

ICA Page: Visualising Cartography

Reading these columns you must have noticed by now that the International Cartographic Association (ICA) has many different faces when it comes to maps - not so strange if you imagine the types of maps that exist or the different fields of application in which they are used. More than twenty ICA commissions are tasked with taking an inspiring look at maps. There are commissions dedicated to Mapping for Africa or Atlases, even Children, and, of course, Education. This particular column discusses the activities of the Commission on Visualisation and Virtual Environment

Collaboration

This commission has studied the changing and expanding role of maps in science, decision-making, policy formulation and society in general; changes resulting from continuing technological and conceptual advances that are enabling new forms of map to be used as visual thinking/decision-support tools. Our focus has centred on how to use and apply methods and techniques from other disciplines like scientific visualisation, computer graphics, virtual reality, information visualisation and, most recently, visual analysis, within the discipline of cartography. The working approach has been to organise annual meetings for international scientists centred on a theme from the research agenda established and published by the commission. This has resulted in biannual special issues of relevant scientific journals. Through these publications, and by inviting participants from outside our cartographic community, we actively propagate cartographic visualisation ideas within our own cartographic community as well as trying to reach out to other disciplines, the GIScience community and the Information Visualisation community. An important and longstanding collaboration has been with the Association for Computing Machinery's Special Interest Group on Computer Graphics (ACM SIGGRAPH) Carto Project.

Snapshot

Our links with non-cartographic communities have given us a different and fresh approach to mapping. In our view, the map is no longer the map as many of us know it. Although we still recognise and value the traditional role of a map as a tool for "presentation", it should also be seen as a flexible interface to geospatial data. Maps offer interaction with the data behind the visual representation and are instruments that encourage exploration. As such they are used to stimulate (visual) thinking about geospatial patterns, relationships and trends. The context within which maps operate in this way is the world of Geovisualisation, as described in the book *Exploring Geovisualization* (edited by Dykes, MacEachren and Kraak, and published by Elsevier in 2005) as a loosely bounded domain that addresses the visual exploration, analysis, synthesis and presentation of geospatial data. It does so by integrating approaches from disciplines including cartography with those stemming from scientific visualisation, image analysis, information visualisation, exploratory data analysis, visual analysis, and GIScience. This book covers the current state of the art within the working field of the commission. However, the book offers no more than a snapshot of on-going developments. We will continue via ICA workshops and seminars to facilitate exchange of ideas between cartographers and others working on geo-related problems.