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NATURE



Landscape sculpture by Nella Golanta / Image by Dimitris Kapsanis

CULTURE

strategies and solutions for cities and territories

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**OUR HERITAGE:
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ECHOPOLIS INTERNATIONAL 2018
**«Nature and culture-based strategies and solutions for cities and territories:
an idea whose time has come !»**

BOOK OF ABSTRACTS

NOVEMBER, 2018

Keynote speech, Maguelonne Déjeant-Pons, Executive Secretary of the European Landscape Convention, Council of Europe / Secrétaire exécutive de la Convention européenne du paysage, Conseil de l'Europe

« Le paysage entre nature et culture : les travaux du Conseil de l'Europe »

Adoptée par le Comité des Ministres du Conseil de l'Europe à Strasbourg le 19 juillet 2000, la Convention européenne du paysage du Conseil de l'Europe a été ouverte à la signature des Etats européens à Florence le 20 octobre 2000. A ce jour, 39 Etats membres du Conseil de l'Europe ont ratifié la Convention et deux l'ont signée.

Premier traité international exclusivement consacré à l'ensemble des dimensions du paysage, elle répond aux grands enjeux de l'Organisation en matière de droits de l'homme, de démocratie et d'état de droit dans une perspective de développement durable. Les Etats membres du Conseil de l'Europe signataires de la Convention se sont déclarés « soucieux de parvenir à un développement durable fondé sur un équilibre harmonieux entre les besoins sociaux, l'économie et l'environnement », en considérant également la dimension culturelle du paysage.

Des travaux importants, traitant du développement durable et faisant état de la place qu'occupe le paysage dans la vie des êtres humains et des sociétés, ont été réalisés dans le cadre du Programme de travail de la Convention. La Convention ainsi que les textes fondamentaux concernant sa mise en œuvre contribuent à promouvoir : la définition et la reconnaissance juridique du paysage ; la prise en compte de la dimension paysagère dans les politiques nationales et internationales ; le développement de la coopération internationale ; la reconnaissance de réalisations exemplaire.

Concept important, de grande actualité, le paysage représente une mosaïque des quatre dimensions du développement durable : naturelle, culturelle, sociale et économique. L'ouverture de la Convention européenne du paysage à des Etats non européens sera une occasion de réaffirmer le caractère universel de la dimension paysagère des droits de l'homme et de la démocratie. Celle-ci représente une contribution du Conseil de l'Europe à la mise en œuvre de l'Agenda 2030 des Nations Unies pour le développement durable.

DAY 1

Monday 26 November 2018
Venue : Eugenides Foundation

1 Plenary Session I Auditorium, Eugenides Foundation

Natural and tangible and intangible cultural heritage as strategic territorial development resources

Maria Prezioso, Maria Coronato (IT)

To integrate the Network of protected Areas (NPAs) in territorial development strategy

Following the evolution of different approaches to biodiversity conservation and sustainable development, protected areas' (PA) management is currently framed within an ecological network approach (IUCN, 2003). PAs are increasingly being designated and managed as systems, rejecting the traditional view that regards protected areas as 'islands of nature', fenced off from the dangerous outside world. The traditional objectives of biological and cultural diversity are integrated by social and economic aims for integrating natural capital into territorial strategies and meeting EU targets, e.g. the provision of ecosystem services for settlements and human well-being, climate change reduction, natural hazard mitigation, green economy, etc.

Recent European experiences (ESPON LinkPAs, 2018) have highlighted different legislative, planning, management and governance approaches regarding protected areas also belonging

to the same IUCN category. These approaches are even more complex if the actions of territorial development are built according to a systemic approach, which looks at Natura 2000 and sees territorial development planning by the network of protected areas (NPAs). The Action Plan of the EU Commission (Action Plan for Nature, People and the Economy, EC 2017), devoted to reaching the EU 2020 goals on biodiversity, identifies the following as its priority: "ensuring better coherence of biodiversity conservation with broader socio-economic objectives". In order to achieve this aim, in many cases Networks of PAs (NPAs) emerged as a governance instrument in the framework of territorial sustainable development and green infrastructure (GI).

The NPAs can be classified into 4 types (transnational, international, national and regional) each of which has its own model of governance and a different impact on territorial and sectorial development strategies. In any case, all NPAs are directly linked to the PAs involved and consequently, in different ways, to the municipalities in the area; all NPAs have direct connections with central and regional administrative bodies; all NPAs pay particular attention to international and EU conservation policies, especially to GI; all NPAs focus on monitoring tools; all NPAs consider financial and communication aspects as important for involving local actors such as SMEs, citizens, NGOs, etc. NPAs thus become the place for cooperation and change. NPAs can become an institutional body and an instrument for implementing the directives linked to GI on the basis of territorial diversity (relating to the national and regional policy strategy domain).

These aspects appear relevant in the integration of NPAs' management in sectoral development strategies because they represent how, at different level NPAs, could enter and influence the sectoral strategies because NPAs are linked to the PAs that are direct connected with the territories (people, SME, local bodies, etc). NPAs through PAs can interact with the territories becoming an intermedium policy actor able to connect regional and central bodies with

the local bodies where PAs insist. The strong relation among the different actors that insist on each PA organised in NPA need to be better defined assessing, at the end, the added value that PA, if organised in NPA, produce for economic actors (SME, citizens).

The paper will investigate the models of network of protected areas and the management of NPA by highlighting the common domains that networks of different levels present (domain of funding, domain of change and cooperation, domain of policy and strategy, domain of Territorial Impact) for introducing a model of NPA management in which the NPA appears an Institutional intermedium policy actor that can be connected with regional and central bodies.

Keywords: Network of Protected Areas, Green infrastructures, territorial development

Stella Kostopoulou, E.Sofianou, Miltiades Lazoglou (GR)

Polycentricity and Silk Road cultural heritage tourism : in search of ontologies

Worldwide, the concept of polycentric development has attracted much attention of both academia and policy-makers, with growing acknowledgment of the relevance of the topic in geography and regional and urban studies. Polycentricity indicates the connection of neighboring centres that have common characteristics and their integration in wider spatial networks. Among the functional linkages developed within a spatial network, cultural heritage and tourism are considered as important factors of integration in a polycentric system. In the international academic literature on sustainable tourism development, there is an increasing awareness of the importance of cultural heritage regeneration on urban and regional scale, as an important resource for local economic and social development. Cultural heritage tourism, widely recognized as one of the fastest growing segments of the global tourism industry, enables cultural exchange and encourages local development, as a major creator of jobs and investment. As a result, a growing number of cities and regions globally are basing their tourism development strategies on the promotion of tangible and intangible cultural heritage.

The Silk Road cultural heritage tourism is a rather untapped research topic, and polycentric networks based on the Silk Road culture is believed to orientate a new research field. The revival of the Silk Road heritage in its modern perspective encompasses and encourages the creation of new tourism flows of independent travelers, seeking to experience diverse cultures and alternative forms of tourism. Greece, endowed with a rich cultural heritage connected with the Silk Road, can benefit from this revival and capitalize over a diversified cultural tourism product.

Main aim of this research is to explore the factors that boost cultural polycentric development and more specifically, to identify the prospects of creating new polycentric networks based on the Silk Road cultural heritage using ontologies. In philosophy, the term "ontology" describes physical entities, whereas in information science ontologies are an easy and accessible way to obtain and share knowledge in a certain domain and also promote knowledge interoperability and interpretation. Thus, ontologies are a proper tool to help researchers organize data related to a particular domain and can be central to investigate the links of the Silk Road cultural heritage and sustainable tourism development. The proposed methodology aims to identify the degree of spatial polycentricity in the study area, in terms of the Silk Road cultural heritage footprint networking, introducing relevant ontologies of Silk Road tangible and intangible assets (eg. museums, archeological sites, industrial cultural heritage, historical buildings, festivals, creative industries, gastronomy).

The paper focuses on the polycentric networking of urban and rural areas in the Region of Central Macedonia in Northern Greece, based on the Silk Road cultural heritage. The region is endowed with rich tourism resources based on the Silk Road cultural heritage footprint, most of it still untapped. The creation of networks of Silk Road tourism destinations is estimated to play an important role in promoting a multipolar regional tourism development model. Research results underline **Silk Road tangible and intangible heritage and tourism ontologies** as a research topic that needs to be further investigated both theoretically and empirically.

Keywords: Cultural heritage, polycentricity, Silk Road, tourism, ontologies

Angela d'Orazio, Michele Pigliucci (IT)

The potential role of the networks of protected areas in the European Green Infrastructure Strategy

As part of its post-2010 biodiversity policy, the European Commission has been developing a strategy for an EU-wide Green Infrastructure (GI). The underlying idea of this initiative is the recognition of the environment as an infrastructural resource capable of delivering a wide range of ecosystem services.

By means of its GI strategy, the European Commission aims to provide a framework for integrating GI into sectoral policies, including nature conservation. The shared model refers to a functional approach built on a coherent system of areal components where PAs (under different categories of preservation) are included as core elements. In addition to the conservation dimension aspect (which provides a particular ecological connectivity), this approach makes it possible to identify appropriate opportunities for the exploitation of natural resources, by means of activities such as agriculture, forestry, fishing, human settlement, recreation etc. If these activities are planned and managed in a sensitive manner and on an appropriate geographical scale, they can ensure the sustainable use of natural resources. As the object of European policy, Green Infrastructures development can exploit financing sources mainly deriving from the Operational programmes under the existing Structural and Cohesion Funds for the 2014 – 2020 period (Operational Programme Environment 2014 – 2020, Rural Development Programme 2014 – 2020, Operational Programme Human Recourses Development, Operational Programme Innovations and Competitiveness 2014-2020), LIFE Programme 2014 – 2020, Financial Mechanism of the European Economic Area and Horizon 2020 Programme.

The realization of GI within the European strategy must rely on the backbone of the existing established networks under EU regulation: the Emerald network; the EU's Natura 2000 network, the Council of Europe's Pan European Ecological Network (PEEN, under Pan-European Biological and Landscape Diversity Strategy - PEBLDS). To date, these are all the European protected areas that have been established nationally and regionally. Then it is possible to identify a diversified governance instrument in the Network of Protected Areas (NPA) which comprises two or more PAs that share common goals and which is aimed to coordinating management of protected areas, by means of joint actions in conservation and valorization. NPAs are systems of PAs that can be institutional or non-institutional, built around different objectives and managed according to an ecological perspective or a wider cooperation-based approach.

In order to investigate the real and potential role in territorial development of such kind of Networks of Protected Areas (NPAs), one of the considerations to bear in mind is that the NPAs are made by areas. These areas are the basic element in the planning rationale since they are the target of specific regulations as well as the elements pertaining to the envisaged spatial structure. On the other hand, NPAs can also be considered as collective actors in

terms of planning, as they are the territorial organization serving as managing authority of the individual local PAs. Consequently, NPAs can be seen as passive or active players in territorial development. In addition, as NPAs at different levels are part of GI, they can either passively or actively support it. It depends on the status that each NPA has within the broad policy-setting and planning system at the national (country) and regional (states, regions) level.

The NPAs can be recognized only as ecological networks (i.e. a complex of areas that are ecologically coherent), which are managed by a single authority; alternatively, they can be autonomous networks of PAs that are managed individually. A broad evaluation of the role of NPAs in defining and implementing territorial development strategies must therefore focus on the role that NPAs have been assigned within each context. The paper presents some results of the recent research (ESPON LinkPAs, 2018) in providing a European wide investigation (a country-by-country analysis) that has sought to reveal which type of role the NPAs can play within the institutional setup for territorial development policy and for GI policy in general. The analysis has concentrated on the database provided by the Biodiversity Information System for Europe (<https://biodiversity.europa.eu/>) organizing the information regarding NPAs according to different criteria. This analysis reveals critical elements in developing suitable governance models for NPAs in implementing GI policy strategy at regional, national and transnational level.

Keywords: Green infrastructure Policy, planning systems, Network of Protected Areas

Adnan Shehadeh (PT)

Natural and cultural heritage in Palestine

By the name Palestine (Philistine of the Philistines or Canaan land by the Canaanites) is called the region of the eastern Mediterranean stretching from the border of Egypt (south) to the border of Lebanon and Syria (north) and east to the Jordan River. It is located to the west of mainland Asia between latitude 29° 30' and 33° 10' north and longitude 34° 10' and 35° 40' east of Greenwich. The total area of Palestine is 26323 square kilometers. Palestine, the land of religious missions and cradle of human civilization, is a natural and symbolic space of great importance for the three great monotheistic religions: Judaism, Christianity and Islam. It is the oldest kingdom of ancient Eastern civilization where twenty-one civilizations from the eighth millennium BC passed through Jericho's most ancient city, and who left their marks.

Palestine is the link between the continents of Europe, Asia and Africa, which gives it an excellent strategic and commercial importance, and has been the mainstay of the dispute among many peoples since ancient times. Palestine contains a large number of important historical and religious cities for the three monotheistic religions, mainly Jerusalem, Hebron, Bethlehem, Nazareth, Jericho, and Tiberias. Historic Palestine has 14 listed sites on the World Heritage List.

Palestine is characterized by the diversity of its climatic areas, despite its small size, belongs to the Mediterranean region, with mild weather, tropical climate, desert climate and semi-desert. This climatic variation has had a major impact on soil diversity, natural vegetation, water distribution, agricultural production and distribution of the population. The Architecture of Palestine covers a huge historical timetable and a series of different forms and influences.

Maria Markatou (GR)

Place branding based on the tangible and intangible cultural heritage: a proposal for the region of Thessaly in Greece

Intangible cultural heritage is embodied in those practices, expressions, knowledge, and skills - as well as in associated objects and cultural spaces - that communities and individuals recognize as part of their cultural heritage. Transmitted through generations and constantly recreated, it provides humanity with a sense of identity and continuity. Sustainable tourism and intangible cultural heritage are interrelated concepts: The global wealth of traditions is one of the principal motivations for travel, with tourists seeking to engage with new cultures and to experience the global variety of performing arts, handicrafts, rituals and cuisines. Fostering the responsible use of this living heritage for tourism purposes can generate employment, alleviate poverty, curb rural flight migration, and nurture a sense of pride among communities. Intangible cultural heritage must be thoughtfully managed if it is to flourish in an increasingly globalized world. Only true partnerships between communities and the tourism and heritage sectors, built on a genuine appreciation for the aspirations and values of all parties, can ensure its survival.

The work that follows aims at suggesting a proposal that promotes sustainable tourism investing in the “Thessalian” intangible cultural heritage. The basic assumption is that what distinguishes and highlights Thessaly from the other regions in Greece, is the existence of the so called “Thessalian” plain. In this context, the central challenge revolves around to ‘work’ on attributing to Thessaly a specific or a number of trademark characteristics, to “use” “Thessalian” plain in order to build an identity completely different from the respective that Thessaly is famous in nowadays (for example, Meteora monasteries and rocks, Pelion area, Olympus mountain). In this way, the region will be exploited to a different and more sustainable direction, away from traditional ideas such as those of just enjoying the sun and the beach. Therefore, tourism will be focused on the intangible cultural heritage, namely the “Thessalian” plain landscape, the long history, the historical and cultural symbolism. The unique and innovative with this paper is the focus on landscape and more specifically on the rural landscape. Therefore, the work tries to redefine man's relationship with Earth, a relationship as old as the human species.

Keywords: Greece; intangible cultural heritage; place branding; sustainable tourism; trilogy of food chain.

Emmy Papazoglou (GR)

Nature and culture: The cultural policy of local authorities as a factor of local development - the example of the Municipality of Xanthi

This research is to examine cultural policies designed by local government authorities and their impact on social and regional development as seen within the Municipality of Xanthi. The purpose of the study is to analyze and examine the set-up of cultural activities implemented by the Greek Municipalities. In particular, it reflects upon events, changes and concerns which involve cultural affairs as well as their socioeconomic, political, spatial and regional dimension.

Considering that the locality is a part of a totality, the process to achieve cultural development in Xanthi becomes very interesting as it proves to be fundamental for the whole Greek cultural image. The general is defined as national and the local as regional. Consequently, local cultural development becomes an essential part of national development. Qualitative and quantitative analysis’ tools were used for empirical research purposes along with the scientific principles of social policy, regional development, communication and cultural studies, coupled with the

relevant literature and bibliography, so that it was eventually possible to: i. Examine sustainable regional development and urban regeneration as well as means of cultural action, ii. Look into the European experience and paradigm with reference to best practices of successful municipalities, iii. Study the cultural policies of the Municipality of Xanthi, and iv. Analyze cultural policies and action tools generating socioeconomic benefits so that the Municipality becomes a common ground where efforts of development and social progress meet at both local and regional level.

The study develops a theoretical framework based upon empirical research conducted in a Northern Greek municipality, the town of Xanthi in Thrace. This is a border region which bears various multicultural features; an area where customs and folklore not only manage to survive but are also an integral part of the local people's life and have a long-standing tradition. The above cultural specificities are related to multiple factors (such as historical, geographical, social etc.) which as a result render Xanthi an ideal region for scientific research purposes.

Thus the research could eventually trigger a fertile and constructive process for reflection on the role of the local cultural policy in further achieving social and regional development. The issues raised here contribute to both scientific research and dialogue and also highlight the role of the Municipalities, in their capacity as **active cultural assets** with distinct cultural identities in the context of a **Europe of Regions**.

Keywords: culture, cultural policy, local development, local authorities

Keynote speech, Nikitas Chiotinis, University of West Attica, School of Applied Arts and Culture
«Nature and culture in an indivisible relationship, a historical approach»

Keynote speech, Ilias Beriatos, Professor Emeritus, University of Thessaly
«Natural and Cultural heritage : the role of spatial planning»

Keynote speech, Maria Prezioso, University Tor-Vergata, Italian ESPON Contact Point
«The role of natural and cultural heritage in territorial development»

Keynote speech, Sofia Avgerinou-Kolonia, Professor Emeritus, National Technical University of Athens,
 President of ELEUSIS 2021
«A multidimensional view of heritage as factor of Sustainable development»

2 Plenary Session II Auditorium, Eugenides Foundation

Reconnecting natural and cultural heritage

Fabio Attorre, P-C. Zingari (IT)
Reconnecting natural and cultural capital

In 2014 the Sapienza University of Rome and the Italian Botanical Society started a science-policy initiative under the aegis of the Italian Ministry of Environment and the European Commission. The aim was to raise awareness on the

inextricable links between natural and cultural capital intended as the vital asset of traditional and scientific knowledge, skills, capacities and practices that have been shaping productive ecosystems with their goods and services. Subsequently the Charter of Rome has been adopted by all Member Countries during the 2014 meeting of the European Council. As one of the results in 2018, the EU Joint Research Centre, the University of Rome and the Italian Botanical Society edited the contributions of 86 world researchers and experts on the reconnections of natural and cultural capital for sustainability.

The book, published by the EU is an interdisciplinary and intersectoral cornerstone of the current and future efforts to recognise that societies create and elaborate culturally-rooted and sustainable systems to safeguard their natural resources and the benefits, goods and services they provide. The driving forces of industry, agriculture, infrastructure, urbanisation, transport and energy for a growing population and in a GDP-dominated economy, have been undermining diversity, both biological and cultural. Worldwide we are losing biological species at a rate comparable to the loss of ethnicities. Recent generations are losing conceptual and practical connections to the living resources in their daily life.

If we really want to halt the loss of biodiversity, we must aim at halting the cultural loss. Culture – in its broader sense of attitudes, behaviours, values, expressions, norms, livelihood patterns, local and traditional knowledge, skills transmission, and good practices – can substantially contribute towards saving nature, while, at the same time, revising our economies adopting nature-based solutions agreed within societies.

François Huleux (CA)

Safeguarding Intangible Cultural Heritage for the benefits of Natural Ecosystems conservation

Sommaire : L'une des nombreuses conséquences de la mondialisation est l'appauvrissement de la **diversité culturelle** dont le patrimoine culturel immatériel (PCI) constitue une composante. Or, le PCI n'est pas seulement un outil de rapprochement, d'échange, de compréhension entre les êtres humains, mais également de préservation de la nature. C'est ce que la *Convention pour la sauvegarde du patrimoine culturel immatériel* (Convention PCI), adoptée en 2003, reconnaît. Elle a pour objectif de sauvegarde le patrimoine culturel immatériel (PCI), c'est-à-dire « les pratiques, représentations, expressions, connaissances et savoir-faire – ainsi que les instruments, objets, artefacts et espaces culturels qui leur sont associés – que les communautés, les groupes et, le cas échéant, les individus reconnaissent comme faisant partie de leur patrimoine culturel ». Deux liens unissant la Convention à la biodiversité retiennent notre attention dans le cadre de cette contribution. Le premier est que cette Convention a pour objectif de sauvegarder un patrimoine qui peut être utile à la conservation et l'utilisation durable de la biodiversité. Il s'agit des connaissances et pratiques concernant la nature et l'univers que les communautés, les groupes et, le cas échéant, les individus transmettent de génération en génération. Le second est que certaines pratiques, représentations, expressions, connaissances et savoir-faire ont besoin de ressources et d'espaces naturels pour pouvoir être exprimés. En ce sens, les Etats doivent conserver et utiliser durablement ces ressources et espaces naturels pour favoriser la sauvegarde du PCI. Dans la mise en œuvre de la Convention, les Etats parties élaborent - avec la participation des communautés, groupes et individus qui reconnaissent le PCI comme faisant partie de leur patrimoine culturel - des bonnes pratiques de sauvegarde du PCI au bénéfice de la biodiversité. Cette contribution fait la lumière sur quelques-unes de ces bonnes pratiques.

Mots-clés : diversité culturelle, patrimoine culturel immatériel, biodiversité

Torgrim Svene Guttormsen, Knut Fageraas, Veronique Simon (NO)*Historiographical lenses to the History of National Parks : Ideas of past, present and future heritage management*

To preserve for future generations has been a central guiding ideology and policy in the history of natural and cultural heritage managements, and a unique example of this is the creation of National Parks. We can safely say that since the idea of national parks grew up in the 1870s and the extension of this idea to today, is witnesses of a management concept that has been very successful. Today, nearly 100 countries around the world have lands classified as a national park. Many of these parks have a long management history. In this presentation, we are examining how the history of national parks are presented in the research literature. Our hypothesis is that the concept of national parks is based on historiographic conditions (choices of narration, valuation, reflexive history views, attitudes to nature, etc.) that affect how national parks are managed today. By revealing these historiographical assumptions, we wish to promote a debate about future goals with national park care.

Keywords : historiography, natural and cultural heritage, national parks**N.Georgiadis, G.Melissourgios, S.Dodouras, E.Lyrtzaki, G.Dimitropoulos, A.Foutri, L.Mordehai (GR)***Reconnecting nature and culture – The INCREAte approach and its practical implementation in the island of Cythera*

The INCREAte Approach promotes the interconnection of culture and nature, guiding its users towards a more comprehensive and effective design of nature conservation projects. It is addressed primarily to nature conservation managers, but also to any agent working on nature-culture issues or area and resource management. The focus of the Approach is to guide the users to design more integrated and efficient conservation projects by working on issues related to culture while also addressing stakeholders' participation and human wellbeing. Allowing users to be selective and flexible, such issues can also be incorporated in ongoing projects, providing, in this sense, a practice-oriented guidance and toolkit rather than a "take it or leave it" option. It was developed by the Scientific Secretariat of the Mediterranean Institute for Nature and Anthropos (Medina), founded in 2003, which promotes the joint management of the natural and cultural heritage and the strengthening of the timeless relationship between human and nature. The approach is successfully tested in Kythira, where a strategy for tourism has been designed through the sequence of its relevant steps. Main focus of the strategy is the development of an integrated and innovative trail network, which, together with all the accompanying actions of the programme, is designed to protect the natural and cultural heritage of the island.

