

**ECONOMIC AND SOCIAL COUNCIL**

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**Ninth United Nations Regional Cartographic  
Conference for the Americas  
New York, 10-14 August 2009  
Item 7(a) of the provisional agenda  
Strategy, policy, economic, and institutional issues**

**ICA Research Agenda<sup>\*</sup>**

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**\* Prepared by Menno-Jan Kraak, Vice President, International Cartographic Association (ICA)**

# ICA Research Agenda

Menno-Jan Kraak



# Programme de recherche de l'ACI

Menno-Jan Kraak



## ICA Research Agenda

- Background
- Need for a Research Agenda
- Content
- The Research Agenda and the Commissions and Working Groups
- The Research Agenda and ICA Policy
- Conclusions



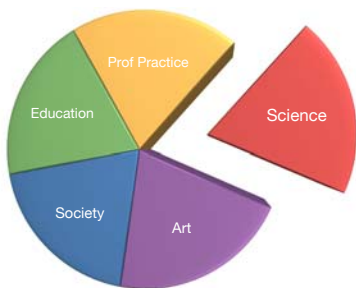
## ICA's operating environments



- promote application of cartography
- development and promotion of our subject
- support professionals and users
- development scientific and technology base
- stimulate a good design



## ICA's Science operating environment

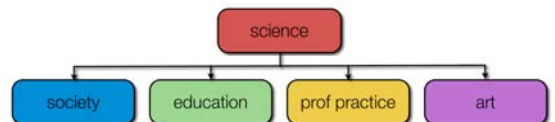


- The development of the scientific and technological basis of Cartography and GIScience
- more interdisciplinary
- technology driven developments
- maps: any-where, any-time, any-appearance



## Research Agenda

- Keep track of theory, concepts, methodology and technology relevant for our discipline
- Linked to and stimulate the other operational fields (Society, Education, Professional Practice, and Art)

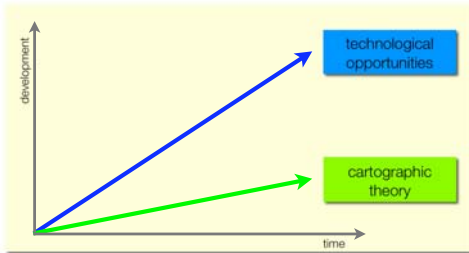


- Give guidelines for ICA C&WG's work and improve co-operation
- Moderate discussion, interaction and co-operation within and without ICA
- Support the development of an effective ICA C&WG structure



## Need for a research agenda

- The gap: technology is developing rapidly but the theories and theoretical approaches remain traditional



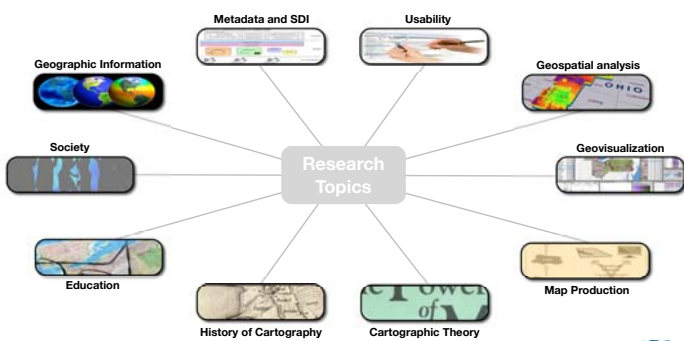
## Creating the research agenda

- 2005 • Base was ICA's Strategic Plan (2001/2003)
- 2006 • A result of brainstorming sessions in ICC A Corunã
- 2007 • Further developed by Commission chairs and EC members
- 2007 • First version was presented / published at Moscow ICC
- 2008 • Content was linked to ICA Commission & Working Groups' TORs
- 2009 • Published in the ICA endorsed Journals

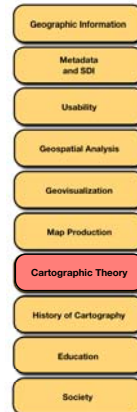
*The research agenda is supposed to be a living document*



