

The background features several concentric circles in shades of pink, yellow, and light blue. A faint, light-colored silhouette of a person's head and shoulders is visible on the right side of the slide.

W.E.B. Dubois

Visualizing Black America

Marisa Ruiz Asari | Data Visualization & Information Aesthetics | Oct. 2nd, 2019

PRESENTATION OVERVIEW:

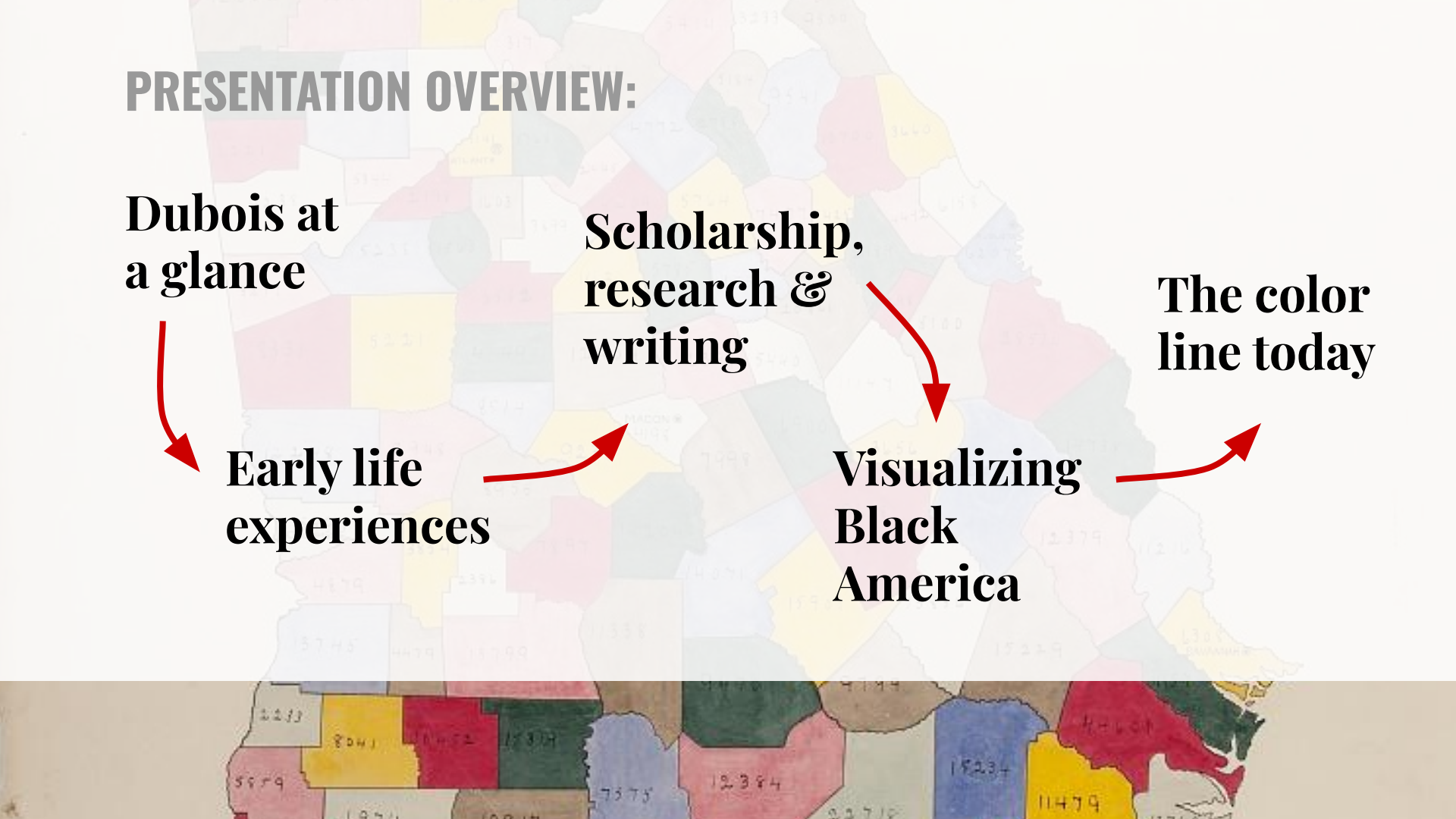
**Dubois at
a glance**

**Scholarship,
research &
writing**

**The color
line today**

**Early life
experiences**

**Visualizing
Black
America**



Dubois at a glance



February 23, 1868 – August 27, 1963

American civil rights activist

Helped found NAACP in 1909

Pan-Africanist

Unity and common destiny for all people of African descent

Writer, Scholar & Poet

First African American to receive a PhD from Harvard (at age 27)

Studies, novels, & autobiographies

Educator

University of Pennsylvania - Sociology

Atlanta University - Economics

Early life experiences

Born 1868, in Great Barrington, Massachusetts

1885 moved to Nashville, Tennessee, to attend Fisk University

Jim Crow south - brutal racism & segregation

Harvard masters

University of Berlin

Harvard PhD

**How do these
experiences
influence Dubois'
data visualizations?**

DARIEN, McINTOSH CO.,
GA.

DISTRIBUTION OF 1000 NEGRO INHABITANTS

- Well-to-do
- Better class of laborers
- Poor
- Lowest class

Jim Crow South



<https://www.themaparchive.com/the-spread-of-jim-crows-laws-in-the-south-18901909.html>

**Jim Crow: separate
but “equal”**



**1896 Plessy vs. Ferguson Supreme Court Decision
upholds segregation**



Scholarship, Research & Writing

Dissertation:

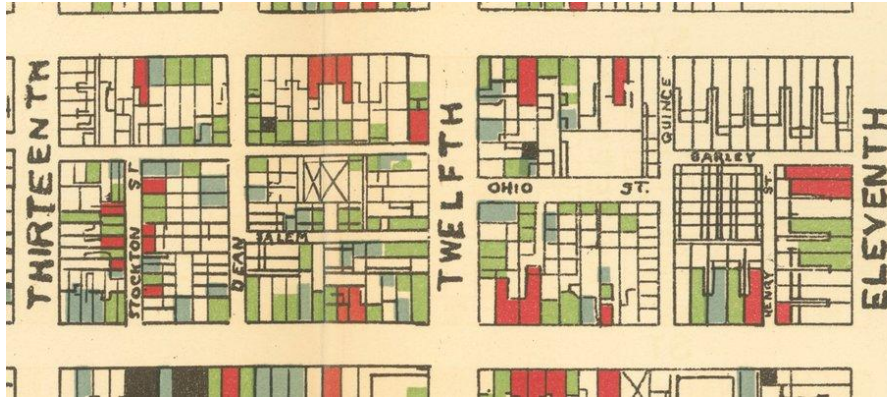
The Suppression of the African Slave Trade to
the United States of America, 1638-1870

Souls of black folks 1903:

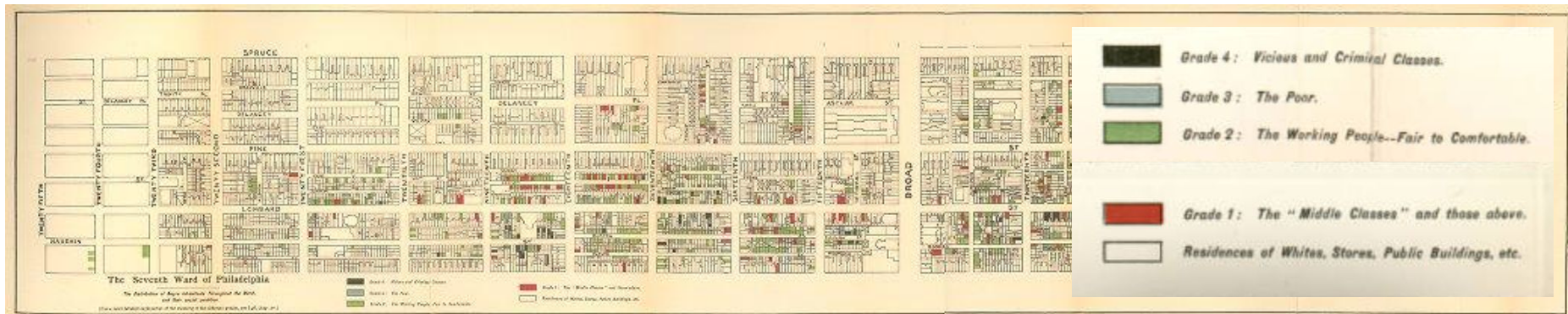
**"The problem of the Twentieth Century
is the problem of the color-line."**

"Du Bois concentrates on how racial prejudice impacts individuals. He mourns the loss of his baby son, but he wonders if his son is not better off dead than growing up in a world dominated by the color-line."