Keywords: Nature-culture integration, heritage conservation, innovative trail network, Kythera**Sara Van Rompaey, Eleni Goni (BE)***Sustainable urbanisation-the role of Cultural Heritage in re-naturing cities : Learning from the past, designing for the future (EU Project ThinkNature)*

Cultural Heritage is a key component of European cities. The scope of this presentation is to highlight the importance of introducing Cultural Heritage in an integrated approach for re-naturing cities. Nature Based Solutions taking into account and inspired by Cultural Heritage will be presented through different Case Studies. The co-benefits of using cultural heritage as a driving force in re-naturing cities will be analysed whereas best practices as well as failure factors will be explored. Innovative approaches and recommendations towards the upscaling of NBS with respect to

Cultural Heritage will be identified. Main ideas: **2018** is dedicated in the EU to celebrating the **European Year of Cultural Heritage**: Role of CH in achieving the objectives of 2020 Strategy for a "smart, sustainable and inclusive growth". **Cultural Heritage: The Fourth Pillar of Sustainable Development** : The interaction between the pillars of economy, society, environment and culture lead to a new form of regenerated sustainable development that supports the cohesion of society, economic development and environmental protection to an even greater extent. The cultural pillar advances the primary objective of any sustainable community which is the promotion of wellbeing through enhancing quality of life and place. A community's vibrancy is closely related to the vitality of its cultural engagement, expression and celebration. **Definition of Re-naturing Cities**: The process of addressing Environmental Challenges and the effects of economic crisis through Nature- Based Solutions. It is about using nature to provide climate services (e.g. regarding storm water management, urban heat island, air quality), to address biodiversity issues, to promote social cohesion and all for a lower cost compared to investments for grey infrastructures. **Cultural Heritage can be used as a driver for the sustainable growth** of urban areas, as a factor of production and competitiveness and a means for introducing socially and environmentally innovative solutions. The challenges faced by most European cities create a demand for testing and experimenting with innovative pathways for regeneration. Nature Based Solutions on a life cycle approach are low cost solutions. Having this in mind, Cultural and Natural Heritage can be and should be sources of inspiration and innovation for renaturing cities. It is all about **learning from the past, to design for the future**.

- **The overall challenge**: to go far beyond simple conservation, restoration, physical rehabilitation or repurposing of a site and to demonstrate heritage potential as a powerful economic, social and environmental catalyst for regeneration, sustainable development, economic growth and improvement of people's well-being and living environments.

- **Presentation of 3 Case Studies**, where Cultural Heritage is source of innovation & inspiration for Re-naturing Cities: Highlighting innovative tools, strategies and best practices in the field of Nature Based Solutions that not only European cities but also cities from all over the world, are adopting in order to combine tradition and modernity while addressing environmental challenges and the impacts of the economic crisis. Cultural Heritage is finally seen as a vital resource for 21st Century rather than only as a cost to society. It is related to economic benefits (tourism) but it is also a stimulant for growth and employment. Cultural Heritage is also a major contributor to social cohesion. Through selected case studies we will demonstrate how cultural heritage can be used to deliver environmental, economic and social benefits. How cultural heritage has been used as a catalyst for regeneration. How culture and bio-diversity can be integrated and enhanced to create successful living rural landscapes.

We will see that it is possible to **innovate Cities with Nature and Culture**.

Expected outcomes of this approach: **Regarding the Economy**: To promote innovative finance, investment, governance, management and business models to increase the effectiveness of cultural heritage as an economic production factor. To challenge traditional public - private roles by viewing Cultural Heritage as a factor of production to encourage wider private investment when public funds unable to maintain assets. **Regarding Society**: To promote the innovative use of cultural heritage to encourage integration, inclusiveness, cohesion and participation. To challenge the traditional role of cultural heritage specialists to encourage new governance models that transfer responsibilities and involve and engage citizens. **Regarding the Environment**: To promote innovative and sustainable use of cultural heritage to enable it to realise its full potential in contributing to the sustainable development of European landscapes and environments. To identify and share innovative strategies, tools and methods that address adaptive re-use and new management approaches including the commons in both rural and

urban cultural landscapes.

1. "River remediation and urban development scheme", Medina of Fez -Morocco

Based on an analysis of Fez's urban and ecological context, the project at the city scale (City of Fez including the ville nouvelle and the Medina) is a master plan with recommended measures for improving regional water quality. The overall effect is a project that elevates the river to a multi-performance urban infrastructure that possesses the potential to stitch or blend disjuncture between the needs of a 21st century population and the historic imperatives necessary to preserve the integrity of a UNESCO World Heritage designation.

2. "Opening up of Cheonggyecheon River", Seoul - Korea

The Cheonggyecheon Restoration Project took two years and cost around \$281 million, but it has created a thriving stretch of green public space in the middle of the city. What was once a dividing line between the north and south parts of the city has been recreated as an urban park that bridges the gap and brings people together.

3. "Opening up of tubed-in river Dijle", Leuven- Belgium

The River Dyle has provided an example of how water management practice can change from the outmoded view that the only solution lies in concrete to one that works with nature. In the development of the site, priority is given to the reconversion of the heritage buildings.

Keywords: sustainable urbanisation, re-naturing cities, cultural heritage, Nature Based Solutions, innovating cities with nature & culture

P.Karamani, Ch.Ntrinia, S.Siakas, G.Panagiaris (GR)

Study of cultural and environmental promotion of the cave of Galaxidi

The cave of Galaxidi is a monument of natural environment located in the city center next to the sea. Its location in the city as well as its proximity to major touristic destinations such as Delphi and Arachova are unique advantages for its promotion. Horizontal, easily accessible, without stalactites and stalagmites, the cave is expected to identify the cultural life of the city and to become a pole of attraction for various groups of people, offering educational and recreational activities. The enhancement and exploitation of this space is a desire of the local community which anticipates the integration of the cave into its daily life combined with the developmental benefits that will arise from the resulting increase in touristic traffic.

The Cave of Galaxidi is a very important part of the inhabitants' lives as a space where the natural and the anthropogenic (man-made) environment interact and co-form on a diachronic level. This intense experiential function of the cave diffuses into the life of the community, provoking a variety of attitudes and behaviors. The main objective of its exploitation is to satisfy the common sense through the promotion of the temporal importance of this monument for the local community, and to promote social participation in the management of environment and culture at a local level. Through a variety of pioneer actions to inform, reflect and raise public awareness, this study seeks to shape environmental, cultural and social consciousness and mobilize citizens in the direction of sustainable development.

At the core the proposal, lies the interconnection between culture, research and innovation and through these the development of a model for growth for the area which will connect the cave with the local communities, the academic/research institutions and the local market. According to the above mentioned, the implementation of the

project as well as ensuring its sustainability depends to a large extent on the degree of maturation of the local community as far as the acceptance of culture's/ heritage's role as a main developmental tool for the society.

Keywords: cultural and environmental management, participatory planning, geo-monuments, digital applications

Athanasios Panagiotopoulos, Eleni Paparidi, G.Panagiaris (GR)

Nature and culture : A two face coin, the case of the Municipality of Delphi

The Municipality of Delphi is one of the two Municipalities of the prefecture of Fokida while Amfissa is its town hall and Delphi its historical town hall. Delphi region supports a significant cultural baggage because of the powerful symbolism of its name. The vital location of ancient Delphi, in the centre of Mediterranean society, combined with the process of giving oracles by Pythia, which had an epochal effect on its history, offers the region a comparative advantage that benefits the whole country, especially central Greece.

The landscape of Delphi - as it was defined in 1981 - is the largest protected zone of archaeological interest in Greece, about 350.000.000 square meters (sprawled around Delphi, Amfissa and Itea and its intervening area). The rest of Delphi is protected by a dense grid of constraints (Natura Zones, Parnassos & Ili National Parks, Proclamations of archaeological sites, traditional settlements, etc.), which make the Municipality of Delphi the most compressively controlled one in the country, in the terms of spatial and urban planning.

For the last forty years, the Greek state has dealt with the area, almost as if it was an extensive protected park of historical, cultural and natural heritage. This approach should create not only bans but also corresponding obligations of the Greek state towards the area. Meanwhile, the lack of any virtually large infrastructure in the region throughout the post-conflict period is obvious. Fokida is perhaps one of the few areas in the country that its national road network has remained almost the same since the 1970s, since when it hasn't been constructed neither an extension nor a rail link, an airport, a modern harbor. These distortions are also reflected in the statistical analysis in which the demographic evolution since 1981 forms a characteristic part: While all the capital cities of the Prefectures of Central Greece showed a significant increase in population, at the same time Amfissa shows a decrease in population and an increase in aging population.

The article investigates the causes that make developmental planning of the Municipality of Delphi difficult and the existing reality is reflected through SWOT and PEST analysis and the possibilities for an efficient spatial management are examined.

The authors underline the practical actions for a sustainable development strategy of the area, referring to the communication strategy (tools, branding), accessibility (road network, marking, people with disabilities) the management of the material and intangible cultural heritage, environmental protection and the global impact. Additionally, they point out the comparative advantages of the site as a whole, the activation of the local community (through specific actions and educational programmes) and the development of the so-called "creative economy". For all of the above, the strategic role of the Municipality of Delphi is to develop collaborations and networks with both productive entities and, in particular, academic institutions that can share their expertise with the Municipality and also carry out primary research with the local communities of the region being will be the "end users".

Keywords: Delphi Region, Culture, Nature, Heritage, Sustainable development, urban planning, spatial planning

Special Session I Auditorium, Eugenides Foundation
Culture in and for Sustainable development

Caecilia Alexandre (CA)

Sustainable development : a key concept for the effective protection of the indigenous peoples' culture, The Canadian experience

Sommaire : *La Politique de l'UNESCO sur l'engagement auprès des peuples autochtones*, approuvée récemment par le conseil exécutif, affirme l'importance de répondre à la vision holistique du monde des peuples autochtones au sein de ses divers programmes. En effet, une prise en compte intégrée de la diversité biologique et de la diversité culturelle est fondamentale pour sauvegarder de manière effective la culture des peuples autochtones et respecter leurs droits culturels. Le concept de développement durable arrivant progressivement en droit international et particulièrement au sein de l'enceinte de l'UNESCO constitue un moyen juridique innovant pour répondre à la vision holistique des peuples autochtones reposant sur une approche intégrée de la nature et de la culture. N'ayant pas d'équivalent dans le langage des Premières Nations, par exemple au Canada, le développement durable est, en fait, le reflet de leur méthode de gestion de la terre. Ma communication analysera, en ce sens, les efforts déployés par le Canada pour rendre compte de cette approche intégrée de la nature et de la culture autochtones fondée sur le développement durable au sein de leurs mesures et politiques de mise en œuvre de trois instruments juridiques internationaux : La *Convention concernant la protection du patrimoine mondial culturel et naturel* de 1972 ; la *Convention pour la sauvegarde du patrimoine culturel immatériel* de 2003 (dans ce cas précis, le Canada n'ayant pas ratifié la Convention, nous analyserons les stratégies nationales et locales développées notamment par le Québec dans le cadre de la loi sur le patrimoine culturel qui transpose les dispositions de la Convention de 2003) et la *Convention sur la protection et la promotion de la diversité des expressions culturelles* de 2005.

Mots clés : Peuples autochtones, Développement durable, Droits culturels, UNESCO, Canada

Georgia Gemenetzi, Stella Kyvelou (GR)

Natural and cultural Heritage as key component of structuring eco-neighborhoods in the Euromediterranean : towards a new model of econeighborhood ?

The creation of the first eco-neighborhoods coincides with the return of Eco-geography in the period 1960-1970 and the emergence of concerns about the antagonistic relations between society and the natural environment.

The development of ecological and environmental movements cannot be unrelated to the development of the first eco-neighborhoods, even before the introduction of the relevant term in 1991. Currently, eco-neighborhoods are a recognized "institution" that is called upon to implement the concept of a sustainable community. In spite of the diversity of these eco-neighborhoods according to their location (urban, suburban, rural) and their distinction in new residential developments or in revitalized neighborhoods, common axes of organization and creation are (a) the empowerment and revival of the local community with the key elements of open governance, widespread participation and, in general, sound social and political networking, and (b) the implementation of sustainable practices in the management of natural resources, accessibility and the built environment.

These axes are framed by additional organizational objectives and principles such as the **conservation of biodiversity** and the **promotion of natural and cultural heritage**, local specificities and the identity of the region; the creation of an attractive structured environment and social cohesion; equal access of citizens to work and services; and the safety and welfare of the inhabitants. In Greece, the development of urban eco-neighborhoods requires a series of institutional and town-planning interventions in order to overcome the peculiarities of the Greek city.

To date, residential projects based on the integration of sustainability principles have been promoted by the Workers' Housing Organization and include the creation of the Solar Village in Pefki, Attica, and the environmental and social upgrading of a part of the city of Elefsina. Another effort of "green neighborhood" has been attempted by the Municipality of Agia Varvara, with controversial results. The purpose of this paper is to explore the realization of eco-neighborhoods in the Mediterranean as well as the basic principles of their organization and, as far as possible, their impact on housing development and the real estate market. Emphasis will, however, be placed on exploring the integration of the protection and enhancement of natural and cultural heritage in the organization of eco-neighborhoods, given that natural and cultural resources are central to the identification of sites, particularly in the European coastal area.

In this context, examples of corresponding urban interventions will be sought in various areas of Greece such as the port-industrial area of Drapetsona which, in our view, is striving for a vision of environmental protection and economic development based on the reconnection of nature and culture..

Keywords: urban renewal, urban regeneration, natural and cultural heritage, eco-neighborhoods, Euromediterranean

V.Sladescu, Al.Rusu, Cl.Musat (RO)

Culturally and ecologically aware textile design education for a sustainable future

The present paper emphasizes, through our ongoing research in the field of textile design, the importance of tangible (traditional technologies, techniques and designs) and intangible heritage (technological gestures and practices) for eco-design education. The projects extensively portrayed in this contribution, from micro-farm sericulture to plant dyeing methods and traditional techniques within the textile design education practice create a coherent framework of sustainability in a finite material world. By guiding new generations of textile designers to experience a wide array of technological possibilities, stressing the ecological component, we aim to decisively change the mindset of consumers towards sustainable and culturally rich products. The fabrics and objects developed in our educational projects are not only ecological products but also, through the culturally inspired design and patterns, complex prototypes with social impact.

Prototyping often collides with the textile industry's inertia, constraining designers to act only at micro-level. The purpose of culturally and ecologically aware textile design education is to generate clusters of innovation within the small scale textile workshops, research centers and universities, focusing on creating public engagement, that in turn will generate the technological momentum industry needs to positively react.

Keywords : textile design, tangible heritage, intangible heritage, eco-design education

N.Skordaki, A.Moropoulou (GR)

The contribution of the principles of sustainable development to the selection of sustainability and compatibility criteria for both materials and conservation interventions of cultural heritage

The wording of the term of sustainability, the factors that influence it, as well as the principles that govern it, have been discussed in the scientific and economic community and on the international political scene. The 20th century was a landmark for the concept of sustainable development, which was shaped by international processes and conferences such as the Stockholm Conference (1972), the Brundtland Report (1987) and the Rio de Janeiro Conference on Environment and Development (1992) taking the form of the three-pillar model (environmental, social and economic), which is the basis of sustainable planning to date.

This article will explore the contribution of the three-pillar model to the selection of appropriate sustainability and compatibility criteria for building materials and conservation interventions for monuments, historical structures and sets, which is a multidimensional field. By selecting appropriate control criteria, the lifetime of monuments and historic structures can be increased, environmental costs and maintenance costs reduced, and minimizing the impact of environmental factors on monuments and historic constructions can be achieved. In order to select the appropriate criteria, a collection of already developed criteria for the sustainability and compatibility of building materials and maintenance interventions in the Cultural Heritage was initially undertaken. Their collection and then evaluation was done through bibliographic research and study of programmes (European and national) focused on the protection of cultural heritage, with particular emphasis on data and parameters collected and researched from time to time by the Laboratory of Science and Engineering of the Hellenic School of Chemical Engineering of NTUA. The estimated results demonstrate whether the study of compatibility between the original and new building materials and the choice of the most effective intervention depends on the degree of satisfaction of the three pillars of sustainability of interactions with the environment in the field of cultural heritage preservation, as well as how to define a holistic approach with the participation of all stakeholders for the realization of a sustainable planning.

Keywords : Cultural Heritage, Building Materials, Sustainability, Compatibility, Sustainable Design

Maria Karoglou, Chryssa Theofani, Stella Kyvelou, Asterios Bakolas, Magdalyni Krokida, Antonia Moropoulou (GR)

Integrating Sustainability in the 20th century built heritage :environmental footprint calculation outcomes of a block of historic refugee buildings in Athens.

ABSTRACT :Modern metropolis sustainability requires innovation due to the complexity of the living needs, human values and the variety of environmental burdens resulting from its existence and complex evolution. The district selected for the following experimental procedure based on Life Cycle Analysis (LCA) methodology, is the “refugee” neighbourhood at Alexandras avenue, situated at a nodal point within the network of the city. It occupies in total a site of 14.323 m², comprises 8 three floors apartment blocks, 228 flats (about 45 m² in area, each), and covers a built total surface of 13.620 m². During the procedure of the calculation of the most accurate possible environmental footprint, as defined through the objectives of the study, a 3-D model of the structural-functional unit is constructed to measure the material quantity. Data is collected through in situ observations in order to fill the Life Cycle Inventory panel, so as to be imported to the SimaPRO 7.1 software, which is selected for the LCA. From the results of life-cycle analysis in the refugee building blocks area it is concluded that in the process of selecting restoration materials for the damaged building stock, broader environmental and sustainability parameters should be taken into account in the

effort to revive the neighborhood. This neighborhood is also an opportunity to apply pioneering energy methods as it has the early bioclimatic features : For each concrete operation, quantitative studies should be conducted and taken into account in parallel with the qualitative criteria. The qualitative benefits are a prerequisite for the implementation. The potential of the experimental methodology presented exceeds the boundaries of the case study and is also worth exploring for other areas. A general conclusion is that sustainability should be integrated in the management of built cultural heritage of the 20th century.

Keywords: Life Cycle Analysis, Built Cultural Heritage, 20th century, Sustainability, Eco-neighborhoods

Special LIFE-NATURE Session II Auditorium, Eugenides Foundation
The challenge of reconnecting nature and culture in the implementation of the Natura 2000

Dimitrios Chomatidis (Green Fund, GR)

The LIFE programme and the Greek Task Force (Green Fund)

The LIFE Programme is the EU's funding instrument for the environment and climate action. It contributes to the implementation, updating and development of EU environmental and climate policy and legislation by co-financing projects. Since the launch of the LIFE programme by the European Commission in 1992 and until 2017, a total of 254 projects have been co-financed with a Greek beneficiary as a Coordinator. The total investment of these projects amounts to €388 million, of which the EU's contribution is €212 million. The maximum EU co-financing rate for "traditional" LIFE projects is 55% of the total eligible project costs. An exception is made for "traditional" LIFE projects in the priority area Nature and Biodiversity under the sub-programme Environment for which the EU co-funding rate can go up to 60% or 75% when proposals in this priority area focus on concrete conservation actions for priority species or habitat types of the Birds and Habitats Directives, when actions in the project are necessary to achieve the conservation objective. The Greek LIFE Task Force, the LIFE capacity building project currently implemented by the Green Fund and the Ministry of Environment and Energy, is actively engaged in informing potential beneficiaries, supporting the preparation of proposals, providing technical assistance and consulting to potential beneficiaries, promoting the exchange of experiences, best practices and the uptake of LIFE projects results, enhancing the LIFE National Contact Points and thus provide for a more efficient participation of Greece in LIFE projects. Supporting information systems are constantly being developed to support the work of the project and NCPs and are available through the web: www.lifetaskforce.gr and support.lifetaskforce.gr. The GRLTF managed to increase the success rate in 2017 to 25.5% from 9.2-14.3% of the years 2011-2016. Finally, two IP proposals, one in Nature/Biodiversity and one in Climate Action, were successfully supported by the project's experts and a third one is under development.

Key words: LIFE programme, environment, nature

Ioannis Mitsopoulos (Ministry of Environment and Energy, GR)

LIFE-IP 4 NATURA - The largest in terms of duration and funding LIFE project for the protection of the Hellenic nature

LIFE-IP 4 NATURA, the largest in terms of duration and funding for the protection of the Greek nature project, aims to develop and implement specific priority measures and policies included in the Greek "Prioritized Action Framework 2014-2020" for the management and conservation of the Greek Natura 2000 network. More specifically, the project in combination with complimentary funding (Assembly of Special Environmental Studies and Management Plans for

Natura 2000 sites in Greece), will implement several Natura 2000 Management Plans (MPs) in four Administrative Regions and it will formulate, legally approve and implement Action Plans for species/habitats of Community Interest. Additionally, it will map and assess Ecosystem Services (MAES) of the Greek Natura 2000 network and it will develop web-based interactive/cutting edge GIS tools for effective management of the Natura 2000 network by competent authorities. Furthermore, the project will map all stakeholders involved in Natura 2000 network, it will launch a nation-wide communication and dissemination campaign and it will monitor and coordinate all existing complimentary funds relative to Natura 2000 network of the country. The project overall aim is to contribute to the development and implementation of National and European Union policy and legislation in the area of nature and biodiversity.

Keywords: Natura 2000, LIFE Integrated Projects, PAF 2014-2020, Complementary Funds.

Ioli Christopoulou (College Year in Athens / CYA)

Shaping the future: The challenge of sustainable development in the implementation of the Natura 2000 network

The Natura 2000 network, is the backbone of biodiversity conservation in the European Union. The designation of sites is almost complete, especially as member states are in the process of expanding the network in the marine areas, where the greatest deficiencies of appropriate coverage of protected species and habitats are noted. However, management actions and management plans have yet to be adopted for many Natura 2000 sites. Currently the European Commission has initiated infringement cases against several member states for not complying with provisions of the Natura 2000 network. The delays and the difficulties of member states are not inexplicable. Given that Natura 2000 sites, in principle, are not absolute reserves; rather, areas where the right balance between human activities and nature conservation can be found, decisions on the management of Natura 2000 sites and even of their surrounding areas, relate to the future of development in these areas. With activities such as farming, fishing, tourism, infrastructure development, etc. influenced by management choices, several reactions and negative responses come to the forefront as the status quo is questioned. As a consequence, Natura 2000 management becomes the testing ground to find the right balance between environmental, social and economic needs. The challenge, therefore, in the implementation of the Natura 2000 network, is, in effect, sustainable development. With the Natura 2000 network in place, and management looming large, the time to make a difference is now. The recently adopted 2030 Agenda for Sustainable Development offers once more the context and the plan for the EU to act. Will the EU rise to the occasion and realize sustainable development on the ground and make the Natura 2000 network, not only the largest network of protected areas, but, in fact, the largest network of sustainable development in practice?

Key words: Natura 2000, Sustainable Development, EU

Roula Trigou (Hellenic Ornithological Society/BirdLife GR)

Coexistence of nature and culture: the case of the Vravrona wetland, Attica

Situated on a small but very fertile plain in which Erasinos river flows, on the coast of Eastern Attica between the municipalities of Artemis and Markopoulo, Vravrona wetland is characterised by a beautiful and historical landscape that has remained almost intact since the ancient times. The human presence in Vravrona dates from the Neolithic period. The area became well known from 700 BC, when the Temple of Artemis was built. Every five years, a procession, starting from Acropolis and ending to Vravrona, signaled the opening of the religious feast of the Great Vravronia. The wetland and the surrounding area have been declared a Special Area of Conservation (SAC) under the Habitats Directive 92/43/CEE and are included in the Natura 2000 European network of protected areas. More

than 220 species of birds have been recorded so far, while the area is also rich in mammals, reptiles and amphibians. The "Conservation and Sustainable Management of the Vravrona wetland" Project is implemented since 2008 by the HOS/BirdLife Greece in collaboration with the Athens International Airport and the Municipality of Markopoulo. It includes actions that help restore the wetland ecosystem, recover the populations of plants and animals of the wetland and the surrounding area, inform and aware locals and visitors, and promote the area in a manner compatible to the conservation of the local natural and cultural heritage. More than 5,000 school pupils and over 6,000 people visit the protected area of Vravrona wetland in daily basis in the framework of the Project, making the Vravrona Wetland Project an exemplary conservation project that reintroduced the harmony between man and the natural wealth of the wetland.

