

# **New Technologies and Land Protection**

## **"... a good survey is already midway through project!"**

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### **Keywords**

Architectonic Survey, GIS, Laser Scanners 3D, Architectonic Photogrammetry, Training

**Objectives** - The Regional Committee Surveyors and Graduates Surveyors of Puglia has organized and sponsored the 2010 and 2011 the International Summer School "New Technologies and Land Protection" and offered its members the opportunity to study and optimize the use of "new technologies" for the land protection. The project of the International Summer School aims to:

- investigate the area as a key to interpret the future, to unite in one place the history of the places with the use of new technologies for the survey;
- emphasize that important transactions are not limited only to establish the shape and position of "building structures and land" in the environment;
- enter into a closer collaboration between teachers and professionals, domestic and foreign, to study and optimize the opportunities offered by new technologies for the survey of the territory.

The study of the environment is the meeting point between the business community and academia, the study is the viaticum to give strength to a new culture, a culture that is confident about the combination of history and new technologies, study and protection of cultural estate through the eyes of new tools for the survey of the territory or any element thereof intended as a "living organism".

**Method** - The philosophy of teaching, which is behind the project of the International Summer School, was to recover the old concept of "school-workshop" where the student works closely with the teacher and ends up taking the role of the teacher the same. It has implemented a common path of study that brings together engineers for the survey and art historians, business community and researchers from universities.

Given that teaching must be understood for the transmission of "know how" from Master to Disciple, is to remember that it is possible only if some conditions are verified, such as:

- clear definition of teaching;
- the ability of the Master of "know-how," given that "knowledge" without the "know how" is equivalent to "not know";
- the estimation of Discipleship against the Master, based mainly on knowledge on the part of the Disciple, what the Master himself has done;
- the estimation of the Master in respect of the Disciple, based on knowledge of what the Disciple can do the same;
- free choice of the Teacher by the Disciple;
- the free acceptance of the Disciple of the Master.

**Results** - Through a curriculum designed and implemented with the coordination of Pietro Grimaldi the Regional Committee of the Surveyors and Surveying Graduates of Puglia has offered its members the opportunity to study and optimize the use of "new technology" for the land protection.

The first edition of "Summer School" was built with a full immersion of ten days, from August 23 to September 3, 2010 at the Colonial Sorresso in Noci (Bari, Italy).

Fifteen professionals between 20 and 45, from Romania, Turkey, Venezuela, Brazil have created a "school camp" face on one side to represent the architectural heritage of its own in the context of the vast Colonial Sorresso rural heritage of the City of Noci (Bari, Italy), and the other to detect the entire farm complex with modern technologies, thus contributing actively to its development.

The second edition of the "Summer School", which took 5 to 10 September 2011, had a character of "traveling". At some places the center of studies of unquestionable historical and anthropological context in Puglia which allowed the study of all the opportunities offered by the study of new technologies for the study and preservation of a historical artifact. The laser scanner 3D, GPS, thermal imaging, the ground penetrating radar and architectural photogrammetry allowed to fully investigate the historical roots of an asset, to analyze the state of health, providing a database (GIS) with new indicators to monitor the protection of the "architectonic structure" detected (we, Eugenio Rizzo and Pietro Grimaldi, in person, we take the opportunity to thank the GEOTOP-TOPCON of Ancona, Italy for technical support in the 2010 and 2011 editions of "Summer School")

Foreign participants were experts in cultural estate, the remote sensing technology and the protection and enhancement of the territory.

The sites "detected" and "studied", International Summer School in 2011 are:

- the "Cantina Spagnola" Laterza in the province of Taranto, which contains frescoes of the sixteenth century, unique for the fact that combine secular and religious subjects to topics I write about the period in which Laterza was ruled by the Spanish family of Perez Navarrete;
- the church of "San Giovanni al Sepolcro" in Brindisi;
- the "Parco Torcito" in Cannole, province of Lecce, managed by the Intini Group, which covers an area of 203 hectares, where there is a farm complex located in the ancient feud, called Cerceto, that existed year 864, year when the village was destroyed and razed by the Saracens.

**<http://scuola.gruppointini.com>**.

At training camp attended by employees of the Group Intini, who have fully accepted the business logic, always attentive to the professional growth through continuing education.

**[http://administra.it/page\\_video/page\\_template.php?id\\_pls=6](http://administra.it/page_video/page_template.php?id_pls=6)**

The summer school was a time of constant comparison between different methods of approach to work and technological systems, becoming an undeniable moment of cultural and professional enrichment. In this context, the contributions from the international academic world, with the presence of teachers and students from universities in Turkey, Venezuela, Brazil and Romania in addition to the precious presence of the University of Bari, were fundamental.

**Conclusions** - It has strengthened the belief that starting from the usability of a consumer survey by the highly diversified (architects, historians, archaeologists, engineers, tourists), emerges the need of having access to information (selectable in real time) of type text, graphic, photographic and film, as well as all the dynamic type made available by new technologies, through the use of a GIS is an indispensable tool for any intervention on the territory and, therefore, must be "read" by all those that can perform these operations, ie professionals from across Europe. In the transition from paper to digital one can not ignore the use of the Internet in the transmission and / or presentation of

the relevant local network. Finally, we believe, in general, that the relief of any "environmental element" (in the absence of a clear finalization) is a collection of information (GIS) appropriate to give for each object, at least, to answer three questions:

1. What is it?
2. What is the function?
3. What need does it solve?