“The Philadelphia Negro” 1899



- City's oldest African American community - 7th Ward
- Over 5,000 personal interviews
- Data on birthplace, occupation, age
- Detailed neighborhood maps



[Add Layers](#) [Save](#) [Identify](#) [Link](#) [Print](#) [Gazetteer](#) [About](#) [Notes](#)[Street View](#) [Measure](#) [Share Map](#)

- ☐ Bromley, 1895 (26th to 18th)
- ☐ Bromley, 1895 (18th to 12th)
- ☐ Bromley, 1895 (12th to 6th)
- ☒ Du Bois Map of the Seventh Ward

Society & Demographics

- ☐ Children, 1900 (parcels)
- ☐ Boarders/Lodgers 1900 (parcels)
- ☐ Servants, 1900 (parcels)
- ☒ Race/nationality, 1900 (parcels)
 - White, US-born
 - England-born
 - Russia/Poland-born
 - Black, PA-born
 - White, PA-born
 - White, Irish-born
 - Black, Southern-born
 - White immigrant, other
- ☐ Percent Black, 1900 (Ward)
- ☐ Foreign Born, 1900 (Ward)
- ☐ Population Density, 1900 (Ward)
- ☐ Building Type, 1900 (parcels)

Base Maps

- ☒ Stamen Toner
- ☐ Stamen Watercolor
- ☐ OpenStreetMap
- ☐ No background

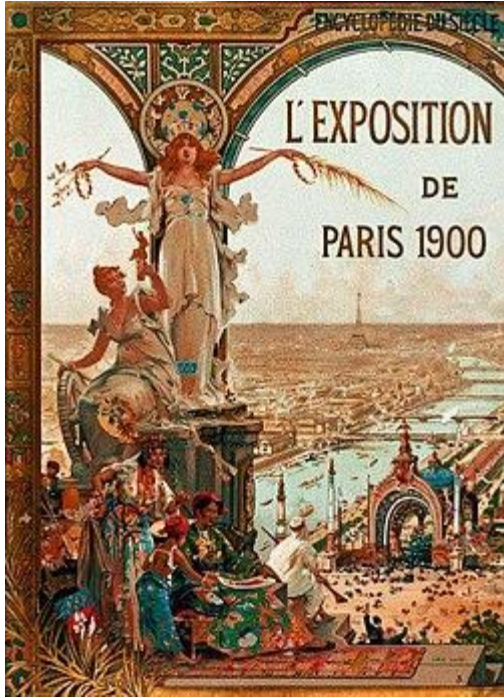
Enter search...

Search

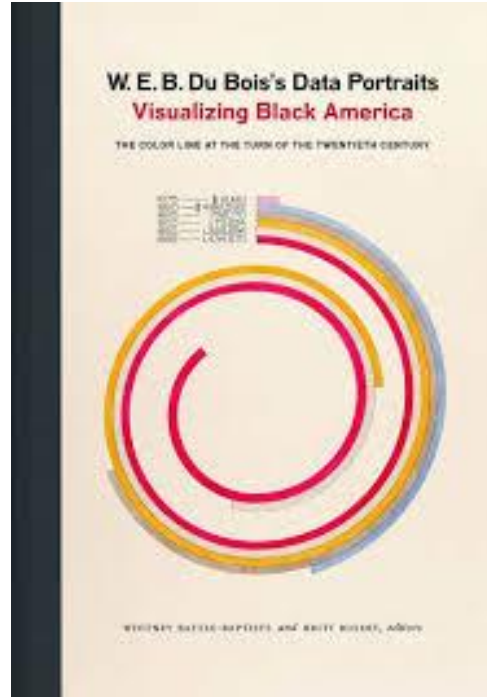
Reset

Map tiles by [Stamen Design](#), under [CC BY 3.0](#). Data by [OpenStreetMap](#), under [CC BY SA](#).

Visualizing Black America



1900 Paris Exposition Universelle



Two groups of data portraits:

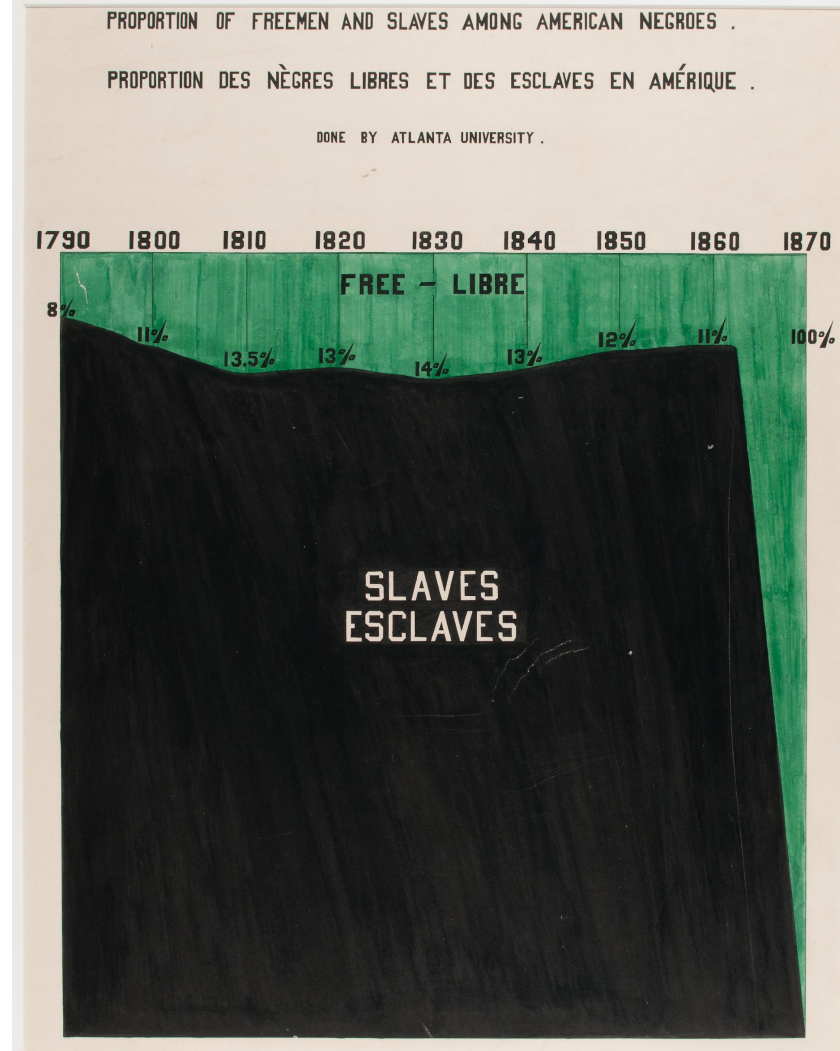
1. “A Series of Statistical Charts Illustrating the Condition of the Descendants of Former African Slaves Now in Residence in the United States of America”
2. “The Georgia Negro”

Proportion of freedmen and slaves among American Negroes 1790 - 1870

Type: Area Chart

Considerations:

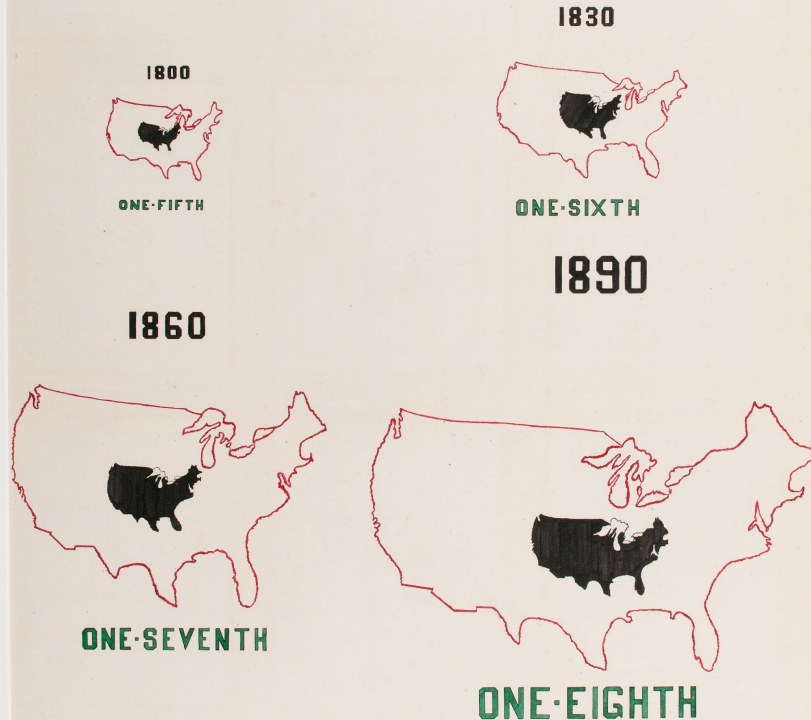
- Color - black and green
- Use of area instead of bar chart
- Axes positioning
- All hand drawn



PROPORTION OF NEGROES IN THE TOTAL POPULATION OF THE UNITED STATES .

