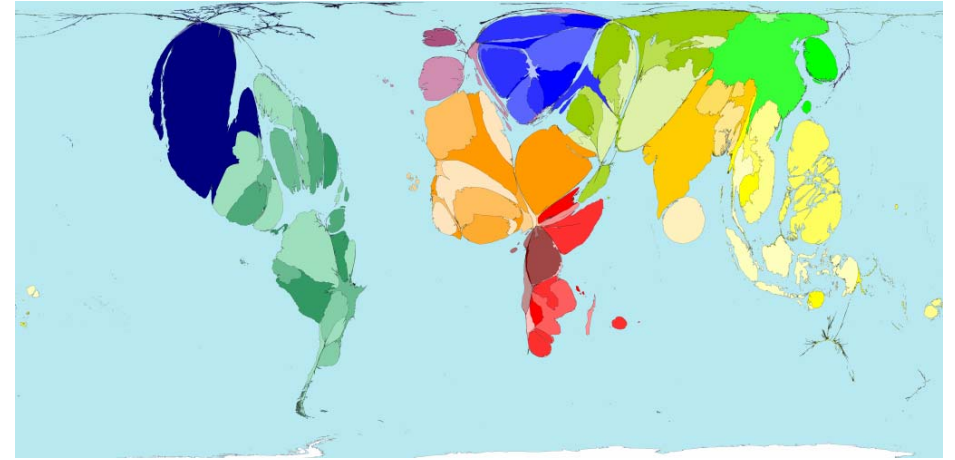


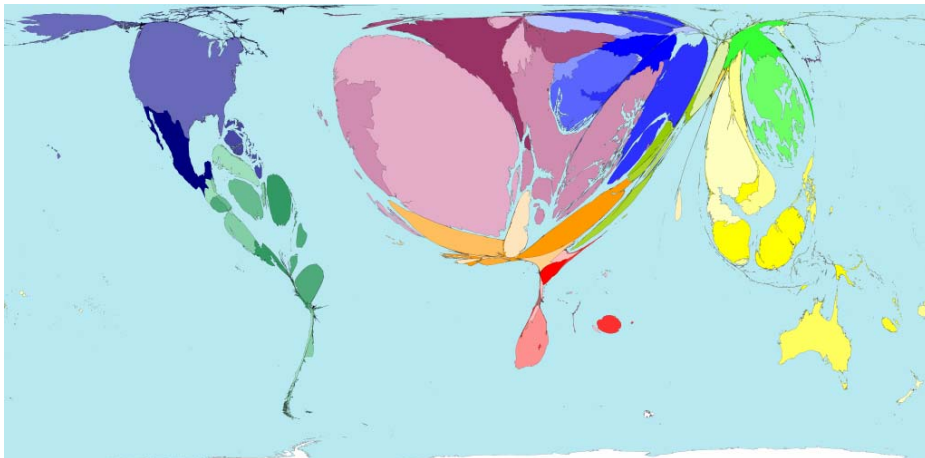
WORLDMAPPER: the world as you've never seen it before

Danny Dorling, Anna Barford and Mark Newman
Sheffield University, University of Michigan

