

Cartographic Heritage embedded into the Digital. Achievements and expectations

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The 7th annual Workshop **DIGITAL APPROACHES TO CARTOGRAPHIC HERITAGE** of the International Cartographic Association (ICA) **Commission on Digital Technologies in Cartographic Heritage** is the result of the Commission's main task activity since its birth, first as a ICA Working Group in July 2005, according to the decision of the ICA Executive Committee in A Coruña, its upgrading in the status of an ICA Commission, according to the ICA General Assembly decision in Moscow, 2007 and its reconfirmation for a second four years term, up to 2015, according to the ICA General Assembly decision in Paris, 2011.

The philosophy behind the establishment of this ICA activity is simple but challenging. It is based on the foreseen that our multifaceted **Cartographic Heritage**, this very important and continuous part of the World's overall cultural heritage could possibly offer a variety of benefits and advantages to our modern cartographic science and technology, and to its future, enriching and strengthening the interest and concern not only of experts dedicated to Cartography and Maps but also of the society and the general public. This can and should be done today taking full advantage of all the possibilities, which are profusely available by modern **digital information and communication technologies**.

As I have stated six years ago at the opening of the 1st Workshop at Thessaloniki, the strategic objective was "... *to bring together the ensemble of cartographic heritage with the digital mainstream in order to comply with the international contemporary policies on cultural issues in the conceptual and the operational sense (e.g. the projects on cultural heritage financed by the European Commission should obey the digital precondition!)* and to offer the grounds for the attraction of young researchers who are already familiar with digital technologies and are interested in or fascinated by history...". I think that this strategic view is still valid, strong and inspiring.

Six successful Workshops, all kindly invited by the hosting institutions, represent the up to now history of this Commission. They held in Thessaloniki (2006) at the Museum of Byzantine Culture; Athens (2007) at the National Research Foundation; Barcelona (2008) at the Institut Cartogràfic de Catalunya; Venice (2009) at the Università IUAV; Vienna (2010) at the Technische Universität; The Hague (2011) at the National Archives of the Netherlands.

Thanks to these Workshops we managed:

a) **To formulate, establish and advance the concept of Cartographic Heritage** and clarify the affinities with and the distinctions from History of Cartography.

b) **To define the fields and components, inherent in the context of Cartographic Heritage, which meet and integrate with modern Digital Technologies mainstream.** Digitization technologies and acquisition, both in 2D and in 3D, georeference processing, issues in digital map documentation, retrieval, access, transfer, both in-situ and in the net, become of major interest in map archiving and map librarianship as well as issues related to the socialization of Cartographic Heritage through physical and virtual exhibitions and educational and cultural relevant synergies addressed to the general public. In this respect **the Commission resulted as a multiplier and an amplifier**, a fact proved by numerous other affine initiatives, meetings and conferences, which came out and are coming out all over the world in this direction, organized by a variety of initiators and operators.

c) **To expand the horizons and open new in research, development and implementation**, as it is proved by relevant new activities in the Academia (theses and doctoral dissertations) and in other institutions (Centres of Research and Development, Libraries, Archives, Collections). Here one should mention and underline the academic research which is continuously developing in **analyzing the cartographic content of historical maps**, especially as far as the geometric component is concerned. Important new findings came out from this research, which enrich the History of cartography and maps, involving proper analytical methodologies (e.g. transformation, best fitting and deformation analyses) and adequate use of image processing techniques (e.g. digital transparency supporting comparative studies).

d) **To inspire strong partnerships and joint ventures**, as more and more examples show, where collective efforts are competing to get funding from international institutions in order to modernize and develop structures, facilities, activities and accesses in Cartographic Heritage and to promote its treasures.

d) **To contribute in the development of expertise and new products in the field of services and digitization industry**. Inspired and encouraged by this Commission some important initiatives started in the private business sector, as it is the case of the creation of small-medium enterprises dealing with the support of the work of Map Libraries, Map Archives and Map Collections as well as the improvement in the digitization industry, which implement advances and innovation in building scanners taking into consideration issues discussed and suggested in the Commission's Workshops.

e) **To encourage and promote the inter-disciplinary dialogue** (which is sometime of a real inter-cultural nature) between the world of digital technologies and the worlds of history of cartography, map-librarianship, map-archives and map-collections.

f) **To feed the international literature** with relevant papers encompassing content, terminology and methodologies related to issues introduced and elaborated in the work-frame of this Commission. In this domain belongs also the case of *e-Perimetron*, the international web journal on sciences and technologies affined to history of cartography and maps, emerged at the same time when the Commission was created in 2006. This well-followed web journal is since then a free tool for the spreading the scientific and the technology results produced in the frame of the Commission's work.

