The influence of data, media and design on the future of Cartography

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Some context: Relevance of Cartography
- Cartography is...
- Cartography is influenced
- Cartographers & Mapmakers

Future:
- data
- media
- design
- Next?

Relevance
- The killer maps……

Cartography
- ....the art, science, and technology of making and using maps
### Cartography influenced

<table>
<thead>
<tr>
<th>ART</th>
<th>SCIENCE</th>
<th>TECHNOLOGY</th>
<th>MAKING</th>
<th>USING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Designers</td>
<td>Visualization</td>
<td>GPS</td>
<td>Mobile</td>
<td>Crowd</td>
</tr>
<tr>
<td>Data visualizers</td>
<td>GIScience</td>
<td>Internet</td>
<td>Web - D3</td>
<td>Professionals</td>
</tr>
</tbody>
</table>

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### ICA activities

- **Planetary Cartography**
- **Mountain Cartography**
- **Art and Cartography**
- **Map Design**
- **SDI and Standards**
- **Generalization and Multiple Representations**
- **Cognitive Issues in Geographic Information Visualization**
- **Geospatial Analysis and Modeling**
- **Visual Analytics**
- **Toponomy**
- **Cartographic Heritage into the Digital History of Cartography**
- **Open Source Geospatial Technologies**
- **Maps and the Internet**
- **Location Based Services**
- **Maps and Graphics for Blind and Partially Sighted People**
- **Atlases**
- **Map Projections**
- **Topographic Mapping**
- **Sensor-driven Mapping**
- **Map Production and Geoinformation Management**
- **GI for Sustainability**
- **Ubiquitous Mapping**
- **Use, User and Usability Issues**
- **Cartography and Children**
- **Education and Training**
- **Cartography in Early Warning and Crisis Management**

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### Cartography

- **Geographic Data**
- **Map**
- **visualization process**

### Cartography: when live was simple

- **data**
- **cartographic visualization**
- **map**
- **cartographers**

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**International Cartographic Association**

*Association Cartographique Internationale*
**Cartography: media challenge**

- Data
- Visualization
- Map / other graphic
- Cartographer
- Artist
- Designer
- Personalized interaction
- Hidden stories?

**Cartography: design challenge**

- Data
- Cartographic visualization
- Map
- User
- Clarity +
- Edit
- Learn from the past
- Privacy
- Evidence

**Quotes and observations**

- Good maps are invisible
- Importance of context / personalized maps
- Time (to create / to use ……. society get faster and faster)

**Next….**

- Reports….
- Paper in research agenda
  (special issue International Journal of Cartography)

- Participate in ICA activities
  - ICC Washington 2017
  - Commission activities (there is a flavor for all of you)
Let's make the world a better place with maps

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Cartography: when live gets challenging

Cartography influenced by....
Let’s make the world a better place with maps