

Mediterranean Workshop 2017 – Work Tracks’ Summary

Naples, 23rd-24th October 2017

[<http://www.jeangilder.it/mw17/>]

1. Work Track on Mobility in Education, Industrial Innovation and Business Creation

The Work Track was jointly convened by Ahmed Ben Cheikh Larbi (ENSIT - Tunisia and RMEI), Antonello Cutolo (University of Sannio, Italy) and Mariano Iadanza (Città della Scienza, Italy). The Work Track was aimed at highlighting the cooperation opportunities in the fields of education, industrial innovation and business creation among Mediterranean regions.

The Work Track was introduced by Mariano Iadanza who delivered a speech on the changes in the Mediterranean area that is currently characterised by political and economic challenges, immigration problems and religious tension. Considering these factors together with global changes in the business environment, the boom of industry 4.0 and advanced education and training, Iadanza shed light on the importance of existing cooperation mechanisms and new ones. Such mechanisms are able to enhance mobility and channel resources towards sustainable economic development that is socially inclusive, taking into account the peculiarities of Mediterranean countries and reinforcing the collective historic, current character and the challenges faced.

Stefano Gallo (CNR-ISSM, Italy) presented insights on mobility in the Mediterranean in relation to the political and economic transformations witnessed within the last few decades. He described the results of a research project of the ISSM-CNR that is specialised on studying the internal migration patterns in Italy bringing together various perspectives such as history, sociology, anthropology, demography, linguistics and computer science. The speech indicated migration patterns within the Italian borders and it stressed the significance of research on movement within the space of individual countries as it is an area that is not very well emphasised in research and public debate. Further analysis of internal migration within the whole Mediterranean area was also discussed with the conclusion of the vitality of research on this particular matter and its link to the policy-making arena.

The speech delivered by Alfonso Montella (University of Naples Federico II, Italy) presented a project entitled “HiT4Med – Highway and Traffic Engineering: Curricular Reform for the Mediterranean Area.” The main project objective was to develop high-level specialised post-graduate programmes in highway and traffic engineering, in four Mediterranean Arab countries: Egypt, Lebanon, Morocco and Tunisia. Ten HiT4Med post-graduate programmes were co-created by European and Mediterranean universities with the aim of developing an innovative and rich experience in technical higher education in the targeted Mediterranean Institutions through capacity building in traffic and highway engineering. The acquired skills from the Masters Programmes should significantly contribute to the improvement of transportation systems in the region. After the general introduction of HiT4Med, Montella presented the project activities in the participating Arab countries and Italy. The project not only developed academic capacity in the field, but it also empowered youth on pursuing new and important careers for the development of their respective countries.

Laura Marino from the University of Naples Federico II presented an European Project aimed at reforming higher education in Tunisia. It is entitled “Tunisian Network for Employability and Development of Graduate Programmes, TUNED”. TUNED’s objectives are to connect the monitoring of higher education programmes in Tunisian Institutions and the efficiency of

the system by the means of quality certification and improving the links between education and the labour market. Marino presented the different work packages of the TUNED Project and showed some of the achieved targets thus far. The project is ongoing since October 2016 and it will end in October 2018.

Léo Vincent from the RMEI discussed a project which he is leading and entitled HOMERe programme. HOMERe is offering internships to young talents in various companies within the Mediterranean area. Participating students are offered 6-months practical experiences in another Mediterranean country. The project does not only support students and enhance their career perspective, but it also helps diversify companies and their activities. In the pilot phase of HOMERe (2015-2017), the project scheme is implemented in 9 countries: Algeria, Egypt, France, Greece, Italy, Lebanon, Spain, Morocco and Tunisia.

