PLACES & SPACES

MAPPING SCIENCE

scimaps.org

Maps & Macroscopes

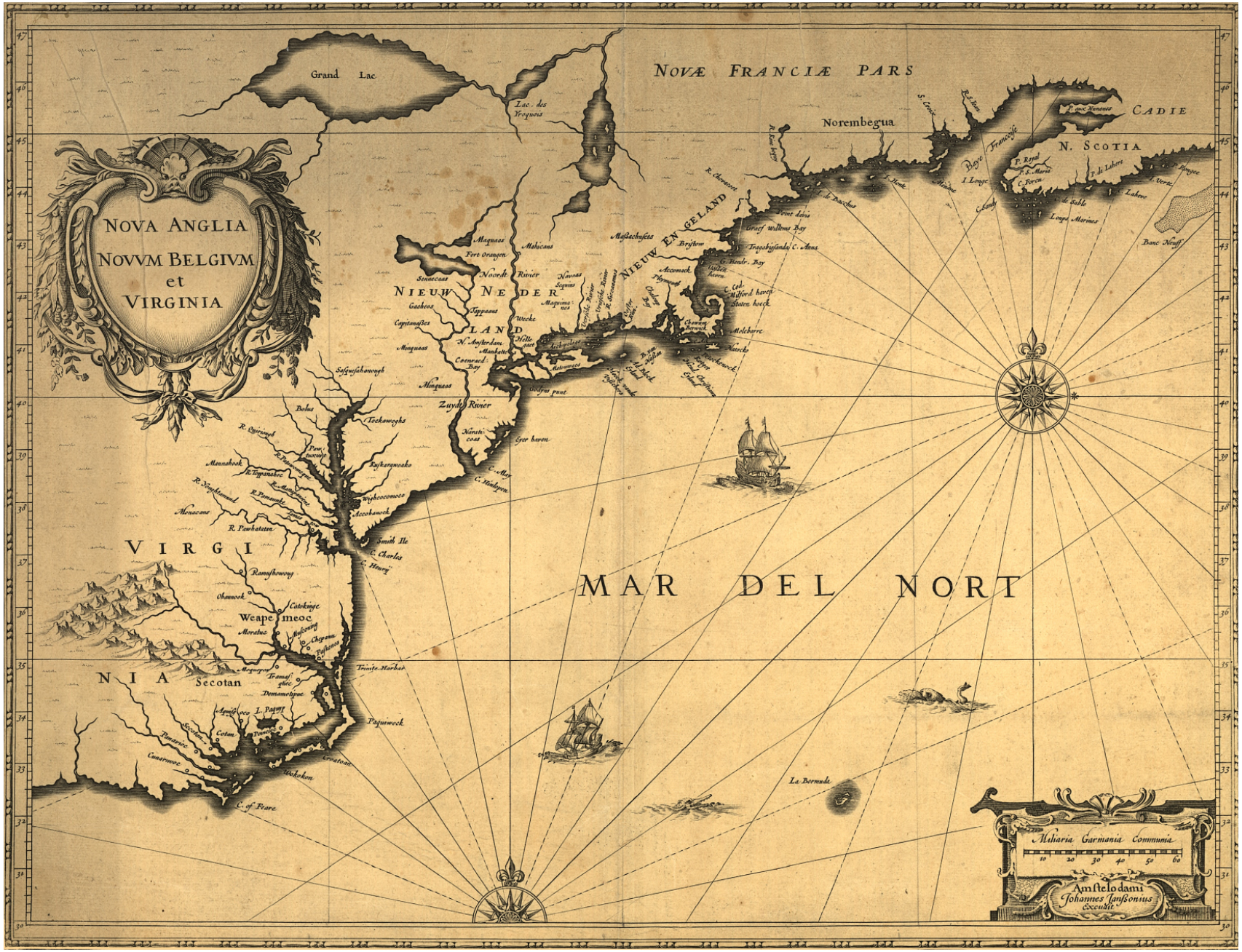
Digital Studies of Digital Science

March 15–18, 2021

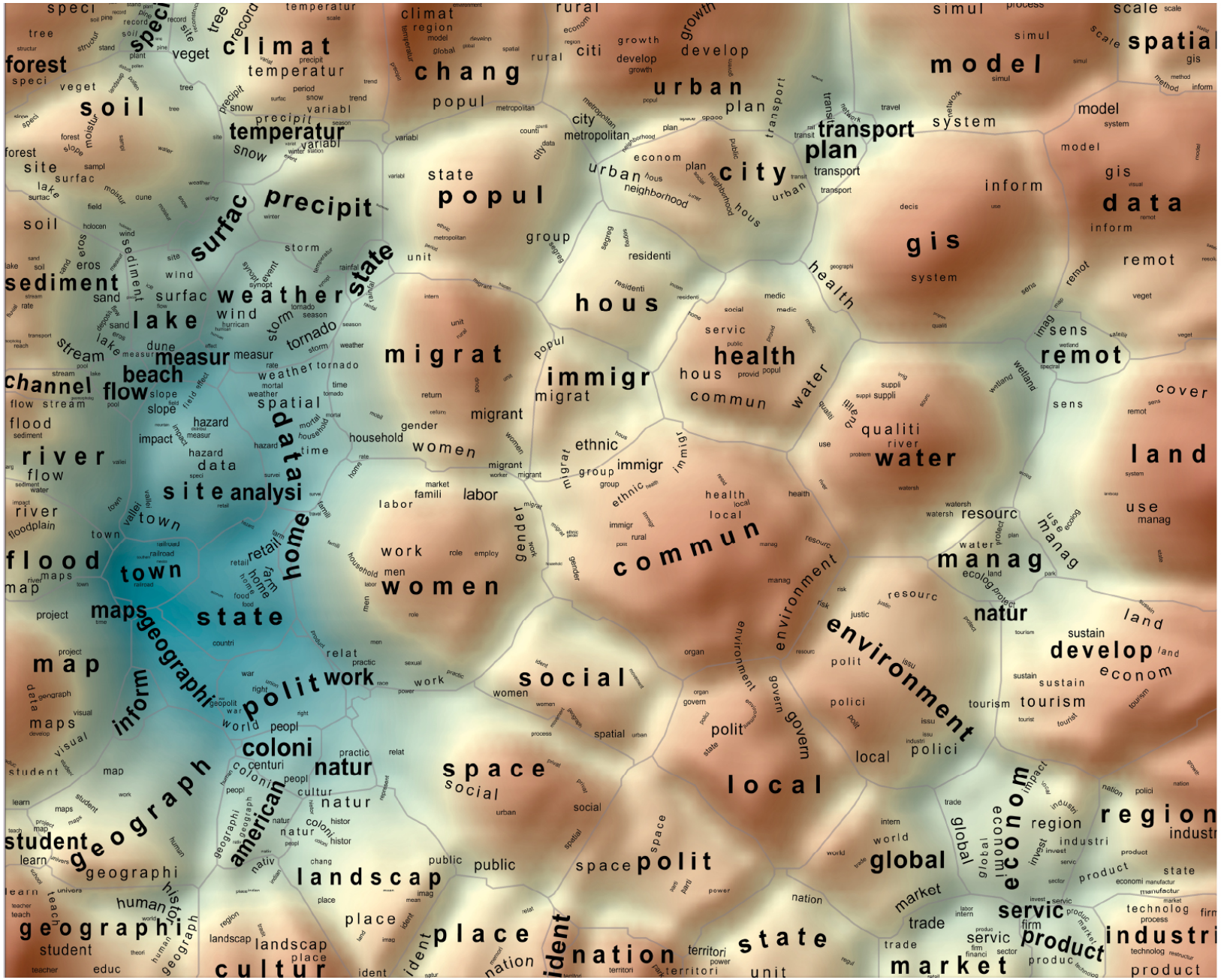
How can we communicate the beauty, structure, and dynamics of science to a general audience?