## Content of the Research Agenda



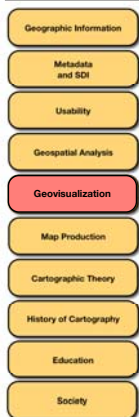
## Sample content: theory topic



- Conceptual analysis of maps and Cartography
- Structural models of Cartography
- Map artefact as a concept
- Cartographic design principles
- Cartosemiotics: map syntactics, map semantics
- Geospatial knowledge
- Cartographic ontology, terminology



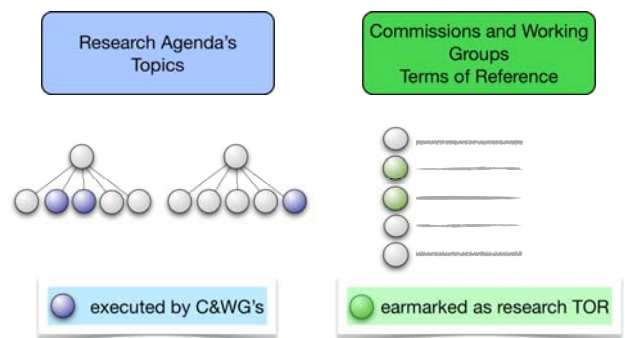
## Sample content: geovisualization topic



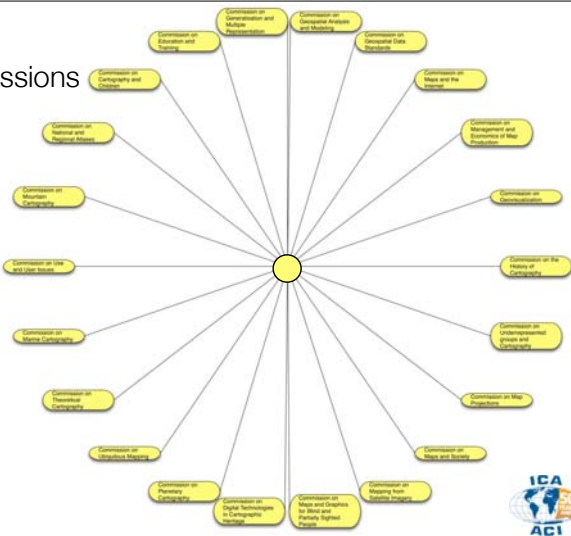
- Explorative data analysis
- Geovisual analytics
- Visualization in knowledge acquisition and reasoning
- Collaborative decision-making
- Visualization processes and models
- Visual thinking



## How well is the agenda 'implemented'



## Commissions



## Working Groups



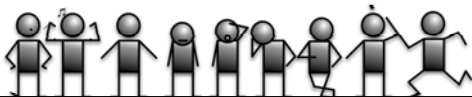
## On-line enquiry among C&WG chairs

### 15. Task 2 - Commission 10

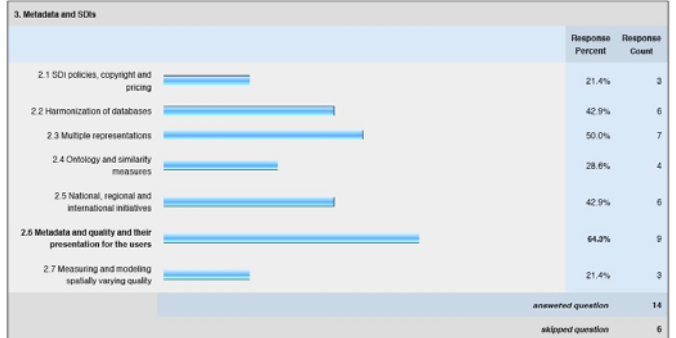
Indicate which of your terms of reference is related to research.