The last presentation was given by Amleto Picerno Ceraso from Città della Scienza in Naples, Italy. After presenting the activities of Città della Scienza, an Italian non-profit organisation dedicated to the promotion of science, culture and innovation at local, national and international levels, Ceraso presented the D.RE.A.M FabLab (Design and REsearch in Advanced Manufacturing FabLab) and its several activities. The D.RE.A.M FabLab is a large workshop space and laboratory that is dedicated to new digital manufacturing technologies and digital innovation in production and distribution processes. As part of its activities, D.RE.A.M offers a high-level training programme, the so-called D.RE.A.M Academy, specialised in computational design and Industry 4.0. The D.RE.A.M Academy successfully completed its first edition with students coming from Italy, China and Iran. The Academy brings international academics and professionals covering the four main areas of research: biomedicine, fashion and design, architecture and advanced manufacturing, and cultural heritage and museum installations. Lastly, the presentation highlighted the importance of such training opportunities in the promotion of cooperation and partnerships in the Mediterranean area, given the significance and power of the Industry 4.0 for development and the fostering of new paths.

2. Work Track on Sustainable Development

The Work Track on Sustainable Development showed the participation, besides Italy, of four speakers coming from different Mediterranean countries (Cyprus, Greece, and Lebanon). The Work Track was jointly convened by Walid El Baba (EAMC and Webco, Lebanon) and Piergiuseppe Morone (Unitelma Sapienza University of Rome, Italy).

Walid El Baba opened the session by highlighting how the increase of the world population with socio-economic growth, the extensive use of cars creating traffic and transport congestion, the high demand on classical energy sources, the amount of generated waste, the reduction of green spaces and public parks are important factors that influence negatively the quality of outdoor air in Mediterranean cities. The solution is to create a sustainable environment providing citizen's daily priorities, enhancing competitive economy, creativity and capitalizing on human resources and cultural heritage.

Sustainable city design, improvement of outdoor air quality, public green parks, integrated solid waste management, use of renewable energy in parallel to classical energy sources, enhancing energy efficient systems in the construction, a good education at all levels with research and development, reinforcing the role of women in the society are important actions to achieving a real sustainable development in the Mediterranean countries.

Subsequently, Anastasia Zabaniotou (Aristotle University, Thessaloniki, Greece) presented a conceptual vision of a sustainable circular waste-based bioeconomy development in the

Mediterranean regions. She argued that the Mediterranean is a geographical, cultural, and philosophical reference point encompassing multiple cultures, languages, faiths, and temporal rhythms of development. In this context, innovation can play an important role at regional level, as regions are important engines of economic development and, indeed, sustainable regional bioeconomy, local knowledge, ethics and social benefits are linked to technological solutions.

The inspiring speech of Anastasia Zabaniotou was followed by a talk given by Aram Yeretizian (American University of Beirut, Lebanon), who focused his presentation on climate responsive and environmentally sensitive building design vs. quality outdoor space. Aram Yeretizian presented interesting data on the increase of population density with the urban centres in the Mediterranean basin, the GDP per capita in Mediterranean countries between 1950 and 2014, the evolution of mobilization rate, as well as trends in green public space. As an exemplification of such trends, Aram Yeretizian introduced the case of outdoor space in Beirut, which is catastrophic with a reduction of green spaces, no treatment of wasted water or solid waste with an important lack of public awareness. Quality of outdoor space can then be improved by actions such as rainwater recovery, treating sewage, recycling solid waste and establishing a clean transportation policy. Clean air, proper orientation of buildings, more vegetation, rainwater recovery and waste management will strongly contribute to implement climate responsive buildings and reducing energy consumption in constructions. In conclusion, it is crucial to achieve a better governance to clean up the outdoor space with a large awareness campaign.

The third talk was provided by Michalis Koutinas (Cyprus University of Technology, Limassol, Cyprus) who focused on food waste valorisation for the production of added-value commodities. Michalis Koutinas showed how the food sector is currently emerging as an area providing a range of advanced and multidisciplinary research and development approaches for sustainable waste management. Food manufacturing generates substantial quantities of residues and waste rich of molecules, such as carbohydrates, fatty acids and proteins, which can be used to generate added-value compounds including chemicals, biofuels and biopolymers through physicochemical and biochemical processing. In such a context, Michalis Koutinas argued that the restructuring of the traditional fermentation industry into bio refineries that produce low value commodities (e.g. biofuels) as well as bio based chemicals and materials of high value can set the basis for replacement of petrochemical processing with a renewable resource and to develop a minimal waste community.