Photos from “Earth from Above” by Yann Arthus-Bertrand

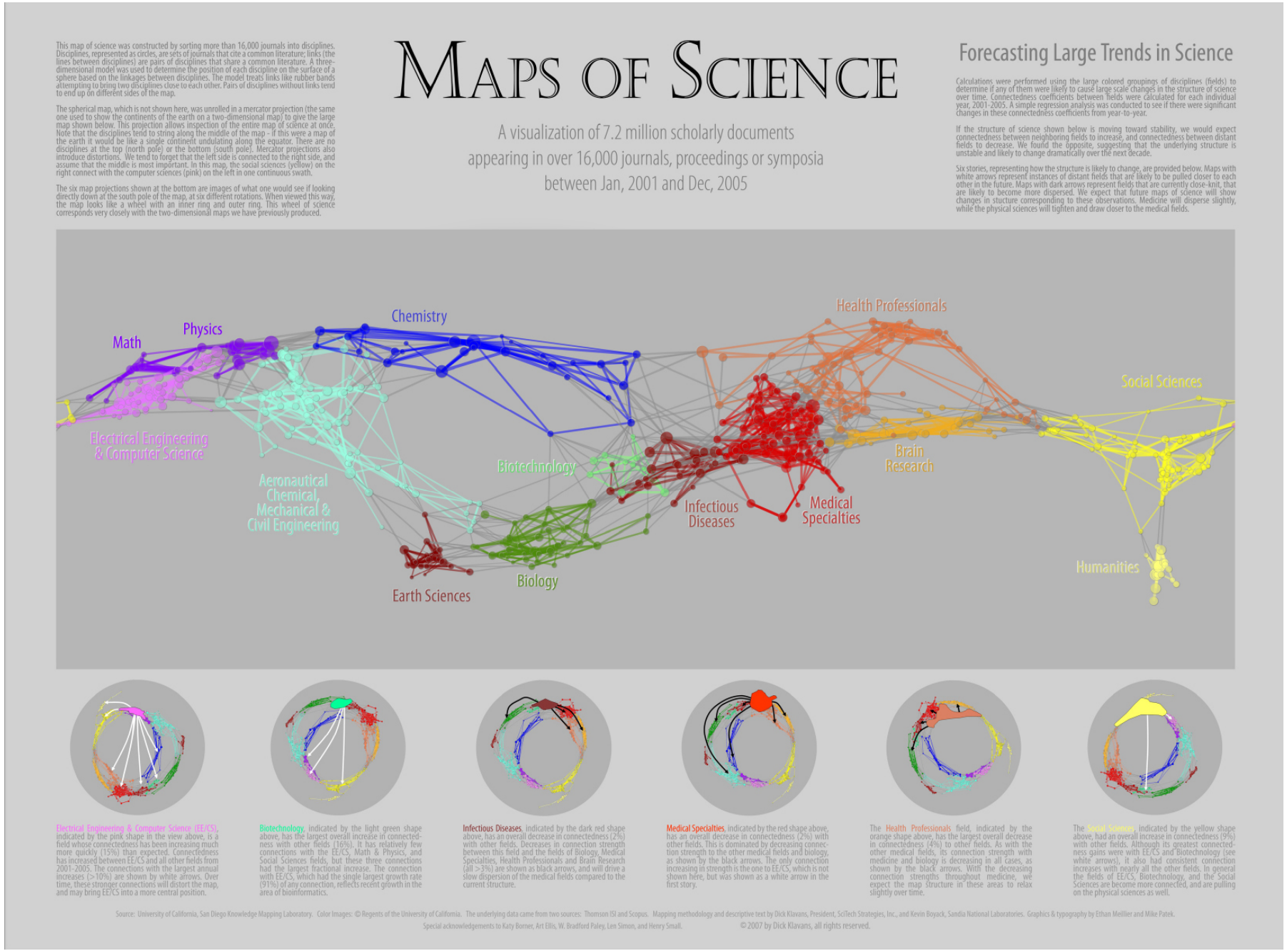
I.1 *Cosmographia World Map* – Claudius Ptolemy - 1482