Keywords: Nature, culture, wetlands, human

Special Session III Aphitheatre Sakis Karagiorgas ***Spatial strategies for built heritage***

Marilena Papageorgiou, Aikaterini Papandreou (GR)

Planning for the enhancement of the modern built heritage in Thessaly Region (Greece): the case of the "konakia" monuments

Built heritage constitutes an invaluable asset from a historical, cultural, social and economic point of view. Therefore, it should be treasured and wisely managed in order to avoid loss of place identity, cultural and social degradation, loss of leisure and tourism opportunities, etc. Given this context, the present paper focuses on the modern built heritage of Thessaly Region (Greece), giving special emphasis to the "konakia" monuments that used to be residences built during the late 19th and early 20th century, for the big landowners of the Thessalian agricultural land (tsiflikia).

Field research conducted as well as survey on secondary data revealed that: there are fifteen (15) "konakia" properties in Thessaly, equally dispersed in Larisa, Trikala and Karditsa Prefectures. Most of them present severe signs of abandonment, while only four (4) of them are in use (either as second-homes or as spaces of cultural and administrative use). Starting in 1979 (until 2005), all of the "konakia" have been designated as part of the modern built heritage of Greece, following the provisions of Laws 1469 (of 1950) and 3028 (of 2002). Given their nature, all of the "konakia" are found within - or in vicinity with - rural settlements and agricultural land.

Considering these facts - and that most of such properties are private - the paper proposes a set of actions, so that the "konakia" are better preserved and wisely managed: delimitation of protection buffer zones; inclusion of monuments in cultural protected areas of greater size (e.g. "Historical Sites"); expropriation of selected "konakia" to be rehabilitated and re-used for cultural and administrative purposes; establishment of cultural routes (following a marketing plan for the place branding of Thessaly). The paper ends by highlighting the need to upgrade/enhance the economic and social value of the modern built heritage of Thessaly and Greece, without undermining its protection status and the private rights of owners over these cultural properties.

Keywords: *modern built heritage, spatial management and protection; konakia; Thessaly (Greece)*

Eugenia Marin, Florentina Sela, Marian Mierla, Iulian Nichersu (RO)

The need to preserve vernacular patrimony, as part of cultural heritage, in Danube Delta, Romania

The cultural built heritage in Danube Delta reflects the traditional way of life of the human community and its ethnicity,

being an expression of the heritage of the past, closely connected and influenced by the physical and geographical conditions of the area. The use of natural resources, such as clay, straw, reed determined an extremely unique and valuable architecture for Romania, with features well suited both to the place and to the cultural and religious traditions of the local people. The objective of this study is to assess the characteristics and tendencies of traditional rural architecture in two fishing communities in which the main ethnic minorities are Lipovans (Russians ethnic origins) and Ukrainians. The research relied on the study of General Urban Plans of localities, on the Framework Regulation of Urban Planning in Danube Delta Biosphere Reserve and field campaigns in which were analyzed all the buildings, by completing ground sheets with characteristic architectural elements: the type of housing, the specificity of the dwelling, roofs, fences, traditional colors used on exterior walls, windows. The technique of investigations on traditional architectural practices and the tendencies of architectural elements in localities consisted of interviewing local authorities and local population, using semi-structured interviews and focus groups. The use of these methods allowed a quantitative and qualitative analysis in terms of identifying the elements of traditional architecture, their conservation status, the frequency of use of traditional building materials, decorative elements and specific colors used in the architecture of buildings. The results emphasize that traditional building materials are still used in both localities but the dynamics of new buildings, especially those used for tourism purposes, and the changes that will take place through this activity will alter the specific local architecture. In this respect, this study will rise awareness among local population, local public administration and tourism investors about the need to preserve local identity.

Keywords: cultural heritage, vernacular patrimony, Danube delta, traditional architecture

Georgia Pozoukidou, Fotis Fotiadis (GR)

Spatial strategies for resilient traditional settlements. The case study of Arkochori, Imathia

Traditional settlements have been constantly providing us with lessons on how adaptation and flexibility through a generated rather than a fabricated built environment could lead to a harmonious man-nature co-existence. Tangible and intangible elements such as building materials, spatial organization, social and cultural networks were critical elements of this relationship. Nevertheless, due to new developmental patterns that was mainly expressed through excessive urbanization, traditional settlements were led to either tourist development or de-growth that ended up to the overexploitation or abandonment of the settlements.

The new evolutionary approach on spatial planning offers a new perspective on planning strategies where adaptation and flexibility play a central role. Thus, spatial planning becomes more strategic and sets visions that could be achieved through self-organizing processes which might follow alternative paths. This approach is quite different from the traditional regulative and coordinative role that spatial planning currently has. In this context this paper explores how this new evolutionary approach on spatial planning strategies could be applied to achieve socio-ecological resilience for small traditional settlements.

Economic, social and ecological resilience are considered to be the essential properties of the proposed spatial strategy for the abandoned settlement of Arkochori, located in Northern Greece. The strategy is based on the fact that traditional settlements have been created and evolved as part of the local ecosystem and therefore any revival and protection strategy should start by rebuilding this essential relationship. As such the strategy encompasses the minimum interventions with maximum adaptability.

Keywords: traditional settlements, spatial planning, evolutionary approach, resilience

Eleni Linaki (GR)

The built heritage of the traditional settlement of Siatista in Greece. Recording, mapping, evaluation and management

The present paper deals with Siatista town (located in Western Macedonia Region - Greece), that was designated as "traditional settlement" and put under protection status back in 1978 (Presidential Decree 594), along with other 400 settlements of Greece. The paper argues that, despite the enactment of PD 594, no protection zoning has ever been officially adopted, therefore Siatista has longtime failed to properly protect its invaluable built heritage, including numerous folklore houses called "archontika" (mansions), narrow streets, twenty-nine churches, and so on. Through the years, construction of new buildings (using different patterns) and demolition of old ones, construction and widening of roads, etc., have severely altered the urban and architectural morphology of Siatista.

Having as ultimate goal to identify proper planning guidelines and regulations for the preservation of Siatista's built heritage, the methodology used in the paper, included the following steps: a) recording and codification of the key legislation for the protection of Siatista, including the official urban plans (and their revisions), b) identification and mapping of the urban form and spatial characteristics of Siatista (existing land uses, house typology, etc.) c) identification of the urban form alterations, mainly with the use of aerial photos (1960-2014) d) creation of a map, also presenting the remaining built heritage per degree of preservation (using a four-categories evaluation system), in order to propose a protection zoning, e) implementation of questionnaire, addressed to the citizens of Siatista (also engaging children to provide drawings of the town), in order to record their view and to identify their needs related to the spatial management and interventions to be made in Siatista.

Following the analysis of the existing situation and the identification of the key challenges and inefficiencies, the paper ends by adopting protection zoning and by defining the well-preserved section of the town (proposing stricter rules and regulations for its preservation). The paper also proposes a set of planning regulations (to be adopted by the future Urban Plan of Siatista), as well as other spatial interventions, such as the rehabilitation of building facades, the regeneration of 'Saint Dimitrios' park and so on.

Keywords: built heritage, traditional settlement, spatial planning and management, Siatista, Greece

Soultana Veziriannidou (GR)

Urban and Morphological Rules of Building and Architecture in Settlements of less than 2000 inhabitants, in Greece: Present Situation and Future Prospects.

Greece has a large number of small remarkable settlements, 96% of which have a population of <2000 inhabitants. Two important Decrees which regulate development in these settlements, have been in place since 1978: The first, which defines their boundaries, was immediately implemented and then modified in 2011, while the second one, which refers to the implementation of their urban plan, has been applied partly. Another important decree which specifies the protection of traditional settlements, has been put into force since 1978.

In 2011, the Ministry of the Environment and Energy (MEE) decided the enforcement of Morphological Rules in Building and Architecture (MRBA) for the settlements of <2000 inhabitants. For this reason initiated studies for the 29 Regional Units (RU) of the 48 total RUs of the country, excluding Attica and Thessaloniki. The basic aim of the proposed institutional framework of MRBA was to contribute effectively to the integration of the spatial planning and

to the upgrading of the environmental, architectural, urban and historical physiognomy of the settlements. However, despite the initial intention, the MEE neither has proceeded to the establishment of the new institutional framework of small-scale settlements until today, in spite of the fact that the first 28 studies were completed in 2016, nor has it proceeded to the other studies.

The present paper aims to the assessment of the contribution of the proposed institutional framework for MRBA in small settlements to the improvement of the efficiency of spatial planning.

Keywords: Morphological Rules of Building and Architecture in Settlements <2000 inhabitants, Traditional Settlements, Spatial Planning.

Special Session IV Auditorium, Eugenides Foundation
Climate change, Natural and other hazards and cultural heritage

Miloš Rozkošný, Hana Hudcová, Hana Mlejnková, Alžběta Petránová, Pavel Sedláček, Miriam Dzuráková (CZ)
Methodological approach to evaluation of the threat to the state and quality of the environment of water elements forming part of cultural heritage

Aquatic and wetland habitats are among the most endangered habitats in the landscape. At the same time, even the smallest water elements in terms of area, including pools, ponds and small water reservoirs, represent a valuable refuge for the survival of a number of protected species of flora and fauna. Numerous heritage monuments and areas, including several UNESCO heritage sites, both in the Czech Republic and in the world, are to varying degrees interconnected with these habitats, which are often part of the overall composition of the assets and grounds, especially as part of parks and gardens. They can also form significant areas in terms of nature and landscape protection, including, water-dependent habitats, e.g. in the Czech Republic: the Lednice-Valtice Cultural Landscape, or the ponds system in the South Bohemia region (Rožmberk National Cultural Heritage).

In terms of hazards posed to water elements and small water reservoirs in a landscape, we may identify in particular the threat to the quality of their water environment (flow of pollution from point, area and diffuse sources of pollution), endangering of the spatial characteristics (the process of gradually filling in with detritus and turning into land, clogging, drying up, etc.) and the threat to the quality of the accompanying vegetation (spreading of invasive species, threat of drought, flooding, changes in groundwater levels, pests and diseases, etc.). Contamination of sites from leaking sewerage and sumps, especially during floods, is described as one of the problems.

A significant role in compromising the quality of the water elements is played by water eutrophication. A major problem is also the deposition of sediments and gradual siltation and subsequent overgrowing with vegetation, which can pose a problem also in case of water elements of heritage sites that are connected to surface water of inadequate quality, bringing erosion downwash.

The first part of the paper presents the methodology for assessing the treat to the state and quality of the environment of water elements forming part of cultural heritage sites, based, among other things, on a questionnaire survey, measuring the quality of the aquatic environment and eutrophication level, sampling and recording the incidence of invasive plant species.

The second part presents a review of the environmentally friendly and non-invasive technologies to maintain or improve the quality of the aquatic environment of water elements in a landscape with a regard to the decreasing of the eutrophication.

Keywords : Cultural heritage, historic gardens, parks, water elements, water quality

Monalisa Maharjan (PT)

Restoration and reconstruction of heritage after Natural Disaster, Need of Policy, Laws and implementation mechanisms

Natural disasters like earthquakes, floods and volcanic eruptions cannot be controlled nor stopped but it could always be managed and impact could be minimized. Different countries and cities have their own coping mechanism for the disasters. Some countries like Nepal with the frequent history of the earthquake and some even to be very destructive still continue to have the outstanding heritage. Even frequent natural disasters, the building material which were simple wood, mud and bricks, were never changed in the history but the resilient nature of the people kept rebuilding the destroyed monuments, restoring and replacing the parts.

But the earthquake of 2015 (with 7.8 magnitudes), which destroyed numerous monuments, temples and historic buildings also presented the new challenges towards the heritage conservation. Amidst pressure of development and urbanization, the earthquake of 2015 too brought the issues of authenticity and the material use. Lack of laws regarding heritage restoration and reconstruction and some even unclear laws has made the reconstruction and restoration work controversial. Additionally, this disaster has brought heritage awareness among people and also the consciousness regarding the community participation. This paper will explore the issues emerged, the restoration and reconstruction work undergoing in Kathmandu Valley after 2015 earthquake.

Keywords: Earthquake, Kathmandu Valley, Heritage policies and laws

Miriam Dzuráková, Milena Forejtníková, Alexandra Křížová, Hana Mlejnková, Miloš Rozkošný, Jana Uhrová, Pavel Sedláček (CZ)

Multidisciplinary approach to the selected natural and anthropogenic threats assessment of cultural heritage sites

Protection of cultural heritage includes a wide range of activities for which are also important objective information about potential sources and causes of threats to their values. This knowledge allows to design and set optimal methods of protection and restoration of cultural monuments. Threat of cultural heritage in the Czech Republic is assessed by the conservation authorities, but mainly in terms of their construction conditions. The possible effect of external negative impacts is taken only marginally.

This paper presents possible ways and procedures for a comprehensive assessment of the potential threats degree to cultural sites, including the effects of significant external natural and anthropogenic impacts on their protected values. Specifically, the interaction of river floods, flash floods, wind erosion, landslides, atmospheric fallout, industrial activities, water pollution and wetting to objects and sites of cultural heritage is analysed. Also, the synergistic effect of all the phenomena and their impact on the heritage is assessed.

The assessment is carried out using the accessible nationwide databases, questionnaires, spatial mapping analyses, field survey and process modelling. For the overall assessment of the state is chosen multi-criteria analysis (MCA) method, which takes into account the varying severity of the assessed risks impact and their interaction. There is

tested several MCA equations with variable weights setting of phenomena effects. The analysis results support the objective comparison of the potential threats degree of the cultural monuments objects and their trend over time also. Thus, the allocation of funds to heritage protection may be more effective.

Theme presented in the paper was solved within the applied research program of the Ministry of Culture of the Czech Republic. The multidisciplinary character of the solved task requires cooperation between technical, science and humanities-oriented experts. The project was done in collaboration of many Czech research and academic institutions: TGM Water Research Institute, Czech Geological Survey, Transport Research Centre and Mendel University in Brno together with Czech National Heritage Institute.

Keywords: Culture heritage, multi-criteria analysis, floods, erosion, anthropogenic pollution

Eleni Theotokatou (GR)

On «Arogi» buildings' structural system and construction procedure after the 1953 earthquake in Cefalonia

After the series of earthquakes in August 1953, most of Kefalonia's building stock totally collapsed. In order to be reconstructed, local authorities and mere individuals had to ask for - and thus received - financial and any other kind of help from expatriates, other countries and the Greek state itself. The buildings that emerged as a result of this collective effort are commonly referred to as "arogi buildings", with the term *arogi* meaning *help* or *assistance*, in Greek. In this way, merely referring to these structures is a direct mention to the circumstances under which they were constructed. The reconstruction of the building stock of the island was based in a series of building types proposed from the authorities, and proceeded "replacing" the richness of the architectural forms that stood before the earthquake, with austere but necessary settlements. However, it is exactly these buildings that constitute today's image of the island.

This study wishes to introduce us to "arogi" buildings structural system, as it is presented through a practical building guide, distributed by the Ministry of Agriculture at that time, with the contribution of recent bibliography and the recent experience of 2014 earthquake. The purpose of setting the grounds for such a research would obviously be to highlight the effectiveness of this structural system. Moreover, to emphasize the fact that "arogi" buildings and their construction procedure incorporate Kefalonia's recent history and have eventually produced today's available "traditional" architecture of the island.

Keywords :«arogi buildings»,earthquakes, Kefalonia island, traditional architecture

Aycan Gokçek (TR)

Social, phycological and environmental effects of pollution in London from the eyes of British poets

This study aims at studying social, psychological and environmental effects of pollution in London in British Poetry within the framework of ecocriticism. Since pollution is a growing problem in London seen since Middle Ages, the paper will focus on how pollution problem has been reflected to British Poetry with a brief background information on the history of pollution in London. In Britain, romantic poetry came into existence as a reaction to industrial revolution and through their poems Romantic Poets reacted against the industrial effects on their emotions, social life and especially on environment. William Wordsworth had a peculiar sensitivity to a region called Lake Region and organized campaigns to protect this place from industrial effects. For this reason, he was called Lake Poets. Although he could not prevent this, he did his best to do it. Similarly, William Blake pointed out to social, environmental and psychological problems brought into industrial pollution in most of his poems. He also offered solutions for a peaceful

urban life remote from the negative effects of industry through his poems. Gerard Manley Hopkins also referred to earth, water and air pollution in his poetry. Analyzing some of the poems of these poets, the paper will focus on solution offers of these poets to pollution problem and take them as an example to find a solution to the problem of urban pollution of today. The paper claims that like Wordsworth, we should take reasonable actions to prevent the beauty of our environment which is mostly cities in today's world.

Keywords : urbanpollution, ecocriticism, British poetry

Richard Witt, Dzintra Liepa (UK/EL, LVA)

Clean-up: a medium-term national environmental initiative in Latvia and the dimensions of collective action.

This year, 2018, Latvia celebrates one hundred years of independent existence, with an appropriately large and varied range of national initiatives. It is, in relation to the European Union, a small country, with a population of just under two million, broadly comparable with its neighbours Estonia and Lithuania, and this entails both disadvantages and advantages. The centenary events have been conceived as lasting, in several cases, beyond the end of the centenary year and into the middle term. One of these, reflecting the extraordinary feeling of Latvians for their natural environment and its traditions, is the five-year national Big Clean-Up (Lielā talka), inaugurated this April, "the biggest national volunteers' campaign to make Latvia the cleanest country in the world." The first part of the paper [RW] will discuss the impressive concept of a whole country addressing itself to a pressing environmental problem and the priority of collective action over individual consciousness. The second part [CL# will report on the way the Clean-Up programme has been carried out, and to what extent, so far, it is meeting its targets.

Keywords : Latvia,Clean-Up programme, collective action

Dimitrios Markou (GR)

Using green infrastructure for flood prevention: a case study for the urban expansion of Kavala city

The New Urban Development Plan of Kavala City was approved in 2013. By this Plan a new zone of approximately 1.7 km², called 'Perigiali' was added into the boundaries of Kavala City. The stormwater management of this zone is a crucial topic because major construction works have been made in its catchment area such as Egnatia Motorway, as well as public and private sector infrastructure (landfill, roads, buildings, etc.). The fact that this zone has not yet been fully covered, gives us the chance to study and implement an appropriate stormwater management system relying on the principles of Sustainable Development, i.e. Sustainable Drainage Systems (SuDS) and Urban Natural Water Retention Measures (NWRM).

Recently, Draft Flood Management Plans (DFMP) have been elaborated for each River Basin District (RBD) of Greek Territory according to the European Directive 2007/60/EC, as it has been adopted by Greek Legislation. Within these Plans, and particularly in the Draft Flood Management Plan of RBD 11 (Eastern Macedonia), SuDS and NWRM are proposed for flood protection, mainly in urban areas. Even though this new zone (Perigiali) and the whole Kaval City is outside the High Flood Hazard Zones and Flood Hazard Maps as they were defined by Preliminary Flood Risk Assessment (PFRA) and DFMP, respectively, it is strongly believed that SuDS and NWRM must be implemented in this particular case too. Within this framework, a preliminary study is drawn up in order to specify some innovative proposals for sustainable stomwater management in Perigiali.

Firstly, the exact study area boundaries are determined and then the catchment area of this area is drawn up. Then, the appropriate Intensity Duration Frequency (IDF) Curve is selected by those which are given in the Flood Management Plan (FMP) of RBD 11, according to Greek Legislation (Ministerial Decision 14005/2017), as well as the design frequency. Design Flood is calculated after the rainfall graph and the synthetic unit hydrograph are drawn up. The quality characteristics (pollutants) of stormwater are determined according to international bibliography. Using these data, the appropriate infrastructure for sustainable stormwater management is determined by examining various alternatives, including the conventional one. The comparison of the alternatives considers the cost as well as the environmental impacts of each one of them. The sustainable systems proposed for stormwater management of Perigiali are based on SuDS toolbox developed mainly by the British Construction Industry Research and Information Association (CIRIA), as well as on Urban NWRM by the European Union (EU) Directorate- General for Environment (DG). Some of the proposed systems are: green roofs and rainwater harvesting for private and public buildings; soakaways; permeable surfaces and roads; swales; channels and rills; filter strips; infiltration trenches; rain gardens.

For the final treatment and disposal of stormwater a technical and environmental comparison is assessed among three systems: detention and infiltration basins, as well as retention ponds.

Keywords: Flood Prevention; Stormwater Management; Urban Expansion; Sustainable Drainage Systems; Natural Water Retention Measures.

Special Session V Conference Hall, Eugenides Foundation
Shaping places with nature and culture – Culture for building sustainable urban development

Despoina Dimelli (GR)

Urban vegetation, a new tool for green cities, the Greek case

According to the United Nations, it is predicted that by 2030, the number of city dwellers will reach 60% of the world's population. Nowadays, there is an increasing societal support for more green space in and around cities. The new increasing food demands have led to the increasing needs for urban vegetation, which is not a new phenomenon in the urban environments. As a solution to this rapid growth appears urban agriculture “an industry that produces, processes and markets food and fuel, largely in response to daily demand of consumers within a town, city or metropolis” (UNDP).

The current paper focuses on the investigation of urban vegetation, its forms and history and its role in urban areas through the renewed approach of the city - countryside relation. It will examine the policies that are applied in many urban areas for the promotion of urban vegetation. It will investigate, with the use of international case studies, the planning tools and principles that encourage this “new” land use which has positive social, economic and environmental impacts. In a second level it will examine urban vegetation as it is today taking place in Greece.

During the economic crisis Greece faces today, some small steps towards the urban vegetation direction is recorded, but these are only small efforts of private initiatives. The aim of the paper is to investigate the planning tools that are today used for the promotion of urban vegetation, in all planning levels to evaluate the opportunities that are provided, while it will propose good practices that can be adopted from the international experience. It will examine the difficulties for the development of urban vegetation and it will propose practices and tools from the international experience that can optimize the development of these areas in the Greek cities.

Keywords: urban vegetation, urban agriculture, spatial policies, good practices.

Dimitra Tsoumpri (GR)

Fab this la study of Elaionas through creative activities

The current study is about the activation of the Elaionas area through the installment of creative activities and the creation of a network of different social groups and science fields. My goal is to conduct an experiment of a creative city, where social groups work together to shape the public space and give it a new meaning. Elaionas is an area of Athens that undergoes constant change. During the economic crisis, a lot of industries were closed down, leaving an inactive number of buildings. The area was taken over from various logistics and informal activities such as scavengers' center and market. The social groups of Elaionas are quite different both in culture and use of the area. However, for most of them, Elaionas is more of a passing than a destination. In order for the subject to remain in the area, there has to be a specific goal in mind. How can Elaionas get such points/ attractors in order to change from a Passing Through Land to an Active Space? Based on "Creativity and the City" there was a study of Elaionas aiming at the connection of the social groups through creative hubs such as Fab Labs. Fab Labs are directed towards both physical manufacturing and education. Such spots can be attractors of permanent dynamic groups, such as engineers and artists while at the same time they can be attractive for school students and new educational activities. S.T.E.A.M. Could the social weaving and the founding of a support hub of new creators be the motive to rethink Elaionas as a whole, preserving the elements of its identity?

Keywords: creative city, fabrication, reuse/recycle, mapping, steam education

I. Skoufali, A. Battisti (IT)

Microclimate of urban canopy layer and outdoor thermal comfort: a case study in Pavlou Mela, Thessaloniki

The present paper begins with the assumption that the Urban Heat Island (UHI) mitigation appears indispensable and urgent in the dense cities. To this area tematica, recent interventions of redevelopment of the open space for the microclimatic improvement at scale of the neighborhood (local), start through national and international programs. One of these processes is the case study of Pavlou Mela in the Greek context, where the investigations will be focused on the micro-specific scale of seven points represented and distributed in order to extrapolate post operam considerations on the microclimatic parameters (air temperature, temperature superficial and mean radiant temperature) and on thermal comfort (physiologically equivalent temperature). In this framework the analysis is expressed in two aims: (i) the first, concerns the observation of Urban Canopy Layer (UCL) to each individual open space, highlighting the factor of the orientation related to the thermal characteristics of 'cool' pavements and the spatial configuration, i.e. the relationship distance / height and greenery, (ii) the second, tends to identify the potential / limits of the software used (ENVImet Pro and Rayman).