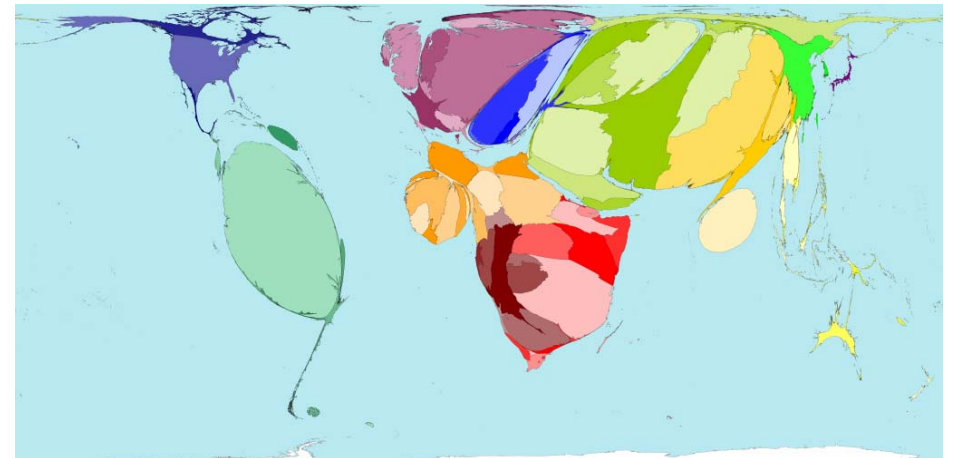
Net Emigration



Profits from tourism

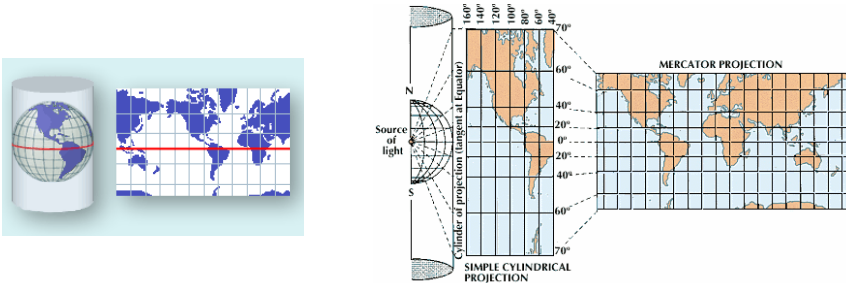


Refugee destination



History

- Mercator projection: preserve global angles
- Cartograms: distorted mapping



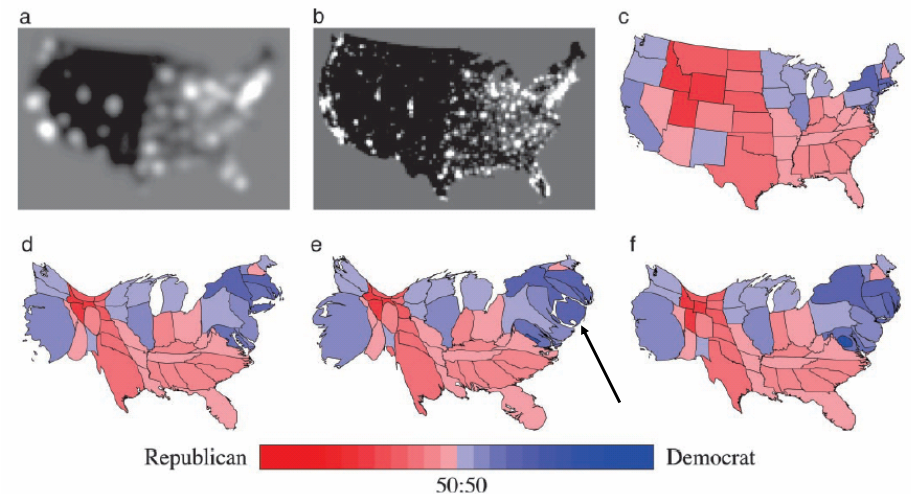
Data

- Territory
- Population
- Land areas
- Missing data
- Refugees
- Historical estimates

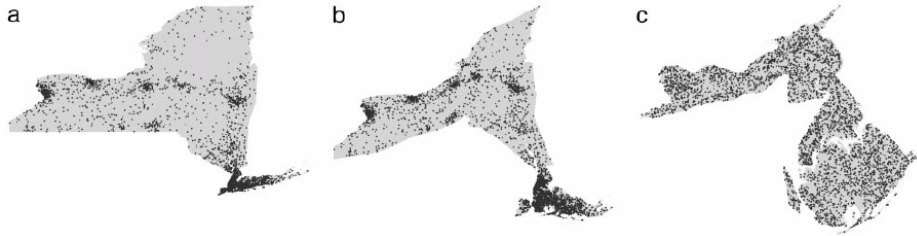
Cartogram Calculation

- Result distribution density is uniform!
- Let it flow from high to low density areas
- Diffusion-based method
 - Final size is proportional to the quantity of interest
 - Resize with minimum distortion of initial shapes
- Boundary issues (sea/ocean → mean density)
- Fourier-space