#### 1. Commission on National and Regional Atlases

- Produce a cookbook for the production of (digital) national and regional atlases
- Promote and support the design, production and use...
- Conduct workshops and / or seminars...
- Document guidelines and procedures for the...
- Elaborate and maintain an electronic inventory...
- Maintain a commission website...
- Encourage efforts for integrating data...

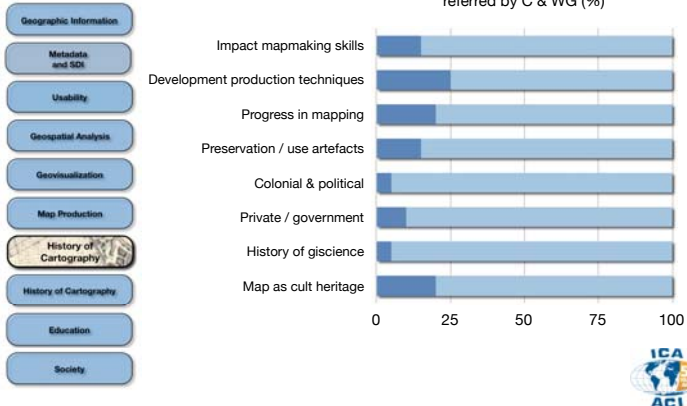


## Analysis of the enquiry results



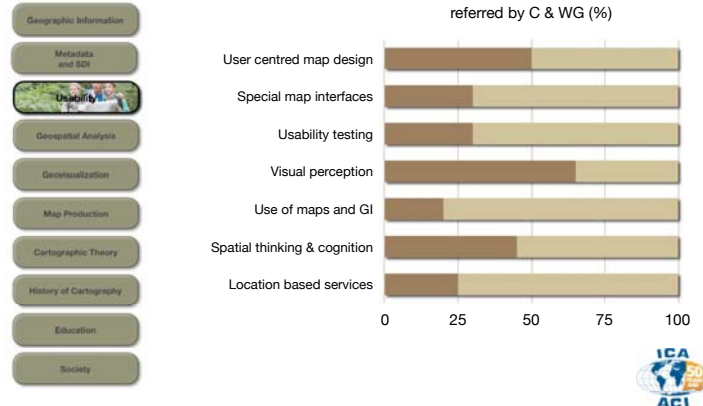
## Doing history ....

referred by C & WG (%)

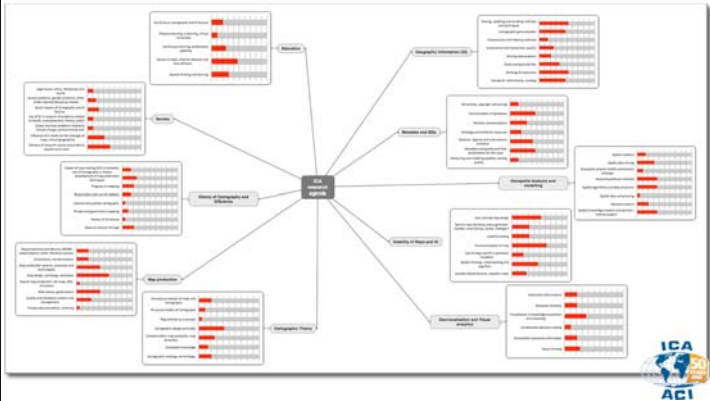


## Doing usability ....

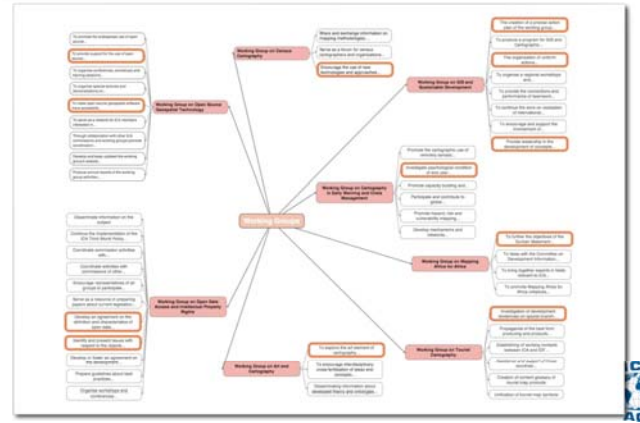
referred by C & WG (%)



