Analyzing the Dutch-Asiatic Trade in the 17th and 18th Centuries by Using a Spatial and Quantitative Approach

Erik van Zummeren
Bachelor student (History, University of Amsterdam)
erikvanzummeren@gmail.com

Robert-Jan Korteschiel
Bachelor student (Art History, University of Amsterdam)
rjkorteschiel@gmail.com

In recent years the Dutch Huygens Institute has released several datasets on Dutch shipping in Asia. Examples include the digitisation of the DutchAsiatic Shipping dataset (DAS) and the BookkeeperGeneral Batavia database (BGB). These databases contain an impressive amount of information. It does not only contain basic information such as a place and date of departure of every single voyage that went from the Dutch Republic to Asia and vice versa. But it also contains, in the case of the BGB database, a detailed list of onboard commodities. However, in it's present day usage these sets are mostly used as a work of reference. By visiting the DAS or BGBwebsite you can get a good understanding of a single voyage, but it's quite difficult to see the bigger picture.

By creating a visualisation based on an open source GIS system we hope to tackle this problem. Our approach consists of plotting 18 000 voyages on a world map. Each of these voyages is linked with it's date of departure and arrival. The canvas of our application only shows the voyages from a user specified time period. For instance if a user selects March 1643 only those voyages taking place in March 1643 show up. Further insights can be gained by colourcoding voyages that contain certain commodities such as tin, opium or Chinese paper. The sum of their financial value is distributed in years and are plotted in a graph underneath the map. Events are also added to the map. They show how the voyages relate to certain events, and they provide a narrative.

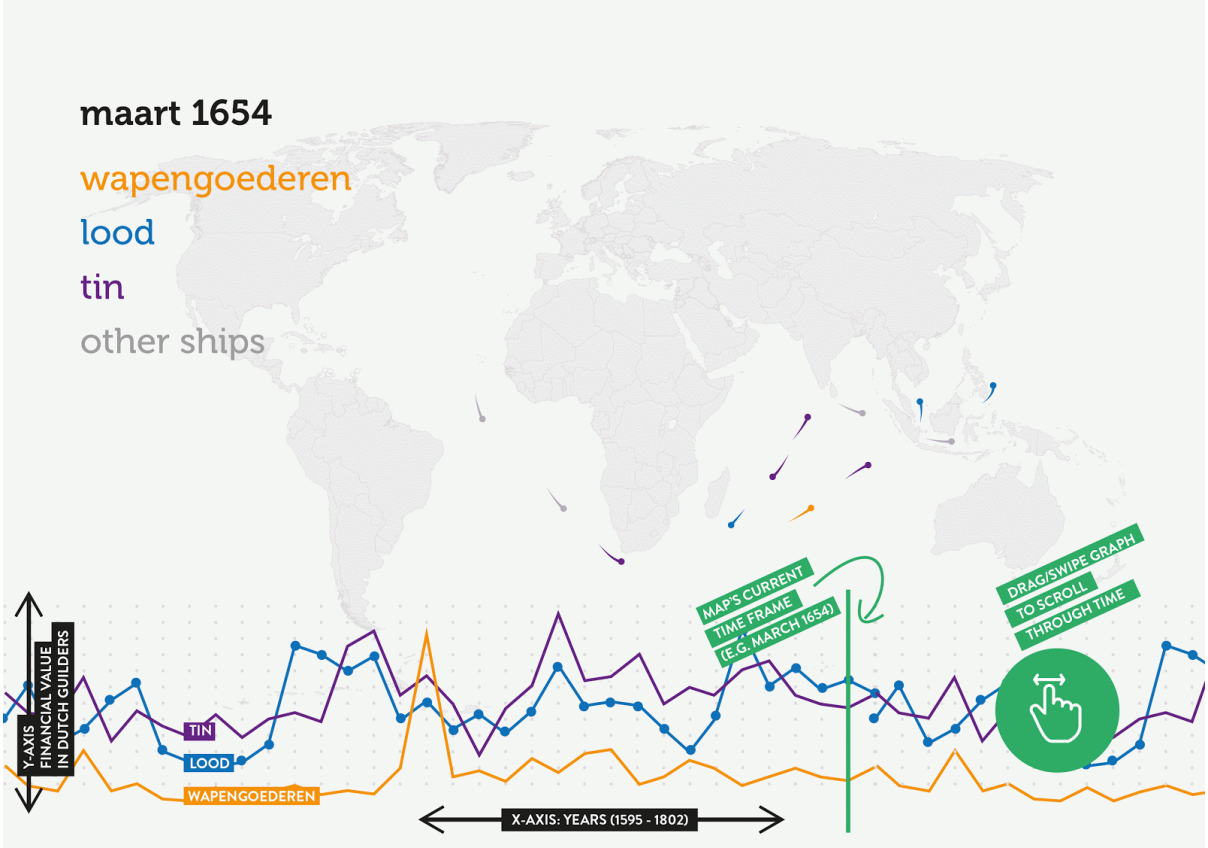

Figure 1: An early concept drawing

Time is an important element in the visualisation as well. The interactive timeline enables the user to literally scroll through time, by pressing a play button it can also play automatically. This allows the user to passively view the visualisation and intuitively interact with it when an interesting pattern presents tself. From there the user can explore the dataset even further. One way to do this could be to look at how commodities are related to certain events. For instance, can we expect a buildup in weaponry and medical goods before or after a violent conflict. Maybe it's even possible to predict certain events based on the circulation of commodities. We want the tool to assist the user in finding out where commodities, voyages and events intersect.

At this moment we only use the DAS and BGB datasets. However, we also expect to incorporate other datasets related to the Dutch trade in the East Indies in a later stage. Since the tool is open source, other researchers can fork it and put in their own data and use it for their own needs.

This project evolved from a course we did during the Digital Humanities minor (UvA/VU). Therefore this presentation/demo might not only be interesting for those who are into (H)GIS, history or data visualisation, but also for those who want to get an idea what a digital humanities student project looks like.