RAPPORT DES NÈGRES A LA POPULATION TOTALE DES ETATS UNIS .

DONE BY ATLANTA UNIVERSITY .



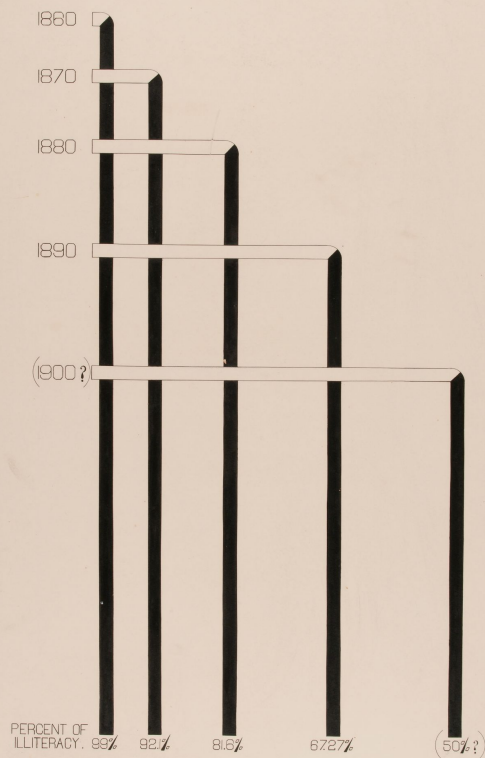
Proportion of Negroes in the total population of the United States

Type: Isotype (proportional), small multiples

Considerations:

- Use of scale
- Relative size between black population and total population, but also overall population growth
- Before Otto Neurath
- Shape rather than geographical features
- Colors: pan-african red green and black

ILLITERACY.



Illiteracy

Type: Bar Chart

Considerations:

- Axes labels
- Contrasting lines and colors

Negro business men in the United States.

Nègres Américains dans les affaires.

Done by Atlanta University.



Negro business men in the United States

Type: ?

Considerations:

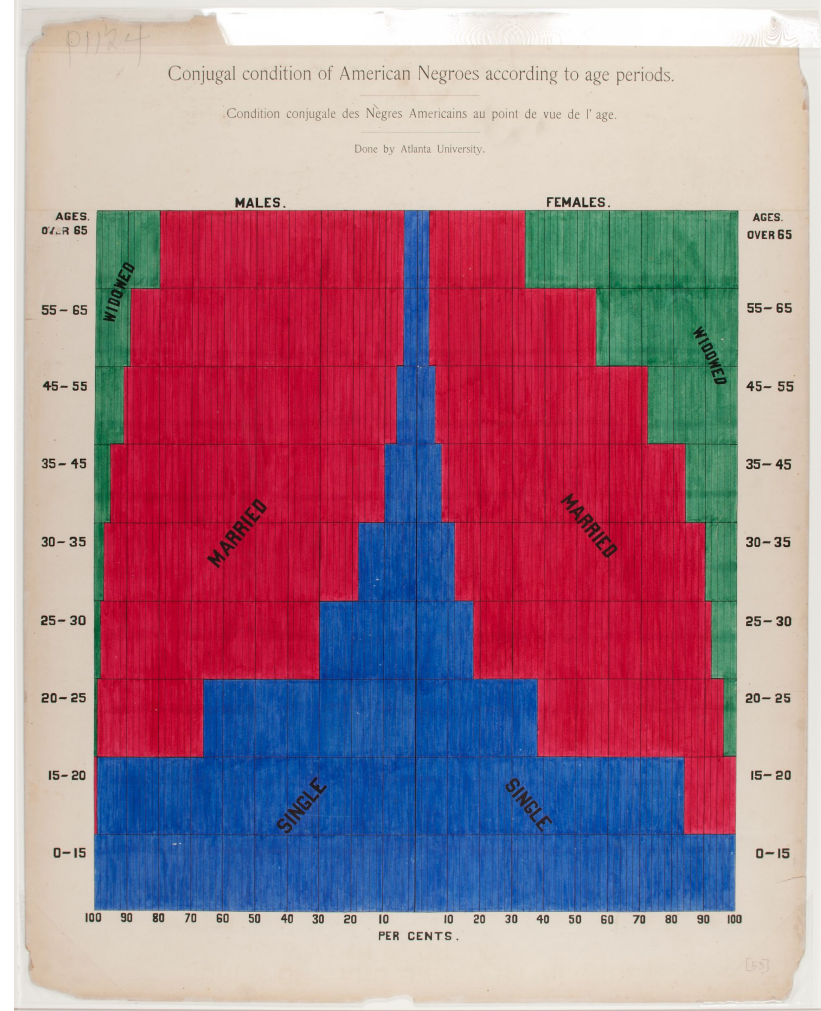
- Color, composition, scale
- Relative scale instead of numbers

Conjugal condition of the American Negroes according to age periods

Type: Grid, Area, and Bar Chart

Considerations:

- Color

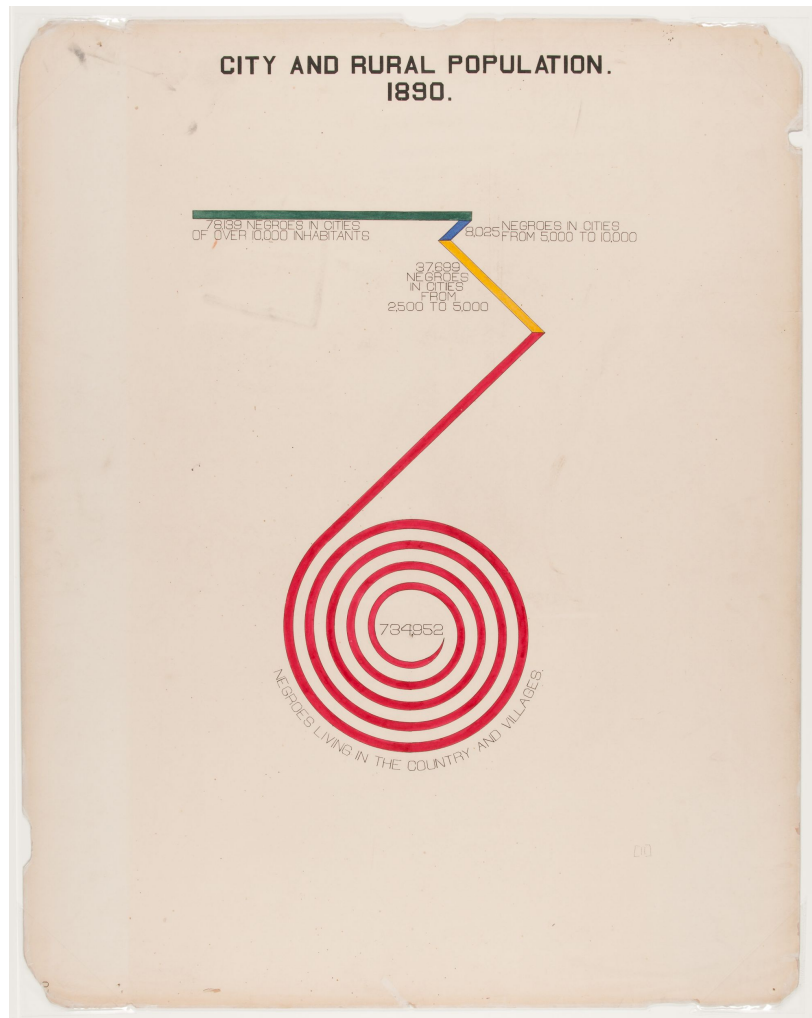


City and rural population

Type: Stacked/radial bar chart?