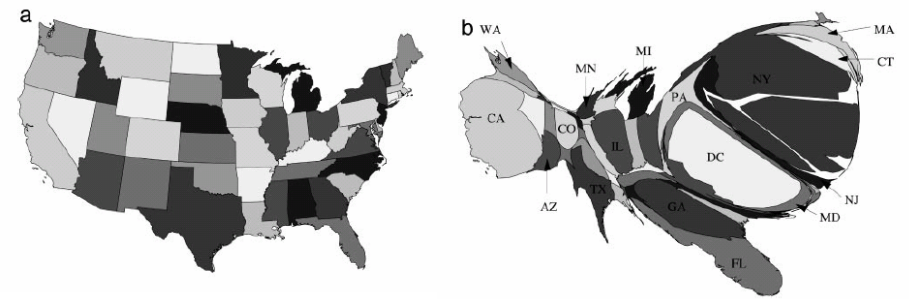
2000 President Election



Lung cancer in New York state

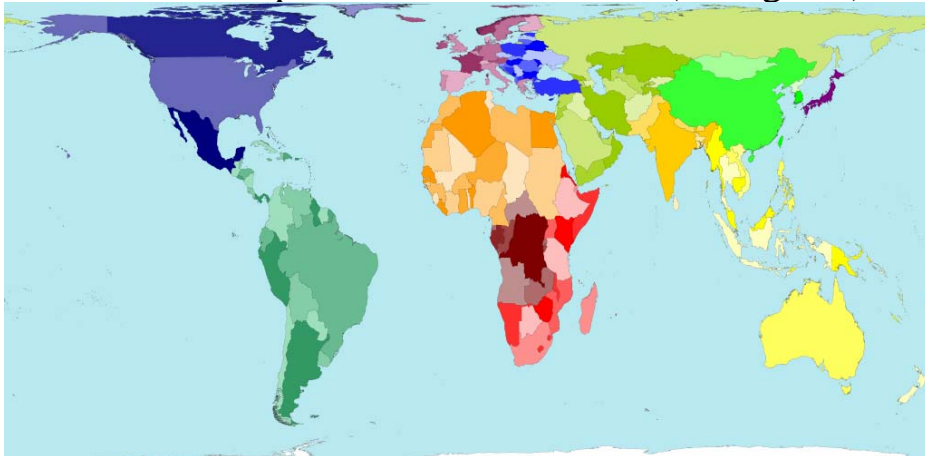


News appearance frequency

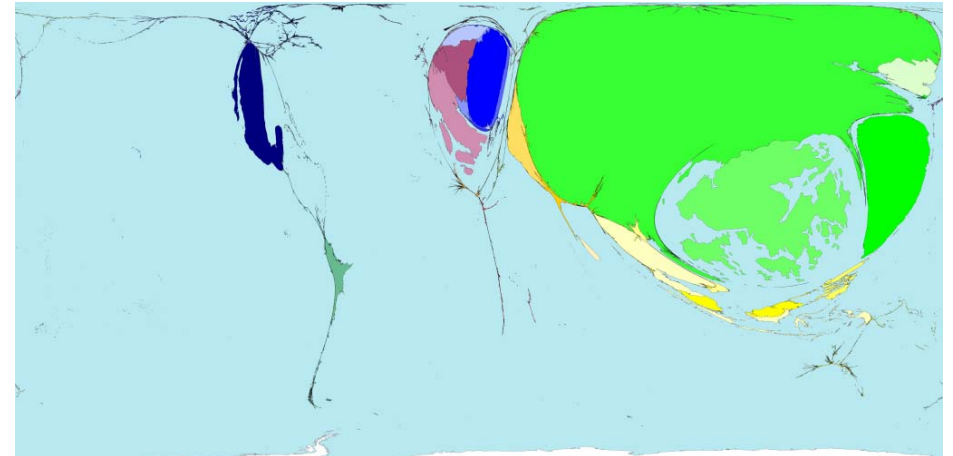


Use of color

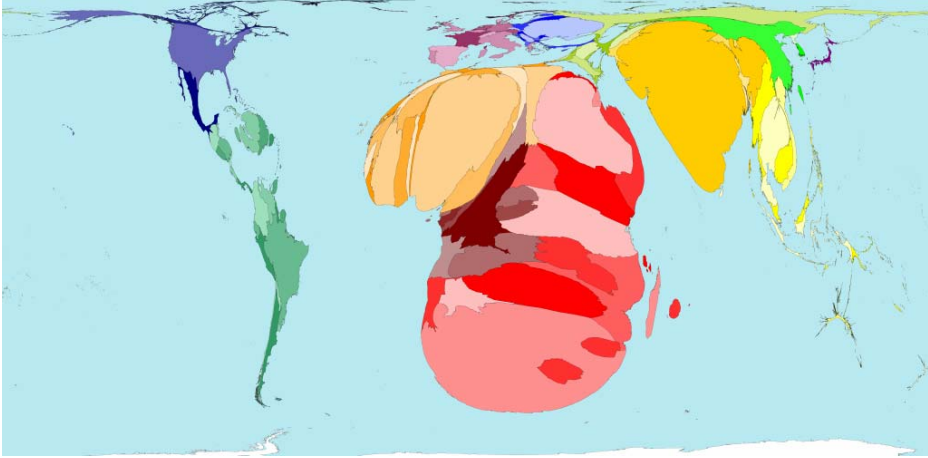
□ Dark red: poorest Violet: Richest (12 regions)