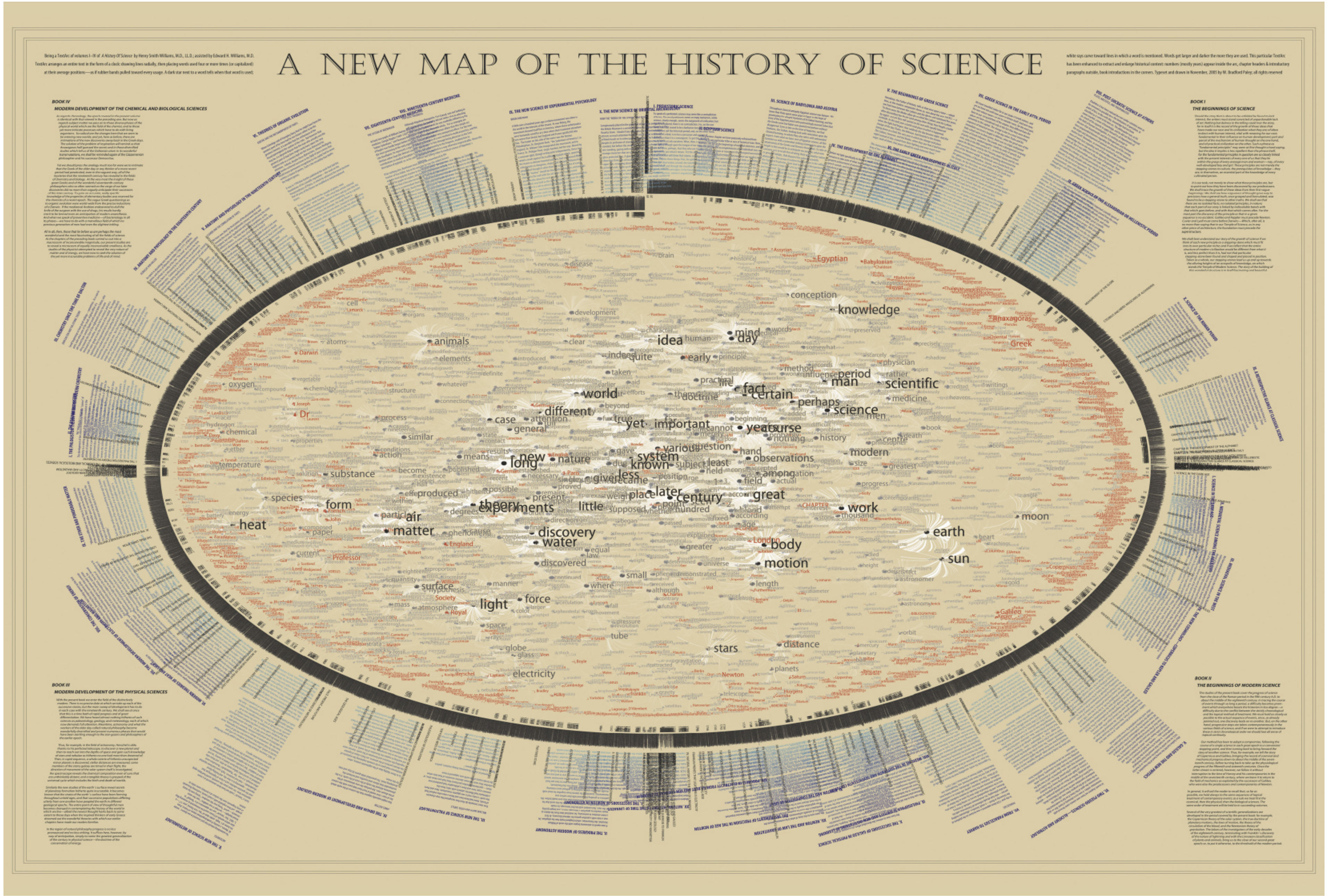
I.2 *Nova Anglia, Novvm Belgivm et Virginia* – Johannes Janssonius - 1642



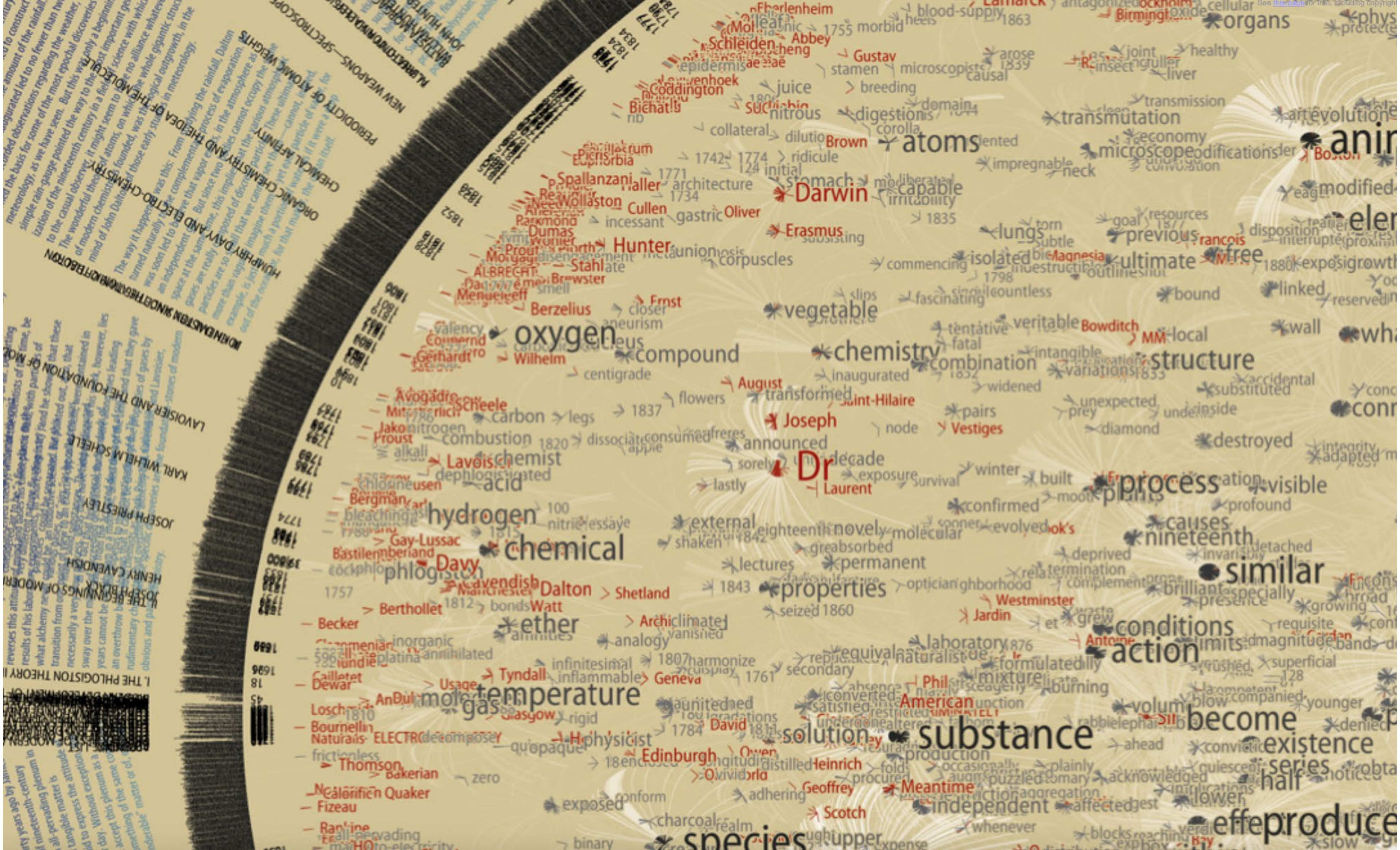
I.9 *In Terms of Geography* – André Skupin - 2005



