Traditions of visualising spatial policy in Europe
Opportunities and challenges for territorial cooperation

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• Increasing cooperation on territorial development at EU and transnational levels
• Maps as powerful tool in presenting and communicating spatial trends (analytical function) and visualising spatial futures (normative function) – but also controversial

➢ Traditions of visualising spatial policy in Europe
➢ Opportunities and challenges for territorial cooperation and innovative approaches to cartography
• Increasing understanding of maps as practices of power-knowledge
  'Deconstructing the map' (Harley 1989)
  'How to lie with maps' (Monmonier 1996)
  'The power of maps' (Wood 1992)
  ➢ Maps are socially constructed (dependent on context and on the values and interests of those involved in the cartographic process)

However:
• assumption of 'objective cartography' appears still dominant, despite:
  – Selection, schematisation and generalisation process
  – The 'internal' and 'external' power of maps (Harley 1989), and the graphic and linguistic structures of maps (Pickles 1992)
  – The ‘positivist roots’ of GIS (Veregin 1995)
  – Zoning and the focus on the material aspects of the planned territory (Söderström 1996)
The Netherlands
comprehensive-integrated planning in a unitary country

*National Spatial Strategy*

Nota Ruimte (2004): Urbanisation key map

*Provincial Streekplan*

Germany
comprehensive-integrated planning in a federal country

Bund/Länder Guiding principles

State spatial development programme

Raumordnungspolitischer Orientierungsrahmen 1993

Landesentwicklungsprogramm III Rheinland-Pfalz 1995
Planning traditions in visualising

England
From land use management to ‘integrated spatial planning’

No national spatial plan for England - PPSs

Regional Spatial Strategy (RSS)
Cross-national comparison of the level of abstraction in Dutch, German and English strategic spatial plans

- How 'certain' does the content of the map seem?
- Who is the audience?

- Much variation on cartographic design in Dutch and English spatial plans at same level
- Overall are German and also Dutch regional-level plans much more detailed and complex than English regional strategies
- Dutch 'integrated plankaart' approach: complex maps
- German plans in particular aimed at giving certainty to lower planning tiers, topographic map base, rational-scientific appearance
Cross-national comparison of policy aims in text and graphical expression in strategic spatial planning documents in the Netherlands, Germany and England

- How important is visual medium in plan? Do text and map communicate the same message? Who is the audience?

- Structural distortion in favour of zones and objects / urban bias

- English documents text-heavy – many policies not visualised

- 'Island perspective' in many English plans

Source: Dühr 2007
Spatial positioning and links with neighbouring territories

The Netherlands in North-west Europe (Nota Ruimte 2004)

North-East of England Plan (RSS 2008)

Landesentwicklungsplan Nordrhein-Westfalen (1995)
Summarising reflections

• More comprehensive visualisation in Dutch and German spatial plans:
  – Germany: hierarchical and regulative planning approach, scientific-rational approach to mapping
  – Netherlands: power of consensus, 'golden reins' of national government funding

• English visualisations reductive: infrastructure, urban areas, economic development, nature protection designations…
  – Strong emphasis on written statements, sectoral policy
  – Policies often non-spatial, and little tradition of visualising

Overall:

• Structural distortions in favour of urban areas, infrastructure and 'zoning' (designations)
• Widening scope of planning systems not reflected in visualisations – traditional approaches are carried forward in maps: increasing discrepancy between communication media
• Spatial positioning underdeveloped, static representations dominate, territorial functional interlinkages largely ignored
Types of maps in the planning process (Moll 1991, 1992)

- “Internal maps”: working maps for analysis and reference
- “External maps”: intended for reproduction (quality, design, audience?)

Three types with different functions:
- Base maps (topographic or analytical maps)
- Cartographic representations for participative purposes (policy maps, but possibly sketchy)
- Final policy map, intended for reproduction

Statutory versus non-statutory planning instruments:
- Different audiences and different functions
- Different maps for different purposes: analysis / presentation, communication…
- which tools and media (from paper maps to computer visualisation)?
- which symbology?
Map use and visualization (McEachren 1994)

Opportunities for interaction with different user groups through computer visualisation

A continuum of map use:

- map use that is *private* (where an individual generates a map for his or her own needs) versus *public* (where previously prepared maps are made available to a wide audience);
- directed toward *revealing unknowns* (where the user may begin with only the general goal of looking for something ‘interesting’) versus *presenting knowns* (where the user is attempting to access particular spatial information); and
- map use with *high human-map interaction* (where the user can manipulate the map(s) in substantive ways) versus *low interaction* (where the user has limited ability to change the presentation).

Source: MacEachren 1994: 6

What type of cartography for territorial planning?
What type of cartography for territorial planning?

Time-space geographies and visualising flows

• Paper medium vs. computer animations
• Data availability and selection of information?
• Scale of analysis and representation?

Dublin: Incommuting 3D surface map
Source: Yarwood et al.: POLYNET project Action 1.1

Tourists to the Arnheim-Nijmegen city region
Source: KAN-Atlas 2003: 39

‘Shrinking of the European space’ through High-Speed-Train connections
Source: Spiekermann und Wegener 1993
• Differences in planning traditions of visualising:
  – Less directly subject to change than policy discourse (the ‘roots of planning traditions’)
  – Reflect differences in understanding of planning and of maps in planning
  – 'uploading' of national ideas and policy preferences in European territorial initiatives, including mapping techniques

• Which innovative cartography and cartographic language for Europe?
  – Function and audience
    emphasis to date mainly on (quantitative) analysis; little qualitative (immaterial) or normative / policy visualisation at European level
  – The continuing belief in objective and 'neutral' GIS-based maps and the mistrust against 'biased' policy maps
  – Power and politics in map production and in use of maps (e.g. structural funds)
  – Dynamic representations (time, functional relationships), 2D and 3D presentations data and indicators, audience, function…. 
Thank you for your attention
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