities- might recognize culture as a means to improve their identity and respect to their surrounding environment.

*Spain.*  
*Instituto Andaluz del Patrimonio Histórico.*  
*Conjunto Arqueológico de Baelo Claudia. Tarifa.*

*Activity 1.*  
*The Territorial Assets Charter.*  
*Landscape Laboratory.*

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## 1 FRAMEWORK

The new century brings with it the requirement to view the relationship between monuments and their surroundings from a holistic viewpoint that takes into account topography, infrastructures, buildings, habitat, natural surroundings, climate, environment and the implication of component materials as well as economic development and social balance.

If we understand the concept of landscape as a tool for unifying, analyzing and comprehending all of the different aspects that make up a territory, if territory changes or remains the same by virtue of the decisions taken by human assemblages, if it is broadly accepted that the environment and the elements that make up cultural heritage are so interdependent that the two become inseparable, it then seems to be appropriate to embark upon tasks of defining, studying, protecting, communicating, and conservation within the complex framework of territory.

The conditions underlying the morphological transformation of a landscape are generally due to structural alterations relating to natural factors; but also, and especially, to economic development and the occupation and use of surface land. If a dialogue is not established between cultural heritage and the new ways in which we have an impact on territory, societies will have serious difficulties maintaining their heritage in conditions conducive to its use and enjoyment. In short, the instruments of protection and preservation should address these measures in order to achieve a global perspective of European heritage.

It is from this viewpoint that the **Territorial Assets Charter** is proposed, as a reflection on the characteristics of the surroundings within which we act, while regarding these surroundings as a *cultural space* and as a basic tool supporting the balance of activities carried out in the project.

From this perspective, space ceases to be understood as a mere stage and begins to manifest as an active entity that can contribute to strengthening its own development. The environment, surroundings and territory viewed as resources and their relationship to the culture thus acquire a new value.

In the case in study, landscape should not be understood simply as an aesthetic image of a given space. It is more complex and at the same time more useful. Landscape is interpreted as a dynamic physical manifestation of the complex system of relationships between human activity and the natural environment. It is increasingly considered as a highly transcendental component and criteria in the planning of both natural and cultural spaces.

As an experimental tool using graphic processes and models for simulating actions, and by enouncing proposals and projects, the landscape laboratory establishes the treatment of landscape problems from a territorial perspective. To that end, it will draw from mechanisms of analysis, knowledge, and dissemination of the values of locations with an intentional and interpretative focus. In short, by using the landscape and resources of a given location, the laboratory proposes to generate an integrated reading that includes both technical-scientific and cultural perspectives.

## **2 OBJECTIVES**

- 1.** To understand space as a cultural territory resulting from the interrelationship of the readings and dialogue maintained between a space and multiple generations of human society.
- 2.** To produce a computerized cartography of the landscape of Archaeological Sites.
- 3.** To construct a history of the landscape of Archaeological Sites by gathering and compiling maps, photographs, oral tradition, and so forth.
- 4.** Awareness of the assets and hazards of a given location and to represent this knowledge on a medium enabling the development of planning instruments: protection, conservation, uses, and so forth. To carry out an assessment of the landscape of the "Arch de Bolonia" in which aspects and topics coming from cutting-edge landscape perspectives are integrated.
- 5.** To employ analytical instruments that are easily combined with graphic tools accessible to a mixture of audiences with diverse interests. To generate mid-scale maps displaying the different phases of the study.
- 6.** To draw up a landscape proposal that integrates the protection, planning and management of landscapes.
- 7.** To study the components comprising the Archaeological Site as well as their relationship to the territory.
- 8.** To assume the close ties binding the monument and the cultural heritage to the environment.
- 9.** To contribute to the increase of knowledge regarding the European landscape and to implement the European Landscape Convention.

### 3 THE LOCUS

#### 3.1 GENERAL TERRITORIAL PROCESSES: THE GROWING OCCUPATION OF THE ANDALUSIAN COAST BY TOURIST SETTLEMENTS

The perception of landscape as a fragile threatened heritage has come to be a collective concern, although not as yet a social demand; we can say that landscape is now a tangible reality.

The phenomenon of Andalusian seacoast tourism has become a dominant activity over the past few decades, taking up large tracts of land and shaping new landscapes. The large profits generated by the growing and powerful tourist activity translate into the destruction of areas that have historically been the main and sole resource of specific social groups.

Situated within the Tarifa-Baelo Claudia-Barbate axis, the location chosen for our study, the Bolonia Inlet, affords us an opportunity to launch the project along a strip of territory in which tourist occupation has remained latent due to the specific features and strategic characteristics of the space. Notwithstanding, the destruction of cultural diversity and its roots, the face of which is the landscape, have begun to instigate signs of transformation along broad areas of the coast.

#### 3.2 THE BAELO CLAUDIA ARCHEOLOGICAL SITE

##### 3.2.1 HISTORIC ANTECEDENTS

Situated in the northern part of the inlet of Bolonia and pertaining to the municipality of Tarifa in the province of Cadiz, the origins of the Roman-Hispanic city of *Baelo Claudia* stem from its privileged geo-strategic location. Although the founding of the city goes back to the end of the 2<sup>nd</sup> century B.C., it was during the 1<sup>st</sup> and 2<sup>nd</sup> centuries A.D that it reached its highest point. Even during the times of Caesar newly emerging policies directed towards annexing lands in Northern Africa (*Mauritania Tingitana*) and the need to control the recently opened Atlantic sea route contributed to the flowering and thrust of the city, but especially significant was the granting of the status of Roman city under the mandate of Emperor Claudius.

During the early centuries of the period, *Baelo* was the main port of departure for trade ships sailing for Northern African (Strabo, III, 1, 8). Strategic factors such as its location at the outlet to the Mediterranean Sea at a short distance from *Tingis* (Tangier), the capital of *Mauritania Tingitana*; the presence of a natural system of ocean currents that propitiated navigation between the two sea-ports; and the magnificent natural conditions for safeguarding ships that the inlet provided during the Roman period would have been decisive factors the political and administrative flourishing of the enclave as opposed to other points along the northern coast of the Straits of Gibraltar.

The architectural appearance of *Baelo Claudia* became fully imperial during the early decades of the 1st century A.D. when the city boasted a theatre, Roman baths, a market and a large forum around which shops and the main religious and administrative buildings were situated. Today the city, in which

excavations have been carried out since the early 1920s, is a magnificent example of the cultural legacy of ancient Rome found on the Iberian Peninsula.

The extraordinary abundance of fish in its waters favoured the city becoming well-known during Roman times as an important trade emporium for salted-fish, of which there is ample archaeological evidence.

The decline of *Baelo* began at the beginning of the 2<sup>nd</sup> century A.D. The profound economic changes occurring at the end of the century; the abandoning of the Atlantic trade route; the possible destruction of a large part of the city by earthquakes, the area's growing political instability made manifest by successive invasions (3<sup>rd</sup> century) of Beatrice by nomadic tribes from North Africa; and possibly a change in the shape of Bolonia Inlet's coastline as a consequence of climate changes or seismic activity, were all factors contributing to its decline.

Beginning at this time and continuing throughout the 4<sup>th</sup> century, the urban area became considerably smaller and houses were even built over the ruins of what had once been monumental buildings. By the 7<sup>th</sup> century it seems that *Baelo* had already been completely abandoned.

### **3.2.2 LEGAL STATUS**

*Baelo Claudia* was declared a national monument on 19 January, 1925 and permanent protection was established in 1966.

**Baelo Claudia Archaeological Area** Decree 240/2000 of 23 May, published in the Official Gazette (BOE) No. 76 of the Regional Government of Andalusia (Junta de Andalucía)

Whereby declaration of social interest is issued regarding expropriation by eminent domain for conservation, care and use compatible with its values as Asset of Cultural Interest, to be denominated The *Baelo Claudia* Archaeological Area.

**General Urban Zoning Plan** September 1990. Archaeological Protection. Construction works are banned in archaeological sites and only urban development works tending to enhance access routes are authorised. In accordance with Norma 19 of the P.E.P.M.F. and the Catalogue of the Province of Cádiz, any work or activity tending to alter the environment thereof must be reported to the Provincial Urban Planning Commission, which in turn shall require the mandatory report from the Department of Culture of the said Junta.

Whenever during progress of any other work or activity signs of any such digs are turned up, these must be reported to the City Administration, which must order work or activity stopped in the area involved, communicating same to the Culture Department for their pertinent actions. Exclusive use of the area must be devoted to culture and recreation or agriculture as the case may be, with land to be worked only superficially so long as proof is presented indicating no damages accrue to materials or structures located therein.

Express prohibition is made of any and all actions upon foundations, be they for excavation or consolidation, where pertinent permit from competent official bodies is not extant and work is not under the direction of a professionally qualified person.

### **3.3 APPREHENDING THE LOCUS- The territory**

#### **Chance determines fate**

The earliest geological upheavals determined, right from the beginning, the *directional axes* of the zone. The fracturing of the Straits of Gibraltar created an opening that would be used much later as a sea passage by leading civilizations. This horizontal line would come to connect very disparate realities and would be one of the fundamental routes for outward and return journeys in the discovery of the planet. The Straits, as a physical space, would come to take on the frontier feeling that is produced by the meeting of two seas; seas that underline not just the links between East and West, but between North and South as well.

#### **Two different views of the same reality**

The sense of an abrupt break between two similar realities has endured since the earliest apprehensions of the current terrestrial configuration. The certainty that just a few meters down an extension of our perceived reality can be found has brought about a strong desire to discover and appreciate that other world. In the case of Baelo Claudia the two realities are clearly verifiable. On a clear day, the North-South connection is evident, and Baelo is in itself evidence of the meeting of East and West. At times a political border, or even a physical one, can only register slight differences and points of view regarding a single actuality. Al-Idrisi graphically displayed his concept of the world as opposite in order to that of the West.

## **4 METHODOLOGY**

The experimental study of the landscape of the "Arch of Bologna", within the framework of the "Territorial Assets Charter", is an outstanding opportunity to apply within the scope of our Autonomous Community the most innovative ideas and approaches being developed in the European Union regarding landscape assessment and policy.

This study is developed based on the indicative sequence described below, although it must be made clear that the methods of analysis and synthesis do not require the conclusion of one phase before the next is begun. It is an ongoing dialectic process between analysis-description, diagnosis-assessment and proposals and projects.

The territorial assessment tools incorporate the use of new technologies and methods directed towards a global understanding on a scale ranging from regional down to the urban setting.

Understanding landscape is approached as a multi-level exercise in interpretation on several different levels:

- 1. Analytical interpretation**
- 2. Visual and perceptual assessment**
- 3. Landscape and immaterial heritage**
- 4. Proposals and projects**

## **5 APPROACHING THE LANDSCAPE- Methodological outline**

### **5.1 ANALYSIS AND INTERPRETATION OF GRAPHIC AND WRITTEN RECORDS**

Based on the hypothesis that in any graphic representation various interpretations of the object being represented will be manifest, an analysis of the historic cartography, photography, literary and other factors are developed from the viewpoint of meaning.

From among the documents that have been found we sought to select those that would in some way facilitate an elaboration of the evolution of the territory.

#### **Cartographic language and its interpretation**

- 1. Gathering of information**
- 2. Cataloguing of the cartographic record of the area under study**
- 3. Analysis of historic cartographic records from the viewpoint of meaning**

4. Interpretations of the landscape
5. The development of cartographic symbology
6. Perceptions and motives influencing representations of the sea and of mountains- Charts and maps- Strategic location

#### **Aerial photography and other photographic documents: analysis and interpretation**

1. Gathering of information
2. Cataloguing of the photographic records of the area under study
3. Interpretations of the landscape

#### **Epigraphic and literary documents: Myths and legends**

1. Gathering of information
2. Cataloguing of documents
3. Interpretations of the landscape

Literary and epigraphic information complements our knowledge of the city of Baelo and its territory. The most complete text comes from Strabo in his *Geography* (III,1,8):

"After that comes Melaria, with salted-fish factories, and then the city and the river of Belon. Belon is the port from which ships generally set sail for Tingis, in Maurusia. It is a market as well and has salted-fish factories."

Another valuable reference is the *Antonine Itinerarium*, which describes the path of the Roman road along this section of the coast.

### **5.2 TERRITORIAL INTERPRETATION**

The creation of a scaled Territorial Information System was necessary in order to attend to decision and territorial processes.

This tool for the processing of massive volumes of information was fed with input from informational and cartographic data bases. The initial stance was to create and use an information system that could be up-dated through routine procedures and which would be available for varied consultation and treatment strategies. In short, a tool to facilitate follow-up on actions, diagnosis and proposals.

Including landscape in these planning instruments, as well as the way in which landscape would be processed in the available information systems, generates confusion between the concepts of landscape, environment, space and territory. This confusion leads to the mistake of resolving the underlying debate with landscape's least dynamic factor, scenery, and abandoning the idea of landscape as a subtle result of individual and collective appropriation of space through comprehension and interpretation, which, by its very nature would be difficult to translate into magnitudes or numbers.

In order to avoid this situation, an interpretational line of reasoning has been developed, avoiding inventory and embracing a global interpretation of the territory. In so doing, geographical and secondary sources of information were used together with field work. Thus, the study of the relationship between human society and geographical space: use, exploitation, appropriation, affection, and individualization, allows us to influence the relationships between local heritage and development.

### **5.2.1 TERRITORIAL INTERPRETATION OF THE "TARIFA-BAELO CLAUDIA-BARBATE AXIS"**

Territorial interpretation is based on:

1. The sequenced and reasoned organization of maps
2. Preferential attention to anthropic territorial processes: Inherited processes and emerging processes

#### **1. Strong coastal dynamics owing to strong winds and ocean currents**

- Predominance of erosive mechanisms, resulting in exceptional and characteristic sand dune formations
- Dynamic compartmentalization into independent physiographic units
- Significant impact from tidal currents

#### **2. Compartmentalized space**

- Small capes and promontories alternate with wide inlets sheltered by coastal hill ranges
- Highland extensions
- Sequence of coves and cliffs
- Small river basins

#### **3 Strategic space**

The terrain affected by national defence usage divides the littoral space of the Straits of Gibraltar into various sectors, in accordance with a historic strategic and military relationship. Currently, this activity is defined by the presence of enclosures situated in sectors very near the

coast and above on elevated sites in compliance with their defensive mission.

Following are the resulting territorial effects of these two factors:

- Absence of coastal continuity
- Restrictions on territorial changes derived from the above-mentioned factors

#### **4 Spatial discontinuity**

Basic infrastructures become key factors in the modelling of a geographical area. With regard to our "axis", the N-340 highway is the principal support for the inland road network, contrasting to this is a discontinuity of roadway infrastructure along the coast.

#### **5 A space rich in cultural heritage**

The presence of a large number of archaeological sites, coastal fortifications, and "vías pecuarias" (an ancient public network of rural paths for livestock transit) has the effect of transforming the territory into a cultural vessel.

#### **6 An inherited territorial model- The overlapping of heterogeneous territorial strips**

The anthropic processes were integrated into the two territorial models: the inherited territorial model and the emerging territorial model. The first includes aspects resulting from anthropic processes that have moulded the space over the years and continue to be active.

- Inland inherited territorial model: the countryside
- Inherited territorial model on Coast I: ground surface covered with thickets and pasturelands used for livestock exploitation
- Inherited territorial model on Coast II: natural forestland and reforested areas

#### **7 Emerging territorial model: Tourism-Protection-Windfarms**

The emerging territorial model includes aspects of recent anthropic activity:

- Emerging territorial model on Coast I: seasonal tourist occupation
- Emerging territorial model on Coast II: Environmental appraisal has been carried out by governmental bodies. In following with this the published guidelines for the protection of natural spaces are:
  - The Cadiz province's Catalogue of Spaces and Protected Properties of the P.E.P.M.F., dating from the eighties.
  - The Special Plan for the Protection of the Physical Environment of the Province of Cadiz.

- La Breña-Marismas de Barbate Natural Park
  - Los Alcornocales Natural Park
  - Los Lances Natural Area
- Emerging territorial model on Coast III: Wind farms-frailness

### **5.2.2 SYNTHESIS OF TERRITORIAL UNITS**

As a territorial synthesis, following is a proposal for the delimitation of territorial units.

1. Tahivilla
2. La Janda
3. Almarchal-La Zarzuela
4. Barbate
5. Los Lances-Salada Vieja
6. Valdevaqueros
7. Zahara-Atlanterra
8. Inlet of Bolonia

### **5.2.3 TERRITORIAL INTERPRETATION: BOLONIA INLET**

Among the coastal units of the “Tarifa-Baelo Claudia-Barbate axis”, the Bolonia Inlet stands out owing to the convergence of:

#### **1. A “spatial island”**

- A mountainous amphitheatre: highlands and countryside

To the west, the Sierra de la Plata, dominated by Silla del Papa Mountain (altitude 459 meters) and connecting to the sea through Cape Gracia and Cape Plata, forms a triangle together with the San Bartolomé Ridge (altitude 445 meters) to the east.

- Strategic functions and their influence on the territorial

Military installations are located at the coastal vertices of the virtual triangle of the inlet: Point Camarinal, Sierra de la Plata, and Point Paloma.

From a territorial viewpoint, the military presence has been a decisive factor regarding change in the geographic area. On the one hand, it has created a restricted accessibility and has established the Port of Bolonia as the sole access to the inlet. On the other hand, it controls the use of wide stretches of territory by incorporating them into the security zones of the instalations.

- Restricted accessibility and relationship between areas

Isolated from the rest of the coast with regard to insular traffic.

- Clustered road network

The road network of Bolonia Inlet has a branching structure right from the start of the access road that turns off from the N-340 highway. A paved road climbs to the Port of Bolonia at which point the first ramifications towards.

The access road to Bolonia Inlet reaches the settlement of El Lentiscal which in recent years has been transformed almost into an urban crossing owing to the proliferation of buildings along its sides. There is a road crossing at the far end of the highway where the former military road that gives access to the Archaeological Site swerves north.

The branching capillary structure of the road network is complemented by an extensive network of minor paths and tracks covering the territory, both towards the highland and to the coastal areas.

## **2 A space with distinguishing cultural characteristics** Permanence and transformation: Historical records

The Arch of Bolonia is a large vessel of anthropic records in which we find prehistoric remnants, Roman settlements comprised of villas, aqueducts, quarries and necropoli, and the pre-Roman city of Silla del Papa (the Pope's Chair).

Owing to its size and state of conservation, the Baelo Claudia Archaeological Site is the basic structuring component of the spatial heritage.

- *Vías pecuarias*
- Archaeological sites
- Settlements relating to the occupation and use of the land

## **3 The inherited territorial model**

- Fenced fields for livestock
- Dispersed rural dwellings
- Community-owned woodlands

Model based on:

- Different forms of public and private appropriation
- Socio-ecological management of resources directed towards their use with specific, although differentiated, purposes:

**Stock farm:** small private property with productive purposes and in which Retinta cattle raising prevails; associated with a scattered settled population.

**Reforestation of community-owned forestland:** public-private property dedicated to environmental and landscape purposes.

#### **4 Emerging territorial model**

Tourism and development of settlements:

- A model based on recreational consumerism focusing on the coast as a tourism resource
- The development of settlements specializing in tourist services: El Lentiscal
- The development of settlements of second homes: Rosa de Contreras, El Chaparral, the Ranchos de La Plata

Recognized outstanding space:

- Environmental protection from the Special Plan for the Protection of the Physical Environment of the Province of Cadiz

Recent protective trends:

Protection and listing by different public and private bodies. Appraised area

- Delimitation of the area surrounding the Baelo Claudia Archaeological Site.
- To declare the "El Anclon" sand dune a Natural Monument.
- A proposal to delimit the Tarifa Seaboard Natural Resources Plan

#### **5 Frailness**

- Land reserved for the construction of a power station in El Lentiscal during the seventies.
- A proposal to increase the surface area of urbanisable land in El Lentiscal on the part of the Public Sector Enterprise for the Land Surface of Andalusia (year 2000)
- Europe-Africa Connection (In project)

### **6 LANDSCAPE: THE ARCH OF BOLONIA**

#### **6.1 DESCRIPTION AND ASSESSMENT OF THE LANDSCAPE: THE SCIENTIFIC PROCESS** Methodological outline

Based on the initial proposal of contents, the methodology has been prepared based on the sequence of: analysis and description-assessment and objectives-landscape criteria.

First it is important to specify the focus of the sequence:

- In **landscape analysis** two basic operations are dealt with: the delimitation of macrostructures based on different criteria, and their description.
- During the **landscape assessment and objectives** phase, the assets, hazards and impact of the landscape of each unit are identified at the same time that the landscape objectives for each is formulated. It is important here to highlight that during this phase attention to the results of human intervention and territorial processes becomes especially important, above all in relation to hazards and impacts. The process is therefore more selective and qualitative.
- Last of all, the formulation of concrete landscape criteria is considered, both in relation to the units and to the activities and interventions on the territory.

Accordingly, the following outline of contents is proposed:

### **6.1.1 DESCRIPTION OF THE LANDSCAPE**

#### **Occupation of surface land: Settlements**

The settlements in the area of Bolonia Inlet are characterized by their spatial dispersion.

The territorial structure has been extensive since the Roman period; Ager Baelonensis was spread over a surface area measuring 250 square kilometres and exploitation of the area was carried out by scattered settlements. The colonization of the space was adapted to orographical features characteristic to the Arch of Bolonia that gave rise to special climate conditions. The wide variety of buildings like aqueducts, fountains, and mills, and the springs and streams that criss-cross the area reveal the importance and abundance of water.

Recent tourist pressure has generated changes in the nucleated settlements.

#### **Surface occupation: Architectural styles**

The pre-Roman settlements dedicated to pastoralism colonized the highlands surrounding Bolonia. Roman colonization was centred on exploitation of the sea and did not continue with the area's former agricultural and livestock practices. After Roman decline, the area was abandoned and a self-sufficient economy of primary activities was followed: animal husbandry, pastoralism, and agriculture.

We are currently confronted with tourism as a new system of occupation.

#### **Territorial registers: road network**

The restricted access to the Port of Bolonia has generated a "clustered" structure to the road network.

An asphalt road begins at the N-340 highway and climbs to the Port of Bolonia. The scattering of nucleated settlements are distributed throughout the De la Plata and the San Bartolome sierras generating a branched system of registers.

Betis, El Chaparral, El Pulido, Betijuelo and El Puntal are settlements pertaining to San Bartolome, while El Lentiscal is located at the Inlet and Rosa de Contreras (town of Bolonia), Cortijo de Ranchiles, Los Carrizales, El Helechar and Realillo pertain to the Sierra de la Plata.

### **Mountainous amphitheatre**

Bolonia Inlet is set in an amphitheatre formed by sierras and ridges. The Sierra de la Plata to the northeast and the Sierra de la Higuera to the north.

#### **Analysis:**

Three landscape macrostructures are detected:

##### **1. De la Plata**

**LOCATION:** Viewed to the northeast from the vantage point of the San Bartolome Ridge and to the east from the Port of Bolonia.

**RELIEF:** The southern edge of the Sierra de la Plata is shaped by sandstone crests, an abrupt slope, lime piedmont, and clay hills with small alluvial basins.

**USES AND EXPLOITATION:** Reforestation of eucalyptus and pine, strips of vegetation on the slopes, fenced pastures crossed with livestock paths and patches of shrubs.

#### **SETTLEMENTS:**

- The ranches constitute a type of dispersed settlement based on small scale livestock exploitation located on the eastern slope.
- Rosa de Contreras, a semi-urban centre with an isolated heterogeneous residential typology located on rustic land divided into plots.
- Baelo Claudia Archaeological Site

**INFRASTRUCTURE:** There is a north-south high tension cable on the slope, a paved secondary road network, and dirt roads.

##### **2 Bolonia Inlet**

**LOCATION:** Visual basin viewed from the Port of Bolonia

**RELIEF:** Shaped by clay hills with small alluvial lowland areas, a sandy coastal strip with dune formations, and cliffs of heterogeneous material with a predominance of calcarenite, followed by the sea.

**USES AND EXPLOITATION:** Fenced pastures and pine reforestation to secure the dunes.

**SETTLEMENTS:** El Lentiscal, a nucleated settlement with an isolated heterogeneous single-family residential typology of predominantly tertiary use, school facilities and the Baelo Claudia Archaeological Site.

**INFRASTRUCTURE:** Access road off the N-340 highway leading to the Archaeological Site.

### 3 San Bartolome

LOCATION: Viewed to the south from the Port of Bolonia.

RELIEF: Comprised of the northern slope of the San Bartolome Ridge shaped by sandstone crests, abrupt clay and calcarenite slopes and clay ridges with a small alluvial hillock.

USE AND EXPLOITATION: Fenced pastures crossed with livestock paths and patches of shrubs.

SETTLEMENTS: There is a dispersed population of small-scale livestock operations and isolated one-storey single-family homes.

INFRASTRUCTURE: Paved secondary road and a dirt road

### **6.1.2 ASSESSMENT OF THE LANDSCAPE**

Assessment is centred round the landscape macrostructures previously described, studying the patterns of organization, the sequence of elements that make them up and the indicators that define the most significant landscape variables.

#### **Variables-indicators:**

Visual and aesthetic aspects:

Colour, shape, line, texture, outline and materiality

Intrinsic aspects of the landscape:

Shape of the terrain: Slope, topographical complexity, morphological peculiarities, etc.

Soil: lithology, erosive processes, etc.

Waters: type and dependency upon seasonal climate

Acquired aspects:

Vegetation and use of the soil

Human actions: Type of action, spatial distribution, surface extension, etc.

A study of the relationship -causality and dynamics- between the macrostructures was conducted, and certain landscape peculiarities were established such as elements of compositive reference, scale and construed settings:

The "El Anclon" Sand Dune

Baelo Claudia Archaeological Site

The San Bartolome Crest

Based on this assessment an evaluation of quality is established:

#### **Visual quality of the spot**

In as much as the legibility of a territory is the fundamental component upon which the quality of a landscape is evaluated, it seems essential to define its visual structure.

#### **Visual quality of the unit**

A matter of defining the spaces of a territory centring round three concepts: delimitation, focal point or visual landmark and directionality.

#### **Visual structure**

The quality of these units is determined by organizational factors of the landscape. Structures generated by landmarks and references.

### **Visual frailness**

Elements of visual impact are identified and typified with the purpose of control and prevention. These elements lead us to the "load capacity" of the location.

We summarise in the following those structures that, owing to their complexity and qualification, we call **landscape structures** are listed and characterised.

#### **Fenced pastures 1.**

Fenced fields of pastureland constitute a landscape structure with two basic variants determined by the type of fence: low stone walls or wood posts.

However, the density of the vegetation, the type of fence and the topographical conditions combine in different ways giving place to a remarkable variety of visual conditions.

*Example 1. Fenced fields in the foothills of Sierra de la Plata:*

The visual force of the low stone walls and the patches of vegetation generate visual conditions of a certain complexity and pleasantness.

*Example 2. Fenced fields in the foothills of the San Bartolome Ridge:*

The contrast of the meadows of pasture and patches of shrubs with the rocky formation of San Bartolome and the reforested areas qualify and visually complicate this landscape structure, anthropized by a screen of low rock walls and wooden post fences.

#### **Fenced pastures 2.**

*Example: Fenced fields in the proximity of the Port of Bolonia*

The combination of wooden post enclosures (lacking in visual strength), low density of bushy vegetation and the gentle slope generate a very plain, almost desolate, landscape.

#### **The settlements: The San Bartolome Ridge:**

Occupation of the sides of San Bartolome Ridge has been carried out while preserving the pre-existing landscape values, especially with regard to the association between pine forest, masses of vegetation, and rocky components (stone walls and rocky areas).

This association, specific to this sector of the Arch of Bolonia, is an important landscape asset and possesses the characteristic features of a landscape structure: visual complexity and the capacity to qualify a space.

#### **The settlements: The San Bartolome Ridge II**

Here, landscape integration is devalued by certain interventions: non-native plant species, electrical infrastructures, and so forth.

#### **The settlements: El Lentiscal**

El Lentiscal is the source of diverse elements of visual impact in relation to its immediate surroundings and to the over-all territorial unit. Due to their influence, two factors are worth highlighting:

1. El Lentiscal seen from Baelo Claudia: if we consider Baelo Claudia as a point of observation of the mountainous amphitheatre that surrounds it, El Lentiscal is a source of visual devaluation.

2. Access to El Lentiscal from the Port of Bolonia road: The proliferation of activities and interventions on this edge of the urban area carries a clear risk of devaluation as well as of visual contamination.

### **The settlements: Sierra de la Plata**

Settlement on the slope of Sierra de la Plata is a clear example of visual impact caused by an absence of landscape management criteria.

A mixture of components contributes to this situation:

1. The lack of tree mass
2. The use of thick hedges to enclose the perimeters of the plots.
3. The use of heterogeneous and banalized architectural styles.

As a result of this a destructuring of the landscape occurs, an absence of a clear visual pattern. This contributes to the devaluation of the route along the road to the slope of Sierra de la Plata.

In addition to this, the proliferation of power lines adds visual contamination to certain stretches of the route.

### **Reforestation I**

Reforestation on the Sierra de la Plata (eucalyptus) and on the San Bartolome Ridge (pine) forms the basis of one of the principal visual patterns of Bolonia Inlet. We refer to the formation of a sequence of strips differentiated by colour and texture.

In the case of Sierra de la Plata we find a succession of rocky areas, eucalyptus stands, and bushy vegetation.

Pine reforestation on the Sierra de San Bartolome generates an even clearer succession: ridge, pine forest, bushy vegetation, and herbaceous meadows.

### **Reforestation II**

Pine reforestation at Camarinal Point is an interesting example of clear borders as a landscape asset. The reforested area gives rise to a straight edge along herbaceous meadows.

In contrast to the above, the contact with the Duna de Bolonia (Dune of Bolonia) generates a sharp colour contrast between the pine forest, the sand and the sea as well as a visually complex border.

All this gives rise to a landscape resource with strong visual force based on the sharp chromatic contrasts.

### **6.1.3 ASSETS-HAZZARDS**

These parameters are proposed in order to develop a more complex view than that resulting from a simple enumeration of the range of problems in the zone. The idea is to direct the parameters towards an analysis of future measures to be taken under certain assumptions. In other words, to propose risk prevention measures.

#### **Landscape impact:**

- The El Lentiscal littoral: The irregular building development on rustic land divided into plots using imported architectural designs is causing the homogenisation and trivialization of the seaboard. Territorial transformation and landscape impact: banality, devaluation and degradation.
- An increase in the occupation of land by residential and recreational buildings. Visual impact and visual contamination.
- Insufficient infrastructure to deal with the increase in occupation. Waste-waters drain directly into fluvial channels.
- Disappearance of landscape assets
- Spatial isolation

#### **Hazards:**

- Hazards deriving from territorial transformational processes
- Hazards deriving from specific interventions

#### **Landscape assets:**

- Areas with landscape value
- Landscape resources
- Scenic-visual resources

#### **Potential:**

- Natural exploitation
- Recreational-tourist activities
- Cultural activities
- Proposals for intervention

### **Conclusions**

#### **1. Environmental degradation of the surroundings:**

- Growing anthropic pressures: tourism-recreational, an increase in the number of second homes.
- The abandoning of traditional activities resulting in a deterioration of the space.

#### **2. Disproportionate growth of nucleated settlements: "El Lentiscal"**

#### **3. Un-regulated building development on rustic land divided into plots.**

#### **4. Imported architectural styles causing a banal homogenization of the coastal front.**

5. Deterioration of the landscape owing to isolated buildings: open-air beach restaurants, new housing-developments on the slopes, and so forth.

- An increase in land occupation by residential and recreational buildings
- Insufficient infrastructure to deal with the increase in occupation. Waste-waters drain directly into fluvial channels
- Spatial isolation

6. Public works: Environmental project at the Baelo Claudia Archaeological Site

7. The destruction of the area's cultural roots and diversity, the face of which is the landscape.

## **6.2 VISUAL AND PERCEPTUAL ASSESSMENT**

Bolonia Inlet thus emerges as a vessel of different meanings, projecting into new fields of cultural-spatial research, both of which concepts form part of the "collective memory.

