

## PLACES & SPACES: MAPPING SCIENCE

### Program Report

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## Overview of the Program

Organized by the Cyberinfrastructure for Network Science Center at Indiana University, the exhibition traces the evolution of science maps, featuring examples of knowledge domain mapping, novel location-based cartographies, data visualizations, and science-inspired art works. The Library worked with the office of the Vice Provost for Learning and Residential Affairs to create a semester of programming around data visualization. Funding for the Vanderbilt venue came from the Library's Wild Bunch Speaker's Fund.

[Exhibit Master Booklet](#)

100 *physical maps* on a variety of subjects, from geographical maps to data visualizations of scientific trends. A [zoom-able website](#) invites close inspection of the maps. [Location: Sarratt and Rand]

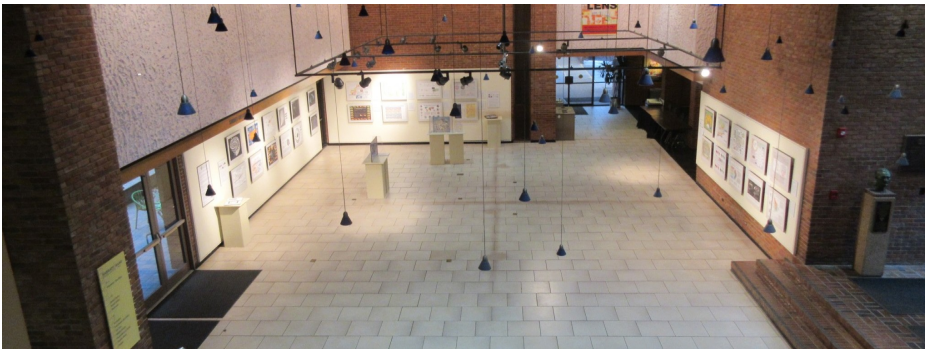
The *Illuminated Diagram* features a geographic map and a science map controlled by a touch panel, which allows users to learn what areas of science are producing the most publications, and where this research is coming from. [Location: Innovation Center]

Two interactive *Macroscopes* provide data visualizations as tools for exploring, understanding, and communicating science. [Location: Central Library]

Three *World Processor Globes* explore patents and the shape of science. [Location: Central Library],

*"I am teaching one of the inaugural iSeminars to a group of 13 freshmen (primarily engineering majors) in hopes of working through the mechanics of designing an immersion experience ..and [the exhibit] sounds fascinating"*

*-Vanderbilt Professor*



Sarratt Student Center Gallery

We are grateful to the campus locations that hosted the *Places & Spaces: Mapping Science* exhibition: Sarratt Student Center, the Wond'ry, and the Central Library Lobby. The high traffic areas assured that hundreds of people visited the exhibition. The exhibition was on display January 23-April 23, 2017.

# PLACES & SPACES: MAPPING SCIENCE

## Programs

Associate Provost John Sloop convened a group of 13 faculty, staff, and students to plan programming around the *Places & Spaces* exhibition for the spring semester in support of the [Educational Technologies pillar of the Academic Strategic Plan](#). The purpose of the programming was to highlight the importance of data visualization as a tool to understand the surrounding world and to advance teaching, learning, and discovery. With their help, the following 8 programs were accomplished.



Dr. Katy Börner Keynote Lecture, Library Community Room; Photo: Jon Erickson

Seventy attended the January 27 lecture by Dr. Börner, "[Maps and Macroscopes: Drawing Actionable Insights from Data.](#)" held in the Community Room. The lecture was recorded and made available via Vanderbilt YouTube. A reception was followed by a private dinner in Special Collections for a number of the Wild Bunch (David Blum, Margaret Callihan, and Marty and Jim Conrad), as well as University Librarian Valerie Hotchkiss and Connie Heard.