III.9 *Maps of Science: Forecasting Large Trends in Science* - Richard Klavans and Kevin Boyack - 2007

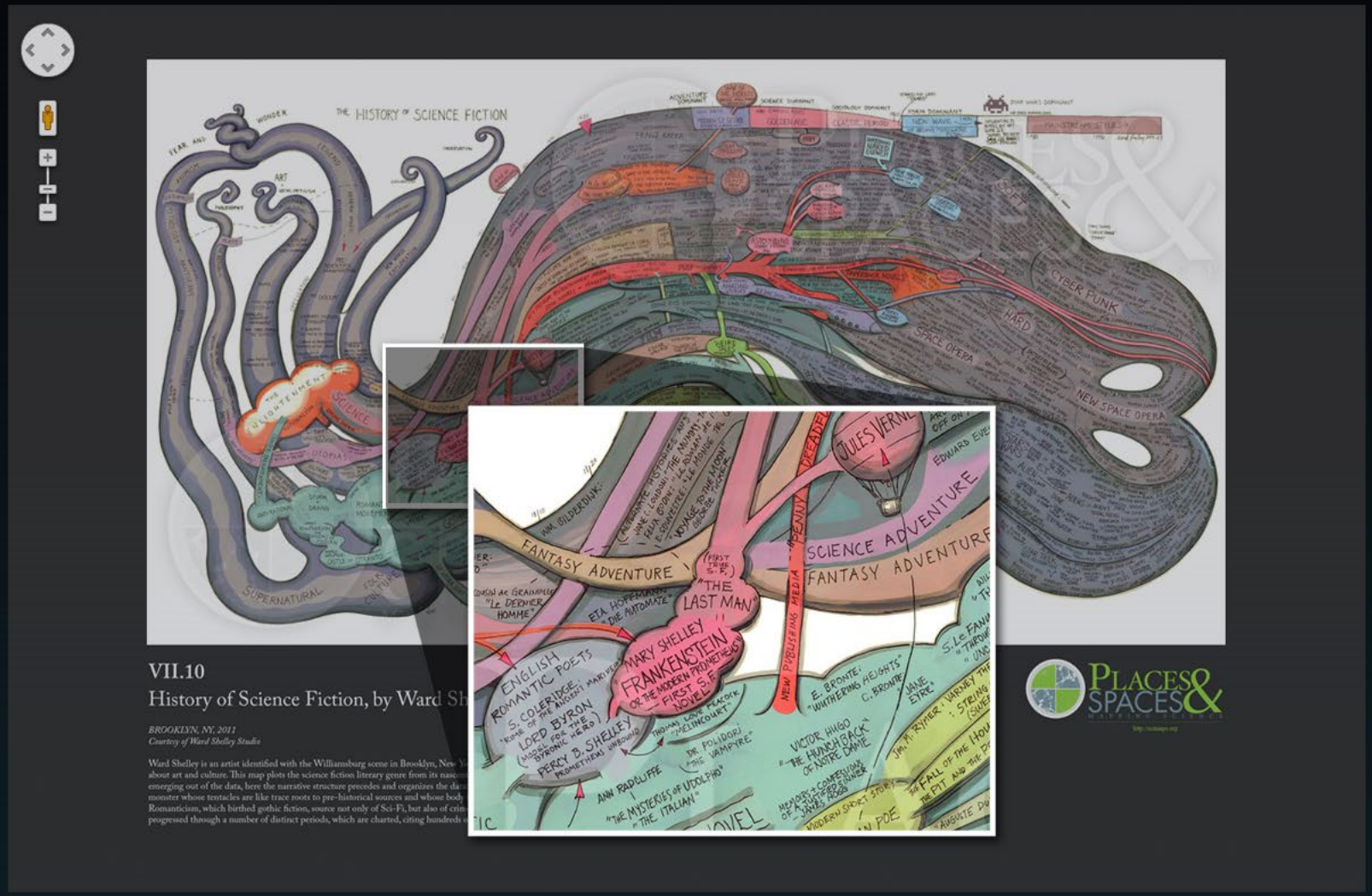


II.7 *TextArc Visualization of The History of Science* - W. Bradford Paley - 2006



PERIODICITY OF ATOMIC WEIGHTS
CHEMICAL AFFINITY
ORGANIC CHEMISTRY AND CHEMICAL
HUMPHRY DAVY AND ELECTRO-CHEMISTRY
LAVOISIER AND THE FOUNDATION OF MODERN
KARL WILHELM SCHEELE
JOSEPH PRIESTLEY
HENRY CAVENDISH
JOSEPH BLACK
I. THE PHLOGISTON THEORY
NEW WEAPONS
SPECTROSCOPE
oxygen
compound
chemistry
combination
structure
atoms
Darwin
Erasmus
Hunter
vegetable
Joseph
Dr
Laurent
process
hydrogen
chemical
Davy
Dalton
Cavendish
Shetland
properties
conditions
action
similar
nineteenth
causes
ether
temperature
gas
solution
substance
become
existence
series
independent
species
Edinburgh
Thomson
Lavoisier
chemist
acid
carbon
combustion
Scheele
Avogadro
Gay-Lussac
Berthollet
Watt
Becker
Tyndall
Geneva
American
Meantime
Scotch
Westminster
Jardin
Berzelius
Brewster
Stahl
Cullen
Wollaston
Spallanzani
Haller
Brown
Oliver
Vestiges
Bowditch
organs
transmutation
microscope
modified
evolution
digestion
stomach
corpuscles
isolated
ultimate
free
visible
destroyed
confirmed
molecular
novel
permanent
lectures
laboratory
mixture
production
produce

Check out our Zoom Maps online!