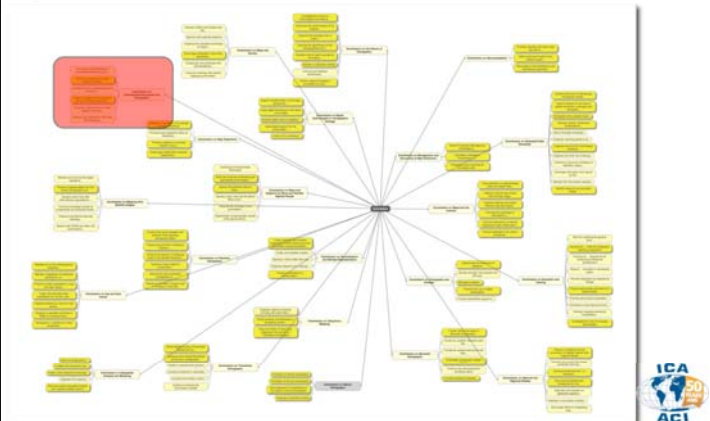
## Interest in the research topic



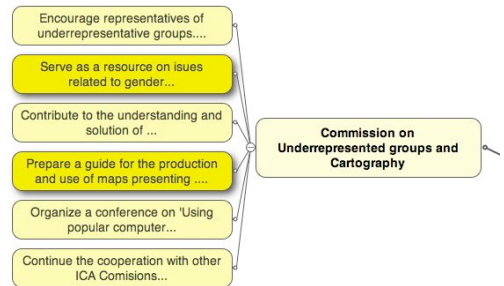
## Working Groups, Terms of Reference & Research



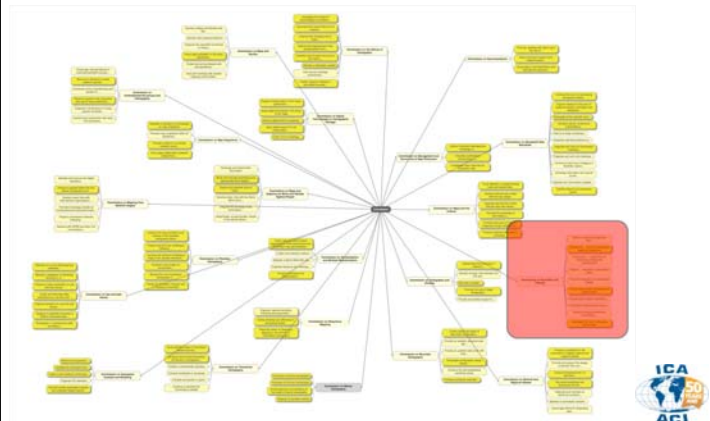
## Commissions, Terms of Reference & Research



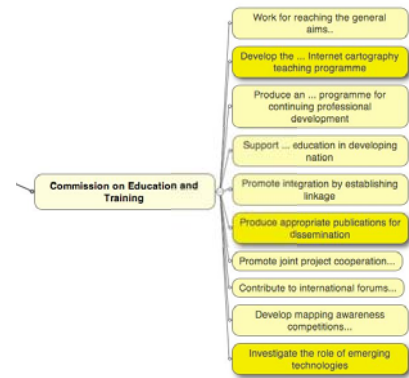
## A sample of TOR and research



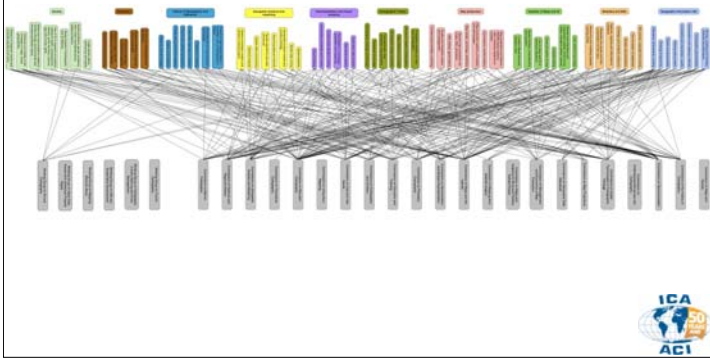
## Commissions, Terms of Reference & Research