Considerations:

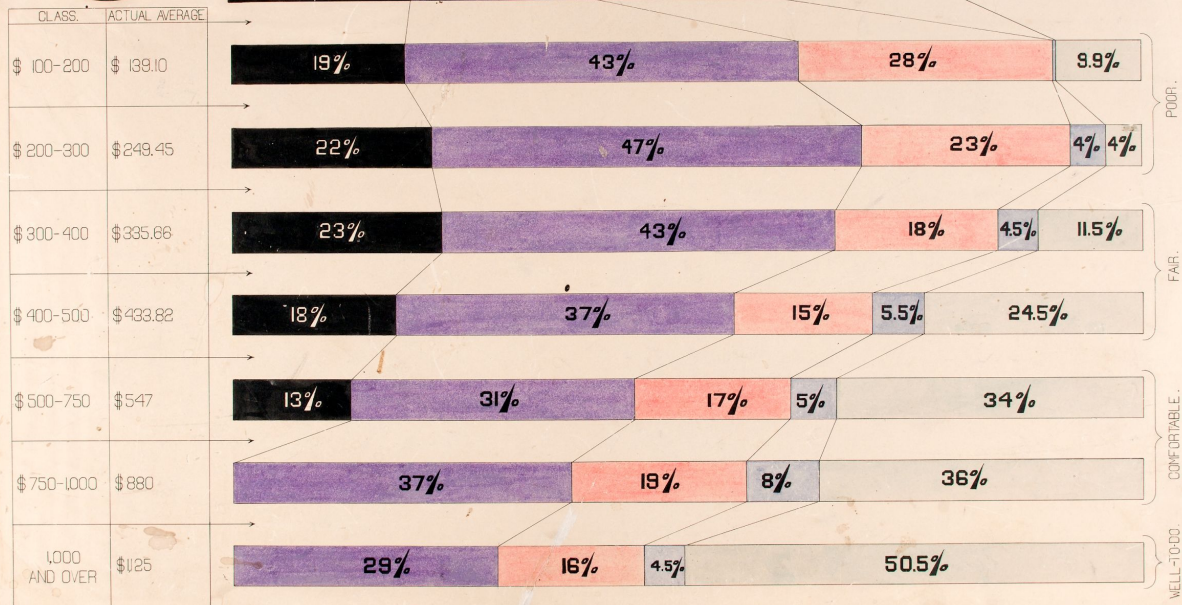
- Use of coil - do we lose critical information here?



INCOME AND EXPENDITURE OF 150 NEGRO FAMILIES IN ATLANTA, GA., U.S.A.



ANNUAL EXPENDITURE FOR				
RENT.	FOOD.	CLOTHES.	DIRECT TAXES.	OTHER EXPENSES AND SAVINGS.
			THE STATE TAX RATE IS: 1890-\$3.50 PER \$1,000 1895-\$3.50 1899-\$3.98 1895 \$4.56 1899 \$5.38 STATE AND COUNTY TAXES RAISE THIS TO \$21 PER \$1,000 IN ATLANTA.	THE HIGHER LIFE. RELIGION. ART. EDUCATION. SICKNESS. SAVINGS. AMUSEMENTS. BOOKS AND PAPERS TRAVEL



FOR FURTHER STATISTICS RAISE THIS FRAME.

Income and expenditure of 150 Negro families in Atlanta, GA

Type: Stacked Bar Chart

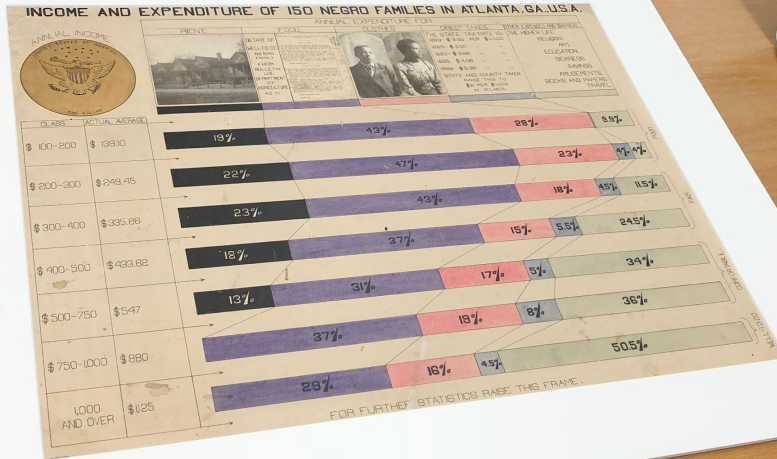
Considerations:

- Use of images
- Color
- Connecting lines
- Scale - see next slide

Income and expenditure of 150 Negro families in Atlanta, GA

Scale!

Hand drawn



ACRES OF LAND OWNED BY NEGROES
IN GEORGIA.



Acres of land owned by Negroes in Georgia

Type: Bar Chart

Considerations:

- Use of single color
- Time on the y axis
- No x axis
- Messaging here: we exist, we own property

MIGRATION OF NEGROES . 1890.



PRESENT DWELLING PLACE OF NEGROES BORN IN GEORGIA.



BIRTH PLACE OF NEGROES NOW RESIDENT IN GEORGIA.

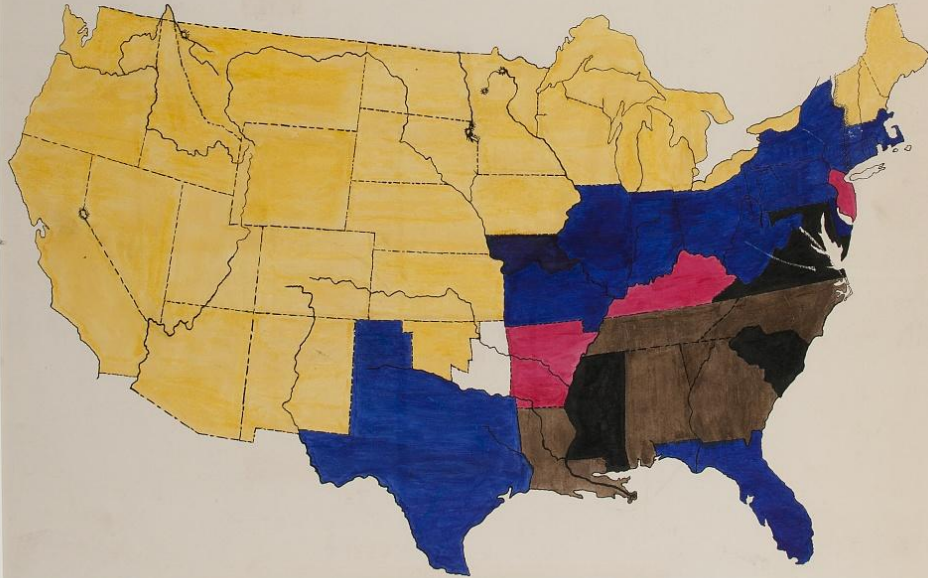
Migration of Negroes 1890

Type: map

Considerations:

- Colors do not seem to correlate to numbers
- Hard to read numbers for each state
- Use of arrows

DISTRIBUTION DES NÈGRES DAN LES ETATS UNIS.



