ABSTRACTS

Coastal environments and human practice in the long term: the case of Corfu
Kostas Sbonias

Seascapes, both as specific ecosystems and as cultural manifestations formed through human action, are important in shaping economic and social relations and entail a range of experiences and meanings for human societies. The coastal environment of Corfu constitutes the field in which a network of cultural routes was planned and developed within the FISH&CHIPS project. The paper focuses on key features of this environment. First, it examines the geographical location of Corfu in the Ionian Sea and the specific characteristics of its sea -channel as prescribing the importance sea held for the island throughout its history, as well as its relationship with the mainland shores across, dating back to antiquity and, through time, to the 20th century. Then, it discusses the economic significance of fishing from prehistory to modern times, focusing on the data available for Corfu regarding fishing methods, fishing-fleet, catches and human resources. In this context, a significant aspect of the Corfiote fishery is highlighted: in inland waters, lagoons, lakes, rivers and marshes, barriers were constructed to create *vivaria* and trap fish within these wetlands, converting them into fish-farms. Such characteristics of coastal geomorphology allowed also for the development of salt-flats, as in the case of the Lefkimmi saltworks in South Corfu. Salt-pans and built installations signpost the production of one of the most important sea-related commodities and a source of income for both local and state economy.

The coastal environment of southern Corfu and its correspondent cultural landscape, understood through its fishing grounds, coast-linked inland villages, wetlands, estuaries, salt marshes and fish farms, as well as via traditions and other aspects of the local communities" collective memory, form the core of the "Petritis and South Corfu eco-museum", which was planned within the FISH&CHIPS project.

Ancient fisheries and fish catches in the Ionian Sea
Dimitra Mylona

The evidence on marine resources, fishing technology and fish eating at the Ionian islands and Corfu in antiquity is currently limited. It is, however, indicative of the existence of varied and complex fisheries which included the exploitation of the coastal waters, both marine and euryaline, and, at certain periods, even the systematic processing of these resources. The exact chronological development of fishing technology and culinary preferences is at the moment unclear. Future targeted work on this topic is particularly promising.

Corcyra and the sea routes of the Ionian Sea in ancient times
Kalomira Mataranga

The role of the wealthy sea-power of Corcyra, within the island region of the Ionian Sea and the Adriatic Sea, is explored, in the period between the 6th and the beginning of the 4th C. BCE, with an emphasis set on the years of the Peloponnesian War. Based, primarily, on literary sources, the main topics discussed are: the importance of Corcyra's geographic location on the sailing routes along the west coast of Greece and on the route to Italy and Sicily; its role as a military naval base, as a marshalling site for naval expeditions and as a convenient "station' for the fleets of the «great powers» at the time; its significance as a trade center.

Archival evidence for fishing in Corfu in the 19th century
Nikos Alevyzakis

Fishing on the island of Corfu in the 19th century is discussed in the light of an archival study conducted within the FISH&CHIPS project. Documentary evidence studied sheds light on a range of economic and administrative practices related to fishing: overall, authorities ensured a smooth-running of fishing activities which were meticulously integrated into a set of economic and hygiene regulations; connections to fisheries across the Corfu channel, on the continental shore, are well illustrated and their significance highlighted. A significant corpus of data was processed while recording and analysing a series of entries into the registry of a certain branch of a regional public health office. These data soundly document an intense fishing activity and allow for the investigation of issues related to the types fishing-vessels and to the sequence

of the certain practices implemented in the study area, within a comprehensive fishing-process. Furthermore, a report issued by the Port Authority of Corfu, addressed to the Ministry of Maritime, sheds light on the sizes of fishing boats in use and of the corresponding fishing crews, on the fishing grounds around the island as well as on fish-quantities and catch monetary value.

Interactions between traditional fishing activities and marine ecosystem of Central and Southern Ionian Sea
Georgios Karris

The Mediterranean Sea is a highly dynamic ecosystem, influenced by a range of oceanographic factors (e.g. primary productivity, sea surface temperature, sea level anomaly, seafloor depth, etc.) and human activities (e.g. fisheries), which may constrain prey availability for top marine predators, ultimately affecting their foraging behaviour. For example, seabirds are increasingly recognised as critically important bioindicators of marine ecosystems that are useful in assessing the environmental disruption via human activities and the impacts of climate change on marine biota. The Department of Environment of the Ionian University has participated in several research projects during the last 15 years, aiming to understand aspects of fishery-seabirds interactions as well as to study the impact of various fishery gears on marine environment in general. Indicatively, aims of these projects were a) to assess the magnitude of incidental by-catch of seabirds on fishing gears in the Ionian region, b) to evaluate possible effects of a ban on discarding at sea on top marine predators such as seabirds in Eastern Mediterranean, c) to study the movements of breeding shearwaters in Mediterranean colonies by using innovative remote sensing tools, to assess the predictability of high-use areas for foraging as well as the key environmental factors and human fishery activities which may affect foraging habitat preference, and d) to examine microplastic ingestion in *boops* from Greek coastal waters, at areas of ranging anthropogenic pressure, including both urbanised and marine protected areas (MPAs).

