

Building on the Legacy of the Du Bois Data Portraits

Anthony Starks
Allen Hillery
Sekou Tyler



Atlanta University Debating Team, c. 1900



Women seated on steps of building at Atlanta University c. 1900



W.E.B. DuBois in Paris 1900



Exposition of the American Negro, Paris, 1900

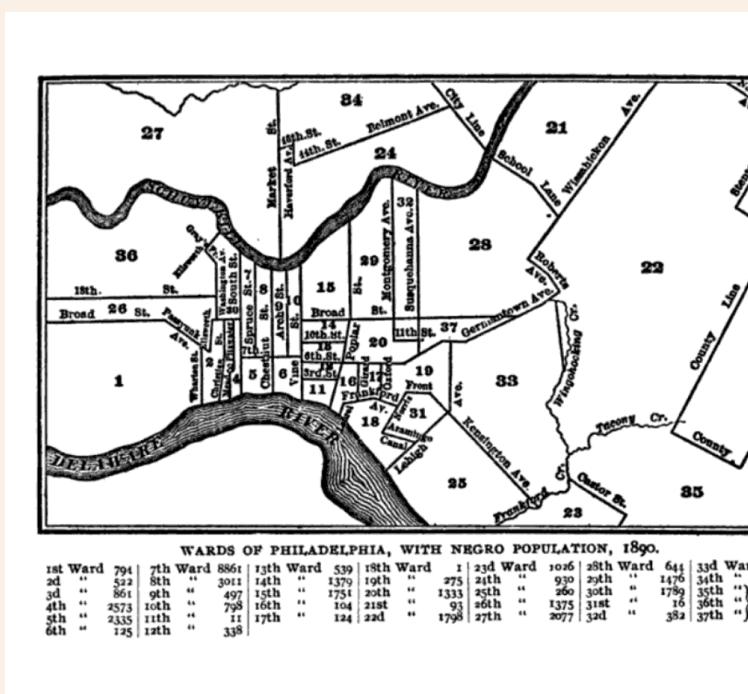
Historical Context



“Black America” Fair

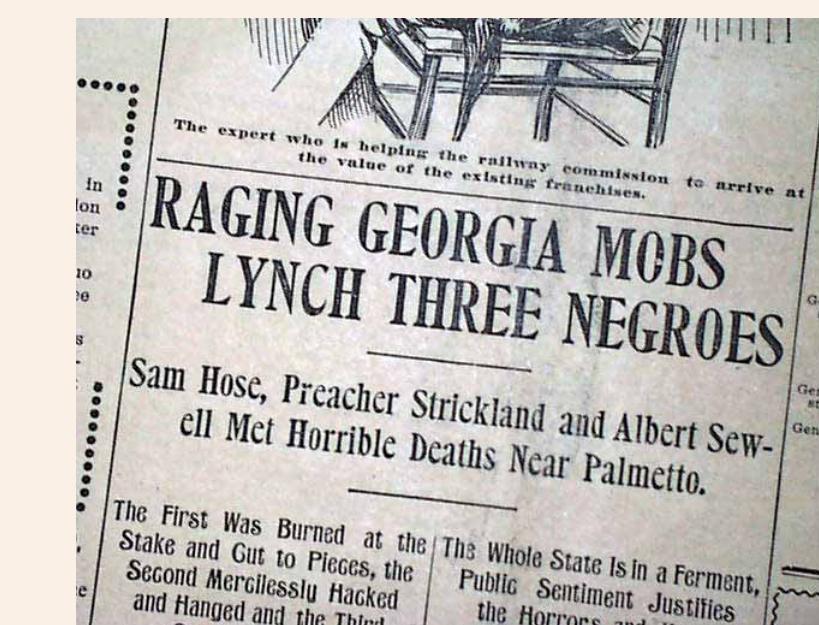


Plessy v. Ferguson



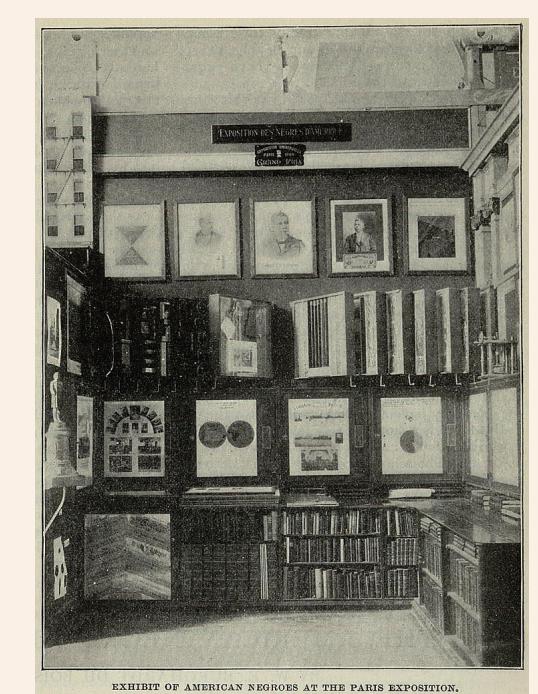
Phila. Negro begins

A WHITE MAN'S DAY.
Eight to Ten Thousand People Out.
TILLMAN MAKES A GREAT SPEECH FOR DEMOCRACY
Yesterday was a great day for Fayetteville and all this Cape Fear country. It was the occasion of the speaking in behalf of the restoration of white rule in North Carolina by Senator Ben R. Tillman, the Liberator of South Carolina.