### **Key concepts of the assessment:**

Space-landscape-poetry  
Landscape-art-science  
Landscape as a space for creative processes  
Nature-time-fragment.  
Forum-Agora

## **6.3 THE LANDSCAPE AND IMMATERIAL HERITAGE**

Going beyond a simple typology of the "immaterial components" that we can locate in the area, we present three basic lines of reasoning for improving the knowledge of intangible heritage. These three dimensions for a relational and overlapping analysis are:

### **Landscape as a source of living:**

This dimension spans from the range of potentialities of a territory to the different ways of exploiting its economic resources. It influences the different productive activities (tourism, fishing, agriculture, canning industries, and craftwork) from a diachronic perspective, taking all of these into account as factors in the modelling of the landscape and giving the sea the omnipresent quality that it deserves

### **Landscape as a meeting place**

Here we refer to the relevant places in a landscape - places in which the collective awareness of a people is made manifest- marked by the relationship between groups. These are spaces for social encounters in which families and friends come together, rites of passage are carried out, the festivals and

celebrations of diverse groups are held, whether they be towns, neighbourhoods, beaches or the sea.

### **Landscape as a point of focus**

As fruit borne from the result of work and rituals, of meetings and passings-on, certain landmarks or components of a landscape become charged with meaning; they become symbols for different groups, footprints of the memory. Their meanings vary due to the different perceptions and personal appropriations of the sea, of the beach, of the coast; the feeling brought on by the strong winds known as the Levante, is different depending on if you are a resident, sailor, surfer or tourist.

## **6.4 PROPOSALS: REFERENTIAL DOCUMENT AND PROJECTS**

Taking into account the totality of the territory in which human activity is carried out, the document seeks to orientate landscape, environmental, and cultural policies.

- Criteria to be followed for the conservation and improvement of the landscape are established.
- Strategies are proposed that promote the active conservation of cultural and natural heritage.
- The landscape is regarded as an object of specific proposals in a formal expression of the current state of the interrelation of all of the natural and anthropic components of the territory.

### **6.4.1 REFERENTIAL DOCUMENT**

The formulation, stemming from prior assessment, of a series of landscape characteristics allows us to define the strategies, orientation and quality objectives of landscape protection, management or planning.

#### **1 LANDSCAPE PROTECTION**

Landscape protection signifies the actions directed towards the conservation and upkeep of the significant or characteristic aspects of a landscape, justified by their heritage value stemming from natural configuration or human intervention.

##### **Protective diagrams**

- Zoning
- Regulation of uses and transformation

##### **Protective norms**

- Prohibitions
- Actions subject to approval
- Others

#### **2. LANDSCAPE PLANNING**

Landscape planning refers to prospective actions with a specific accent on and directed towards the improvement, restoration, or creation of landscapes. They are, in short, strategies focused primarily on degraded or devalued areas such as peri-urban spaces and so forth.

- Landscape diversification

Recommendations regarding actions and types of works

The planning of roads, observation points and individual elements of particular interest

- Appraisal of landscape components

Non-urbanisable land contains a multiplicity of components that, owing to their specific environmental, landscape or cultural value, should be protected in order to preserve them above all from building or infrastructural works. Included among these components, which should be especially marked in the case of municipal urban planning, the following should be highlighted:

Archaeological sites

The streambeds with special environmental value

Beds of native vegetation

- Re-qualification of degraded areas

Actions on interstitial spaces, reforestation of erosive zones, treatment of urban boundaries, landscape treatment of lineal components (road network and riversides), recuperation of cultural heritage

### 3 LANDSCAPE MANAGEMENT

Actions directed, with the perspective of sustainable development, towards the upkeep of landscape with the purpose of guiding and harmonizing transformation generated by social, economic, and environmental development.

- Integration criteria
- Compensation criteria
- Minimization criteria
- Occluding criteria

#### **Cultural Policies**

- To generate a structure of archaeological-landscape registers incorporating approach routes, principal paths, recreational or specialized paths, thresholds, windows and so forth.
- To improve the relations of the Archaeological Site with its surroundings through the boundary area, accessibility to the site, and parking facilities.
- To improve the interior space of the Archaeological Site: treatment of outbuildings, study of the itineraries, design of the furniture, signs and materials.

#### **Agricultural Policies**

- Agro-environmental aid
- Reforestation aid
- Landscape diversification measures

#### **Environmental Policies**

- Appraisal and recuperation of the *vías pecuarias*
- Upkeep of the structure of strips of vegetation
- Upkeep of the boundaries

### **Urban Policies**

- Control of illegal housing developments: legalize, delimit, and propose building codes that include landscape criteria.
- Delimitation of urban ground in El Lentiscal: a landscape code

### **Promotional and Public Works Policies**

- Landscape treatment of the access road to Bolonia Inlet
- Improvement of basic infrastructures at existing settlements
- Improvement of services and access to the beach
- Revision of the lay outs of the electric power network

## **6.4.2 PROJECTS**

A reflection on the concept of landscape as the focus of a project is undertaken, seeking to approach a project by first detecting the components, records and ideas regarding the locus allowing us to maintain the relationship of identity between the individual and his/her environment.

Proposals provide us with simple examples of planning and designing, equipping and managing public and private space.

### **The locus**

Maps of relationships, views, and zones of interest that qualify a space and its perception as a locus will be generated through the analysis of the territory and its relation to the Archaeological Site.

It is **proposed** that a propositional and operative meaning be formulated. **To define** situations under which the project would be feasible. **To establish** relationships.

### **Proposals**

#### **1. Structural landscape proposal:**

By appraising loci with maximum visual expression and components with significant perceptual impact, we endeavour to obtain a view of the landscape at different scales through the structuring of itineraries based on permanence, as well to revitalize old rural lanes or farm paths. Landmarks, observation points, routes, resources, archaeological sites, and so forth.

#### **Network of observation points:**

1. Port of Bolonia- A privileged observation point where the Inlet blends with the African coast on the horizon. It is globally perceived as a space enclosed by the Sierra de la Plata and the San Bartolome Ridge.

2 View of Bolonia Inlet from the San Bartolome Ridge. The topographical outline shows Silla del Papa Mountain, the Sierra de la Higuera and the Port of Bolonia.

3 Observation point of the Sierra de la Plata from which one can see how the topography approaches the sea following the basins of the Churriana, Puertabajo and Cruces streams.

4 "El Anclón" sand dune is a spot in which natural and heritage components come together.

### **Landscape project proposal for the access road to the archaeological site from the N-340 highway**

Two landmarks signal the way to the Inlet: A "Tio Pepe" sign and a palm tree. These are components of the cultural landscape of the highway, marking the access from the horizon. From the beginning of the paved road we can see the beauty of the Port of Bolonia, with the Sierra de la Higuera to the left. Here again the large geological promontory frames the landscape. As the access road reaches El Lentiscal it separates into three branches: the settlements throughway which turns into a dirt road towards Paloma Point; the access road to the Archaeological Site and the paved former military road that curves to the north up to the installations at Sierra de Plata. At this location "El Anclón" becomes the landmark of reference.

### **2 Geological formations as a landscape asset:**

1. Bolonia Inlet and Cape Carmarinal from Paloma Alta: The wind-eroded calcarenite create a singular landscape.

2 Paloma Alta Dune (150 metres): Generated in an open breach between Paloma Baja and Paloma Alta.

3 Paloma Alta Path: An old quarry on the edge of the cornice. The tubular and monolithic formations are a result of karstic erosion.

4 Southeast of Paloma Point (El Colmenar): A calcarenite formation eroded by the karstic cycle.

5. Edge of Cape Camarinal: Ancient calcarenite extractive quarries. Next to them are the artificial dunes known as "El Anclón".

6 Cape Camarinal and Galera Cove

7 Cape Camarinal (El Anclón sector): Tubular karstic formations can be observed near the quarries.

### **3 Baelo Claudia Project: Object-territory**

#### **Re-planning access roads and parking areas**

- New location for parking areas at El Lentiscal
- Access road to the Archaeological Site from El Lentiscal

#### **Recovering the Archaeological Site's relationship with the territory:**

- Opening to the sea
- A reflection regarding the boundaries. Relational landscape components such as the remnants of the wall of the Roman city, the pine forest at Camarinal Point, the aqueducts, the sand dune and the livestock route at Baelo Claudia are incorporated as project situations.

**Treatment of interstitial spaces within the Archaeological Site:**

- Itineraries, viewpoints, signs, and so forth

**Recovery of a *vía pecuaria* with historic content: The *Colada* of Baelo Claudia**

After analyzing the current path and comparing it with former historic lay outs, similarities emerge. The proposal would link into the structural landscape project.

**Project Lentiscal: Boundaries and interstitial spaces**

The project approaches the debate concerning the boundaries of the settlement and its interaction with the landscape.

## 7 CONCLUSIONS

There is a need:

- **For co-operation** between the multifarious agents that join together to carry out actions centring round cultural heritage.
- **To establish** decisive ties to private initiative granting it an important role in the **management of cultural property**.
- **To promote** the use and appreciation of the cultural heritage, taking into account the diversity of the Andalusian territory.
- **To develop** further models of participation.
- **To establish new ties** between the cultural heritage and the economy, as well as to create an alternative frame of reference.
- **To formulate** an integrated planning methodology from which criteria for norms, recommendations, instruments, and so forth, can be derived.
- **To involve cultural policies in the correction of territorial imbalances.**

### LANDSCAPE

- A general trend is observed towards the consolidation of an **integrated concept of the landscape**, as can be seen in the European Landscape Convention.
- It is important that local governments be involved as well as to increase **public participation**.
- **It is essential to co-ordinate and integrate the landscape within territorial policies.** The development of non-regulated instruments of concertation regarding landscape policy, which, given a certain flexibility, allow for the integration, in a given area, of actions implementing landscape policy: requalification of degraded areas, the formulation of concrete landscape criteria for activities and interventions on a territory. In relation to this, the present study could be a basis of future initiatives of inter-municipal co-operation directed towards landscape concertation.
- There is interest in establishing a framework of propositions with a broad content. In other words, **proposals and landscape projects** based on the convergence of different perspectives, developed within differing contexts and disciplines: the traditions of territorial interpretation stemming from the landscape, the traditions of cultural interpretation, and, finally, visual-scenic analysis.
- The exchange of experiences between experts from the different participating countries and governmental bodies that have supported this project has been

carried out on the basis of the transfer of knowledge, facilitating communication and mobility.

- Last of all, it is important to underline the growing importance of landscape cartography and its representation. The "Landscape Assets Laboratory" thus becomes an active planimetre that includes the consideration of hazards and at the same time mutual dependencies.

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***Activity 2.***  
***Charter of the Territorys 's values.***  
***Cultural Resources.***

## **CULTURA 2000 - DRAFT OF FINAL REPORT CHARTER OF THE TERRITORY'S VALUES. AREA OF CULTURAL RESOURCES.**

### **0. INTRODUCTION**

The Project "Cultura 2000" aims at interpreting the area of the Archaeological Complex of Baelo Claudia as a Cultural Landscape<sup>1</sup>. Its mission consists in defining - collaborating with the population - strategies of protection and preservation. These strategies will be specified in the *Charter of the Territory's Values* - which can be understood as an instrument that depicts the reality of the present cultural landscape.

In Activity 2, the *Charter of Values* is constituted through the analysis of the cultural resources and of the parameters which presently affect this landscape: the social, economic, geographic, political and cultural environment, the characteristics of the resident and visiting population, factors that influence the cultural offer etc..

The objectives defined for Activity 2 are aimed at activating the territory's resources and at establishing means, which enhance their social and cultural profitability.

According to this approach, the Charter of the Territory's Values is a means of diagnosis, which reflects the possibilities of the territory's cultural values as well as their ability to influence the socio-cultural dynamics of the area.

The fact that the cultural resources are a key element of development processes at local level<sup>2</sup> is widely accepted, and the "use/enjoyment" of determined elements of the heritage, which, up to now, were appreciated very little in this sense (manners of traditional production, domestic and industrial buildings etc.) is increasing. This calls authorities in charge of managing and safeguarding the heritage for permitting a compatible use of cultural assets and for creating systems which make possible that this use reverts to their conservation.

From this point of view, the planning of the patrimonial offer at territorial level becomes indispensable. In this context, the analysis of the cultural resources and their organization in the territory will guarantee an adequate use of the heritage for a well-balanced development in the region. To carry out this planning, it is necessary to know the situation of the territory's heritage, its determinants, attractive aspects, risks etc. - to reveal in this way the sense and the meaning of the legacy offer. Activity 2 of the project goes for tackling this process through the analysis of the cultural resources and their communication by means of interpretative work.

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<sup>1</sup> "Cultural Landscapes: represent the combined creations of nature and man. Illustrate the evolution of the society and of the human settlements through the history as constructions of the relation between the environment and the consecutive internal and external social, economic and cultural forces." Intergovernmental Committee for the protection of the World Cultural and Natural Heritage. UNESCO, February, 1996.

<sup>2</sup> VÍCTOR FERNÁNDEZ SALINAS: Indicadores para la diagnosis sociocultural del territorio: propuesta metodológica, p. 3.

Fig. 1. Area of activity.

001

### **0.1. GENERAL OBJECTIVES**

Activity 2 of the European Project "Cultura 2000" is directed toward the following general objectives:

- To establish the appropriate means that promote the knowledge about and the respect for the cultural and natural heritage of the territory linked to the Archaeological Complex de Baelo Claudia with the aim of promoting its conservation, especially by the local population.
- To present lines of research and analysis of the cultural resources designed to ensure the suitability and viability of the heritage's social use.
- To test ways of structuring and recovering information about the cultural resources.
- To propose ways of appreciating and disseminating the cultural resources of the territory.

### **0.2. LINES AND PROCESSES OF WORK**

Following the objectives explained above, the following two lines of work were developed:

The analysis of the cultural resources consists in examining, evaluating and diagnosing the present situation of the cultural resources in the geographical area around the Archaeological Complex of Baelo Claudia. It represents the starting point for different levels of proposals aiming at a contribution of the cultural and environmental heritage to the dynamism of the economic and cultural activities in the area.

The interpretation work leads to the necessity of transmitting the meaning of the values that the area contains. This implies that these values have to be presented to the resident population by means of an accessible programme of interpretation that deciphers the aforementioned contents. Therefore, the Plan of Interpretation of the Territory's Heritage of Baelo Claudia is established as a communication system, which facilitates to reveal the meaning of the natural, cultural and historical legacy to the visitor.

In both lines of work, following the official call for proposals, the connections of the heritage with the social and economic development of the territory, the dissemination and the necessity of involving the local population in the proposals and activities.

The different phases were being developed simultaneously with the intention to achieve a global vision of the process explained and to detect possible deficits.

With the same intention, the work exposes a complete theoretical supposition about the geographic environment of the Archaeological Complex. Since the time

was limited, the collection of data was realised based on a previous selection of informants and resources to be analysed.

Working stages:

Documentation and search for information

Theoretical definition: Based on the concept of CULTURAL RESOURCE<sup>3</sup>  
- *the entire cultural expression conserved from the past until the present, including as well the places, equipment and agents that influence the present cultural dynamics of the territorial environment* - the definition of terms, contents and dates which make up the conceptual framework of the project have been tackled.

Systematisation of the information: The work was continued making up a general classification of resources differentiating Heritage Resources, Cultural Equipment and Cultural Agents, followed by the creation of a specific classification of each type in order to define the dates which had to be collected and analysed.

Treatment of information: It is channelled by two types of media: information records and a digitalized geographical map of resources.

Analysis and evaluation.

Proposals for the acknowledgement of the value of the area.

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<sup>3</sup> Other definitions of "Cultural Resource":

"all cultural expressions, past or present, tangible or intangible that are representative for the culture of a determined human collective of the past or the present" WORLD BANK The Management of Cultural Property in World Bank-Assisted Projects. Washington, USA, 1987

"the cultural resource, understood as that element, place or event, the contemplation of which increases the visitant's perception of the origin, the customs and ways of life of the visited territory. CASA, DE LA, C.: El turismo cultural: una forma alternativa de desarrollo económico. Turismo Cultural: el Patrimonio Cultural como fuente de riqueza, p. 99 – 107, Fundación de Patrimonio Histórico de Castilla y León, Valladolid, 2000, p.100

## 1. ANALYSIS OF THE CULTURAL RESOURCES

Following the tendency marked by international organizations and administrations competent in the management and protection of the cultural heritage<sup>4</sup>, the analysis of the cultural resources is tackled from a point of view which is open for the involvement of the heritage in the socio-economic development of the territory. Concerning the area we are working on, the corresponding guidelines are defined by the *General Programme of Cultural Goods. Andalusia 2000*, which emphasizes the importance of the cultural heritage for the economic development of Andalusia.

As already pointed out, this point of view demands a rigorous planning which guarantees the control of the use and the preservation of the involved cultural resources as well as the achievement of a social return from them. To realize this planning, it is necessary to know and to analyse the starting point or the present situation of the area and its resources. This will make it possible for us to define objectives programmes for action that are really correspond to the reality.

The analysis of the Cultural Resources in the territory of the Archaeological Complex of Baelo Claudia is determined to the following intentions:

- To identify and classify the cultural resources.

- To create instruments for the collection of objective information. This will allow to establish an appropriate diagnosis of the cultural reality which is the base for future planning.

- To get to know possible socio-economic implications of the cultural resources.

- To analyse the characteristics of the cultural resources regarding their possible exploitation

- To evaluate the possibilities of revaluation of the cultural resources.

- To select and relate the cultural resources with the ability of being elements which can influence the dynamics of the social and economic development at local level.

From a methodological point of view, the analysis is carried out in two different levels:

- Specific analysis of the cultural resources.

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<sup>4</sup> "...The commission considers that culture is closely related to tourism insofar as the cultural heritage of a region does not only contribute to the affirmation of a local or regional identity, but it represents as well a strongly attracting factor for tourism. Culture creates complementary possibilities of employment, which is of fundamental importance for many disadvantaged regions of the Union, which, in this way, have at their disposal a strong concentration of cultural potential." BÓVEDA FARRÉ, M. "El turismo cultural en la Unión Europea" Turismo Cultural el Patrimonio Histórico como fuente de riqueza, 53-67, Fundación de Patrimonio Histórico de Castilla y León, Valladolid 2000, 60.

Analysis of the territorial situation of the cultural resources.

### **1.2. SPECIFIC ANALYSIS OF THE CULTURAL RESOURCES.**

The specific analysis of all resources identified in the region is directed towards the following objectives:

- To identify each resource's potential impact on the cultural and socio-economic dynamics, studying the specific conditions of each resource (functional data, accessibility, qualitative evaluation etc.)
- To achieve a general assessment of the territory, based on the concrete knowledge about each resource: state of the heritage's conservation, most characteristic hereditary elements, location in the region, degree of use, typical problems etc.

As it can be observed in the attached records, the information focuses on the state of the resources' present or potential use. Special interest has been granted to the definition of information fields referring to functional (formal description of the property, equipment, activities so far, characteristics of the environment etc.) and economic data.

The information records were completed by means of visual analysis and consultations with professionals, residents and cultural agents of the zone (essentially cultural technicians and representatives of the local authorities).

This work of analysis and evaluation of the cultural resources is the basis for the elaboration of adequate proposals how to make use of each resource according to its objective possibilities and its territorial frame.

Fig. 2. Models of information cards  
i002

### **1.3. ANALYSIS OF THE CULTURAL RESOURCES' TERRITORIAL SITUATION**

The Analysis of the Territorial Situation aims at knowing in depth the characteristics and determinants of the zone. To achieve this objective, it is indispensable that the study approaches, from an interdisciplinary perspective, those factors and elements, which influence the socio-cultural dynamics of the territory.

In this way, contrasted information about the real situation and the necessities of preservation, infrastructure, equipment, social services, accessibility etc. can be obtained without forgetting about the perspectives and requirements of the local community, visitors, persons in charge of the heritage, public institutions etc.

Dumping this information in digital cartography, by means of a Geographic Information System, the territory's Map of Resources can be generated. It facilitates the analysis of the territory's present situation (identify values and risks, determine the potential by zones etc.) and represents the base for future works (revision of the analysis, creation of proposals and activities for the acknowledgement of the value of the area, the design of networks and routes etc.).

Related to the Analysis of the Cultural Resources, the following maps have been created up to now:

Location of Cultural Resources (Equipment and Heritage Resources of the landed properties, Archaeological, Architectural, Ethnological), selected in the territorial frame of the Project "Cultura 2000".

Details of the Cultural Equipment's location in the village of Facinas

Details of the heritage of landed properties in Facinas

Demarcation of the Project's territorial frame considering spatial variables of interest for its value's acknowledgement (Natural Spaces of interest, confluence of cattle paths, thematic routes, paths, roads, distribution of cultural resources etc.).

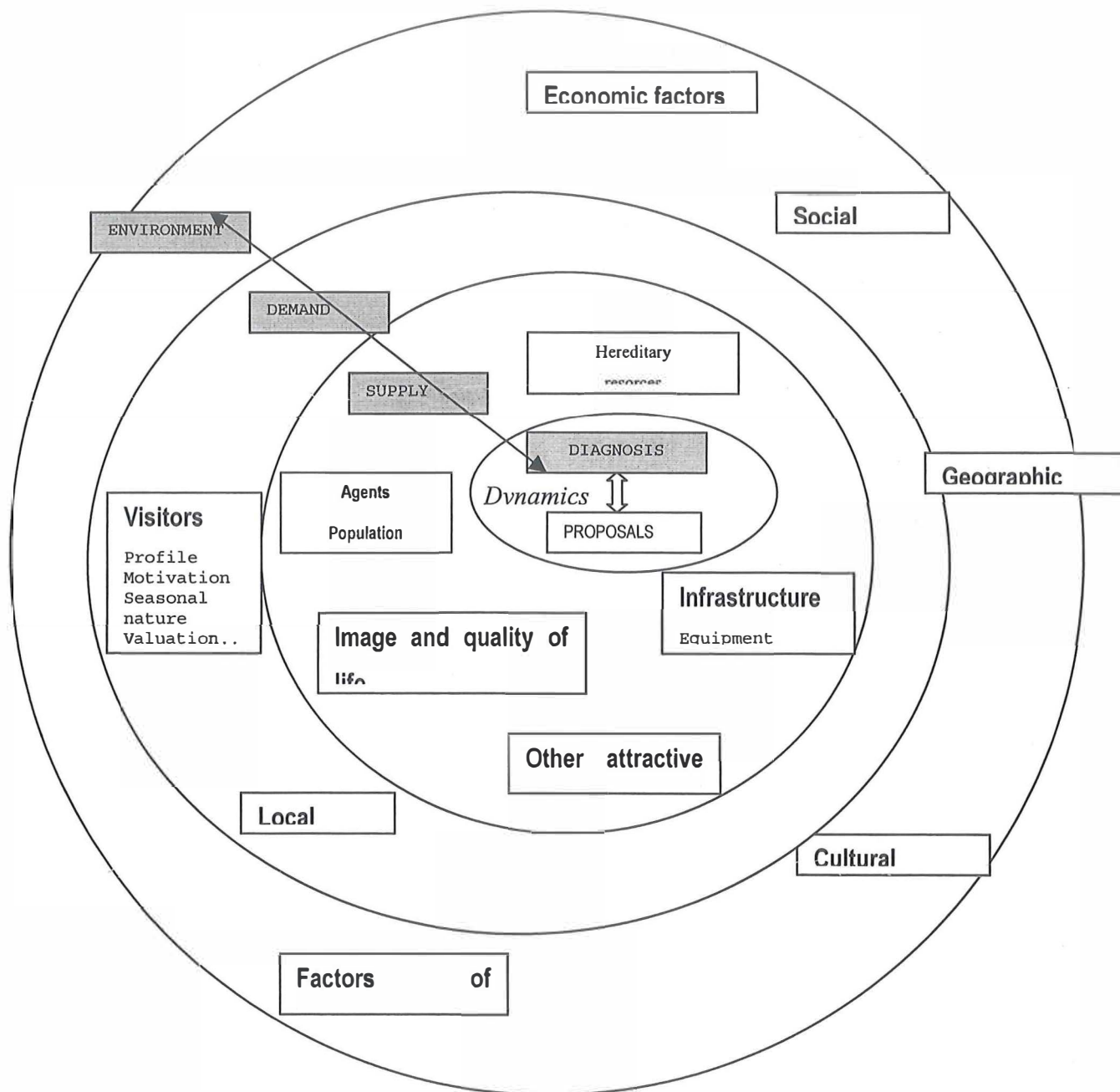
The analysis of the present situation's constituent factors provides us with a general diagnosis of the territory, being the base for establishing lines of action to enhance the socio-economic and economic dynamics of the territory, strategies to develop the cultural resources, concepts for the interpretation of the Territory's Heritage etc.

The Analysis of the Situation was based on the concept of study<sup>5</sup>, visualized in the diagram below. In this concept, the factors which influence the dynamics of the territory (Environment, Demand, Offer) are organized in concentric circles, keeping an axis between them which defines the territorial dynamics, shows the relation between the factors and draws the present situation of the territory.

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<sup>5</sup>

adapted diagram. see of Kotler, Haider y Rein, 1993



### **1.3.1. Environmental factors**

In the environment of the Archaeological Complex of Baelo Claudia, the following social, economic, political and administrative factors related to the cultural heritage have been detected:

Factors related to the socio-economic context of the zone of the study

According to the Register of inhabitants of 2001, in the municipality of Tarifa were counted 15.764 inhabitants. The zone is characterized by very dispersed centres of population. At present, 19 entities depend on the town council of Tarifa. Among them, the village of Facina stands out with 1.303 inhabitants (1996).

Regarding the demographic evolution during the last years, there could be observed a growth on the coastal zone and a general fall in the interior centres of population.

Fig. 3: Map of centres of population  
i003

The loss of employment in the primary sector has caused a transfer to the tertiary one, essentially to the areas of service and construction. Although their level is lower than the average in the province, these are the predominant sectors in Tarifa.

Fig. 4: Economic Activities. Drawing by a pupil of the Rural School "Campiña de Tarifa" in Activity 3  
i004

Agriculture, stockbreeding, fishing and forestry are activities of special interest for their presence in the landscape and for being linked to the maintenance of traditional productive systems.

The influence of agriculture in the zone near the Archaeological Complex of Baelo Claudia is relatively poor. It is more intense in the interior, which is characterized by the existence of a wheat monoculture.

Farming, chiefly cattle breeding (for bullfighting, an autochthonous race of the red-brown bull) is run in extensive farms in which agricultural, ranching and forestry activities are combined, generating in this way a typical landscape in which many (physical, ecological and ethnographic) values are accumulated.

The cultivation of wheat and cattle breeding are historically linked to the zone. Roman coins, unearthed during the archaeological campaign of Baelo, showing cattle and wheatears are documentary evidence.

Fig. 5. Coins from Baelo  
i005

The appearance of fishes on the coins reveals as well the traditional presence of productive activities related to the sea. Amongst these activities, tuna fishing in trap-nets stands out. This system that, for the most part, has

moved to the nearby village of Barbate. In the area the study refers to, the weight of the sector has strongly decreased and the presence of this activity is limited to the fishing and commercial port of Tarifa and some small fishing boats dispersed on the beaches.

Regarding forestry there stands out the survival of the traditional cork harvest in the valuable cork oak groves of the zone. However, forestry has focused on the activities dependent on the Environmental Agency, which are related to the maintenance of the Natural Park of the cork oaks' grove: cleaning, reforestation, control of fires etc. These activities represent the main source of employment for the inhabitants of Facinas.

Fig. 5. Cork harvest.  
i006

The primary sector, especially important in the interior zone where the impact of tourism hardly exists, does not favour employment for women. This leads to a high unemployment rate among the female population.

This lack of alternatives caused that determined sectors of the population and representatives of the local administration show interest in new ways of creating employment. In this context, the creation of offers for a rural tourism, based on the region's ethnographic, archaeological and environmental resources is considered one of the principal options.

However, one of the big problems for private initiatives keeps being the lack of financial resources, which affects the local population's capacity of investment.

In the same way, also the public resources dedicated to cultural issues are very limited. For instance, the town council of Tarifa does not dedicate any specific part of its budget to it. This situation makes it very difficult to carry out an annual planning of cultural activities and the maintenance of the local equipment and heritage in the smaller centres of population that depend on the budget of Tarifa.

In this way, the Autonomous Local Entity of Facinas receives 3.000 € per year for its expenses on cultural issues. This amount is complemented by agreements (promoted by the town council of Tarifa or by the administration of Facinas itself) with other public entities to cover the costs for determined interventions, materials etc. In this way, it is intended to compensate for the lack of direct municipal investments in the cultural infrastructure of the zone, making possible, in this way, undertakings like the creation of a Public Library in Facinas.

Fig.7. Inside the Public Library of Facinas  
i007

Apart from that, there can be observed a poor impact of LEADER and PRODER projects in the frame of the study. However, these impacts have been created in nearby areas such as the Natural Park of the Cork Oaks' Grove, the pool *La Janda* etc.

Activities like the construction of the view point *Mirador de Facinas* and other interventions in order to fit out public areas have been carried out in the frame of the Plan of Excellence of Tourism (*Plan Marco de Competitividad del Turismo Español, 1996–1999*). However, their repercussion was insignificant.

#### **Political and administrative factors**

The study detected a great diversity regarding the responsibility for and the management of cultural resources. This decreases the speed of procedures, hampers the co-ordination of works, causes differences of objectives etc. Finally, this situation leads to conflicts of controlled domains between the different authorities- occasionally intensified by the belonging to different political options.

Regarding the cultural equipment, a usual model is to share the management between the town council of Tarifa and other institutions. For example the management of schools is shared with the Educational Council of the Andalusian Autonomous Government, the Cultural Centre of Facinas is managed together with the local authorities of Facinas (which is an Autonomous Local Entity since 1990, sharing the responsibility for the Cultural Centre with the town council of Tarifa and depending on it administratively).

Namely, the General Direction of Institutions of the Ministry of Culture (*Dirección General de Instituciones de la Consejería de Cultura*) is responsible for the tutelage and the management of the Archaeological Complex of Baelo Claudia.

The role of the local public institutions in the cultural management of the entire municipal area focuses on the direct administration of the resources under their responsibility or on the creation of different agreements for the development of activities.

In this sense, the town council of Tarifa keeps the following agreements to cover costs:

With the Provincial Foundation of Culture of the Provincial Council of Cádiz

Cultural activities: *Cinema season, Festival of Literature of Oral Tradition etc.*

The provincial council awards a sponsor of 1.500.000 pesetas per year for the activities in Tarifa and the municipal districts of Tahivilla and Facinas.

Contribution of human resources: 1 cultural technicians for the localities of Tahivilla and Facinas. The wage costs are shared among the Provincial Council and the Town Council of Tarifa (each institution assumes 50 per cent).

Agreements with the Andalusian Cultural Council are related to works on heritage located in central Tarifa, which is no part of the zone the study refers to.

In the frame of the Plan of Excellence and Dynamization of Tourism (*Plan de Excelencia y Dinamización Turística*), part of the Draft Plan for the Competitiveness of the Spanish Tourism (*Plan Marco de Competitividad del Turismo Español, 1996-1999*) there have been carried out as well activities in cooperation with the national or the Andalusian administration.

This diversity causes the disconnection between the cultural agents responsible for the promotion of activities. This implies a lack of co-operation and of a co-ordinated framework for the activities.

Apart from this, and despite the positive disposition of the cultural agents from local administrations promoting activities, the local government's appreciation of cultural aspects is rather limited.

In determined cases, Facinas is one of them, the insignificant impact of the present sector of tourism caused that the environmental and heritage supply can be appreciated as a potential source of incomes. However, budgetary limitations, the lack of an adequate management and the aforementioned difficulties regarding the local authorities hinder that this option can be really consolidated.

Summarizing, it can be stated that the existence of temporary agreements between institutions (instead of a specific programme) to organize authorities and expenditures related to culture in the territory of this study has direct consequences. These are, among others, the lack of continuity in activities and services, of financial resources and predictions of personnel. These inadequacies are settled by temporary solutions - such as running the Public Library of Facinas with voluntary personnel which does not receive any remuneration.