Pezótrata collaborative groups in South Corfu: the ethnoarchaeology of the social aspects of fishing practices
Andreas Kapetanios

The Fish&Chips project provided us with the opportunity to explore the *ethnoarchaeology* of fishing, at the coastal zone of South Corfu, employing ethno-

graphic techniques such as interviews and participant observation. In parallel, *ethnoarchaeological* workshops were organised, in which fishermen and other members of the local communities were invited to "teach" some of their fishing practices, applying techniques of *experimental archaeology*. The integration of oral and observational empirical data achieved in this manner is employed in this paper in examining a certain collaborative fishing technique called "pezótrata". The case is used as a vehicle to discuss the social rôle of this practice, diachronically. This is done by developing an *hermeneutic circle* between past and present involving ethnographic, historical and archaeological data (pottery and other artefacts, iconography, inscriptions). The certain practices of fishing, the accumulation and transmission of practical knowledge, human labour, the material means used (nets, boats, tools), the emergence of control and ownership of both knowledge and means, aspects of collective ideology (value system, gender relations, religion and ritual practices), economic processes (monetised vs non-monetised relations, commercialisation) and political structures (polities, centripetal control, taxation) are all examined comparatively in order to develop *formal* and *structural analogies* as well as *homologies* (i.e. sets of relations between analogies) linking past to present, as well as material practices to social behaviour. It is argued that collectivity, reciprocal relationships (both collaborative and conflictual) are structural principles activated within the certain practical and material aspects of "pezótrata", structuring the specific ways in which communities correspond to changing historical contexts, both reproducing existing social bonds and mentalities and allowing for safe (not traumatic) adaptation through change.

Participatory cultural mapping as a methodological tool for the development of the "Petriti and South Corfu Ecomuseum"
Georgia Kanellopoulou

The multifaceted character of an *ecomuseum* (an experienced space) is the basis of an interdisciplinary and participatory approach during both its planning stage and its subsequent operation. The *Petritis and South Corfu Ecomuseum* intends to accentuate the marine and coastal heritage of South Corfu, focusing on three main visiting areas: the fishing village of Petritis, the Korission Lagoon and the Lefkimmi salt-flats. Three participatory workshops were held to record social, cultural and environmental values of each local community, based on the methodology of *Participatory Cultural Mapping* in the stages of "Participation

by providing information" and "Participation with stakeholders in an advisory role". At each meeting an informative presentation on the concept of the Ecomuseum was provided, giving examples from Greece and abroad and analysing the way in which the "Petriti and South Corfu Ecomuseum" could contribute to the sustainable tourism development of the territory. During the "Participation by providing information" stage, participants were asked to fill out a questionnaire. The questions were divided into two sections; the first related to documenting aspects of the natural and cultural heritage they valued and the second to recording opinions on the development of an Ecomuseum in their community and their willingness to become involved in its operation. Additionally, using specially designed cards, the participants, through group activities, shared elements of their collective memory and indicated on maps aspects of their heritage which require preservation and interpretation. During the stage of "Participation with stakeholders in an advisory role", a number of meetings were held with representatives of institutions and organisations such as: the *Corfu Environmental Education Centre*, cultural associations, entrepreneurs from the tourism sector and town council members. The data collected throughout the process were employed in planning *Cultural Routes* as part of an *in-situ* promotion of the certain marine and coastal heritage of South Corfu.

Fishing activities in lake Korission
Ilias Kotinis

Korission Lagoon is the largest wetland on the island and one of the most remarkable ecosystems in the southern part of Corfu, known for its remarkable fishing abundance. The paper delivers a synopsis of a study of historical sources for the Korrision wetland and its contexts. Historical documentation is scarce but not absent. One of the main questions asked is whether the channel that connects the lake with the sea is natural or artificial. It seems that the shallow lake was converted into a lagoon by digging a channel cutting through recent and *paleo* sand-dunes, during the Middle Ages; there are indications that, at least since the 16th century, the lake functioned as a fish-farm and certain sections with its furrows were leased. Fishing in the lagoon triggers the construction of aquaculture facilities, also known as "vivaria", representing a range of fish-trap systems. A description of traditional such systems, employed in modern times, is given, on the basis of oral testimonies by fishermen who were interviewed within the study activities of the Fish and Chips Project.