Wilmington Overthrow

Lynchings Peak



Paris Exposition

1895

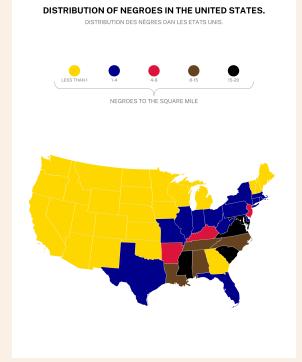
1896

1897

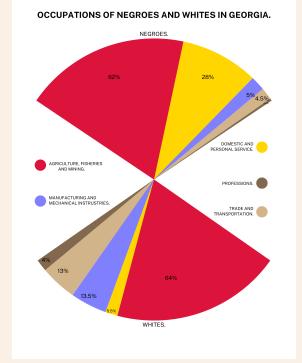
1898

1899

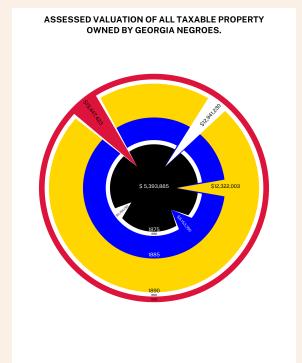
1900



We are here

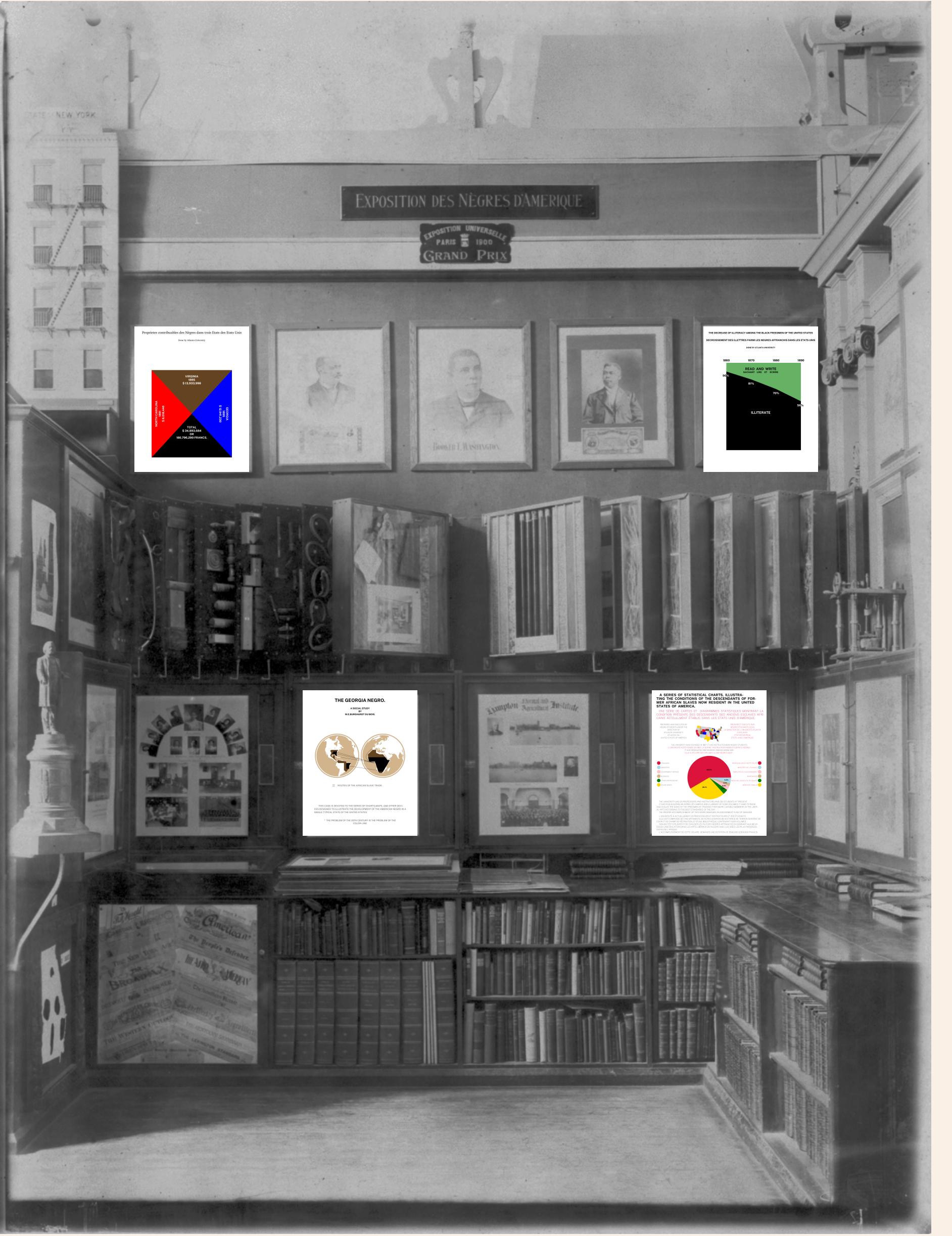


This is who we are



This is how far we have come





22"

A SERIES OF STATISTICAL CHARTS, ILLUSTRATING THE CONDITION OF THE DESCENDANTS OF FORMER AFRICAN SLAVES NOW RESIDENT IN THE UNITED STATES OF AMERICA.

UNE SÉRIE DE CARTES ET DIAGRAMMES STATISTIQUES MONTRANT LA CONDITION PRÉSENTE DES DESCENDANTS DES ANCIENS ESQLAVES AFRIQUEAINS ACTUELLEMENT ÉTABLIS DANS LES ETATS UNIS D'AMÉRIQUE.

PREPARED AND EXECUTED BY
NEGRO STUDENTS UNDER THE
DIRECTION OF
ATLANTA UNIVERSITY,
ATLANTA, GA.
UNITED STATES OF AMERICA.



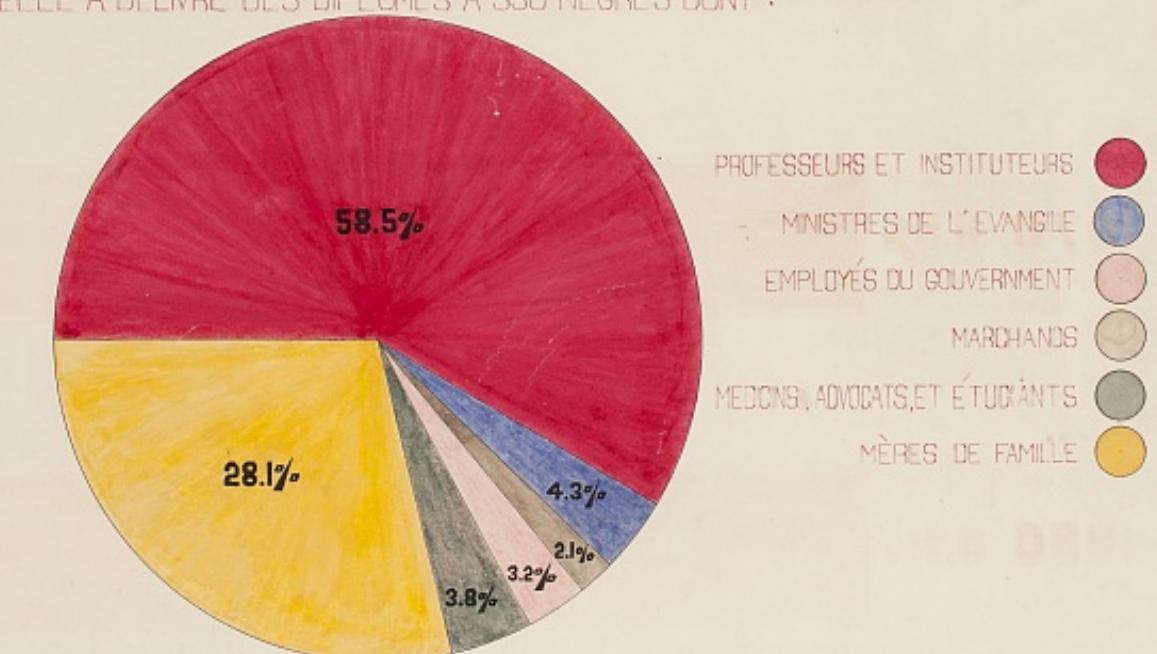
CENTRE OF NEGRO POPULATION,
ATLANTA UNIVERSITY.

