Cartography today

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• Introduction
• About Cartography
  • Definition debate
  • ICA context / developments
• Maps
  • International Map Year
  • Relevance of Cartography
• Next

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About Cartography

• ...the art, science, and technology of making and using maps
[ICA Strategic Plan 2003–2011]
Survey Dresden 2013 / 142 entries


• Is this proof?
• Not, if everyone knew the definition by head circular reasoning
• Still......

About Cartography

• the art, science, and technology of making and using maps

Many ‘correct’ design options
About Cartography

- ...the art, **science**, and technology of making and using maps

- ...the art, science, and **technology** of making and using maps

- ...the art, science, and technology of **making** and using maps

- ...the art, science, and technology of making and **using** maps

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**Bertin’s Data Analysis**

**INTERNATIONAL CARTOGRAPHIC ASSOCIATION**

**Association Cartographique Internationale**

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The sustainability of the definition

The sustainability of the definition

The elasticity of the definition: push and pull by developments

- Info vis
- Internet
- Professionals
- Data Vis
  - art
  - science
  - technology
  - making
  - using
- Designers
  - GIScience
  - GPS
- Crowd
- D3

About Cartography

- Do we need a new definition?
  - No......
- It is simple and clean, and hype-proof
- Developments will play the elasticity of the chain of keywords

- Debate is always possible:
  - are these the right keywords?
  - what is meaning of the keywords?
  - should it be more extensive?

What about the relation between the definition and activities within ICA over time?

Spatialization of the work of the International Cartographic Society 1993-2013
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Contribution of Commissions and Working Groups to Cartography

Maps and Graphics for Blind and Partially Sighted People
Open Source Geospatial Technologies
Use, User and Usability Issues
Maps and Graphics for Blind and Partially Sighted People

Cognitive Issues in Geographic Information Visualization
Education and Training
Generalisation and Multiple Representations
Map Production and Geoinformation Management
SDI and Standards
Location-Based Services
Maps and the Internet

Visual Analytics
Atlases
Geospatial Analysis and Modeling
Map Design
Cartography and Children
Sensor-driven Mapping

Commissions and Working Groups over time
The International Map Year [mapyear.org]

- Objective: increasing peoples’ knowledge of cartography
- IMY Working Group has produced a textbook, *The World of Maps*, that can be freely downloaded from the IMY homepage
- Originally written in English, with translations in French and Spanish, and in near future in Chinese, Arabic, and Italian
- Number of downloads by October 8, 2015: 14,419
**Cartography and maps**

We do have a definition!

A map is a symbolised representation of geographical reality, representing selected features or characteristics, resulting from the creative effort of its author’s execution of choices, and is designed for use when spatial relationships are of primary relevance.


**Survey Dresden 2013 / 142 entries**

• place based... rep (alan)

A representation of the environment...

Work in progress....
Changes: Cartography and maps

- Design and create maps that are ‘authoritative’ and offer insight and support decision making
- Yesterday
  - Filling gaps to present the essence of the message
- Today
  - Retrieve the essence and presented interactively in multiple alternatives allowing the user to interact, change, and ultimately understand

ICA, IMY and UNGGIM: new sustainability goals

- Goals
  - Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

- Targets
  - 4.1
  - 4.2
  - 4.3
  - 4.4
  - 4.5
  - 4.6
  - 4.7
  - 4.1.1
  - 4.2.1
  - 4.3.1
  - 4.4.1
  - 4.5.1
  - 4.6.1
  - 4.7.1
  - 4.7.2
  - 4.1.2
  - 4.2.2
  - 4.4.2
  - 4.6.2

- Indicators
  - 4.1.1
  - 4.1.2
  - 4.3.1
  - 4.5.1
  - 4.7.1
  - 4.7.2

http://www.un.org/sustainabledevelopment/education/

Our relevance

ICA, IMY and UNGGIM: new sustainability goals

Sample Targets

- 4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes
- 4.2 By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education
- 4.3 By 2030, ensure ……..
- …..

http://sustainabledevelopment.un.org/content/documents/6754Technical%20report%20on%20the%20UN%20IS%20Bureau%20Final.pdf
ICA, IMY and UNGGIM: new sustainability goals

Sample Indicators

- **4.1** By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes
  - **Indicator 4.1.1** Percentage of children who achieve minimum proficiency standards in reading and mathematics at end of: (i) primary (ii) lower secondary
  - **Indicator 4.1.2** Completion rate (primary, lower secondary, upper secondary)

- **4.2** By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education
  - **Indicator 4.2.1** Early Childhood Development Index
  - **Indicator 4.2.2** Participation rate in organized learning (one year before the official primary entry age)

Let's make the world a better place with maps