Shipwrecks in northern Ionian Sea
Georgios Rouvas

Due to its geographical location and strategic importance, Corfu has always been at the sea-route for ships approaching the Adriatic. Underwater survey has recorded a number of shipwrecks on the seabed in the vicinity of the Corfu island. Most of these were identified by the Ephorate of Underwater Antiquities, in collaboration with the Hellenic Center for Marine Research; others were discovered by chance by local divers. All identified shipwrecks currently count up to one hundred and twenty-three and this is evidently only part of the number presumed to be actually in sea. The paper examines three categories of shipwrecks: ancient and historic ones, warships and merchant / passenger ships. Some of the latter were recorded in the framework of the "Magna Grecia Mare" Italy-Greece Interreg Project for the promotion of the shared maritime culture.

Apulia and the sea. A journey into coastal and underwater landscapes
Rita Auriemma – Giuliano Volpe

In Apulia region, in the context of various projects, wide coastal stretches and seabeds have been surveyed systematically. Both surface and underwater investigations were undertaken within the holistic, contextual, diachronic and multi- and interdisciplinary approach of landscape archaeology. In this paper we focus on coastal and underwater landscapes or, better, "seascapes" of the Apulia region. A concise overview of this research is presented following an ideal *periplous* course, from north to south, and highlighting the latest activities and acquisitions. The excursus includes investigations of harbour structures, shipwrecks and routes, sacred places as well as museums and exhibitions related to these "seascapes". Last, we present the *Salento Underwater Archaeological Map* information system which has been transformed into a WebGIS system be integrated into the wider *Map of Cultural Heritage of Apulia* information system, attached to the Regional Landscape Plan (www.cartapulia.it). [http://www.arcgis.com/apps/OnePane/storytelling_basic/index.html?appid=edb2b5022b3a4d4abb1b6f4abc95a2c7].

Taranto, the resources of the sea and the "Mar Piccolo" Ecomuseum
Danilo Leone – Maria Turchiano

The long coastline of Apulia, stretching over nearly 850 km, is defined by rich

tangible and intangible cultural heritage. The impressive number of both terrestrial and underwater archaeological remains, as well as the range of traditional craftsmanship, customs and practices that have survived in time, testify for the strong interaction between humans and coastal environment. Owing to its strategic position in the central Mediterranean, this region has played a pivotal role in maritime networks, as indicated by the complex system of coastal sites, anchorages, harbours, coastal towers, lighthouses etc. Being part of the main trade-route to the East and the obligatory crossing on the sea-route to the northern Adriatic, Apulia represents a key case to study Mediterranean trade, production and culture from Prehistory up to the Modern Age. The ancient maritime traditions and the marine biodiversity characterising Taranto have produced over time an incredible variety of traditional fishing techniques. Aristotle, in a well-known passage of the fourth book of Politics, mentions the *demos* of Taranto, as being characterized by a large number of people employed in fishing activities. Salt-production was an essential resource for the city, already in Classical times. It was related with a series of secondary production practices ranging from fish-conservation to manufacturing a renowned high quality wool-type. Literary and archaeological evidence outlines Taranto as one of the main purple pigment production centres, extracted from murices. Another little-known manufacturing process was that of the filaments the *pinna nobilis* produces to fix itself to the seabed. *Byssus*, or sea-silk, was obtained from them. The softness, shine and the peculiar golden colour of this fibre contributed to myths and legends. Literary sources occasionally refer to sea "products", oysters among them. Pliny attests that they were much appreciated and cultivated in the Mar Piccolo. Fishing was a major source of income and contributed strongly in shaping the city's identity, throughout Antiquity. An alternative but essential component of the "harvest of the sea" was intensive fish-farming in the fishponds of the Mar Piccolo. All this precious heritage is now quickly disappearing, due to both exogenous and endogenous factors. The exhaustion of fish resources (due to intensive fishing, destruction of seabed habitats and pollution) results in significant decrease of the catch per capita. In parallel, knowledge of traditional techniques, which was passed from father to son, is dissipating as the Taranto young generation opts for different working activities. However, we need to take advantage of this knowledge-reservoir, retrieved and adapted by means of new fishing technologies. In this way, it may well provide significant input into the process of diversification of local sustainable economic practices by ways of seasonal differentiation of economic activities, participation of fishermen in the transmission of traditional knowledge, role of Museums in preserving and transmitting the memory of traditional fishing practices and maritime activities.

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