LANDMARKS:
Understanding Pre-industrial Structures in Rural and Mining Landscapes

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# **Euopean Cooperation in the field of Scientific and Technical research**

- COST is one of the longest-running instruments supporting co-operation among scientists and researchers across Europe.

- It has 35 member countries and enables scientists to collaborate in a wide spectrum of activities in research and technology.

- COST is an intergovernmental network with nine scientific COST Domain Committees formed by some of the most outstanding scientists, which are responsible for the scientific quality control.

- **http://www.cost.esf.org/**

ACTION A27

Domain: **Individuals, Societies, Cultures and Health**

Action Title: **Understanding pre-industrial structures in rural and mining landscapes**

Participating: **21 countries**

COST
Member States

States with participating institutions
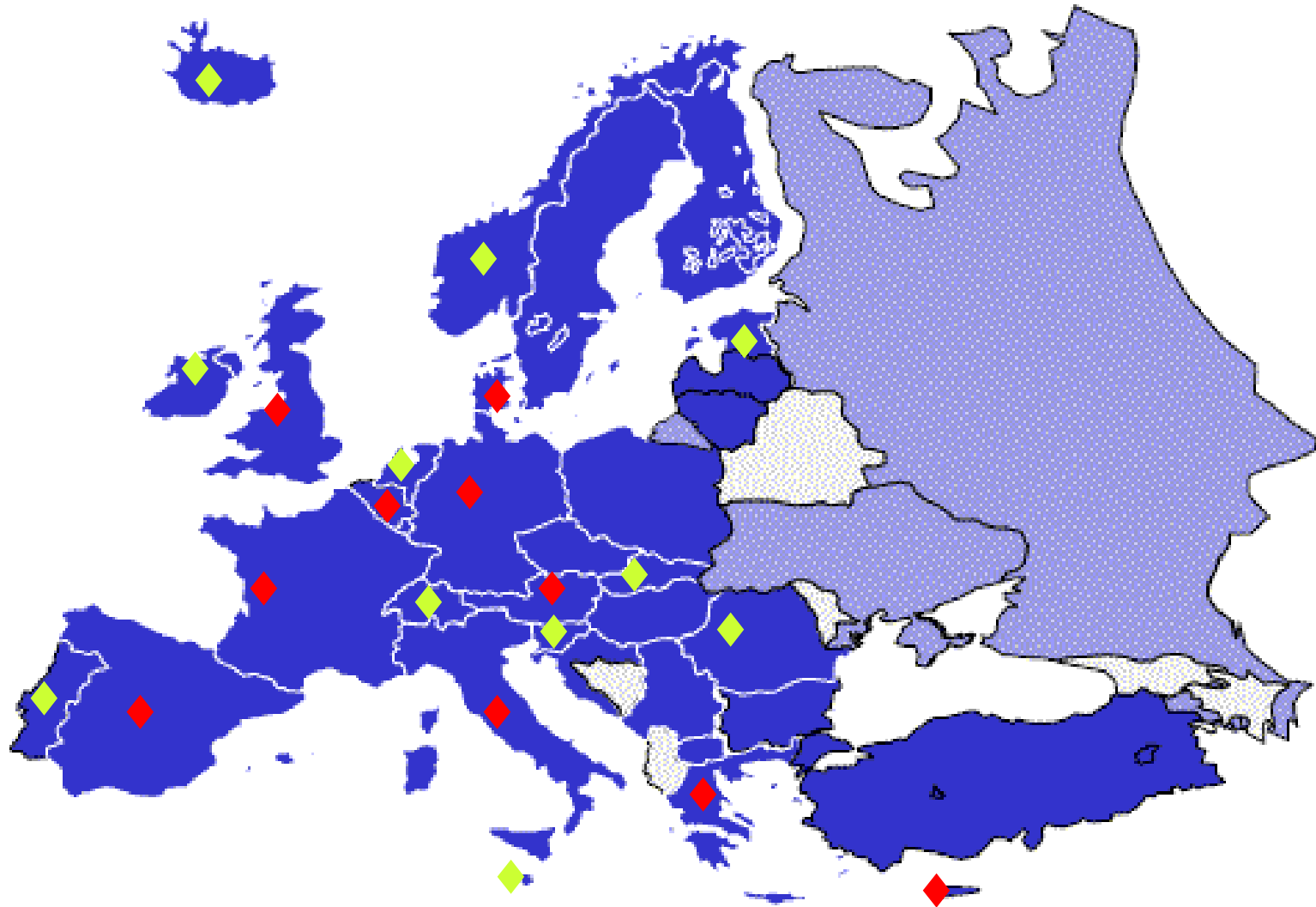
Main Objective of the Action

The main objective of the Action A27 is the identification and the evaluation of pre-industrial elements in the European landscape, threatened by the abandonment of traditional agricultural and mining activities.