Cliff Anderson Presents on February 8; Photo: Celia Walker

A total of 49 attended the four data visualization workshops conducted in the Wond'ry:

- February 7 11:00 Creating Illustrations & Figures in Inkscape (Carla Beals)
- February 8 11:00 Interactive Data Analysis with R & ggvis (Cliff Anderson)
- February 9 11:00 Visualizing Data with Tableau (Bobby Smiley)
- March 16 1:00 Using a GoPro Camera (Jeffrey Shoup)

# PLACES & SPACES: MAPPING SCIENCE

Seattle artist Tivon Rice visited Vanderbilt March 22 – 24 to conduct a site-specific workshop entitled ***Mapping the Visual Layer: Drones and Urban Photogrammetry*** with students from the Department of Art's Digital Imaging class, the Department of Anthropology's Introduction to Geographic Information Systems and Remote Sensing course, and students in the North Nashville photography Workshop at The McGruder Creative University (M-SPAR), a partnership of Fisk University, Tennessee State University, and Vanderbilt University in collaboration with Berea College and Tougaloo College. Seventeen students attended the workshops.



Drone Workshop, Photo: Vesna Pavlovic



*Mapping the Visual Layer: Drones and Urban Photogrammetry* Panel Discussion; Photo: Celia Walker

Rice also presented his site-research evolving around these technologies, and discussed their relationships with memory, media, and the mapping of contemporary urban space at a panel discussion on March 22. Other panelists were: Vesna Pavlović, Steven Wernke, and Lutz Koepnick. 37 attended the panel discussion.

The Vanderbilt Institute for Digital Learning and Vanderbilt University Libraries teamed together to offer the [Wild Bunch Data Visualization Competition](#). Fifteen students submitted fourteen visualizations to the competition. Awards were given out on April 13 to the first, second, and third place winners in the undergraduate and graduate/professional categories. Students spoke about their projects, received cash prizes, and were inducted by David Blum into the Wild Bunch group. Approximately 30 were in attendance at the event.



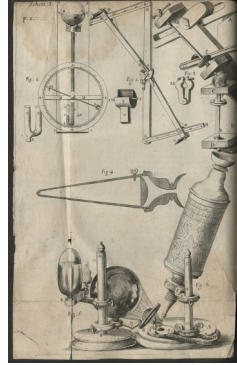
David Blum and Valerie Hotchkiss Watch Ben Shapiro Present His Winning Data Visualization; Photo: Jon Erickson



# PLACES & SPACES: MAPPING SCIENCE

The Library hosted an exhibit, "Picturing Our World" on the Central Library 7<sup>th</sup> floor with selections from our permanent collections on the topic of visualizing data through history.

Picture right: Robert Hooke. [Diagram of Hooke's Lens Grinding Machine and Microscope.] *Micrographia or Some Physiological Descriptions of Minute Bodies Made by Magnifying Glasses*. London: Printed for J. Allestry, printer to the Royal Society, 1667. Vanderbilt University Special Collections. Sevier Collection



## Audience

The exhibition was placed in campus areas with high traffic so we know that hundreds of campus visitors saw the exhibition. We had 47 signatures in the guest book. A total of 203 attended the public programs.

Macroscope [Google Analytics](#) between January 23 and April 23, 2017

### Audience

541 users (109 users were on March 29)

### Sessions

761 sessions

2,900 page views, with averages of 3.81 pages per session

Average session duration: 3 minutes

## Publicity and Marketing

### A. Articles

[Unique Exhibition Will "Map" Science and Visualize Data at Four Campus Locations Beginning Jan. 23,](#) *MyVU*, January 6, 2017

["Student Entries Sought for Data Visualization Competition,"](#) *MyVU*, January 31, 2017

Ann Marie Deer Owens, ["Students Recognized for Eye-Catching Data Visualizations,"](#) *MyVU*, April 20, 2017

### B. Blogs, Tweets and Websites

Events were posted to the Library's [internal](#) and [external](#) blogs.

The Wond'ry also posted our materials to their website.

Each event was tweeted by the library or Elizabeth Scott and many were retweeted by Vanderbilt.

Indiana's [Places & Spaces site](#) posted our content.

### C. Print

Flyers and brochures were printed by Vanderbilt. Indiana printed postcards. The Department of Art distributed a poster and press release for the panel discussion.

### D. Emails

Direct emails were sent to:

VIDL and Digital Scholarship leaders

the Digital Humanities Center

a campus data visualization group

student groups (OACS, xQuery, Digital Scholarship)

community partners

Emma email invitations were sent to all friends of the library, to Medicine Health and Society faculty, to the Vice-Provost's contact list, to VUSE faculty, the Wild Bunch Programming Committee, and to Wild Bunch members for the keynote event.