### **1.3.2. Demand**

One of the objectives of Activity 2 is to involve the heritage in the enhancement of the social and cultural dynamics of the territory. To achieve this, it is necessary to know the characteristics of the local and visiting population. Only in this way, it will be possible to know its necessities, requirements and priorities, and to develop appropriate instruments to make the most of this human potential in favour of the heritage.

In the area of this study, the overall number of visitors and residents with possible interest in activities of resources amounts to 76.000 persons.

It is difficult to establish specific quantitative data concerning the "cultural consumption" of the local population. According to data of the Archaeological Complex of Baelo Claudia, approximately 11 percent of its visitors are residents of the area around the complex.

Moreover, and considering that the proportion of university graduates in Tarifa is above the provincial average, a high interest and participation in training courses, theater activities etc. is expected. Regarding this fact and taking into account that the situation is fairly precarious, the local agents show interest in increasing the selection of cultural activities and services.

The data of the *Tourist Observatory of the Province of Cádiz*, 2001, referring to Area no. 3, *Campo de Gibraltar* (which the municipal area of Tarifa belongs to), prove that the current profile of the visitor corresponds basically with the potential consumer of activities related to cultural, ecological, rural tourism. However, there is no structured supply of cultural products for tourists in the zone.

As shown in the table below, most of the visitors of Tarifa are seeking leisure and relaxation opportunities<sup>6</sup>.

three-month period	1 <sup>st</sup> quarter	2nd quarter	3rd quarter	4th quarter	Average
Holidays/leisure/relaxation	47.1	47.3	51.1	55.0	50.1
Familiar visit	23.5	17.8	11.7	14.7	16.9
Business/work	8.1	10.9	11.7	8.5	9.8
Part of circular tour	8.8	10.1	2.2	5.4	6.6
Golf	3.7	2.3	5.1	4.7	3.9
Studies/culture	4.4	6.2	3.6	7.0	5.3
Others	4.4	5.4	13.9	4.7	7.1

Fig. 8. Motivation of visitors. Area 3 *Campo de Gibraltar*. It includes Tarifa  
Chart carried out by the Andalusian Institute of Historical Heritage Source:  
Tourist Observatory of Cádiz, 2001.

Fig. 8. Motivation of visitors. Area 3 *Campo de Gibraltar*. It includes Tarifa  
Chart carried out by the Andalusian Institute of Historical Heritage Source:  
Tourist Observatory of Cádiz, 2001.  
i008

Although in this aspect, the motivation is very small, culture is considered an interesting complementary activity. This is revealed by the tourists' *comments and recommendations*<sup>7</sup>, which were also gathered in the study. In this context, the request for cultural activities represents a priority, followed by general requests related to the improvement of services.

More cultural activities  
Improvement of roads  
Improvement of public services  
More precaution for the environment  
Reduction of noise  
More information for tourists  
Increase of hotel supply  
Improvement of hotel services

Comments and recommendations regarding aspects of tourism in  
TARIFA that can be improved.

<sup>6</sup> On the other hand, there is a high percentage of familiar visits - which reveals the impact of internal emigration in the middle of the 20th century.

<sup>7</sup> Data in relation to the first quarter 2001, Tourist Observatory of Cádiz.

Source: Tourist Observatory of Cádiz, 2001

Coinciding with the *profile* of the tourist/consumer of cultural products (heritage and environment), the visitors who arrive at the area of our study travels with his/her partner and/or in groups of relatives or friends. On the average, they stay for eight days and the majority travels by car - making up in this way for the lack of public transports in the area. The great majority of them come from the urban centres of Andalusia, followed by residents of Madrid. The country from which most foreign visitors come is Germany.

The most usual cause for choosing the destination is direct communication.

Three-month period	1st quarter	2nd quarter	3rd quarter	4th quarter	Average
Acquaintance	45.6	37.2	44.5	37.2	41.1
Press	2.2	0.8		1.6	1.1
Agency	9.6	4.7	12.4	8.5	8.8
Catalogue		0.8	4.4	0.8	1.5
Fair	0.7	0.8	1.5	0.8	0.9
Internet	2.9	3.9	3.6	4.7	3.8
Own experience	25.0	34.1	10.2	40.3	27.4
Leaflet	2.9	5.4	4.4	2.3	3.7
Association	0.7		2.2		0.7
Others	8.8	7.8	10.2	3.9	7.7

Ways of getting to know about the region. Area no. 3: *Campo de Gibraltar*  
Tourist Observatory of Cádiz, 2001.

### 1.3.3. Supply

Our analysis was focused on cultural offers and services, which are directly connected with them. Since they influence the dynamics of the territory, aspects regarding the infrastructure and general services of the area (accommodation, companies offering services for tourists, transport systems, accesses etc.) have also been taken into consideration.

Based on the information gathered in the area, the following factors related to its cultural supply could be identified.

One of the most remarkable facts is the presence of high-quality natural places situated in the area of this study or around it. Among them, the Natural Space of the Littoral Front Tarifa-Algeciras (*Espacio Natural del Frente Litoral Tarifa-Algeciras*; that is currently being submitted to approval) the Natural Park of the Cork Oak's Grove (the Southern Gate of which is situated in the village of Facinas), the Beach of *Los Lances* (natural landscape of the beach de *Los Lances*) or the Natural Park of La Breña and the Wetlands of Barbate (*Parque Natural de la Breña y las Marismas de Barbate*) could be highlighted.

The aforementioned natural resources generate diverse activities promoted by several agents of the zone. Among them, the environmental and archaeological

routes through the *Natural Park of the Cork Oaks' Grove* should be highlighted - together with the thematic ones, such as the *Ruta del Toro* (Bull's Route) or the *Ruta Atlántica* (Atlantic Route). Occasionally they are connected to networks of routes that involve several regions, such as the *Ruta Bética* (Andalusian Route), the Muslim Legacy, etc.

From a historical perspective and regarding the regional topography, the Archaeological Complex of Baelo Claudia is the most important landmark of the zone. The excellent conservation of its urban structure and its location convert this complex into a first-class heritage resource with a very high potential of use. However, the numerous archaeological resources dispersed in the territory have no programmes for their exploitation.

In the last three years, the yearly number of visitors of the Archaeological Complex has multiplied by 2,5. Following this progression, according to provisional data, the number of 77.921 visitors in 2000 will be surpassed.

In the frame of the study, a certain spirit of renewal marks the vision of the ethnographic heritage. Thus, special attention was paid to the key issues of the immaterial heritage, such as the ways of life, the landmarks, symbols and meeting places of the different collectives of the zone.

From this point of view, a number of groups, characterized by their specific use of the territory which is centred in activities of extraction, transformation (fishing, forestry and agriculture) and service is located in the area of the study.

Regarding the first group, several very interesting ways of production and techniques, such as trap-netting, corkage, charcoal making, muleteer extensive stock-breeding and agricultural farms are still present in the region. These activities refer us to - occasionally decreasing - methods of transformation, such as the production of cork utensils, harness production, milling with traditional hydraulic devices etc. and of course a gastronomy, which is based on regional products.

Moreover, every group is identified by characteristic festivities like the *Festival of San Isidro*, which is closely related to the agricultural and ranching sector of the interior or the *Carmen Festival* in the coastal region.

Fig. 9. Festival of Bolonia. Drawing made by a pupil of the Public Rural School Campiña de Tarifa. Activity 3  
i009

Related to this, there can be observed the existence of associations and groups that are interested in recovering and transmitting the oral literature, dances, traditions etc. However, the repercussion of these groups is limited almost exclusively to the local population.

In short, and also according the cultural technicians of the zone, there exist an obvious lack of scheduled cultural activities and events, which could contribute to the local dynamics or attract visitors.

The external image of the zone, since the eighties associated with windsurfing, keeps enjoying a boom. This results in an imbalance of sports offers in comparison with cultural ones - and in a lack of interest in its reassessment shown by the Local Authorities.

#### **1.4. CHARTER OF THE TERRITORY'S VALUES**

Based on the specific analysis of the cultural resources and their territorial situation, the Charter of the Territories Values is developed. It gives expression to the reality of the zone, locates the resources and variables of the environment, identifies the zones of their accumulation and establishes relations.

Fig. 10. Charter of the Territory's Values  
i010

In this way, the Charter of the Territory's Values becomes a starting point for elaborating a diagnosis of the zone, knowing its possibilities, deriving general guidelines for the revaluation of the cultural resources and establishing a framework for the interpretation of the Heritage at territorial level.

#### **1.5. DIAGNOSIS**

The analysis of the territorial situation shows a clear differentiation and disconnection between the coastal zone and the interior. The latter is oriented toward the Park of Cork Oaks' Grove and the Pool of *La Janda*, the presence of which influences the way of living, centred on agriculture, stockbreeding and forestry and as well its symbolic and territorial referents. The activities in the coastal region are oriented toward tourism and its landmarks are identified with the coast from where the silhouette of Africa can be made out.

The accumulation of tourist offers along the beach and in the centre of Tarifa implies the increase of an imbalance in economic terms and in terms of services. This causes risks of saturation, pressures due to an uncontrolled urban development, an increase in the importance in the tertiary sector, depopulation of interior centres etc. However, the contrast "coast - interior" implies a potential of alternative resources able to neutralize the regional imbalance and the aforementioned risks.

In a very schematic way, we point out some aspects of the analysis:

REALITY	NEGATIVE DETERMINANTS	NEGATIVE CONSEQUENCES	POSITIVE DETERMINANTS	POSITIVE CONSEQUENCES
Zone with influx of tourists, basically motivated by the conditions of its beaches: nautical tourism, sports and relaxation.	<p>The external image of the zone is connected to the wind and nautical activities.</p> <p>Tendency toward a monoculture of tourism.</p> <p>Concentration of the demand in the village of Tarifa.</p>	<p>Tendency toward seasoning</p> <p>Lack of service infrastructure and management of offers of Cultural, Rural and/or Environmental Tourism.</p> <p>The economic benefits hardly revert to the centres of population that depend on Tarifa and that are not situated directly at the coast.</p> <p>Depopulation of the interior.</p>	<p>Existence of cultural resources sufficiently important to maintain an alternative offer to sports and relaxation.</p> <p>Interest shown by determined local agents in taking advantage of this supply gap (active associations, locals authorities in Facinas, projects to build up associations</p>	<p>Ways of living, values of the landscape etc., especially in the interior, have been hardly affected by the pressure of the urban development and tourism.</p> <p>At present, the conservation of these values is considered an additional attractive factor.</p>
Zone with serious social and economic problems.	<p>High unemployment rate, crisis of the fishing sector and the traditional agriculture, black economy, drug trafficking, traffic illegal immigrants.</p>	<p>Situation of insecurity, being projected towards the exterior.</p> <p>Reduced capacity of private initiatives by the local population.</p>		
Zone with a high	Lack of public	Inadequate	Most of the	Possibility to

degree of dispersion and diversity regarding its centres/entities of population	transport means including the access to the Archaeological Complex of Baelo Claudia.	communication. Exclusion of determined zones caused by its poor accessibility.	visitors use their own cars (Tourist Observatory of Cádiz, 2001).  In Spain, 70 per cent of all displacements in rural areas are done by car (Institute of Tourism Studies).	structure a CULTURAL offer with multiple focuses dispersed in the territory, favouring in the realization of routes as well as the spatial and thematic diversification of the offer.
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Fig. 11. Drawing of a pupil of the Rural School "Campiña de Tarifa", Activity 3.

Fig. 12. Beach of Bolonia.

Fig. 13. Abandoned boat of ilegal inmigrants on the beach. Photo by a pupil Rural School "Campiña de Tarifa" Activity 3.

Fig. 14. Area of the Arch of Bolonia.

i011, i012, i013, i014

*Understanding our surrounding.  
Landscape as an experience.  
Final Report.*

## **UNDERSTANDING OUR SURROUNDING LANDSCAPE AS AN EXPERIENCE**

### **Introduction**

Some of the objectives of our workshop were the following ones: observing in a different way what we have always looked at, discovering realities closely tied to the place, looking for the links that made up the landscape in our memories,...

Artists, specialists on heritage, students, youngsters and interested people approached their environment willing to enjoy all the possible ways, without limit, to grasp it, to understand it.

## **UNDERSTANDING OUR SURROUNDING LANDSCAPE AS AN EXPERIENCE**

### **Laboratory with visual artists**

Watching inside the mind: Bologna in our memory

#### **Looking sharp**

The knowledge, the experiences, the ideas and even the prejudices about the place were forgotten in order to get to know the land itself and to dare to understand our surrounding environment in a different way.

#### **The landscape: your landscape**

Once we transcended this first moment of looking at the landscape, we turned the features of our surrounding and its transformations into objects of plastic interest.

#### **Different ways of approaching the surrounding landscape**

The plastic workshops that we chose were those of drawing, painting, photography and activities with cork and clay. Other complementary workshops were the ones on eco-building and production of bread.

#### **Looking through drawings**

##### **Nature in our memory**

Once we chose the motifs, we worked with very simple graphic tools both in the open air and inside a room. Thus we promoted the participants' ability to observe and remember. We tried to encourage the contemplation of the landscape and the continuous symbiotic relationship between remembering and watching

##### **How does the landscape look like and how do we depict it?**

From the very first moment we put forward the difference between drawing motifs of our memory and drawing real objects. The main aim consisted in showing the participants the difference between our memories and the reality. General features that did not coincide with the reality characterized the images, withdrawn from their memories.

##### **The cuisine of the landscape**

The fact of approaching the landscape as a way of understanding it was conditioned by the numerous techniques and plastic graphic procedures that we use: pencil, ink, wax, collage, tempera. Each of these methods made one plastic aspect outweigh other ones (stains, lines, colour, light...), provoked determined effects and qualities or even introduced random varieties in the process.

### **The changing landscape**

We tried to work with the landscape as a flexible tool, to contact it and to transform it; to play with autochthonous materials by means of plastic methods. We worked with the sand on its beaches; we drew on it; we collected objects to create attractive shapes and express through them creative feelings.

### **Telling about the landscape**

Messages about Nature, buildings, customs, professions, festivals or the hardest reality were symbolically put inside bottle and "launched".

### **The group defines the landscape**

As a conclusion and as synthesis of the whole process each group carried out a large collage. The similitude and differences on assessing and depicting the landscape were gathered in a global panorama, rich in nuances. Thus the landscape was understood and enriched by the accumulation of experiences, knowledge and intuitions.

### **The individuality of the landscape**

In this case the landscape was built through a camera. Each person built its landscape. The varied objects and approaches made each landscape different and independent, transforming all of them into "our landscape".

### **Looking at the past**

In this case we tried to understand our ancestors' traces and observe their creations as their inheritors, considering ourselves as owners of past stares. We tried to grasp the origins of the beautiful town, to understand it, to enjoy it, assess it and show it to other people whereas we are proud of being a participant of a history of centuries.

### **Feeling the sea**

Life, dreams and reality; sorrow and wealth, everything comes from the sea.

### **Feeling the air**

The air is felt, is considered as the essence of things. Nobody ignores it. For many people the east wind, so-called *Levante*, is a source of richness; for other ones it is a daily torment. For every one is something slippery and invisible that put in order their lives.

### **Feeling the light**

The mighty light become real on the mountains, on the beaches that shape the landscape. The light defines the colours; a golden one on the dunes and sharp green ones on the slopes of the mountains. Every colour contrasts the bright blue colour of the sea.

### **Getting to know the other one**

The contact with the landscape makes the participants distinguish themselves from the other ones. One of the keys of this workshop was to collect the relationship between the individual and his/her environment. We underlined the importance of the personal observation as a means to complete our understanding of the landscape.

### **Feeling the earth**

The autochthonous materials, what we see everyday, what we feel under our feet; those that we might not appreciate are an inherent part of our environment. Clay, cork; earth and fire are parts of the life in this area.

### **Appreciating the importance of trees**

The trees are closely tied to the landscape's evolution; they also play an essential role in the economic development of the area. We showed the participants jobs concerning wood that might be of vital importance for the area.

### **The earth seen as a material**

Creating simple objects made with their own hands, meant for many people a direct contact with ancient techniques. Old works such as pottery were presented and assessed.

### **Retrieving the past (Workshop on eco-building)**

Going back to the ancient shapes

It was organized a workshop on traditional building techniques and special features. The participants built, by means of vernacular techniques and materials, buildings closely related to the area.

*Portugal.  
Portuguese Institute of Architectonic Heritage.  
Archeological Complex of Miróbriga. Alentejo.*

### The Place

The Roman Ruins of *Miróbriga*, situated in the Santiago do Cacém area in southwest Portugal, are overseen by Instituto Português do Património Arquitectónico (Portuguese Institute of Architectural Heritage, or *IPPAR*), and were listed as buildings of public interest in 1940. They currently have a Visitors Centre, with an exhibition room, shop, and cafeteria, as well as an auditorium, laboratory and workshops (see figures 1 + 2).

*Miróbriga* was the subject of various excavation projects in the 19th century, all of which were set up by D. Frei Manuel do Cenáculo. Numerous archaeological digs were carried out in the 20th century, among which were those managed by D. Fernando de Almeida in the 60s and 70s. In the first half of the 80s, various excavation projects were also carried out by a Portuguese-American team. These digs were recorded in detail in *Miróbriga*, BAR International Series 451, Oxford.

Since 1990 *IPPAR* has been developing an "Improvement Programme", (by improvement we mean a number of projects aimed at increasing the cultural profile of an archaeological site and also to contribute to its dissemination and preservation), which at its outset required that priorities be drawn up, and that periodically "Action Plans" for *Miróbriga* be put together.

This archaeological site was subsequently allocated to a structural programme entitled "Archaeological Itineraries of Alentejo and Algarve, as part of an agreement between the Secretary of State for Tourism and the Secretary of State for Culture, which was signed in 1994. An agreement was also recently signed between *IPPAR* and the Santiago do Cacém City Council with the aim of jointly preserving *Miróbriga*. As part of that agreement a number of projects have been developed dealing with widening the public's knowledge of the site, its preservation, maintenance, and improvement.

*Miróbriga's* main period of habitation ran from the 5<sup>th</sup>/6<sup>th</sup> century BC to the 5<sup>th</sup> Century AD, encompassing the eras known as the Iron Age and the Roman Period. The Iron Age settlement was almost entirely obscured by the contraction of the Roman *forum*. What is currently visible at the site is a large, though incomplete, expanse of structures belonging to the Roman town founded in the 1<sup>st</sup> century AD (see figure 5).

*Miróbriga* is situated between the Grândola mountain range (rich in mineral deposits) and the sea. However, the town's historical and geographical context is understood only through an analysis of the area stretching from the lower Sado river (Tróia, Alcácer do Sal), and Ilha do Pessegueiro, as well as Sines, places where there were important Roman structures (see figure 14).

Ancient maps give further clues to *Miróbriga's* physical setting, as in several instances the Santo André Lagoon is shown as being much larger than it is in modern times. This allows for the possibility that the sea was closer to *Miróbriga* in Roman times. This possibility, given the inconsistent reliability of ancient map-making, can only be confirmed if future geographical studies are carried out.

### History of the Site and the Region Based on Graphic Documents

This chapter has been divided into four sub-sections, dedicated respectively to:

- Classical cartography – which depicts the ethnic geography of the Iberian Peninsula throughout the Iron Age and Roman Period;

- Post-Roman maps and images – which focus on the Alentejo coast and on the basis of which it is possible to propose research on the physical changes of the coast. Particularly those changes experienced by the former "Pera Lagoon", now known as "Santo André Lagoon", and Ilha do Pessegueiro (see figure 15);

- Contemporary images – illustrating the development of knowledge of the archaeological site and how it has been altered by archaeological restoration (see figures 25, 26, 29, 32, 34) ;

Aerial photographs – although these can also be considered to be “contemporary images” they are achieved through a very specific technique. They allow us to chart the changes in the excavation areas on the site, as unfortunately many of the digs carried out in the 20<sup>th</sup> century were not properly recorded or reported, with stratigraphic geology analysis or a materials inventory. (see figures 36, 37).

### **Recorded Memories**

This chapter is dedicated to another kind of experience of the site: that of the local community.

The oldest known document, related to the site, dates from the 18<sup>th</sup> century, when then local authorities had yet to establish any concept of heritage: local memory told only of “an old city” (see figure 40).

Currently, and after various archaeologists and systematic excavation campaigns, the city’s Latin name is known to the region’s population and many of them have taken it on as a name for their businesses. The reconstruction of the central temple, carried out by D. Fernando de Almeida, in the 60s, is the symbol of the local radio station, “Antena *Miróbriga*” (see figure 42).

### **Interpretation of the Landscape – Geographic Unity**

This chapter describes the physical characteristics of the area where *Miróbriga* is situated. It summarises the region, not on the basis of ancient cartography, but rather based upon current physical phenomena; in other words to better understand the region as it was through a better understanding of its present state and how it has interacted with man throughout the ages.

*Miróbriga* (and Santiago do Cacém) is set between a submediterranean mixed farming area – typical of the coastal region – and a cork plantation – typical of the mountainous area, at the edge of which *Miróbriga* is set.

*This area, known as coastal Alentejo and Ribatejo, has a number of characteristics that differentiate it from the interior Alentejo; a secondary, but slightly stronger, hydrographic network, which accounts for the coastal lagoon network; high temperatures and a high number of hours of sunlight, but with greater humidity and precipitation than in the interior. This set of characteristics is the basis for a mixed Mediterranean / Atlantic climate.* (see figure 53).

*Miróbriga’s* position reveals another strategic aspect that was important in the success of the site’s occupation in the Iron Age and Roman Period. It is on the border between two distinct areas – a sandstone and bush area, and an area of shale - this diversity made a greater number of natural resources available (raw-materials for construction, food.) (see figure 59).

### **Territorial Diagnosis – The Past**

Before moving on to the analysis and study of the territory as it stands, a brief presentation of the Archaeological Geography of *Miróbriga*. The Roman city was part of the province of *Lusitania*, the capital of which was *Emerita Augusta* (Mérida); part of the *Conventus* of *Pax Iulia* (Beja); and headed a *Civitas*, with a territory that likely stretched from below the Sado River to the basin of the Mira River (see figure 63).

The Archaeological Map of the Santiago do Cacém region is still in its early stages, due to a lack of investment in that respect. Despite this, around 20 sites have been identified which are thought to date from the Iron Age / Roman Period. The continuance of this study, along with excavations, could make a significant contribution to the historical understanding of *Miróbriga* and to more informed urban planning in the Santiago do Cacém area (see figure 66).

### **Territorial Diagnosis – The Present**

In a summary of the *Proposal for Protection of the Roman Ruins of Miróbriga*, drawn up by the TOPIARIS company, in 1998, a number of criteria for landscape analysis, with the aim of outlining a more integrated view of natural and historical heritage:

#### **Historical and cultural significance of the surrounding area**

The Burra Charter (ICOMOS, 1979) defined the historical and cultural value of a landscape, based on two concepts:

- significance
- completeness

The first of these is defined as the capacity of the landscape to be associated with historical periods and characteristics, as well as its natural definition.

The second is defined by the historical interpretation of its components.

In terms of completeness "the greatest exponents are cases that allow for greater removal from the present, permitting a stronger experience of the past. The fundamental components for understanding the significance of a place are considered to be its morphological characteristics, the patterns of settlement and land use, man-made elements of cultural value, and other archaeological vestiges of human occupation throughout the ages."

The work carried out puts forward two levels of study of the landscape in which the *Miróbriga* Roman Ruins are set:

- homogenous areas of landscape (1/25000);
- evaluation of the landscape's sensitivity to human intervention (1/10000).

The proposed analysis includes four homogenous landscape areas:

#### **Lithological analysis** (see figure 59):

Flood plains to the West with irrigated agriculture in poorly defined valleys;

Sand and gravel to the West, raised but generally smooth, stretching as far as the coastline;

*A more lithologically diverse area made up of sand, chalkstone, shale and sedimentary volcanic formations, among others, in a higher and more uneven area sloping from East to West;*

Shale, siltstone, and greywacke to the East of Santiago do Cacém, in a mountainous area of higher altitude.

#### **Physiographic analysis** (see figure 67):

A raised but less rough area with greater water resources and rich in water-bearing areas;

A rough area of land with fewer water resources, in shaley permeate soil A lot of water erosion.

#### **Land use analysis** (see figure 68)

Irrigation farming;

Dry farming;

Dry farming with sparse trees;

Cork plantation ( cork forest);

Production forest.

In the raised uneven area there are cork plantations and dry farming, in shale and greywacke. Visibility is high.

The area immediately West of Santiago is very diverse and has many water resources, with 5 categories of land use, distributed in small patches. Further to the West, on the coast, production forest is much more important than irrigation and dry farming, in line with the reduced water resources.

### Settlement pattern analysis (see figure 69)

Settlements;  
Farms;  
Homesteads,  
Windmills;  
Religious buildings / sites

Three areas of settlement pattern:

The area to the West of Santiago do Cacém: widespread settlements, but of greater density, known as "quintas", or farms;

Mountain ridge: Santiago do Cacém, *Miróbriga*, most of the religious sites and windmills;

Area to the East of Santiago do Cacém: very widespread and less dense, known as "montes" or homesteads.

Thus, we can make the following links:

Widespread and low density settlement – homesteads – shale – mountains – cork plantations and dry farming on sandy soil;

Widespread settlement, but of higher density – farms – more varied and use with irrigation farming – raised but less uneven land;

Mountain ridge – defence – symbolic – wind farming.

### Units of cultural landscape (see figure 70)

- Urban (Santiago);
- Cork plantation / concentrated, low density settlement (uneven ground) / "monte" or homestead;
- Dry farming / concentrated, low density settlement;
- Rural areas / widespread, high density settlement (to the West of Santiago, in an area richer in natural and agricultural resources / "quinta," or farm / well-defined borders.

### Archaeology Unit

The Ruins are set in the landscape unit defined as "Dry farming / Concentrated, medium-density settlement".

The *forum* is situated on the top of a hill, allowing for wide-ranging panoramic views of the surrounding landscape. This makes the *forum* one of the most sensitive places in terms of the visual impact of its adjacent areas (see figure 83).

The baths are set in a more limited visual area, and are impacted essentially in terms of short distance vision.

Most of the structures are built against slopes, and are highly sensitive to, not only new construction, but also changes in land use.

The sparsity of trees and the mutable quality of the soil in the area between the city and the circus also make it sensitive to change.

Despite some tree planting which was carried out in the 1960s – mostly cypress trees, giving the area the more Italian appearance in vogue at the time - *Miróbriga* and the area that immediately surrounds it are part of a somewhat exposed and sensitive landscape, which has little urbanisation and still has many of its original characteristics intact. (See figures 73, 74).

The growth of the Santiago do Cacém urban area may lead to problems with the modern area's interaction with its heritage. A proposal was drawn up by *TOPIARIS* for the *Miróbriga* Special Protection Area taking into account criteria that will safeguard the area's visual quality. (See figures 72 + 85).

### Measurement of real and potential impact on the landscape

Potentially sensitive observers were identified based on two criteria: category and geographic location of the observer.

The most sensitive observers are visitors and the inhabitants of Santiago do Cacém.

Observers can be sorted into 3 categories:

- spiritual approach,
- experientialist approach
- intellectual approach.

Visitors to archaeological sites essentially have an experientialist and intellectual approach.

It is experientialist because it allows the visitor to relive previous eras.

The intellectual approach encompasses three types of observer:

tourists that are part of a field trip;

- ecological tourists;
- historical tourists.

Tourists that are part of a field trip area affected by changes in the landscape as these can limit their interpretation of the site. The ecological tourist is also sensitive to those changes, especially those carried out on a large scale. The historical tourist is particularly sensitive to the state of the ruins themselves, and sees the surrounding landscape as being of secondary importance though important in understanding. The awareness of the value of the surrounding landscape has increased significantly over the last few years. The geographic and physical location of the observer are fundamental in determining the quality of visual perception of the site's various areas.

<b>PRESERVATION PLAN</b>		
	Historic and cultural characterisation of Archaeological Unit and surrounding area.	
tural and historical nificance of the landscape		Cultural and historical integrity of the landscape
	Landscape's visual Sensitivity	
Identification of Sensitive observers	Instrument and planning analysis	Visual impact field study
	Evaluation of existing impact on visual field	
Minimisation measures: landscape integration strategies		Protection measures: Special Protection Area and Municipal Direction Plan.

### **Miróbriga<sup>8</sup> Environmental Plan Natural Heritage**

#### **Introduction**

Given that IPPAR's global aim for *Miróbriga* is its improvement by means of various projects that integrate many fields of study – namely Archaeology, Ecology,

<sup>8</sup> This chapter was written by the MÃE D'ÁGUA (1999) company, *Ruínas Romanas de Miróbriga. Programa / Estudo Ambiental*.

Geology and Landscape – from the beginning our aim was to make a very detailed inventory of the species that are present and describing their significance in terms of nature conservation and their interaction with the ruins.

The organisation of information about the plant and animal life on the site was carried out with the aim of informing visitors and, through new approaches and methods, attracting new types of visitor. Therefore, apart from a list of the species found at the site, their relationship with the environment, as well as their link to the Ancient World, through mythology, agriculture, or medicine, were also dealt with. Proposals were put forward for measures to promote biodiversity at a local level, and for alterations to the landscape that will allow for a better development of the area.

Field studies were carried out between mid-October 1998 and mid-January 1999, with checks in June 2002. This short period of field study led to the coverage of some communities being considered inadequate, especially with regard to reptile and amphibious species.

Finally, we must thank Dr. Filomena Barata, director of the *Miróbriga* archaeological site, for all her help and support throughout the time that our work was carried out.

### **Environmental, Historical and Geographic Setting**

The area in which *Miróbriga* is set is located in the middle of the *Charneca de Grândola* (heathland), although it is somewhat altered by its proximity to the coastal lowlands. These two different types of habitat are easily visible from the highest points of the ruins: The first has small rolling hills and is set on shaley soil where cork trees grow; the second is flat land set on sandy and marshy ground that runs parallel to the coast.

As there has been no pollen analysis of the site and surrounding area, the knowledge of characteristics of the flora and land use in Roman times is mainly conjecture, and therefore very general. However, the phyto-sociological analysis of the area allows us to say that during Roman times, the vegetation around *Miróbriga* were little different from the succession climax throughout the various periods and was, therefore, in better condition than today. Despite this some effects of land use were already being felt due to agriculture and grazing.

It is supposed that during that time the region's vegetation was dominated by cork bushes which were particularly dense on hillsides, where the slope would make agriculture less attractive and where only grazing was likely to have taken place. In the transitional areas between agricultural land and autochthonous forest, there were plantations, which were created and managed by Man, and which in this area were dominated by cork oaks. The plantation's main use was for the grazing of pigs.

One possibility is that the fields surrounded the settlement and that the fields were in turn surrounded by a large ring of cork plantation, big enough to allow for management of the pasture and to feed the flocks. The cork grove, which was further away and less used, had more natural characteristics.

This environment, which had much more dense vegetation than we see today, was home to many large herbivores and predators that became extinct in the area at an uncertain time in history. Cardoso (1993 in Silva and Soares) on analysing the remains of mammals used as food at the Roman outpost on Ilha do Pessegueiro, just a few kilometres from *Miróbriga*, found red deer (*Cervus elaphus*), roe deer (*Capreolus capreolus*), wild boar (*Sus scrofa*), and horse (*Equus caballus*). The latter, given the context in which it was found and the animal's age (young), led the author to believe that it was a wild animal.

It is worth emphasising the presence of the roe deer, which is a sensitive species that lives in moist forest habitats far removed from the type of landscape present in the region today. This fact suggests substantial differences in climate. This possibility is also corroborated by the availability of water, which allowed for the existence of a bath

complex as large as that at *Miróbriga*, the day to day working of which would not be compatible with the torrential pattern seen today.

It is difficult to pinpoint the disappearance from the region of some of the species mentioned. It is known however that the wolf (Lobo in Portuguese) survived until the mid 20<sup>th</sup> century. Its regular presence is proven by some place names: *Lobais*, *Mata Lobos*, *Bica do Pego do Lobo*, *Monte da Lobata e Fojo*.

