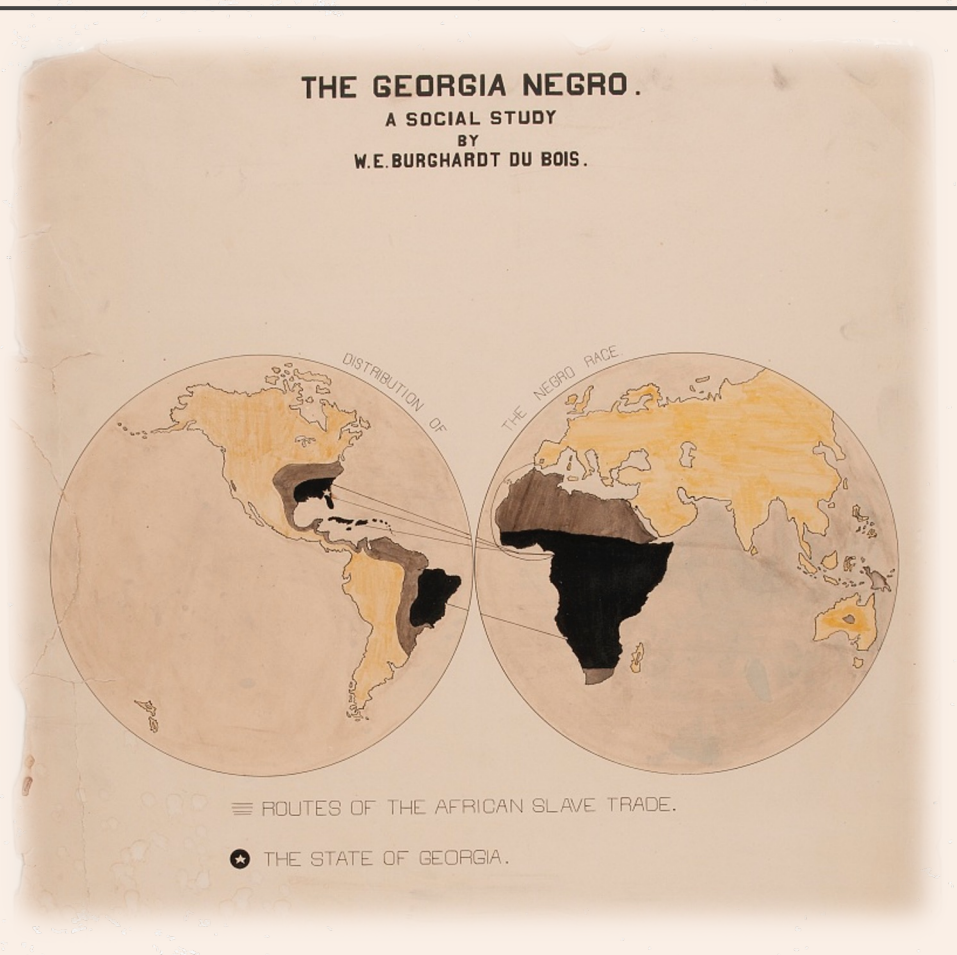


Color Line at the Turn of the Century

Data Visualization from W.E.B. DuBois's Paris Exhibition

DSE241 – Case Study

Alejandro Hohmann



Background

- The prolific sociologist and civil rights activist W.E.B. DuBois was asked to contribute to 1900 Paris World Expo.
- Exhibit's goal was “*to educate patrons about the forms of education and uplift occurring at black institutions and in African American communities across the US South.*”[†]
- DuBois and a team from Atlanta University created 63 hand crafted charts (plates).
- “*Most of the information for the charts was drawn from sources such as the United States Census, the Atlanta University Reports, and various governmental reports that had been compiled by DuBois for groups such as the United States Bureau of Labor.*”[†]