The last talk was given by Joslin Kehdy (Recycle Lebanon) who provided the audience with an interesting talk on an applied case of solid waste sorting facility for the Fanar Municipality – an area located in the Metn district of Mount Lebanon and seven kilometers away from Beirut. The area has been suffering from mismanagement in solid waste due to the crisis that started on July 2015. Some parts of Fanar are being used as a dump and a burning site to dispose the waste, which angered the residents of the area, thus calling for protests and blockage of roads. Requests for the establishment of a solid waste sorting facility were made by residents and municipality members, and as such Recycle Lebanon has been in-contact with members of the municipality of the Fanar and Reco Waste. As part of its activities, Recycle Lebanon will set up a project to promote and increase recycling and sorting starting at the household level and in-collaboration with the community and municipality. Special emphasis will be given to reducing plastic consumption at the household level. Specific tasks will include: (1) training at the household by doing door to door sorting of solid waste; (2) implementing clean up campaigns around the area as part of Recycle Lebanon's program "Dive into action"; (3) establishing recycling booths which involve fun educational activities

at events/festivals in Fanar; (4) creating an eco-friendly market where retailers and shop owners are encouraged to use recycled material.

3. Work Track on Cultural Heritage

The Work Track was convened by Carlo Rescigno (University of Campania Luigi Vanvitelli, Italy). Only a few words to summarize the Work Track and illustrate the links that connect apparently disjointed themes. Speaking of Mediterranean Cultural Heritage is a theme in which it is easy to be inadequate: there are so many contacts and ties in this geographic space that only an intricate diachronic and geographic network system could help us to represent it. What links the apparently different topics dealt with in the Work Track is the concept of invisibility. It is a pervasive heritage that is not always easy to recognize because of physical limits but also of cultural barriers that often make landscapes and objects unseen because they are ignored by our common identity parameters. An arduous selection of topics was made to stay in the space of an initial workshop as this is. It may be considered as a start, mainly to build contacts between different research groups. The Work Track was structured into three open tables, followed by a discussion on an invisible but audible heritage: music with its complexity of suggestions, assonances, cultural lines. It was concluded by a discussion on a heritage visible by palate, with a speech on the Mediterranean diet.

- Open Table – Mediterranean harbours, markets and goods: networking archaeological studies.

In almost all of the great museums deposits there is a universe of objects, repetitive, serial, extracted through excavations from the flow of material cultures that have produced them. They are too little notable from an aesthetic point of view to be able to get a space in showcases and museum rooms, but dense of history. How to make this heritage visible, transform lost places into libraries of available objects for knowledge? This question motivates the idea of a project that started from the Museum of Naples and was elaborated by a group of archaeologists from Campania universities. But how do the other great Mediterranean museums deal with this heritage and how is it possible to create a common language of behaviour to share this kind of heritage? Archaeological finds are also true script tablets for invisible alphabets. The letters of this alphabet are the traces of use that document food, wine and oil, allow us to enter in the economic archives of the Mediterranean, to follow through the ports and ships the movement of men and goods, to record their food cultures, deep uses and slow changes. This is what the speech on Pompeii is about. Even from this point of view, the Vesuvian sites appear to us unique in the world, for having returned goods and organic material, preciously preserved in a specialized laboratory, pride of the site. With its wealthy deposits, Pompeii represents a point of view on ancient cultures with few other comparisons. Demetris Athanasoulis, Ephorus of the Cyclades, introduced the Open Table with a report on Delos, the Cycladic island that is so far from Naples from the historical point of view. Pozzuoli, the ancient Puteoli, the most important harbour of the roman world, was called Little Delos, the Apollo vowed at Kyme was delian, engraved on stones in the squares of Delos we find the names of *mercatores*, the Italian merchants; in the current management of the site we find problems and questions similar at many Mediterranean sites. The above speech introduced the audience into the network of Mediterranean contacts that were built since ancient times, which motivated the project for a collaborative scientific research that Pompeii has built in recent months with Delos. The case of Pompeii was illustrated by a contribution from Laura D'Esposito, Alberta Martelloni and Luana Toniolo (Archaeological Park of Pompeii, Italy). The core of the contributions to the Open Table consisted of the report by Paolo Giulierini (Director of the Naples National Archaeological Museum) on “The

archives hidden in the Museums” and of the report by Carmela Capaldi (University of Naples Federico II, Italy) and Carlo Rescigno (University of Campania Luigi Vanvitelli, Italy) on “An integrated research program on the archeology of goods”.