As for the region's deer, we believe that their extinction occurred in a relatively distant time, given that place names relating to them are scarce - *Vale da Cerva* -, and is also absent from municipal documentation about hunting, which mention only small animals. It is interesting to note the presence of the bear in the region's place names - *Vale da Ursa* - given that there are few place names in Portugal that refer to it and those that do appear are confined to mountainous areas in the Northern interior of the country.

### **Land use**

What we can see today and comes described in this chapter, is obviously the result of a vast and complex universe of interaction, in which the large property or *Herdade*, based on extensive agriculture and forestry, coexisted alongside small plots of land known as *hortas* and *courelas*. The latter were units of land used for subsistence farming that made use of small irrigation systems and fruit trees.

As would seem only natural, the region's place names are full of references to the dominant tree species: names such as *Chaparral*, *Chaparreira*, *Chaparrinho*, *Cortiçada*, *Sobral*, *Sobreira*, *Sobreirinha*, *Sobralinho*, and *Sobreirinho* occur often in places where there are many cork oaks. Despite this there are also many place names related to the fruit trees grown in the area: *Abrunheira*, *Amoreira*, *Fonte Figueira*, *Feitões dos Figos*, *Monte das Figueiras*, *Rio da Figueira*, *Laranjeira*, *Laranjeirinha*, *Marmeleiros*, *Nogueira*, *Peral*, *Peralinho*, *Pereiras* and *Pessegueiro*, are just a few of the place names directly related to fruit farming.

In order to correctly identify the various types of land use present in the area surrounding *Miróbriga's* ruins, a diachronic analysis was carried out, which allows for identification, and even quantification, of the variety of uses a piece of land is given over to throughout a specified period of time.

The results of the study can be summarised in the following points:

The urban areas, especially those surrounding Santiago do Cacém, have expanded, though not significantly (see figures 97, 98);

The building of new isolated "montes" or homesteads scattered throughout the study area;

The disappearance of some areas given over to the production of olives and citrus fruits;

We can therefore conclude that there is a certain tendency towards the building up of the area and the abandonment of certain agricultural practices, something that has led to a certain "suburbanisation" of this landscape. This may, if it increases in the future, affect the improvement of the archaeological site. This development should be contained through corrective urban planning measures.

### **Phyto-sociological context of the study area**

The study area and the surrounding landscape are part of the bio-climactic thermo-mediterranean sub-humid plain (600 to 1000 mm), according to the meteorological data supplied by the Santiago de Cacém weather station, (Rivas-Martínez *et al.*, 1990). This area is part of the following bio-geographical units:

Luso-Estremadurensis province

Mariânico-Monchiquense sector

Baixo Alentejano-Monchiquense sub-sector

Serrano-Monchiquense super district

This sub-sector is characterised by very original vegetation, with groves rich in gorse and furze - *Cisto ladaniferi-Ulicetum argentei*. As for the Southern Portuguese Vegetation Series, the climate series for the study area and surrounding landscape is the *Myrto communis-Querceto suberis sigmetum*, the sub-humid thermo-mediterranean, silicate, cork oak *luso-estremadurensis* and *algarbiensis* series.

Considering that the vegetation at the *Miróbriga* ruins is so fragmented and so difficult to place into a phyto-sociological context, we attempted to identify the region's vegetation that is present in *Miróbriga* and the surrounding area.

### The Flora of *Miróbriga*

In the floral index of *Miróbriga* (enclosed area and hippodrome), X species were identified (see figure 90).

In terms of physiognomy and structure, the vegetation that can be seen in the enclosed area is grouped into the following categories:

1 – Natural herbaceous vegetation. This group occupies a substantial part of the site and is a result of significant soil mobilisation and exposure to erosion, which occurred during successive digs and preservation projects. It is essentially made up of annuals, which can evolve into a first stage of shrub vegetation dominated by cistus, or rock roses, as long as there is no human intervention.

2 – Vegetation identical to 1, but contains numerous oleaster shoots. (*Olea europaea* var. *sylvestris*);

3 - *Rubus ulmifolius* blackberry brush. This vegetation develops in areas where there are higher levels of humidity in the soil. It can be kept for several years without evolving into another type of vegetation and has a tendency to be invasive if there is no control;

4 - *Cistus salvifolius* sargasso. Corresponds to a stage of regression to cork-oaks, which represent vegetation that is common in this area;

5 - *Cistus ladanifer* grove. Similar to the vegetation referred to in 4, of which there is an abundant supply; constitutes a stage of regression to cork-oaks, but has adapted to a poorer and drier soil;

6 – Small groves of olive trees, with domestic and wild (oleaster) olive trees. Mediterranean characteristics; capable of protecting natural and stable groves;

7 - *Quercus suber* cork-oak groves. Contain elements of natural vegetation common in this region; contains very diverse layers of herbaceous and brush;

8 – Tame pine grove (*Pinus pinea*). Occupy peripheral areas of poor soil and constitute a natural forest group well adapted to the local conditions;

9 – An ornamental group of *Cupressus sempervirens* cypress trees;

10 – A mixed group of *Pinus halepensis* (which were planted here), tame pine (*Pinus pinea*) and olive trees (*Olea europaea*). It has well developed herbaceous and bush substratum, presenting very diverse natural characteristics;

11 – Reed bed with *Arundo donax*. Presents traces of being harvested recently and occupies a peripheral area;

12 – An area with fig trees (*Ficus carica*), a plant with Mediterranean characteristics;

13 - An area with mulberry bushes (*Morus alba*) and European walnut tree (*Juglans regia*). These plants are also cultivated and surround an old farming area that contains terracing, which contain some fruit trees (*Citrus limon* (L.) Burm. fil. – lemon tree, *Citrus sinensis* (L.) Osbeck – orange tree and *Eriobotrya japonica* (Lindl.) – medlar tree).

### Old flora and useful plants

In an attempt to relate the flora present in *Miróbriga* with flora that was associated with farming or other activities in Roman times, various bibliographical works were

referenced. It is of worthy of note to mention that there is very little amount of this information, seeing that most of the cited sources report to Pliny the Elder's Natural History.

When Carcopino, in 1939, describes the daily life of Rome, he cites some aromatic and/or medicinal plants, namely mallows (*Malvaceae*), as a laxative, and mint (it is not known if he refers to Roman or French mint - *Balsamita suaveolens* Perr., in Feijão, 1961). However, according to Saramago in 1997, it was in Alentejo where "the Romans heard news of an abundance of aromatic herbs that Roman cuisine was not familiar with: apple mint (*Mentha rotundifolia* (L.) Hudson), savory (*Satureja hortensis* L.) and pennyroyal (*Mentha pulegium* L.)". One can see in Saramago's writing references to the occurrence of pennyroyal in the Alentejo region that goes back to the dolmen harvests (circa 2000 AC.).

Finally it must be noted that pharmacology during the Classical Period utilised these plants and that medical knowledge from the Roman Period resulted in an accumulation of knowledge from the Greeks and Egyptians.

#### Useful Plants found at the Miróbriga site:

Species	Observations (Medicinal M; Food F)
<i>Allium ampeloprasum</i> L. – wild leek	(M;F)
<i>Arum italicum</i> Miller – Italian lily	(M;F) Dioscorides refers to this plant as useful in alleviating gout.
<i>Arundo donax</i> L – giant reed	(M) Dioscórides notes that by mixing reed ashes and vinegar into the hair one can prevent baldness.
<i>Asparagus acutifolius</i> L. – sharp-leaved, lesser asparagus	(M) This plant is used as food in western Mediterranean and the Iberian Peninsula.
<i>Asparagus albus</i> L - w white asparagus	(F)
<i>Asparagus officinalis</i> asparagus	(M;F) This was highly cited and regarded by the Romans for its as a food qualities from 200 BC (Cato), I century, (Columela, Plinius), II century ( <i>Pomponius e Suetonius</i> ) and III century ( <i>Palladius</i> ).
<i>Asparagus aphyllus</i> L. – greater asparagus	(M)
<i>Asphodelus ramosus</i> L. Branching asphodel	(M) The oldest engraving from <i>Materia Medica</i> referring to this species was executed and shown in Constantinople, in 512 AC, as part of <i>Codex Vibenensis</i> .
<i>Avena sativa</i> L. - common oat	(M;F) Mentioned by Romans Virgil and Plinius, but the ancient Romans probably used this as forage or feed, and not for human consumption. Dioscorides describes this plant as "anti-tússica", that is, non-medicinal
<i>Beta vulgaris</i> L. subsp. <i>Maritima</i> (L.) Arcangeli. Wild beetroot	(M;F) This was used in 800 BC by the Assyrians (Assírios), who ate its leaves. It has also been cited in a medicinal context by the Greeks Galenus (Galeno) and Dioscorides. The latter cites its virtues as a treatment for ear pains, dandruff and tinea or ringworm; and for the rapid healing of scars from cuts and burns. In the II century it is again mentioned as a food by <i>Apicius</i> and <i>Ateneus</i> (170-230 AC)

<i>Bryonia cretica</i> L. Subsp. <i>Dioica</i> (Jacq.) Tutin – white bryony	(M) Cited by Dioscorides as a provoker of urination (incontinence?), able to relax the abdominal region (ventre) and helps heal gangrene wounds. Also cited as being useful against warts and sunburns.
<i>Chenopodium album</i> L. Subsp. <i>album</i> – lambsquarters weed	(M)
<i>Cichorium intybus</i> L. - chicory	(M;F) Sometimes cultivated as a substitute for coffee, and its leaves can be used in salads. Egyptians mentioned it in 4000 BC, as it is referred to in The Papyrus Ebers. Dioscorides makes reference to it and Galenus calls it the “friend of the liver”.
<i>Cistus ladanifer</i> L. – crimson spot rock-rose	(M) Plant where laudanum was extracted, used as a sedative and a scar maker (cicatriser).
<i>Crataegus monogyna</i> Jacq. subsp. <i>brevispina</i> (G.Kuntze) Franco – hawthorn	
<i>Cupressus sempervirens</i> L. - cypress	(M) Originally from the islands of the Aegean sea, but also found in Syria and Iran. Its wood is very tough and it was mainly used in building ships, sarcophaguses, and sanctuary doors. It played an important role in funeral rites of ancient civilisations, symbolised death and eternal life and was planted in sacred wooded areas that surrounded Greek and Mesopotamian temples. One of the most ancient medicinal plants, it is mentioned in an Assyrian text that was 35 centuries old.
<i>Cydonia oblonga</i> Miller - quince	(M;F)
<i>Daphne gnidium</i> L. – spurgeflax daphne	(M) It is known to have been used for medicinal purposes since ancient times, especially as a purgative, and Dioscorides refers to it that respect.
<i>Daucus carota</i> L. Subsp. <i>Maritimus</i> (Lam.) Batt. & Trabut. - wild carrot Queen Anne's lace	(M;F) A relative of the cultivated carrot, this wild carrot was known as a food by the Romans and Greeks, though it was not cultivated as such. It was most likely used as a medicinal plant.
<i>Dittrichia viscosa</i> (L.) W.Greuter subsp. <i>Viscosa</i> – false yellowhead, aromatic inula	(M) Considered useful against snake bites and for healing wounds.
<i>Eryngium campestre</i> L field eryngo	(M) This was a very well known species among ancient healers. Dioscorides cites the root of this plant as a diuretic and an aid to menstruation. It is also beneficial against colic.

<i>Ficus carica</i> L. - common fig	(M;F) The fig when cultivated, spreads exponentially without human intervention, especially in areas that are hot and dry. One of the oldest fruit trees, the fig is originally from the Middle East, Asia Minor and north Africa, and was cultivated in the Bronze Age (first half of the 3 millennium BC). In the First Testament, it is mentioned as one of the symbols of abundance of the Promised Land. Along with wheat and olives, figs had an important role in Ancient Mediterranean food, especially in Greece and Rome. The fruit was mentioned by <i>Ateneus</i> , <i>Columela</i> and <i>Macrobius</i> . In the time of Cato, there were 6 different varieties known in Italy, while <i>Plinius</i> mentions 29. <i>Dioscorides</i> highlights the laxative effects of the fruit and notes that they are useful in treating throat, bladder and kidney infections, though he adds its virtues are endless.
<i>Foeniculum vulgare</i> Miller - wild fennel	(M;F) This was cultivated by the ancient Romans as a garden herb and used for marinating meat and in vinaigrette sauces. The Egyptians used it as a medicinal plant, and <i>Dioscorides</i> also mentions this use.
<i>Galactites tomentosa</i> Moench - milk thistle	(F) Described by <i>Dioscorides</i> as edible, when picked at a young stage, cooked in oil and seasoned with salt.
<i>Hypericum perforatum</i> L. – St. John's Wort	(M)
<i>Iris foetidissima</i> L. – stinking iris	(M) Useful in the treatment of wounds and fractures to the skull, after the removal of barbs and arrows, and against bruises and swelling.
<i>Juglans regia</i> L. – English walnut	(M;F) According to <i>Dioscorides</i> , walnuts are useful against poisons, by provoking vomiting, and against gangrene and tapeworm.
<i>Laurus nobilis</i> L. – sweet bay	(M) Originally from Asia Minor, it was used in Greece, where it was dedicated to the god Apollo, and was used to crown the glorious heroes. The bay symbolises victory, celebrity status, and respect. <i>Dioscorides</i> attributes many qualities to the plant, among which include its use against insect bites, burns, tuberculosis and asthma.
<i>Malus domestica</i> Borkh. – cultivated apple	
<i>Marrubium vulgare</i> L. - white horehound	(M) The ancient Egyptians believed that this was a remedy for respiratory problems and <i>Dioscorides</i> notes its usefulness against asthma, tuberculosis and coughs. <i>Plinius</i> refers it as a high quality medicinal plant and it was also mentioned by <i>Columela</i> .
<i>Mentha suaveolens</i> Ehrh. - round leaved mint	(M)

<i>Olea europaea</i> L. var. <i>Europaea</i> – European olive	(M;F) The olive has been cultivated since the Copper Age (first half of the 3 <sup>rd</sup> millennium BC). It is one of the oldest sources of edible oil. Homer mentions green olives in his garden of Alcinous and Laertes, brought to Greece by Cecrops, the founder of Athens. This tree was introduced in Italy in 571 BC Dioscorides differentiated between the wild variety ( <i>sylvestris</i> (Miller) Lehr) and the cultivated variety. Cites the olive as useful against the scabies.
<i>Petroselinum crispum</i> (Miller) A.W.Hill - wild parsley	(M;F) Its origin is uncertain, though some point to southeast Europe or western Asia. The ancient naturalists, from the time of Hippocrates and Galeno, mention that it can serve as a diuretic and an aid in menstruation.
<i>Pinus pinea</i> L. – Italian stone pine	(M;F) The Greeks considered it sacred to Neptune and Plato's contemporaries (circa 338 BC), who introduced forest trees, with the stone pine one of the first to be used as shade for pavements where philosophical discussion took place. This use is still similar to that of the cloisters of Christian convents. Resin from these pines has been used for centuries and its main medicinal use was for combating fatigue.
<i>Pistacia lentiscus</i> L. – mastic tree	(M) Dioscorides left a recipe for preparing lentiscian wine, which was used to cure indigestion and diarrhoea.
<i>Plantago coronopus</i> L. Subsp. <i>Coronopus</i> Buck's horn Plantain	(M;F) Dioscorides considered it useful against heartburn.
<i>Portulaca oleracea</i> L. – purselane	(M;F) This plant is mentioned by Teofrasto and Dioscorides. The latter said it was useful for headaches, eye inflammation, heartburn, bladder and stomach pain.
<i>Prunus persica</i> (L.) Batsch. – peach	(F) This fruit-bearing tree seems to have reached Europe at the beginning of the Christian period. Dioscorides writes about the peach in 60 AD and Plinius said, in 79 AD, that the tree was imported from Persia by the Romans and that the tree was taken from Egypt to the island of Rhodes and from there on to Italy. At that time it was not common in Greece. Plinius that the name <i>persica</i> came from king <i>Perseo</i> that ordered it to be planted in Memphis.
<i>Quercus suber</i> L. – cork oak	(M;F) Grown for its edible acorns and for its bark, cork. Dioscorides said the acorns were useful for curing wounds, against inflammation and venomous bites.
<i>Rosmarinus officinalis</i> L.- rosemary	(M;F) In ancient Greece this herb was considered to be a present from Aphrodite to humans, and was used as a substitute for incense as a perfume. This aromatic and tasty herb was mentioned by Dioscorides, who said it was a cure for jaundice, and by Galeno. Its virtues were also described by Plinius.
<i>Rubus ulmifolius</i> Schott – blackberry	(F)
<i>Ruscus aculeatus</i> L. – butcher's broom, box holly	(M)

<i>Salvia verbenaca</i> L. – salvia, wild sage	(M) This plant was considered useful for treating eye infections.
<i>Scolymus maculatus</i> L. – spotted golden thistle	(M)
<i>Senecio vulgaris</i> L. – ragwort, groundsel	(M)
<i>Smilax aspera</i> L. – sarsaparilla	(M) Dioscorides described sarsaparilla as being a venom antidote.
<i>Smyrniololus atrum</i> L. – Alexanders	(M;F) Dioscorides described its great properties as a food (stewed leaves and roots), while Columela and Plinius mention its cultivation. Galeno cites it as being edible and <i>Apicius</i> noted a recipe for its preparation. It is mentioned by Teofrasto as a medicine and Dioscorides said its seeds, drunk with wine and honey, were useful for menstrual problems and urinary incontinence.
<i>Solanum nigrum</i> L. Subsp. <i>Nigrum</i> - black fruited nightshade	(M;F) This plant is mentioned by Galeno as being edible and antipyretic, and Dioscorides claimed it had innumerable properties (antipyretic, healing, counteracts headaches, earache and heartburn). Plinius did not cover it in detail as he considered it hallucinogenic and very toxic, a property which we now know is common to many plants in this family.
<i>Sonchus oleraceus</i> L. – annual sowthistle	(M) Dioscorides described it as being antipyretic and useful for treating scorpion stings.
<i>Stellaria media</i> (L.) Vill. Subsp. <i>Media</i> – common chickweed	(M) Useful for relieving eye infections.
<i>Umbilicus rupestris</i> (Salisb.) Dandy – wall pennywort, navelwort	(M)
<i>Urginea maritima</i> (L.) Baker – sea onion	(M)
<i>Verbena officinalis</i> L. – European vervain, verbena	(M)
<i>Vitis vinifera</i> L. subsp. <i>Vinifera</i> - videira	(F;M) Hippocrates described a potion that became known as Hippocratic wine (sweet wine with cinnamon, ginger or another spice, pressed through a sieve), with comforting and stimulating qualities.

### Fauna (see figure 96)

As stated earlier, the natural habitats and the agro-systems present at *Miróbriga* and its immediate surroundings are in a very basic state, and in some cases, run down. These factors have serious implications for the area's fauna, especially those animals that are not able to move great distances, as is the case with micro-mammals, reptiles and certain amphibians.

In terms of fauna, the habitats and micro-habitats in *Miróbriga* can be grouped into the following categories:

Pastures and grasslands – correspond to area 1 of the vegetation map, and the total area of the hippodrome, in the fenced area.

*Rock environment* – all of the structures at the ruins;

*Cave environment* – corresponds to the tunnels, rooms and subterranean ducts in the baths area;

*Tree area* – corresponds to the wooded area (olive, oak, pine and cypress);

*Tree-bush area* – corresponds to the bed of the river downstream from the bridge and to the nearby uneven area of land (ancient horticulture area);

We should mention, though, that the patchy occurrence of various habitat types and distinct formations is beneficial to certain species, such as birds, of which an abundant number of species were found (some 55). In fact, the pastures containing small clusters of olive and cork trees, blackberry bushes from the ancient horticultural terraces and the rocks from the ruins all provide an enormous variety of habitats, which can be used by birds, particularly song or perching birds.

In the future, these habitats can, if adequately publicised, serve as a supplementary attraction for *Miróbriga*.

### **The Fauna and Flora interacting with the ruins**

This chapter serves a dual purpose: to evaluate the impact that animal life and vegetation has on the ruins' rock formations (to preserve those structures), as well as to determine the impact on these communities of archaeological work that is carried out.

As explained in the description of the fauna and flora, the different communities are made up of mostly ubiquitous species, which have general habits and characteristics. This means they are more tolerant of the various factors at the site that could disturb them. The only exception is a minute population of horseshoe bats *Rinolophus sp.* (about 18/20 of them) that were spotted in June 2002 in a small room in the underground tunnels of the baths. As this small community was in the middle of its breeding period, no captures were made to determine the exact species. However, all of the species of this kind of bat are listed in the *Livro Vermelho dos Vertebrados de Portugal* (Red Book of Vertebrates of Portugal) under the category "Em Perigo" (Endangered).

In terms of fauna, the various species that use the formations found in the ruins, no signs of negative interactions were found. In fact, these species, whether in terms of population density or their ecology, have a minimal sort of interference, as is shown by the following:

- Mammals. The digging species, such as the rabbit and the mole, tend to stay away from the more rocky and stony areas and therefore present no danger to the stability of the structures. The bats, whose colony is located in the baths, use a room that has already been stabilised, and its entrance will not be blocked or altered by any further digs or conservation work on other structures.

- Birds. The only species that regularly nests in the structures is the black redstart. There may be other species that nest on a more sporadic basis, such as the little owl and the hoopoe. However, none of these species interferes with the structures, as their nests are built into the cavities, grooves, nooks and crannies that already exist, depending on such factors as sun exposure, height from the ground, vulnerability to predators, etc. The low number of black redstart breeding pairs, (a maximum of 4 to 5) and their small size means that any damage from their droppings is insignificant. However, the fact that they frequently use signposts as a place to rest, and subsequently deposit their droppings there, could, for merely aesthetic reasons, lead to the use of a repellent on these signs.

- Gastropods. The rocky and stony areas and the surrounding pastures are extremely good for snails, which in certain phases of their life crawl far into the cracks in the ruins. However, the mucus of the identified species, (*Otala lactea* e *Helix aspersa*), is harmless due to its low acidity level, contrary to other invertebrates, such as tube-

worms, whose secretions are rich in hydrochloric acid, but whose presence was not detected.

- Flora. The invasive plants on the walls of *Miróbriga* are removed from the pastures and should be subject to regular cleaning. The mechanical action of their roots on the structures could on occasion impact the stability and conservation of the heritage. In terms of the cypresses, the type of root that they have will not influence the conservation of the structures; and although it is not considered a native species, it does not have invasive characteristics, so poses no threat to the autochthonal vegetation. Therefore, any decision to remove or keep this species will be based on merely aesthetic criteria, bearing in mind that its planting was carried out in an attempt to *Italianise* the site, as was the fashion at the time.

The site contains a diversity of lichen species, some of which have acidic qualities. However, the interaction with the rocks calls for a more detailed analysis; only a specific study will be able to identify and evaluate it properly and propose methods to control it.

### **Management Proposals**

Management proposals that were presented for the site have been based more on a *natural* than a *garden-like* concept. This proposal tries to make taking advantage of the space and promotion biodiversity compatible, similar to a philosophy that some authors designate as *ameno-natural*, that is, pleasing and natural at the same time. It is therefore important to improve the access to certain areas, as well as improve the natural barriers that protect others. All of these actions require research, though as a first step we would like to list the following actions:

- Horticultural area. This area is considered to have the most natural value at the site. The existence of bushy, shrubby trees, the development of land into hills and terraces (solcalcos and terraços) and the presence of loose stone walls (as a way to stabilise the taluses) make the area particularly attractive as an area of leisure. In view of this, we propose a selective cleaning process of the hills and terraces, eliminating, or considerably reducing, the invasive species, such as blackberry bushes and bamboos, improving the phyto-sanitary conditions of the fruit trees. (see figure 104).

On the first level of hills on the prairie, situated in front of the fountain, we propose the placement of a lake, with totally natural characteristics, by placing a waterproof tarpaulin, which would guarantee the presence of a small amount of water, even during drought periods.

- With the purpose of increasing the population density of some bird species, we propose placing nest boxes, which can be occupied by an array of species, particularly of the *parus* family.

- In terms of visitors moving around the site, various paths should be established and properly signposted around the whole area, and walking outside of these paths should be prohibited. The implementation of this network should safeguard certain areas from excessive trampling, or simply protect the tranquillity of the animals.

- At the hippodrome, we think that the regular cutting of the grass is perfectly acceptable and adapted to reality. In an effort to improve and add value to the site, we propose introducing, for a trial period, a reduced number of Lusitanian horses (4 to 8), as they are linked to the site and to Roman daily life. The horse would take advantage of the natural pasture, they would not hamper the conservation of the site with excessive trampling.

### **The Ruins-Hippodrome Itinerary**

We see the establishment of this itinerary as a fundamental instrument to the improvement of *Miróbriga*, seeing that such an addition would serve as an important

attraction for visitors. There are, however, a series of restrictions that are linked to property and passage rights that the area is subject to. (see figure 102).

### **Some conclusions**

Even though the vegetation has been altered according to what has been identified as its original characteristics, it does present elements that are typical of this region.

There are a variety of habitats and micro-habitats that has led to a diverse population of species, many of which can be easily observed.

Given the strong relationship between the Ancient people of the area and Nature, there are a great number of natural elements (still present at the site) that have connections to the Classical World, be it through food, medicine or mythology. These facts could serve as a mine of information and additional interest for input to visitors.

The statutes relating to the conservation of species and habitats do not present an obstacle to the normal investigative and stabilisation works of the structures. The only exceptions are the community of bats and the maintenance of some of the areas diverse in flora, namely the ancient area of the garden.

The site's natural interest can be improved through careful management. This could also improve the site's interpretative components and improve the area on a more general level, which would certainly be reflected in the number of visitors that are attracted to the site.

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## ACTIVITY 2 REPORT

### THEORETICAL DEFINITION OF THE REGION'S VALUE CHART

The region's value chart with regard to activity 2 encompasses various components. The resources of the Santiago do Cacém area are evaluated in a general way, and VALUES are considered to be all the resources that characterise the region today.

These values were divided into natural and anthropological values. The natural values refer to the natural landscape – mountains, beaches, lakes and lagoons, without, or with a minimum of human interference. Natural values were further split into anthropological natural resources, i.e., natural resources that have been altered by Man giving them their present appearance. This category includes plantations, reservoirs, rice fields and pine forests.

Anthropological values include all types of structure or activities carried out by man. All architectural and urban interventions in all their forms were considered to be values. In this case the analysis was restricted to Santiago de Cacém and its outskirts.

The analysis aims to follow the historical development of the area, in all its aspects – architecture and urbanisation, use of existing natural resources – increasing the significance of the symbolic values of the area.

These symbolic values, which change depending on the times, have a strong presence. Not only can they influence the presence of people in the area, and their adaptation to the landscape, but are also significant as values that are still present in our imagination.

### ANALYSIS OF CULTURAL RESOURCES

#### ARCHAEOLOGICAL INTERPRETATIVE ANALYSIS

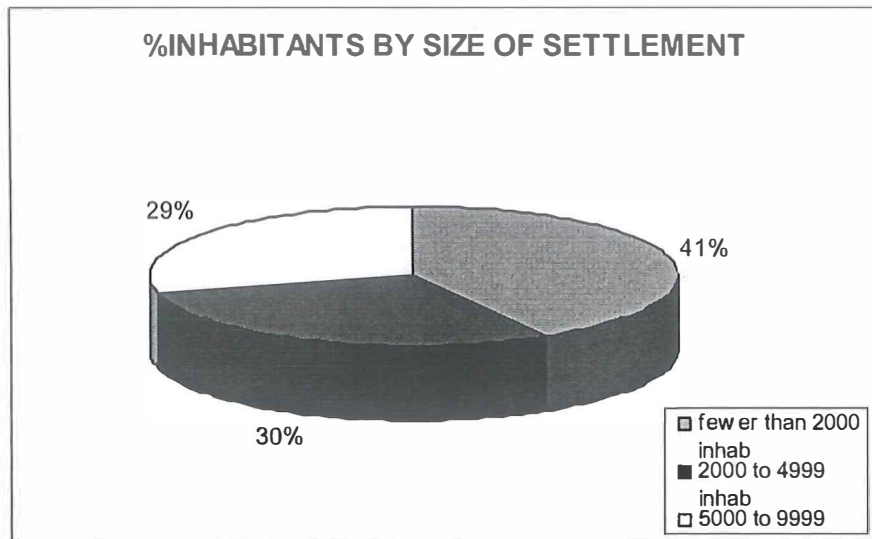
The link with the *Miróbriga* archaeological area is made through the re-utilisation of some of its architectural elements and the presence of a shrine – S. Bras chapel – which is used a pilgrimage site and is, for the local people, a point of contact with the ancient city.

#### ANTHROPOLOGICAL INTERPRETATIVE ANALYSIS

It was found that, on consultation of historical sources, Santiago do Cacém was, and remains, a rural area. With the exception of the relatively recent introduction of some agricultural production and an increase in part of the secondary and tertiary sectors, the activities undertaken in Santiago do Cacém have changed little since the 16<sup>th</sup> century.

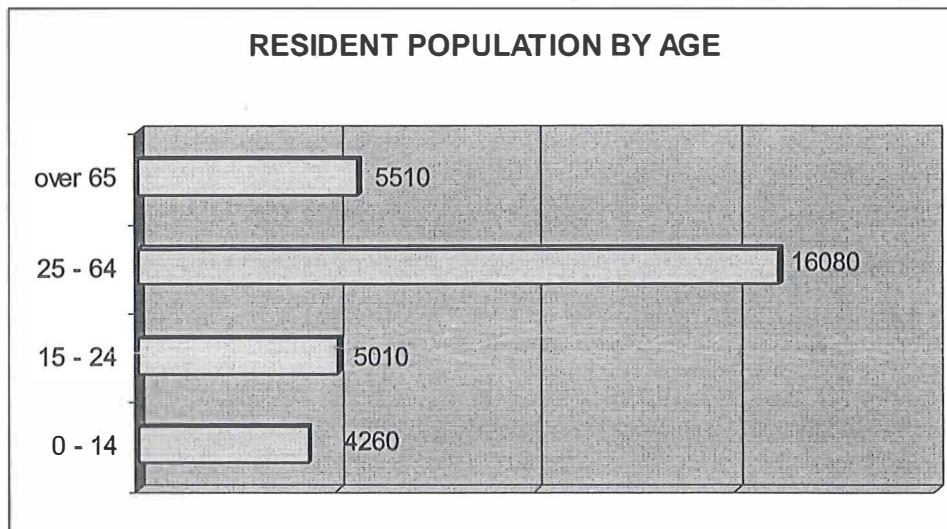
This is apparent in the distribution of the local population and the way in which it makes a living.

Currently 41% of the population lives in rural areas, with the remaining population distributed equally between the various types of residential area. However, the largest number of people per settlement is 10,000.



**Figure 1- % of inhabitants by size of settlement**

The distribution of the population by age is also quite even, with a large portion of the population classified as active (25-64 years of age). The number of people of active age is greater than that of inactive people (totalling 14780).



**Figure 2 – Resident population by age**

In the distribution of population by sex it is clear that there is a greater number of women than men, although the difference is not large.