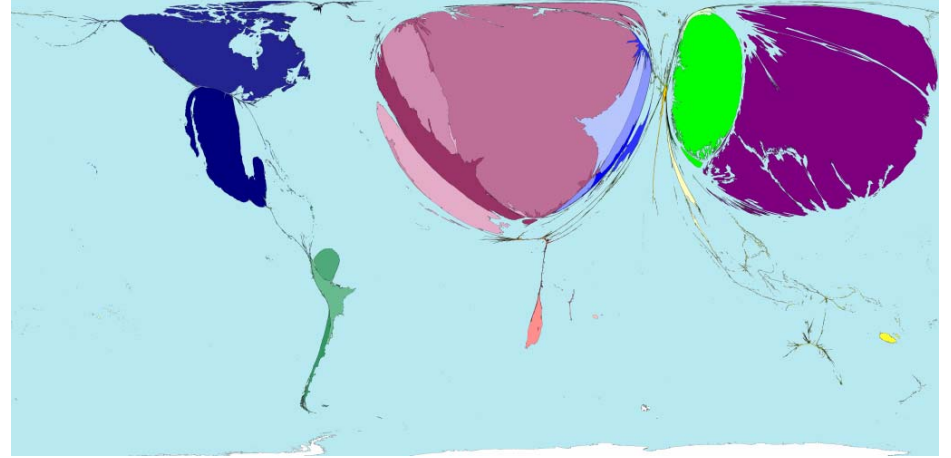
Net toy exports



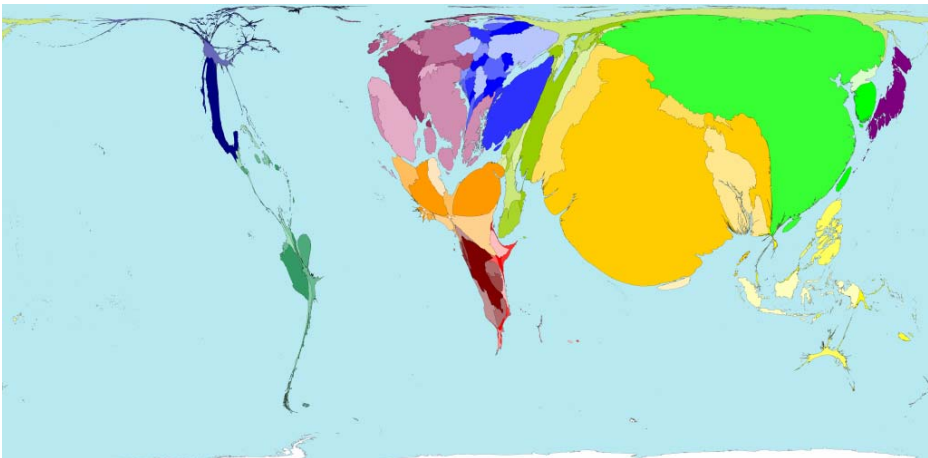
HIV/AIDS



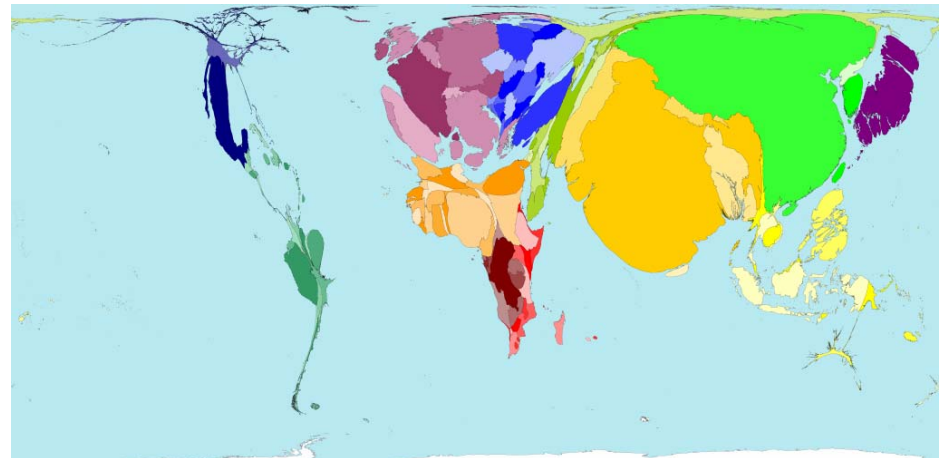
Vehicle Exports



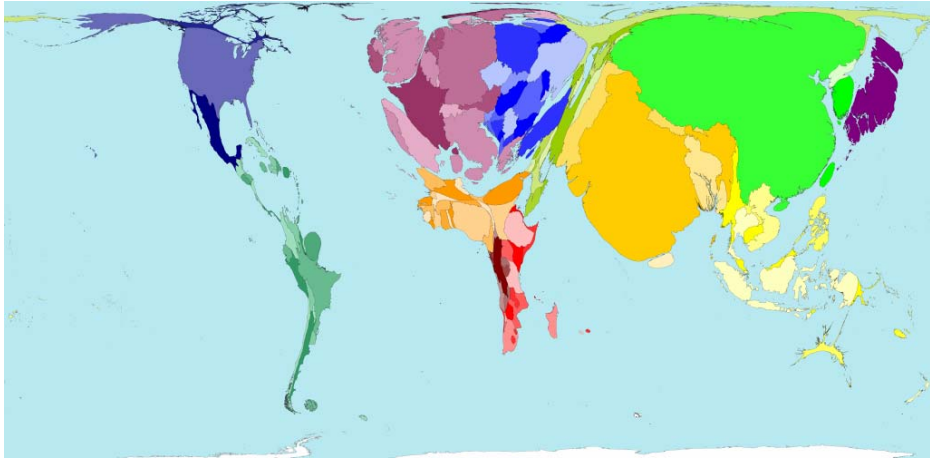
Population: Year 1



