Lynx

SC_EN_02

IMT SCUOLA ALTI STUDI LUCCA

RESEARCHERS

Ruggero Longo

LAB

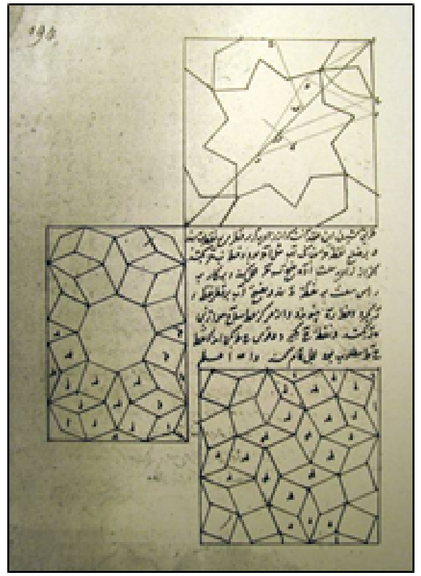
Center for the interdisciplinary Analysis of Images

research activity

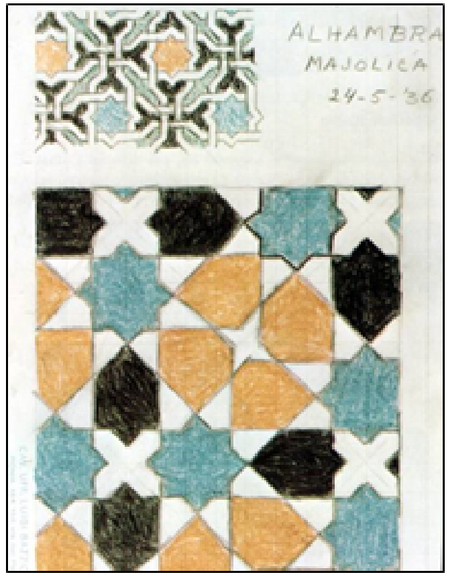
The research deals with the relationships between text and image in the context of the creation and spreading of geometric ornamental motifs and forms through the study of Arabic treatises on geometry and their employment for the development of the visual language in the Medieval Mediterranean. In particular, the investigation is focused on the relationship between textual and visual languages within the elaboration of geometric and aniconic ornamental patterns in Islamic culture and their perception and appreciation in the Byzantine East and the Latin West. The Arabic textual sources provide a fundamental step in the process of scientific translation from the geometric-mathematical classical Greek knowledge into the Medieval Mediterranean world. The transmission of such a kind of knowledge permitted in turn the construction and development of geometrical patterns widely adopted within the Islamic aesthetic of ornament. Among the objectives of the research is the creation of a catalogue classifying the aniconic geometric ornamental patterns of the Medieval Mediterranean (10th-15th centuries).

The final aim of the research is the understanding of the dynamics underlying the image's creation, and also those related to its perception and appreciation.

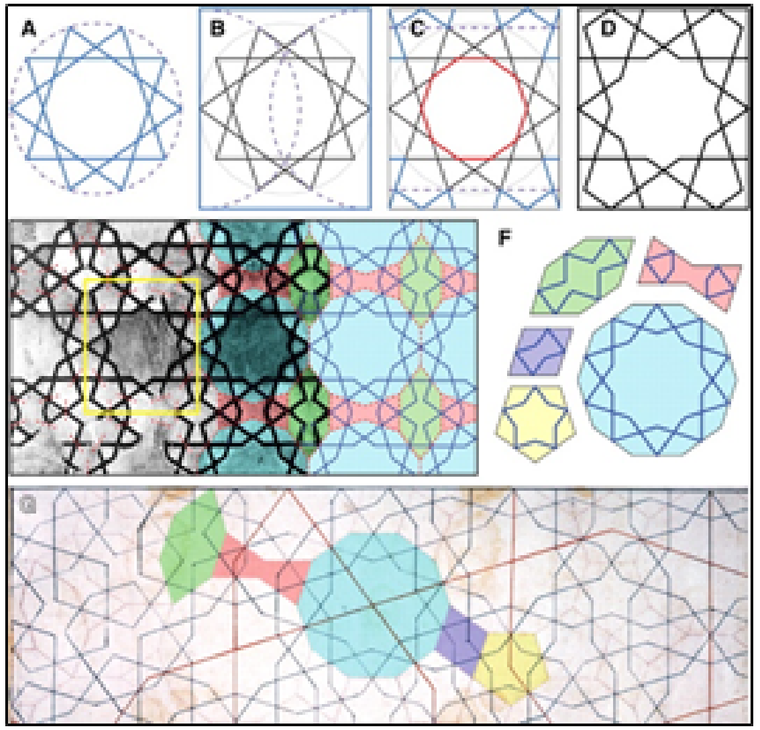
Images



Tenth century Arabic text on the construction of geometrical schemes



Alhambra’s alicatados tiles drawn by M. C. Escher in 1936



Geometric scheme of Islamic decorations with identification of compositive patterns

Technologies and services

The research activity is based on the reading of textual sources, literature and scientific references.

The activity could be implemented by the collaboration with experts on digital and informatic tools for the use of software able to automatically perform pattern recognition and classification.

The creation of a catalogue and the employment of addressed software could provide suitable tools also able to process and create new patterns.

Applications and collaborations

The research group has identified a series of organizational activities that can be addressed to leading companies in a plethora of sectors and industries. For instance, the jobs can be carried out are:

- Fashion companies: consultancy for the adaptation and employment of historical geometric patterns;
- Audio-visual technologies: consultancy for the creation of visual multimedia materials concerning the aniconic image conception, the Islamic ornament, the geometric ornament, etc.;
- Pottery district: consultancy for the process of creation of new patterns in the context of creation and decoration of ceramic tiles and pottery objects;
- Paper district: consultancy for the process of creation of new patterns in the context of creation and production of watermarks, etc.

For more information

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IMT SCUOLA ALTI STUDI LUCCA

REGIONE TOSCANA

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