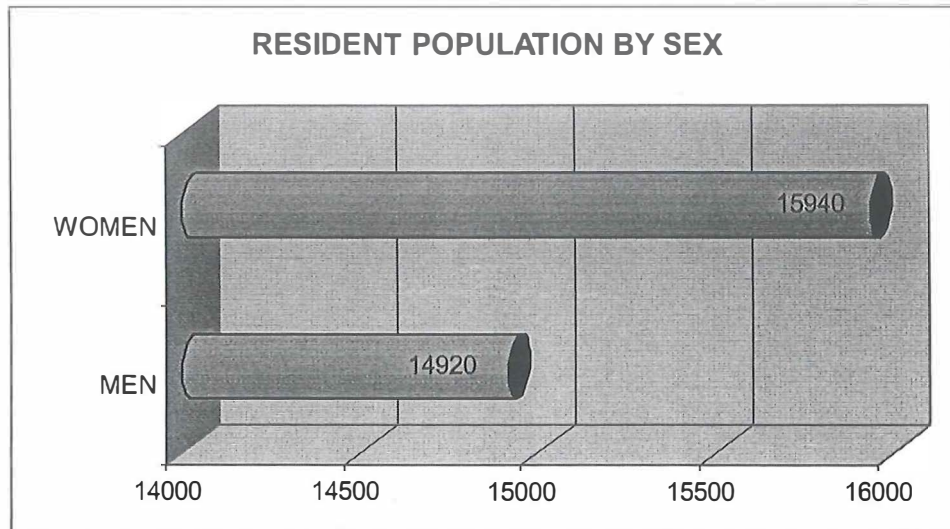


Figure 3 – Resident population by sex

With the information available it was possible to show the development of the demographic growth of Santiago do Cacém. Despite large fluctuations in the size of the population the demographic trend has recently taken an upward turn, which is in fact apparent in the urban growth of the city.

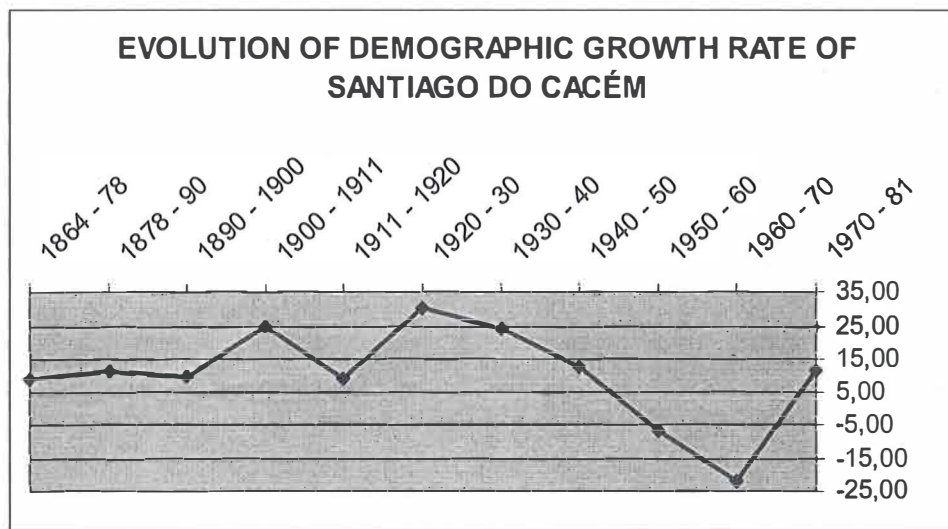
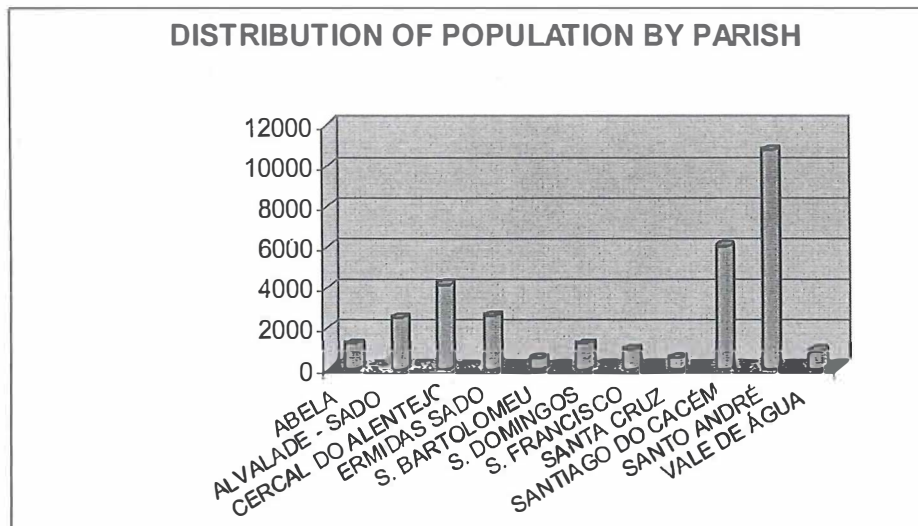


Figure 4 – Evolution of demographic growth rate of Santiago do Cacém

The population distribution by parish is somewhat uneven. The two big urban centres are Santo André and Santiago do Cacém. Santo André is a unusual case as, despite belonging to the Santiago do Cacém area, it has grown due to the search for labour in neighbouring Sines, specifically because of the Sines Industrial Complex. The remaining population is spread unevenly throughout the rest of the area. More than half of the parishes have fewer than 2000 inhabitants, which is a further indication of the area's rural nature.



**Figure 5 – Distribution of population by parish**

The rural nature of the area is clear when its resources and agricultural system are analysed. Dry farming and cattle and chicken farming are the most prevalent in the plantation system. This agricultural system also allows for cork production. In the flood plains of the Sado River rice growing was introduced at the beginning of the 20<sup>th</sup> century and is still undertaken to this day. This cultivation marks the landscape and is a contrast to the plantations.

The secondary sector is almost non-existent. The mines, the mining of which was of great importance in days gone by, are now closed down. The industry that is still present is linked to cork production – Cork Factory – and with rice cultivation – Rice Factory. The population that works in the secondary sector does so in the neighbouring district of Sines.

In the tertiary sector it is the services which are prevalent. Services are essential for community life, and tourism, albeit in its incipient form.

Although this is a rural area, there is not a large variety of specifically local handicrafts. There are however two arts worth mentioning: gastronomy and cork work.

The local cuisine and handicrafts are indicative of the way in which the local population makes use of its resources. We can see that in the region's cuisine fish dishes are prevalent, which come from the marine resources, as are sweets made from pine nuts – from the regions pine forests – and honey.

Also in terms of handicraft, traditional furniture is made from local products- cork and boxwood.

Map of the resources mentioned in the Santiago do Cacém Value Chart



Figure 6 - Map of the resources mentioned in the Santiago do Cacém Value Chart

Source – Military Map of Portugal, adapted

The map, which shows the resources mentioned in the Cultural Value Chart shows the position of the presented sites. As can be seen, all the resources identified, even those in a rural setting, can be found in the area immediately surrounding Santiago do Cacém.

We can therefore conclude that there is a strong bond between the urban and rural areas, which are often closely linked, not only through socio-cultural ties, but also in physical terms.

In the same way as seems to have happened at *Miróbriga*, the urban area of Santiago do Cacém has grown outwards from a ridge – in this case where the castle is positioned – into the interior (Eastern quadrant). This protection had various kinds of strategic motive. Not only protection from the dangers that could come from the sea, but also questions of safety, in case the Santo André/Pera lagoons grew, and to protect the town from strong winds that blow in from the coast.

## SEARCH FOR AND COMPILATION OF INFORMATION

### COMPILATION OF INFORMATION

The compilation of information was carried out with recourse to various types of source and support. Documents, books on the development and characterisation of Santiago do Cacém, leaflets and tourist guides were some of the sources used.

The search for information was mainly based on graphic sources and particularly the oldest documents, especially old maps, tourist guides and old photographs. Images on tile murals, representing the city at the beginning of the 20<sup>th</sup> century, were also used.

Iconographic sources were also used, which allowed for the collection of various images depicting Santiago do Cacém's castle, showing the different phases of occupation and abandonment.

Some historical sources and studies about the urban and historical development of Santiago do Cacém put together by the Local Technical Office (Gabinete Técnico local – GTL) and the Revitalisation Project for the Region's Historical Towns – from the Old Castle to the New Castle.

Another interesting source is the website of the Santiago do Cacém municipal council, which contains some data and suggests a number of tourist routes, which give an image of the area.

A value chart was drawn up based on the information collected, making use of current photographs and contrasting these with old data wherever possible.

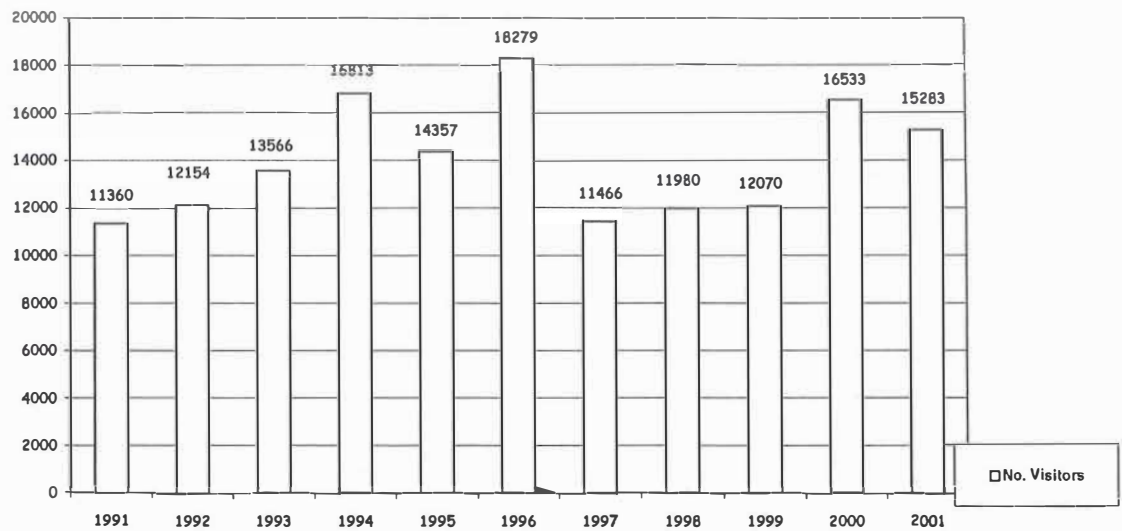
### SITUATION ANALYSIS

Santiago do Cacém is a city which, given its location and access, can serve as a stop-off point for those visiting the Alentejo coast. For whoever may be travelling between the North and South of the country, a stop-off here would require a short detour from the main road. *Miróbriga* is a must as a stop-off due to its historical and cultural significance and is often the main reason for passing through Santiago do Cacém. As well as *Miróbriga* Santiago do Cacém's castle is also much visited. A visit to the centre of the city is usually made because of a need to cross in order to reach the castle.

On analysing the statistics regarding visitors to *Miróbriga*, we can see that in the first half of the decade between 1991 and 2002, there was a constant increase in the number of visitors. In 1995 however there was decline in visitors followed by growth in 1996.

The second half of that period was affected by a large decrease in the number of visitors in 1997, followed by an almost imperceptible increase, which ended in 2000. 2001 saw a slight decline in the number of visitors to the site.

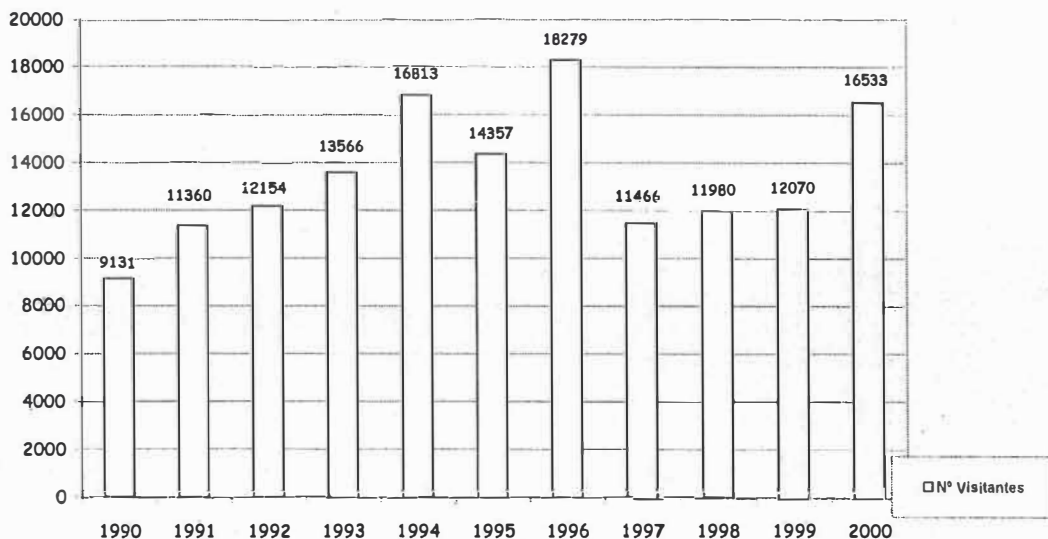
### VARIATION IN NUMBER OF VISITORS BETWEEN 1991 AND 2001



**Figure 7: Variation in number of visitors between 1991 and 2001**

The strong decline seen in September 2001, could help to explain the general decrease for 2001. Between August and September the number of visitors fell to less than half, a trend which continued until the end of the year.

### VARIAÇÃO DO Nº DE VISITANTES ENTRE 1990 E 2000



### VARIATION IN VISITS THROUGHOUT 2001

#### JANUARY

FEBRUARY  
MARCH APRIL  
MAY  
JUNE  
JULY  
AUGUST  
SEPTEMBER  
OCTOBER  
NOVEMBER  
DECEMBER

No. visitors

#### **Figure 8 – Variation in visits throughout 2001**

The variation in paid and free visits throughout the decade of 1990 to 2000 follows this trend, as is to be expected. The number of free visits did decrease however between 1997 and 1999, countering the increased general demand.

#### **VARIATION IN PAID AND FREE VISITS BETWEEN 1990 AND 2000**

Paid  
Free

#### **Figure 9 – Variation in paid and free visits between 1990 and 2000**

Analysis of the data for 2000 shows that there was an increase in demand for free visits between the months of January and May. This fact, followed by a strong decrease in April, is linked to demand for tickets from schools. The fall in April is related to the Easter holidays (about 2 weeks), when there is obviously no school.

The growth in number of paid visits is inversely proportional to the trend for free visits, reaching its highest point in August, which is traditional the holiday month.

#### **VARIATION IN PAID AND FREE VISITS IN 2000**

JANUARY  
FEBRUARY  
MARCH APRIL  
MAY  
JUNE  
JULY  
AUGUST  
SEPTEMBER  
OCTOBER  
NOVEMBER  
DECEMBER

Paid visits  
Free visits

### **Figure 10 – Variation in paid and free visits in 2000**

In a general analysis of visits (both free and paid) in 2000, we can see that the greatest peak is reached in August, and the month registering fewest visits is December. In general terms, the rate of visits on months with a greater number of visits coincides with a greater demand from schools and associations that choose these months to visit the archaeological site.

Given the large number of free visits we can consider that that the people who most often visit *Miróbriga* are part of the school population and associations that can gain free entry.

Looking at the graph of organised visits, this gives proof of the previous point. A large number of organised visits take place during school months, especially at the beginning of Spring, when the weather is less rainy. In what are traditional holiday months and at the beginning of the school year, organised visits fall off.

#### **No. OF ORGANISED VISITS IN 2000**

No. of visits

JANUARY  
FEBRUARY  
MARCH APRIL  
MAY  
JUNE  
JULY  
AUGUST  
SEPTEMBER  
OCTOBER  
NOVEMBER  
DECEMBER

#### **Figure 11 – Number of organised visits in 2000**

Lastly we can see that organised visits saw a substantial increase between 1999 and 2000, of over 100%.

#### **VARIATION IN NUMBER ORGANISED VISITS MADE IN 1999 AND 2000**

No. of organised visits

#### **Figure 12 – Variation in number organised visits made in 1999 and 2000**

Interpretation

##### **Theoretical Definition**

The highly symbolic history of Santiago do Cacém and its adjacent structures motivated the choice of these components. This component is always linked to historical and cultural motifs, not only elements that mark the landscape, but from

stories and legends that are associated with it. Some of the cultural elements only exist for their symbolism, but other, due to a change in their original functions, have a very specific symbolism.

Various interesting cultural components were defined based on symbols and the way they have developed in the population's imagination.

The definition of the area also followed this principal. Based on the historical importance of the old town as a municipality, the territory was defined as the that of the Santiago do Cacém municipality, as its present-day borders closely resemble those mentioned in historical records.

### **Interpretative Planning of the Territory**

The territory that was studied and presented in Activity 2 refers to the present-day municipality of Santiago do Cacém, and specifically to the city.

### **Location of the Santiago do Cacém municipality.**

#### **Figure 13 – Location of the Santiago do Cacém municipality.**

Source: Atlas do Ambiente (Atlas of the Environment), adapted.

The territory's administrative borders suffered various alterations over time, which was not a point of analysis. Only resources were considered, and some cases were presented as examples.

All the municipality's representative resources are located within the present-day administrative borders,

### **Location of the parishes within the Santiago do Cacém municipality**

#### **Figure 14 – Location of the parishes within the Santiago do Cacém municipality**

Source: Atlas do Ambiente (Atlas of the Environment), adapted.

The area that was described in most detail is the present-day city of Santiago do Cacém. This city has a very specific local history, with both a physical and historical development, very much of its own. The interpretation of the territory of the city was based on its historical and urban development and on the analysis of its direct surroundings.

With this in mind, not only were the city's historical buildings recognised and recorded, but also buildings that are characteristic of the rural way of life around the city. Such is the case with farms and homesteads (montes).

## **ANALYSIS OF RESOURCES OF INTEREST**

Three categories of cultural resources of interest were defined:

**WATER SUPPLIES**  
**URBAN LIFE**  
**RURAL LIFE**

These three components make up the foundation of the natural resources in Santiago do Cacém and its surrounding area. Each component was then divided into various smaller and more specific components, which aim to represent all cultural values present in this area.

#### WATER SUPPLY

- WIND AND WATER MILLS
- WATER-FOUNTAINS
- WATER DEPOSITS

The component referred to as water supply, directly related to urban life, is divided into four types of building. This component is defined by cultural elements that are found in the study area and which are directly related to the milling of cereals and to the supply of water.

Today these elements are seen, on a collective level, as symbols of times gone by or as places of leisure. Windmills, and old water mills are stamped in the memory of many of the people and are sources of inspiration for songs and stories.

The windmills are a recurring feature of the landscape around the city, and on a lesser scale, throughout the whole area. These structures represent a series of invaluable cultural references, given that they are an obvious feature on the landscape, and are both educational and symbolic.

Some of these mills, despite being in ruins, have relevant picturesque and symbolic value. Others have been transformed into homes, in a number of diverse ways. Adaptations and reconstruction remains significant however as it has allowed for a diverse number of uses when compared to what the structures were originally intended for.

The water mills are almost all in ruins, but some of them are now part of renovation projects. These structures not only offer an educational opportunity, but can serve as a place of leisure, as almost all of them are located in pleasant areas.

The interest in these mills is evident from the fact that they only run on a seasonal basis. This aspect, which is very visible in their architecture, gives these structures further value.

The fountains, which were a focal point in city life before the present-day water supply was laid down, still serve as a meeting point for locals.

Fountains were an essential part of daily life, not only as a source of drinking water, but for their role in the city's social life. They were a meeting point where communication was exchanged. For women, fountains had the same social function that taverns did for men.

Water deposits are recent structures, but are a notable feature of the Alentejo landscape, where the Santiago do Cacém municipality is located. This is the image and symbolism that the council, which built the present water deposit, wanted to preserve. Even though its architecture differs from the traditional, the objective of making it a feature of the landscape was attained.

## URBAN LIFE

- MILITARY
- POLITICAL AND ADMINISTRATIVE
- URBAN AND ARCHITECTURAL
- SERVICES
- LEISURE AND CULTURE
- RELIGIOUS - CHURCHES

The urban life component, as the name indicates, refers to the elements directly related to life in the city, and is defined as cultural values of interest. Six sub-groups were created after an analysis of this component.

Marking the beginning of historical and urban development of the city, we have the military component. The only structure in this group is the castle, as there are no signs of walls on the outskirts of the town.

However, the castle, which underwent important renovations and different stages of conservation, holds a place in the memory of the people as one of the most important cultural elements of Santiago do Cacém. This is not only because of its symbolism, but also because the legends of the region refer to this structure.

The castle presently plays an important role in the life of the people, as the municipal cemetery is located there. Founded in 1834 as a result of a law that prohibited burials at churches, the cemetery was built here as, at the time, it was a completely abandoned area. However, this change turned the castle and its surrounding area once again into a focal point for the community, strengthened by the fact that the parish church was connected to the castle walls.

Initially part of the military component, the political and administrative component was made into an individual group due to historical circumstances. Here we present some visible symbols of power from that period.

The one that presents the strongest symbolism is the whipping post. At some point in the past, it was put up with one of the columns from Miróbriga, connecting the old city and the new city. The placement of the present whipping post, given that it was only from the middle of the 19<sup>th</sup> century, further accentuates the symbolism.

In these terms, the Casa da Câmara (Municipal Building) was also regarded as a cultural landmark, as it is strongly tied to the history of the city as a municipality.

The urban and architectural component sought to individualise some of the aspects featured in the development of the city. Some private palaces were included in this component, as were some urban elements, such as the square Praça do Conde de Bracial, the old centre of the city and centre of life until the end of the 19<sup>th</sup> century. Also featured is the road system, both in the city as well as access beyond it.

The service component aimed to include all forms of services that contributed to the development of the town. This component includes structures ranging from the old quarters of the fire brigade to the train station, which seek to emphasise

the collective memory of the people, but they are important pieces of architecture.

The leisure and culture component, which is intimately related to the urban and services components, seeks to focus on cultural elements, used for leisure, which include those that have already disappeared and those that are still present.

The bullring, which has since disappeared, is included in this category. A photograph of it still remains.

Also included in this component could be the fountains, because they functioned as a meeting point, mostly related to work (to get drinkable water, wash clothes). This component was planned only to include places of leisure, past and present, that permitted the gathering of the people. The Santiago market was not included. This market still runs today and has colourful stories relating to it.

Lastly, the religious – churches component, highlights and is an accumulation of the life and urban development of the city. The churches and chapels are a very urban element of the city, and reflect the religiosity of the people.

The location of the churches, their development in terms of architecture, their organs, which change depending on the season, and the attendance of social classes are all indicative of the history and development of Santiago do Cacém.

#### RURAL LIFE

- -RELIGIOUS - CHAPELS
- -CIVIL-FARMS AND HOMESTEADS
- 

The rural life component refers to the rural life directly related to the city, and is divided into religious and civil categories.

In the religious component, the chapels are a symbol of the importance of religion in rural life. They are also intimately related to urban life, as they are venues for pilgrimages and processions carried out for and by the urban population.

The city of Santiago do Cacém is directly linked to three chapels: S. Pedro, near the castle, on the hillside opposite the urban sprawl; S. Sebastião, in ruins in the 16<sup>th</sup> century, still exists today, outside of the city; S Brás, a Medieval and modern chapel that is related to disease, built within the present-day ruins of *Miróbriga*.

In terms of rural life, we can still mention 2 very distinct elements: the farms and homesteads.

The rural – farms component has a direct link to urban life. These farms can only be found outside of Santiago do Cacém and result from a social-economic phenomenon associated to the rise of the urban bourgeoisie at the end of the 19<sup>th</sup> century. They transported to the rural world the values and architecture of the urban world. As the farms are places of leisure, their architecture shows the need to relax and make use of the country.

Since some of the structures are an important feature of the landscape around the city, some of the farms have been renovated and turned into hotels and pousadas (country inns).

On the other hand, the rural – homestead component tries to feature a traditional type of rural home, which can be found throughout the municipality and in the city's suburbs. Some of the homes were replaced by the building of others, but many others are a feature of the surrounding rural landscape.

A homestead is characterised by a very isolated home in the middle of a large property. The particular type of property and farming at that time led to the existence of a series of smaller scattered homes, not located far from each other. However, the development of farming and the need for travel to urban centres led to the abandonment of these homes. Others are being renovated, though sometimes for uses other than those for which they were built. In many cases, they have become a second home, to be occupied only during holiday periods.

The link between the present town of Santiago do Cacém and the ancient town of *Miróbriga* is made through a number of architectural features, which were recycled in many different places and at different times.

One of the most significant features is, without doubt, the ancient Esculapio inscription that was set, whether intentionally or not, on the front of the old hospital. Apart from this, there is an old column serving as a whipping post, as well as four slabs that are being used to decorate the Sra. do Monte fountain.

In another way, the presence of the S. Brás sanctuary within the confines of the Roman city and yearly procession to the site perpetuates the link between the old and the new cities.

*Italy.*  
*Cortona Municipality in Tuscany. Arezzo.*  
*The Archeological Park of Cortona.*

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## Stage 1- Territorial Framing

### Surface and Borders (fig. 1.6 – fig. 1.8)

The territory of the Municipality of Cortona is situated in Tuscany and belongs to the province of Arezzo. It has an area of 34,123 hectares and is bound by Umbria (Castello, Umbertide, Lisciano Niccone, Tuoro and Castiglion del Lago) to the east and the south, by the province of Siena to the south-west and by the province of Arezzo (by Foiano to the west, by Castiglion Fiorentino to the north-west and by the Municipality of Arezzo to the north).

### Geology, Morphology and Borders (fig. 1.9)

The town surface is characterized by three different areas:

- a mountainous pre-Appennine area to the north (an area of about 13,200 hectares). Here we find the peaks of Monte S. Egidio and Monte Ginezzo;
- a hilly area next to the reliefs and in the Chiuso area (an area of about 9,500 hectares)
- a flat area (an area of about 11,400 hectares) which constitutes a part of the Valdichiana.

The mountains mainly consist of sandstone and marl. Only to the south of Cortona do we find a small area of compact limestone (Alberese). These soils are tertiary and belong to the Eocene period. Near the Cortona hill Pliocene soils are found.

The plain generally consists of alluvial soils.

The hills of the Chiuso are situated in the southern part of the municipality. They consist of clayey tufa of Pliocene origin. Only the Pietraia hill consists of marl of Eocene origin, while in the Farneta hills we find traces of lignite layers.

#### **Valdichiana Reclamations (fig. 1.10)**

In ancient literary sources the Valdichiana was always mentioned as one of the breadbasket of the Etruscans earlier and of the Romans later. It was very rich and became an important trade junction.

In the beginning, part of the water of the Arno poured out on the Arezzo plain. When it joined the water of the streams, it used to form a great mass of water which altered the present course of the river Chiana and flew into the Tiber.

Starting from the early Middle Ages, the progressive absence of the optimisation of the regime of the water made the Valdichiana progressively marshy. This territory partly coincided with the plain of Cortona. Only some hills were left stranded and were used as harbours for the navigation (Creti, Cignano, Fasciano, Porto and Bettolle).

At the time of Dante a branch of the Arno which flowed into the Tiber must have ceased to exist and, in the thirteenth and fourteenth centuries, the situation got even worse.

The first people to think of the reclamation of the valley were the Florentines. Starting from 1388, they ordered the digging of a drain to collect and drain the water of the marsh into the Arno. Leonardo da Vinci also studied the possibility of a reclamation project and drew two very famous maps of the Valdichiana. Later the reclamation works went on thanks to the Signoria of Florence, who got the marshy soils from the Communes with the promise to reclaim them. Distinguished engineers and men of science followed one another in the works, from Antonio Ricasoli to Michelini, Torricelli, Antonio Tasi and Giovanni Franchi. At the end, in 1788, the Grand Duke of Tuscany entrusted Vittorio Fossombroni with the works. He worked out a new hydraulic plan and the conclusive works were directed by Alessandro Manetti.

In the middle of the nineteenth century the valley was fertile again as it used to be in the Etruscan period.

#### **Climate (fig. 1.11)**

The area of the territory of Cortona has the characteristics of the sub-Mediterranean Apennine environment, with minima of summer rainfall and maxima of autumn-winter rainfall. In fact the pluviometric characteristics offer data between 500 and 1,500 mm per year. Summer temperatures can be over 30°C in July and August and reach 0°C in January.

#### **Hydrography (fig. 1.12)**

The water of the territory of Cortona flows in two opposite directions which are divided by a chain of mountains. This chain starts at the border of Castiglion Fiorentino and stretches in a concave bend near Lake Trasimeno. On the northern side the water flows into the Tiber, while the rivers or streams of the southern side flow into the Chiana and later into the Arno.

There are no big rivers on either sides. Only the streams of the southern side are important in some way, as they collect the water of the wide basin. The basin has

a surface area of about 4,500 hectares and the streams discharge it in the underlying Chiana. On the southern side the most important are the Mucchia, the Essolina, the Musarone, the Esse, the Rio di Loreto, the Rio di Cegliolo, the Reglie di Val di Spera e delle Chianacce.

Among them, we must take into particular consideration the Rio di Loreto which flows near the area of the Tumuli. It has its origin in the ditch of the Guglielmenesca and its level is raised by the ditches of the Cappuccini, of Gonfia-nuvole and the Rio di Cegliolo. It flows into the reclaimed area of Burcinella, after running for about four and a half kilometres. In its last stretch along the valley, it was canalised again at the time of the Grand Duke Leopoldo. The Nestoro, the Minimella, the Minima and the Nicone flow on the northern side, too. They are tributaries to the Tiber and discharge their water there, after crossing the province in Umbria.

#### **Road System (fig. 1.13)**

The Florence-Rome (FS) railway crosses the Municipality of Cortona in its southern side.

The main roads which cross the Municipality are:

- 1) Florence-Rome motorway
- 2) Siena-Perugia clearway
- 3) Umbro-Casentinese provincial road (Arezzo-Orvieto)
- 4) Lauretana provincial road (to Cortona-Montepulciano)
- 5) Senese provincial road (to Cortona-Sodo-Fratta-Foiano).

The other roads are municipal roads of I, II and III category and mule tracks.

#### **Land Exploitation (fig. 1.14)**

We can divide the various kinds of exploitation of the land with its vegetation as follows:

- industrial use (quarries, etc.)
- living use
- agricultural use

Below the altitude of 300 metres, where the ground is level, we find sown fields, with limited areas devoted to orchards or vineyards. Agriculture is intensive and mainly cereals, sunflowers, tobacco, maize, beet-root, vegetables and fodders are cultivated.

At an altitude of over 300 metres and up to 500 metres, the hilly terraced belt starts, where olive trees are grown.

- forest use

In some areas of the plain we find oak woods, woods consisting mainly of oak, heather and broom and woods consisting mainly of Turkey oak. On the hill of Sepoltaglia and of the Val d'Esse we find small forests of cluster pine. Chestnut and beech trees are situated at higher altitudes, over 500 metres. Above 800 metres fir trees begin to appear.

#### **Fauna (fig. 1.15)**

##### **Wild fauna**

Only the main species, which are important from the game point of view and for the possible protection, are taken into consideration:

- Birds (Kestrel, Buzzard, Sparrowhawk, Pheasant, Partridge, Woodcock, Turtledove, Barn Owl, Owl, Long-Eared Owl, Horned Owl, Green Woodpecker, Hooded Crow, Jay, Great Tit, Thrush, Blackbird, Robin, Blackcap, Wagtail, Goldfinch, Chaffinch)

- Mammals (Wild Boar, Squirrel, Porcupine, Coypu, Weasel, Hedgehog, Hare, Mouse, Fox)
- Amphibians (Toad, Frog, Tree Frog)
- Reptiles (Grass Snake, Viper, Lizard)

### **Domestic Animals**

Only breeding animals are taken into consideration (Pigs, Cattle, Sheep, Poultry, Equines).

### **Stage 1 – History of Cortona**

#### **The Origins: Villanovan Period (eighth-sixth century B.C.) (fig. 1.16)**

The origins of the town (seventh century B.C.)

The recent discovery of a Villanovan hut in Via Vagnotti, in the town centre, seems to confirm that the proto-historic settlement developed exactly in the same place where the centre of the Roman and Hellenistic settlement was situated, and where the Medieval and modern town has continued to develop.

#### **Etruscan Period: Archaic Phase (sixth century B.C.) (fig. 1.17)**

After that period, the most ancient archaeological documentation dates back to the first quarter of the sixth century B.C., when the three big tumuli of the plain appeared, the one in Camucia, on the road to Chiusi, and the First and the Second Tumulo del Sodo, on the road to Arezzo. These findings are evidence of the formation of a narrow aristocratic class in Cortona, too, which was aware of its royal role and its hegemony over the rest of the social structure.