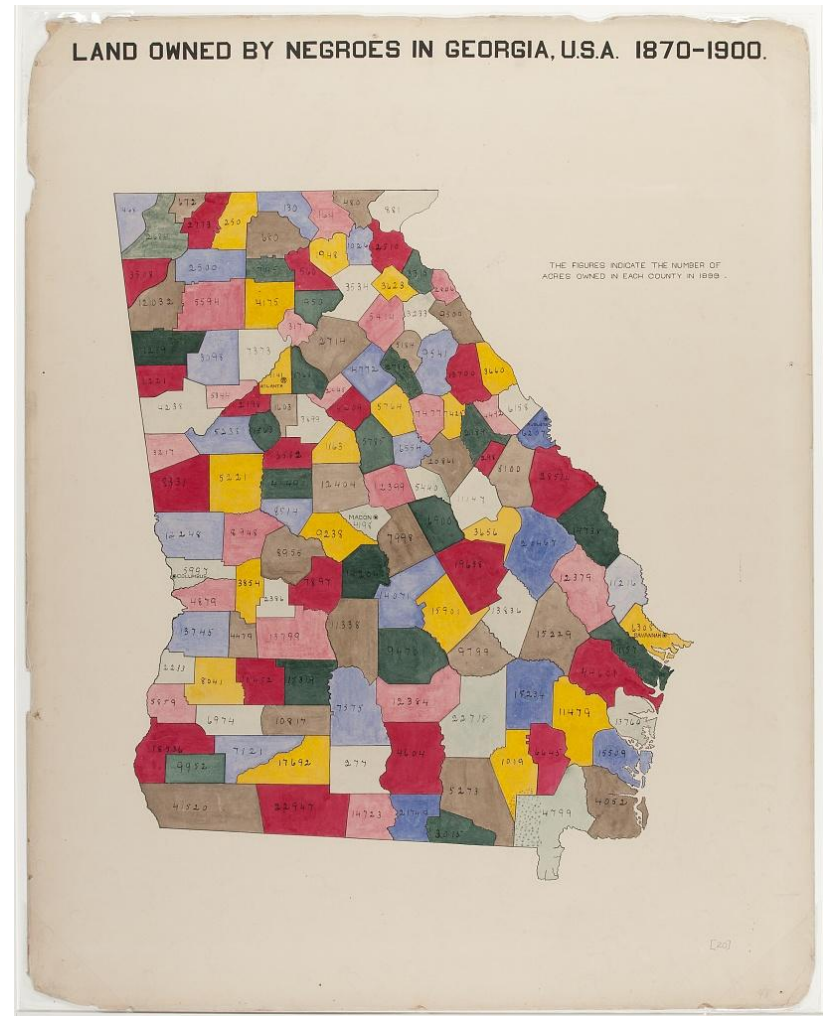
- Color gradient - better than no color relationship, but still counterintuitive?

Land owner by Negroes in Georgia, 1870-1900

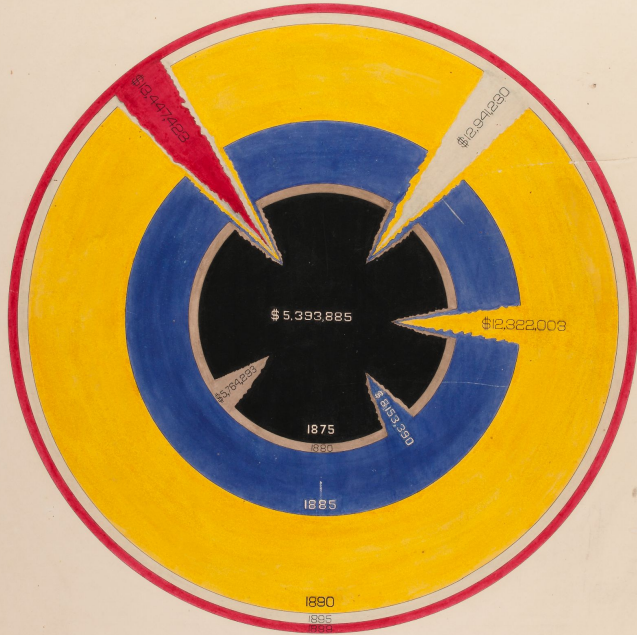
Type: map

Considerations:

- Colors do not seem to correlate to numbers
- Hard to read numbers for each county



ASSESSED VALUATION OF ALL TAXABLE PROPERTY
OWNED BY GEORGIA NEGROES .



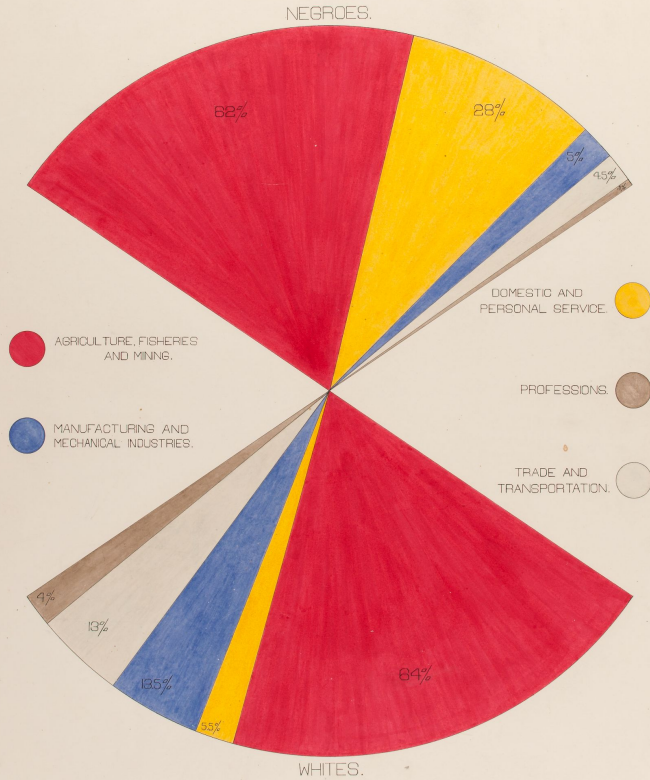
Assessed valuation of all taxable property owned by Georgia Negroes

Type: ?

Considerations:

- Could this be better shown as a bar chart or line chart?
- Colors - dark to light/bright

OCCUPATIONS OF NEGROES AND WHITES IN GEORGIA.



Occupations of Negroes and Whites in Georgia

Type: Pie Chart

Considerations:

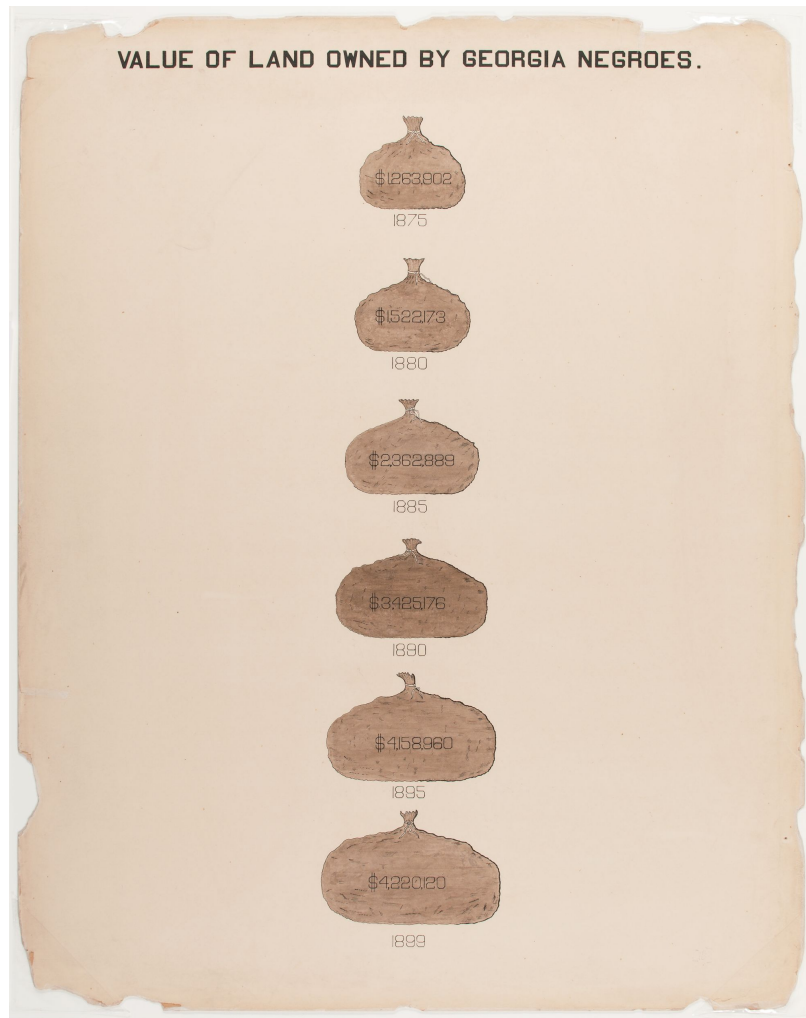
- Composition, use of top & bottom halves
- Position of legend
- What point is trying to be made here? Is it about similarities or differences?