In both cases, the numerical results are based on a comparison expressed in °C for greater compressibility and further confrontation with in-situ measurements.

Keywords: consolidated urban canopy, cool pavements, local microclimate, mitigation UHI, simulation thermal comfort (PET).

Sofia Strati (GR)

Exploring strategies to enhance attractiveness of the City of Athens

Current planning

In this volatile and conflicted day and age, information overload and the frenzied pace of everyday life trivialise human life, subjecting everything to the rule of money. Rapid changes in social values may highlight the need to explore solutions for interventions through planning, in such a way as to reduce contradictions in understanding and owning space, with the aim to promote quality of living and habitation.

Therefore, if the projects are replaced by "constructs" based on the building typology, thought-out programmes as formulations of social inquiries and values, they may usher modern cities into adopting appropriate conditions for a more attractive environment.

This presentation investigates the multi-purpose elements of visual communication ingrained into the urban fabric. It also entertains the intention to contribute to the attractiveness of the urban landscape, by attempting:

- To articulate a rationale on communication interventions in public space, regarding their cultural impact, as well as
- To formulate rules that will control and reverse the disorder characterising spatial messages.

Thus, it may be useful in education, in issues pertaining to communication in public space, research and the act of implementing studies on the cultural impact of interventions.

An agent of reshaping the rationale behind daily routine could possibly be found in the point of convergence between a person and society and between culture and the environment; thus, the new awareness could generate contemplation on daily routine, as well as actions that would help revise the identity of the cultural production of goods and services.

In our opinion, a qualitative development in the relationship between visual communication and the modern cultural environment translates into the creation of real coexistence conditions. Restoring communication generally calls for design ideology and the intention to produce qualitative products in terms of shape, function and symbol, in order to develop an environment-friendly character with upgraded communication features.

Design, as an established supply mechanism of modern social life, calls for serious interdisciplinary study and integrates a broad range of activities, with the aim to shed light into and mold those qualities of design that shape quality of living. Thus, today, design may contribute to a promising development of the environment, built on local culture.

Dafne Aslanidi, Athina Mela (GR)*Implementing a lighting masterplan in an area of cultural and architectural value : the case of Plaka*

The main goal of this project is to develop a lighting and environmental design regarding to the cultural, social and ecological status in the architectural and urban context of Plaka, a traditional district of Athens. A detailed inventory and exploration of the existing situation was carried out by collecting the necessary information on the land uses and urban planning status of the structured environment of the area. The case study is based on two thematic axes:

The lighting masterplan is based on the geographical, historical, architectural, urban and social situation and the stakeholders of the area. Analysis of the present situation leads to the proposed ideas for both streets and

landmarks, presented via photoshopped sketches. The final lighting masterplan is based on the design inferences and the conclusions of the whole approach.

The environmental upgrading, focused on: a) The restoration of the derelict building at Sholiou Str and, subsequently, then its use as a center of environmental and cultural actions, b) The regeneration of the park at Tripodon Str and the creation of an educational garden with Mediterranean plants

Keywords: Lighting, environmental, design

Maria Sinou (GR)

Creating Urban Public Space where there is no space available: the case of parklets

The amount of public space is decreasing worldwide due to population growth. On the other hand, changes in lifestyle increase the need for urban public spaces. The economic crisis exacerbates this need as citizens have reduced resources for recreation. This is why in today's era of economic uncertainty the presence of public space is imperative. In cities such as Athens where the greening per capita is very low and large public spaces very few due to past urban design mistakes, a solution that can be proposed is the organization of small public spaces such as pocket parks, urban courtyards and parklets.

Parklets are small parks-public spaces, which are hosted in the space of a parking place usually occupied by one or two cars and act as an extension of the pavement. Typically, they extend outside the pavement, but at the same level. They can be designed either as permanent or temporary constructions. The design of a parklet platform protects it from vehicle traffic and creates the conditions for hosting several functions such as landscape architecture, seating, tables and parking of bicycles.

The paper will focus on parklets and will show that with a few means, proper planning and management we can develop a network of such small spaces that could provide a sustainable solution to the lack of public spaces in dense cities. The research, develops on one hand, the concept of parklets and their dynamics as a tool for urban planning and, on the other hand, presents the study and construction of such a project by the Urban Ecology Laboratory of the University of West Attica. The construction was placed for three months in the center of Athens at Polykleitou Street during summer of 2017.

The project has shown that such spaces are not only accepted and embraced by the community but also that a wider application of such proposals could actually contribute to the environmental upgrading of the city.

Keywords: parklet, urban regeneration, lack of public space

Vroh Bi Tra Aimé, Nomel Gnagne Richard, N'Guessan Kouakou Edouard (Côte d'Ivoire)

Diversité végétale, et usages des espaces aménagés au niveau des échangeurs dans la ville d'Abidjan (Côte d'Ivoire)

Sommaire: La ville d'Abidjan a été dotée de divers échangeurs pour faciliter le transport urbain. Lors de la construction de ces échangeurs dans les années 1980, de nombreux espaces de 0,2 à 1,5 ha ont été aménagés avec des espèces ligneuses. Plus de 30 ans après, la présente étude a évalué la diversité floristique de ces espaces ainsi que certains services écosystémiques liés à la présence de végétaux au niveau de 10 de ces échangeurs

totalisant une superficie de 18 ha dans trois communes: Yopougon, Adjamé et Cocody. Après des inventaires botaniques, 132 visiteurs ont été interrogés sur les raisons de leur présence dans ces espaces. En outre, leurs perceptions de la présence d'arbres et de services liés à ces espaces ont été analysées. 1767 tiges ont été dénombrées enregistrant une biomasse de 79,15 t/ha pour 42 espèces. *Acacia mangium* est l'espèce prépondérante avec plus de 50 % des tiges et une biomasse de 58,51 t/ha. Les résultats des enquêtes montrent que 83,3% des visiteurs sont des hommes. La majorité des répondants (62%) ont un niveau d'études secondaires ; cette proportion varie selon les communes. Seuls les services d'approvisionnement et culturels tels que l'approvisionnement alimentaire, les matières premières, les plantes médicinales, l'esthétique et les loisirs sont plus accessibles et bien connus des citoyens. Les principales raisons de visites sont le repos (40% des visiteurs) et les rendez-vous (20% des visiteurs). D'autres usages dont l'exercice d'activités ; les rites religieux et les études ont des proportions variant selon les communes. Les espèces les plus connues des visiteurs sont: Orgueil de Chine (*Caesalpinia pulcherrima*), Flamboyant (*Delonix regia*), Teck (*Tectona grandis*), Mango (*Mangifera indica*) et *Terminalia catappa* localement appelé «Cocoman». Peu de visiteurs ont souhaité un enrichissement de ces espaces avec des espèces ornementales. L'étude suggère la prise en compte d'une plus grande diversité des espèces végétales indigènes dans le verdissement des infrastructures urbaines routières en Côte d'Ivoire. Les espaces aménagés au niveau des échangeurs de la ville d'Abidjan sont donc des écosystèmes où les plantes et les citoyens trouvent refuge et ressources pour leur développement. Ces zones répondent à des défis sociaux, économiques et environnementaux.

Mots clés : infrastructure verte, services écosystémiques, diversité végétale

Special Session VII, Workshops Room, Eugenides Foundation
«Natural and Cultural heritage, planning, management, governance, marketing, funding»

M.Lazoglou, D.Aggelides (GR)

Between policy and practice: A spatial decision support system for the protection of the environment and cultural heritage

ABSTRACT :This paper aims to investigate the alternative options for allocating land-uses in sub-urban areas by examining the provisions of the legal framework as well as their geology and terrain. Particular emphasis is placed on assessing alternative options regarding complex forms of housing development in relation to areas that possess **precious and fragile cultural and natural heritage**.

The allocation of land-uses in sub-urban areas is a complex problem that (i) requires the collection, management and representation of a large amount of data, (ii) takes place in a dynamic and complex environment, which makes it difficult, time-consuming or possibly even infeasible for an expert or a team of experts to investigate all the relevant parameters, (iii) is hard to solve using a single mathematical model or algorithm, (iv) requires decisions to be made in a limited time and/or with incomplete data, (v) requires reliability and accuracy of calculations, (vi) requires the use of existing knowledge, (vii) can be entirely or partly semi-structured and (viii) is critical for the sustainable development of an area; therefore, the costs of the proposed Spatial Decision Support System (SDSS) are justifiable.

To address these challenges a SDSS that combines an Artificial Intelligence technique named Ontologies with Geographic Information Systems and Object-oriented programming to support decision-making in spatial planning was developed. **The case study of this paper is the Mastichochoria area of Chios island, Greece.** The developed system supports stakeholders involved in spatial planning who are responsible for assessing the impacts

of each land-use allocation alternative. It provides the necessary information to analyse each problem so they can easily assess the complexity of the problem, evaluate the impact of each alternative, relate the predetermined objectives to the results of each alternative and choose the solution that best meets their demands, beliefs and priorities. The proposed approach promotes and strengthens the trend to use the benefits modern technologies offer in forming policies aiming to protect the natural environment and cultural heritage.

Keywords: Spatial Planning, Spatial Decision Support Systems, Land-use Planning

Dimitris Banousis (GR)

Building international Networks to promote Green Place branding : lessons learned from the ELAIN Project

In the era of internationalization cities focus on pushing towards *diversification* in order to improve their competitiveness. Of special interest in this context is cities' tendency to devote considerable attention to the role that environmental policy could play in improving their image and strengthening their attractiveness. On the other hand, it is common ground that cities' development prospects are connected with their capacity of partnership building. For this reason, local authorities tend to focus on the establishment of thematic cooperation platforms aiming to identify and overcome common challenges. Both of the abovementioned conditions are met in the Balkan region, where a context of socio-economic disparities, significant infrastructure gaps and the environmental challenges is present. Furthermore, the context is characterised by challenges linked to the communication and reconciliation of non-similar planning systems.

A characteristic initiative within the abovementioned framework was undertaken by the Environmental Association of the Municipalities of Athens - Piraeus (PESYDAP) in cooperation with the Municipalities of Novi Sad and Nis (Serbia), the Municipality of Rijeka (Croatia), the Municipalities of Eastern Sarajevo and Bijeljina (Bosnia and Herzegovina), the Municipality of Tirana (Albania) and the Municipality of Sofia (Bulgaria). More specific a partnership was built and the "Environmental Local Authorities Interbalkan Network" (ELAIN) project was implemented. All activities were funded under the Europe for Citizens Programme (Reference number: 2013-4954). The project is investing in exchange and transfer of good practices in EU, national and local environment protection policies. Its predominant pillar is participatory planning, as citizens express their views on the project's priorities and highlight the policies that need to be adopted, through an outward-oriented platform of collaboration, based on mobility and e-interactivity.

Keywords: placemarketing, place branding, environmental policy, international cooperation, Balkans, participatory planning

A.Kamara, Chr.Karamperi, P.Pantzou, Marco de Cave, I.Manolis, H.Monton, El. Simeonova (GR, IT, BG, ES)

Effective management and enhancement of local cultural resources : the DEN CuPID paradigm and training

Through the European Year of Cultural Heritage 2018 local cultures and cultural resources, both tangible and intangible, become not only the focus of systematic enhancement but also a matter of international interest. The project DEN CuPID (Digital Educational Network for Cultural Projects' Implementation and Direction) an Erasmus+ Strategic Partnership (KA2) project, which started in 2016, offers tools especially designed for raising cultural awareness, increasing technical and systematic knowledge for local stakeholders and municipal organizations and creating points of contact for effective cultural management on a local level.

DEN CuPID was born as a response to the needs of local agents to design and implement sustainable cultural policies and projects. Despite the fact that local culture is an essential source of wisdom and creation, its preservation often requires a professional approach lacking in municipal agents or little cultural organizations.

Therefore, the project's methodology involved the following points:

- a) To create links between Cultural Management as a discipline and the practical, day-to-day aspects of management that local agents deal with;
- b) To establish a digital network where individuals and organizations will be able to find partners, best practices and consultancy;
- c) To train municipal employees, local agents etc through workshops based on case studies and to mentor them throughout the process of planning their own successful projects;
- d) To establish an e-learning platform for more people from our target groups to get knowledge and networking.

The project started with a thorough state-of-the-art investigation and a transnational research on the needs of local agents regarding cultural management. Within the two years of the project's implementation, local agents from Spain, Italy, Greece and Bulgaria met with each other and with experts and managed to grasp theoretical knowledge and advance their own project ideas based on a solid substratum of methodical work. Furthermore, they managed to get international experience and to share best practices with successful local implementers during the project's four transnational workshops in Zaragoza (Spain), Trikala (Greece), Cori (Italy) and Varna (Bulgaria). Some of our trainees' projects, such as the case of Farkadona, develop into first-rank management models. Lessons learned and practices followed can serve as examples for a broader network of stakeholders not only in the partner countries but all over Europe in order to prepare local societies for the next EU cultural policy framework after 2020, in which local culture will become the main asset to enhance as well as a source for innovative inspiration.

Our plans for the future would ideally involve the establishment of a focus group which would continue meeting and producing intellectual outputs and dissemination activities even after the project's end, in order to stimulate the transition from local to national and international cultural resources' management.

V.Meleti, V.Delitheou (GR)

The use of green taxes in designing public space with nature and culture

ABSTRACT :This paper examines the case of designing the public space with nature and culture. The public space we meet is a result of both social conditions and institutional framework. In recent years, in many points of Attica, the lack of public spaces is intense. However, where the public space is adequate, it often fails to be used by residents in the best possible way. In this context, the causes of the "inactive" public space will be examined as well as the spatial dimension of the problem in conjunction with the socio-economic and cultural mutations taking place. The main reason for which the public space is not successfully used is basically the lack of financial resources. These resources will be studied as to whether they can derive from the use of green taxes that a Municipality may receive in order to spend on better use of public space.

The Municipality of Nea Ionia will be selected as an example of public urban space. What characterizes the area over time is its revitalization through restrictive actions and works. The Municipality has been affected like all other Municipalities of Attica due to the economic crisis and needs rejuvenation actions in terms of utilization of existing

public spaces. At the same time, the aforesaid Municipality has the guarantees to develop as long as it has all necessary resources for investment and exploitation. The above represent the main reasons for investigating the issue of "gaps" - without the operation of public spaces.

Initially, an analysis of the issue of public urban space in Attica will be undertaken through presenting the most important events that have defined its role and its presence. These are socio-economic mutations which, in relation to the institutional framework, functioned catalytically in shaping the public space. Then a spatial and historical analysis of Nea Ionia is carried out with regard to its location and its form. It presents the framework of its design, the actions taken by public bodies, studies that have been carried out as well as architectural competitions. Subsequently, emphasis is placed on its current spatial reality through the use of buildings and pedestrian movements when crossing it. It will still be a reference to the green taxes the municipality receives and how it can use them. In order to illustrate the current image of the Municipality, a field survey will be carried out in which the uses in the area will be captured.

The issue relating the Municipality with the public spaces of other Municipalities will also be approached from the point of view of spatial neighbouring as well as the functional disintegration. The question arises as to who are the users and how they experience this public space in their everyday lives. In the text of its completion, reference will be made to the predominant discourse and the upcoming regeneration of the area based on the Municipality's revenue resulting from green taxes.

Keywords: Green taxes, public space, nature, culture

DAY 2**Tuesday 27 November 2018**
Venue : Eugenides Foundation**4 Plenary Session IV Auditorium, Eugenides Foundation***Underwater Natural and Cultural heritage, Maritime Spatial Planning, Cultural aspects of insular policies, Blue growth, environment and culture***Stella Kyvelou, Eleni Giannopoulou, Eirini Barianaki, Nikitas Chiotinis (GR)***Marine/maritime spatial planning and cultural values : an assessment methodology for the Aegean archipelago*

Despite the increasing recognition of their importance, the intangible cultural values associated with the sea continue to be neglected in marine/maritime spatial planning (MSP). The lack of socio-cultural evidence as mentioned by an EU report (MSP data) is due to inherent difficulties in defining and highlighting cultural values but also to the difficulties connecting cultural values to specific places in order to allow for a place-based approach to planning and management. The paper deals with three aspects that are important for the inclusion of cultural values and intangible cultural heritage in MSP: a. Definition of cultural capital and cultural values (mainly intangible ones) not only as part of ecosystem services but as part of the "maritime capital" (Kyvelou, 2016 & 2017) an analogue of the "territorial capital" (see Camagni, ESPON., Kyvelou et. al, 2012); b. recognition of sites of cultural value; c. determining the relative importance of sites of cultural significance.

Common classification systems, such as **cultural ecosystem services** can provide a good starting point for identifying cultural capital and cultural values, but so far they are limited to capturing the cultural interconnections of local communities with the sea. A first approach to the methodology of structuring a place-based (and community-based) narrative about cultural values and their "territorialisation" for MSP purposes is being attempted, using key criteria that can lead to the definition of "culturally significant areas" (Gee et al, 2017) and "**cultural landmarks**". A baseline report on "culturally significant areas" is proposed as an element that can be used by designers to identify where cultural links to the marine space are particularly strong and create sense of place and identity. We also emphasize the need for participatory processes (participatory mapping) and related tools such as PPGIS (Geographical Information Systems).

The island and micro-island space of the Aegean archipelago is used as the main reference territory, taking into account its cosmopolitan dimension and its role as a mediator for the cultural development of the West. In parallel the paper develops a critical approach and assessment of the new Law 4546/2018 on MSP in Greece as to whether it favors the inclusion of cultural values and cultural marinescapes in planning.

Keywords :marine space,intangible cultural values, maritime capital, cultural ecosystem services, Aegean archipelago, culturally significant areas.

A. Toufeggopoulou, I. Spyropoulos, S. Avgerinou- Colonia (GR)*Marine Spatial Planning and Cultural Heritage: Challenges related to its protection and promotion through the application of MSP in the marine environment of Myrto Pelagos-Crete*

Abstract : The conditions formulated today due to growing competitiveness at a global level, the financial crisis and, as a result, of the constant search of growth prospects for the country highlight the strong potential of maritime and coastal areas for innovation and growth. Consequently, this gives rise to hot issues, such as tackling multiple competitive activities in the marine environment, and at the same time - often on the sidelines - protecting and promoting the cultural heritage, both material and immaterial, located within this area. Indeed, for many specialist researchers, culture can be the fourth pillar of sustainable development and constitute its main cohesive element.

Undeniably, both interest in the maritime and coastal areas and the cultural and environmental issues linked to them has been steadily increasing in recent years. In particular, in the Mediterranean area, the main European Convention regulating Environmental and Natural Heritage Protection issues is the Mediterranean Action Plan, signed in 1976 and updated in 1995 (MAP II) in Barcelona (the Barcelona Convention). Moreover, at an institutional level, as of 1992, with the Maastricht Treaty, the issues of natural and cultural heritage have become one of the EU's main goals in the implementation of all its policies. Maritime Spatial Planning (MSP) bridges the gap between the concepts of geographical area and culture, as it is "the process through which the competent authority analyses and organises human activities in marine and coastal areas to achieve the composition of ecological, environmental, economic, social and cultural parameters aiming at the promotion of sustainable development" (Law 4546/08, GG 101A).

Therefore, MSP emerges as the necessary process to achieve cohesion in the (terrestrial and marine) area and develop activities within it rationally, while ensuring the preservation, protection and improvement of the natural and cultural environment, taking into account the overall marine cultural heritage. Thus, starting from the above observations, this paper strives to contribute to investigating the challenges relating to the protection and promotion of the cultural heritage through the implementation of MSP. The implementation of MSP in Greece through the European program SUPREME - Supporting Maritime Spatial Planning in the Eastern Mediterranean (2017-2018) is the first substantial effort to implement pilot marine spatial plans in the national marine environment. One of the five case studies examined in the program is the Myrto Sea / Peloponnese - Crete passage, which forms the western boundary of the Aegean Sea and is a passage for various transports of international significance, with a rich marine life and submarine cultural heritage (Isle of Pavlopetri, Antikythera shipwreck, etc.). The main working hypothesis and the innovation brought about by this approach is the need to achieve coherence and interconnectivity among the actions taken in three inextricably linked areas: planning - marine area - culture.

Keywords: Marine Spatial Planning, Cultural Heritage, Myrto Sea, Peloponnese - Crete passage.

Aikatenini Gkoltsiou (GR)

Landscape character assessment methodology : a useful tool in regional planning for insular areas

ABSTRACT : Many European policies (European Landscape Convention, European Spatial Development Perspective, Euroscape 2020) stress the important role of landscape in the cultural, ecological, environmental and social fields, in regional planning, in rural development schemes, new forms of governance and in national and European spatial planning initiatives. European islands and more specifically Greek islands are important depositories of natural and cultural assets and more vulnerable to climate change, tourism development, financial crisis, refugee immigration, with severe impacts on social, economic, environmental services. The value of equitable and balanced "landscapes" is often adhered and one of their territorial priorities for development.

Due to the urgency for a more balanced national and regional development of insular geographical areas further research is required for a) a strategic development based on the valorisation of their landscape/seascape characteristics, b) implementation and monitoring of policies adapted to their specific characteristics and needs, c) practical tools and methods which will help them towards a sustainable growth.

So far, several planning tools based on landscape character assessment (L.C.A.) methods are widely used among European Countries. However, they do not capture the insular character and a new more holistic approach is required. At the Mediterranean, L.C.A. is less developed and used, especially as a tool for landscape planning, while there is a complete absence of any Seascape character assessment (S.C.A.) efforts and only a few countries have developed national landscape classifications. However, landscape/seascape assessment tools remain still underdeveloped for Greek landscape planning.

The paper aims to highlight the importance of a holistic landscape/seascape character assessment methodology in regional planning for insular areas, as well as the gaps faced in Greece. Starting with a literature review about the L.C.A. methods applied in several European countries, a variety of approaches/tools used to the landscape/Seascape analysis will be revealed. Then, several attempts and obstacles about the integration of these methods in island context, throughout the Mediterranean, will be presented, to reveal their distinct role in developing island policy objectives for a range of sectors. In the Greek context, examples in the frame of European Research programs (Medscares project,) will be presented about the application of LCA to insular areas, presenting the gaps and potentials.

In conclusion, the research will offer suggestions about how to assess in a holistic way the landscape/seascape character of the islands for a sustainable regional development. The proposed research activities will focus on amelioration and adaptation of current LCA-SCA methods & tools, policies and planning strategies for insular areas at European/national level, on a methodological framework of LCA adjusted to islands, on the integration of the socio-economic perspective, public participation and smart technologies. Then possibilities of developing a holistic methodology on landscape/seascape character assessment, especially developed for the islands, will be investigated, to integrate this methodology into national/regional/local planning policies, as well as in any other policies with possible direct or indirect impact on the islands landscape.

Keywords: Islandscape, Landscape character assessment, Seascape character assessment, Regional Planning, Insular Areas, Landscape Policies, Greece.

Stella Kyvelou, Dimitrios Ierapetritis (GR)

Perspectives of blue growth in Greece: lessons learnt from the local and regional environment

This paper seeks to identify the most important factors that can be driving forces of blue growth in Greece, using the method of environmental scanning (S.W.O.T analysis etc.) The aim of the research is to put forward concrete policy proposals to promote blue growth in Greece. For this purpose a field survey was conducted with participating representatives of the Development Companies, which in the current programming period implement LEADER / Community Led Local Development (LLCD) programmes with the co-financing of the European Maritime and Fisheries Fund and are part of the Greek Operational Programme for Fisheries and the Sea 2014 -2020.

The survey highlighted the strengths and weaknesses as well as the opportunities, the risks and the many challenges that outline the prospects of blue growth in the Greek regional space. Initially, both the theoretical and the policy framework of blue growth in the EU are presented. It is also analyzed whether the new Law on Maritime Spatial Planning (L.4456 / 1018) will be able to create the appropriate conditions for the development of the marine and coastal economy and to ensure that the identified problems and constraints linked with terrestrial spatial planning in terms of investments are not replicated. Then, the results of the primary research are discussed, highlighting the most important areas of strategy for promoting blue growth at local level by the Development Companies. Finally, proposals are presented for political support of blue entrepreneurship, mostly based on environment and culture, which may be the cutting edge of the country's new development model.