#### **Etruscan Period: Classical Phase (fifth century B.C.) (fig. 1.18)**

In the fifth century B.C. the town and the territory of Cortona seemed completely formed, but only in the fourth century B.C. could the town plan be perfectly discerned due to the building of the walls. They were huge square walls and stretched along the perimeter for over 3 kilometres. Today they are still tangible evidence of an extraordinary continuity in the shape of the town between the classical and the present ages.

The best known town door is the Porta Bifora. It has a double fornix and it was investigated between 1986 and 1990 during restoration works which allowed its reopening. Later the door became a proper 'triumphal door' of Cortona from which two important roads branch off, one to Chiusi and one to Arezzo.

#### **Etruscan Period: Hellenistic Phase (fourth-second century B.C.) (fig. 1.19)**

The town was at its height during the years between the Hannibal war, which took place near Cortona (the Trasimeno battle was in 217 B.C.), and the acquisition of Roman status, in 89 B.C.

While in Etruria the ancient servants were set free, the war events left the great aristocratic families of Cortona in a dominant position. They became the protagonists of a new period of splendour in the town. The late-Hellenistic aristocracy took part in the town planning, the public building and in the private sector and above all with works of great ideological impact, such as the tombs. The members of this class were laid again in the great archaic tumuli or they imitated them in the new Hellenistic shapes, as we can see in the 'Tanella' di Pitagora, 'Tanella Angori' and Tomba di Mezzavia.

#### **Roman Period (first century B.C. – fifth century A.C.) (fig. 1.20)**

As soon as it became Roman, the territory of Cortona had a fully compact shape.

The literary and archaeological sources show Cortona as a quiet Roman municipium. The most relevant building evidence is represented by the great villas, the best known of which is the one at Ossaia. At the end of the republic it was owned by the Perugia family of Vibii Pansae. When they passed, it became part of the imperial fiscus, probably because it had been left by will to Agrippa Caio and Lucio Cesari's children. The villa, which was abandoned after the first half of the fifth century A.C., has a mosaic flooring dating back to the years between the first century B.C. and the fourth century A.C.

**The Middle Ages and the Reinassance (sixth-fourteenth century) (Fig. 1.21)**

In 1200 Cortona became a Commune, like many other towns, ruled by a podestà and a capitano del popolo. Also the citizens of Cortona were divided between Guelphs and Ghibellines and they soon allied themselves with the people of Perugia, in order to resist the supremacy of Arezzo. The rivalries with Arezzo started in that period. In 1232, after allying with the Florentines, the people of Cortona entered Arezzo triumphantly. They took away the door chains which they used in their own doors as a symbol of trophy. But in 1258 the people of Arezzo, with the help of the Guelphs of Cortona, occupied Cortona, sacked it and burnt its houses. In 1261, with the help of the Sienese and under the leadership of Uguccio Casali, the fugitives of Cortona entered Cortona again through the Porta Bacarelli, taking the town by storm from the people of Arezzo. It was the on the 25<sup>th</sup> of April, the festival of St Mark, and since then the name of the evangelist has been chosen as the patron saint of Cortona. The year 1325 is another important date for Cortona: after verifying the impossibility of a peaceful coexistence between Cortona and Arezzo, Pope John XXII created the new diocese of Cortona and appointed Ranieri Umbertini as its first bishop. There is a lot of cultural evidence of the period, like the Laudario di Cortona, one of the most stimulating and complete collections of Laude set to music. From 1325 to 1409 Cortona was ruled by the Casali family, which bound its name to the building of the homonymous Palazzo.

**Medicean Period (fifteenth-eighteenth century) (fig. 1.22)**

The history of Cortona has merged with the one of Florence since 1400. We cannot find any specifically significant historical event starting this, even though in 1509 the assault by the imperial troops led by Prince Filiberto d'Orange is a memorable record. With the establishment of the rule of Cosimo I Medici and until the subjugation of Siena (1555), Cortona became an important military centre. This can be seen from the building of the new Medicean fortress of the Girifalco (1549) on the remains of the Medieval Rock, after a plan by Gabrio Serbellone and Francesco Lavarelli. Starting from the second half of the sixteenth century Cortona was the seat of the Capitanato and had the title and the privilege of a city.

The artistic, cultural and economic activities flourished, as we can see from the momuments, palaces, churches and paintings, works by artists like Luca Signorelli, Pietro Berretini or architects like the Sienese Francesco di Giorio Martini.

**Lorraine Period (eighteenth-nineteenth century) (fig. 1.23)**

Under the command of the Lorraine family in the Grand Duchy of Tuscany, great public works and infrastructures were made across the Valdichiana. First of all, the Lorraine bound their name to the progressive reclamation of the marsh and the subsequent optimisation of the agrarian spaces. They built some farmhouses specializing in the farming which took the name of 'leopoldine', after the name of

Gran Duke Pietro Leopoldo. Today they still characterize the plain of Cortona from the building point of view.

In 1727 the Marcello brothers, Filippo and Ridolfino Venuti, founded the Accademia Etrusca. It was the first scientific institution which was interested in the Etruscan people and since then it has numbered important people, from Voltaire to Winkelman to Muratori to Pallottino among its members. One of its meritorious action was the display of various works, among which the translation of the famous Encyclopaedia by Diderot, edited by Filippo Venuti. In 1799 Cortona rose against the French and Polish soldiers sent by the 'French Jacobins' by the acclamation 'Viva Maria', after Cortona had been attacked by four thousand Polish soldiers from the army of Napoleon. In the following century the people of the territory of Cortona took part in the Risorgimento risings and in the plebiscite of March 1860 they voted for the annexation of the Grand Duchy of Tuscany to the Reign of Vittorio Emanuele II.

## **Stage 1- Historical Documentation**

### **Historical Cartography**

The territory of Cortona has been represented over the time by a lot of draughtsmen who have left us a large quantity of historical maps. The most important is the map of the Val di Chiana by Leonardo da Vinci of the sixteenth century, preserved at Windsor Castle (fig. 1.24). It represents also the town of Cortona and the river Loreto, on whose sides we can see the directions to the Tumuli del Sodo, obviously already known. Many other historical maps, mainly of the seventeenth and eighteenth centuries, are kept at the Archivio Storico di Cortona, important cultural institution of the town and one of the most important in Tuscany, and in the archives of the Istituto Geografico Militare di Firenze. Both of them have placed all the existing cartography at our disposal and we have used the most significant documents, among which some are unpublished (fig. 1.25 – fig. 1.55).

### **Ancient Studies on the Etruscans and the Romans**

Since ancient times all the Cortona area has been an object of deep studies and cultural interests by local scholars, collectors, experts and travellers from Europe. In the sixteenth century already the famous artist and architect Giorgio Vasari visited Cortona at the Tanella di Pitagora. Many have also left a remarkable graphic documentation, like Anton Francesco Gori, who published the impressive work 'Museum Etruscum' with drawings of some archaeological monuments of Cortona in the middle of the sixteenth century. In 1727 one of the most important Italian and European cultural institutions was set up, the Accademia Etrusca, founded by Onofrio Baldelli and by the Venuti brothers. It attracted a lot of scholars, experts and collectors who made Cortona one of the most flourishing towns from the intellectual and cultural points of view in the following centuries. It is still working, together with the Museo dell'Accademia Etrusca, which boasts archaeological and artistic collections which are among the most important in Tuscany (fig. 1.56 – fig. 1.59).

### **Travellers in the Land of Cortona**

In ancient times there were a lot of visitors and travellers in the territory of Cortona, which aroused great interest as a landmark for its archaeological monuments and the Etruscan findings. These aroused curiosity and attracted many travellers and writers, mainly from Great Britain, among whom G. Dennis, who left a fundamental publication of his trips in the Etruscan territory, the writers

D. H. Lawrence and H. James and other travellers of the nineteenth century, also Italian.(fig. 1.61 – 1.69).

### **Historical Photos**

Also the photographic documentation is rich and is important for our research. Some was recovered among old postcards of the beginning of the twentieth century, on publications of the Archivio Storico and at the Biblioteca del Comune di Cortona (fig. 1.70 – fig. 1.77) and thanks to the photographic works by scholars and inhabitants of Cortona. We have also profited from some photographers who, in the course of the last century, produced a precious photographic documentation of the territory and of the activities which took place here, such as the fundamental work by Duilio Peruzzi, who gave us his images on a Cd 'Colture & Culture'. (fig. 1.78 – 1.91)

### **Aerial Photos**

The Istituto Geografico Militare di Firenze has placed an important aerial photographic documentation of the territory of Cortona at our disposal. The most important aerial photos for the study of the archaeological areas taken into consideration are the photograms shot from the flights taken in 1941, which allow a visualization of the comparison data with the situation of the territory of the current years. The documentation has been completed with a series of aerial photos shot from the flights of the 80s and the 90s, which show an extensive view of the areas taking into consideration the current times. (fig. 1.92 – fig. 1.108)

### **Stage 1 – Resources of the Territory**

#### **Socio-Demographic Survey**

#### **Demographic Trend**

Questionnaire on the Archaeological

Park

#### **Economic Survey**

Agricultural Industrial Craftsmanship

Activities

Tourist Activities

#### **Thematic Maps**

Historical-Artistic Property

Agricultural Productive Handcrafted

Activities

Cultural Resources

Sports Activities

### **Socio-Demographic Survey**

#### **Demographic Trend** (fig. 1.109 – fig. 1.110)

The demographic analysis on the territory of Cortona concerns the period from 1551 to 2001. The data show an increase in the population over the centuries until 1951 with 31,910 inhabitants, then a remarkable decrease in 1961 to 26,718 and then a gradual light decrease until the 22,494 inhabitants of 2001.

#### **Questionnaire on the Archaeological Park**

In order to awaken the local population to the park, a questionnaire has been sent to a representative sample of population. The form consists of two parts: the first concerns personal information and the second contains requests for proposals. It was sent by mail and collected mainly by an operator.

**Text of the questionnaire sent to the resident and non-resident population of the Municipality of Cortona**

*Dear Sir/Madam,*  
*the research group of the European project of the Archaeological Park in the municipal territory would like to inform you about the activities the Municipality of Cortona is organizing. Your cooperation would be appreciated, with observations and suggestions, through the filling in of a thematic questionnaire.*

*A collaborator of ours will collect the enclosed questionnaire, upon appointment.*

The Municipality of Cortona is the beneficiary of public funds for a new Archaeological Park in its municipal territory.

The main activities which concern the planned Archaeological Park will be:

- the new Museo Archeologico at Palazzo Casali;
- excavation, recovery and restoration of the Tumulo del Sodo II (575-570 B.C.);
- excavation and recovery of the Roman Villa at Ossaia (second century B.C. – fifth century A.C.).

These add to those already existing concerning the Tumulo del Sodo I, Tumulo di Camucia, the Museo dell'Accademia Etrusca, and the Tanella di Pitagora. The park will have a vast perimeter which will be traced following the directions given by some surveys. These were previously acquired and include items such as the prospectings requested by the Municipality on the occasion of new building licences, the prospectings of the Soprintendenza and places where there is the certainty of the existence of earthed archaeological finds of great interest.

Besides the ministerial funds of about 2,500,000.00 , **the new Archaeological Park** is supported by two funds of the European Commission on the Culture 2000 Programme (reference year: 2001). These funds have activated a methodological cooperation with other European countries: Spain, Portugal, Greece and France.

The first European contribution, of about 150,000.00 , **is being used to** coordinate a research on '*Archaeology without barriers*' dealing with the problems concerning access of the disabled to an Archaeological Park.

The second European contribution, of about 300,000.00 , **was given to Spain** which coordinates the project '*Workshop on the landscape and on the cultural and economic resources of various European archaeological sites*'. The Municipality of Cortona is an active partner in that project. It deals with problems which bind an Archaeological Park to the landscape, and not only the historical landscape.

Researches about some innovative activities are being carried out. They tend to create a relationship between an Archaeological Park and the daily life of the citizens, fulfilling the growing interest in the values of the environment to be lived in and also as culture.

The enclosed questionnaire deals with these aspects and aims to involve all the new and old inhabitants of Cortona in the research, trying to produce an analysis of the evolution of the municipal territory in the last 10 years.

Phenomena such as the increasing spread of farmhouses and the modification of the structure of the population, which is being enriched by foreign people mainly from Europe, determine a variation in the cultural interests of the population. The new Archaeological Park must take this into consideration, asking for the opinions of the immediate interested parties.

A sample of inhabitants which statistically satisfy the typologies of the current inhabitants of Cortona has been identified and the enclosed questionnaire is addressed to them. The results of the survey will directly influence the two European projects.

An international meeting where such results will be shown and discussed with the European partners has been fixed for 7 June in Cortona. The presence of all those who are interested in the European activities will be appreciated.

**Form for the participation of the resident and non-resident population in the activities of the Archaeological Park**

1. Age range                      **Children/Youngsters**   **Adults**                      **Elderly**  
2. Occupation                      **Employee**                      **Professional**  
   **Retired**  
   **Unemployed**                      **Student**  
3. Education                      **Compulsory schools**   **Secondary schools**   **University**  
4. How long have you been living in the Municipality of Cortona?   **more**   **than**  
10 years  
   **less than 10 years**                      **non-resident**  
5. Place of origin  
   City \_\_\_\_\_ Country \_\_\_\_\_  
6. How do you spend your free time?  
7. In your free time, do you take part in the cultural activities organized by the Municipality of Cortona?  
If                      you                      do,                      which                      ones?

If you do not, would you like to be informed about such activities to be able to take part in them?

8. Would you like to involve your family in such activities, too? \_\_\_\_\_

- Children**  
   **Youngsters**                      **Elderly**  
9. Do you know that there are some archaeological sites in Cortona?  
10. How did you know about the archaeological sites in the Municipality of Cortona?  
11. Do you know exactly what the archaeological property of the Municipality of Cortona consists of, the ones which have been discovered up to now?  
12. Have you ever visited the Museo dell'Accademia Etrusca?  
13. Do you think that an Archaeological Park can contribute to the safeguard of the environment?  
14. If you think it can, which of the following activities do you think the most suitable to integrate environment and Archaeological Park (please put a progressive number next to them)?

- \_\_\_\_\_ Conferences  
\_\_\_\_\_ Sports activities  
\_\_\_\_\_ Musical shows  
\_\_\_\_\_ Theatre

- ☐ Guided visits to the workshops of experimental archaeology  
☐ Thematic routes  
☐ Other

15. In the case of thematic routes, which ones would you like to suggest, besides the ones concerning craftsmanship, oenology, historical gastronomy?

16. Are you in favour of awakening the new generations to the archaeological values of their territory and to the environmental safeguard through didactic courses on archaeology in school and in archaeology school-camps in the summer?

17. Do you have any other suggestion?

18. Would you like to take part in the activities concerning the Archaeological Park of Cortona seen as a safeguard of the environment and possibly involving also the members of your family?

### **Results of the questionnaire concerning the involvement of the resident and non-resident population in the activities of the Archaeological Park**

The criteria to select the sample of the population tend to represent in the most reliable way the potential users of the Archaeological Park. The sample was divided in two main groups: resident and non-resident population. Inside each of them, age ranges, education, type and quality of the employment (low income, high income, professionals, employees), nationality... all these parameters have been taken into consideration.

The questionnaire, after the request for some personal data, tended to ascertain the knowledge of the archaeological sites by the interviewees and opened the possibility of ideas and proposals to improve the park.

Out of fifty interviewees only half answered, a sign of a scant interest from the beginning.

Among those who answered, foreign people were the most willing, delivering personally the questionnaire to the office responsible for the project.

As far as the knowledge of the archaeological monuments is concerned, most of the Italian interviewees state they know the archaeological areas and the Museum thanks to school trips.

Foreign people know about the Museum and the Archaeological Park thanks to personal visits. All of them are ready to cooperate in possible promotional activities.

Among the most recurrent promotional proposals for the park we find:

#### **Musical routes**

#### **Thematic routes (churches, rural society, oenology-gastronomy)**

**Strengthening of information (inside the museum, on the press, websites, billboards on the territory)**

#### **Strengthening of the didactics to children and adults**

#### **Reconstruction of music and sports events of the ancient civilizations**

#### **Association of environmental routes with archaeological ones**

#### **Decentralization of the promotional activities of the park into the territory, too.**

### **Economic Survey (fig. 1.111 – fig. 1.116)**

The results of the economic survey are founded on a comparison between some statistical data given by the competent territorial observers. If we compare the list of the typologies of firms existing ten years ago and the current one, we essentially see the progressive reappearance of a lot of farms (which had

previously disappeared following the great flow from the country at the end of the 50s). These farms were converted into farmhouses and sometimes produce typical products of the area. The progressive interest of the foreign market in rural and naturalistic environments is visible. They are often situated near the best known great art centres and are specializing to meet the new requirements with local offers.

### **Tourist Activities**

Tourism is a remarkable resource for the Municipality of Cortona and important allied activities (trade, craftsmanship, agro-industrial activities) are linked to it, even though they are susceptible of further and considerable improvement. The strong bond between the tourism resources and the environment favours the promotion of all the productive skills, human as well as cultural of an area. It makes the tourism distribution channels available for the promotion and sale of products and services in other sectors.

The idea is to move towards a tourism characterized by the capability to make the best of environment, culture and of the relation between resources/production/culture.

The development of homogeneous tourist areas is establishing itself more and more, without any consideration of their administrative borders. In these areas the strong point is the bond of territory-culture, which is also the reference point for any kind of intervention.

We must meet all that with marketing strategies to make the best of the single resources and tourist attractions which 'twirl' around the territory. Tourism should improve 'places', stimulate the development of new economic activities (not necessarily innovative ones, they can be recovered from the local tradition) to bring deserted areas to life again, to revitalize the historical town centres and some areas (in our case the Archaeological Park) creating real marketing territorial plans. That way different types of users could be linked to space and time characteristics of the territory during the different times of their lives.

At this point we must not forget that the most important goals can be attained only through coordinate activities between local authorities (in our case the Municipality of Cortona), Provincia di Arezzo, Regione Toscana, Azienda Autonoma per il Turismo, Soprintendenze, managers of receptive spaces and of private enterprises. Among the territorial marketing strategies which have already been undertaken, aiming to recover and offer the various potentialities of the territory, especially the cultural ones, we find:

*Coordinated actions between Local Authority (Municipality of Cortona), Provincia di Arezzo, Regione Toscana, Azienda Autonoma per il Turismo, managers of receptive spaces and of private enterprises;*

*Studies and market researches;*

*Creation of a tourist observatory;*

*Improvement of the infrastructures and transport;*

*Revitalization of town centres;*

*Improvement of products and typical activities;*

*Seasonal adjustment of tourism;*

*Easing of town centres;*

*Timing of cultural events;*

*Promotion of editorial initiatives and the image strategy;*

*Promotion of a sports, study and school tourism;*

*Promotion of a cultural tourism;*

*Promotion of a territory which looks like a spread museum;*

*Verification.*

### **Thematic Maps**

The territory of the Municipality of Cortona comprehends a great architectonic, archaeological and artistic heritage (fig. 1.117 – fig. 1. 150). At the moment the great cultural tradition allows a series of cultural activities promoted by the Municipality and by the local authorities (fig. 1.170 – fig. 1.176). A complete range of hotels and farmhouses (fig. 1.163 – fig. 1.165) and the possibility to enjoy the various typical productive activities (fig. 1.151 – fig. 1.162) of the region supports this. The oenological and gastronomic activities (fig. 1.166 – fig. 1.169), the craftsmanship activities and the folkloristic (fig. 1.177 – fig. 1.180) and sports activities all play a role.

### **Historical-Artistic Property**

The particular history of Cortona, which sinks its roots in the Etruscan reality but enjoyed a great splendour in the Middle Ages and even more during the Renaissance, gives the tourist the possibility to enjoy a series of thematic routes. From the archaeological, urban and extra-urban one, of the Etruscan and Roman monuments, to the historical-artistic one, of the monasteries and the civil buildings, to the pictorial one, characterized by the great paintings kept inside the Museo dell'Accademia Etrusca and the Museo Diocesano, or inside the holy and civil buildings of the town.

### **Productive Activities**

The Municipality of Cortona has an economy characterized by a series of activities which can be divided as follows:

Agriculture (cereals, tobacco and maize);

Tertiary: building sector; retail trade; hotel sector and farmhouses (these are remarkably increasing in the last years); craftsmanship (terra-cotta works are noteworthy); production of typical products with retail sale and wholesale (in particular local wine, chianina meat and pork). Underdeveloped is the industrial sector, mainly linked to the gold working

### **Cultural Resources**

#### **Activities in the Cultural Assets**

The inclusion of the new museum of the town and of the territory of Cortona (whose opening is due in 2003) in the Accordo di Programma Quadro between State and Regione Toscana and the subsequent funds of the Archaeological Park through the L. 513/1999 have made the Municipality of Cortona leader of an innovative project to establish the Archaeological Park. This agreement is a model of cooperation between different parties of the State of political, administrative and national importance. The parties are the Municipality of Cortona, the Soprintendenza Archeologica per la Toscana, Regione Toscana, Provincia di Arezzo, Autorità di Bacino dell'Arno, according to law 59/97 and following legislative decree 112/98 concerning the decentralization of the Beni Culturali.

Every year the Municipality of Cortona, which is the President of AMAT (Associazione dei Musei Archeologici della Toscana), organizes the '*Settimana dell'Archeologia*' together with AMAT. This event takes place every first week of July and it provides for a considerable series of promotional initiatives for the archaeological cultural heritage, with archaeological movies, thematic shows, night visits to the monuments.

The Municipality of Cortona as a leader, the Ephorality of Tesalonika (Greece) and the Memory and Heritage Association of Paris are taking part in the

European project *Archaeology without barriers*, which was financed by the EU. This project is devoted to the realization of tactile routes for the blind inside the Museum and the Archaeological Park and it is a partner of the Project *Workshop of the landscape* together with the Andalusian Historical Heritage Institute (Spain), the Ephorality of Tesalonika (Greece), the city of Mirobriga (Portugal), devoted to the study and promotion of Archaeological Parks.

The recovery and promotional strategies of the cultural heritage provides for other parties to play a leading role, too. Particularly important is the Associazione Organi Antichi, whose project to recover the organs of S. Filippo, S. Maria Nuova, and S. Domenico was financed by the Ministero per i Beni Culturali.

The Municipality of Cortona actively cooperates with the Associazione Organi Antichi, organizing an *international course of Italian music by ancients keyboard instruments*, a top-level cultural and artistic event without a record which offers young foreign musicians the possibility to improve their knowledge of original instruments which were built by incomparable teachers from Cortona such as Giovan Battista Boni and his son Giuseppe.

In the framework of this eco-museum route the Municipality of Cortona has obtained a loan to build a building near the hamlet of Fratticiola, which should be used partly for eco-museum activities and partly to contain ancient farm carts. The funds to the Municipality will be integrated by a share of the hamlet of Fratticiola. The use of the building will be regulated by a special agreement. The idea of setting up a museum of the territory, characterized by representative sites and collections, thematic routes and remains of ancient civilizations is by now well-established, thanks also to a general project and a specific one about routes and the system of signs.

MUSEUMS (*Museo dell' Accademia Etrusca, Museo Diocesano*)

LIBRARIES (*Biblioteca del Comune e dell'Accademia Etrusca, Biblioteca Comunale di Camucia*)

ARCHIVES (*Archivio Storico Comunale*)

MEETING PLACES (*Centro Convegni S. Agostino, the Palazzone, Schools*)

### **Cultural Activities**

The cultural activities organized by the Assessorato alla Cultura rely on the close cooperation with a lot of no-profit associations of the territory.

Every theatrical season at the Teatro Signorelli, together with the Accademia degli Arditi, 12 performances are staged. They are divided into two turns and performed by national theatre companies.

Also the Accademia degli Arditi sees to the season of films with the showings at the Teatro Signorelli on Fridays, Saturdays and Sundays from September to June, on Thursdays from October to April with the review 'meet the Italian cinema'.

At the Giardini del Parterre in July and August the review 'Cinema under the stars' is by now well-established (on Wednesday nights, for the foreign tourists' benefit, a film in English is shown). Usually in August opera shows take place in Piazza Signorelli, during the Estate Cortonese.

Every year in May, in cooperation with the Consiglio dei Terzieri and the Compagnia dei Balestrieri, the Giostra dell'Archidado is organized, a commemoration in period costume of the wedding between Francesco Casali and Antonia Salinbeni. Other cultural events take place in summer, such as the Campionato dei Balestrieri and, with the fundamental contribution of AION, the second edition of Medioevo in Fortezza (in August) .

Other summer musical activities consist in the usual international flute course, directed by the music teacher Fabbriciani, and a series of singing and instrumental concerts among which the scheduled important experience with the University of Dresden is noteworthy.

Another event which usually takes place between the end of August and the beginning of September is the *Festival Internazionale di Teatro Musicale per Bambini*, directed by the music teacher Marco Papeschi. This is an important cultural experience in the music sector, aimed to the writing up of an unpublished work by top-level national musicians, composers and authors interested in the childhood. In the contemporary art sector, art reviews at Palazzo Ferretti and a series of exhibitions at Palazzo Casali and the Fortezza di Girifalco are scheduled.

ACADEMIES (*Accademia Etrusca, Accademia degli Arditi*)

CULTURAL ASSOCIATIONS (*Consiglio dei Terzieri, Compagnia del Cilindro, Professional theatre and ballet companies of the territory, Fotoclub*)

TEMPORARY EXHIBITION ROOMS (*Palazzo Ferretti, Palazzo Casali, Fortezza del Girifalco*)

ART GALLERIES (*Galleria d'arte Gino Severini, Galleria d'arte Luca Signorelli, Galleria L'Atelier, Galerie des Arcs, Galleria del Cavallino*)

MUSIC CLUBS (*Associazione MAHLER, Associazione per il recupero degli organi storici*)

THEATRES (*Teatro Signorelli*)

CINEMAS (*Teatro Signorelli, Giardini Estivi del Parterre*)

HALLS OR ROOMS FOR SHOWS AND CONCERTS (*Teatro Signorelli, Cortile Palazzo Casali Chiesa S. Domenico, Nuova Sala della Filarmonica, Cortile di S. Niccolò, Chiesa di S. Chiara*)

MUSIC SCHOOLS (*Scuola di Musica Comunale, Associazione Amici della Musica, Società Filarmonica di Cortona, Società Filarmonica di Farneta, Scuola musicale di Bertinoro*)

## **SHOWS, FESTIVALS, EXHIBITIONS**

### **Relations with Important Cultural Institutions**

The Municipality of Cortona, in cooperation with Provincia di Arezzo and the Fondazione Giangiacomo Feltrinelli, organizes a yearly series of important international symposia about the world political situations. In cooperation with the Scuola Normale di Pisa, top-level scientific and cultural conferences and meetings and a yearly series of programmes and courses are scheduled. They are master, specialization and refresher courses devoted to postgraduate training, with particular attention to preservation, improvement and promotion of the archaeological, historical, artistic and environmental heritage and to the activities connected with them.

Since November 2001 a convention with the Istituto Orientale di Napoli has become effective to plan a series of top-level cultural initiatives.

After the successful organization of the international meeting *Emotions and Analysis of Chinese Sources*, which took place from 6 to 11 November 2001 in Cortona, master courses in Oriental Studies are scheduled, under the scientific direction of the Istituto Universitario Orientale. There is also a programme for the organization of the preliminary phases of the conference about Alexander the Great.

Edmonton University (Georgia) has struck root in Cortona for a period of twenty-five year, after the acquisition of the premises once used by the ex Istituto Professionale Severini.

Graphics and painting exhibitions by the students are usual as well as biennial international symposia.

The successful relation with the University of Alberta (Canada), which has been making archaeological excavations for over ten years near the imperial Roman villa at Ossaia, has been cemented by the opening of six-month university courses with curricular value. Their successful impact has suggested the academic authorities of the University of Alberta visiting Cortona in the first months of 2002 to develop them and make them stable through the determination of permanent premises.

All that happens in a framework where Cortona has been identified by the Canadian Federal Government and by the one of the state of Alberta as one of the focus of the cultural Canadian activity abroad, seen the prestigious results of the excavations at Ossaia. The Administration regards the relation with the University of Alberta not only as an important cultural opportunity with exchange possibilities, but as an event which opens to interesting scenarios, and to tourist and business relationships with Canada. With the University of Perugia yearly courses of Scuola di Specializzazione in Archeologia are scheduled in Cortona.

Cortona has twinned with the French Municipality of Chateau Chinon for forty years, whose Mayor was the late French President Francois Mitterand.

QUALIFYING COURSES (*Courses of the Archaeology Department of the University of Perugia and Padova*)

ITALIAN UNIVERSITIES (*Scuola Normale Superiore, Istituto Universitario Orientale*)

FOREIGN UNIVERSITIES (*American University of Georgia, Canadian University of Alberta*)

IMPORTAN INSTITUTIONS (*AION CULTURA p.s.c.a r.l., management and promotion of the cultural heritage*)

### **Sports Activities**

The territory of Cortona has a strong sports tradition, with some particularly privileged sports, among them football, with numerous amateur teams and breeding grounds for the young. Volleyball is spread, too. The Municipality owns a series of sports facilities (stadiums and swimming-pools) run by sports clubs. The schedule itself of the sports events is a sign of the liveliness of the sector.

### **Facilities**

STADIO COMUNALE MAESTA' DEL SASSO (*Camucia*)

TENNIS PITCHES (*Rotonda del Parterre; Portole; Terontola*)

SWIMMING POOLS (*Piscina Comunale; Jumbo; at Il Sodo*)

TARGET SHOOTING GROUND (*Cortona*)

WING SHOOTING AND CLAY PIGEON SHOOTING (*Castel Girardi*)

RIDING GROUNDS (*Il Molino; at S: Maria Nuova; Saltafossi- at Tecognano; Centro Ippico Cortonese – at Piazzanella; Associazione Ippica Farnetese – at Farneta; Azienda Ippoturistica – at Farneta*)

TAVERNELLE SPORTS FACILITIES (*at Tavernelle*)

SEVEN POINT SPORT CLUB (*at Il Sodo*)

### **Events**

**CAR RACING** *Uphill time trial of vintage cars (Camucia-Cortona)*

**MOTOCROSS** *Interregional championship F.I.M. (Pietraia)*

**HORSE-RACING** *Gran Premio della Liberazione (Farneta)*

**CYCLE RACING** *Gran Premio della città di Cortona – Trofeo Val di Perle; Mezzofondo dei Colli Cortonesi (Camucia)*

**TENNIS** *Torneo delle Vallate Aretine cat IV (male) (Rotonda del Parterre di Cortona); Circuito Umbria Tennis; Torneo Open (male) (Rotonda del Parterre di Cortona); Circuito Umbria Tennis – Championship cat. IV under 12 and 14 (male and female) (Rotonda del Parterre di Cortona); Interregional Championship Open (female) (at Sodo)*

**PREMIO SPORT della città di Cortona** *(Terme di Manzano)*

**FESTA DELLO SPORT** *(Tavernelle di Cortona)*

### **Stage1 – ARCHAEOLOGICAL SITES**

#### **FOREWORD**

The Archaeological Park of Cortona will comprehend a series of archaeological sites which are situated inside and outside the urban area (fig. 1.181). Inside the town we find the Etruscan city walls, the Porta Bifora, some lengths of wall unearthed under the foundations of some historical buildings like the one near Palazzo Cerulli-Diligenti or the one under Palazzo Casali and the Etruscan barrel vault near Porta Guelfa. Outside the town a series of funerary monuments are visible: the Tumulo di Camucia, the Tumuli I and II del Sodo, the Tanella di Pitagora, the Tanella Angori, the Tomba di Mezzavia.

#### **Porta Bifora** (fig. 1.182)

The Porta Bifora or Ghibellina is the only monumental gate of the Etruscan walls of Cortona still standing. The excavation has also unearthed the remains of a one-fornix entrance which existed formerly.

In the first half of the second century B.C. the new double barrel-vaulted arched gate with an inner gate was built. Its beautiful internal paving shows the ceremonial aspect of the gate which welcomed the great road to the main Hellenistic necropolis of the town.

In the late ancient period the gate was narrowed to one fornix, the one to the north, and that is still its appearance after various transformations.