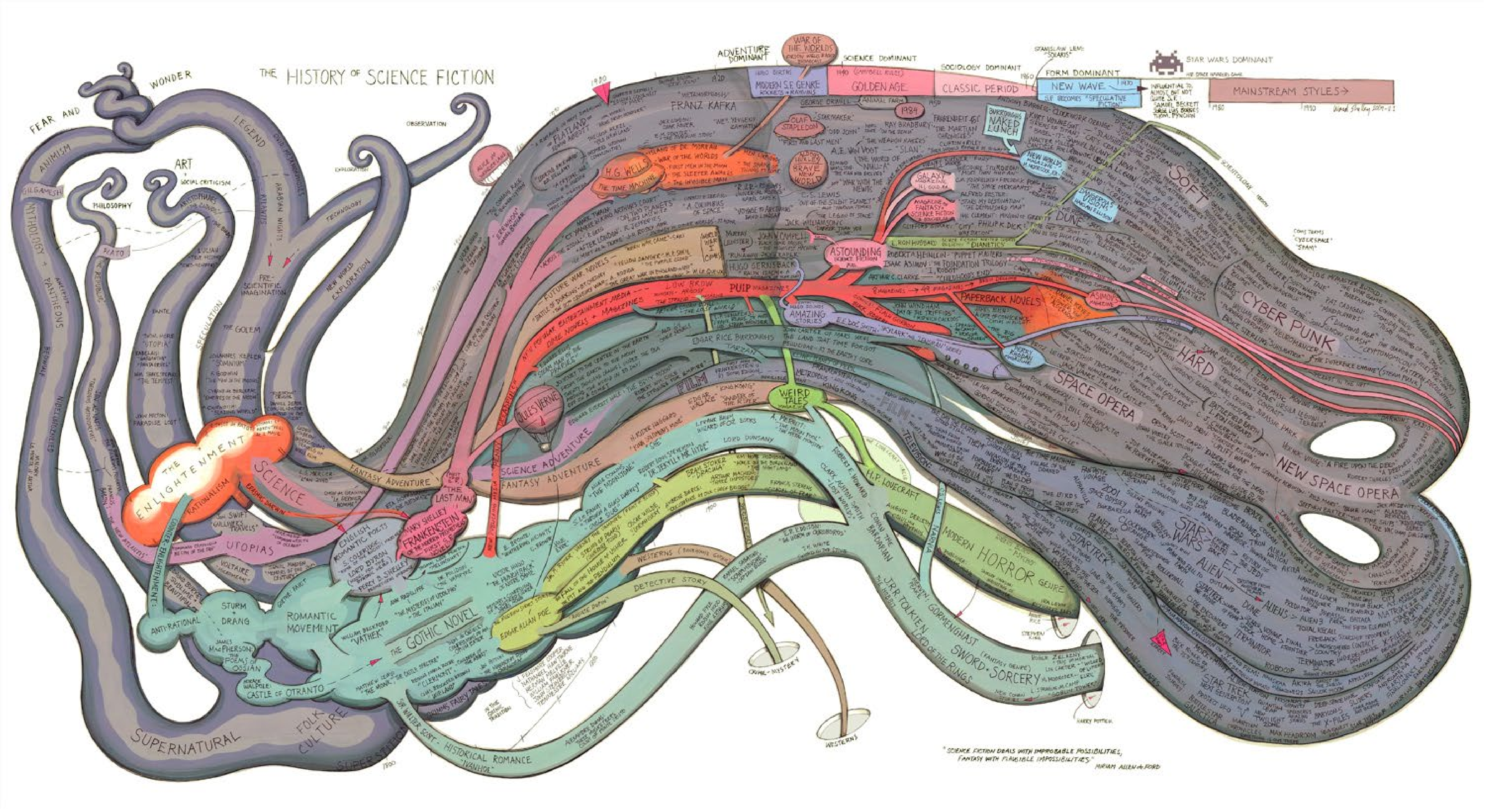
VII.10

History of Science Fiction, by Ward Sh

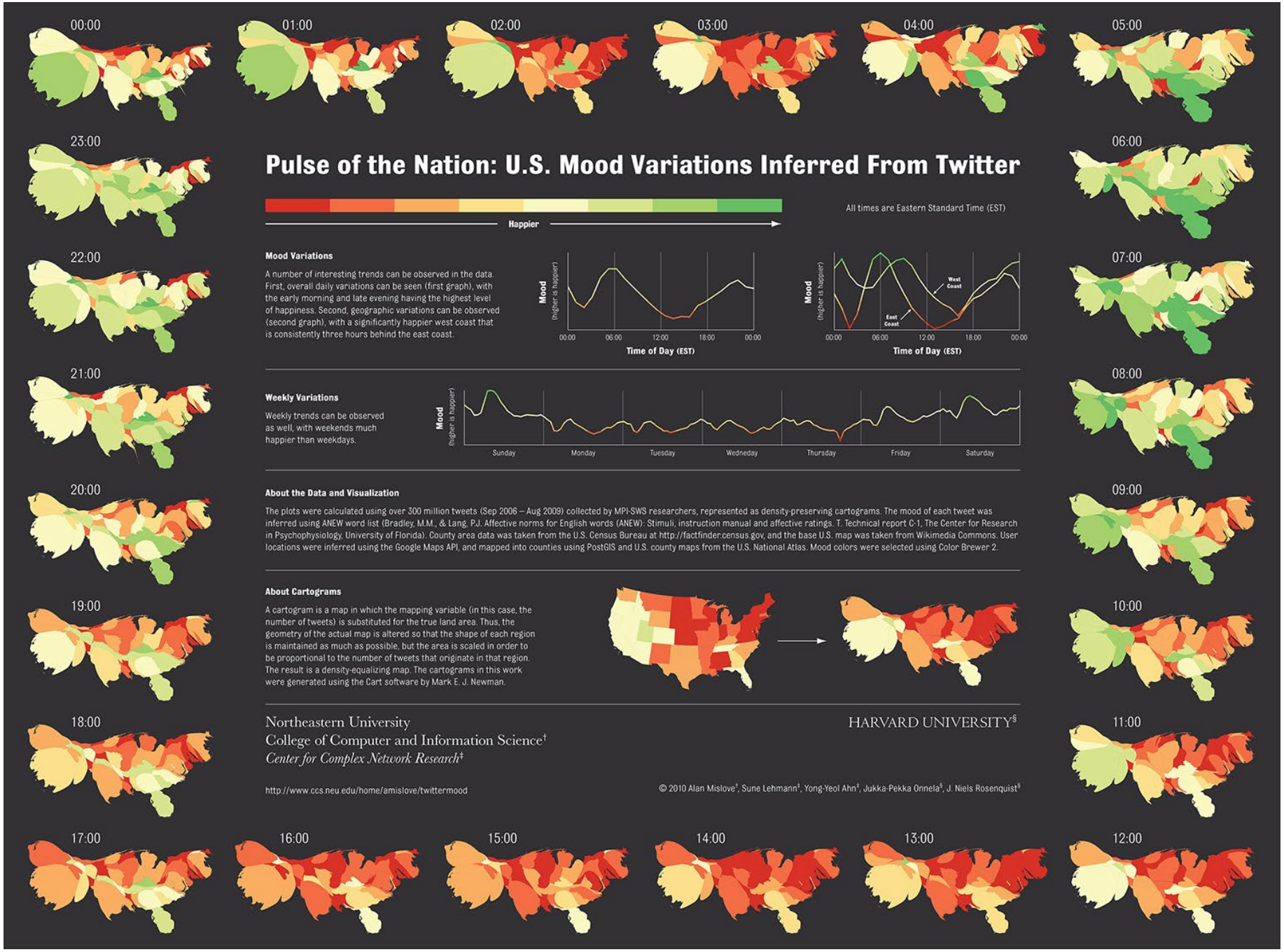
BROOKLYN, NY, 2011
Courtesy of Ward Shelley Studio

Ward Shelley is an artist identified with the Williamsburg scene in Brooklyn, New Y
about art and culture. This map plots the science fiction literary genre from its nasce
emerging out of the data, here the narrative structure precedes and organizes the da
monster whose tentacles are like trace roots to pre-historical sources and whose body
Romanticism, which birthed gothic fiction, source not only of Sci-Fi, but also of crim
progressed through a number of distinct periods, which are charted, citing hundreds o

Visit scimaps.org and check out all our maps in stunning detail!