PRÉPARÉES ET EXÉCUTÉES PAR
DES ÉTUDIANTS NÈGRES SOUS
LA DIRECTION DE L'UNIVERSITÉ
D'ATLANTA,
ETAT DE GÉORGIE,
ETATS UNIS D'AMÉRIQUE.

THE UNIVERSITY WAS FOUNDED IN 1867. IT HAS INSTRUCTED 6000 NEGRO STUDENTS.
L'UNIVERSITÉ A ÉTÉ FONDÉE EN 1867. ELLE A DONNÉ L'INSTRUCTION À 6000 ÉTUDIANTS NÈGRES.
IT HAS GRADUATED 330 NEGROES AMONG WHOM ARE:
ELLE A DÉLIVRÉ DES DIPLÔMES À 330 NÈGRES DONT :

28"

- TEACHERS
- MINISTERS
- GOVERNMENT SERVICE
- BUSINESS
- OTHER PROFESSIONS
- HOUSE WIVES



- PROFESSEURS ET INSTITUTEURS
- MINISTRES DE L'EVANGILE
- EMPLOYÉS DU GOUVERNEMENT
- MARCHANDS
- MEDECINS, AVOCATS, ET ÉTUDIANTS
- MÈRES DE FAMILLE

THE UNIVERSITY HAS 20 PROFESSORS AND INSTRUCTORS AND 250 STUDENTS AT PRESENT.
IT HAS FIVE BUILDINGS, 60 ACRES OF CAMPUS, AND A LIBRARY OF 11,000 VOLUMES. IT AIMS TO RAISE
AND CIVILIZE THE SONS OF THE FREEDMEN BY TRAINING THEIR MORE CAPABLE MEMBERS IN THE LIBER-
AL ARTS ACCORDING TO THE BEST STANDARDS OF THE DAY.

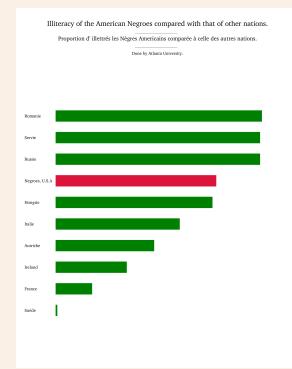
THE PROPER ACCOMPLISHMENT OF THIS WORK DEMANDS AN ENDOWMENT FUND OF \$500,000.

L'UNIVERSITÉ A ACTUELLEMENT 20 PROFESSEURS ET INSTRUCTEURS ET 250 ÉTUDIANTS.
ELLE EST COMPOSÉE DE CINQ BÂTIMENTS, 60 ACRES (ENVIRON 26 HECTARES) DE TERRAIN SERVANT DE
COUR ET DE CHAMP DE RÉCRÉATION, ET D'UNE BIBLIOTHÈQUE CONTENANT 11,000 VOLUMES.

SON BUT EST D'ÉLEVER ET DE CIVILISER LES FILS DES NÈGRES AFFRANCHIS EN DONNANT AUX MIEUX
DOUÉS UNE ÉDUCATION DANS LES ARTS LIBÉRAUX EN ACCORD AVEC LES IDÉES LES PLUS PROGRES-
SISTES DE L'ÉPOQUE.

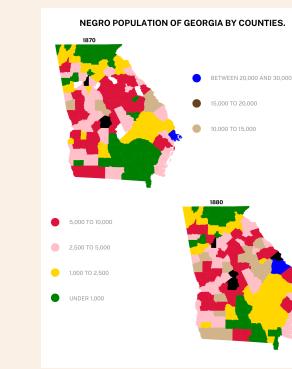
L'ACCOMPLISSEMENT DE CETTE ŒUVRE DEMANDE UNE DOTATION DE \$500,000 (2,500,000 FRANCS).

