Lim, Jee Yeon
Leigh, Lieberman
Digital Humanities Studio
February 8, 2019

Review: ORBIS

Overview of Project:

ORBIS is a geospatial mapping project of the Roman Empire mostly from 200CE to the late middle ages. This project shows roads and sea routes and different types of transportation used for travel across the Roman Empire. By using this map, users can create time and budget simulations from a starting point to a destination. The routes are divided into three categories (cost, speed, distance) and users can compare these routes with one another. Taking into account how the monthly weather patterns, like wave height and wind, affected the sea routes, ORBIS generates different outcomes according to each month. In addition, it provides diverse modes of road traveling such as ox cart, military march, donkey rides, etc. With regard to the river travel, it is available to figure out which canals were the fastest and charged the cost least.

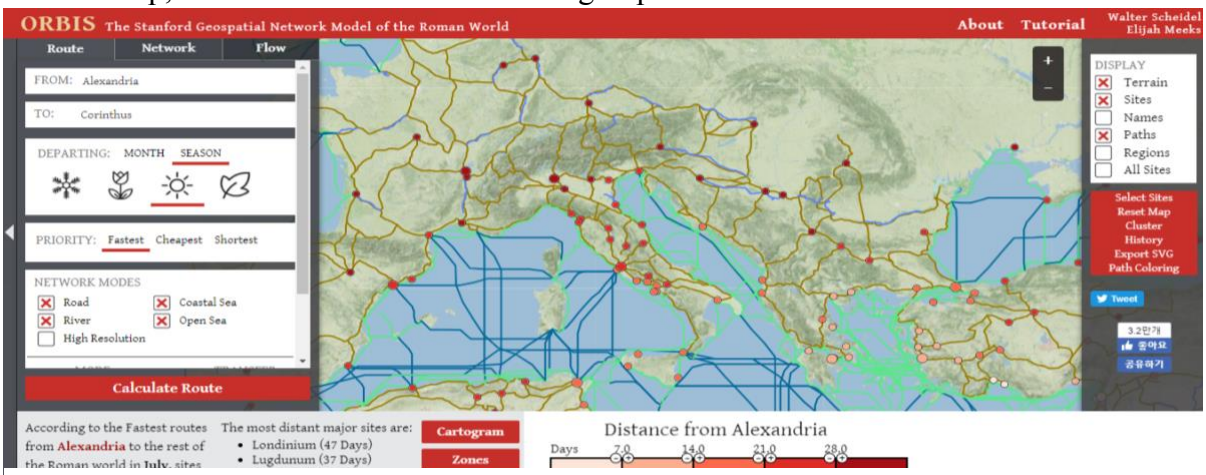
This model was designed to enhance our understanding of how a large-scale transportation system worked and how people in the Roman Empire crossed land and sea to other parts of the Roman Empire. Therefore, this map is more focused on entire system not particular sections. ORBIS suggests the route, transportation, or budget that is most used by travelers and not the routes that may have been used by a traveler by chance. The purpose of this was to enable readers to understand how the whole Roman networks operated.

ORBIS is the result of collaboration between historians and information technology specialists at Stanford University. Walter Scheidel, a Roman historian, mainly devised this

project. He oversaw the content aspects of the project, connecting all roads, rivers, and sea routes into one whole system, and collecting data concerning different modes of transportation. Elijah Meeks was the Technical Lead for ORBIS. He developed the geographic information system that reflects the data of Walter Scheidel, and implemented all the choices that users can make on the map. Although these two were the main creators of this project, they received help from co-authors, including Karl Grossner and Ashley Ngu to complete this project.

1. T-O Map

This project fulfills the aim of the creators. Although the exact story about the origin of name ORBIS is not given in the explanation, the project seems to have been inspired by "The Mappa Orbis terrae"(the T-O map). The T-O map represents the world view of the middle-aged western Europeans. This map shows the map Africa, Europe and Asia where the Roman Empire was located. Therefore, the authors chose the title ORBIS to reveals the area of Rome and period that the authors intended. Readers who are interested in the Roman Empire are likely to familiar with the T-O map, so the title ORBIS attracts this group.