VII.10 *History of Science Fiction* - Ward Shelley - 2011



IX.4 *Pulse of the Nation* - Alan Mislove, Sune Lehmann, Yong-Yeol Ahn, Jukka-Pekka Onnela, and James Niels Rosenquist - 2010

April, 2005: 101st Annual Meeting of the
Association of American Geographer, Denver, Colorado.

101st Annual Meeting of the Association of American Geographers, Denver, CO.
April 5th - 9th, 2005 (First showing of Places & Spaces)

University of Miami, Miami, FL.
September 4 - December 11, 2014.

Duke University, Durham, NC.
January 12 - April 10, 2015

http://scimaps.org

The David J. Sencer CDC Museum, Atlanta, GA.
January 25 - June 17, 2016.

Science Maps in "Expedition Zukunft" science train visited 62 cities in 7 months.
Opening on April 23rd, 2009 by German Chancellor Merkel

Places & Spaces Digital Display in North Carolina State's Immersion Theater

Exhibit Curators

Lisel Record, Katy Börner, and Todd Theriault; Linnea Holt (not pictured)

Advisory Board

The pieces that make up the *Places & Spaces* exhibit are chosen annually in a process that begins with a call for submissions. Then, the team of international reviewers and exhibit advisors shown below work with the Indiana University exhibit team to select the most stunning and innovative submissions. The Indiana University exhibit team benefits greatly from the expert input it receives from this international advisory board.

Gary Berg-Cross

Cognitive psychologist (PhD, SUNY–Stony Brook). Potomac, MD, USA

Lev Manovich

Professor, The Graduate Center, City University of New York; Director, Software Studies Initiative (big data, digital humanities, visualization)

Donna J. Cox, MFA, Ph.D.

Director of the Advanced Visualization Laboratory at the National Center for Supercomputing Applications, University of Illinois at Urbana-Champaign, IL, USA

Elijah Meeks

Senior Data Visualzation Engineer at Netflix, Los Gatos, CA, USA

Bonnie DeVarco

Media X Distinguished Visiting Scholar at Stanford University, Palo Alto, CA, USA

André Skupin

Associate Professor of Geography at San Diego State University, California

Ingo Günther

Professor at the Karlsruhe Univerity of Art and Design, Karlsruhe, Germany

Olga Subirós

Curator of Big Bang Data and Founder of Olga Subirós Studio in Barcelona, Spain

Peter A. Hook

Head of Digital and Scholarly Services and LawArXiv Administrator, Cornell Law Library. Ithaca, NY, USA

Stephen Uzzo

Vice President of Science and Technology for the New York Hall of Science

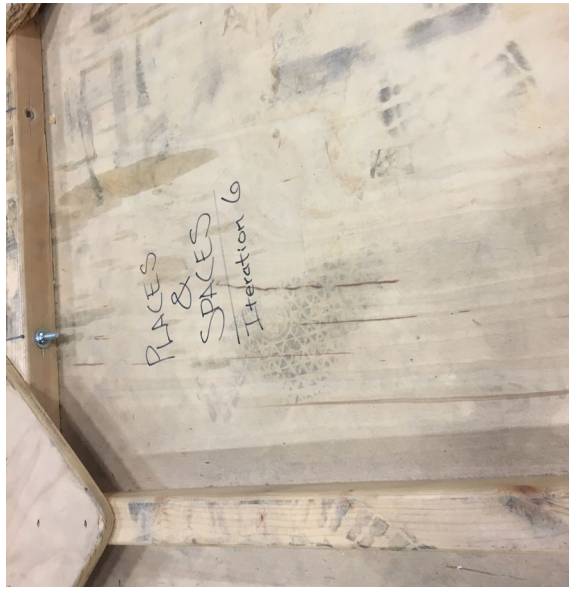
Francis Harvey

Professor of Visual Communication in Geography at the Liebnitz Institute for Regional Geography, Leipzig University, Germany

Benjamin Wiederkehr

Founding Partner and Managing Director of Interactive Things in Zürich, Switzerland


213#
A
B
C
INDIANA UNIVERSITY
PLACES & SPACES EXHIBIT


PLACES
&
SPACES
Iteration 6


NDIANA UNI
PLACES & SPA
6TH ITERAT
IU Warehouse
124570
4.5X4X4
917508


Exhibit Advisors
and Ambassadors

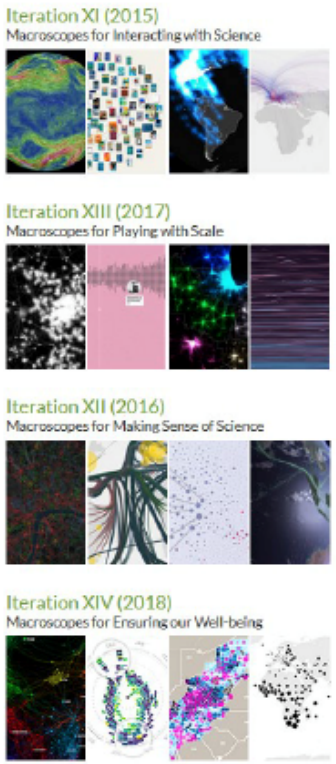
Places & Spaces: Mapping Science Exhibit

1st Decade (2005-2014)

Maps

2nd Decade (2015-2024)