Value of land owned by Georgia Negroes

Type: Isotypes, small multiples

Considerations:

- Before Otto Neurath



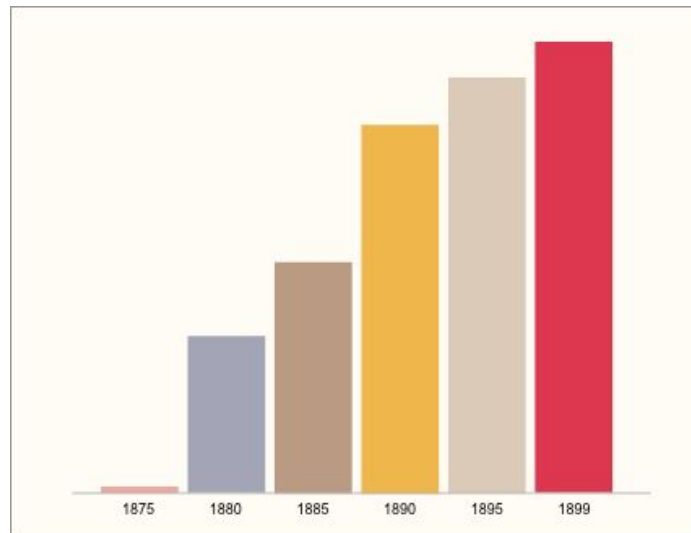
ASSESSED VALUE OF HOUSEHOLD AND KITCHEN FURNITURE
OWNED BY GEORGIA NEGROES.

1875 — \$ 21,86
1880 — \$ 498,532
1885 — 796,170
1890 — 1,173,624
1895 — 1,322,694
1899 — 1,494,975



Assessed value of household and kitchen furniture owned by Georgia Negroes

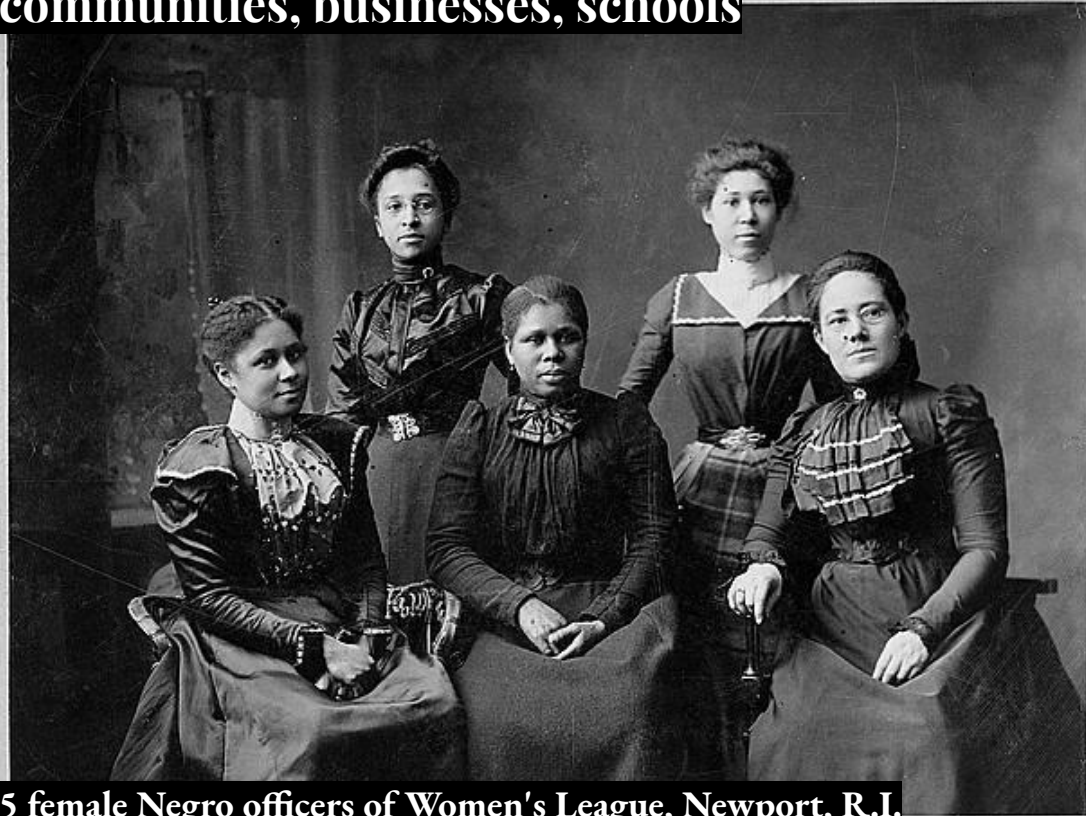
Type: Radial Bar Chart, Considerations: circular form



<https://medium.com/nightingale/exploring-the-craft-and-design-of-w-e-b-du-bois-data-visualizations-part-3-b110d034fd36>

Photos as data visualization?

500 photos of African American communities, businesses, schools



5 female Negro officers of Women's League, Newport, R.I.



Two African American children sitting on steps to porch



Agricultural and Mechanical College, Greensboro, N.C - Butter making



Visualizing Black America

Takeaways:

"The problem of the Twentieth Century is the problem of the color-line."

- Intentional use of color and shape
- Powerful underlying messaging
- Hand drawn data portraits
- Focus on 'ordinary' census-like data, jobs, property, marital status, place of birth
- Context and time period - before the time of many influential bodies of work in the data visualization field

America is more diverse than ever — but still segregated

The United States is on track to be a majority-minority nation by 2044. But census data show most of our neighbors are the same race.

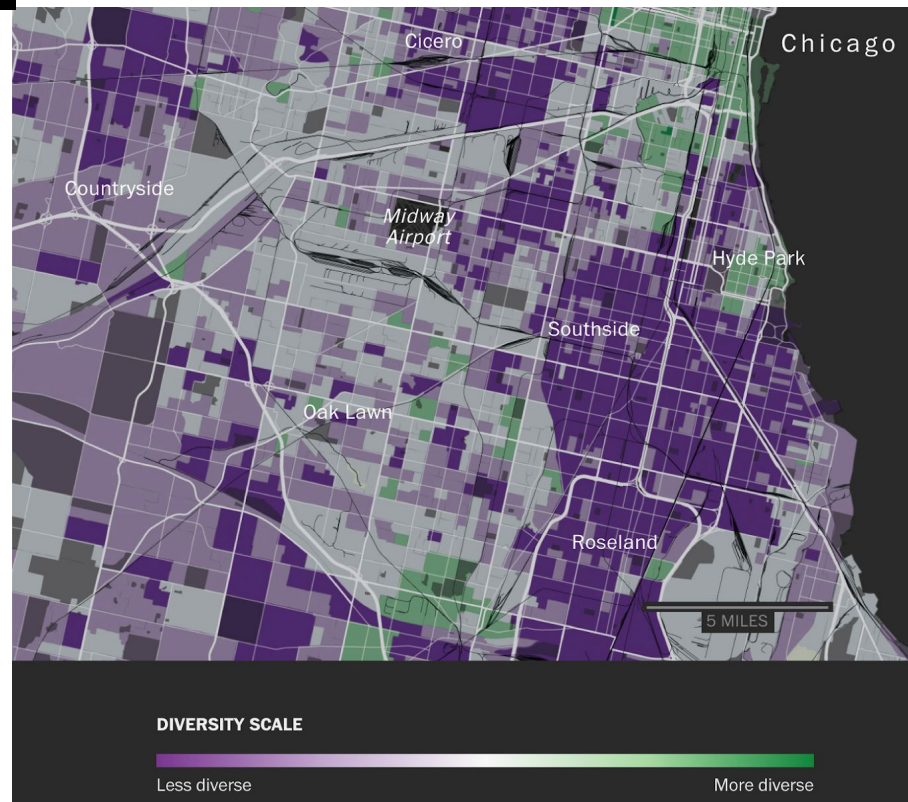
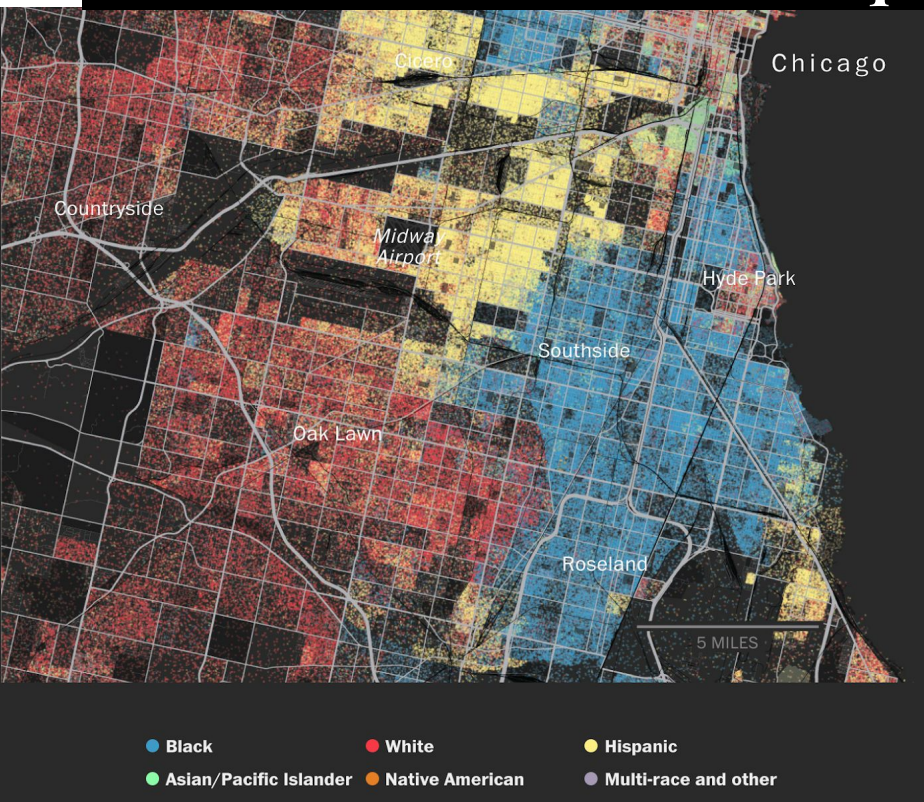
By Aaron Williams and Armand Emamdjomeh Updated May 10, 2018