Taxonomy



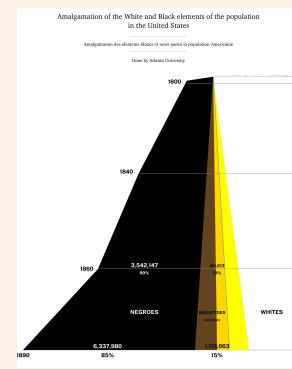
Bars

52.63%



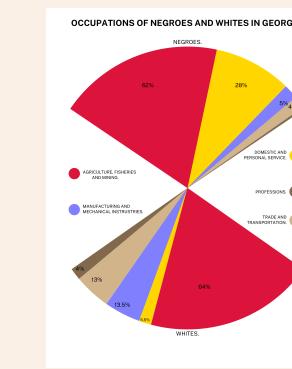
Maps

15.79%



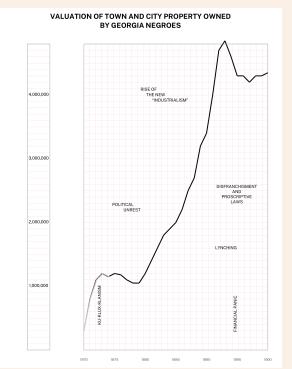
Blocks

14.04%



Circles

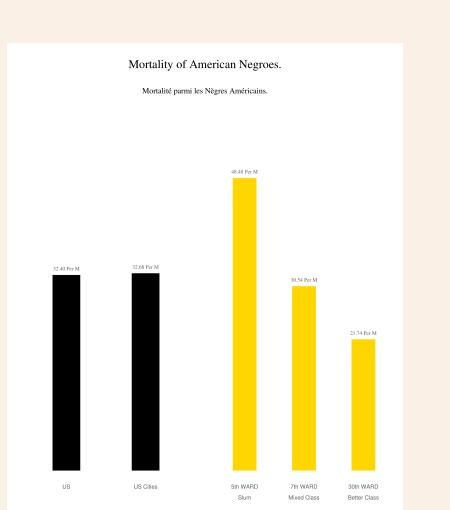
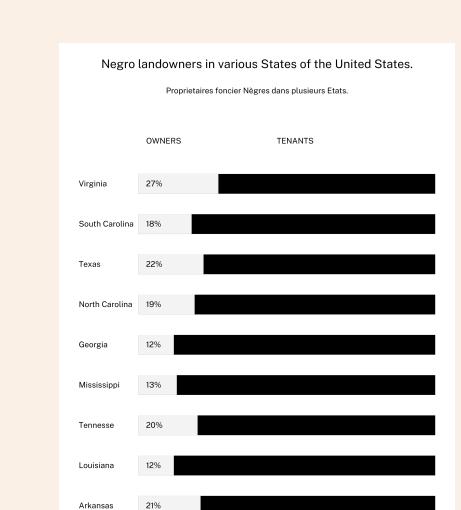
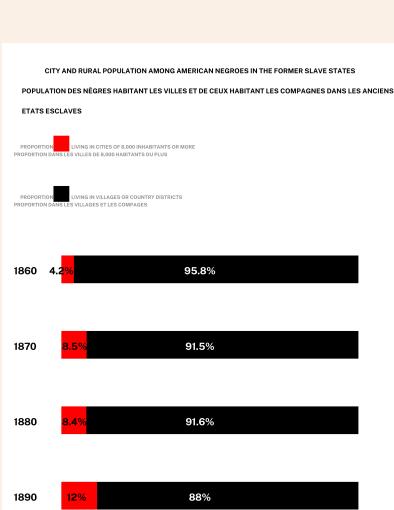
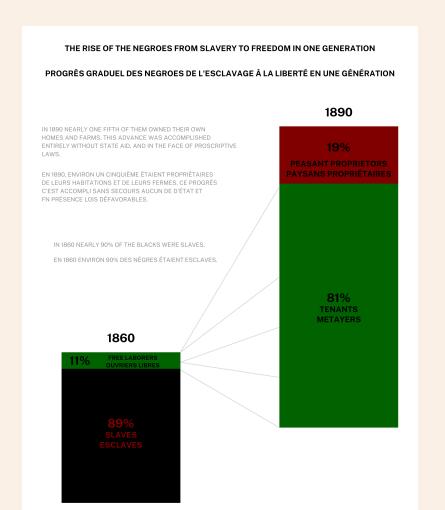
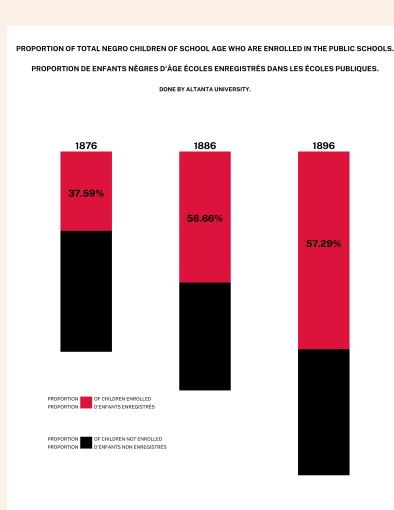