Macroscopes



100
MAPS
in large format, full color, and high resolution.

215
MAPMAKERS
from fields as disparate as art, urban planning, engineering, and the history of science.

49
MACROSCOPE MAKERS
including one whose job title is "Truth and Beauty Operator."

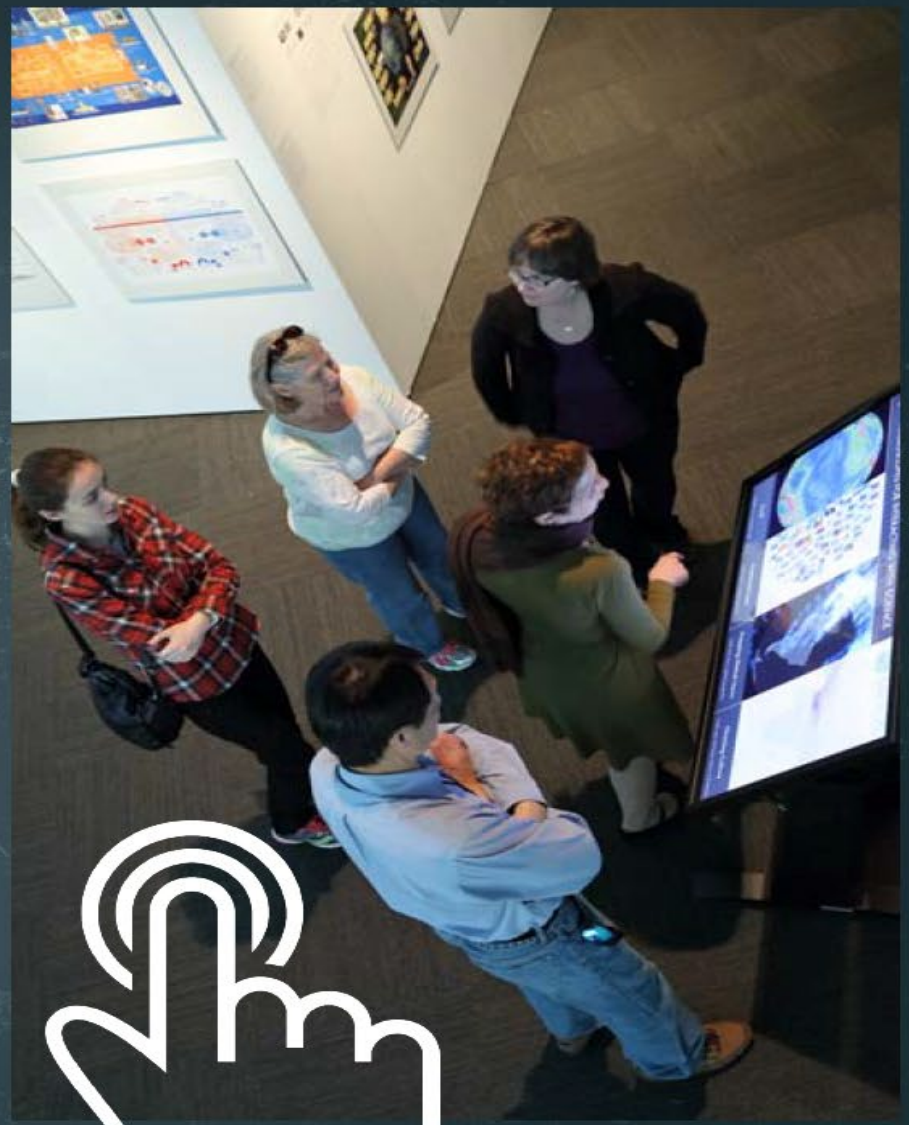
20
MACROSCOPES
for touching all kinds of data.

