Digital Technologies for Cartographic Heritage

Much progress has been made since the last GIM report (in May 2006) from the ICA group responsible for examining the role of digital technologies in cartographic heritage. Back then the group was officially the 'ICA Working Group on Digital Technologies in Cartographic Heritage', with the status of an ad hoc collection of individuals charged with 'studying the possibilities afforded by modern digital information and communication technologies (ICT) in observing and using our rich cartographic heritage'.

Successful
This group was remarkably successful, and the 23rd ICA General Assembly approved its development into a formal Commission. Terms of reference include supporting the transformation of old maps, globes and cartographic documents into digital form; applying digital techniques in the study of old maps; developing digital tools for assisting the work of map curators and functionality of map libraries, networking and access to cartographic heritage; applying digital support for the preservation and restoration of old maps, atlases and globes; and fostering ICT in teaching and disseminating the history of cartography and maps to the public.

Overlap
It thus has significant overlap with other geomatics disciplines outside cartography, and its work has contributed to and is itself influenced by photogrammetrists, architects, historians, archaeologists, geodesists, archivists and vision scientists. The Commission’s website indicates the wide-ranging activities undertaken by the group under the dynamic leadership of Professor Evangelos Livieratos from the Department of Cadastre, Photogrammetry and Cartography at Aristotle University in Thessaloniki.

Annual Meetings
The work of the Commission has included successful annual meetings in Thessaloniki, Athens, Barcelona, and, most recently, Venice. Topics addressed have included both general overviews of technologies and specific investigations into particular map documents, methods and applied tasks. Alongside these meetings, the work of the Commission stands recorded in an eminent online, refereed journal, e-Perimetron (See ?1), which promotes both the research presented at meetings and contributions from outside the Commission. It was started in 2006 and has appeared quarterly every year since, each issue carrying up to half a dozen papers.

Contents
Contents have addressed technologies (e.g. Fleet’s ?Locating trees in the Caledonian forest: A critical assessment of methods for presenting series mapping over the web?), assessments of individual maps (e.g. ‘The Petr Ivanovich Sevastiano’s 19th century Holy Mt Athos plans, embedded in a modern digital 3-D local cartographic environment’ by Ploutoglou, Pazarli and Boutoura), methods for utilising heritage sources (e.g. ‘Some efforts for re-mapping the area and securing the available documented articles affected by tsunami in Aceh, Indonesia’ by Martha and Utomo) and specific tasks to which such approaches can make a valuable contribution (e.g. Gaspar’s ‘Dead reckoning and magnetic declination: unveiling the mystery of portolan charts’).

This Commission has a significant agenda to address and is taking a wide-ranging view of its subject matter, with positive results.

https://www.gim-international.com/content/article/digital-technologies-for-cartographic-heritage