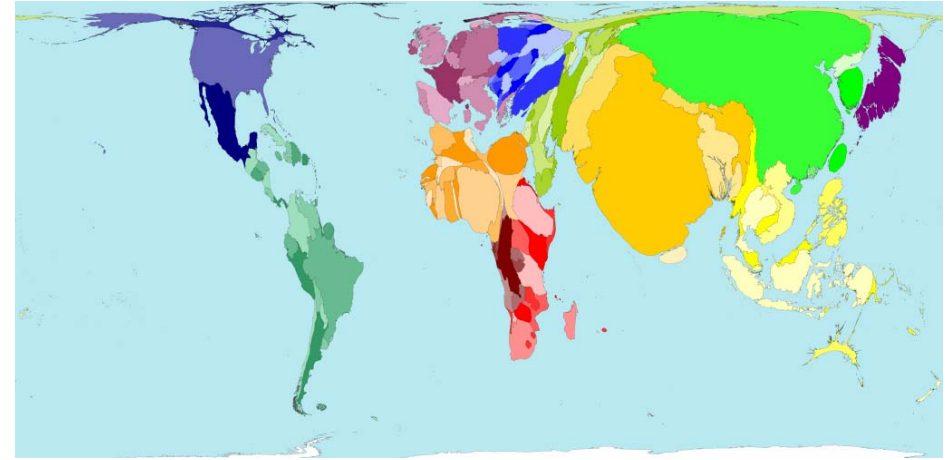
Population: Year 1500



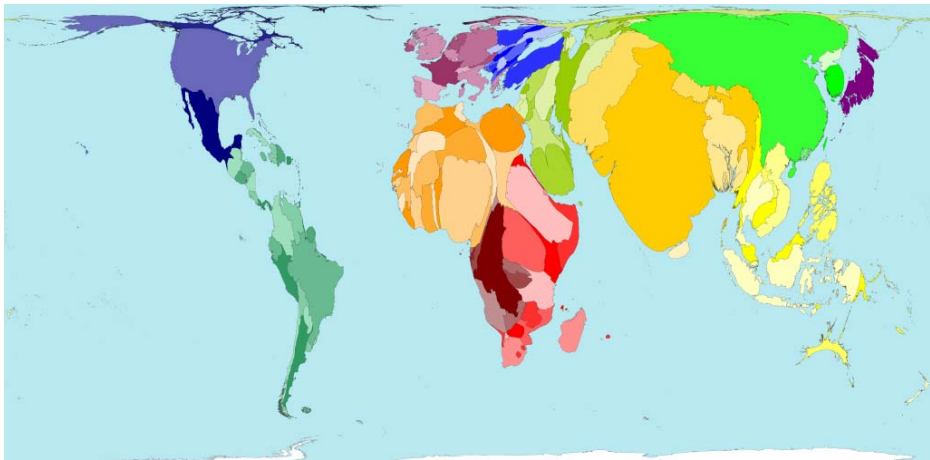
Population: Year 1900



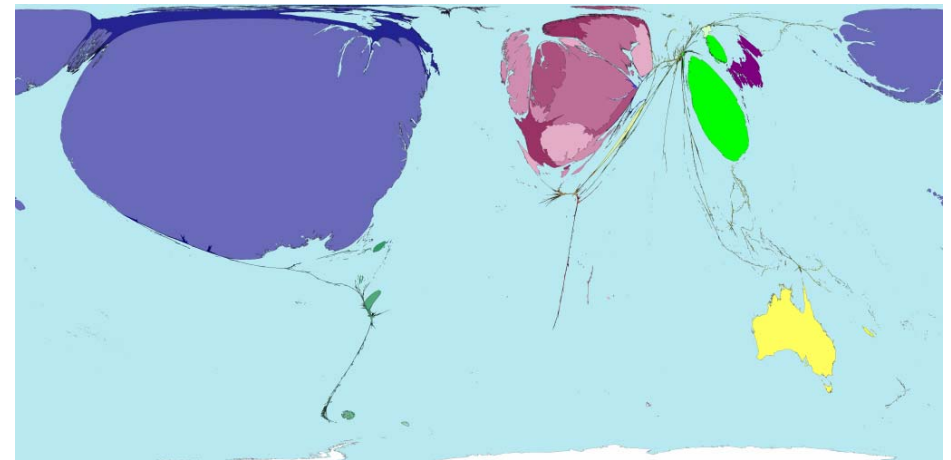
Population: Year 2002