#### **Barrel Vault in Via Guelfa** (fig 1.183 – fig. 1.184)

Not far from the walls, near Porta S. Agostino, there is a space with a barrel-vaulted cover and an outlet in the centre of the ceiling, probably used as a tank or a depot.

It seems to date back to the period between the second and the first centuries B.C.

#### **Length of Wall near Palazzo Cerulli-Diligenti** (fig. 1.185)

Inside Palazzo Cerulli-Diligenti, in Via Mazzuoli, a length of wall 6 m long and 2.4 m high was unearthed.

#### **Length of Wall near Palazzo Casali** (fig. 1.186)

Inside the rooms underlying Palazzo Casali, where the new Museum will be established, a length of Etruscan wall was found. It is over 15 m long and it was supposed to be used as a buttress and a substructure of the great public buildings which were once situated near the forum.

**Tumulo di Camucia** (fig. 1.187)

The Tumulo di Camucia was found in 1840 by A. François.

Its circumference is about 200 m and inside we find a chambered tomb (Tomba A or François) and another tomb (Tomba B) which was discovered by the Soprintendenza Archeologica della Toscana in 1964.

**Melone I del Sodo** (fig. 1.188 – fig. 1.189)

The Melone I del Sodo is situated on the left bank of the Rio Loreto.

It is an artificial tumulus belonging to the Etruscan archaic funerary architecture.

It was excavated and studied in 1909.

Inside we can find a tomb with an uncovered dromos and five chambers, the central one is at the bottom and the others on the sides of a central passage.

The cover is a pseudo-vault.

**Melone II del Sodo** (fig. 1.190 – fig. 1.191)

The melone II del Sodo is situated on the right bank of the Rio Loreto.

It is a tumulus of the archaic period and it consists of two tombs. The Tomb 1 has a pseudo-vault cover and was found in 1928/1929; the Tomb 2 was found in 1991 and has produced a very rich outfit of goldsmith's works.

In 1990, on the eastern side next to the perimeter of the tumulus a monumental altar-platform was unearthed. Access to it is through a staircase the side faces of which are decorated with reliefs and sculptural groups.

**Tanella di Pitagora** (fig. 1.192)

The Tanella di Pitagora is situated on the slope from the Cortona hill towards the Valdichiana.

It was mentioned for the first time during a visit by G. Vasari in 1566.

It is a small tumulus of the Hellenistic period (second century B.C.). It consists of a circular podium on which another drum stands with juxtaposed blocks. The inside has a short dromos and a small rectangular room with a barrel-vaulted cover.

**Tanella Angori** (fig. 1.193 – 1.194)

The Tanella Angori, not far from the Tanella di Pitagora, was unearthed in 1951 and it dates back to the Hellenistic period (second century B.C.), too.

Only the lower part of the cylindric drum on circular foot is preserved, together with some blocks of the crowning belt.

The Greek-crossed inside still preserves the paving of the chamber.

**Tomba di Mezzavia** (fig. 1.195 – fig. 1.196)

The chambered tomb is dug in the tufa and it was unearthed at Il Passaggio near Mezzavia (Percano) in 1950.

It consists of a cell with four loculi on the side walls and one at the bottom on which the word 'tutsitui' is carved.

It dates back to the Hellenistic period (late third-early second century B.C.)

**Villa Ossaia** (fig. 1.197 – fig. 1.198)

A noteworthy example of villa of late republican-imperial period was unearthed at Ossaia – La Tufa. It has a total area of about 1,000 square metres and it is divided in three areas separated by an in-between balcony.

This living unit shows three distinct living phases.

The first phase dates from 50 B.C. to the middle of the first century A.C.

The second building phase dates from 80-100 A.C. to the third century A.C. The third phase dates from the Tetrarchy age and the Constantinian age till the middle of the fifth century A.C.

**The mosaics of Villa Ossaia (fig. 1.199 – fig. 1.202)**

In Area 1 a late-republican paving and rooms with painted plasters were unearthed.

The buttressed structure, which was used as a tank in the third phase, was built in the first phase. In this area there are two arms of polychromatic geometrical mosaic with a cross-shielded emblem dating back to the beginning of the fourth century A.C.

Area 2 was radically changed during the second phase.

The richest documentation comes from Area 2 and Area 3 with the finding of a portico. On one of its sides a room decorated with a black and white mosaic of the first phase opens. Two other contemporary rooms have produced black and white mosaics with geometrical pattern.

An arcade unearthed in Area 3 has produced an elegant mosaic of square red tiles alternated with white stripes with a spotted pattern, dating back to the second phase.

**Stage 2 – LIST OF CONTENTS**

**THE ARCHAEOLOGICAL PARK**

**Foreword**

**Definition of Archaeological Park**

**Interventions for the Archaeological Park**

**Administrative Procedures, Obligations and Changes**

**Il Museo dell'Accademia Etrusca e della Città di Cortona**

**Activities of the Archaeological Park**

**FOREWORD**

**The archaeological research in Cortona from 1985 up to the present (fig. 2.1 – fig. 2.2)**

In 1985, on the occasion of the Anno degli Etruschi, the Regione Toscana welcomed the recommendation by the Comitato Esecutivo Regionale del Progetto Etruschi. It consisted in entrusting the universities which had taken part in the activities of the Anno degli Etruschi with promotional tasks for the research, supported by regional and local funds. Amongst these there was the University of Perugia. It had organized the exhibition *Case e Palazzi* in Siena during which Cortona was singled out as a territory on which to start a research plan, for nearness and opportunity. The ancient polis of Cortona and its territory lacked a scientifically based historical framework despite the extraordinary core of mythical and semi-mythical traditions on the origin of the town. The only synthesis attempt, the volume *Cortona Etrusca e Romana* by A. Neppi Modona (two editions, respectively of 1925 and of 1977), was unsatisfactory.

On these assumptions, in 1987 the Amministrazione Comunale di Cortona and the Provincia di Arezzo entrusted the University of Perugia, in the person of Prof. Mario Torelli, full professor of Greek and Roman Archaeology there, with the start of an investigation project about the ancient town of Cortona and its territory.

The examination of the paper documentation about the findings up to 1985 (which was collected in the *Atlante dei Siti Archeologici della Toscana* and published by the Regione Toscana some years later) and the first explorations and excavations singled out the priority of the research and of the improvement of archaeological findings.

Among the urban monuments, the Porta Ghibellina or Bifora was the first to be taken into consideration. It is an extraordinary sample of Etruscan monumental architecture for its particular double-fornixed typology. Besides the verification of its chronology (which was as unknown as the walls', in spite of Neppi's essays) and its unearthing, its potential condition of junction for an urban upgrading of all the area was discovered.

The long, hard, expensive excavation and restoration of the gate, which lasted from 1987 to 1995, has allowed the achievement of all these goals.

The repaving of two important roads in the town centre, via Dardano and via Vagnotti, provided for the other exceptional chance of urban excavation, which produced the most ancient building of Cortona, a hut with dry stone walls, situated obliquely at the bottom of via Vagnotti, built in the early Orientalizing Age (seventh century B.C.)

During these excavations, the nearby piazza Tommasi produced the remains of a watering place, as we can assume because of the presence of fragments of mosaic paving reused around a well. The mosaic, in black and white on a high bearing of *cocciopesto*, showed a turreted edge and a central sea-wave patterned emblem. It appeared definitely identical, also for the inscription with the names of the judges, to the one unearthed in the middle of the Tarquinian oppidum of Musarna, of the crucial second century B.C. They are exceptional evidence of the precocious diffusion in Etruria both of the typology of the thermal building and the existence of itinerant mosaic workers, who decorated buildings which are very far from each other, as the baths of Musarna and the ones now discovered in Cortona are.

At the same time the Soprintendenza Archeologica per la Toscana made excavations in the town and the territory.

The first sensational finding was the Melone II del Sodo. It is a monumental footing with a terraced big altar with allegorical sculptures portraying the fight between a man and a lion, framed by a palmette and a gorgon pattern of clear Ionic tradition.

Later the Soprintendenza Archeologica della Toscana unearthed two finds of great interest to the history of the town.

The first find, discovered on the occasion of some building works in Camucia at the Vivai Felici area, qualified Camucia as the seat of a vicus of Cortona. The excavation produced a holy area, where once a temple stood. Only some architectural terracotta (the first unearthed in Cortona) was found, dated from the second century B.C.

During the restoration works of Palazzo Casali for the new museum there was the second find, a huge terraced wall which resumes, under the courtyard of the building, a considerable length already known in the caveau of Cassa di Risparmio di Firenze next to Palazzo Casali. It was supposed to be a huge retaining wall of a great square of Etruscan and Roman times. It was situated in the middle of the town, which was probably the seat of the, urban forum.

In parallel, the researches coordinated by Prof. Torelli recovered the structure of the waterworks of the town, a work dating from the second century B.C., too. It went from the intake to collect the spring water to the Alta di S. Egidio, in the Cortonese mountain, to the internal system of distribution of the town, through a series of enormous tanks. Two of them are of Roman age (one at the Convento delle Clarisse, the other which corresponds to the so called Terme di Bacco), and one is made of stones of the same size and it is situated near Porta S. Agostino. It dates back to the second century B.C.

In the extra-urban territory, the site of the Tufa at Ossaia was soon identified as very rich, both for the quality and quantity of surface materials and the presence

of some huge ruins of a big water depot. With the financial support of the municipality, which was charged with the accomodation of the Canadian and Italian students who have been working there since 1992, under the joint direction of Maurizio Gualtieri and Helena Fracchia, archaeologists respectively of the University of Perugia and of the Canadian University of Alberta, intensive summer works were done. Thanks to the cooperation between Italy and Canada, this undertaking unearthed significant parts of a magnificent villa dating from the end of the republic and the late-ancient age. This villa is rich in mosaic floorings and it is one of the most remarkable complexes of the late-republican time in the Etruscan area, and it seldom has a match in the known panorama of the villa architectures.

Together with the Archaeological Park, the logical consequence of the research furthered by the Amministrazione Locale and the Soprintendenza Archeologica per la Toscana, from which a new aspect of the ancient town and territory comes to surface, is the creation of the new Museo della Città Etrusca e Romana. It is being organized at Palazzo Casali, where we also find the extraordinary historical monument of the archaeological culture of the eighteenth century consisting in the collections of the Museo dell'Accademia Etrusca.

**Programme Agreement for the Realization of the Archaeological Park of the Sodo, Stato – Regione Toscana Agreement of General Programme and Funds according to L. 513/1999**

The most remarkable signs of the archaic Cortona are the three big tumulus tombs, called 'Meloni', heritage of the power of the princely families who ruled the territory between the end of the seventh and the beginning of the sixth centuries B.C.

Placed at the crossroad between the Umbro-Casentinese national road and the Siena-Cortona provincial road, the two adjoining tumuli (Primo Melone del Sodo and Secondo Melone del Sodo, the latter being the object of very important excavations starting from 1989) raised the issue of the creation of an Archaeological Park which encompassed them and, on the other hand, of the rearrangement of the municipal and provincial road network and of the surface waterworks, to make them compatible with the exigencies of use of the Archaeological Park.

For this reason, in 1998 the interested administrations, Municipality of Cortona, Soprintendenza Archeologica per la Toscana, Provincia di Arezzo, Autorità di Bacino dell'Arno, Provveditorato regionale per le Opere Pubbliche, made a programme agreement for the realization of the Archaeological Park of the Sodo. Its project should have planned for all the required interventions for the unearthing of the archaeological monuments, for their restoration, for the adjustment of the waterworks of high and low waters and of the municipal and provincial road network, for the creation of service infrastructures essential to the activity of the Archaeological Park.

This programme agreement and the realization of the new archaeological museum, renamed Sistema integrato dell'Archeologia di Cortona, were included in the Accordo di Programma Quadro per i Beni e le Attività Culturali. It was signed on 16 December 1999 by the Regione Toscana and the Ministero per i Beni e le Attività Culturali in the frame of the Intesa Istituzionale di Programma fra il Governo della Repubblica e la Giunta della Regione Toscana.

The inclusion provided the Sistema integrato dell'Archeologia di Cortona with funds from the State: £ 1,200,000,000 for the museum and £ 1, 300,000,000 for the Archaeological Park of the Sodo.

Later, on 3 November 2000, by decree of the Ministro per i Beni e le Attività Culturali the Municipality of Cortona received a contribution of about £ 5,500,000,000 for the realization of the Archaeological Park including the funerary monuments of the Cortonese hill and plain. The contribution was disbursed according to art. 1 of L. 21 December 1999, n. 513 and reabsorbed the funds of £ 1,300,000,000 for the Archaeological Park of the Sodo of the Accordo Programma Quadro per i Beni e le Attività Culturali.

The sizes of the park, at first circumscribed only to the territory of Primo and Secondo Tumulo del Sodo, have been enlarged, following the funds and the L 513/1999, to comprehend all the monumental archaeological findings of the municipal territory.

The regulation policy, the growing awareness of the potential active and propulsive role of the local administration to safeguard and to make the best of the environmental and cultural resources, the great planning and organizing capacity of the Municipality of Cortona have led the Soprintendenza Archeologica per la Toscana, with an act which has few precedents in Italy, to entrust the Municipality of Cortona with all the planning and realization tasks, reserving only safeguard and control tasks. This preliminary project has been written to start the procedures of planning and realization of the works.

### **Definition of Archaeological Park**

The territory of the Municipality of Cortona, where the archaeological findings are irregularly situated in an area both inside the town and on its slopes and on the underlying valley, is deeply composite and important also from the anthropic and environmental point of view. We have thought that the planning principles explained here must follow such features so that the single specificities of such territory are highlighted and improved.

The location of the park will at first be based on the area which has produced archaeological findings and finds over the time. Soon after they must be dynamically included in the environmental structure, that is the naturalistic context and, in our case, above all the anthropic context which was created and historicized with the constant adjustment of the human presence till today. So our idea of the park will consider the archaeological findings and their analysis as a starting point and as a reference point for its boundaries. But they will also be considered as part of a complex eco-system which is the main value of this territory and which maintains the wider concept of park in itself at the point of considering its boundaries as open as possible and not a 'closed' system.

Such a concept has its support and its value in the knowledge and the memory of the territory which have an active part not only in its safeguard but also in its improvement, in the environmental, historical, anthropic meaning, involving all its population and all its activity.

The irregularity of the territory makes it possible to intervene with the creation of a series of guide-routes inside the park, useful for the knowledge and the use of both the tourist and the citizen.

On the whole these are the operational objectives we would like to achieve:

- the monument, or the present historical or archaeological evidence, will be bonded to its historical structure and to its landscape environment. It will not stay apart outside its context through physical barriers or of any other kind;

- the naturalistic, anthropic and landscape environment will be preserved as faithfully as possible, even through rebuilding where there have been destructive interventions;

study of the human activities present in the territory and their management through the specialisation and the creation of infrastructure also through the recovery of the pre-existing building;

the park will be a tool of knowledge for the archaeological findings, a historical memory and part of the cultural identity of the territory and of the town;

the park will be an instrument to make the most of the history of the agrarian landscape, of the town and of the history of its territory;

the park will be an instrument to safeguard, upgrade and promote the socio-economic-cultural system of the town, the territory and of its environment.

### **INTERVENTIONS FOR THE PARK**

Here is a synthetic description of the content of each excerpt and the economic framework deriving from the definitive project of the Archaeological Park.

#### ***Excerpt n. 1 (fig. 2.43 – fig. 2.46)***

First interventions of safety, adjustment and investigation for the establishment of the Archaeological Park

Total amount of the excerpt: **367, 610.74**

The excerpt n. 1 provides for the readjustment of the system of the archaeological heritage which is partly inaccessible today. This will be done through restoration and maintenance works of the monuments, architectural and environmental adjustment of their accesses, together with incidental archaeological investigations in order to integrate the knowledge acquired during the recent interventions and the planning of following interventions.

At the end of the work all the Etruscan archaeological monuments of Cortona will be accessible and enjoyable.

The direction and planning of the works have been supplied by the Soprintendenza Archeologica per la Toscana.

Excerpt n. 1 involves the following administrations: the Municipality of Cortona and the Soprintendenza Archeologica per la Toscana.

The works scheduled by the excerpt were delivered on 24 December 2001.

#### ***Excerpt n. 2 (fig. 2.47 – fig. 2.53)***

*Detaching and restoration of the mosaics of the Roman Villa at Ossaia*

Total amount of the excerpt: **77,468.53**

The works have become necessary for the safeguarding of the mosaics themselves. Even though the selection of the working firm was made in December 2001, the delivery of the works could not be made before 31 December 2001. In fact in the course of the inspection they ascertained that during the autumn, after the inspections made for the writing up of the restoration quote subject to the tender, there had been leakages in the mosaics which had deteriorated them even more. The contracting firm consented to further investigations following which they agreed upon the necessity of a further inspection of about **10,000. The works were delivered on 27 July 2002.**

Excerpt n.2 involves the following administrations: the Municipality of Cortona and the Soprintendenza Archeologica per la Toscana.

#### ***Excerpt n. 3***

*Readjustment and safety works of the surface waterworks in the Sodo area*

Total amount of the excerpt: **785,967.10**

**Excerpt n. 4 (fig. 2.54)**

*Readjustment and safety works of the infrastructural network in the Sodo area*

Total amount of the excerpt: **1,166,332.24**

The excerpts 3 and 4 provide for the safety works of the two archaic tumuli called Primo and Secondo Tumulo del Sodo, today separated by the Provincial road 28 (Siena – Cortona) and by the Rio Loreto. The works consist of the building of a new tract of the Loreto canal, about 500 m long, directly to the north of the Secondo Tumulo del Sodo (Excerpt n. 3) and of a new tract of Provincial road, about 1,000 m long, directly to the south of the Primo Tumulo del Sodo (Excerpt n. 4). The two tumuli so joined will be the heart of the Archaeological Park.

The two works, obviously delicate and complex, are explicitly provided for in the programme agreement signed in December 1998 by the Commissario di Governo per la regione Toscana, Soprintendenza Archeologica della Toscana, Autorità di Bacino per il Fiume Arno, Provveditorato alle Opere Pubbliche per la Toscana, Provincia di Arezzo, Comune di Cortona (acknowledged by the Municipality of Cortona with the resolution n. 219 of 21 December 1998 of the town council). Their inclusion in the agreement was needed both for planning reasons – with reference to the bearableness of the interventions (that is to their physical, functional, urban, environmental integration with the territory) and for administrative reasons – with reference to the required authorizations.

The excerpts n. 3 and n. 4 involve the following administrations: the Municipality of Cortona, Provincia di Arezzo, the Soprintendenza Archeologica per la Toscana, the Autorità di Bacino per il fiume Arno and the Ufficio Regionale per la Tutela del Territorio di Arezzo (ex Genio Civile di Arezzo).

**Excerpt n. 5**

*Urban upgrading of the Sodo Area*

Total amount of the excerpt: **56,810.26**

The excerpt provides for the redefinition of the urban instruments in the Sodo area, in order to assimilate the changes made through the excerpts 3 and 4, to introduce sharp readjustment measures (the Sodo area is strongly compromised by more or less recent settlements), improvement measures, with the indication of the facilities (reception and guidance centre of the Park, the car park etc.) essential to the activity of the Archaeological Park and for its safeguard.

Excerpt n. 5 consists of two distinct sections: the drawing of a Variante di Piano Regolatore for the Sodo area, by the Ufficio Urbanistica of the Municipality of Cortona, and the drawing up of a Detailed Plan for the same area, by an external professional.

Excerpt n. 5 involves the following administrations: the Municipality of Cortona, Provincia di Arezzo and Regione Toscana.

**Excerpt n. 6**

*Establishment of a state property of the Archaeological Park*

Total amount of the excerpt: **365,608.21**

The excerpt provides for the establishment of a state property of the Archaeological Park, through expropriations and acquisitions of monuments (which are partly private property) and appurtenances of surfaces (all of them to be acquired from private owners) suitable for the execution of the works, their use and for the location of the facilities. Most expropriations and acquisitions concern the Sodo area and they are functional to the realization of the new tract of the Loreto canal and of the Provincial road 28. They are also in connection with the amendment to the town planning.

Excerpt n. 6 involves only the Municipality of Cortona.

**Excerpt n. 7**

*Different entrustments for usage, communication, promotion of the Archaeological Park*

Total amount of the excerpt: **84,647.31**

Excerpt n. 7 provides for the realization of usage, communication and promotion instruments – from the first-direction instruments, such as signs and poster design, to proper communication and promotion instruments, such as logos, various publishing materials (from depliants to guides) etc. The excerpt also encompasses scientific direction, research, drawing up of interpretations necessary to the realization of publishing material and the acquisition of research material and studies necessary for an efficacious running of the park.

The entrustments could not be effected before 31 December 2001 for technical problems.

Because of the kind of professional services, supplies and services provided for in excerpt 7, it was necessary to wait for the works of the park to be started and sent ahead. For example, only after the excavations and the prospecting ended during the restoration and recovery works of the big vault located at the bottom of via Guelfa and of the wall and arch at Palazzo Cerulli – Diligenti (works provided for in excerpt n. 1) was it possible to draw up reliable texts about these monuments. Such considerations also apply to the photographic campaigns for which it is necessary that the restoration works are finished.

**ADMINISTRATIVE PROCEDURES, OBLIGATIONS AND CHANGES**

The first administrative step towards the idea of Park was taken by the Soprintendenza Archeologica per la Toscana with its activities on the single monuments which are included in the park, starting from the 50s. Later a series of important resolutions have followed:

Town Council Res. N. 136 of 11 July 1998

Object: preliminary project for the realization of the Archaeological Park of Cortona.

Approval.

Town Council Res. N. 219 of 21 December 1998

Object: programme agreement for the realization of the interventions needed for the creation of an Archaeological Park in the Municipality of Cortona called 'Il Sodo'

Approval.

Town Council Res. N. 190 of 26 September 2000

Object: entrustment of the park planning to the University of Perugia.

Town Council Res. N. 235 of 23 December 2000

Object: purchasing of the monuments required for the establishment of the Archaeological Park.

Town Council Res. N. 96 of 3 May 2001

Object: amendment to the town planning at Sodo. Start of the process according to the art. 40 par. 8 R.L. 5/95.

Town Council Res. N. 175 of 4 September 2001

Object: approval of the agreement between SAT and the Municipality of Cortona for the realization of the interventions provided for in the functional A excerpt of the preliminary project of the Archaeological Park.

Town Council Res. 154 of 17 August 2001

Object: convocation of the service conference to examine the preliminary project of the Archaeological Park.

Town Council Res. N. 195 of 9 October 2001

Object: final project for the realization of the Archaeological Park of Cortona.  
Approval.

Town Council Res. N. 11 of 26 January 2002

Object: final project 'realization of the Archaeological Park of Cortona'. Approval of the project from the technical point of view and for the expropriations.

#### **MUSEO DELL'ACCADEMIA ETRUSCA E DELLA CITTA' DI CORTONA** (fig. 2.71 – fig. 2.80)

The Museo dell'Accademia Etrusca e della città di Cortona is the result of the unification of the historical Museo dell'Accademia Etrusca at Palazzo Casali and its new archaeological section which will be on display on the lower floors of the building.

The Museo dell'Accademia consists of the collections of the Accademia itself , among which the famous candelabrum and the Etruscan bronzettes; the Egyptian collection; the picture gallery (Pietro da Cortona, Signorelli); collection of Medieval art; Etruscan and Roman archaeological collections; the Biblioteca dell'Alta Accademia Etrusca; the outfit of the Melone del Sodo, Etruscan tumulus of archaic age.

The new section of the Museum will display the outfit of the Tumulo di Camucia; the Tabula Cortonensis; the findings of the last few years of research in the town of Cortona and of all the territory, with particular attention to those of the urban and extra-urban sanctuaries and to those of the imperial villa at Ossaia.

#### **ACTIVITIES OF THE ARCHAEOLOGICAL PARK**

The Archaeological Park will be able to offer the users a series of cultural services of various kind, part of which are already working, thanks to the cooperation of the Museo dell'Accademia Etrusca and the specialistic contribution of the partners of Cooperativa AION CULTURA. For many years this association has been involved in the running of the Italian archaeological and cultural heritage and in the scientific sector of archaeology and art history.

The Archaeological Park provides for a system of guided routes for the connection of the various monuments of the park in town and in the territory (fig. 2.81). These routes will be fit for use by the disabled with particular reference to the blind, with suitable structures and the possibility to have guided visits to the cultural routes with specialized staff from AION CULTURA (fig. 2.82 – fig. 2.85).

The Centro di Documentazione del Parco will be situated at the Museo dell'Accademia Etrusca e della Città di Cortona (fig. 2.86).

The Centro di Restauro will be situated in the area of the Tumuli del Sodo (fig. 2.87). It will go on with the restoration works and will be a reference point also for other archaeological sites of the park. The Centro di Archeologia Sperimentale

will be devoted to the research in this field, involving scholars and population (children and adults).

A Laboratorio Didattico will be created near the Roman villa at Ossaia (fig. 2.88). Here children and youngster of all kind of schools and adults will be able to enjoy educational activities concerning the park and the cultural heritage of Cortona. AION CULTURA has run these activities for many years, which consist in guided visits in Italian and in English, with various thematic routes and archaeological and cultural school-camps for youngster.

The park will have information points along all the routes, signs with directions and information, a website and a bookshop with guides, depliants and playbills.

### **Stage 3 – ARCHAEOLOGY AS SEEN BY THE ARTISTS**

The archaeology week, which took place the first week of July 2002 and which has been submitted as the third stage of this project, involved the students of the American University of Georgia, which has been organizing regular Drawing and Graphic Arts courses for over 20 years, and a series of Italian and foreign artists living in Cortona. The topic submitted to be developed through the visual arts was the Cortonese archaeological heritage in particular, and in general the appeal of the past. The artists have produced many of their works directly inside the archaeological sites. The final exhibition was held on Saturday 5 July 2002, at the Centro Convegni S. Agostino, at the presence of the European partners (fig. 3.1 – fig. 3.---).

This is the list of the artists who attended it:

#### **Faculty**

Clarence Morgan

Gene Wright

#### **Students**

Kristina Chan

Susan Gepford

Kate Hayes

Danielle Hersey

Bill Logan

Sarah McCallum

Michelle Motley

Ryan O'Mara

Sandra Plaza

Megan Rhodes

Ryan Roth

Amy Shiver

Robin Sloan

Sarah Slobodzian

James Taylor

Soldatini Marco

Sarah Miatt

### **Stage 4 – PROMOTION STRATEGIES FOR THE PARK**

Promotion activities for the Archaeological Park of Cortona are wide and deal with different topics.

Promotion will be effected through ordinary channels such as signs inside and outside the park.

Information points, tourist offices and tourist agencies; websites about the park and about the town, the Municipality of Cortona and the Museum.

Information at hotels and farmhouses.

Centro di Documentazione del Parco.

Tourist guides.

Depliants and playbills.

Activities to be done over the time and with a constant updating, in synergy with economic and social realities and institutions of the territory, with particular reference to the cultural institutions and to the activities concerning tourism and oeno-gastronomy, such as restaurants, hotels, farmhouses and farms producing typical local products.

In particular, among the promotion activities part of which are still working, the Municipality of Cortona and the association AION CULTURA with its specialist, efficacious and managerial participation, in cooperation with various public and private associations, organize a series of cultural events and displays. They are aimed to attract the attention of local and tourist population towards the Archaeological Park, the town of Cortona and its culture in general:

Settimana dell'Archeologia (fig. 4.1 – fig. 4.2), annual event which will involve the Park and the Museum. It will devote a whole week to archaeology and to cultural activities dealing with the territory of Cortona, in cooperation with the Regione Toscana;

Museum Image (fig. 4.3 – 4.4), international cultural event which puts forth contents and activities of each museum and cultural institute, promoting the territorial heritage;

Domenica al Museo (fig. 4.5 – fig. 4.6): cultural activities, events and conferences, organized by AION CULTURA and by Accademia Etrusca, which take place at the Museum and can be extended to the park, on autumn and winter Sundays. They are aimed to involve above all the local population in the territory and the local and non-local culture, in a period of the year usually considered not easily accessible for the users;

Vinaria, a manifestation which involves the public in places of historical, archaeological and cultural interest, concerning the tasting of oenological local products;

Similar manifestations are organized for the tasting of typical local gastronomic products (fig. 4.7 – fig. 4.8);

Bambini al Museo (fig. 4.9), frequent activities which take place inside the Museum and the Park, with games, treasure hunts and activities for babies and children;

Archaeological school camps which involve youngsters and children for prolonged periods, about 15 days. They work there and do activities concerning archaeology and culture in general, through games and amusement;

Archaeology and Art History courses for Italian and foreign adults, resident and non-resident in the territory, with the aim of involving them in cultural and personal training activities following their own exigencies;

Art and Culture exhibitions, housed in important monuments of the territory of Cortona, such as the recent art exhibition 'Giovani pulsioni' held at the Fortezza Medicea, by young contemporary artists living in the territory;

Medioevo in Fortezza, cultural displays which take place in cultural places of the territory and involve the resident and tourist population in approaching the monuments and the historic local heritage;

AMAT, Associazione dei Musei Archeologici della Toscana, has created a database of all the museums of Tuscany of archaeological nature. Here you can find information about all the museums and their contents. It is an important promotion channel and provides for the starting off of an Internet site, too;

Archeotours, for Italian and foreign people along the footpaths of the park; improvement of the archive heritage of the town;

Bookshop del Parco e del Museo, where you can find all the publications concerning the town and archaeological subjects, including specific guides for children;

Training Courses for cultural operators who will work in the territory;

Italian Courses for not Italian-speaking children of the territory with specific references to the cultural heritage of the territory;

Permanent Training Courses for adults;

Workshop for the building of the town on a human scale;

Presentation in the schools of the work of the European project 'Workshop of the Landscape'.

*Greece.*  
*9<sup>b</sup> Ephoreia of Byzantine Antiquities.*  
*Thessaloniki.*  
*The Acropolis of Thessaloniki.*

## PRESENTATION OF THE ARCHAEOLOGICAL SITE IN GREECE: THE ACROPOLIS OF THESSALONIKI

### Introduction (Fig. 1)

In the framework of the EU program Culture 2000 — Laboratorio Europeo del Patrimonio, the Ephoreia of Byzantine Antiquities intends to pursue the design project for the restoration and *mise en valeur* of the Early Christian, Byzantine, and Postbyzantine monuments located within the Thessaloniki Citadel (Fig. 2, 83, 84). The aim is to redesign the wider area of the Citadel with a view to investigating the cultural and social potential of the district and improve the relationship between the monuments and their environment.

The Citadel district, which was isolated for many years and occupied by underprivileged social groups, was selected with a view to re-assessing the use of the existing open spaces and their relationship with the archaeological sites, and at the same time encouraging the local residents to play a more active part in the social life of the district.

### ACTIVITY 1

#### Historical analysis

Due to a combination of historical circumstances, economic necessity and geographical factors, the city of Thessaloniki was born. (Fig. 3) Its founding in 315 BC was not without historical consequences. Thanks to its favourable geographical position and successful commercial operation, Thessaloniki rapidly rose to distinction as the economic and organisational capital of Macedonia, the political and military seat of the Roman tetrarchy, the second capital of the Byzantine Empire for a thousand years, and a great city and vital port in the Ottoman Empire, serving the vast Balkan hinterland for a further five centuries. As the second city of the modern Greek state, since 1912 it has continued to enjoy steady growth and development with two large universities, an extensive industrial area, a harbour, and a population of over one million. (Fig. 5)

The urban landscape is dominated by the city's relationship with the sea, and its long history has enriched it with monuments representing many eras and successive cultures. (Fig. 6, 7, 8, 9) In 1917 while Greece was still engaged in the First World War, the historic city centre was destroyed by fire, and in 1922, following the compulsory exchange of populations between Greece and Turkey, Thessaloniki's Moslem population left and was replaced by vast number of Greeks from Asia Minor. The complex mosaic of religions in the city received its final blow during the Second World War, when 45,000 local Jews vanished into the German concentration camps.

The replanning of the city in 1917-21 by an international committee completely transformed the intramural historic nucleus, and provided some general guidelines for the districts outside the walls.