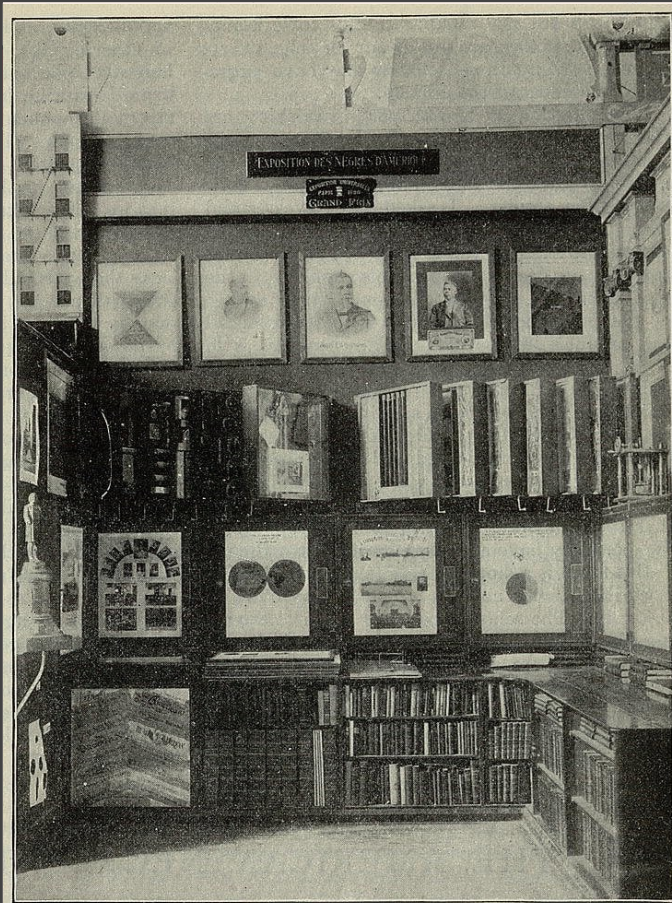


EXHIBIT OF AMERICAN NEGROES AT THE PARIS EXPOSITION.

[†]W.E.B. DuBois's Data Portraits, Visualizing Black America; pg. 9

Plate 51

Idiom	100% Stacked Area Chart
What: Data	Percentage of African Americans Free or Enslaved during 70-year period in USA
Why: Tasks	Proportion over time
How: Encode	<ul style="list-style-type: none"> Area marks Color channel for categorical attribute Length channel for time
Expressiveness & Effectiveness	Area chart perfect for proportion, especially in binary class. The vastness of the enslaved/black area highlights the scale of atrocity along with the stark contrast of 1870.