Keywords: Greece, blue growth, local development, Development Agencies, blue entrepreneurship, regional policy.

Eleni Hatziyanni (GR)

Mediterranean Innovation strategy for transnational activity of clusters and networks of the Blue Growth - the «MISTRAL» INTERREG MED project

Keynote speech by George Alexakis, Vice Governor of the Region of Crete, Vice President of CPMR
«How Crete faces the new reality of maritime spatial plans : Challenges, opportunities, constraints»

Keynote speech by Stella Kyvelou, Associate Professor, Panteion University
«Integrating intangible cultural values and UCH in MSP »

Keynote speech by Vasiliki Vasilopoulou, Hellenic Centre of Marine Research
«Ecosystem-based Maritime Spatial Planning as a key process to support Blue Growth: examples from research applications in Greek waters»

Special BalticRIM Session IV Auditorium, Eugenides Foundation
Underwater Natural and Cultural heritage, Maritime Spatial Planning, Cultural aspects of insular policies

Block 1: Nature & Culture from the archaeologist's point of view

Daniel Zwick, State Archaeology Department of Schleswig-Holstein, Schleswig, Germany

The physical and anthropogenic landscape of the Baltic Sea region: an introductory overview

The genesis of the Baltic Sea from a glacial meltwater lake to a semi-enclosed sea has shaped its shores and its people. Many distinctive customs as famously described by the Swedish cartographer Olaus Magnus in his *Carta Marina* of 1539 can be attributed to the unique environmental conditions. Due to the brackish water and its many straits, the Baltic Sea is habitat to numerous saltwater and freshwater species. Its fishing grounds were renowned throughout Europe since medieval times. The low temperatures and low salinity explains the absence of the destructive, wood-eating *teredo navalis* in the north-eastern part to the effect of stunningly preserved shipwrecks, which have endured the centuries as 'time capsules'. The short geological history of the Baltic Sea of only a few millenia after glaciation is the reason for the formation of the world's largest archipelago, which made it possible to traverse almost the entire sea along the northern coastline without getting out of landsight, an aspect mirrored in medieval itineraries and rutters, but found also expression in a common coastal culture as testified by Bronze Age petroglyphs up to (post)medieval stone maze symbols. The glaciation is still having an effect to the present day: the post-glacial rebound leads to a land-rise in Fennoscandia, with many ancient maritime sites now located further inland, while having the reverse effect south of the Ringkøbing-Fyn tilt line, where late Mesolithic and early Neolithic coastal settlement sites have become inundated, resulting in very favourable anaerobic preservation conditions under the marine sediments – a natural "archive". Aside from the known archaeological heritage, the statutory protection – as far as Schleswig-Holstein is concerned – also extends to as yet undiscovered sites according to the *ipso lege* principle, as well as the preservation of intact geological formations as showcases of earth history, thus giving leverage to include also areas of an anticipated archaeological potential or 'underwater landscapes' in

maritime spatial plans. The people of the Baltic Sea region cannot be understood in isolation of their environment, and thus both natural and cultural maritime landscapes are inseparately intertwined.

Keywords: BalticRIM-Project, Baltic Sea, Maritime Landscape, Maritime Archaeology

Riikka Tevali, Finnish Heritage Agency, Helsinki, Finland

Innovative management for the Maritime Cultural Heritage – best practices

Some countries in the Baltic Sea region have based their Maritime Cultural Heritage management practices on free and public registers that are maintained by government agencies according to the EU INSPIRE-directive. The register data is available online through interfaces and is updated regularly. The opening of data to a wider audience created more opportunities for safeguarding the Underwater Cultural Heritage (UCH) and the Maritime Cultural Heritage (MCH). The sharing of data means more responsibility for divers, but also creates possibilities for site monitoring. Additionally, open access to most of the underwater sites in the form of underwater parks confirms safeguarding and cooperation.

With narrow resources, co-operation with volunteer divers is crucial and mutual trust is an essential element of working together. The diving community is dedicated and educated with special skills, e.g. in photogrammetry. Important work in educating divers is done in Diving Clubs. Making data available means the community becomes invested in safeguarding, researching and preserving the common heritage. The trust works both ways, as divers share their data and government agencies act as public servants.

Co-operation goes also between various government agencies to share data and infrastructure, which creates more possibilities for research, site monitoring and preservation. Finnish government agencies responsible for UCH and Nature have joined resources in the BalticRIM-Project to research the UCH to gain more information on historical phenomena. Nature and landscape values are collected from local diver communities to create information for Maritime Spatial Planning (MSP). Co-operation with neighbouring countries, sharing of information and even personnel in common projects creates possibilities to share the best practices.

Keywords: INSPIRE-directive, Management, Volunteers, Co-operation

Maili Roio, Krista Karro, National Heritage Board of Estonia, Tallinn, Estonia

Maritime planning and Estonian regulations of diving to nationally protected underwater sites

As the Baltic Sea has very good preservation conditions for shipwrecks and other underwater structures, then diving to those objects becomes more and more popular in the Baltic Sea region as a whole. The same processes can be noticed in Estonia, too. Since 2011, Estonia has developed a set of laws to regulate diving to nationally protected underwater cultural heritage sites. Data collected in the course provides information on the popularity of different underwater objects among divers, which enables the development of the tourism sector in maritime planning more sufficiently. In this presentation the regulations are analysed in the context of maritime planning and the Blue Growth initiative.

Keywords: underwater tourism, maritime spatial planning, shipwrecks, underwater cultural heritage

Block 2: Nature & Culture from the planner's point of view

Susanne Altvater, Submariner Network for Blue Growth EEIG, Berlin, Germany

How can planners promote MCH - practical examples from the Baltic Sea

The presentation outlines differences in maritime spatial planning (MSP) frameworks in the countries of the Baltic Sea Region and highlights certain management approaches which have been taken or are envisioned so far to integrate maritime cultural heritage (MCH) into planning to overcome existing barriers. Hereby the protection and management needs of MCH according to its significance have to be taken into account. First answers coming from research of the BalticRIM project will be given which role MSP has in promoting the awareness-raising and careful handling of heritage sites and areas. Good practices will show integrative, cross-sectorial ways to take care of MCH within a country or cross-border and will link to some multi-use approaches in the region.

Keywords: Maritime spatial planning, integrative management of MCH, cross-sectorial planning, multi-use

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Linking cultural and natural values and human uses in Maritime Spatial Planning

In the Maritime Spatial Planning (MSP) processes, there is a growing need for high quality spatial data on both the natural and cultural values of sea areas and on the existing human uses and pressures. Moreover, there is a need to understand the intrinsic spatial relationships of the patterns of cultural and natural values and human uses in order to deliver well-informed planning solutions. In this study, we compiled a spatial database of underwater marine cultural heritage data (wrecks), data of marine nature values (biodiversity, key species), abiotic environmental data (depth, wave exposure etc.), human uses and pressures data (Baltic Sea Pressure Index, shipping intensity, hydro-morphological alterations etc.) for the Estonian sea area, NE Baltic Sea. The compiled data was used in spatial analyses in order to (a) elucidate the spatial relationships between cultural and natural values and human uses, (b) assess the distribution of cultural and natural values along environmental gradients, (c) develop spatial aggregation techniques for prioritization of valuable marine areas.

Keywords: Maritime Cultural Heritage, Maritime Spatial Planning, spatial analysis, marine biodiversity

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Maritime Cultural Heritage cumulative risk analysis in support of ecosystem-based adaptive Maritime Spatial Planning

The Maritime Cultural Heritage (MCH) cumulative risk analysis methodology is built on the spatially explicit GIS data layers of underwater MCH objects of different national and international significance – the MCH significance profile. The MCH cumulative risk profile combines the MCH significance profile and the HELCOM Baltic Sea Pressure Index (BSPI), the latter representing the spatial distribution of intensities of cumulative anthropogenic pressures. The MCH cumulative risk profile identifies areas where risks to MCH are the highest due to both high significance of protected MCH objects and high intensities of human pressures. Spatially-explicit MCH cumulative risk profiles are further coupled with spatially explicit environmental cumulative risk profiles. As a result, the coupled MCH and environmental cumulative risk profiles can be easily communicated to politicians, maritime spatial planners and other interested stakeholders to jointly evaluate and compare the MCH and environmental risk levels resulting from different potential planning solutions. This methodology can be used in any other sea areas by modifying the list of MCH protected objects, environmental vulnerabilities and the intensities of cumulative human pressure.

Keywords: Maritime Cultural Heritage, Maritime Spatial Planning, MCH cumulative risk analysis, ecosystem based approach

Special INTERREG-MED¹ and INTERREG-ADRION Session VIII & Round Table

Conference Hall, Eugenides Foundation

Nature & Culture as key factors to consolidate new development models in the Mediterranean and for EU's macro-regional strategies

BLOCK 1. Project Presentations

Thanos Kontargyris (GR)

Social, cultural and creative innovators to consolidate new development models in the Mediterranean – The TALIA INTERREG-MED Project

The TALIA INTERREG-MED Project started in 2016 is led by the Region of Bari and involves 6 partners; the Greek partner is UHCC. The project considers creativity and social innovation the enabling forces for prosperity and well-being in the MED space in the context of “territorial innovation”, where innovation is built on the **territorial capital** specific to a given place. It capitalises the experience of previous and current projects in this field and promotes a common vision on social, cultural and creative innovation role for developing the MED area. The project's mission is to **create and animate a community of stakeholders** (partners and beneficiaries) involved in social, cultural and creative innovation and co-develop with them a Mediterranean model for creativity and innovation.¹¹ INTERREG-MED projects are involved in this community with close to 1000 members (300 actively followed and mapped):

- 1) CreativeWear – On Creative Clothing
- 2) open DOORS – On Sharing Economy
- 3) CHIMERA – On cultural clusters
- 4) Prominent MED – On Public pROcureMent for INnovation
- 5) Co-Create – On co-creation
- 6) CoWorkMed - On Coworking
- 7) SMATH – On Culture based creativity
- 8) ODEON – On Open Data
- 9) MDNET – On Mediterranean Diet
- 10) CHEBEC – On Transregional cooperation of creative industries
- 11) +RESILIENT – On social vocation and responsiveness

TALIA carries out its activities through three strands: • Engagement and support: Liaison and interaction for community building and interactions generation. • Communication: Web, social media-like spaces and events for dissemination of projects' results. • Attaining impact: Identification of opportunities to extend the most prominent project results across the MED space and the EU thematic policy agenda and contribution to key debates in fora on social innovation, creativity, culture and sustainability.

Keywords: Social Innovation, Creativity, Cultural Industries

Eleni Hatziyanni (GR)

Coastal and Maritime Tourism at the Mediterranean. Economic growth, sustainability and environmental protection, through regional activities and interprogrammes synergies. PANORAMED and BLUEISLANDS Interreg MED Projects.

As part of EU's Blue Growth strategy, the coastal and maritime tourism sector has been identified as an area with special potential to foster a smart, sustainable and inclusive Europe. It is the biggest maritime sector in terms of gross value added and employment and, according to the Blue Growth Study is expected to grow by 2-3% by 2020. Employing over 3.2 million people, this sector generates a total of € 183 billion in gross value added and representing over one third of the maritime economy. Focusing on the coastal-maritime tourism, there will be a double way approach: (1) By presenting of BLUEISLANDS MED Interreg Project, as an example of interregional cooperation of Med islands, for facing the seasonal variation of waste generation, as an effect of tourism; Blue Islands Project brings together 14 partners from 8 countries in a systematic effort to properly identify, address and mitigate the effects of the seasonal variation of waste generation on MED islands as an effect of tourism, but also: Highlighting the goals of PANORAMED MED Interreg Strategic Project, as a Med governance platform of national and regional authorities, under the umbrella of INTERREG MED Program, and as a cross-sector axis which aim is enhancing the Mediterranean governance on common challenges, such is the coastal and maritime tourism. The overall goal of PANORAMED is to establish an innovative permanent dialogue and decision making process among national and regional public authorities and stakeholders to contribute to informed policy and decision making processes at national and transnational level on common challenges and opportunities in the Mediterranean Region, by including 17 ministerial and regional partners, and focusing on significant thematic sectors of Coastal and Maritime Tourism, and Maritime Surveillance.

Irene Barianaki (GR)

Alternative tourist strategies to enhance the local sustainable development of tourism by promoting mediterranean identity, The INTERREG-MED ALTER ECO Project

ABSTRACT : The Mediterranean is under threat due to the inappropriate practice and development associated with mass tourism. As a consequence areas of high tourist attraction in coastal and insular cities are reaching their limit on carrying capacity, with a direct impact not only on the urban environment but on key elements that define Mediterranean Culture. In this context, ALTER ECO enhances the local sustainable development of tourism by promoting Mediterranean Identity through the implementation of alternative tourist strategies in 6 pilots co-designed and implemented by public and private stakeholders. The project provides the opportunity of testing, in representative Mediterranean cities, used as Living Lab, existing methodologies and tools arisen in previous high impact projects in the field of sustainable tourism or proposed by key stakeholders, with the aim of reaching holistic and realistic tourist strategies at local and regional level that allows the transferability in the Mediterranean territory. Project results will support policy makers to be more informed and integrated for about decisions for the governance and management of tourism in the Mediterranean. At the same time will enhance the coordination of actions between public and private stakeholders towards the implementation of the raised strategies in order to create new business opportunities. ALTER ECO will contribute to improve knowledge and decision making capacities, including a better use of observation, monitoring and planning in the field of sustainable tourism.

In particular, the Region of the South Aegean will implement a pilot alternative tourism application for the elevation, marking, mapping and promotion of walking trails in the center of the island of Rhodes, in areas of natural beauty with ecologically and culturally visited places, which to date have not and have not been promoted to the extent that it is appropriate. By all this, it will be achieved the Creation of an Alternative Tourist Attraction in the middle of Rhodes

Island in order to relieve the pressure in the Popular Areas (Medieval Town, Acropolis of Lindos) by using smart solutions to measure the impact of the pilot actions to the spread of Tourism flows throughout the Island.

Keywords: Environmental Planning, Alternative Tourism, Culture, Mediterranean Identity

Eleni Hatziyanni (GR)

Environment - Tourism- Culture: Interregional cooperation based on a triple axis for sustainable development. Stressing efforts through BRANDTOUR (Interreg EU) and THINKNATURE (H2020) projects.

Europe is the N.1 travel destination in the world today. Tourism is its 3rd economic activity, with 3.4 million enterprises, 12 million jobs and accounting for 9,7% of the GDP. The last decades, good environmental status, natural heritage and culture are of great importance for sustainable development of the tourism sector. On the other hand, they have become a crucial component of an ideal touristic product and destination, worldwide. That is reflected in all levels, local, regional, national and European, highlighting the necessity of oriented policies on a triple dimension for sustainable development: the “Environment-Tourism-Culture” axis.

The objective of the BRANDTOUR INTERREG EU project is to improve the partners’ capacity to support tourism through the promotion, innovation and diversification of the offer. The project aims to provide better policy instruments to develop new customised tourism products that can satisfy emerging target groups, and favour inbound flows towards the EU.

THINKNATURE (H2020) focuses on the development of a multi-stakeholder communication platform that will support the understanding and the promotion of nature-based solutions actions which are inspired by, supported by or copied from nature in order to provide the necessary policy and regulatory tools to solve significant societal challenges such as human well-being, impacts of climate change.

Public authorities, Research Centers and Academia stress their efforts in order to further develop policies at regional, national and European level, through interregional cooperation, by engaging a variety of actors, end users and local stakeholders, having key role for the sustainable development, responsible entrepreneurial activity and tourism potential, at the European Regions.

Round Table I, Panel discussion

Does INTEREG-MED and INTERREG-ADRION promote the idea and challenge of nature and culture as an indivisible whole? Are natural and cultural heritage key factors in the European Union's major framework programmes and macro-regional strategies ?

Participants :

Mathilde Konstantopoulou, Coordinator, EUSAIR FACILITY POINT Project Partner for Greece, Special Service for Strategy, Planning and Evaluation, Ministry of Economy & Development

Denis Sarrigiannis, Professor, Director, Environmental Engineering Laboratory, Department of Chemical Engineering, Aristotle University of Thessaloniki, HORIZON 2020

George Alexakis, Vice Governor of the Region of Crete, Vice President of CPMR

Special Session IX Conference Hall, Eugenides Foundation
***Innovative ideas for the use and the management of marine space:
the multi-use concept***

D.Depellegrin, V.Vassilopoulou, M.Bocci, E.Ramieri, Zacharoula Kyriazi, A.Mourmouris, M.Maniopoulou, A.Barbanti (IT,GR)

Multi-use of the sea space: exploring Underwater Cultural Heritage potential combinations in the Mediterranean Sea

ABSTRACT :Multi-Use (MU) is an emerging concept to manage sea space demand by combining different activities while fostering the sustainable use of marine resources. Within the MUSES Project (Multi-Use of European Seas) typologies of MU combinations and methods to explore the opportunities for MUs in the five sea basins of Europe have been developed. In the eight EU countries of the Mediterranean Sea basin evaluation of the existing and potential MUs was performed with the final aim to investigate the actual status of implementation of the MU concept in the region. The aim of this study is to present current conditions of MU development related to UCH in the Mediterranean. The analysis explores opportunities and challenges at the regional (Mediterranean), national (EU country), and local (pilot case study) scale for UCH-based MU implementation in terms of DABI key factors (drivers, added values, barriers and impact) affecting their development. Factors are analyzed in relation to their political/regulatory/planning, socio-economic, technical and environmental components; benefits from the promotion of MU concepts are addressed, and recommendations that can support UCH MU development, falling under the tourism-driven MU category, are provided.

Keywords: Multi-Use potentials, UCH, tourism-driven, DABI factors, Mediterranean Sea

Stella Kyvelou, Eleni Giannopoulou, Dimitris Banousis (GR)

The “multi-use concept” in the Aegean archipelago: lessons learnt from the past to inform the new era of maritime spatial planning

The concept of marine/maritime spatial planning is directly related to the critical environmental degradation of marine ecosystems, the current demands for the ever increasing exploitation of oceans and marine resources, and the emergence of conflicts between traditional and new uses of marine space. Increasing use intensities and the creation of new marine uses, such as the location of wind farms, are observed in marine and coastal areas, a development that exacerbates pressure on coastal and marine ecosystems. To address conflicts and cumulative impacts, it is necessary to develop integrated planning and management approaches and new planning tools.

A creative and innovative solution to competing claims in European seas lies in the development of Multi-Use platforms at Sea (MUPS) that combine different activities within a specific marine area, for instance energy production and aquaculture. The Aegean Sea is a representative example, with both the existing spontaneous traditional multi-use and the need for a systematic **multi-use planning** and consequent social requirements to be evident.

The conflicts observed are due to the different views, values and attitudes of people and social groups living in coastal areas. In order to address current challenges in marine areas, Maritime Spatial Planning and similar integrated planning tools need to be developed mainly in the form of communication processes that link different types of information and promote the dialogue and shared understanding between social groups and spatial scales.

T.Kampouris, A. Chatzinikolaou, A.Zambelis, I.Batjakas (GR)

Aquaculture : the offshore challenge in EU and Greece

Aquaculture is one of the fastest growing industries in a global level. Aquaculture represents the 20% of the total fish consumption within EU. The Greek aquaculture, along with olive oil, is export-oriented and among the most competitive primary sector. Furthermore, is one of the most important levers of economic growth, with 63 enterprises and 366 units being active in 2015, producing 11 thousand tons. Greek aquaculture targets to triples its production by 2030, resulting in an evident space demand. The present EU and national policies are targeting the aquaculture's offshore sustainable development, yet other industries (maritime, mining, wind farms) require and demand space as well. Thus, the development of an intersectoral marine spatial planning tool is necessary. Blue Growth is a tool that regards the growth of marine industries and the sustainable management of the marine environment. In Greece, though that relatively new, there are -developed or under development, offshore aquaculture units. One at the Holy Mount of Athos, using the novel technology of offshore submerged cages and another - under the licensing procedure, using offshore submerged cages and the Integrated Multitrophic Aquaculture (IMA) methodology, located 2km offshore from shore.

Ioanna Argyrou, Aikaterini Iordanidou, Theologou Elina (GR)

The rational and integrated spatial development of aquaculture for the sustainable development of the coastal zone.

The Aquaculture Sector has emerged as one of the main developmental activities of the country's primary sector. In order to select an appropriate site in the coastal zone for the establishment of an aquaculture farm, there are significant restrictions relating to existing uses as well as with the planned future uses. Concerning the spatial planning of Aquaculture activities, the avoidance of land use conflicts is achieved by the adaption of the planning to the institutional frameworks related to the Spatial and Sectoral development, as well as to the institutional frameworks regarding the protection of the environment in the wider region.

To this end, the National Prototype of development of Aquaculture according to "The Special Spatial Framework and Sustainable Development for Aquaculture" further regulates matters of administrative actions concerning the spatial integration of Aquaculture activities within organized receptors, in the form of Areas of Organized Development of Aquaculture Activities, known as 'P.O.A.Y.' (acronym of the respective Greek terminology).

The study for the establishment of 'P.O.A.Y.' is a scientific approach of paramount importance which should examine in detail: • the required technical, administrative, social and environmental infrastructure, • the spatial, environmental and economic impacts, • the appropriate measures and actions for the prevention, reduction and remediation of the impacts.

The identification of coastal marine areas for aquaculture, which is carried out in the context of 'P.O.A.Y.' studies, stresses the necessity to conduct Strategic Environmental Assessment (S.E.A.) [1]. The Strategic Environmental

Assessment, which is carried out in the framework of the elaboration of the relevant studies for the establishment of 'P.O.A.Y.', leads to the formulation of planning proposals aiming at the rational development of Aquaculture. Furthermore, the Strategic Environmental Assessment contributes to the conservation and protection of the marine environment - with an emphasis on biodiversity - and ensures by analogy the sustainable development of the coastal zone.

In this paper, the main inputs for the development of Strategic Planning are analyzed. In addition, an extensive reporting is presented in relation to the methodology and assessment of the overall status of the environment, based on site observations and samplings, undertaken by Research Institutions or Universities with the appropriate equipment and know-how.

The vital importance of the establishment of 'P.O.A.Y.' as a working tool for the Maritime Spatial Planning (MSP) taken for granted, this study analyzes the methodology followed in various studies submitted for the establishment of 'P.O.A.Y.' in certain selected areas of the country (case studies in which protected and insular areas are included), such as:

- 1) The Northern and Southern Evoikos Gulf and the Lane of Orei
- 2) The island of Oxeia and the coast of Koutsilaris hill
- 3) The Amvrakikos Gulf
- 4) The island of Leros
- 5) The Diaporia islands and the Salamina island in the area of the Saronic Gulf.

The operator of 'P.O.A.Y.' undertakes the management and administration of 'P.O.A.Y.' [2]. The Maritime Spatial Planning has already been a component of spatial planning in Greece, carried out through the corresponding frameworks at a National [General Framework (2008) and Special Frameworks for Renewable Energy Sources, Aquaculture (2011) and Tourism] and at a Regional level (2004), which are currently under review [3]. In Greece, the procedure for the establishment of areas for Aquaculture activities has already started since 2002 in the context of the Law 2742/1999. Gradually, the legislative framework has been adequately supplemented and the directions of the legislation were taken into account [4].

The establishment of 'P.O.A.Y.' contributes to the preservation and protection of the marine environment, to the sustainable development of the coastal zone and, ultimately, to the accomplishment of a balanced development for the Aquaculture activity.

Keywords: Areas of Organized Development of Aquaculture Activities ('P.O.A.Y.'), Marine Spatial Planning (MSP), Spatial Development Prototype, Coastal Zone, Integrated Coastal Zone Management, Strategic Planning, Rational Development, Aquaculture.