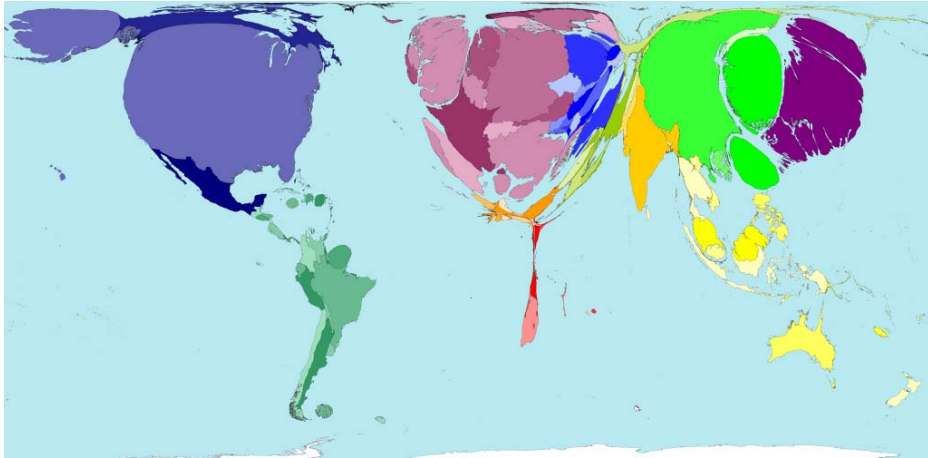
Population: Year 2300



Internet Users: 1990



Internet Users: 2002

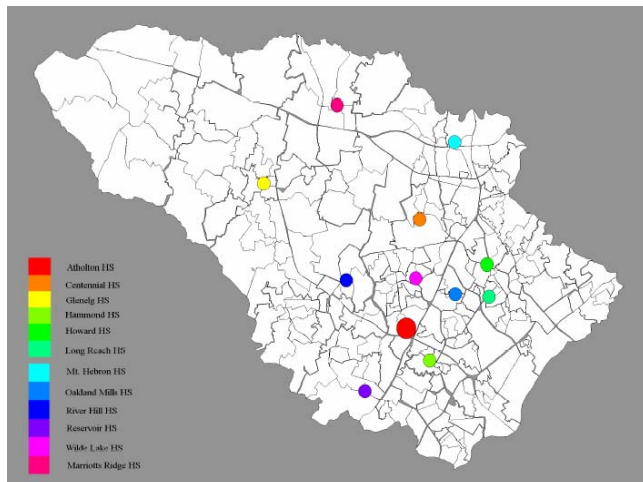


Temporal Visualization of Planning Polygons for Efficient Partitioning of Geo-Spatial Data