● Black ● White ● Hispanic
● Asian/Pacific Islander ● Native American ● Multi-race and other

The color line today

<https://www.washingtonpost.com/graphics/2018/national/segregation-us-cities/>

Color scheme: Dubois- esque?

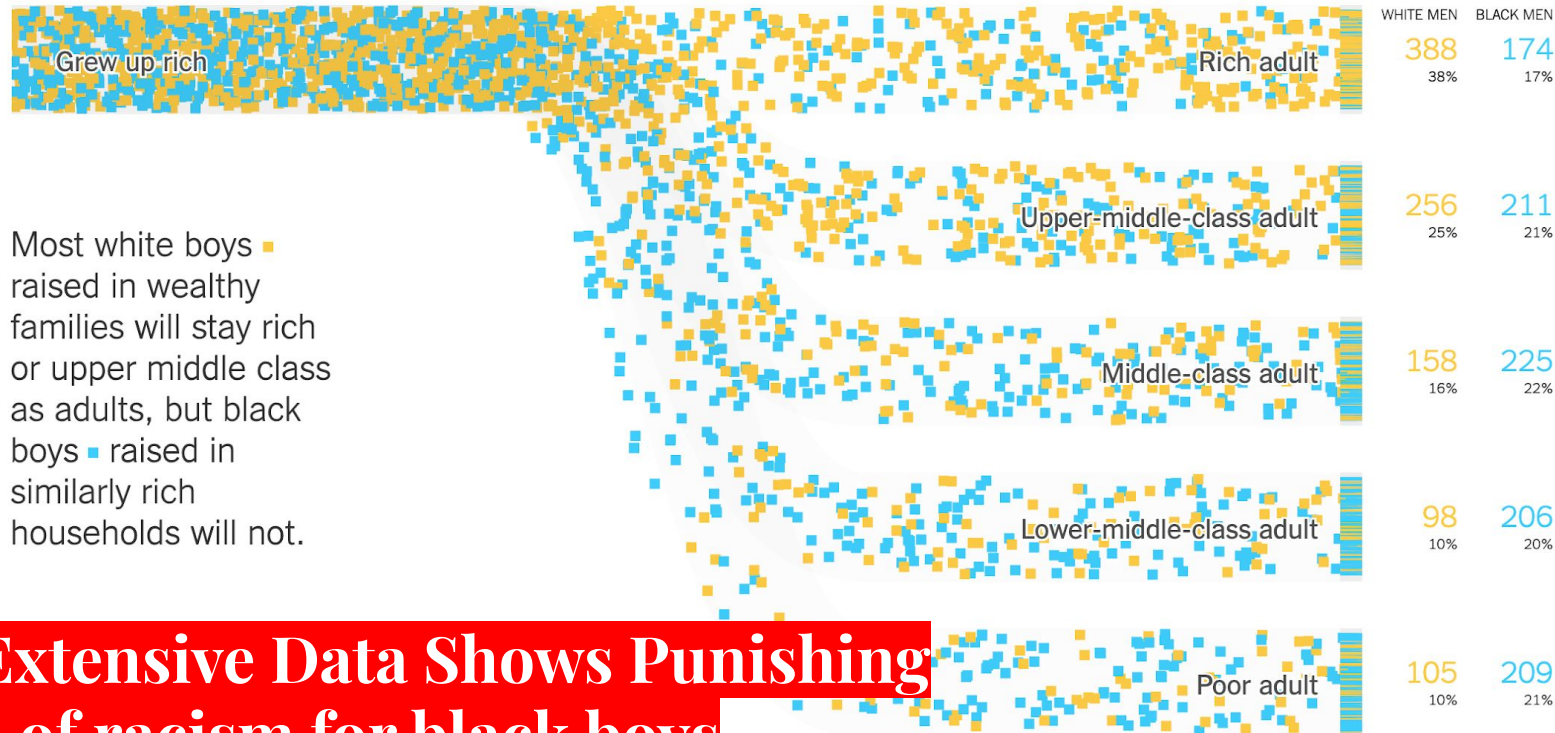


<https://www.washingtonpost.com/graphics/2018/national/segregation-us-cities/>



Follow the lives of 4,800 boys who grew up in rich families ...

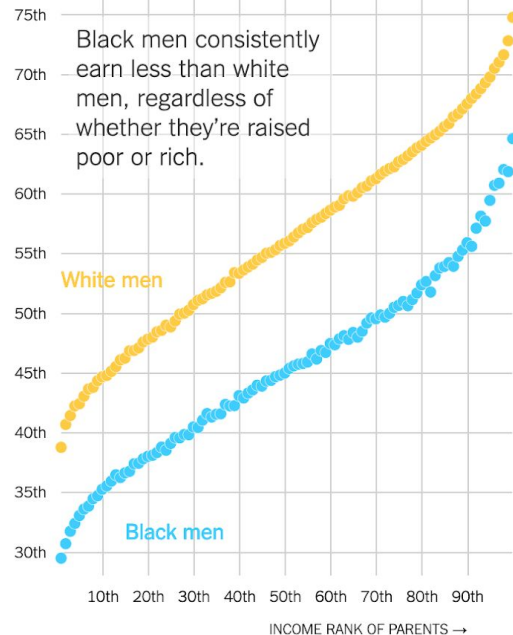
...and see where they end up as adults:



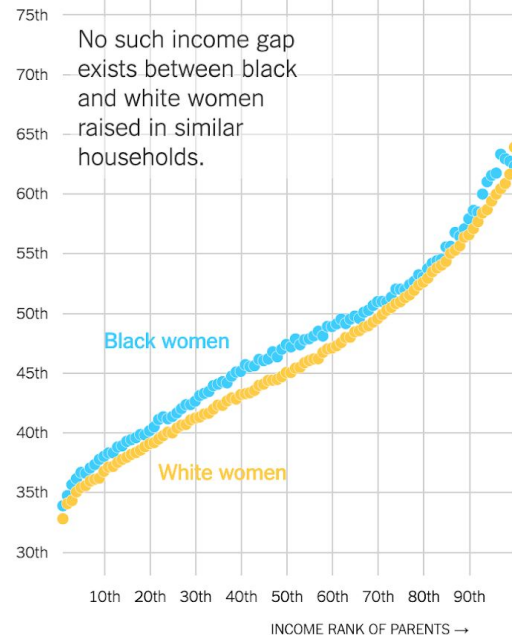
Nyt: Extensive Data Shows Punishing reach of racism for black boys

Large income gaps persist between men — but not women.