Special Session X Workshop Room, Eugenides Foundation
*Land-sea interfaces and the coastal environment in the era of marine spatial planning :
 governance and tools*

Stella Kyvelou, Nektaria Marava (GR)

Land-Sea governance and planning in times of complexity: lessons from selected case studies

The Blue growth strategy advocated at EU level has been endorsed by different coastal cities in Greece such as Piraeus or Heraklion or even Korinthos, lately as an alternative growth strategy for recovering from the crisis. At EU level, attempting to encourage the sustainability of this new growth model, new legislation and policy papers were adopted (see the Maritime Spatial Planning Directive (MSPD) accommodating other EU directives and communications, such as the Marine Strategy Framework Directive (MSFD) and the Integrated Framework Policy (IMP)) while on the same time the importance of "maritime governance " has been addressed (Van Tatenhove, 2011; Van Tatenhove, J.: 2013; Raakjaer, J.: 2014).

Simply putting it, it was soon understood, that the new paradigm also refers to the emergence of change in the context of the existing governing relations and a need for more reflexive governance structures than ever before. The coexistence and cooperation of many actors for addressing effectively ecological, social or developmental challenges is needed (Van Tatenhove, J: 2011; Van Tatenhove, J : 2013; Raakjaer, J: 2014). A sustainable Blue growth strategy encompasses interventions by multi-actors, such as government, NGOs, private firms and citizens, among others. Moreover, this networking of actors refers not only to sea but to land at the same time. But even at EU Level, the importance of a **holistic approach in land-sea governance and planning** was recently acknowledged (Pittman, J : 2016).

Scope of this article is to assess, in selected land and sea interfaces in Greece, i.e those of Piraeus and Korinthos, the former land-sea governance interface and how this governance system has been adaptive either under the ongoing impact of an environmental challenge or in the perspective of a new risen blue growth strategic priorities. Both these negative and positive factors could question the effectiveness of the former spatial planning governance system in the area, revealing its institutional thickness and urge to the evolution of governing relations.

Through a literature review and policy documents study, the aforementioned governance systems of the case studies are being described with its competencies and its challenges in relevance to land-sea interface and the current environmental crisis/ blue growth strategies. The research carried out in a sample of institutional stakeholders of both selected areas acknowledged how the formation of new types of coalition in strategic planning could catalyse more effective planning responses to current crisis of land-sea governance practices but also the need for a new role for the planner.

Keywords : land-sea interface, land-sea governance, evolutionary governance, social innovation, blue growth perspective, strategic planning

Maria Papadaki, Stella Kyvelou, A.Mimis (GR)

Shipping in the Mediterranean Sea : Past, present and future developments relevant for Maritime Spatial Planning

The paper will present a synthesis of available literature on the subject of shipping in the Mediterranean Sea as well as past, current and possible future developments on a new Marine Spatial Planning (MSP) policy.

It is important to mention that Maritime Spatial Planning (MSP) is a national competence and in the Sea Basins they are the Member States that must ensure the consistency of the plans. This emphasizes the need for national planning and cooperation between stakeholders in each country and the cooperation of neighboring countries for the smooth functioning of transnational maritime activities. The presentation will focus on the following key questions:

- What are the unique features of the Mediterranean with regard to shipping? There will be a focus on the Aegean archipelago.

- What economic, environmental and technological developments will affect shipping over the coming years and what are their spatial impacts?
- What plans / guidelines already exist for the coordination of maritime traffic in the Mediterranean and how do they integrate (or not) the MSP? What is the opinion of the competent bodies?

The survey will be based on the collection and statistical processing of available information and will review the discussions on common criteria for shipping, the development of future scenarios and the consultation of stakeholders in a meaningful way.

Keywords: Mediterranean Sea, Maritime Spatial Planning (MSP), Shipping, Cross-border MSP.

Anastasia Patera, Zoe Pataki, Dimitra Kitsiou (GR)

The use of webGIS applications in Marine Spatial Planning: A case study in the Aegean Sea

A variety of marine activities are met in coastal areas with a significant number of them being in conflict either with each other or with the protection of the environment. Recently, Marine Spatial Planning (MSP) has become an important process aiming to optimize the use of marine space by minimizing existing conflicts and to adopt effective plans for the sustainable use of marine resources. Planners, scientists, policy makers, end-users and the wider public co-operate and exchange their knowledge to achieve effective decision making and implement this process. The need for appropriate tools, especially in the framework of Geographical Information Systems (GIS), to support the whole effort has been widely recognized. In particular, webGIS applications which combine the advantages of GIS and internet technologies are considered a valuable tool.

The objective of this paper is the development of a webGIS interface to assess conflicts of activities in the marine area of the Cycladic islands in the Aegean Sea. The interface is accessible via a simple internet connection and incorporates a number of geoprocessing tools for the visualization and analysis of the available dataset. The geoprocessing tools have been developed in ArcGIS environment, using ModelBuilder and Arcpy Scripts. The dataset includes information related to the activities met in the marine area under study and is stored in a spatial database developed in a GIS environment. The user can visualize and interpret the spatial information in a user-friendly environment. In addition, further analysis can be performed in order (a) to delineate areas where a high number of conflicts among activities are met and (b) to assess the intensity of the conflicts in these areas. The latter is possible based on four criteria which can be applied via developed tools available in the webGIS platform.

The importance of such interfaces during the implementation of MSP is further discussed as well as its potential improvement by addition of new geoprocessing tools and services.

Keywords: geoprocessing, spatial analysis, conflicts, decision making, coastal management

Charalambos Ververis, Eleni Fytoka (GR)

Mapping of coastal wetlands using satellite data

Special Session V Auditorium, Eugenides Foundation
«Natural and cultural capital of cities: theory and implications in planning»

Fabrice Thuriot, Thomas Hélie, Sona Capkova, Katarina Vitalisova (FR, SK)

Creative potential in the cultural and natural heritage of the cities and its exploitation in the sustainable development

The main idea is to identify the role of creative potential in the cultural and natural heritage in the economic and social sustainable development of cities. The creative potential is the maximum possible upgrading of the socio-economic performance of a territory, by the introduction of the creative inputs (human capital, high-investment, creative class). The concept of use and development of creativity is examined for several decades in terms of different territorial units that mean districts, cities, regions. Particularly the term creative city appears for the first time in the literature in the 80-ties of the last century (Landry, 1990; Hall, 1998, 2010; Bradford, 2004; etc.).

Research on creative potential has been usually in the form of description of the economic structure of businesses and creative activities in cities (e.g. Documents and analyses of Urban Community Development; Inspired by Culture: The Potential of Creative Cities in East Asia, 2008; Creative Metropolises, 2011; Potentials of Creative Urban Regeneration – Ljubljana Urban Region, 2011; Creative cities: The Potential of Portuguese Cities, 2011; Lisbon Creative city, 2013...).

In Slovakia an analysis of mapping the creative potential in the cities has not been done yet. Nonetheless, mapping creative potential based on expert judgment and measuring its impacts allows next decisions about the conceptual use of creative potential as a part of an integrated and balanced smart local and regional sustainable development.

The project refers also to the ideas about the uniqueness of the cultural and natural heritage as an important part of creative potential and as unrecognized source for innovations and smart growth. The researched field is well developed especially in France and can be a very rich source of ideas, knowledge and experience for Slovakia. For this, some case studies will be analyzed in the both countries and presented in this paper and then in a guidebook of good practices.

Keywords: cities, creative, heritage, France, sustainable development, Slovakia, territories.

Julia Georgi, Danae , Eleni Oikonomaki (CY)

Greenways in Athens, Greece : how to connect the mountains to the seaside, through downtown of the capital

ABSTRACT : In the contemporary urban landscape of the wider area of Athens, the capital of Greece, the lack of connection of green spaces is evident. The inhabitants are confronted daily with the problems of urban deprivation, environmental degradation and air pollution. In this sense, the positive effect of the existence of green spaces is considered to be self-evident. Their prominent role in improving the standard of living of citizens, and their contribution to sustainable development is taken for granted. Their character, use, extent and significance within the urban fabric are constantly changing due to the large - and often uncoordinated - changes that exist in the modern urban complex. Existing green spaces are usually fragmented and unrelated, both with each other and with the urban fabric, while their functional value and their role as infrastructure and urban-aesthetic skeleton of the city is fading daily.

Scheduling, organizing, interconnecting, operating, managing free spaces are issues that are usually posed after the development of various parts of the city. Planning is usually a corrective move that can hardly cope with their complex problems. The investigation of interconnection is usually theoretical, and is rarely implemented in design, making the interface of theory with design, a subject of conflict.

The objective of the paper is to present a proposal for the creation of a greenway within the capital's basin, linking the mountain with the sea, through the centre of the capital, based on the theoretical patterns of greenways creation, which will be attempted in putting in the design.

To sum up, it is clear that the integration of urban green spaces, through the creation of a green network, can make a decisive contribution to the creation of conditions for a more comfortable, pleasant, healthier and sustainable movement of the inhabitants, while linking special attractions, destinations and allowing psychological activities to take place. The research method that is used for the design proposal is based and on broadentheoreticalknowledgebyusingseveral designed case studies that are practically implemented at European and International level.

Keywords : greenways, mountain, seaside, centre of Athens

Christos Montsenigos, Eleni-Maria Skevaki (GR)

Mock ruins -/+ : 4 cases of unfinished construction sites in the Athenian city centre

The proposal expands upon the notion of built heritage by focusing on four unfinished buildings and their transformation into vertical gardens. The buildings are chosen from a wider corpus of unfinished constructions sites, found in the center of Athens, and are then submitted to actions of subtraction and enhancement of their structural system. Most of the buildings being mapped could not have been erected in the contemporary context or legislative framework, which further enhances our conviction that they are trapped in an in-between state. Having not acquired a finished facade, a characteristic inexplicably strong enough to validate a building's presence within the urban fabric, the recorded structures are subject to an ambiguous state of ownership and questionable legal status. Being prone to invasion and occupation, they are collectively understood as sites of ruin, decadence, transgression and pollution. Contrary to a "traditional finishing" of the structure which would render them no longer permeable to air and sunlight, our intervention aims to further "relieve" them. Assuming the role of regulator, Nature reverses the very notion of decay, constructing lush, botanic scenery out of formerly restricted enclosures. The four buildings, arranged serially from smallest to largest, become analogous to the follies which decorated formal European gardens, acquiring a similar, highly suggestive or even symbolic presence. Our proposal developed each case under a small system of common design tools, thus taking the form of a "variations on a theme" exercise. This way, each building is more complex in terms of scale and size than the one that came before it but also richer and more varied in terms of the public space that it articulates. The four vertical gardens being produced should operate synchronically in the shape of climaxing urban episodes or hybrid structures oscillating between City and Nature.

Keywords: ruin, unfinished, gardens, hybrid, Athens

Ioanna Mastora, Anna Nikolaidi (GR)

Olympic Cultural heritage in the City of Athens

ABSTRACT : Athens, has been the first city that offered hospitality to the modern Olympic games in 1896 at the marble Panathinaic stadium, the first international games of the revival, whilst athletic games had already preceded

in 1870, and 1875 in the context of Zappeion Olympiads along with Greek products' exhibitions. One hundred years later, Athens hosted the centennial of the first modern Olympic Games in 1996 at the same place, the marble stadium. International publicity was driven towards the city of Athens after the undertaking of 2004 Olympic games organization, that won the vote against Rome 5/9/1997. Infrastructure, cultural events, exhibitions, exchanges, educational training programs, volunteer actions successfully took place during the cultural Olympiad. The current research study traces the immense cultural wealth and tradition left before and after the games organization. Initially, the study registers, describes and analyzes the bid efforts and the support frame of implementation activities during the four years of the cultural Olympiad. Afterwards, the study revealed by special researchers and large public, explains how this cultural heritage can surely be evolved after the end of the Olympic Games. It also examines developmental ways of cultural actions in the future, by facilitating synergies between different cultural platforms, communities, and intermediaries always in the frame of Olympic movement: academies, museums, cultural departments, research centers and universities, acknowledged organizations, television productions and stages to achieve better results. At last, it suggests cultural proposals related to Olympic heritage so as to create axis and portals of actions for further cultural utilization and application in favor of the city of Athens, of Greece and the whole world.

Keywords: Olympic heritage, cultural implementation, cultural collaborations

Maria Markatou (GR)

Reviving and connecting the urban past to present and future: a virtual promenade in «space» and «time» for the City of Larissa

Cultural heritage is the legacy of physical artefacts and intangible attributes of a group or society that are inherited from past generations, maintained in the present and bestowed for the benefit of future generations. Tangible heritage includes buildings and historic places, monuments, artifacts, etc., which are considered worthy of preservation for the future. These include objects significant to the archaeology, architecture, science or technology of a specific culture. Their preservation demonstrates recognition of the necessity of the past and of the things that tell its story. Preserved objects also validate memories; and the actuality of the object, as opposed to a reproduction or surrogate, draws people in and gives them a literal way of touching the past.

Most cities and places in Greece are characterized by rich and long-lasting historical and urban development features. As a result, they have incorporated into the urban fabric elements of the built cultural heritage from various historical periods, particularly in the so-called "historic centers" of the cities. However, Larissa is a city that most of its historical center has been destroyed due to political (2nd World war), physical (earthquakes) or other (over exploitation of urban land) phenomena. The paper that follows aims at reviving the 'lost historical center of the city of Larissa' and connecting its urban past to its present and future. For that purpose a different, alternative and innovative approach of urban regeneration is proposed: A virtual cultural promenade in 'space' and 'time' for the city of Larissa, which interacts with the past, concerns and takes place in the present and refers to its virtual and physical space. Images and narratives of the past are used to virtually revive buildings, monuments and elements of the city's past urban morphology. The paper suggests that the lost tangible and intangible cultural legacy based on the existing and virtual cultural assets should be central for the city's present and future placement and positioning.

Keywords: cultural heritage, historical center, tangible and intangible assets, urban morphology.

Konstantinos Asikis (GR)

Natural-Cultural Heritage Complexes : Alliances, Synergies, Complementarities for the

Sustainable Development Plans, the case of Farkadona

The Complexes have two dimensions, the local and the thematic. The 1st references to the historical – cultural heritage and natural capital elements of an area, connected with strong ties with it, in order to give it a distinctive quality character. The 2nd references to a network of different areas with some common features. The know-how exchanging is fundamental.

Each area can transform its natural and cultural heritage to a mainspring for its sustainable development through a strategic plan that includes the right combination of actions and mainly the next: registering of the assets, integration of the local actors as shareholders, creation of a mid-term schedule, coordination and monitoring, networking with other areas and institutions, preservation, accessibility improvement and sustainable exploitation of the elements, mental connection with the area, creation of a multi-dimensional Complex, combining with the social and economy sectors for added value, creation of a quality image, horizontal actions (funding, ICT, innovation).

The role of the Municipality as the local administrator is fundamental. The participation of Universities and the other relevant institutions is critical. The scheme must be based on the territorial approach of the development. The identity, the ties, the quality, the sustainability, the wide character, the spread of the action and of the profit among the stakeholders must be the main of its features. The over-local Networks through “mental paths” are very useful. All the possible synergies between elements, actors and sectors must be detected.

Farkadona is a typical rural area in the Greek mainland which is characterized by rich natural resources and a significant cultural reserve. Its economy is based mainly on the modern agriculture and the traditional livestock farming. A Complex of them is a collective and critical territorial asset, an activating, uniting and identical factor. The role of the Municipality is the management of this heritage and the enhancement of the people’s awareness towards the environment and culture and their unique value.

The socioeconomic components and the crucial contribution of the Complex to the building of territorial resources and to competitiveness, make an organized territorial strategy necessary. Actions: scientific research, action plan through bottom-up procedures, funding opportunities, integration and networking of the partners for mutual alliances, digitizing of the data (GIS), creation of an observatory, emphasizing to the local assets, protection and emergence of them as a set of experiences, supporting of innovative methods, strengthening of the synergies with all the social and economic life sectors, spotting of the complementarities between the elements, creation of thematic routes and of a multithematic Complex.

Keywords : complex, networking, local identity, territorial plan, municipality

Argyri Efthimiadou (GR)

"Open Technology Park" as a Proposal of Town Planning Interventions Based on the Contemporary Developments in Production Methods. Investigation of the Urban Parameters in the example of Larissa.

This proposal is part of a broader study on the feasibility of a technology park installed in former productive cells dispersed within a medium-sized Greek urban complex and on the interaction of the new activities with the city. The starting point is to investigate the reuse / upgrading of existing abandoned production complexes with the aim of re-interpreting them as modern production sites (science and technology parks) with uses related to the "local productive identity" of the city. In this way, the rehabilitation and maintenance of remarkable historical buildings and complexes is financially secured and an important part of workforce and traditional know-how is evolving. As an

urban intervention, the project ensures the improvement of the quality of life, density and spatial cohesion of the respective areas.

In this sense, Larissa's example studies the spatial expression of the productive identity of the city, on the one hand using traditional methods of data collection and analysis in relation to the wider area, and on the other hand by applying a questionnaire directly to the inhabitants of the urban center and presenting the results in diagrams, in line with the method of recording the overall image of the city by K. Lynch. This first investigation leads to two general conclusions:

- that a city is not characterized by a unique productive identity, it is rather possible to identify overlapping grids of different productive identities that coexist and
- that the city's productive identity is not the same as the most important forms of production in the region; it concentrates mostly on the activities of the tertiary sector that support both contemporary production and the modern quality of living requirements of the inhabitants.

Therefore, in the case of Larissa, we conclude on the recording of three (3) dominant productive identities with their characteristic buildings and their current distribution in the city area.

Seeking ways to integrate them into the urban fabric and connecting them with the strong historic and commercial center of Larissa, we find links to broader structural and cohesion issues, such as large concentrations on central axes leaving intact entire areas, and we investigate the possible factors to which they are due.

In conclusion, we find that although the city's productive identity is subject to the same urban constraints as other urban functions, it includes elements of "individuality" that differentiate each city from other urban centers. Therefore, it can be an element of recognition, continuity and connection for the inhabitants and visitors.

Keynote speech by Antonios Rovolis, Associate Professor, Panteion University, Dpt of Economic and Regional development (GR)
«Cultural Heritage, City Marketing, and the Real Estate Sector»

Keynote speech, Prof. Akin Ersoy, Professor, Director, Smyrna Agora Excavations (TR)
«Urban archeology, institutions and dynamics in Izmir»

Keynote speech by Bruno Vincent (Acouité, FR)
«How cities can use IoT (Internet of Things) technologies to manage sound and security at large, open-air cultural events in the city – the MONICA Project.»

Special Session IX Conference Hall, Eugenides Foundation
Tangible and intangible heritage in museums, archeological and historic sites

Marta Wroblewska (PL)

Museum practices as Tools to (Re)define memory and identity issues through direct experience of tangible and intangible heritage

In the liquid times of post-modernity, where the notions of memory, identity and culture are undergoing a process of redefinition, transition and interpenetration, the role of museums as institutions responsible for heritage preservation and distribution needs to be addressed in terms relevant to the specificity of the present times, as well as to the expectations and needs of the contemporary audiences. The following text will analyse some examples of those tendencies implemented in contemporary museums practices.

Thinking about and exploring museums one should nowadays be aware of numerous issues connected with those institutions, their strategies and cultural policies which influence their activities and narrations. Visiting a museum does no longer seem a sheer esthetical pleasure, as modern perspectives on the museums' function and mission position them further and further away from the 19th century concept of a temple of the arts, supported by such authorities as Goethe or Schinkel, which with time slowly turned into a mausoleum of arts as Adorno put it, where after a couple of decades unfortunately many a times "dust and disorder reigning supreme" could be observed.

Nowadays, the museum experience includes also the discussion about vast topics like memory, identity, tangible and intangible heritage. The latter is presently facing a broad revival and is the main topic of an international debate on the European Union level. It is as well strongly connected with the issue of reinventing and reshaping the institutional approach to preserving and popularising cultural heritage. This in turn is reflected in self-reflecting and self-critical practices already taking place, especially in institutions presenting exhibitions and gathering collections or archives.

Current events and tendencies taking place in the realms of politics, sociology and culture exert on consecutive European countries the revision of their cultural policies, provoke many European cities to take a closer look at the strategies represented by their local culture institutions, whereas institutions themselves are urged to redefine their sense of mission and activity profiles, especially in the context of the exhibitions they are presenting, as well as the collections they are gathering. Those practices illustrate the tendencies of the general process of rethinking Europe. The big questions which are posed in relation to this complex and long-term phenomenon concern first and foremost the so-called European identity. Or rather multiple identities constituting the European community.

While speaking about the shape of cultural identity one must not underestimate the notion of cultural memory as both of them remain in close connection. We are currently facing a complex process of forming and developing of the so-called "memory culture" interconnected with various institutions, including museums, monuments as well as memorials of all kinds. And if one agrees with Jan Assmann who emphasises that the memory can become cultural only when it is cultivated through institutions and artefacts, the role of museums as memory sites – or to use the term "lieux de memoire" coined by Pierre Nora - seems to be indisputable. In this way it is the museums among other places which assume the function of the managers of the presence of the past mainly by the ways they approach their exhibition concepts, their collections and, last but not least, their growing and diversified audiences.

The growing experimentality in museums' strategies seems to be the key to adapt various museum practices to the needs of present audiences who express the growing need to define their present identity with relation to their own cultural heritage and their cultural memory.

That is why in the light of the present museum practices consisting more and more in the growing self-awareness and self-reference, supported by innovative exhibition practices, collection revisions, participatory and more direct approaches to the audiences, the museum studies are currently making a big leap towards social studies, especially anthropology or ethnography, adapting the methods of field work and surveys, which remains so much in accordance with the specificity of the "liquid" present times. This proves the necessity not only to satisfy the curiosity and need of entertainment of the contemporary audiences, but also to depart from being the cemeteries of arts in order to

correspond with the lively everydayness embodied more and more within the notion of the intangible heritage, grasping it and defining it instead of museumifying it, and in result co-creating the memoryscapes characteristic of our contemporary times.

Keywords :

E.Banou, E.Vallianatou, S.Daskalakis, Th.Konstantinidis, M.Liaska, L. Bournias, S.Papida, M.Pavlou (GR)

Management of vegetation in archeological spaces of Athens : towards the protection of monuments and their co-existence with local flora

Within the framework of initiatives aiming at the sustainable and harmonious management of cultural and natural heritage, the Department of Conservation of the Ephorate of Antiquities of the City of Athens (Directorate of the Hellenic Ministry of Culture and Sports) has designed the GREEN PITYS Integrated Program: **GREEN** Paths and Innovative Technolog**Y** for the Archaeological **S**ites of Athens.

GREEN PITYS combines knowledge of archeology, botany and conservation with innovative IT technologies to change the concept of urban greenery within and between archaeological sites and monuments: to create a Green Path following the ancient Panathenaic Way linking three great archaeological sites of Athens: the Acropolis, the Ancient Agora and the Kerameikos, through vegetation. The project is based on the recording, mapping and evaluation of the flora, the documentation of all forms of deterioration of the ancient materials it causes and the connection of selected plant species with the archaeological sites.

The program will also implement the Flora Catalog of the three archaeological sites, a Live Botanical Collection in Kerameikos area, innovative digital applications for data entry, identification and management of plant species, and a Vegetation Management Guide. At the same time, digital applications will provide access to a multitude of mythological, historical and botanical information, linking plants to the specific archaeological sites and ancient world in general.

Expected results from the program are the enhancement of interdisciplinary research in the field of protection and management of the cultural and natural heritage, the development of innovative information technologies for the direct diagnosis and preservation of the damages of the monuments and the diffusion of the methodology. Digital technology will enrich the multilevel interpretation of archaeological sites, upgrade the visitors' experience, understanding and response to cultural and natural heritage preservation issues and attract new visitors.

Keywords : GREEN PITYS, Green Path, Acropolis of Athens, Conservation of monuments, Archaeological Sites of Athens

Ch.Katsalas, I.Papadimitriou, K.Stoupathis, D.Triantafyllos, P.Helmis (GR)

Design of public participation strategies for the exhibition «Terra Madre» in the Natural History Museum of Zakynthos

The "Terra Madre" exhibition was planned and organised in 2017 at Helmis Natural History Museum in Aghia Marina Fagia in Zakynthos. The exhibition as well as the educational activities took place in this provincial museum by "██████████", contributed creatively through an exceptional presentation of live, dried plants/fruit exhibits, visual and rare information materials which was available to the public. The aim of the exhibition was to present the local variety of Zakynthian vegetable seeds as well as the variety of seeds that are cultivated in Hellenic agriculture but are

originated from five continents presenting to the public the unknown aspects of the origin of plant cultivation, as well as the viability factors, not only for the local farmers, but for all Hellenic region including the schools that visiting the island every year between 29th of March and 8th of April.