Poonam Shanbag, Penny Rheingans, Marie desJardins

University of Maryland, Baltimore County

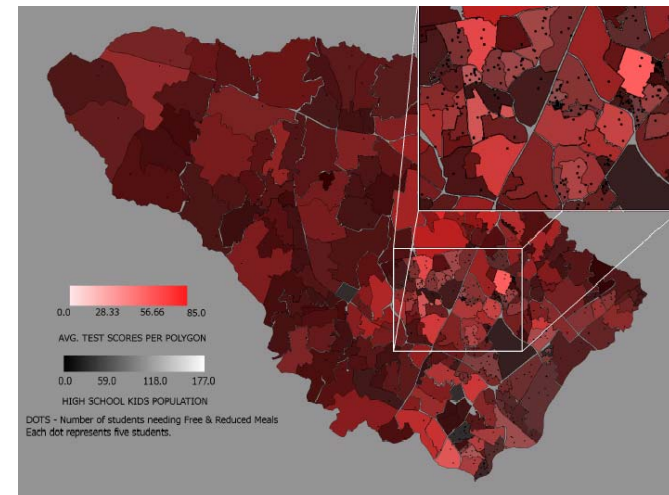
Howard County High Schools



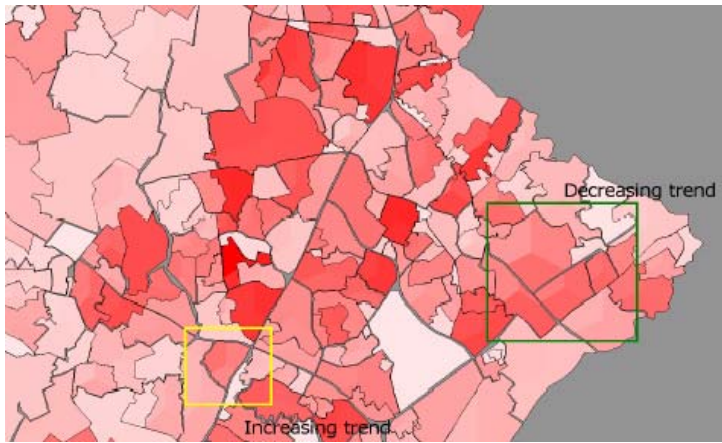
Visual Parameters and Numerousness

Saturation: test scores

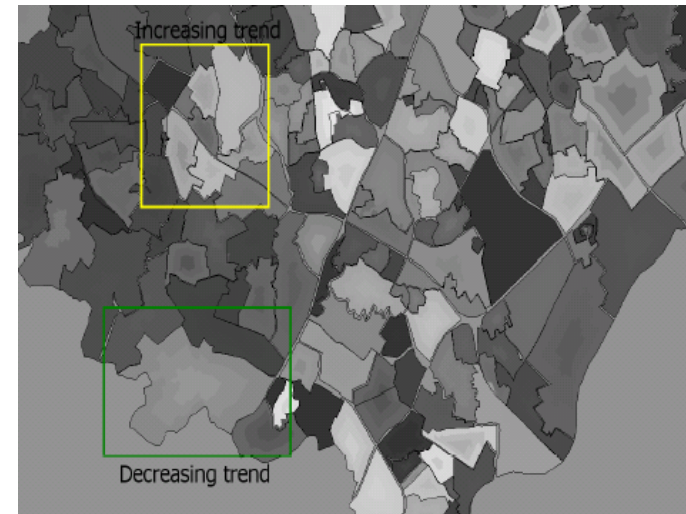
Brightness: population



Saturation: population
Wedges: 2005-2007