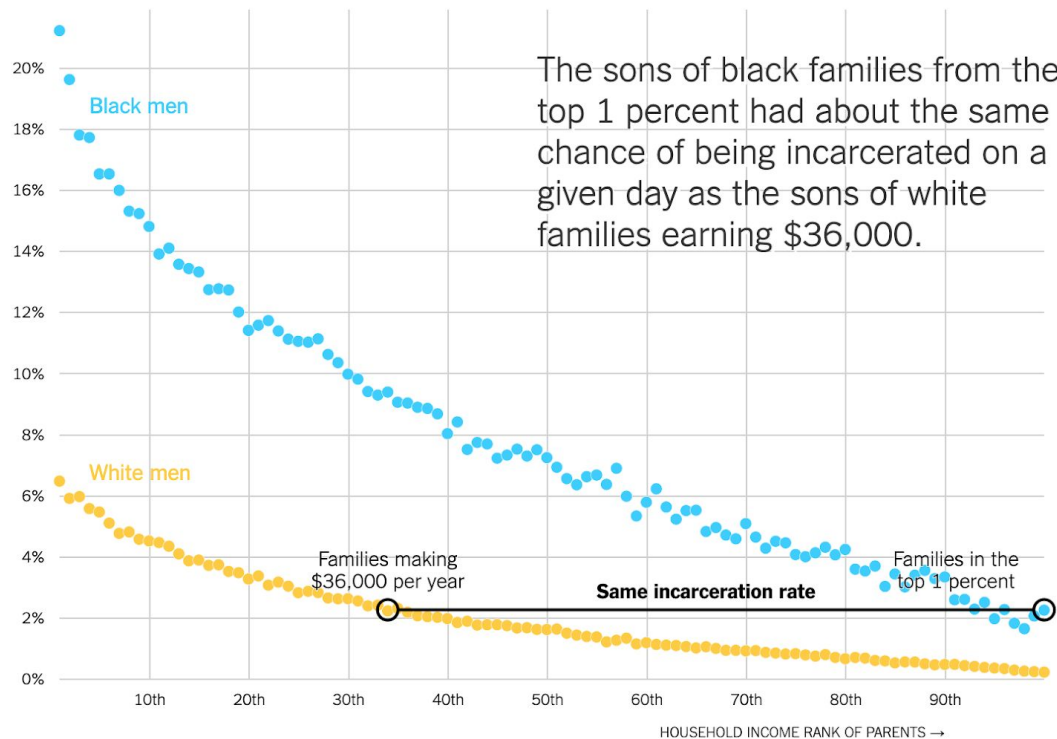
↑ AVERAGE INDIVIDUAL INCOME RANK OF KIDS



↑ AVERAGE INDIVIDUAL INCOME RANK OF KIDS



Share of the men incarcerated on April 1, 2010

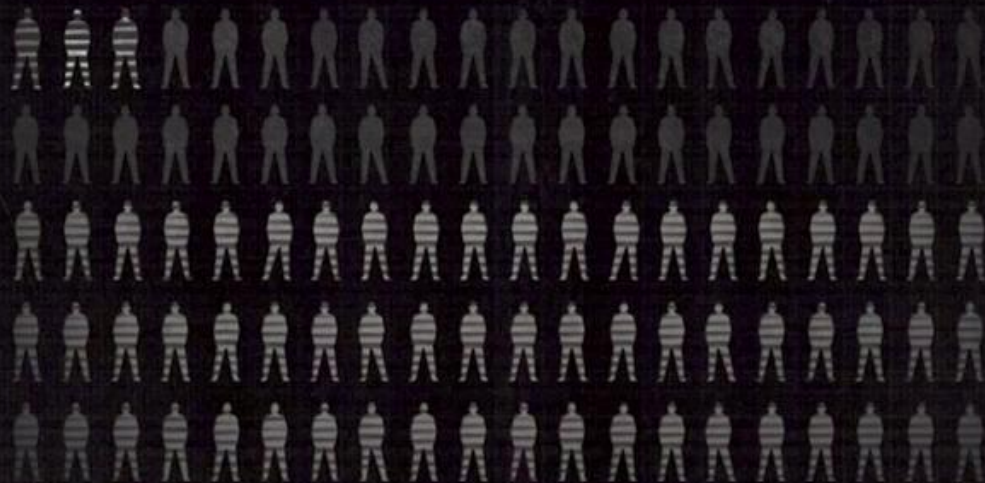


Includes men who were ages 27 to 32 in 2010.

13th - Ava DuVernay



BLACK MEN
40.2%



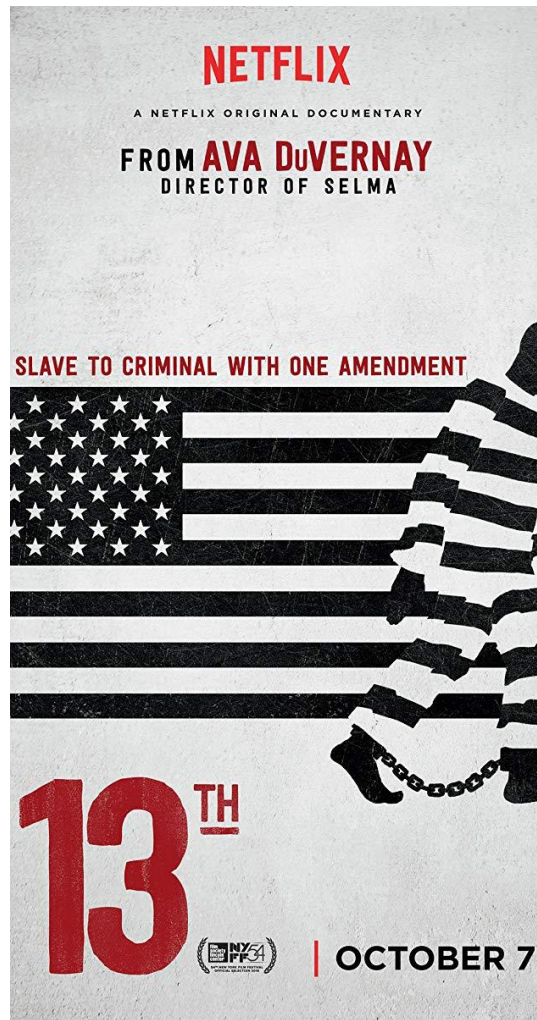
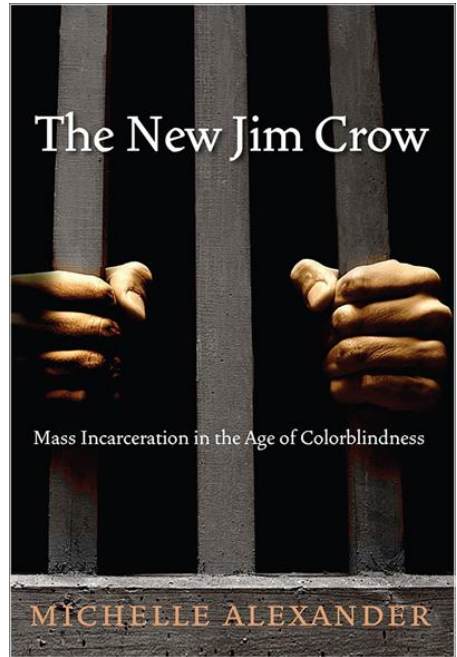
They make up 40.2%
OF PRISON POPULATION
of the prison population.

The color line today:

*“So that America might justify itself, the story of a **black body's destruction** must begin with his or her **error, real or imagined...**”*

*“All my life I'd heard people tell their black boys and black girls to be **"twice as good,"** which is to say **"accept half as much."** These words would be spoken with a veneer of religious nobility, as though they evidenced some unspoken quality, some undetected courage, when in fact all they evidenced was the **gun to our head and the hand in our pocket.**”*

- Ta Nehisi Coates, Between the World and Me



Thought Questions:

- How do our life experiences shape our data visualizations?
- How can data visualization be used as a tool to create “visibility of people”
- What do we think about Dubois use of form, color, and shape in these data portraits?
- How might we think about Dubois use of scale - contrasting all of the US with a ‘case study’ of Georgia?
- What are the limitations and benefits of hand drawn visualizations?
- What would Kieran Healy think of Dubois’ data portraits?
- Is the problem of the 21st century still the color line?

Resources:

<https://medium.com/nightingale/w-e-b-du-bois-staggering-data-visualizations-are-as-powerful-today-as-they-were-in-1900-64752c472ae4>

<http://newjimcrow.com/>

<https://www.history.com/topics/early-20th-century-us/jim-crow-laws>

<https://www.gutenberg.org/files/408/408-h/408-h.htm>

[Library of Congress Data Portraits & Photographs](#)