

Contextualising Space and Time in Historical Atlases: Then and Now

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Paper and Virtual Cities: Programme Description

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In order to make digital maps all sorts of organizations, researchers scan historical maps and combine these into new virtual ones. In this process the original context of the old maps is often lost with serious consequences for the interpretation of the evidence of the information they provide. Most researchers study the evidence of maps by focusing on their accuracy. However the reliability of the map can not be separated from its original function and context of use. We try not only to visualize information on technical reliability, but also on the historical evidence of digital maps by means of annotations that enable the user to establish whether she or he can use the map for her or his own purposes: like historical or archaeological research, restoration etc.

The research program consists of 4 projects:

1. **Measuring the historical city** focuses on the accuracy of old and digital maps. By studying historical land surveying and mapping methods and using this information in the development of digital maps and virtual reconstructions, errors can be minimized and the processes of rectification refined. (Jakeline Benavides, PhD)

2. **Contextualizing the virtual city** by putting sources used in the development of digital town plans and virtual cities in an historical context. By combining (parts of) maps made for different purposes and (re-)used in different historical context also "messages" are mixed. This requires a study of the map as a historical source and of quality of data used in the development of digital town plans and virtual reconstructions of cities. This information is used to assign values to maps for historical evidence based on function and context of use. (Charles van den Heuvel; *the focus of this lecture.*)

3. **Visualizing the historical city** does not focus on the sources but on the virtual reconstructions of cities. The aim is to develop a methodology for a critical reading of virtual reconstructions of cities. The main question is how historical information is represented in digital town plans and virtual reconstructions of cities. How can the user distinguish between necessary manipulations and deliberate

distortions to falsify the truth? How can the user read virtual reconstructions in a critical way in order to assess the reliability of historical representations? (Charles van den Heuvel, Elwin Koster)

4. **Coding the virtual city:** the development of a mark-up language to describe these historical and contextual aspects and made them both understandable to the computer and the user. (Elwin Koster; ~ *This aspect of the project will be discussed by the author in the session **Cultural Atlas Contextual Infrastructure***)

Area studies

For the contextualization of space we focus on a manuscript 17/18 century atlas-factice (composite atlas) and separate maps (but originally belonging to a group of drawings in the atlas) of a small Dutch city, Woerden. This allows us to explore different contexts of spaces: *1 the space of the object* of the atlas itself (atlas and related maps versus the atlas digitally restored); *2 the space of the subject* of the projected town (the city mapped from various functional perspectives: fortification maps, hydraulic engineering maps, topographical maps and implications hereof for assessing the reliability of the various maps as a historical source; and *3 the space between paper and virtual maps* The concept of space in paper and digital maps (contextualizing the choice of points/manipulations for geo-referencing maps in order to make meaningful comparisons). Furthermore we depict differences of reliability in one and the same siege map of Leiden in the engraved atlas of Braun and Hogenberg as a result of the use of various sources with limited information.

Then and now

The contextualization of time will be explained by looking into manuscript maps and engravings of the city of Groningen. Two aspects of time will be put in context: the historical reliability of various maps of the same city within the same manuscript atlas and the mixing of different historical moments in one engraved map. As the result of the partial erasing and engraving anew a part within an engraving a map combines different moments in time. This leads to differences in historical reliability within one and the same map.