- Open Table - Education and training in techniques related to Cultural Heritage

The Open Table was opened by Laura Baratin (University of Urbino Carlo Bo, Italy) with a report on a Euro-Mediterranean curriculum for the preservation and restoration of Cultural Heritage in the frame of the TEMPUS project INFOBC (Innovation dans la Formation pour les Biens Culturels). The aim of the project is to create a new Euro-Mediterranean curriculum for the restoration and preservation of the cultural heritage of this area. Such a curriculum has been established in seven Tunisian universities. A similar program is underway in Lebanon. The case of Tunisia was dealt with by Ines Ouertani (University of Manouba, Tunisia) and the case of Lebanon by Joseph Zaarour (Université Saint-Esprit de Kaslik, Lebanon). The Open Table also discussed the connections between research and training. In fact, the study and the preservation of cultural heritage require advanced experimental techniques and the cooperation of specialized laboratories. The cooperation must extend from research to training, to spread know-how and help local growth. Few cases were presented. The activities in education and training in cultural heritage techniques in the frame of the CHNet network were illustrated by Francesco Taccetti (LABEC-INFN, Florence, Italy). Lucio Gialanella (University of Campania Luigi Vanvitelli, Italy) concluded the Open Table with the proposal of a Summer School on experimental techniques at the CIRCE Laboratory in Caserta.

- Open Table - Searching for hidden structures using a new non-invasive technique: muography

A new non-invasive technique is now available to search for hidden archaeological structures. It is based on the use of “muons”, which are highly penetrating elementary particles that are naturally produced through the interactions of “cosmic rays” in the Earth’s atmosphere. Their abundant flux reaching the Earth’s surface allows imaging of the interior of massive bodies or underground structures through “muography”, a technique analogous to radiography but mapping the absorption of muons instead of that of X-rays. Kunihiro Morishima (Nagoya University, Japan) presented the cosmic ray muon radiography of Egyptian pyramids with nuclear emulsions in the frame of the Scan Pyramids project, anticipating the perspective of exciting results. Giulio Saracino (University of Naples Federico II, Italy) presented the results of a muography of underground structures in ancient Naples that opens the way to the project of a muography of Cumae, according to a proposal presented together with Carlo Rescigno (University of Campania Luigi Vanvitelli) and Paolo Strolin (University of Naples Federico II, Italy). The presentation was followed by a contributions from Pierfrancesco Talamo (Phlegraean Archaeological Park) about the case of Cumae and other sites in the Phlegraean Fields.

- *Memoria Mari*: Musical Koinè of the Mediterranean

Marco Sannini (Conservatorio di Musica San Pietro a Majella, Naples, Italy) presented a project aimed at searching for the melodies that have "travelled" among people influenced by specific and common cultures of the various ethnic and geographical areas. It aims at producing a web repository of the heritage of "melodic memories" that over the centuries have influenced the development of the musical traditions of Mediterranean countries. Contributions to the project were given by Giovanni Conelli (Italy), Laurent Filipe and Paula Castelar (Douro Generation, Portugal), Johanna Monti (University of Naples L’Orientale, Italy), Eugenio Ottieri (Progetto Sonora, Italy), Nicola Pisani (Conservatorio di Musica di Cosenza, Italy), Tommaso Rossi (Associazione Scarlatti, Italy) and Francesco M. Sacerdoti

(Temple University, Philadelphia, USA). An contribution enlightening how music unites people across any border was given by the italian-tunisian artist M'Barka Ben Taleb.

- The Mediterranean diet

Gabriele Riccardi (University of Naples Federico II, Italy) showed how a traditional model of Mediterranean diet can be revitalized by adapting it to current knowledge and needs. The presentation was based on a project carried out in collaboration with Angela A. Rivellese, Giovanni Annuzzi and Marilena Vitale from the University of Naples Federico II, together with Rosalba Giacco (CNR Institute of Food Sciences, Italy) The aim of this project is to define and implement at worksites, school canteens and restaurants a diet reflecting traditional Mediterranean habits. Its first phase will be an evaluation of the dietary habits of different Mediterranean populations in collaboration with research groups from various Mediterranean countries. Migrants will also be interviewed.

