

The national atlas in a world of change - a tool for geovisual analytics?

ABOUT WEB 2.0 AND MAPS:

.... IN MANY WAYS, THESE MAPPING TOOLS ARE RE-LOCATING US AS THE CENTER OF OUR PERSONAL UNIVERSES. WE NO LONGER GO TO MAPS TO FIND OUT WHERE WE ARE. INSTEAD, WE TELL MAPS WHERE WE ARE AND THEY FORM AROUND US ON THE FLY, A SENSATION THAT CAN BE COMFORTING OR STIFLING.... JESSICA CLARK / [HTTP://WWW.INTHESETIMES.COM/ARTICLE/3524/THE_NEW_CARTOGRAPHERS](http://www.inthesetimes.com/article/3524/the_new_cartographers)

After a brief introduction of the latest 'formal' trends in cartography and geovisualization the impact of the above statement on a national atlas operating in a country's geodata infrastructure will be discussed. The above statement indicates a dramatic change in our attitude to maps. This change was started by the introduction of Google Earth / Google Maps and alike. It has had a major impact on maps on the web. It's global free coverage, and its appeal and ease of use has introduced web mapping to the wide consumer market. With Mash-ups one can create customized and privatized maps. In combination with other Web 2.0 facilities such as wiki's, blogs, photosharing, podcasting, social software like facebook, folksonomy and (geo)tagging, as well as rss feeds users contribute to the collection of geo-referenced materials available via the web. This trend has been 'classified' as neo-geography.

Would it be possible to bring these often informal data collection processes of Web 2.0 together with the formal world of for instance the National Atlas or Topographic Maps, such that both world could benefit? From a National Atlas or Topographic Map perspective it is an interesting question if it would be possible to use these communities to up-date / extend the map content. Of course not all content can benefit from this approach. Topics not directly observed or measured (like geology) or those which are already very well measured (like weather) do not qualify. However, topics like the spread of flora and fauna, especially in the light of changing climate could profit. It raises all kind of questions. How to judge the observations of the communities. In the traditionally national atlas map workflow the scientist would provide the data, the narrative and draft maps, and one might expect a certain quality. If one intends to include Web 2.0 communities it is likely the workflow has to be changed, but how? A National Atlas bureau would not be able to check all observations, irrespective from which community.

The **data flow** will be much more dynamic, but also more irregular in content, quality, geographic spread, temporal distribution etc. then in the past (of in today's Geodata Infrastructure). How to tap into this data flow supporting different data characteristic like streaming and GIS data? In addition the National Atlas and Topographic Mapping agencies have well defined workflow processes, while in the Web 2.0 world workflows are not standardized and much more dynamic. How does the evolution of the 'new' data flows effects the evolution and data quality of dependent data flows? This of course will generate all kinds of sub questions like e.g. related to the organization of the data flow, the quality of the produced data, or the propagation of data flow evolution.

Map design in a neogeography environment will require innovation of the traditional approaches. The strength of maps is their ability to select from reality and abstract the selection via a well design symbolization. This results in maps that are characterized by their relative emptiness, by visual hierarchy and have a particular appealing style. Both selection and abstraction are challenged. Under which circumstances are the traditional assumption (un)valid. Especially in the context of the formal cartography of Topographic Mapping and National Atlases challenges are found. Should the products just be annotated with the user data or should they be redesigned. What will happen to look of the maps if people can just add their own symbols? Should 'design' restrictions be implemented? Is it problematic that the maps look 'different'? Experiments should be executed to judge the impact of the effects discussed above.