- The examination of regional and/or local practices in the framework of broader historic processes.

- A better understanding of the evolution of the present-day landscape and its changes through time.

Secondary Objectives of the Action

- Analysis of the **morphological** elements and models of integration in the landscape of today. Design and generation of a database.

- Analysis of the **technologies** related to the historical use of landscapes.

- Diachronic study of specific **legal and administrative practices.**

- Analysis of landscape **perception** during history by the communities that inhabited and exploited it.

- Provide mechanisms for the **public presentation of landscapes** and the optimising of Cultural Heritage.

WG 1: Mining landscapes

Abandoned landscapes, without economic profitability

Negative connotations in the collective memory: polluting and aggressive character of many of the mining activities

Sampling significant mining areas for the database and the evaluation of their characteristics

WG 2: Rural landscapes: landscape markers and the organisation of the land

Certain types of agriculture and of livestock-farming are in regression or have already disappeared

Depopulation and deterioration of the rural areas. New risks; fires and erosion.

Inventory in representative regions aims at contributing to the evaluation of the losses of heritage an finding the criteria for their preservation and development.
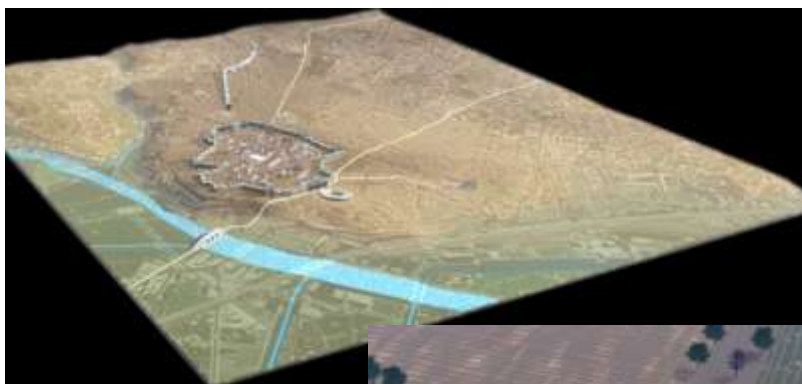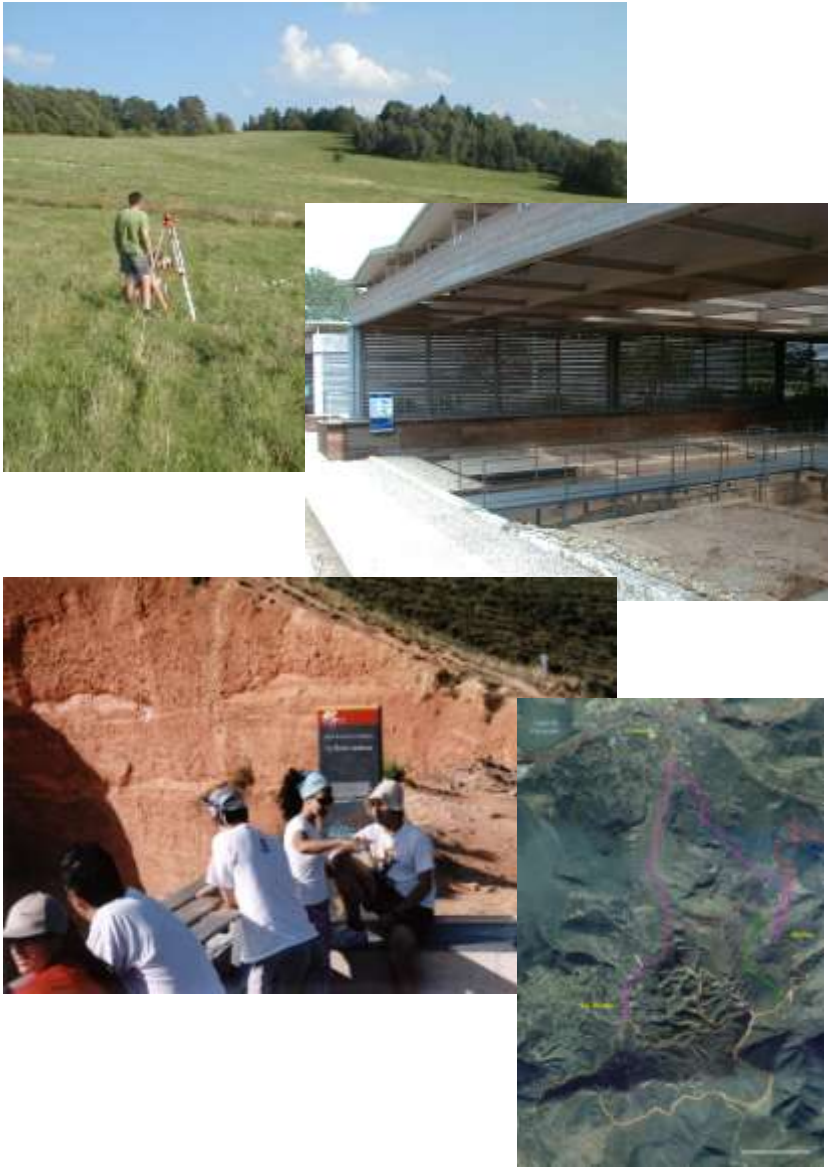
WG 3: Virtual landscapes and databases

