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Integration of the geomorphological environment and cultural heritage for tourism promotion and hazard prevention

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INTERNATIONAL WORKSHOP ON GEOMORPHOLOGY A LOCAL OVERVIEW

The topic of geomorphology may appear too new for some literary circles in Malta, and of little value for others, but its importance can be judged by just typing this word in the internet search engine, Google. The resulting search gives over 2,940,000 entries which feature by way or another this term or information connected to it.

In simple language, geomorphology is about the study of landscape. The origins of this word, which has Greek roots, mean the interaction of earth with form. This interaction expresses the significance and importance of this study. It is not important only in terms of science, but as it is the study of different earth forms, it renders itself useful to humanity. It is because of this interdisciplinary aspect that geomorphology at the University of Malta is housed within the Geography Division. The latter is one of the Divisions which constitute the subjects taught in the Mediterranean Institute at the University of Malta. The nature and set up of the Mediterranean Institute is interdisciplinary and it continuously seeks to bridge the art with the science subjects. In academic jargon, the Mediterranean Institute is often referred to as a servicing institution as it is in the privileged position to offer courses for both arts and science students.

Today, geomorphology has established itself as a science in its own right. The geomorphic themes are numerous and cover a vast number of topics, which according to the prestigious American journal about this subject, the *Geomorphology Journal*, include tectonics and regional structure, glacial processes and landforms; fluvial sequences, environmental change and dating; fluvial processes and landforms, mass movement, slopes and periglacial processes, hill slopes and soil erosion, weathering, karst and soils, aeolian processes and landforms, coastal dunes and arid environments, coastal and marine processes, and estuaries and lakes. It breaches into statistical analysis and informatics through numeric modelling, quantitative processes, theoretical and quantitative geomorphology, besides incorporating DEM (Digital Elevation Model), GIS (Geography Information System) and remote sensing methods and applications. Hazards, applied and planetary geomorphology and volcanics are today considered important topics of geomorphology. The conference held in Malta between 24 and 27 April 2007 sought to focus on one of the above topics, that is coastal land erosion and the resulting hazards.

Yet, the portfolio of the Mediterranean Institute is not tied only to academic research restricted to students' consumption. If the University falls into this trap, it would spell its downfall. On the contrary, whilst the Mediterranean Institute seeks to fulfil its academic duties to the highest proficiency, at the same time, it ventures into the outside world. It is for this reason that the Mediterranean Institute accepted to be a main promoter of this international conference and allied its resources with those of the University of Modena and Reggio Emilia and the National Research Council of Padua. On behalf of these institutions, I want to express a word of thanks for the support received by the Italian Cultural Institute of Malta and to the over 50 foreign delegates who attended this conference. It is my staunch belief that academic institutions should not close themselves into hermeneutic analysis which is eventually disclosed to equal peers. The diffusion of knowledge to the rest of society is important and this has become a sort of mission for all the members of staff of the Instituto, whilst at the same time keeping a high academic profile. Knowledge needs to be shared. Ideas too are shared first with the rest of the academic world but then, they also need to reach the general public. In other words, academics need to be interested to share their works with the rest of the members of staff and students whilst at the same time making sure that their work is beneficial for the socio-economic and cultural development of the country. This conference is one in a number of activities that are held regularly by the Mediterranean Institute in Malta.

The chosen topic and title of this conference fits within the brief of the Mediterranean Institute's mission. This conference has both an academic and a practical side, as a number of case-studies will be analysed and studied. Their ap-

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plication can help in the prevention of hazards, connected with the movement of the earth, which can result in land slides or other forms of geomorphological changes, which are produced by erosion, earthquakes or the movement of the tectonic plates. In Malta, perhaps, one of the biggest hazards, which has been until now underrated, is coastal land slide movement. One simply needs to tour the northern coast of Malta to witness with one's own eyes rocks that have slid from the cliffs' edges down into the underneath ground or water. Such a movement offers a great hazard and needs to be monitored. In fact, thanks to the collaboration that has been established with the University of Pavia, the Geography Division at the Mediterranean Institute has initiated a programme of monitoring these land slide movements at a number of places around the northern coast of Malta.

If such a movement is not monitored, it can lead to disasters or human tragedies. Thus, it was extremely positive that this aspect of geomorphological study being chosen as the subject of this international conference. The title of this conference had broad relevance to Malta. It goes without saying that the theme of coastal erosion is extremely important for our islands. One only needs to remember the many jobs that are dependent on activities linked to the coast, in particular those connected with tourism, to understand the importance of avoiding hazards linked to natural changes in land physics. Therefore, this conference also had a practical angle: it aimed to give suggestions on how to prevent a hazard from geomorphological changes which can negatively affect the tourist industry.

At the same time, geomorphology is linked to landscape. It is not only concerned with physics but also with culture. The study of landscape is one of the topics which interests me most. Simon Schama has shown the importance of this topic to the study of history. In fact, Schama entitled one of his books Landscape and Memory. Unlike what had been thought in the past, landscape can also be created by humans and is very much conditioned by their actions. On their part, people have expressed, at different times in history, diverse forma mentis about landscape. There were times when the landscape was seen as savage, uncultivated, a form of a savannah type environment. Other scholars preferred to speak on what was termed as natural history. Now, landscape is seen more as another human creation which was built or having a planned structure. Our countryside, in particular, is made by humans. Thus, it forms part of our tangible heritage which needs to be studied and understood so that present and future generations will not repeat the mistakes of the past, thus avoiding catastrophic results and irreparable destruction.

Due to the small size of our islands, geomorphology in Malta cannot be constituted into a department of its own. Instead, it is still being considered as part of the Geography Division. Indeed, for many years, this branch of studies was not differentiated from the rest of geography. However, this does not prevent our Geography Division from applying methodologies that are encountered in bigger departments abroad. In actual fact, geomorphology studies focus on fieldwork and quantitative analysis of so-called interconnected processes. At the same time, to strengthen this aspect of study, the University of Malta is sponsoring one of the Mediterranean Institute's lecturing staff to further her studies at a Ph.D level at the University of Modena and Reggio Emilia, which houses one of the most avant-garde institutions in this field of study in Italy.

One augurs that the publication of papers read at this conference will further the aims for which the science of geomorphology had been created, that is, to offer applied research of relevance to the sustainable management of the environment.