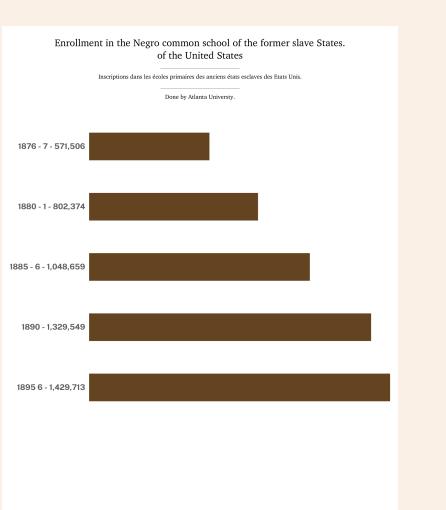
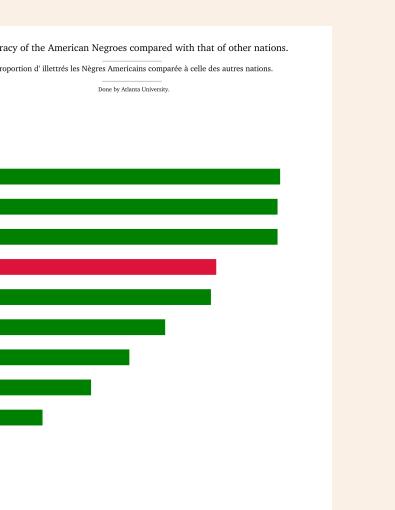
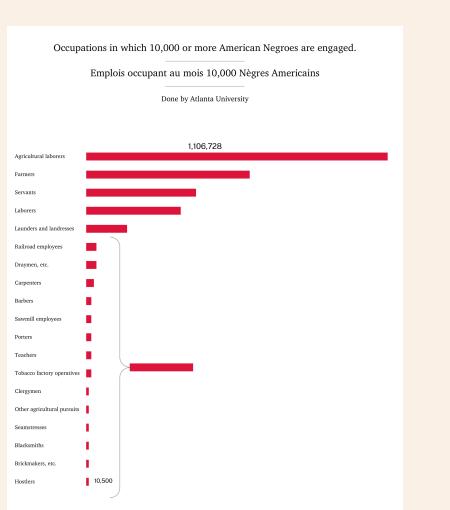
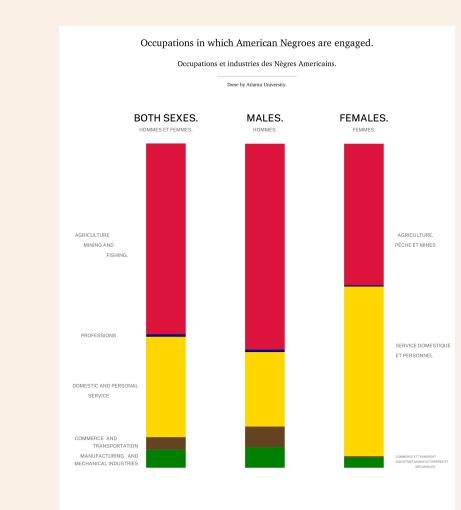
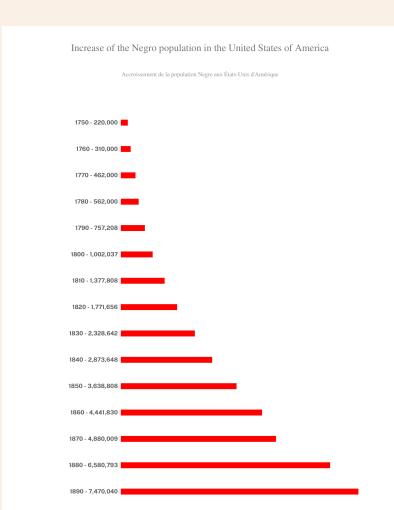
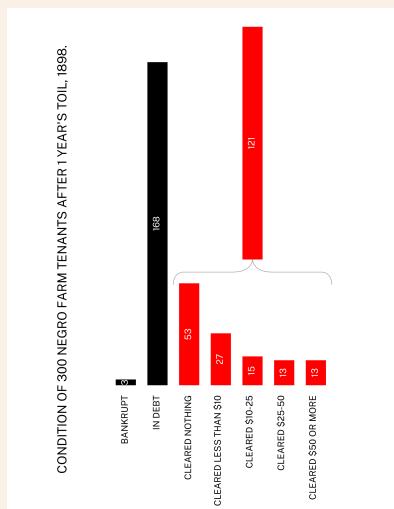
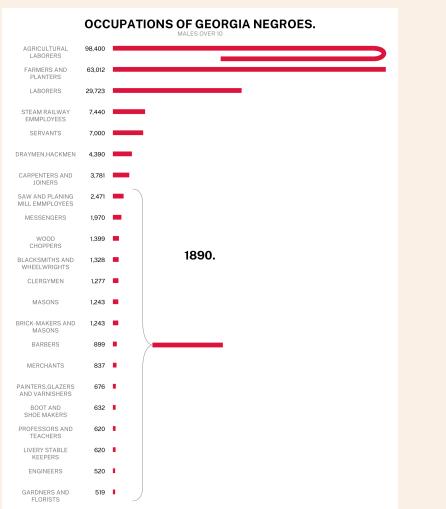
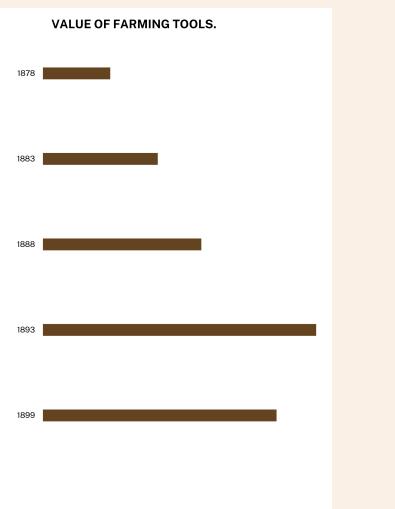
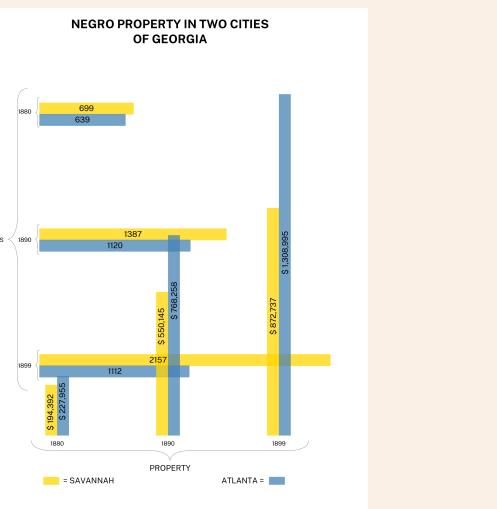
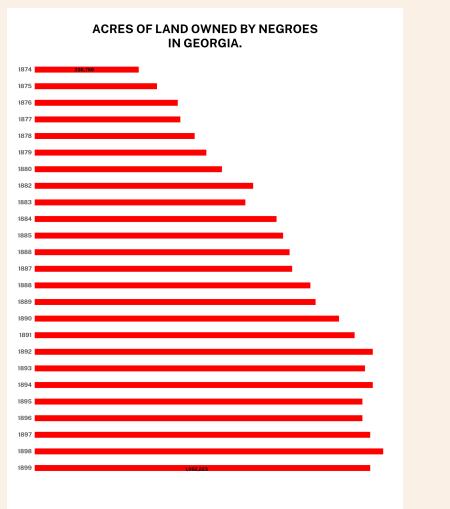