A transverse and instrumental WG which coordinates the work of WG1 and WG2 to standardise methods of research

Geoinformation technologies and landscape analysis

WebGIS of geo-cultural parks and a book publication

WG 4: Transversal activities

- **Website**
- **Publications' coordination**
- **European Network of Cultural Landscapes**
- **Training activities**
- **Dissemination plan**
- **Knowledge transfer**

Repercussions in the life of the region

Website: http://www.soc.staffs.ac.uk/djw1/costa27home.html

Experiences within WG3

- **First idea (humanities):** GIS Manual
- **Argument (geoinformation):**
  - There are many GIS manuals already available an offered by GIS software producers
  - Not much research involved in doing it

What is a research question? What is really needed?

How can (geoinformation) technology help to improve our analysis? Our process? In which phases can it be used?

Which methods and which technologies can be efficiently used for which analytical / research processes?

Which research questions can be best addressed with the help of geonformation technology?

Definition of the Goals (WG3)

(Samos 05/06 and 09/06 Gent meeting)

We would like to:

- focuse on the geoinformation technology that can support geo-cultural landscape analysis.
- produce something that can serve as a compendium for historic landscape researchers dealing with preservation and cultural heritage.
- review good practices for those who are not well experienced with modern geoinformation technology and methods.
- achieve high quality original contributions.

Main focus: Workflow and the parts of the workflow that can be best suported by geoinformation technology

Samos meeting (May 2006)

The Book was Born…

Entitled:

Geoinformation Technologies for Geo-Cultural Landscapes Analysis: European Perspectives

Timeline: November 2005-September 2008

- Mainly the contributions of the Action 27 participating members
- Expressions of Interest (summer 2006)
- Review of the abstracts
- Expert review meeting (May 20007)
- First draft articles (October 2007)
- External reviews (at least three external reviews)

Book Structure: Chapters

- **Introduction**
- **Methodology**

  - **Data capturing and mapping** (vertical photogrammetry, oblique aerial photography, Lidar, high resolution satellite image interpretation, Global Positioning System, field data collection, vectorisation and rectification of historical maps)

  - **Analysis and modelling** (surface modelling, linear landscape features, landscape characterisation, land use analysis, landscape metrics, geo-cultural modelling, visualisation)

- **Case studies**
- **Glossary**

Human Activities Change the Landscape

F o i n i k a s B a y (Greece), Copyright Dr. Niki Evelpidou

Case Studies (Chapter 3)

Description:
- max. 3 pages of text, ca. 5 pages including graphics
- Structure of the text: short abstract, why has this area been selected, country and region
- Key words describing the connection to the methodology