396
DISPLAY VENUES
from the Cannes Film Festival to the World Economic Forum.

221
PRESS ITEMS
including articles in *Nature*, *Science*, *USA Today*, and *Wired*.

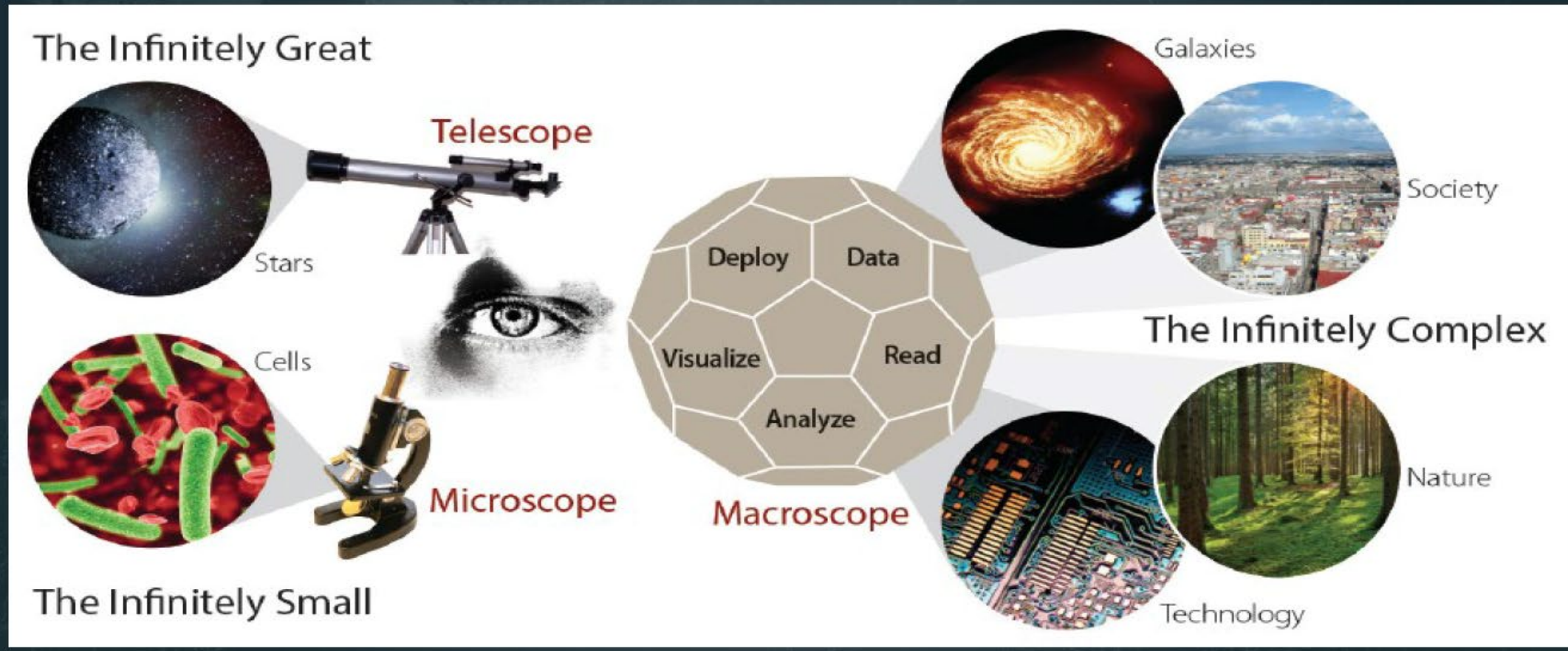
36
WORKSHOPS ORGANIZED

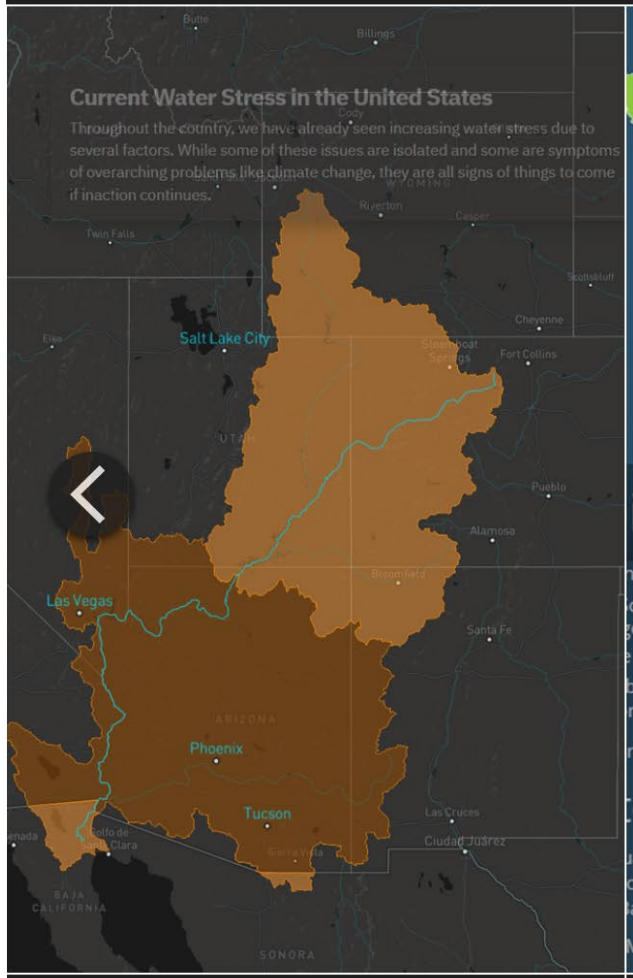
6,086,047
WEBSITE VISITS



MAPS vs. MACROSCOPES

Microscopes & Telescopes vs. MACROSCOPES



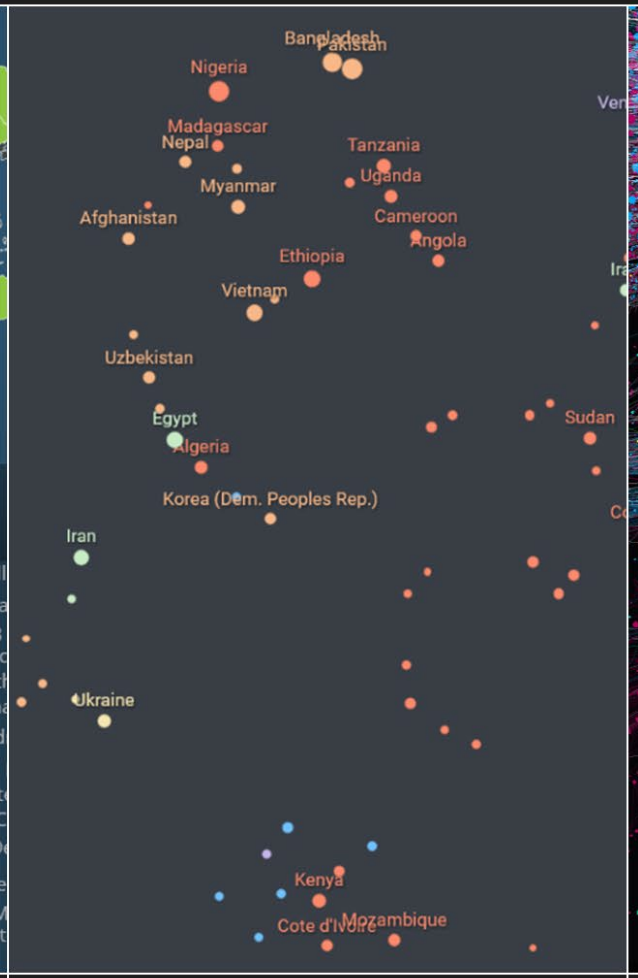


United States Water Crisis

And how to reverse it

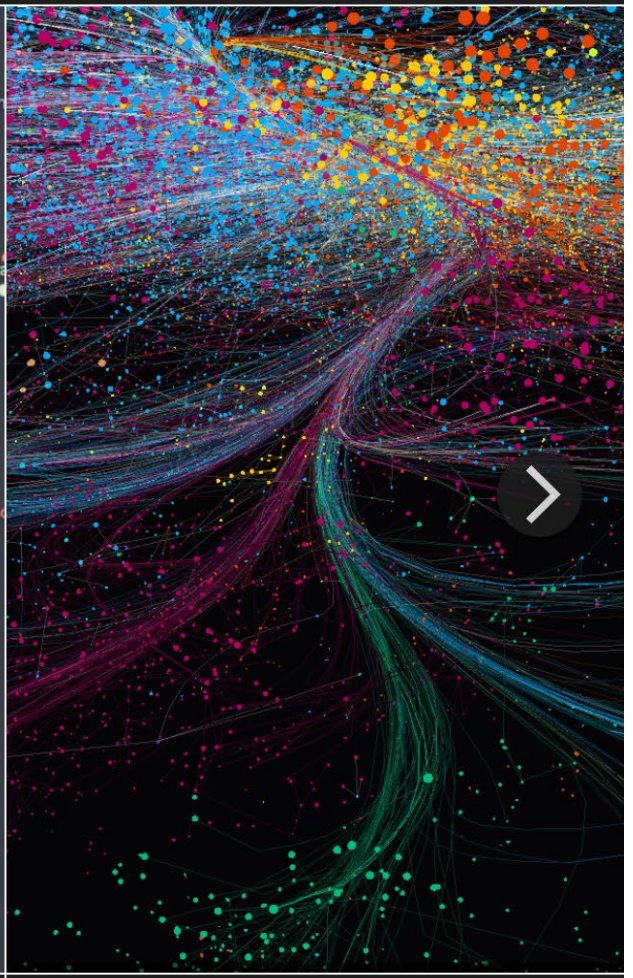
Watson News Explorer

Converting news into networks



An Alternative Data Driven Country Map

Using data to redraw the map



Nature 150

A network of influence