The Commission started its second term (2011-2015) focusing on the following Terms of Reference:

- **The theoretical deepening and broadening of the issue of Cartographic Heritage**
- **The development of methodologies and standards applied on proper two- and three- dimensional digitization of Cartographic Heritage objects, materials and documents**

- **The study and implementation of analytical tools applied on the comparative research concerning the geometric and thematic content of old maps**
- **The digital map libraries and map collections: Archiving, matching, management, networking and accessibility in-situ and in the web**
- **The modern information technologies and interactivity in attracting the general public to Cartographic Heritage: implementations in museology and virtual map exhibitions**

Concerning the major activity of this Commission which is the annual Workshop, our intent is to continue in the more or less same path, but possibly specifying a major subject each time (in the way the Commission's 1st Tutorial was organized in Paris, July 2011, on the **3D digitization of Globes**, in association with Francesco Guerra's Venice IUAV group and the BnF with the assistance of Commission's member Patrick Bramoullé). Instead of leaving the workshop content totally free (which was necessary in the first period, in order to formulate the platform of interests in Cartographic Heritage), the wishful intend now is to specify a major field of interest, according to the Terms of Reference, and to focus on this, as the central theme of the annual Workshop, keeping at the same time the sessions open for eventual minors, always relevant to the Terms of Reference.

In this Commission's second term a new initiative was formulated in order to support and strengthen our work, with the perspective to keep its subject viable in the future: the introduction of the concept of the **Supporting Institution (SI)**, an organized network of groups of people with institutional reference, sharing actively and supporting the Commission's vision, ideas and implementation. The **SI** is mainly a single **public institution** (university, library, archive, agency, etc.) with systematic interests and continuity relevant to the Commission's Terms of Reference, which was actively, involved in our work, during the Commission's first period, either institutionally or with a number of people working there, which interacted positively with the Commission. These **SI**s are considered as "reference points" in the Commission's life. At this point our **SI**s come from **Barcelona** (the Institut Cartogràfic de Catalunya, Ref. Carme Montaner), **Venice** (the Università IUAV di Venezia, Ref. Francesco Guerra), **Edinburgh** (the National Library of

Scotland, Ref. Chris Fleet), **Budapest** (the Eötvös Loránd University, Ref. László Zentai), **Thessaloniki** (the Aristotle University of Thessaloniki, Ref. Chrysoula Boutoura; Alexandra Kousoulakou), but **the list is open and inviting** for other groups interested to join, coming from all over the World, which will commit, as a group, to participate actively in any positive way and to support this second term of our Commission's work until 2015. No other formal commitment - including financing - is requested in order to become the Commission's **SI**.

The list of **SI**s is also open and inviting to the **non-public sector**, of profit-oriented character, dealing with R+D ventures close to the Commission's Terms of Reference. We have successful examples in this category which followed systematically the Commission's activities in the first period and are still present in our work. The Commission is open to discuss participation of these non-public firms, according to ICA's policies on the issue.

This Commission will conclude its mission in 2015 at the next ICA General Assembly, to be held in Rio de Janeiro, **ten years after its creation** in A Coruña. Our Commission's annual Workshop on **Digital Approaches to Cartographic Heritage** created already a tradition. I hope to be able to carry out three more Workshops up to 2015. Let us all be optimistic trying to conclude our Workshop series without losses.

A top priority issue related to the Commission's ten years life (2005-2015) is the preparation and the publication, **by 2015**, of a special properly designed volume documenting the work done and illustrating all the fields developed in **approaching digitally the Cartographic Heritage**. Your contribution in this project will be significantly important.