4. Work Track on Logistics and Marine Strategy

The Work Track on Logistics and Marine Strategy was jointly convened by Pietro Evangelista (IRISS-CNR, Italy) and Dragan Čišić (University of Rijeka, Croatia). Transport and logistics play an undoubtedly key role in the Mediterranean region providing a relevant contribution to the economy of the area. In the marine sector of the EU, the so called blue economy represents roughly 5.4 million jobs and generates a gross added value of almost €500 billion per year. Nevertheless, the transport and logistics sector in this area presents low efficiency that negatively affect the potential of the Mediterranean countries. Traditionally, government and international agencies have paid more attention to infrastructure and trade facilitation rather than to “soft” interventions to improve the sector. Among the others, urban integration of areas dedicated to transport and logistics infrastructures (such airports, rail facilities, and ports) have been rarely considered for being used for different function and activities. Similarly, appropriate training for workers and skilled workforce has not been considered a leverage to foster the development of quality logistics services. This work track discussed these issues through presenting two interesting projects.

The presentation given by Massimo Clemente and Eleonora Giovane di Girasole (IRISS-CNR, Italy) was focused on a collaborative regeneration project concerning the San Vincenzo Pier in Naples. Urban regeneration involves specific features in coastal urban areas for several factors: concentration of people, functions and activities, the maritime identity originated from geographical position and community history. If the sea and the maritime culture are seen as shared values of urban communities in seaside cities, they can become triggers of urban regeneration. In 2014, the IRISS-CNR research group in collaboration with the Community Psychology Lab UNINA, started an Action Research project to define a planning methodology based on collaborative processes for urban regeneration based on the understanding of the sea and the maritime culture as “common goods”. Collaborative processes may represent an innovative procedure in which community, associations and stakeholders take on a pivotal role in defining goals, enhancing plans and programs and proposing regenerating interventions. Through an Action Research approach, the San Vincenzo Pier, the main breakwater of the Port of Naples, was used as a testing ground. The experience of the Friends of Molo San Vincenzo (FMSV) association may be considered one of the outcomes of project. By putting into action collaborative processes, the aim of the project is to recover the pier in its port function (touristic port, mooring areas for yacht) and to create a public space on the sea, promoting the communication among institutions (Navy Command, Coast Guard, Port Authority, etc.), urban community and stakeholders, fixing them in a strategic, comprehensive and integrated vision.

Salem Miladi (Director General of the Tunisian Institute for Competitiveness and Quantitative Studies, Ministry of Planning and International Cooperation, Tunisia; former Minister of Transport of Tunisia) presented the LOGISMED project, which is an initiative to improve the competitiveness and development of the logistics sector in Mediterranean countries and support the creation of an Euro-Mediterranean Free Trade Area. The presentation was related to the "Logismed soft" component of the project concerning the coordination and monitoring aspects of training through the creation of an observatory on transport and logistics in the region. The second component of the projects is "Logismed hard" that aims to create a logistics platform in the Mediterranean region. The project is financed by the European Bank and the European Commission and involves Algeria, Egypt, Jordan, Morocco and Tunisia. Salem Miladi stated that "Logismed soft" is organised into three different parts. The first part is based on an analysis of the existing supply of training together with a detailed assessment of future logistics training needs. The results shown that the supply remains inadequate in relation to the market demand and training is rather academic than practical even if with different emphasis moving from one country to another. The second stage of the project consists in the establishment of training activities involving national logistics associations as they had not a very active role in training process. Further activities in this stage are: i) the development of quality standards for undergraduate university students; ii) the promotion of ELA certification among logistics professionals; iii) develop a training program for trainers; and iv) develop a group of qualified operational level employees who are properly trained according to the requirements of modern logistics priorities. The third stage involves the organization of the Logismed regional initiative steering committee meetings. These are mid-term meetings involving beneficiary countries, experts and donors to evaluate the progress of the project.