2.Screenshot of the First Page

Also, some materials or projects overlook the importance of the “About” page, or just try to stick to the contents of the text, and do not devote pages to “About”. However, without the “About” page, readers have no choice but to question the purpose and direction of the homepage. Especially because this page looks academic. (For academic purposes, readers need to know exactly what information they are using.) On the other hand, focusing too much on academic goals or on an explanation could result in readers losing interest. If readers are not researchers studying for academic purposes, they require a recreational part in the content. When readers first enter this homepage, the interface itself is revealed rather than the “About” page. As mentioned earlier, this homepage has a very appealing interface that can entice readers. However, this project also made the “About” page button very easy to get in, so it is simple and accessible to researchers as well.

Limitations of Data Organization:

Still, there is a limitation on the way the data is organized. Specifically, with regard to the “priority” setting which is divided into cheapest, fastest and shortest. I did not notice the difference between fastest and shortest. I tried changing various settings but they seemed to be almost the same. Presumably, the difference between the two is literally the shortest distance on the route and the fastest route; depending on the availability of transportation however, the shortest straight route may be slower than other routes. Since the transportation is the part that reader can choose, the difference is not noticeable if the reader chooses the same means. It would be better if the difference between the two was as clear as the difference in expense.

Evolving Interface:

2. Screenshot of Official ORBIS Twitter

Since there has not been an official tweet since 2014, it can be assumed that the creators have finished their project. During the two years that the project was in development, the creators of ORBIS changed the site significantly over time; however, they made it easy for users to still access the older version, which meets the needs of diverse users. It is unusual to have access to the older version of a project. The content of the old version and the new version is almost the same. The biggest difference between the old and new versions is readability, achieved by more object-oriented and user-friendly interface. This upgrade was supported by the Stanford Library and the Center for Spatial and Textual Analysis (CESTA), which provided funding for the GIS necessary to add the high-resolution routes. Therefore, the project was able to get a more structured interface. The earlier version emphasized explanations rather than map usage and is less structured. It felt as if the pages were still under construction. The new version allows users to see the purpose of the page more clearly by making the map appears on the first

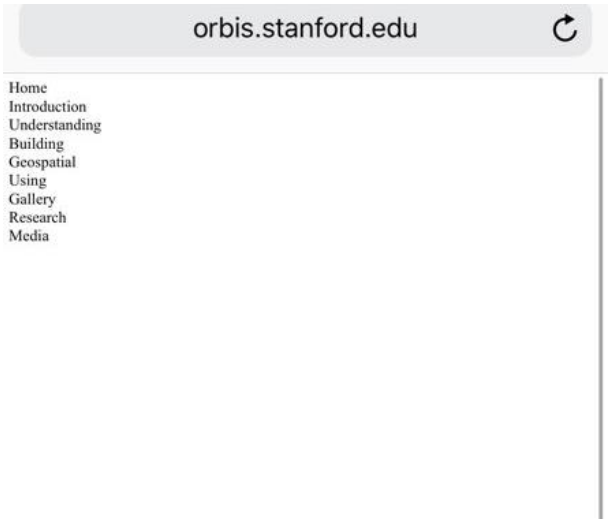
page. However these differences are probably the reasons why authors continue to publish the previous versions. It is an older version that makes it easier to figure out what materials were used for the map and what kind of research it was based on rather than just using the map.

Conveniently, when you move your mouse, you get a brief description of what each button is.