Image: Plate 51

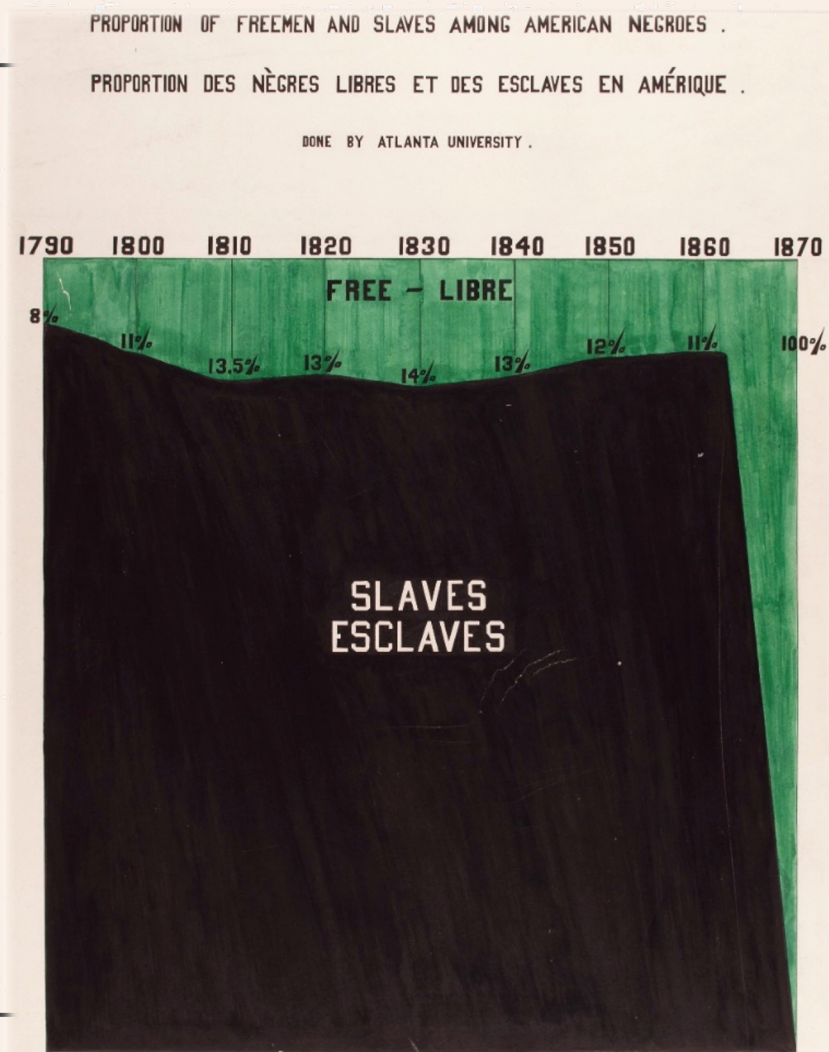


Plate 22

Idiom	Radial Pie Chart
What: Data	African American owned property values in Georgia during 40-year post-emancipation period
Why: Tasks	Value trend over time
How: Encode	<ul style="list-style-type: none"> • Area channel for \$ value • Color channel for time period
Expressiveness & Effectiveness	Color channels clearly separate time-periods, but it is difficult to compare area, especially in this nested circular form.

ASSESSED VALUATION OF ALL TAXABLE PROPERTY OWNED BY GEORGIA NEGROES :

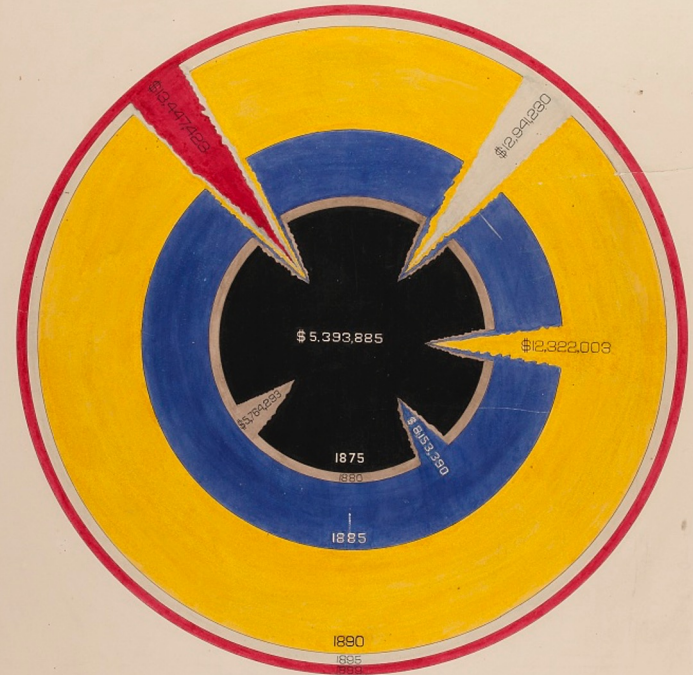


Plate 21

Idiom

Line Chart

What: Data

African American owned property values in Georgia during 40-year post-emancipation period

Why: Tasks

Value trend over time

How: Encode

- Line marks
- Length channel for time
- Color channel for certainty/uncertainty
- Text annotation for context

Expressiveness & Effectiveness

The sharp ascent of a line highlights the quick progress made in the 40-year post emancipation period. The annotations highlight the tragic setbacks.

VALUATION OF TOWN AND CITY PROPERTY OWNED BY GEORGIA NEGROES.