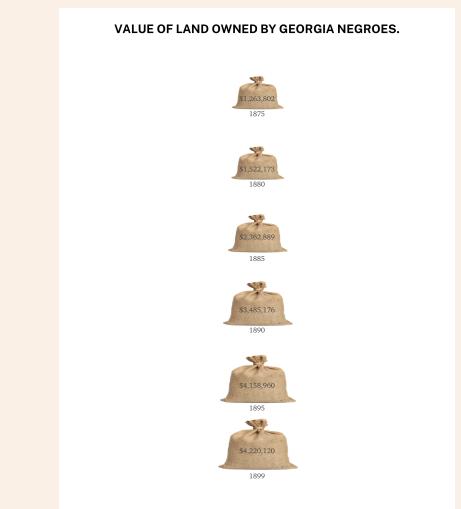
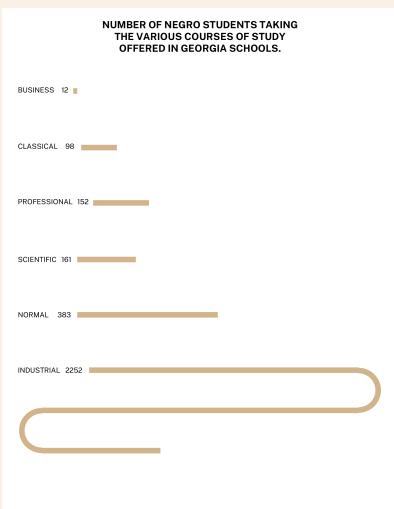
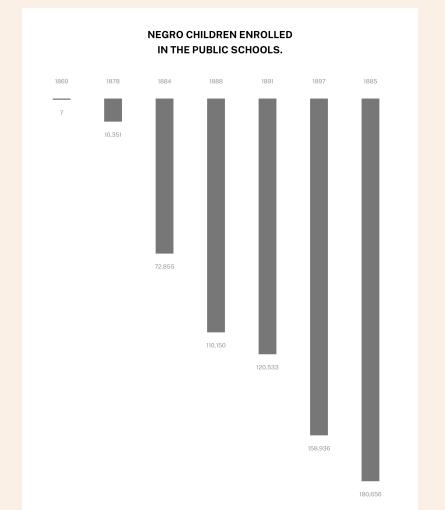
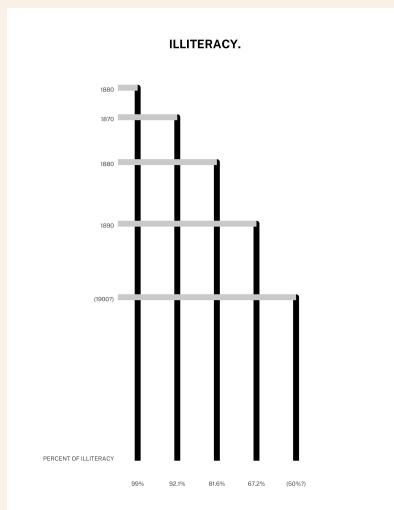
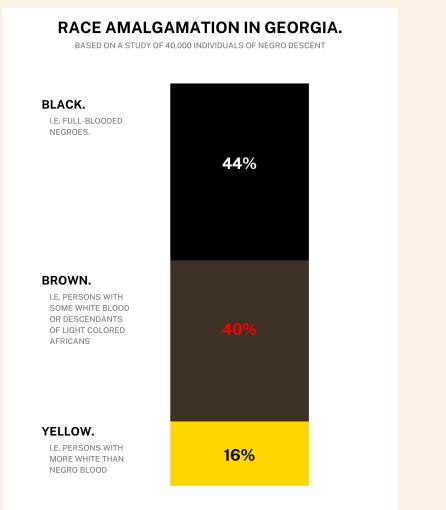
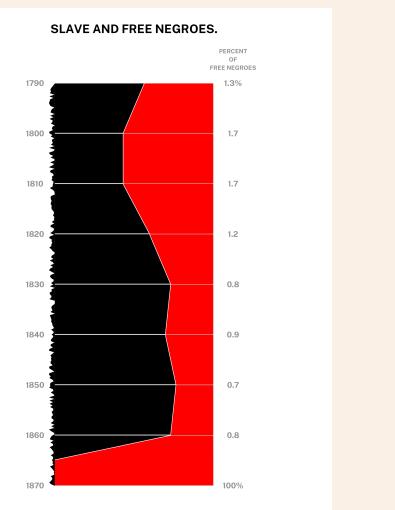
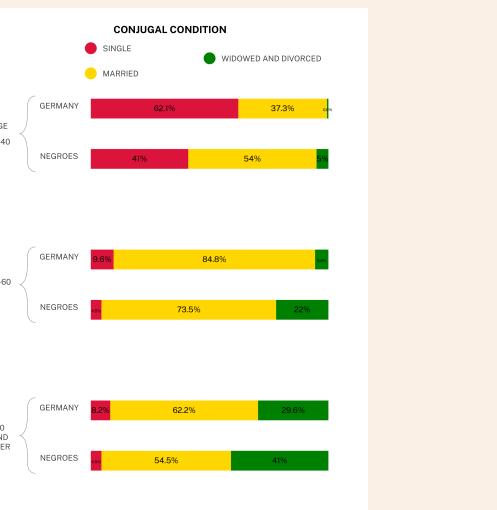
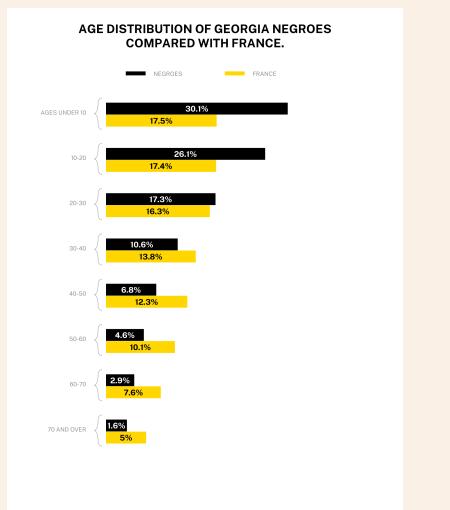
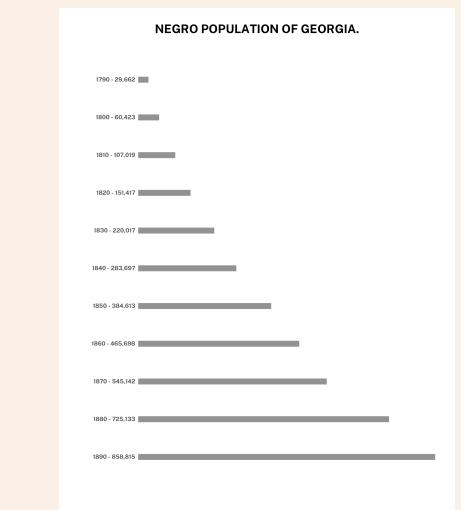
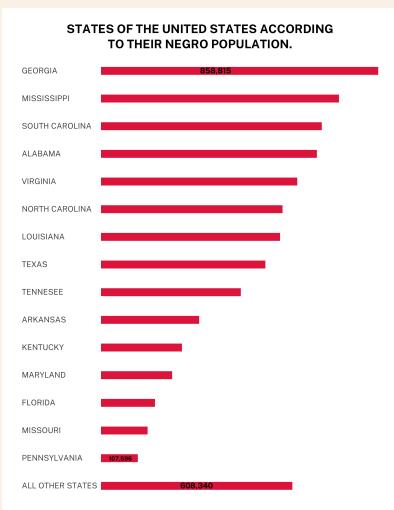
12.28%