#### Byzantine Thessaloniki (4<sup>th</sup> century A. D. to 1430) (Fig. 16)

After Christianity became the official state religion at the end of the fourteenth century, Thessaloniki began to change, and was soon one of the greatest centres of Christendom. In the time of Theodosius I and his successors, a policy of local interventions was implemented in the city, chiefly on sites and in buildings under the jurisdiction of the central authority. Changes were made to a number of important public buildings.

The insecurity that troubled Macedonia during the period when Slavs and other tribes were invading the region led to a general urban rush, with Thessaloniki as a favourite goal. Towards the end of the first millennium, the city acquired a new Citadel, which enclosed an area of sixteen hectares, at the top of the hill, named until today "Acropolis".

The development of monasticism, mainly after the tenth century, created new needs. Large monastery complexes were built in once open areas. (Fig. 17) Most of them occupied sites near the city walls, and the monks frequently built whole wings right up against the fortified enceinte. By the late Byzantine period (13<sup>th</sup> – 15<sup>th</sup> cc.), Thessaloniki resembled nothing so much as a monastic republic. The monasteries were the nuclei around which the city's social life revolved. (Fig. 18) The concept of the local district or neighbourhood was well established by now: each one took its name from the nearest monastery, which also defined the district's spatial identity.

During this last phase of the Byzantine era, the walls were strengthened locally. A small fortress, known as Eptapirgio ('seven towers'), was built in the northern section of the Byzantine Citadel; and a small triangular area of two hectares was brought within the first westward curve of the north wall, obviously for reasons of security, rather than as living space. Even before this time, monastic complexes were being built outside the walls, mainly on the sloping ground.

Thessaloniki enjoyed a notable economic, spiritual, and artistic flowering in the fourteenth century, as is attested both by the written sources and by the monuments, some of which are classic examples of Palaeologan architecture and art. (Fig. 19) The Macedonian capital had no reason to envy Constantinople. But this golden age was soon cut short. In 1430, the city was captured by the Ottomans, many of the inhabitants fled, and it was many years before Thessaloniki regained its leading role under foreign domination.

#### **The period of Ottoman rule (1430- 1912) (Fig. 20, 21)**

The gradual loss of geometric regularity in the urban fabric of Thessaloniki must have been slow at first. Sixteenth-century travellers still describe squares and attractive streets, and they sometimes state quite categorically that the city was designed from the start on a grid plan. The walled city acquired mosques, baths, and a covered market, and its most important churches were converted into mosques. (Fig. 4) Troubled times repeatedly changed both the form of the city and the varied religious make-up of the population, which was swelled by a large number of Spanish Jews at the end of the fifteenth century. (Fig. 22) In 1545, 1610, and particularly 1620, large swathes of the city were burnt down. It is presumed that it was then that the names of most of the neighbourhoods were changed, and the various districts became increasingly homogenous with regard to the ethno-religious origin of their residents. The Moslems were concentrated in the highest part of the city; the Jews in the flatter parts by the sea, and a single district above Egnatia St, in the site of the ancient Agora; while the Christians were more scattered, along the Via Egnatia, around the Cathedral, around Vlatadon Monastery, in the Vardari district, and in a compact zone alongside the east city wall. The old Greek district around the Church of St Menas dwindled and it was taken over by the Frankish quarter and the market. Locked in the stifling embrace of its walls, the city presented the same picture until the second half of the 19<sup>th</sup> c., when the Ottoman Empire underwent reform. (Fig. 11)

(Fig. 23) The demolition of the wall and the construction of a new mole were the most important planning interventions carried out in the city at the end of the Ottoman period, and the resulting transformation made it possible to connect Thessaloniki with the harbour and the railway stations to the west and to extend the city to the east. This was made imperative by the new commercial developments in the Mediterranean, particularly after the opening of the Suez Canal, and heralded a new era that was characterised by Thessaloniki's new international and local role as the principal port in the Balkans. (Fig. 10, 12) The creation of a strip of building land along the sea front attracted the interest of a number of firms that were arriving in the city and looking for somewhere to establish their premises. At the same time, the sanitation in the historic centre was improved and the way was made clear for its gradual renewal.

The first plan we know of for the whole of the intramural city was drawn up around 1880 on the initiative of the City Hall. (Fig. 13) The city's expansion beyond the walls continued apace. The plan of 1889 shows the two 'suburbs' for the first time, covering an area of 90ha to the east and 60 ha to the west. The traditional divisions along religious or ethnic lines, which still characterised the old centre, did not apply here. The residents belonged to all the communities in the city and lived next to each other without let or hindrance.

#### **Modern Greek Thessaloniki (1912- 1940)**

Thessaloniki acquired its official Greek identity in 1912, after the First Balkan War. (Fig. 24, 25) Equally important landmarks in the shaping of its new profile were the compulsory exchange of populations after the Asia Minor disaster of 1922 and the fire of 1917. In the space of a decade, the city's national character and role and a large segment of its population changed, concurrently with its spatial pattern.

The fire which in thirty-two hours devastated 120 ha of the most important part of the centre (leaving 70,000 homeless, three-quarters of them Jews) essentially wiped out the city's 'oriental' aspect, together with its traditional layout, which had steadfastly resisted all efforts at modernisation. (Fig. 14) Embracing the very latest ideas and methods in modern town planning, the Greek government, led by Eleftherios Venizelos, decided to ignore the pre-existing ownership and traditional uses of the land and to use the rebuilding as the basis for the social, economic, and spatial modernisation of the city, the implementation of a reform policy, and boosting the Greek presence and supremacy in the urban space.

An International Planning Committee headed by the French architect Ernest Hébrard was set up. (Fig. 15) Its members were the British landscape architect Thomas Hayton Mawson, the Belgian engineer captain Joseph Pleyber, Aristotle Zachos and Constantin Kitsikis, two known Greek architects, the Greek harbour specialist Angelos Guinis, and the Mayor Constantin Angelakis. The plan hammered out was an interesting vehicle for the predominant planning views of that time, which were now applied to the specifically Greek local geographical and historical features. The new plan gave the city a classical layout (axial formal geometry, diagonal streets, monuments as focal points), a hierarchical street network, and a civic centre with the public buildings and two squares on the new Aristotelous axis. The Byzantine monuments became the conspicuous generative points of a network of public space (squares, pedestrian areas, tree-lined traffic arteries). The same rationale produced the new breakthrough that linked the

Rotunda with the Arch of Galerius and continued, through Navarinou Square, down to the sea, combining this archaeological walk and elements of the urban landscape with a busy work and residential area.

Plans were also drawn up for the University of Thessaloniki, which was being established at that time, the workers' districts, the industrial areas, and the port. The city's traditional image was fading and being replaced by a 'modern' homogenous space stripped of its former distinctive features. The plan proposed new extensions so that the city would be adequate for 350,000 inhabitants and cover 2,400 ha. The basic organising element in the urban fabric was the geometrical block, which replaced the irregular labyrinthine neighbourhoods. At the same time, a new type of collective dwelling was being promoted, the apartment block demanded by the perception of a 'contemporary' built-up urban space. Co-ownership of residences appeared for the first time and subsequently became the norm, at the same time bringing the building of homes into the market economy.

Throughout the inter-war period, Thessaloniki underwent rapid changes and lost much of its cultural complexity, having bidden farewell to its Moslem inhabitants and welcomed over 100,000 refugees from Asia Minor. The 'refugee capital', as the writer Yorgos Ioannou so aptly termed it, had no difficulty in re-directing its drive and vigour, despite the generally adverse conditions produced by the loss of the city's traditional hinterland, the economic crisis of 1930, and the unstable political situation in the country as a whole.

With the outbreak of the War, all architectural and planning activity in the city came to a halt, and it was not until the end of the decade and the end of the Civil War that further changes in the urban space were seen. However, this tragic decade had one very specific consequence, which is not apparent in bare numerical records (the population was 300,000 in 1951). This was the mass extermination in the German concentration camps of virtually the whole of the Jewish community (50,000 people), which had been a major component of the city's profile for centuries.

The pilot plan for the revival of the city's historic commercial centre, which was sponsored by the European union (16<sup>th</sup> Directorate) from 1992 to 1994, helped to focus interest on the city's old markets, such as the harbour market (Ladadika) and the bazaars. The EU also funded the restoration of the market bath-house (Yahudi Hammam) and the excavation of the ancient agora.

In 1994, a large part of the intramural city, coinciding more or less with the area destroyed by the fire of 1917 (the sea front, Pavlou Mela St., Ayia Sofia St., Kassandrou St., Diikitiriu St., 26 Oktovriou St., and the harbour), was declared a Historical Site. It is therefore essential that a special comprehensive study be carried out for the protection of the entire intramural Thessaloniki. The numerous projects and architectural competitions for pedestrianised areas, squares, archaeological excavations, and redevelopment that are being promoted by the Cultural Capital Organisation originated in the planning framework described above. Their purpose is to restore and improve the latent qualities of a seriously traumatised urban space.

### **The Citadel**

The Citadel (Acropolis), which is triangular in shape, occupies the north-east end of the fortifications of Thessaloniki. (Fig. 26) It is enclosed by a stout wall with closely set towers, alternately triangular and quadrilateral. (Fig. 27) The incorporation of the Citadel within the city fortifications was apparently connected with the major defense works carried out in the 5<sup>th</sup> century. It was frequently repaired and reinforced over the centuries that followed.

The significance of its role in the defense of the city, with its weaknesses and strengths, are described briefly by historians at highly dramatic moments in the city's history -that is, at times of siege or capture, and of religious or political conflicts. (Fig. 28) The first known reference is by John Kaminiates, in connection with the siege of the city by the Saracens in 904. In the middle of the 14<sup>th</sup> century there seems to have been a settlement inside the Citadel. More specifically, John VI Kantakouzenos states: "The people at the Citadel (for it resembles a small town and has its own citizens)...".

Regarding its Early Byzantine history we have few pieces of evidence from recent excavations attesting to the existence of churches and monasteries in the Citadel. (Fig. 29) There is evidence in the literary sources for the destruction of a church of Christ the Saviour here during the capture of Thessaloniki by the Turks at the end of the 14<sup>th</sup> century. Important infrastructure works are still to be found inside the Citadel, including parts of the extensive water-supply system of Thessaloniki, such as the large cistern preserved near the Eprapyrgion, other, smaller ones to the south of it, and water-pipes. (Fig. 30,31)

After the second and final capture of Thessaloniki by the Turks in 1430, the Citadel was occupied by settlers and transformed into a Turkish residential area. (Fig. 32) Kal'a-l Balâ, or Yedi Kule, or Küçük Selânik, as the Citadel was now known, was for long the seat of the Turkish administration and, as a Turkish quarter, was not inaccessible until the beginning of the 20<sup>th</sup> century. (Fig. 33)

### **Monuments in the archaeological site of the Acropolis**

The Heptapyrgion fort, within the Acropolis, the last refuge of the city's defenders, consists of ten towers, three-sided and four-sided, and the walls which join them. (Fig. 34, 35, 36, 37)

The first phase of the construction, dating probably from the Early Christian period, forms part of the Acropolis walls and consists of towers P1 to P5 with their connecting walls.

In the second important phase, which is estimated to have occurred in the 12<sup>th</sup> c., the five inner towers, P6 to P10, were built and the towers of the earlier stage were reconstructed.

The third phase completed the work of the second and is assigned to the Palaeologean period.

In a subsequent stage of construction the defensive character of the Byzantine fort was altered by the Ottomans, a year after their capture of Thessaloniki in 1431. This phase is recorded in the Ottoman inscription on the entrance tower.

After the fall of the city the Heptapyrgion was used as the headquarters of the first Ottoman administration (Fig. 38)

The construction of the prison complex must have begun in the 1890's. A map that the prison was already in existence at that time. (Fig. 39) From that date the history of the Heptapyrgion becomes the history of the prison. (Fig. 40) In 1989 a joint ministerial decision transferred the Heptapyrgion to the Ministry of Culture and the Ephoreia of Byzantine Antiquities Monuments Service took over the maintenance and restoration of the monument. (Fig. 41)

Restoration is being carried out in such a way as to preserve the authenticity and integrity of the monument. (Fig. 42) Modifications are planned only where they are deemed unavoidable to prevent further damage. There will be the minimum necessary disturbance to individual features such as floors, roofs, apertures and stairways. The materials used in consolidation and restoration as far as possible will be compatible with the original materials.

#### **Protection by the Greek Archaeological law**

According to the Greek archaeological law (K.N. 5351/1932, article 52) the Acropolis district and the Eprapyrgion fortress are considered as historical monuments as the whole complex and the surrounding area. (Fig. 43)

Published in the national Government Bulletin Y.A. 1513/19-12-1961 (Φ.Ε.Κ. 36/Β/3-2-1962).

#### **Study of the Ephoreia proposing a new destination for the complex of Heptapyrgion**

Heptapyrgion was dismissed as a prison in 3<sup>rd</sup> June 1989. (Fig. 44A) The project for the conservation and reinforcement of the whole complex started in 1990 with surveys and documentation at each building, the towers and the walls at the Byzantine fortress. The research for the pathology of the structures and the static study for the reinforcement of the complex was completed in 1995 and then has been presented and approved in 1996 by the Supreme Archeological Council of the Ministry of Culture. The conservation and the first phase of works started in 1994 and lasted till October 1999.

Then the works continue during 2000 with the national funds.

- Monument for the public to visit.

- Cultural activities of small scale.

- Headquarters of the Thessaloniki Ephoreia installed in the former Prison buildings suitably repaired and organized.

The study concerns the rehabilitation and reinforcement of the former Female Prison building and the installation of the relevant facilities for the new uses (Fig. 44C):

- Temporary exhibitions' room.

- Conference-seminar room.

- Restoration laboratories.

## **ACTIVITY 2**

### **Climate, vegetation and geology**

Thessaloniki has a Mediterranean type climate, with northerly winds (18.9%) and easterly winds (9.8%) in winter. (Fig. 51) The most distinctive north wind, which blows down from the Axios/Vardar valley, is known as the *Vardaris* and also blows occasionally in summer, bringing the city much-needed relief. The prevailing winds in summer are southerly (9.3%) and south-westerly (10.5%).

Maximum monthly rainfall is 189.3 mm, with averages of 22.6 mm in July, 14.2 mm in August, and 55.2 mm in December.

The air temperature in Thessaloniki makes the city more 'continental' than the western areas of the Mediterranean. The absolute maximum temperature (41.8 °C) is reached in July, and the absolute minimum (-10.3 °C) in January. Average humidity in July and August is 60%, though it can fall much lower, to less than 30%.

Sunshine levels are high, with an annual average of 2,645.2 hours. There is most sunshine in July (368.1 hours) and least in December and January (110.3 and 113.6 hours respectively).

The principal crops grown in the wider area of Thessaloniki are cotton (50–25%), wheat (44–38%), vegetables (16–15%), oats, barley, rice, and grapes. (Fig. 52) The terrain in Thessaloniki prefecture is mainly lowland. The rivers Axios, Gallikos, and Loudias (marking the boundary with Pella prefecture) flow through an extensive alluvial plain in the west of the prefecture. In the north, between Mounts Vertiskos, Kerdylia, and Hortiatia, is the Lagadas basin, containing Lake Ayios Vassilios (or Lagadas) and Lake Volvi, which discharges its water via the minor River Rihios into the Strymonic Gulf. (Fig. 53, 54)

### **Assessment of the socio-economic impact of the project**

The Acropolis district is at the extreme north end of Thessaloniki's Old Town which was formerly isolated and inhabited by under-privileged social groups. The whole area is undergoing rapid development owing to two factors: i) families are moving in, particularly those of young professionals keen to move away from the city centre; ii) the new ring road around the city makes access to the Old Town (junction 7) much easier. (Fig. 44B, 45) The Ephoreia installed in July 1999 its headquarters in the former prison buildings in Heptapyrgion fortress which is open to the general public as an important monument and a centre for cultural events, it will certainly lead to the social rehabilitation of this part of Thessaloniki. Living conditions in the area will improve and the Ephoreia will be able to develop its cultural work.

### **Life in the Citadel today**

(Fig. 96, 97, 98, 99, 104, 92, 109, 110, 111, 112, 113, 114, 107, 108, 106, 105)  
Description of the activities available to the public before and after the interventions: Before: relatively few visitors, occasional, casually organised musical events and theatrical performances. After: integrated archaeological site with facilities for visitors; the two permanent exhibitions on Byzantine fortification in Greece and Heptapyrgion down the ages; room for temporary exhibitions, seminars, and various other uses; library; archives of historical documents, plans, drawings, and photographs of the monuments of Thessaloniki

and excavations carried out in the city; small open-air theatre for plays and concerts. (Fig. 46, 47, 48).

**Tourist Activity** (Fig 117, 118, 119)

Arrivals of foreign Tourists in Greece

Prefecture of Thessaloniki: Tourist Activity

Flow of Visitors in the Acropolis of Thessaloniki

MONTHS	YEARS		
	2000	2001	2002
JANUARY	94	1.971	2.522
FEBRUARY	79	1.854	2.927
MARCH	377	1.898	3.773
APRIL	413	2.103	3.908
MAY	786	2.211	4.244
JUNE	267	2.421	4.408
JULY	558	2.972	
AUGUST	750	3.024	
SEPTEMBER	800	2.805	
OCTOBER	1.210	6.733*	
NOVEMBER	1.256	5.621	
DECEMBER	1.070	3.852	

Greeks : 58%, Foreigners : 42%

\* An noticeable increase of the number of visitors due to the opening of two exhibitions: "An essay on Byzantine fortification in Northern Greece 4<sup>th</sup> - 15<sup>th</sup> c." and "Heptapyrgion: The Citadel of Thessaloniki".

**Aim of the project to involve young people and access for disadvantaged groups**

Young people are showing increasing interest in archaeological sites and museums, particularly those which present authentic aspects of history and also offer facilities for visitors. The monumental complex of Heptapyrgion in the heart of the picturesque Acropolis district, the permanent and temporary exhibitions, and the on-site cultural and professional activities organised by the Ephoreia (conferences, slide shows and films, guided tours, courses, educational programmes, and seminars on archaeological subjects for professionals) will all constitute a focus of interest for young people. The locating of the Ephoreia in a district still inhabited by underprivileged groups will unquestionably have a positive effect upon them.

**Existing local/ national financemnt**

Estimated budget and existing or expected funds: 1,173,881 euro.

### ACTIVITY 3

Two exhibitions are planned to be held in Heptapyrgion on 22- 25 August 2002

- painting exhibition organized by Archibald Dunn and
- photography exhibition by Sergio Garbari.

### ACTIVITY 4

#### "Culture 2000 - Laboratorio Europeo del Patrimonio"

In the framework of the EU programme Culture 2000 — Laboratorio Europeo del Patrimonio, the Ephoreia of Byzantine Antiquities intends to pursue the design project for the restoration and *mise en valeur* of the Early Christian, Byzantine, and Postbyzantine monuments located within the Thessaloniki Citadel. The aim is to redesign the wider area of the Citadel with a view to investigating the cultural and social potential of the district and improve the relationship between the monuments and their environment.

The Citadel district, which was isolated for many years and occupied by underprivileged social groups, was selected with a view to re-assessing the use of the existing open spaces and their relationship with the archaeological sites, and at the same time encouraging the local residents to play a more active part in the social life of the district. (Fig. 49, 50)

**Expropriations and construction restrictions in Thessaloniki's Citadel today** (Fig. 116, 115, 87, 85, 86, 89, 90A, 90, 88B, 88A, 88, 94, 93, 91, 95, 102, 100, 101, 103)

#### **Analysis of the premises regarding the planning of the area around Heptapyrgion**

From the foregoing analysis of the site, it is clear that Heptapyrgion, the city's highest point, was originally isolated from the residential part of the city and surrounded by open spaces. (Fig. 55) The north side presented a primarily defensive aspect: a fortress on top of a hill. On the south side, facing the city which it protected, the scene was less forbidding, with vegetable gardens and fruit trees.

Until the end of the nineteenth century, when the fortress was converted into a prison (see the map of 1899), no specific planning process had been applied to the surrounding area on either the north or the south side. (Fig. 56) It was at this time that a small garden with a fountain was laid out next to the prison entrance. Traces of it are visible today, namely what remains of the fountain after an illicit excavation. A few trees have seeded themselves around it. On the site of the parterres stand buildings connected with the prison, which were built in more recent times.

To the south-west, roughly built stone retaining walls mark the site of gardens in which the prison inmates grew vegetables. (Fig. 57) The presence of an open water cistern, together with the oral evidence of the local people, attests that the vegetable gardens were used until the end of the twentieth century.

Insufficient evidence remains of the layout and use of the land at the end of the nineteenth century to enable us to recreate them in their original form as historical gardens.

It was considered best to redesign the space and include some aspects of the previous use of the land. The new design had to provide solutions to problems faced by modern visitors to the monument (such as access and parking) and to preserve its authentic image of a Byzantine fortress surrounded by a piece of land with vegetation representative of the Greek landscape, wild on the north side, cultivated on the south, as it had always been: an authentic piece of land within the urban fabric which now surrounds the monument.

The Ephoreia of Byzantine Antiquities has declared the surrounding area a historic listed monument, thus ensuring legal protection for the authenticity of the site.

These, then, were the basic considerations that were taken into account when the site was planned. The original master plan was approved by decision ΥΠ.ΠΟ./ΑΡΧ.Β1/Φ34/18-4-1997 and **separate plans were drawn up for: i) the extramural area to the north, approved by decision ΥΠ.ΠΟ./ΓΔΑ/ΑΡΧ/Β1/Φ34/10-10-2001; and ii) the intramural area to the south-west, approved by decision ΥΠ.ΠΟ./ΓΔΑ/ΑΡΧ/Β1/Φ34/17-10-2001.**

When the archaeological site of the Early Christian basilica has been excavated, a plan will be drawn up for the intramural area to the south-east. More specifically, the individual plans apply the following principles and aims to the sites for development.

#### **The area around Heptapyrgion**

**North side** (Fig. 58, 59, 69, 70, 71)

Development proposal (Fig. 67)

Premises underlying visitors' access to the site

- I. No access for cars
- II. No unrestricted access for the general public
- III. Visitors must keep to the paths around the site

I & II Boundaries, fencing, and restrictions (Fig. 72, 73)

Access to the site is restricted by:

- i. changing the nature of the terrain around the boundaries of the site;
- ii. planting flowers and bushes around the perimeter of the site to hinder access.

III. Visitors' movements (Fig. 68)

Within the site, visitors will be restricted to the area between the rampart and the wall by i) fencing covered with climbing plants at the points where the rampart has collapsed, and ii) three entrances to the site.

The entrance gates will open and close the site to visitors. No access at night.

Outside the site, visitors may use the pavement and the surrounding streets.

Parking (Fig. 78)

Two carparks, A & B.

Theatre (Fig. 76, 77)

Open-air, non-permanent theatre on the north-west edge of the site between the school and the monument, in a location which offers a good view and is sheltered from traffic noise. As regards visual protection of the monument, the theatre is in an area where the monument cannot be seen from the school. There is no need to level the ground, because it is flat at this point. The theatre will initially be

small; but when the house owned by Mr I. Kambas is expropriated, the site will be further developed and assume its final dimensions. The site of the theatre will be marked off by thinly planted bushes. In its final form, the developed theatre site will also have a belvedere from which to view the monument and the west end of the city. In a cool location under the trees on the Kambas property, visitors will be able to appreciate the geographical relationship between Heptapyrgion and the city.

#### Public conveniences

These will not be free-standing, but part of the facilities connected with the theatre and the carpark when the theatre starts operating.

#### Access to either end of the archaeological site

- I. East end: by metal steps
- II. West end: by metal steps

#### Lighting

The lighting in the surrounding area is not intended to emphasise the monument in relation to the built environment of the city. The lights in Eptapyriou Street will be used for general illumination. In the north corner of the site, the illumination will be reinforced by additional lights installed among existing trees on the Kamba property. The north-west side will be illuminated by lights installed in the row of trees to be planted along the boundary between the site and the school. A separate lighting system will be installed between the rampart and the wall to recall the low distant lighting used in the days when Heptapyrgion was a prison. Specially positioned lighting within the monument will emphasise its contours.

#### Vegetation

Native Greek bushy species (e.g. *Arbutus unedo*, *Nerium oleander*, *Vitex agnus castus*) around the entire perimeter parallel to the road and the visitors' walkways, with the aim of indirectly discouraging access. The manner of planting is intended to reinforce the natural, 'wild' aspect of the landscape.

The self-propagating low vegetation (*Alyssum saxatile*, *Avena sterilis*, *Calendoula arvensis*, *Capparis spinosa*, *Capsella bursa-pastoris*, *Cardaria draba*, *Chenopodium album*, *Cynodon dactylon*, *Echinops viscosus*, *Galium aparine*, *Hordeum murinum*, *Iris germanica*, *Malva sylvestris*, *Matricaria chamomilla*, *Papaver rhoeas*, *Parietaria officinalis*, *Polygonum convolvulus*, *Sinapis arvensis*, *Sonchus oleraceus*, *Taraxacum officinale*, *Tragopogon* spp., *Verbascum* spp. etc.) on the slope will be preserved: with its range of colours and seasonal variations, it is the dominant, most striking feature of the landscape, especially in spring. It will have to be cut down in summer to avoid the risk of fire. (Fig. 62, 63, 64, 65, 66)

Sparsely planted bushes (*Laurus nobilis*, *Quercus coccinea*, *Spartium junceum*) to mark out the theatre site.

Aromatic plants (*Lavandula officinalis*, *Rosmarinus officinalis*, *Santolina chamaecyparissus*, *Thymus capitatus*) in the area between the wall of Heptapyrgion and the rampart. (Fig. 61, 74, 75)

Spiny drought-loving species (*Opuntia ficus indica*, *Quercus coccinea*) in front of the rampart at the points where the area between the rampart and the

Heptapyrgion wall is fenced off with wire netting, and climbers (*Clematis* spp., *Hedera* spp.) trained up the netting itself.

A single symbolic cypress (*Cupressus sempervirens*) at what is believed to have been the execution site

The first block in Eptapyryiou Street and the street itself

The appearance of the frontages in the first block in Eptapyryiou Street must be improved, while adhering to the conditions imposed by the building permits.

The appearance of the street itself must also be improved by removing advertising hoardings, burying electricity cables and telephone lines, and moving the electricity sub-station.

The area around Heptapyrgion

### **South-west side (Fig. 60)**

Site development proposal

#### **The site**

The site to which the proposals relate is located to the south-west of the Heptapyrgion site and is bounded: i) to the north by the Heptapyrgion fortress and the later prison buildings; ii) to the east by the open space outside the main prison entrance; iii) to the south by the adjoining urban block; and iv) to the west by the west city wall. The site slopes 3–5 metres from north to south.

Proprietorial status

The site belongs to the Ministry of Culture.

**By resolution 29/OIK/3903/ΠΣΚ/2492/30.9.1996, Govt Gazette No. 1334/19.11.1996, of the Prefecture of Thessaloniki, and in accordance with a modification of the approved street-plan, in the Eptapyryio district in the Municipality of Thessaloniki a five-metre-wide pedestrian zone occupies the space between the adjoining urban block and the green area around Heptapyrgion.**

The premises underlying the development of the site

1. Minimal intervention
2. Planting with low-growing vegetation
3. Vegetable gardens to be laid out, as a re-creation of the vegetable gardens within the Citadel (shown on the 1899 map) and the prison vegetable gardens which occupied this site until modern times.
4. Conservation of the existing retaining walls of the gardens, the water cistern, and the fountain.

These premises are in line with the terms of resolution **ΥΠΠΟ/ΑΡΧ/Β1/Φ34/18520/462 of 18 April 1997 by the Directorate of Byzantine and Postbyzantine Monuments' Department of Byzantine Sites regarding the 'Development of the area around the Heptapyrgion fortress in Thessaloniki'.**

The proposed interventions partially implement this general resolution.

Present condition

The east end of this enclosed site is used for storing architectural members from excavations in the city, and also for parking the archaeological service's official car and the cars of the service's employees.

Part of the west end of the site is used for storing building materials (sand, bricks, etc.) supplied to the archaeological service's worksites. On the rest of the site are remnants of the drystone walls which enclosed the prison vegetable gardens. They are in poor condition and have collapsed in places. The largest wall, some 80 metres long, runs along the south edge of the Heptapyrgion property and has been encroached upon by unauthorised additions to the adjoining properties. In the past, part of it collapsed and was rebuilt by the Ephoreia of Byzantine Antiquities. A cistern for collecting surface water for watering the gardens and a fountain which used to be located south-west of the entrance to Heptapyrgion (see 1899 map) also survive on the site. There is an electricity sub-station on the south-east edge of the site. The rest of the site is unoccupied. Trial sections beside the west wall have located two burials.

The development (Fig. 81, 82)

Five areas are proposed, not clearly differentiated from one another, apart from the third and the fifth, which will be enclosed.

A gradient goes down to the middle of the site and leads to areas I, II, III, IV, and V.

Area I is for sitting in. Pergolas and vines (*Vitis vinifera*) are proposed here and a built seat parallel to the retaining wall, with three columnar cypresses (*Cupressus sempervirens*) to define the area and the view. (Fig. 80)

Area II continues to be used for storing marble architectural members from urban excavations. (Fig. 79)

Area III is the vegetable garden, enclosed by fencing and bushes. It is separated from area I by a retaining wall. Species grown will be those which the sources tell us were cultivated in the Byzantine period (*Cucumis sativus*, *Cynara scolymus*, *Daucus carota*, *Cucurbita pepo*, *Brassica oleracea botrytis*, *Allium cepa*, *Brassica oleracea capitata*, *Lactuca sativa*, *Solanum melongena*, *Allium porrum*, *Allium sativum*, *Apium graveolens*, *Spinacia oleracea*).

Area IV is a continuation of area II at a lower level and will be planted with fruit trees like those growing there today, with varieties specially selected to provide staggered flowering periods. Between the electricity sub-station and the cistern, a covered parking space for two cars is proposed.

Area V is a pedestrian zone with a controlled entrance for visitors. It will be open during the daylight hours and closed at night for security reasons. Shade will be provided by climbing roses (*Rosa spp.*) trained up pergolas.

The west end of the road leads to a belvedere and metal steps down to Arahthou Street.

It is proposed that the walls of the vegetable gardens, the cistern, and the fountain be consolidated, restored, or simply conserved, where necessary.

## **ACTIVITY 5**

Full moon night's musical concert in Heptapyrgion on the 23rd of August

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Charalambos Bakirtzis, Director of the Ephoreia of Byzantine Antiquities of Thessaloniki

**Technical coordinator of the program, responsible for the study on the urban development of the site**

Vassilis Koniordos Architect

**Research and intervention proposals on the landscape of the site**

Chariklia Siaxampani- Stefanou. Architect

**Lighting proposals**

Ioannis Iliadis, Electrical Engineer

**Research and proposals regarding the use of vegetation on the site , electronic design**

Olga- Maria Bakirtzis, Agriculturist- Landscape Architect

**Computer and graphic animation**

Antonis Papamanolis, Computer Specialist

## **Italy**

**Councillor responsible for the Culture of the Municipality of Cortona**

Luigi Checcarelli

**Executive for the Area Urbanistic of the Municipality of Cortona**

Alvaro Fabrizi

**Responsible for the Ufficio Beni e Attività Culturali**

Bruno Gialluca

**Executive for the Ufficio Beni e Attività Culturali**

Paolo Giulierini

**Project coordinator**

Carlo Avetta

**Chairman of Clessidra Firm**

Fabio lemmi

**Researcher**

Stefano Rossi

**Researcher**

Tamara Orsi

## **Spain**

**Director of the Instituto Andaluz del Patrimonio Histórico**

Román Fernández-Baca.

**General coordinator of the program**

Pedro Salmerón.

**Technical coordinator of the program**

Luis F. Martínez

**Research and intervention proposals on the landscape of the site**

Enrique Larive.

**Research and intervention proposals on the Cultural Resource.**

Laura Rivas.

**Research and intervention proposals on the Economic Resource.**

Elvira Frende.