Case studies included:
- Corns: Roscommon, Ireland
- Crutchey: Lincolnshire, Great Britain
- Wigley: Shropshire, Great Britain
- Gournelos: Thira, Akrotiri, Greece
- Kronberger: Vindobona, Austria
- Chapa: Eastern Andalusia, Spain
- Vermeulen: Potenza valley, Italy
- Bender: Rhineland, Germany
- Dellong: Lac de Montady, France   **10 study cases**
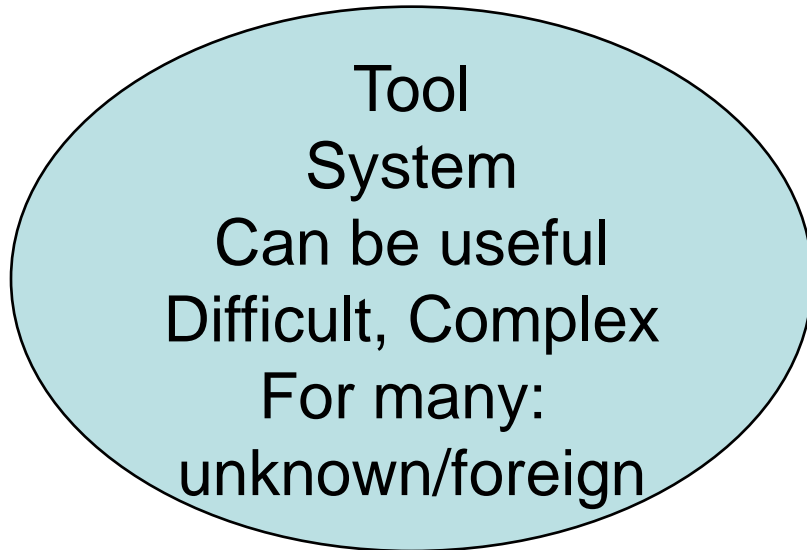- Koivupuu: Estonia