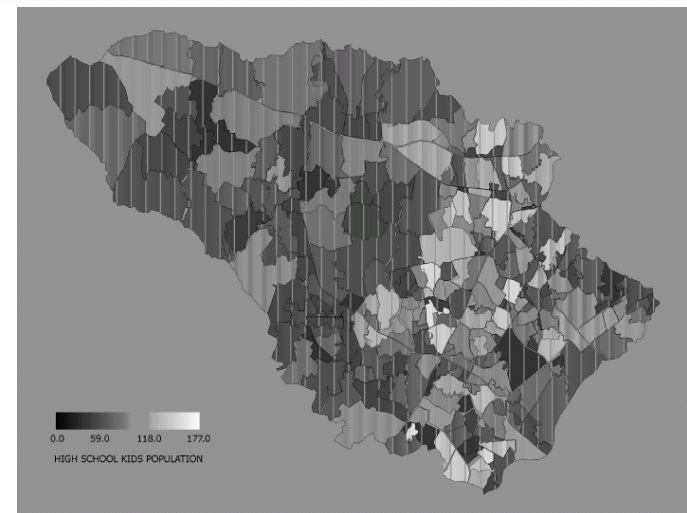
Brightness: population
Rings: 2005-2007



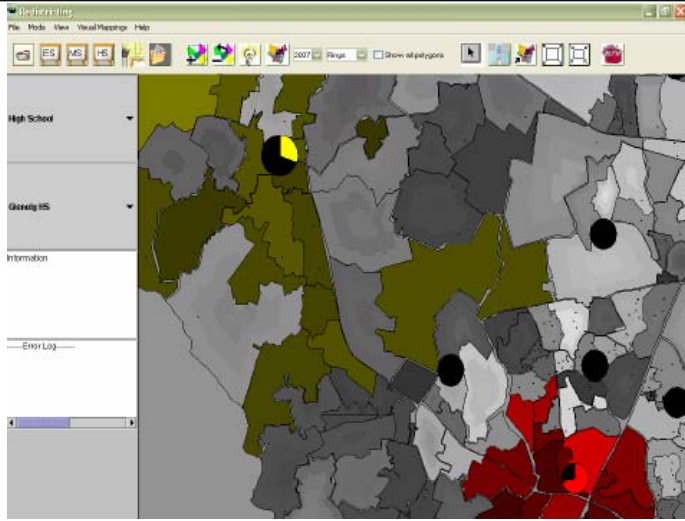
Saturation: population
Slices: 2005-2007



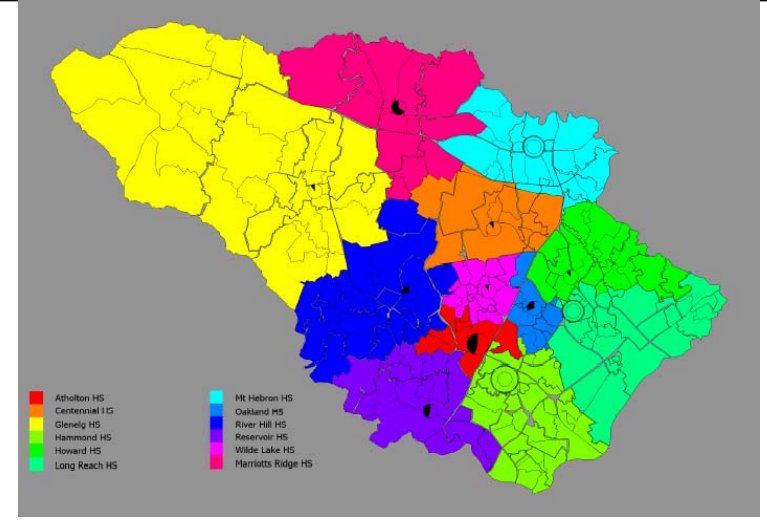
Brightness: population
Repeating time slices



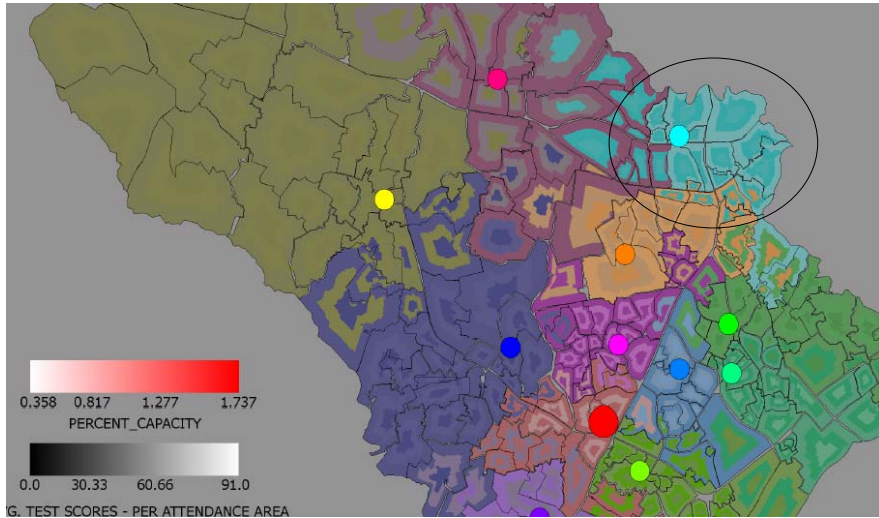
Interface



School Assignments



Evaluation of Different Plans



Evaluation of Different Plans