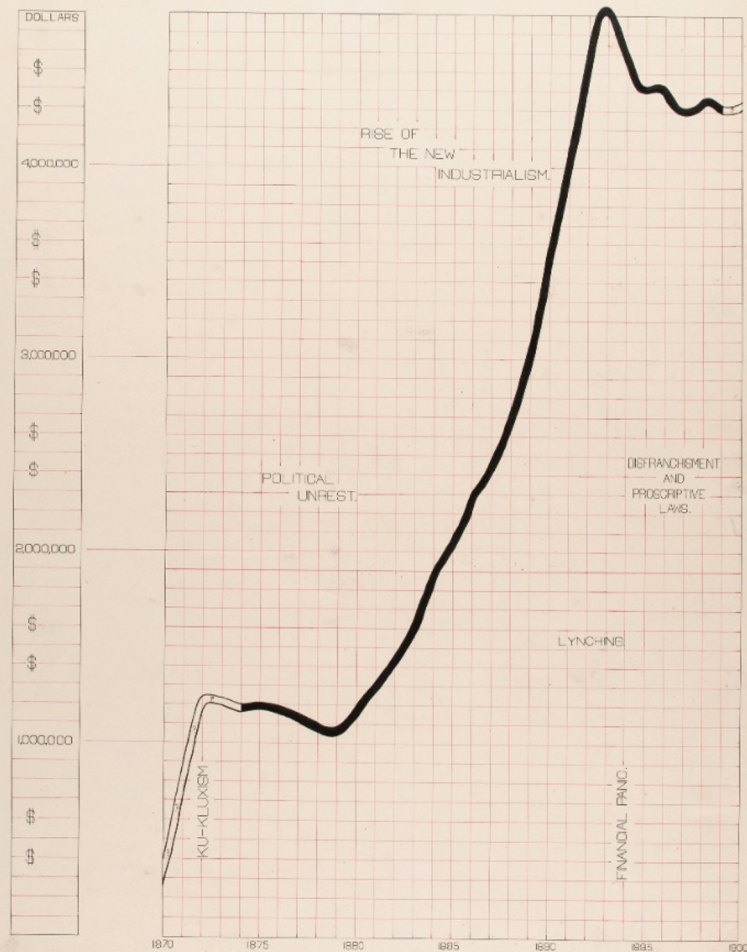


Plate 53

Idiom 100% Stacked-Bar Mirror Chart

What: Data Marriage Status across Genders and Age

Why: Tasks Compare proportions across multiple categories

How: Encode

- Spatial channel for gender
- Color channel for marriage status
- Area/Length channel for proportion

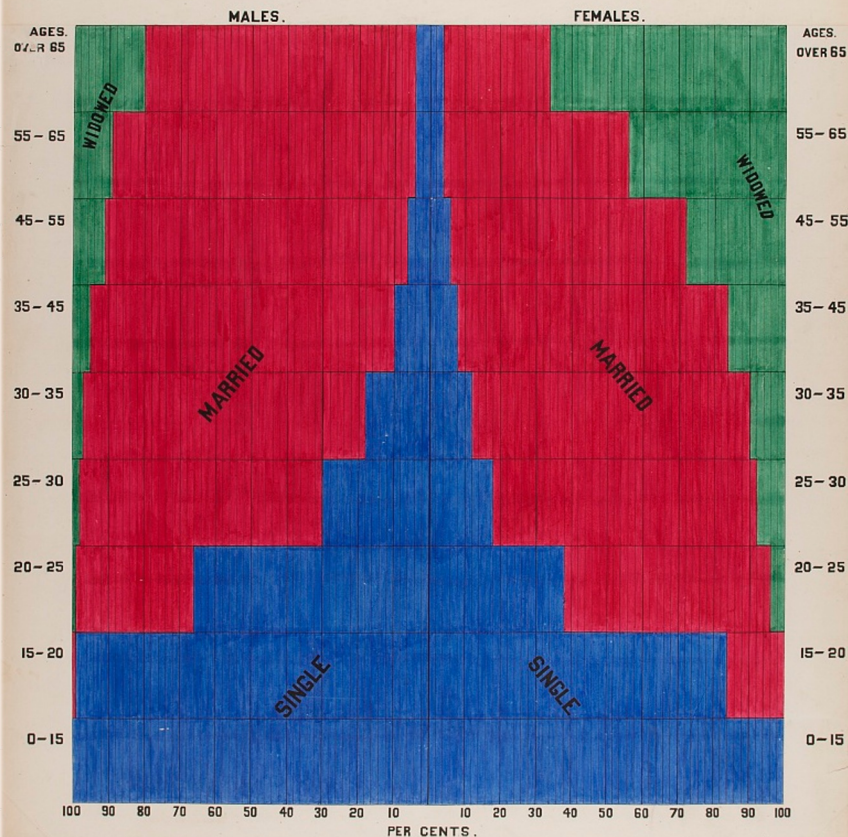
Expressiveness & Effectiveness

Color channels clearly indicate marriage status and vertical axis does a nice job of showing change across ages. It can be somewhat difficult to compare diverging lengths (gender) but aided by percent labels on horizontal axis.

Conjugal condition of American Negroes according to age periods.

Condition conjugale des Nègres Américains au point de vue de l'âge.

Done by Atlanta University.



Reference & Source

Primary Reference:

W.E.B. DuBois's Data Portraits, Visualizing Black America;
Whitney Battle-Baptiste, Britt Rusert

Image Source:

<https://github.com/ajstarks/dubois-data-portraits>

- Modern, digital recreations of the original portraits

Contact



Alejandro Hohmann



ahohmann@ucsd.edu



github.com/gojandrooo