Brief Summary of our Experiences

My personal point of view (a view of someone coming from geoinformation science)
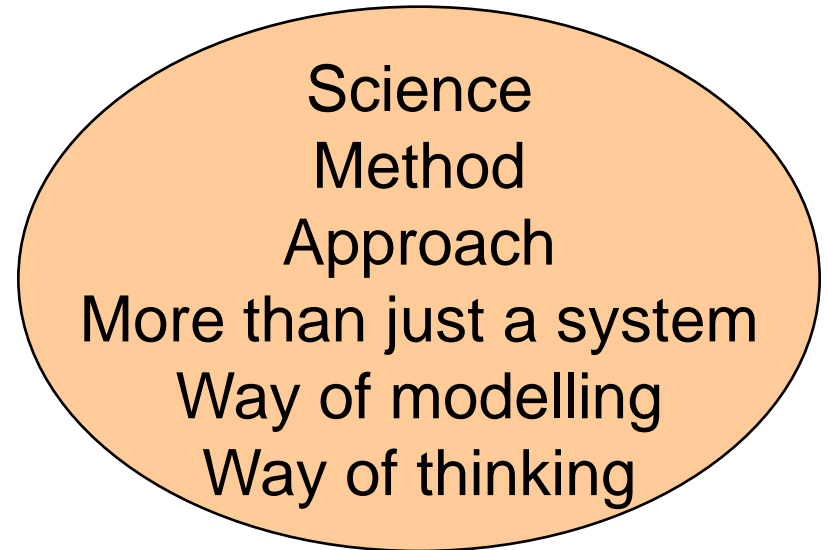
- Working on the book within the project opened up new horizons
  - Improved understanding of the research issues which are of a concern for a certain group of researchers
  - Several scientific fields view GISystems as a useful technology that can support their analysis and nothing more
  - They basically concentrate on their content
- GIS is often seen as a tool, as a technology that can help to support analytical processes
- GISystems have to be distinguished from GIScience
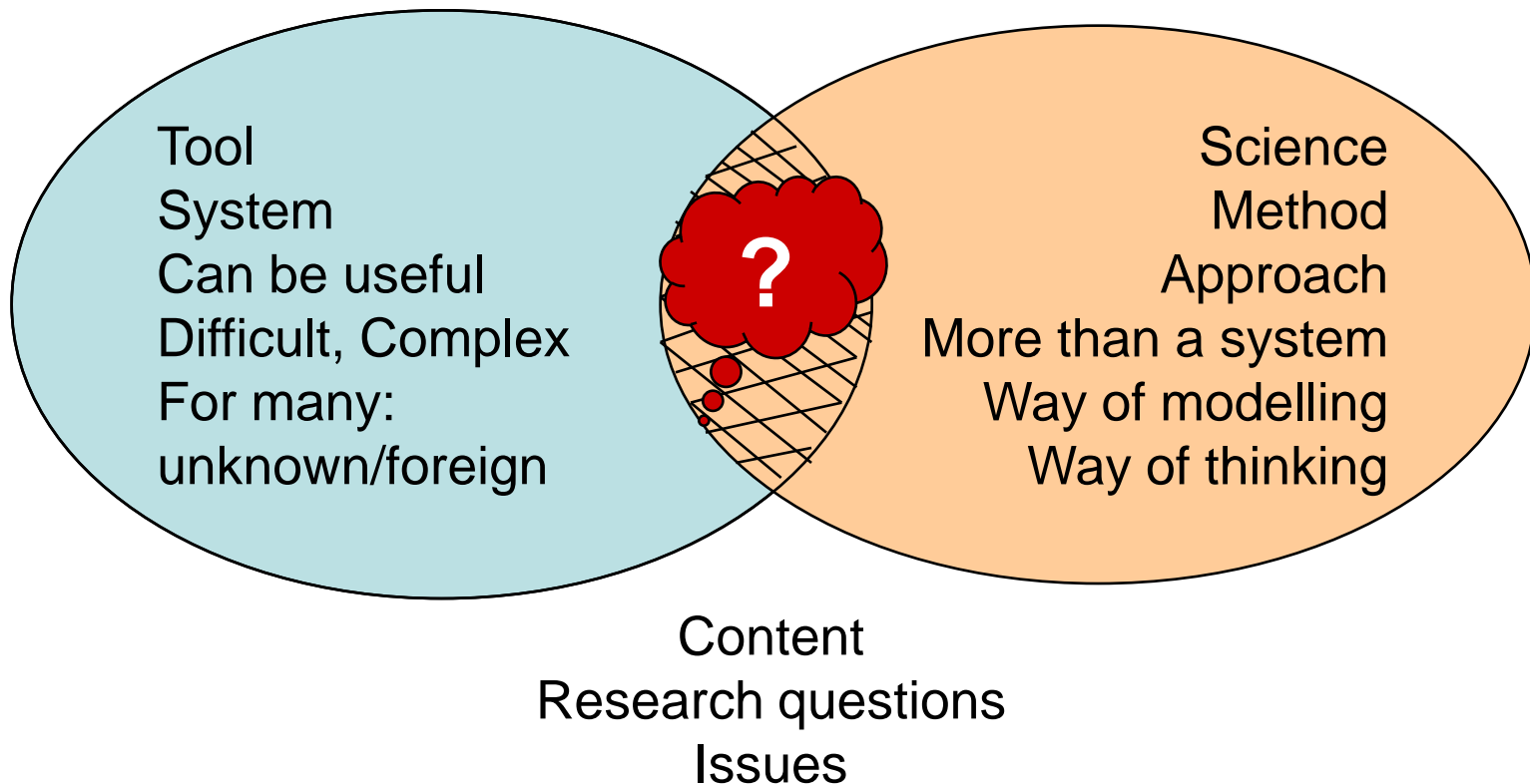
GIS: Two Points of View

GISystem

Tool
System
Can be useful
Difficult, Complex
For many:
unknown/foreign

GIScience

Science
Method
Approach
More than just a system
Way of modelling
Way of thinking

The most interesting….

What is in the intersection of the two?

Tool
System
Can be useful
Difficult, Complex
For many:
unknown/foreign

?

Science
Method
Approach
More than a system
Way of modelling
Way of thinking

Content
Research questions
Issues

Some thoughts instead of conclusions

- What is the value of a GI technology / Geoinformation?
- Which processes can be supported and improved by the use of GI technology?
- What are the research questions addressed by historians (and/or other researchers) that can be best answered by applying GI analytical methods?
- How can these methods be combined with other scientific approaches?

Close cooperation of several **scientific** fields/scientists (and not technicians) is needed.

Contact

COST A27
http://www.soc.staffs.ac.uk/djw1/costa27home.html

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