Planning and Social Approach Methodology:

- A) Retrospective evaluation of visitors of the museum from 1999 to 2016. The age range, the number of visitors and their expectations.
- B) Planning a series of educational activities/guide tours of target groups such as schools, adults, based on the principles of diversity and skills. Organized an open workshop at the museum for the public (i.e locals, environmentalists, ATEI students of environmentalists, farmers, etc).
- C) Structure of a Museological study, able to highlight the intangible culture and heritage of selected vegetable varieties (language/Etymology, History/Origins, Biology, Folklore intangible heritage/Customs, Nutritional Value/ Agriculture).
- D) Informing the Hellenic Ministry of National Educational and Religious Affairs and the public by using techniques which provided information about the project held. (newsletters, Helmis Museum website, <<website>> website, social media, local press, radio spots, etc.)
- E) Sharing the obligations of the Working Group into responsibilities and settlement of budget issues.

Conclusions:

The "Terra Madre" exhibition has driven the members of the Working Group and the museum to create a public development project and change the public's impression about the Natural History Museums, to promote and present well-known and unknown cultivation of plants through an alternative visual interpretation. One more advance of this exhibition was the benefit of the communication policies that were developed, defining the way of involving and the preserving the interest of the public in Zakynthos and in Hellenic region. The primary objective was not the economic benefit but the social and cultural impact, while the museum compensated and redefined its objectives. It has to be noted that it was a starting point for a series of actions for the intangible and corporeal natural heritage protection.

Our future plan is to present the exhibition in countries outside of Hellenic region, make it available to the public in order to learn history behind of each crop.

Key Words: Museology, Horticulture, Crops, Strategic Planning, Zakynthos.

G.Eleftheraki, R-M. Andreopoulou, D.Galanis (GR)

Proposal of landscape design in the area of Aphrodite's sanctuary in Aphaia, Skaramangas

The significance of the area in ancient times, as an important stopover of the Eleusinian procession, an area to rest and accommodate wayfarers and pilgrims depicted in the archaeological site of the Aphrodite's Sanctuary and in the well-preserved part of the ancient road, excavated from the temple towards lake Reiton, along with the uniqueness of Attica's landscape the effort to revive it, were a source of inspiration for this research.

Main objectives are:

- Integration of the large green -planted - areas of Mount Poikilos and Mount Aegaleo, as well as the settlement of Aphaia with Mount Aegaleo.
- The emergence of Aphrodite's Sanctuary through the green areas integration together with a network of

open-air areas and information infrastructures.

- Connecting the area with the ancient route part of the Sacred Way (Iera Odos) from Echo's Hill to Lake Reiton.
- Highlighting the two streams in the area.
- Creating infrastructure (playgrounds and sports facilities, information and accommodation infrastructures, green and leisure areas) which will attract more visitors to Aphrodite's Sanctuary and will activate the settlement.

The methodology used was primarily locating the sites of archaeological and environmental interest through research in bibliography and then indentifying the problematic along with any dynamics that can benefit the area development. Subsequently, site surveys located the individual landmarks in the area. Finally, having in mind to develop the appropriate conditions and infrastructures that will highlight the region's history and activate the settlement of Aphaia, design redevelopment steps are being proposed. The design proposal is based on making Iera Odos road underground in this section and the formation of a unified space above that emphasizes both cultural (Aphrodite's Sanctuary and the traces of the ancient Sacred Way towards Lake Reiton) and natural elements (streams, forest areas of Mount Aegaleo and Mount Poikilos).

Keywords: Sacred Way, Aphaia Skaramangas, Landscape design, cultural network

Eleni Athanasiadou, Nikos Thymakis (GR)

Historic gardens, parks and landscapes in Greece. A proposed methodology for identification, register and management

The ICOMOS Florence Charter in 1981 on Historic Gardens set the first guidelines for the definition of a historic garden in which sites like large parks, whether formal or "landscape" are included. Ever since, ICOMOS and Unesco keep on working on the issue of historic garden identification, protection and management. Countries with garden and park tradition, like the UK, USA, France and others, have several sites registered and protected. In the UK, Historic England was established in 1983, a public body responsible for identifying and registering historic places. The National Heritage List of Historic England includes over 1,600 gardens, grounds and other planned open spaces, such as town squares and other sites. In the USA in 2000, the National Park Service, the American Society of Landscape Architects and the Library of Congress worked together enabling the creation of the Historic American Landscapes Survey (HALS). In France, national associations like the Society for the Protection of Landscapes and the Aesthetics of France, the various regional DRACs (Direction Régionale des Affaires Culturelles), which refer directly to the Ministry of Culture, provide services for the preservation of park and garden heritage. Furthermore, historic garden and parks associations exist in Italy, Spain, Portugal etc.

In Greece there is no specific policy or association regarding historic parks, gardens or landscapes. Attempts in identifying historic landscapes fall under the international Convention Concerning the Protection of the World Cultural and Natural Heritage (1972) and the national law regarding the Protection of Archaeological and Cultural Heritage (2002). The only garden that is protected by law as a 'historic place' is the National Garden of Athens. Yet, in both the Greek certification of the European Landscape Convention and the European Biodiversity directives, there are aspects one could interpret as very useful for the acknowledgement and policy making on historic gardens, parks and landscapes. In this paper, a first attempt is made to present a methodology based on international practice and experience, for assessing greek sites upon their potential to be characterized as historic garden, park or landscape. Furthermore, a first draft list of sites in Greece is presented.

Keywords: Historic gardens, parks and landscapes, Greek historic landscapes, landscape architecture

Plenary Session VI Auditorium, Eugenides Foundation
Landscapes, Soundscapes, Lightscares, Nightscares...: reflections, imaginaries, concepts, policies and creative solutions for living places

Anestis Gourgiotis (GR)

Towards an Integrated Landscape Policy in Greece: the Role of the Council of Europe

Landscape quality has a decisive impact on citizens' quality of life, at multiple levels, and is an important development factor for local communities. Thus, landscape management oughts to be a key objective across all policies related to spatial planning . Within this basic framework the article below analyses and argues the need to work more intensively towards the implementation of the ELC in the Greek context. Greece is characterized by a cultural heritage of great magnitude and a rich biodiversity that includes as range of endangered species and ecosystems. The continuous interaction of this impeccable natural and human-made heritage has contributed to the creation of a mosaic of invaluable landscapes. The character of these landscapes, is not static but constantly evolving. However, the period following the the 1960s and 1970s, contributed mostly to the transformation of these places due to intense construction and residential growth. Since then, the occurring changes have often contributed to the degradation of these landscapes.

As a custodian of democratic values, the Council of Europe has, since its creation, carried out a very important work towards a type of sustainable development that can improve the environment and the quality of life of all citizens of the European Continent and beyond. It has also played a particularly important role in the promotion of spatial development policies across Europe.

The current article seeks to demonstrate the contribution of the work of the Council of Europe to the issues of spatial planning and landscape in Greece and it will do through the case of the treatment of landscapes in the latest Regional Spatial Plans. The ratification of the Landscape Convention by Greece, initiated within the framework of the revision of the Regional Spatial Planning Frameworks a specialized approach to the landscape, where, in each Region, landscapes of particular importance have been identified, so as priority to be given to the implementation of coordinated promotion and management actions.

This initiative, although just a first step, has given a new impetus to spatial planning, as it has managed to coordinate a landscape policy that can positively influence the directions of spatial planning and eventually create a dynamic for a change in philosophy, vision and practice of planning in Greece.

Keywords : Landscape Convention, landscapes, spatial planning, Council of Europe

Nella Golanta (GR)

Developing water codes in the center of the town of Larissa, "THE SCULPTED RIVER OF LARISSA"

The project "Developing water codes in the center of the town of Larissa, "THE SCULPTED RIVER OF LARISSA" has been proposed by the urban scale sculptor Nella Golanda and promoted by the Municipality of Larissa. The project aims to create a new landscape identity for the city of Larissa based on the lost physical and historical landscape of the newly excavated ancient Theatre of the 3rd c. BC, in the center of the town. It intends to do so by involving local

communities and revealing the memories of a distinctive agricultural landscape such as the plain of Thessaly with Pinios river and its surrounding famous mythical mountains. The project achieves the implementation of the principles defined under the ELC (2010) through local urban planning.

Golanda aimed to create a new identity for the city of Larissa based on the enhancement of the Ancient Theatre of the city. The two main squares of the town, the Central (Sapka) and the Post Office square (Tahidromiou), are included in a holistic design approach, in order to reveal the temporal historical character of Larissa. In order to achieve these goals, she proposes the design of the “*Sculpted River*”, marking the lost relation of the city with its river Pinios and emphasizing the different landscape types of Thessaly, the uplands and the lowlands, along its route.

Georgia Touliatou (GR)

Digital Installations : An introduction to the night urban Culture

When we elaborate upon the subject of Art in Public Space, with reference to Digital Arts / Digital Installation Art, the digital work of art oscillates between what Virilio called *The Aesthetics of Disappearance*, i.e. to be acknowledged by the person whose presence is gradually eroded by the public space and at the same time, to be the only possible antidote to such a sensation. In most cases, the intangible, electric nature of these works requires special conditions in order to appear. These conditions are characterized by the absence of natural light, then, the thought that creates such a project knows in advance that the work is going to be seen at night. The same creative thought knows that while the duration of a digital work is short, the strange dialogue it develops with the social net of the public space in which it appears is neither simple, nor ephemeral. In addition, by the time they are installed, digital artworks permanently change a dysfunctional urban space. This change they bring to both the public space and the society that inhabits it, as well as to the understanding of Contemporary Art today, has influenced the works that are proposed by artists and artistic groups for the urban public spaces.

This text explores the above issues through the cases of five Digital Installations and these are, Jenny Holzer, *Xenon for Berlin*, 2001, Museumshöfe, Berlin, Germany, Tania Ruiz, *Elsewhere*, 2010, Central Railway Station, Malmö, Sweden, Pipilotti Rist, ***Highlights (or Enlightened Hips)*, 2011, Southbank, outside Hayward Gallery**, London, UK, William Kentridge, *More Sweetly Play the Dance*, 2017, outside Acropolis Museum, Athens, Greece, Tracey Emin, *I Want My Time With You*, 2018, St. Pancras International Station, London, UK.

Through the particular study I meet some requirements that appear, regarding the relationship of Digital Art and Public Space. First of all, the public space calls for a thought in situ. Thus, ideas for the relationships between the real and the emotional perception of space, the expression of an aesthetic and at the same time a critical reason, the desire or intention for interaction -which arises from the affinity inherent to bodies and spaces- they all can be seen in the light of a new perspective. Based on the fact that the thought which generates these works is revolutionary, because it always creates new ideas. In truth, the creation of new ideas refers to a peculiar space intrinsic between the temporal entities of now and after. In this context, we could see digital artworks that are attached onto the surfaces of public spaces as pure concepts, as new ideas (perhaps unfamiliar so far) that correspond to some present as well real issues (but maybe not yet examined).

According to the above, if the existence of a digital work of art means that someone is engaged to the creation of the new, then we have a provocatively interesting perspective for the future, for "the world that comes". This kind of artworks look like a unique pair of lenses through which, we can understand what this world is not and what it could be about. However, materializing a digital artwork for a public space is not just a project to predict what-will-happen, or a project to understand the reality as-it-is-now, it also composes the means of crossing a multitude of different

dynamics, such as the political, the economic, the social, the cultural and the institutional ones. For the time being, the text will retain the fact that a digital artwork, transitory among the places we inhabit and the time we spend, is not only a reminder of our pattern of perceiving or our motif of living our lives but it is also an opportunity to realize the culture we create.

Keywords: Digital Installation, Art, Architecture, Public Space, Perception, Culture

Nora Lefa (BIH)

The emotional territory of the city : reality or fantasy ?

"Philosophy is properly home-sickness; the wish to be everywhere at home". -Novalis Das allgemeine Brouillon, Materialien zur Enzyklopädistik 1798/99, Nr. 857

The city is comprised of its people -perhaps that is why they take it with them when they leave. Actually, when is its impact more pronounced? When we experience it while there, or when we are away, being there, wherever we are? Nazim Hikmet used to say that we never forget two things: the face of our mother, and the face of our home-city. It wouldn't constitute an overstatement to claim that the city is an entity existing in those who consider themselves its inhabitants: an interpersonal cognitive scheme describing a very concrete reality.

The people of the city, its citizens might not be physically present, but they nevertheless constitute the city -in this way the city constantly redraws its borders, expands, and transcends its physical limits and limitations.

In today's chaotic environments experts call meta-cities, urban conglomerations, or even edge-cities, neocities or technoburbs, common people still talk about Shanghai, Delhi, Lagos, or Paris, considering themselves as living in these cities, despite residing dozens of kilometers away from the "traditional" city core. As Marc Augé claimed, the city is a world because it creates a thread uniting all those who regard themselves its citizens. In order for the city to be accepted as city, it must be acknowledged as such. The question, therefore, is whether the city is more substantially experienced in reality or in our phantasy.

Keywords: city, reality, phantasy, emotional territory, fragments

Artemis Argyri (GR)

Setting the Athens' urban narrative in (e)motion; the perspectives of reviving the city's collective memory towards the redefinition of its identity

The city is the semantic universe of social and cultural memory, of interaction and experience. Spaces and places of use, imagination, representation but nonetheless participation or neglect, conflict and meeting transform its cultural landscapes. In these public spaces of the city's lived experience, diverse narratives emerge as part of Athens' contemporary urban discourse, especially in the context of crisis, affectively motivated by the entanglement of its active participants with the tangible symbolic features of place and its intangible yet still affective memory.

This socially-embedded interaction will be our guide in our aim to seek the importance of emotion in placemaking and public art interventions, pointing out place-based meanings as the indisputable visually constructed initiation of dialogue and the interlinked mobilization of civil society as the redefinition of citizenship and democracy. The conceptualization of active urban space relies on sites and sights of collective cultural memory and participatory

action integrating the private and public life and Self of the city and its citizens, reimagining and redefining its emerging cultural and social identity while offering cultural based perspectives of urban renewal.

The Athens metropolitan railway unfolds its sensory landscape offering a modern, urban case study within the creative rhetorics of space and everyday life, suggesting social semiotics and visual sociology as an interdisciplinary framework to approach cultural and urban communication and contemporary citizenship studies.

Keywords: lived experience, urban narrative and discourse, social and cultural memory, identity, active urban space, social semiotics, citizenship studies

Damla Bulbuloglou (TR)

The reflection of ecological changes and the future of Urban Planning in Utopian/Dystopian Literature : Veronica Roth's Divergent Series

The purpose of this study is to depict the work of Veronica Roth's Divergent Series in terms of ecological utopian and dystopian concepts. The series reflects the ecological changes of the environment and the urban planning related to technological and scientific developments as well as the aftermath of socio-cultural and historical events. Although the setting is fiction, it is developed by the current scientific and social facts. Thus, it can be assumed that the places in the future can be shaped by the present technological, natural, cultural and social conditions of the world. That's why; Ecotopia is conformed to analyze the models of future environment presented in the novels. As a new term, Ecotopia is a sub-genre of Utopian Literature, which was emerged from technological movements in 1970s for the purpose of examining the reflections of technological impacts on ecology and humanity reflected in literary texts. Before Ecotopia, the earliest term appeared as Utopia, which is used to describe an imagined land, which offers the people the model of perfect and ideal society. Then, the term of dystopia was developed by the social changes in reality for presenting an alternative opposite and negative model of society. For these reasons, it is claimed that the utopian or dystopian novels can express the alternative reality of the future and emphasize the possibility of the present developments in the human and natural habitats in terms of the future of urban planning. As a result, it can be said that the utopian and dystopian literature cannot be considered apart from reality.

Keywords: Ecotopia, Utopia, Dystopia, Nature, Technology, Ecology, Urban Planning

Maria Moira, Dimitris Makris (GR)

Visible and invisible aspects of historical Mediterranean metropolis

"in any case the metropolis has the added attraction that, through what it has become, one can look back with nostalgia at what it was.", p.23 "Cities, like dreams, are made of desires and fears, even if the thread of their discourse is secret, their rules are absurd, their perspectives deceitful, and everything conceals something else.", p.28 (I. Calvino)

I. Calvino in his novel 'Invisible Cities' writes that you can talk about the city in two ways: to accurately describe what the map depicts and observe the eyes as material instances (bridges, canals, districts, streets, houses) or talk about things "invisible" and absent from the sight supervision but present in the adventurous journey of urban life. With the detailed description of the city's scenery or its structural components, the city is not imprinted: "city does not consist of this, but of relationships between the measurements of its space and the events of its past" (Calvino, 1974). Literature builds multiple 'portraits' of the city as it moves between individual experience and collective experience. Literary spatial representations echo reality and myth, present and past, memory and history, tracking discontinuities,

ruptures and incisions in the character of the urban landscape (Moirá, Makris 2015). The writers are emotionally involved with their environment and they reproduce cultural concepts through their physical-bodily experiences and the perception they have established for the urban places. In this parallel "intercultural" spatial formulation, the city's physiognomy emerge neither with the absolutes of a town planning event, nor with the clarity of a map or a factual historical context, but as a constantly changing field of significances and meanings that can tolerate many interpretations and readings.

Fiction creates varieties of city maps (social, cultural, historical, emotional, aesthetic). With a variety of traveling, space is connected with desire, imagination with physical presence, urban actors with their social, historical and cultural significance. At the same time, augmented reality combines real and virtual objects in a real environment, works interactively, and in real time, and finally aligns real and virtual objects with each other, (Azuma, 2015). Thanks to these properties, inhabitants or visitors can get in touch with what has happened and incorporated into the urban event and "as this wave from memories flows in, the city soaks up like a sponge and expands", (Calvino, 1974).

Augmented reality in conjunction with the literary plot's maps alternates pathways through space and time, (Moirá, Makris 2018). These paths achieve the fullest reading and interpretation of the city's narrative. Cities of the Mediterranean: Athens, Heraklion, Constantinople, and Alexandria, with a dense historical time and multiple cultural imprints, are the stimulus of literary representations over time and can be the subject of digitized readings and interpretations through a framework of augmented reality. Augmented Reality media combined with literature fiction could function as a new perceptual proposal for aesthetic recruitment of the urban space, allowing firstly, an in- depth monitoring of cultural insights, building an information and image network, secondly, an emergence from oblivion and reappearance with digital restoring their signifiers elements of the past and finally the thorough supervision of the cross-sectional multi-species comparison of views, data and information. "The city, however, does not tell its past, but contains it like the lines of a hand, written in the corners of the streets, the gratings of the windows, the banisters of the steps, the antennae of the lightning rods, the poles of the flags, every segment marked in turn with scratches, indentations, scrolls", (Calvino, 1974).

Keywords: Urban space in literature, Literature mapping, Augmented Reality, Location-based Augmented Reality

DAY 3

Wednesday 28 November 2018

Venues : Panteion University & Ministry
of Digital Policy, Telecommunications
and Media

Plenary Parallel Session VI Conference Hall, Ministry of Digital Policy, Telecommunications and Media
*«New mapping and surveying technologies for natural and cultural heritage Geographic
Information Systems – PPGIS – Smart applications»*

Message by Camelia Voina, University of Bucharest, EQPAM
*«Polities, Societies, and Political Culture Heritages Facing the Great Challenge of the Artificial Sciences and
Technologies»*

Keynote speech, Panos Lolonis, Head of the Geospatial Information Department at the Hellenic
Cadastre
*«The role of the core geospatial information infrastructure in the protection and management of the natural
and cultural heritage of Greece»*

Alexandros Tzitamidis, Enkeleda Bocaj, Charalampos Patrikakis, Maria Concetta Capua (GR, IT)
An extended reality application for cultural heritage preservation

The rapidly-increasing computing power and capabilities of mobile devices, provides the ability to develop a plethora of sophisticated and flexible applications based on Augmented Reality (AR). In this sense, the research community has been challenged to take advantages of these technologies and implement advanced and efficient mobile applications. In this paper, starting from a study of Extended Reality (XR) technologies we are presenting an application which harnesses the untethered freedom of mobile computing in order to support preservation works in the Cultural Heritage domain. The presented application has the capability to record an environment, where an event/incident occurred, and extend the environment with further information regarding its characteristics. The environment is re-viewable through a smart-phone at any time and at any place by immersing the user in the recorded area. Through the movement of the device, a collection of sensors effectively tracks the user's motion, learns the device's area through visual features and is able to perceive the distance of objects on the fly. Further features of the application include the sharing of recorded environments with a cloud storage service, the use of an external omnidirectional camera and the use of maps to display the layout of outdoor environments.

Purpose of the work: Use of mobile computing for creating an extended reality framework, allowing the accurate capturing and reproduction of a scene after an incident which has caused damage to items of cultural heritage has occurred.

Methodology: Starting for a real life scenario, which has been taken out of the work done in the context of the EU H2020 research project STORM (on the mitigation of climate change damages for cultural heritage), where, during the salvage of fragments coming from a fractured bas-relief, caused by an exceptional climatic event an innovative

procedure has been used: with a tablet integrated in the STORM platform, the area was photographed providing the position of the bas-relief scattered fragments. This allowed to understand the event dynamics to recognize and compare the object with the pre-disaster situation.

As a step beyond on the same way, we have designed and implemented a framework running on mobile devices enabled with Google's Tango framework for the creation of point clouds, and using a 360 camera to accurately capture the conditions and situation after a damage causing incident.

Scientific results: A fully functional tool for curators, which can be used in the context of restoration of artifacts after a damage, enabling them to capture details of the scene where the accident has occurred, and which can help them in the restoration process, by assisting them in locating parts to be reassembled, and solve issues of ambiguities as of the position of parts (by investigating the scene where the item was, right after the accident).

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Keywords: Extended reality, Cultural heritage, mobile computing

Selin Küçük Şahin, Uğurcan Yıldız (TR)

An interdisciplinary process of an invention : Ergo-Field

Data taking and processing is a compelling process in conventional surveying and mapping systems. Ergo-Field project suggests a feasible method for a real-time digital working.

In surveying, mapping and construction industries, field data may vary in image, text or numeric format. Time, workforce, data and financial loss may occur while taking and pretreatment of the data on-site and processing it in the office for conducting the final product. Experience and domain of employee, usage and interface of geographical measuring and scanning devices are affected on quality of the final product in conventional process. Thus, Ergo-Field provide a digital real-time working option and a homogeneous final product formation independent from user's expertise. Ergo-Field is an ergonomic and electronic rugged tablet cover which can be integrated with the geographical measuring and laser scanning devices used in land works.

Frequently, developers of surveying and mapping devices and systems are electronic and communication or software engineers, who has never been on working field. In addition to this, practitioners as survey engineers, architects, archaeologists or geological engineers, are not well-informed about electronic and software development. Thus, an interdisciplinary study is needed to comprehend the main problem of the field and solve it rationally. This paper addressed by an architect who had worked in archaeological sites for a few years, thereafter, established a multidisciplinary research and development company for innovative field solutions. Ergo-Field is initial product of the company supported by the Scientific and Technological Research Council of Turkey. The main policy of the project is an interactive study between developers, designers and users while developing the product. In this paper benefits of Ergo-Field to conventional systems is discussed.

Keywords : field data,interdisciplinarity,surveying and mapping devices

M.Lazoglou, D.Aggelides (GR)

Spatial planning and knowledge management

ABSTRACT :Forming policies in spatial planning is a challenging venture because factors such as social cohesion, environmental protection, economic development, and urbanization influence the decision-making process. Therefore, spatial planning policies would be easier to form by combining traditional spatial planning techniques with the benefits new technologies offer.