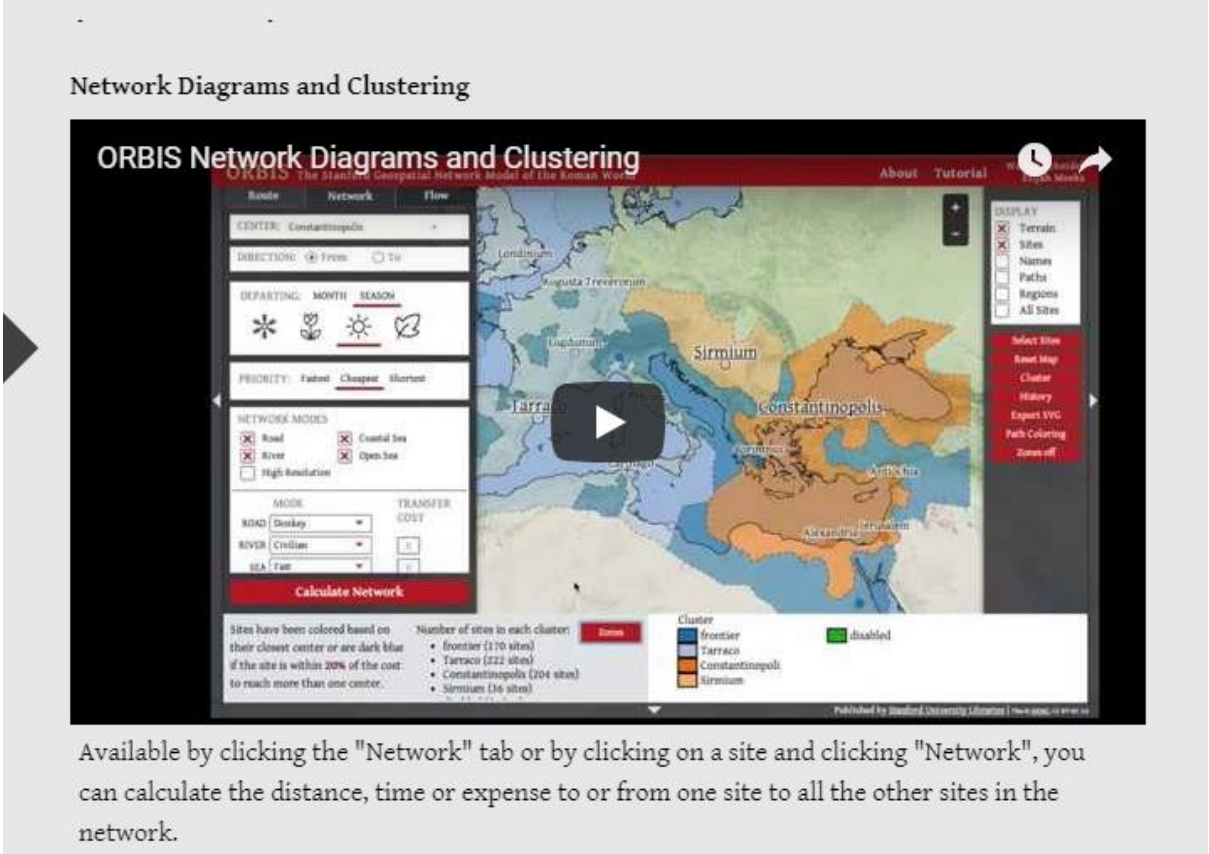
3. Screenshot of Description

Limitations of New Interface:

Nevertheless, there is still an unsatisfactory aspect of the interface. It is very difficult to operate on a mobile phone. I tried to open this project both on my iPhone and iPad. Even though they use same operating system, the iOS, on the iPhone, the features of this project were barely working; on the iPad I was able to use some functions but not Recently, as the functions of smart phones have developed, people choose smartphones over using PCs when they search for something. In that regard, the project can leave a bad first impression and miss the opportunity to show its splendor.



5.Screenshot of ORBIS on iPhone



6. Screenshot of explanation Video for Using ORBIS-https://youtu.be/Q-0KgwhmfdM

Furthermore, another disadvantage of highly sophisticated interfaces is the barrier pose to readers who are not familiar with them. Because of the overly digitized part, people who are not accustomed to using this technique can give up on using it. But ORBIS is overcoming this obstacle by using another digital medium. The authors posted description videos of how to use it properly. Video is a visible medium and has a greater effect than text explanations. Therefore, ORBIS maintains its status as a digital project and overcoming its limitations in a digital way.

<Metadata>

• Title: ORBIS: The Stanford Geospatial Network Model of the Roman World

• Description: An interactive mapping project that encourages users to test movement in the ancient world by road, river, and sea in order to reconstruct the duration and financial cost of traveling in antiquity.

• URL: http://orbis.stanford.edu/

• Method: http://awmc.unc.edu/wordpress/tiles/map-tile-information

• Author(s): Walter Scheidel, Elijah Meeks

• Place: Published by Stanford University Libraries, Stanford University, Stanford, California 94305

• Date in Development: 2012-2014

• Date Accessed: February 2019

• Availability: Free