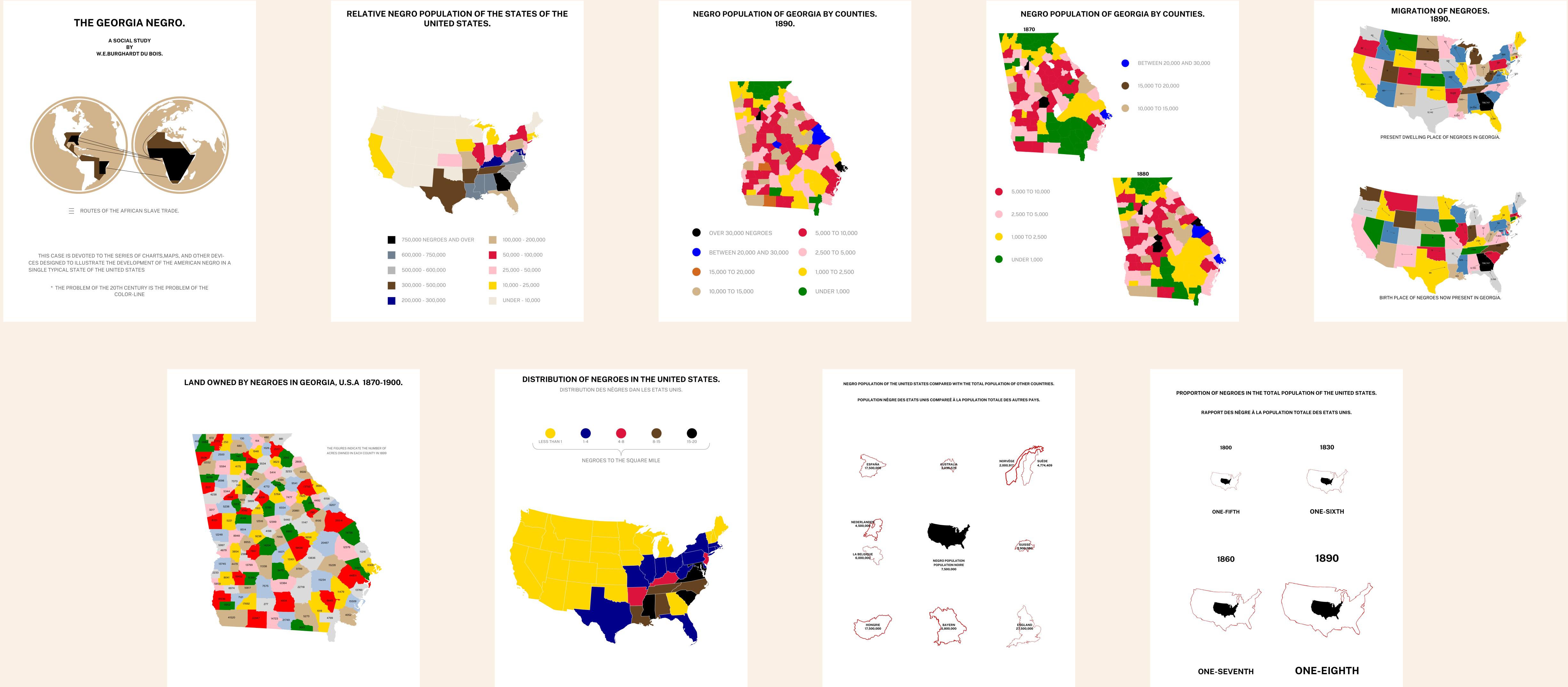
Graphs

5.26%

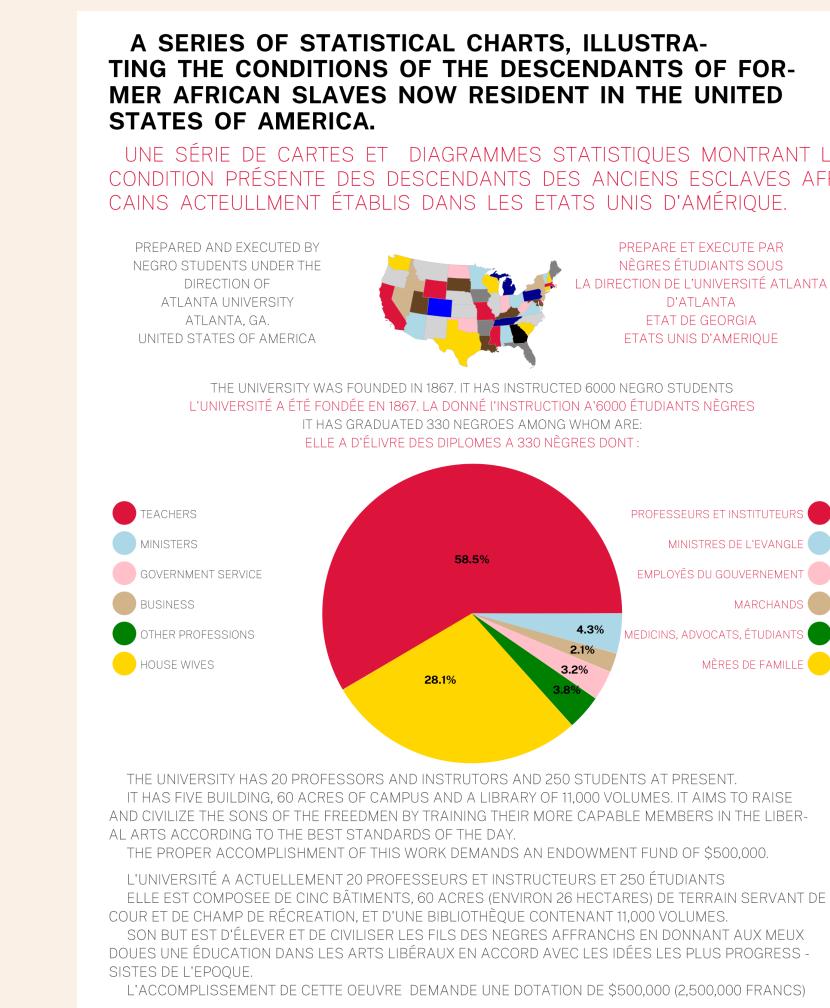
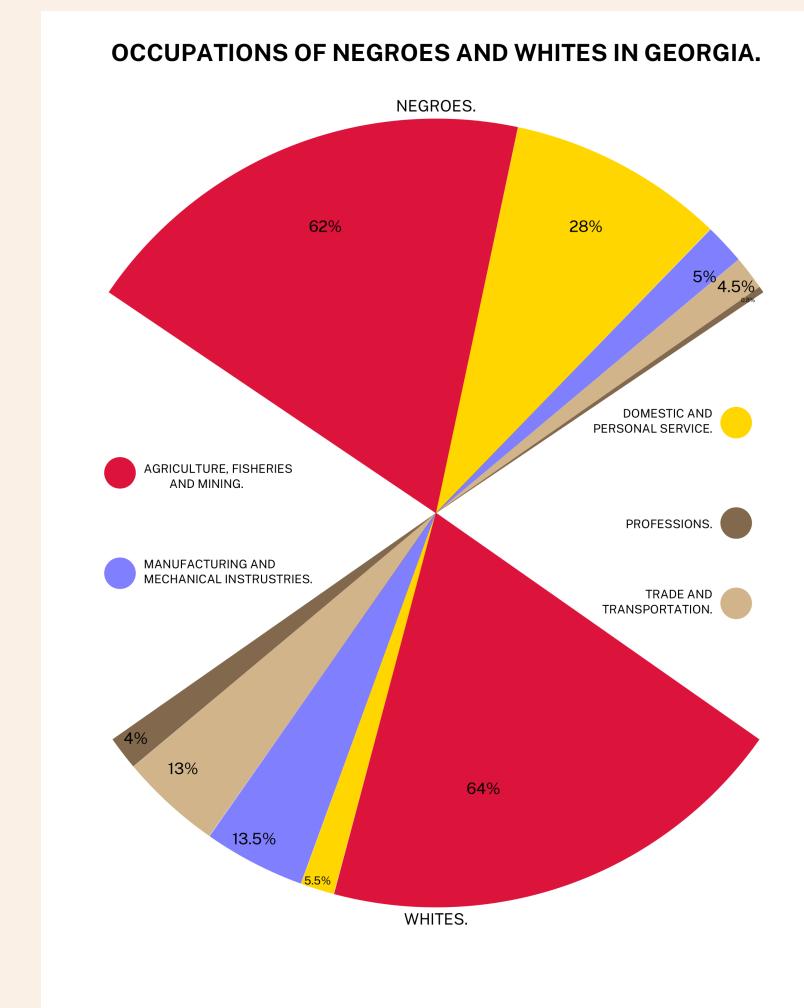