The complexity of the issues related to spatial planning makes it necessary to use Spatial Decision Support Systems (SDSS) as the way through which all these parameters are assessed in the best possible way. SDSS enable the acquisition, organization, sharing, and reuse of knowledge and have therefore become broadly developed in spatial planning.

Knowledge management can contribute significantly to this process as well. Knowledge management is a scientific discipline that encourages the acquisition, organization and management of the available knowledge in a systematic manner. Ontologies are one of the most efficient and effective Artificial Intelligence approaches used to achieve knowledge management. The term ontology in Philosophy is used to describe natural entities (Agarwal, 2005; Kohli et al, 2012) while in Artificial Intelligence is used as “a formal, explicit specification of a conceptualisation” (Gruber, 1993). The detailed features of ontologies have been widely discussed in the scientific dialogue (Reynares et al, 2015; Wang and Stewart, 2015; Arvor et al, 2013; Klien et al, 2006; Visser et al., 2002).

This paper proposes an ontology that records in detail the relationships and interactions related to spatial planning. The proposed ontology follows the provisions the current legislation at national, regional and local level introduce. The ontology was designed using a user-friendly, open-source ontology editor software called Protégé. The codification of the ontology is aligned to the provisions of the current institutional framework (L. 4447/2016).

The approach followed aims to integrate advanced techniques and methods of the science of decision-making and Artificial Intelligence in spatial planning.

Keywords: Spatial Planning, Knowledge-Management, Ontologies

V. Delitheou, E.Bakogiannis, C.Kyriakidis (GR)

Integrating smart applications to support public participation in urban planning. Does it contribute to local development ?

Through the last decades, the development of technology was rapid. As a result, changes in a series of sectors of human life have been observed. One of these sectors is spatial planning, where new applications contribute towards its skillful application. Especially, in the sector of public participation in urban planning procedure, an urge of motivation of the public is noted in order to participate as an active participant who collects data, creates maps, suggests ideas and, finally, accepts or not a design proposal. Crowdsensing and crowdsourcing techniques are typical examples of people participation methods that can be used in design practice through smartphones and other mobile devices. Moreover, web-platforms are also another tool that can enhance consultative democracy in cities. Such tools are now used in Greece, especially, in the context of implementing a Sustainable Urban Mobility Plan (SUMP).

In that context, this research paper investigates how new technologies contribute in the promotion of community engagement in urban planning. In a parallel manner, this paper attempts to locate the effects that are expected to have technologically advanced applications in participant planning in the local community. In order to examine the above issues, an international literature review occurs and institutional guidelines towards this sector are investigated, in European level. Furthermore, the investigation of case studies is utilized in order to establish a guide of line practices and locate the effects that presented similar policies in societies that implemented them. All the above contribute to an ex-ante evaluation of the application of such practices in Greece, in order to find out how much usefulness will their integration provide to the procedures of spatial planning of the country.

Keywords: urban planning, public participation, smart applications.

E.Vouklari, N.Ioannides, V.Andritsanos, V.Pagounis, M.Tsakiri (GR)

3D documentation of industrial cultural heritage monuments

The preservation of industrial heritage is the subject of industrial archaeology. It is a relatively recent discipline and the concept was introduced in 1955 in England. Objects of industrial archaeology are all aerial or underground buildings which were constructed since the mid-19th century at the time of the beginning of industrialisation. The aim of this work is to present the geometric documentation of an industrial construction of cultural interest. The subject of the study is the geometric documentation and 3D digital modelling of the historic Marko winery, located in the wider area of Athens. The winery factory was built in 1914 and is operating since then. To-date renovations are under way in the building to be re-opened as a wine museum. The paper describes the methodology of geometric documentation using geodetic techniques including terrestrial laser scanning and the production of accurate 3D digital products.

Results are given and a discussion is provided on the necessity of industrial heritage documentation and the applicability of the implemented methods.

Keywords : 3D digital modelling, industrial heritage, industrial archaeology

G.Loumos, A.Kargas, D.Varoutas (GR)

Using different ways to 3D reconstruct historical cities through gaming : the case study of Nafplion

Virtual Reality (VR) technologies offer a unique opportunity in “3D reconstruction” of cultural monuments and historical cities, that do not longer exist or have been modified (merely or totally). Even though technological capabilities are growing fast, emphasis is mainly given in developing virtual museums and exhibitions, while archaeological places and excavations are following.

The present paper target's on presenting two distinct approaches on 3D reconstruction of the historical city of Nafplio (Greece), by developing 3D models for buildings and monuments as there were in 19th century. Authors used their professional and academic experience coming from their participation in a European Commission co-funded project in the framework of Partnership Agreement 2007-2013 which was implemented by the “V. Papantoniou” Peloponnesian Folklore Foundation (project's beneficiary) in Nafplio.

Authors' aim (a) to present the importance of past – cities reconstruction and (b) to implement gaming technologies as a mean to increase “end – user's perceived attractiveness” and to achieve specific educational goals. Results

point out the growing need for close cooperation between cultural and academic world with 3D creators and moreover reveal obstacles and opportunities in reconstructing historical cities and monuments.

Keywords : 3D reconstruction, Gaming technologies, Gamification, Historical Cities, Cultural Sector

Special Session XII Sakis Karagiorgas Amphitheatre, Panteion University
Heritage, Cultural Capital & Tourism

Efthymia Sarantakou (GR)

Evaluation of built heritage elements from the point of view of sustainable tourism management

In this paper, heritage resources of an area are the main factor for tourism development in multiple levels. They affect touristic activity of an area to a certain extent (type and volume of tourism), but they are also affected by the dominant type of demand. Finally, since they are a produced cultural product, they could be assessed on the basis of organizational completion and tourist attraction.

Organizational assessment of built heritage elements from the point of view of a sustainable tourism management is considered appropriate for the Greek destinations and it is the methodology proposed herein, after the study of the relevant international bibliography. There is a grading of “cultural product completion”, which shows the process of turning cultural elements into resources, then into goods and then into products. There is also a grading of “tourist attraction” which depends on the resource’s internal qualities (significance and uniqueness) and on its popularity – that is the response to the current tourist perceptions.

At a second level, the proposed methodology is examined through a case study on the island of Aegina with a combination of methodological approaches: the analysis of the evolution of the legal framework on protection, an opinion survey on focused groups of “key informants”, as well as the content analysis of the local tourist guides published since 1938.

This is a dynamic mixed organizational and perceptual evaluation of the gradual evolution of specific local heritage resources into tourism products. Such evaluation shows that Aegina’s cultural resources and products have formed seven distinct groups of cultural tourist attractions over the years, according to the historical period in which the resource was built and to its nature, therefore the framework for its protection, the structured and from time to time changing tourist and product builder’s perceptions and, also, the possibility to create multiple local images and products for a cultural experience, as well as for the creation of complete narrations on the area.

Keywords: Heritage tourism management, heritage resources, tourism cultural resources

Dionysia Fragkou, Dimitris Marnellos (GR)

Modern architectural monuments integrated in networks of cultural tourism

ABSTRACT : In Greece there are several modern buildings and residential complexes that the Ministry of Culture has featured as remarkable examples of Modern Greek architecture, but which are not included in the UNESCO World Heritage List. In this list of monuments there are only archaeological sites, religious monuments and places, as well as two residential complexes those of the old town of Corfu and Rhodes. In emblematic buildings belonging to the category of monuments protected by the Greek state, the buildings of the XENIA and AMALIA hotels are included.

Domestic buildings represent consistently the architecture of the particular historical moment, the design-architectural style of their creators and the principles of holistic design and the modern movement. They are located in important sites, natural landscapes of great historical and archaeological interest and are usually adjacent to UNESCO World Heritage Sites. They preserve virtually their architecture, as shell buildings but also to a large extent the interior space, meaning the design and the furnishings, giving a holistic image of the modern "modernity" of the time (1950-1970) where they represent.

An important element is the interior space and furnishings, designed by the same architects. This space is preserved and gives the complete picture of the time and continuity for the next generations. Protecting them, preserving them and displaying them as monuments of modern architectural heritage will make them accessible to their entirety and destinations as a result of being another factor of interest. Including them in cultural tourism networks could contribute to the further enhancement and development of the site and encouraging dialogue between generations.

Keywords: Culture, Tourism, Modern Architectural Heritage

Nouha Ghosseini (LB)

Le Chouf Souayjani : de la valorisation des patrimoines culturels et naturels vers une économie verte par le tourisme durable

Sommaire : Le regroupement des communes du Chouf Souayjani occupe une position centrale dans le Chouf qui est l'un des principaux Caza du District du Mont-Liban. La position stratégique du Chouf Souayjani, notamment sa proximité de Beyrouth (à une distance de 42 à 54km), du littoral et du haut Chouf, dote le regroupement d'un potentiel d'attraction indéniable au cœur d'un cadre exceptionnel.

Cette région bénéficie d'un climat méditerranéen doux modéré, elle s'étend sur une superficie de 5996 hectares et possède des ressources naturelles importantes : forêts, cours d'eau et sources d'eau potable, etc. Ces ressources constituent des valeurs paysagères dignes d'être protégées afin d'en profiter sur le plan de l'autosuffisance de la région et de son attractivité touristique.

Quant au patrimoine bâti, il n'est pas uniquement constitué de monuments et de demeures historiques, mais aussi de quartiers anciens dont les tissus traditionnels encore assez cohérents conservent toujours des formes bâties intéressantes, des pleins, des vides, des réseaux et des traces de pratiques sociales et culturelles encore ancrées dans la mémoire collective et qu'il convient de sauvegarder.

La population du Chouf Souayjani est au nombre de 54385 dans 10877 logements. Une partie de cette population (qui a quitté la région durant la guerre civile) ne s'est toujours pas retournée. Ceci est dû au manque flagrant des secteurs de services et d'activités économiques qui pourraient drainer les investissements et attirer cette population à la recherche d'un mode de vie meilleur.

En tant qu'Architecte-urbaniste et paysagiste, j'ai initié, durant mes deux mandats de présidence de la Fédération des municipalités du Chouf Souayjani et de la municipalité de Baakline (2004- 2016), un plan stratégique ambitieux dans le but de mettre en place un projet d'écotourisme englobant des activités aux intérêts différés, sur la base de deux composantes: (1) La richesse du patrimoine et l'histoire des communes, (2) La diversité de ses sites naturels exceptionnels.

En tant qu'ensemble indivisible, reconnu, compris, planifié et géré ensemble, la mise en valeur de la richesse naturelle et patrimoniale de la région constitue un élément indispensable pour son développement local durable et

permet de favoriser le tourisme durable et déclencher une économie verte à toutes les échelles.

Ce projet aide les autorités locales (municipalités et leur fédération) à pousser davantage la population locale à préserver son patrimoine naturel et bâti. Il promeut un développement local durable et un tourisme responsable, et déclenche une économie verte à toutes les échelles, notamment dans les autres secteurs connexes: promotion de l'agriculture biologique, floraison des petites et moyennes entreprises et services artisanaux, création d'emplois (pour les jeunes), utilisation durable des ressources naturelles et énergie. Il contribue à la réduction de la pauvreté, à la consolidation des infrastructures locales et au renforcement des compétences locales.

Mais, le grand défi réside dans les faits suivants :

- Comment garantir l'acceptation et la résilience auprès de la population locale qui fait partie intégrante de l'expérience touristique, à la fois comme communauté hôte et comme bassin de main d'œuvre.
- Comment sensibiliser et réduire l'incertitude de la communauté rurale: La sensibilisation peut être perçue comme une réconciliation de la population avec son passé, en lui montrant tout ce que le patrimoine représente comme savoir-faire et comme esthétique. Pour cela des programmes de formations initiale et continue constituent un instrument essentiel pour sensibiliser la population locale à la notion du patrimoine et assurer la durabilité du tourisme en milieu rural.
- Comment assurer un bon niveau de renforcement des capacités des projets. Certes, la main- d'œuvre locale peut acquérir de l'expérience par elle-même, mais il est plus efficace de lui donner des bases solides dans ce domaine. Pour cela, on peut organiser des ateliers, des réunions régulières et des séminaires, consacrés à des activités simples, qui demandent une qualification peu élevée

Mots-clés: Patrimoine culture et naturel, tourisme responsable, économie verte, plan stratégique du développement rural

A. Demertzi, M. Koutsari, K. Petrakos, S. Avgerinou-Kolonias (GR)

The collective cultural capital of Athens in the light of sharing economy

The notion of sharing economy has increasingly been appearing lately both in global literature and every-day practices. It is a phenomenon though, that has its roots in traditional practices of the past and returns today enriched by the digital and innovative means of production, organisation and communication as well as to address the financial crisis effect. The sharing economy appears today as a new alternative of distribution and consumption of goods and services, influencing the spatial development. Recent researches suggest that the meeting of extreme networking of cities due to digital technologies and new mediation forms of sharing could create opportunities to connect smart technology with sustainability. In these cases, the sharing economy seems to create new spatialities encapsulating new qualitative characteristics or combining features from the past with the future, the old and the new. Also, these practices lead to a series of positive and negative socio-economic effects within the urban environments. We observe, on the one hand, many grassroots initiatives – emerged in the framework of crisis in Europe – such as social networks for sharing (i.e. commodities, services or even time) and, on the other, the sharp increase in sharing digital platforms (i.e. Airbnb, Uber) which are in particular entrepreneurial, profit-making enterprises. Leading on from the “European Year of Cultural Heritage” we focus, in this paper, on the collective cultural capital of Athens in the light of the sharing economy: Athens, as an ancient Mediterranean city, is home to- apart from the cultural and monumental wealth- a series of creative traditions that are still alive in the urban environment. Arts, Crafts & Design (ACDs) and other creative activities are vital not only for the survival of the traditional cultural goods, but also for the resilience of the local society and economy. Their intrinsic feature to be organised by the networking, clustering and

collaborating is considered as an aspect of the sharing economy with regards to the intangible Athenian cultural heritage.

On the other hand, in the field of the economic crisis many bottom-up structures of solidarity, co- operation, sharing such as social pharmacies, social grocery stores, medical centres, time banks, recreation & collective housing have emerged. A few representative samples of sharing will be presented and analysed within the very centre of the city of Athens.

Finally, aiming at a holistic approach of the phenomenon we will examine the increasing urban tourism, through the use of digital rental platforms, which seem to exert pressure not only on the tourism sector (changing of the demand distribution, deterioration of labor relations) but also on housing (forced residential migration, unaffordable housing in certain areas, increase in land prices).

In conclusion, we have chosen the case of Athens in order to study in depth the phenomenon of the sharing economy by a three-fold viewpoint: the networking & clustering of the creative activities, the grassroots initiatives emerged to address the socio-economic impact of crisis and the phenomenon of the growing urban tourism using the digital rental platforms. All three aspects could be studied under the assumption that are correlated with the intangible cultural heritage of Athens. We suppose that all these practices are enclosed in the sharing practices, while simultaneously, creating new urban footprints and new socio-spatial & cultural contradictions, but also, convergences.

Keywords: Sharing Economy, Cultural Heritage, Urban Transformations, Grassroots Initiatives

Arjan Lame (AL)

Successful Introduction of Eco-Tourism in Rural Albania: Thethi-an ideal pilot area for eco-tourism in Albania.

Vicky Evangeliou (GR)

Ancient Greek Philosophy values in Entrepreneurship, Leadership and Experiential Tourism

Keynote speech by Paris Tsartas, Professor, Harokopio University
«Natural and Cultural Tourism : which trends ?»

Keynote speech by Nikos Leandros, Professor, Vice Rector of Panteion University
«Urban clustering and networking in cultural and creative industries. Is there a role for the Universities?»

6 Plenary ECHOCULTURE Session VII Conference Hall, Ministry of Digital Policy,
 Telecommunications and Media
*Sound and Culture, Soundscapes as elements of the culture of places, new sound technologies
 for cultural events, Sound & Art*

Keynote speech by Christian Huggonet, La Semaine du Son (FR)
«La résolution de l'UNESCO 39C/49 "L'importance du son dans le monde actuel : promouvoir les bonnes pratiques"»

A.Tsaligopoulos, A. Karapostoli, C.Economou, N.Tsinikas, Y.Matsinos (GR)

Soundscape ecological connectivity of urban quiet areas

The degree of functional and structural connectivity of landscapes is an issue that could be associated with numerous ecological processes at various scales, in both, rural and urban environments. Ecological connectivity is highly associated with conservation and could be described as the degree to which the landscape and hence the soundscape, facilitates or impedes the movement of species among resource patches at structural and functional level. Urban green areas and quiet areas offer a series of ecosystem services with a range of environmental, social and cultural opportunities for city dwellers. The specific areas could be perceived not as independent units, but as disconnected components of a landscape that require reconnection, within the urban environment. Apart from the structural characteristics of an urban landscape, environmental noise could pose as a non-physical barrier that impedes ecological connectivity at a functional level. The two urban green quiet areas of Mytilene (Lesvos-Greece) were identified and action plans for their connection at structural and functional level were shaped. Using strict protocols, noise measurements and sound recordings were conducted. Noise maps were created in order to assess the impacts of noise using the CadnaA software. Additionally, the identification of the structural barriers affecting the ecological connectivity of the two quiet areas was aided by the analytical noise map. By means of passive acoustic recordings, the acoustic biodiversity indices, provided by the multidisciplinary field of ecoacoustics, were extracted in order to calculate biodiversity levels. In order to assess the capacity for functional connectivity, the territoriality of the existing avifauna was studied. The results highlighted the effects of noise regarding the soundscape homogeneity amongst the two quiet areas. Moreover, the proposed action plans endorsed soundscape connectivity and paved the way for future architectural interventions that are truly sustainable.

Keywords: Soundscape, Ecological Connectivity, Quiet Areas

Fotios Kangelaris (GR)

Encomium to noise, psychoanalytical components- philosophical approach

The lecture aims at capturing the negative as well as positive expressions and effects of noise on the contemporary urban environment. In order to achieve that, it analyzes the psychological and political meaning of noise as an expression not only of the social body, but also of the adolescent transformation. The noise realizes the expressions of the unconscious in the symbolic field either as a creative production or as a remnant of civilization.

The adolescent, in the urban audible environment, reacting in the social incorporation, whether secluded narcissistically-autistically in his/her own audible environment, severed, thus, from the social body and the political position, or creating reactive sounds -motorbike's exhaust- stating that way presence and identity, poses us in front of a cultural and political question, that of the Meaning and Metasubjectivity in a Europe seeking its position in the world.

Keywords : noise, adolescent, unconscious

Konstantinos Stoupathis (GR)

Exhibition requirements of the "Arabesque" contemporary art installation through a soundscape and lightscape approach

The "Arabesque" installation by J. Holden was recently presented as an contemporary artwork at the Digital Arts Festival in Athens at "Megaron" Hall. For its exhibition needs, it was necessary a series of decisions to be made. All relative to the factor of "functionality". For the work, is not a simple sculpture but a moving artwork: with an environmental, aesthetic and also aural impact on the viewer. Corresponding to the **principles of acoustic ecology**, the work does not only explore the relationship between man and his environment (and consequently nature and culture) through its sound, but also directly or indirectly influences the consciousness and the way the visitors think, see, hear and interpret.

In particular, the installation is made up of multi-part replicas of the artist's body. Those are robotically dancing through air-pressure systems in the music of j. Straus's on the rhythm of "Blue Danube". Preventive conservation does not seem to have the greatest meaning in the case of preservation- as sound, motion and light are digitally controlled. The same applies for the acoustic climate (db) of noise produced by the project's operating equipment (levers, compressed air tubes, loudspeakers) the optical climate, the hydraulic system, etc.

Unlike recordings and video recordings (of Echo/light-scapes), Arabesque is not just a computer projection to be installed. It raises multiple issues regarding the authenticity of the artwork, the multiple versions of artworks, the deterioration and restoration of matter, and the competence of the group of scientists that care on behalf of the artist.

Note: For the purposes of the presentation, the writer interviewed the artist P. J. Holden. The robotic installation is compared with others of improvised-idiosyncratic musical instruments (leaf whistles, poppies, nuts, etc.) displayed in museums cases while the performer-producer of sound-the man himself as a protagonist- is absent from all sound/light scapes.

Keywords: Installation, contemporary art, preventive, conservation, light-soundscape.

Marios Dimosthenous (CY)

Underwater natural and cultural heritage and soundscapes

Abstract : The present research is dealing with the issue of marine natural and cultural heritage and soundscapes. Initially a literature review focusing on the concept of marine cultural heritage and soundscapes is conducted. The issue of non-formal education is also addressed with reference to modern methods of non-formal education and good practice. Once the concept of Sustainable Development has been defined, the characteristics related to education for sustainable development are presented, focusing on education for sustainable development in the region of Cyprus. The next part of the research is expected to have different content as it will present three teaching suggestions. These proposals adopt non-formal learning practices for sustainable development, clearly outline the objectives, link activity and impact with the local community, and the impact of these activities on the educational process for primary school students.

The paper aims to present prospects of cultural heritage exploitation and its quality as important opportunity for the development of local communities. In particular, the benefits, as well as the possible problems that are expected to occur within this effort, are explored. Furthermore, the work aims at exploring the potential of non-formal education and how it relates to the development of cultural heritage. Finally, the issue of education for sustainable development is explored and is related to the issue of marine cultural heritage as well as to the practices of informal education. At practical level, three teaching suggestions of non-formal education for the Marine Cultural Heritage are expected to be presented, focusing on issues of soundness, biodiversity etc.

Keywords: Cultural heritage, cultural communities, local communities, development, non-formal education, sustainable development, soundscapes.

Dimitrios Sarris (GR)

Research and Training Practices on Sound in Education at National Scientific Educational Network «Sound: Environment, Human, Culture».

Stella Kyvelou (GR)

Soundscapes as a tool for supporting cultural capital and frugality of cities

This article considers "soundscapes" as part of the **territorial capital** of a city or territory. It attempts to highlight, mainly through a territorial approach, the question of the sound environment and its multi-sensory and multi-faceted dimensions related to the **intangible heritage and the identity of a city or territory**. It goes beyond the attenuation of ambient noise by considering the quality of the sound environment as a key factor, among others, of the **attractiveness** of a city or neighborhood. Several examples of cities and neighborhoods (eco districts) that have set sound to the service of a global vision of urban quality and territorial development will be presented. Thus, the article leads to the concept of **frugal city** (Haentjens, 2011) which goes beyond sustainable city, to support a dynamic and "active" approach in the provision of **cultural satisfactions to the citizens**. Because, frugal city is mostly based on satisfactions, including those related to sound ecology. The article thus attempts to conclude on the need for a dynamic and innovative approach to urban strategies. An approach based on the supply of various satisfactions including cultural ones and at the same time on the minimisation of the use of resources revealing territorial capital, thus allowing the society to be creative and frugal at the same time, with positive effects for the whole economy.

Keywords : Sound environment, soundscape, territorial capital, cultural capital, urban attractiveness, frugality

Keynote speech by Yannis Matsinos, Professor, University of Aegean, GR
«The Ecological Characteristics of Quietness in a City»

Quietness is a term commonly used in order to describe the state of an area with low decibel levels. Nevertheless, recent research has revealed that quietness is an ecosystemic service that functions as an indicator of ecosystem health and resilience. Quiet Areas in agglomerations, are defined in the 2002/49/EC Directive, as areas delimited by a competent authority, for instance, which are not exposed to a value of L_{den} or another appropriate noise indicator greater than a certain value set by the Member State, from any noise source. The quiet area definition leaves ample room for discussion. In this case all sounds are assessed regardless their source, mainly by the prism of their

intensity, substantially reducing the emergence of positive and ecologically meaningful sounds. It is of common knowledge that several ecological phenomena similar to bird dawn chorus are a source of biophony that is expressed in high levels of intensity. Therefore, we propose that it is the acoustic content along with the acoustic complexity of an area that characterizes it as “quiet” and not merely the decibel levels. Here, we summarize all the ecological characteristics of quiet areas highlighting the symbiotic relationship of quietness and biodiversity.

Closing Round Table II

Conference Hall, Ministry of Digital Policy, Telecommunications and Media

«Nature and Culture bridging borders : Continuities, Interdependencies and territorial cooperation in cross-border regions and in the Eastern Mediterranean»