## A sample of TOR and research

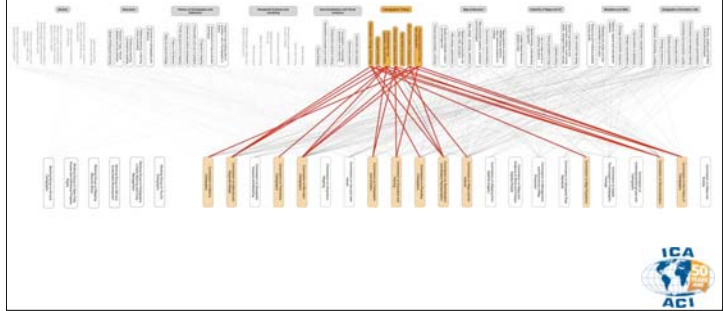


## Relation research topics and interests C&WG



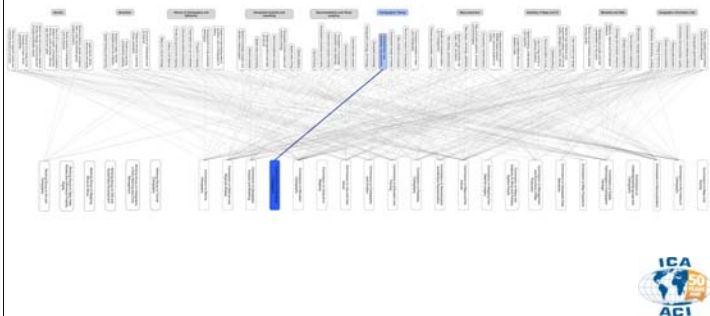
## Research topics versus C&WG

- Interests in Cartographic Theory : twelve Commissions



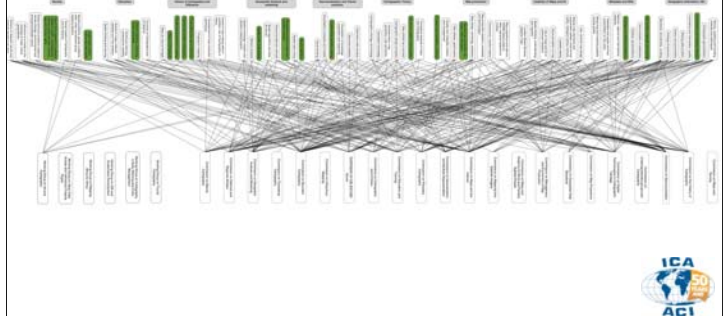
## C&WG versus Research topics

- Interests of the Commission on Theoretical Cartography : Cartosemiotics: map syntactics, map semantics



## Lonely research topics

- topics mentioned by only one or two C&WG's: ontology, documentation, legal issues, and history of gisience



## Dissemination of the agenda

- In our 2009 english language journals



vol. 46, no.2, pp 63-75



vol. 36, no.2, pp 209-222



vol. 44, no.1, pp 44-55

- Potential German, Spanish, Russian, and Chinese translations (Polish realized)

- ICA website



## What is missing?

- The research agenda is supposed to be a living document
- Recent trends
  - Neogeography



## ICA Policy based on Research agenda

- Guideline for cooperation between C&WG's
- Management of the amount of C&WG's
  - realize research is just one of the environments
  - realize C&WG's depend on 'voluntary' workforce
  - realize the research is done/dictated in members own institute /university
- C&WG play an important role in international (cartographic) cooperation and each have their niche



## ICA's operating environments revisited

- matrix C&WG versus environments