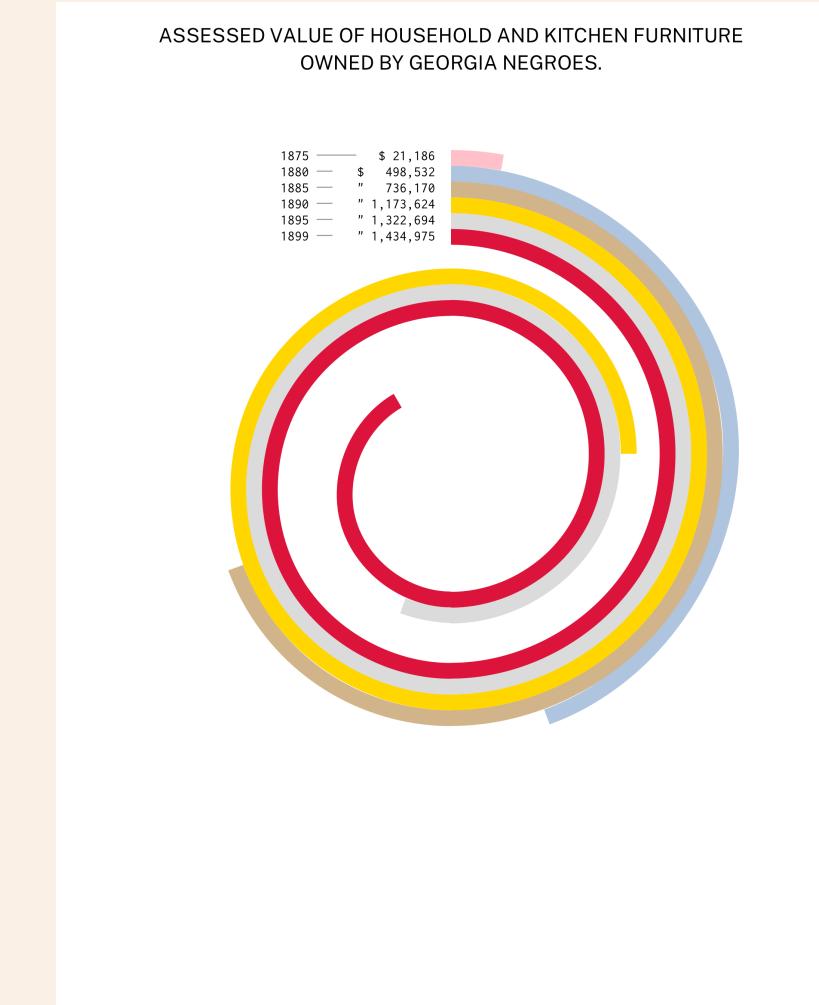
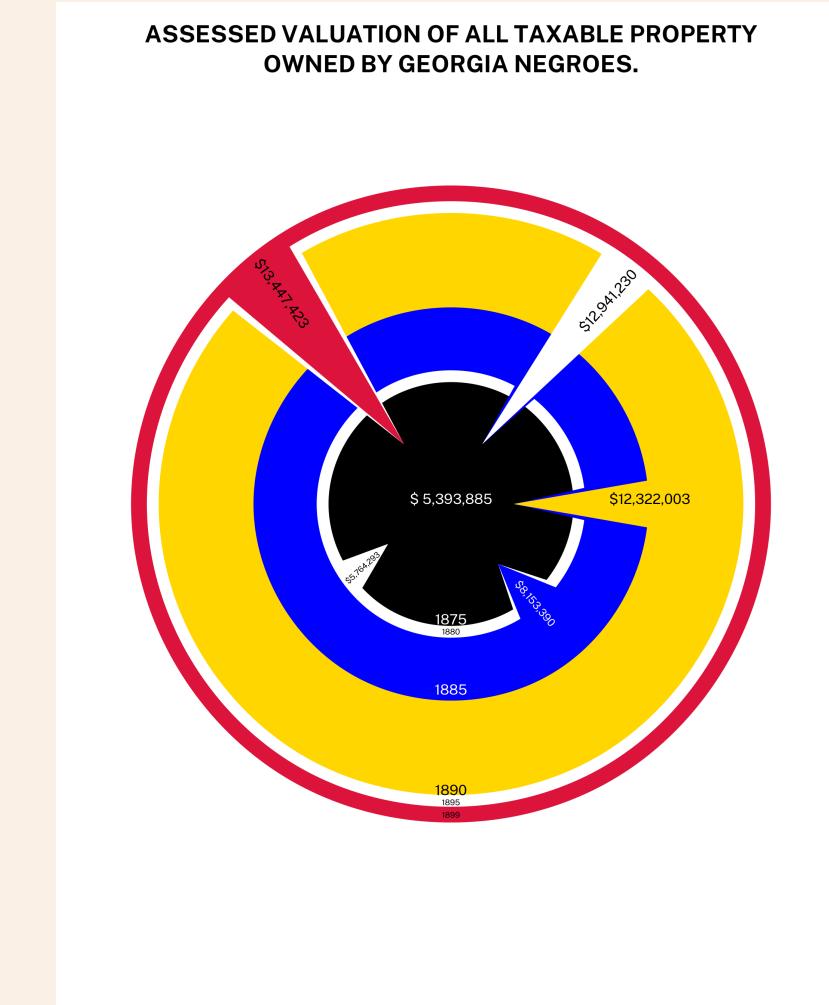
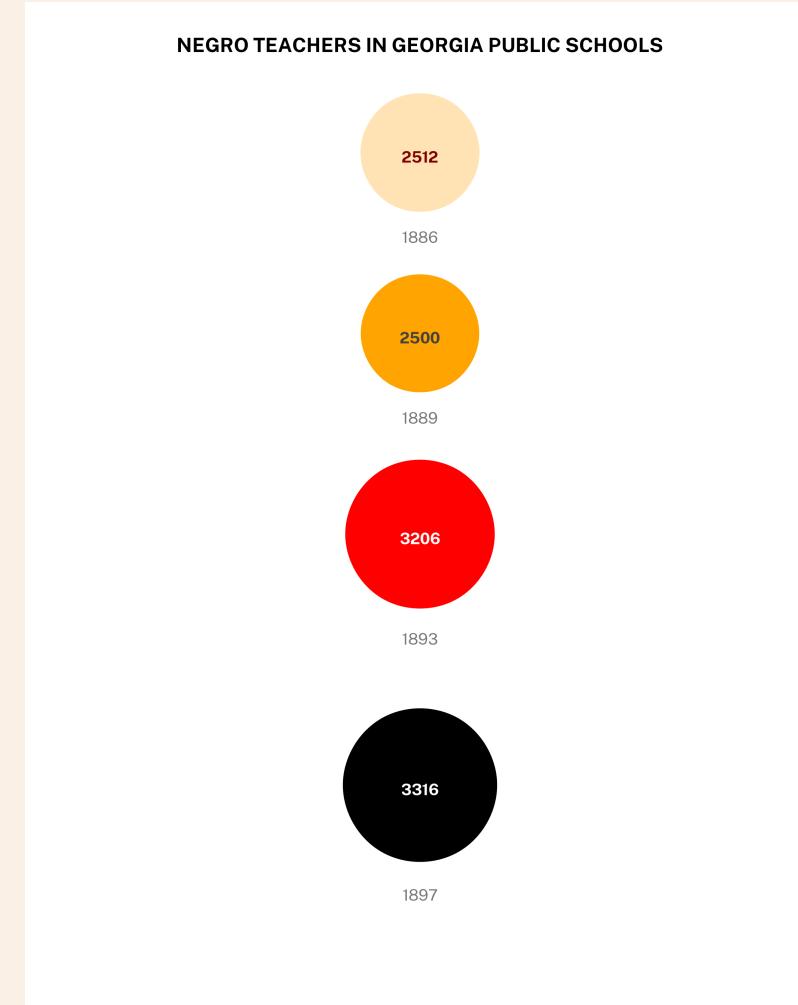
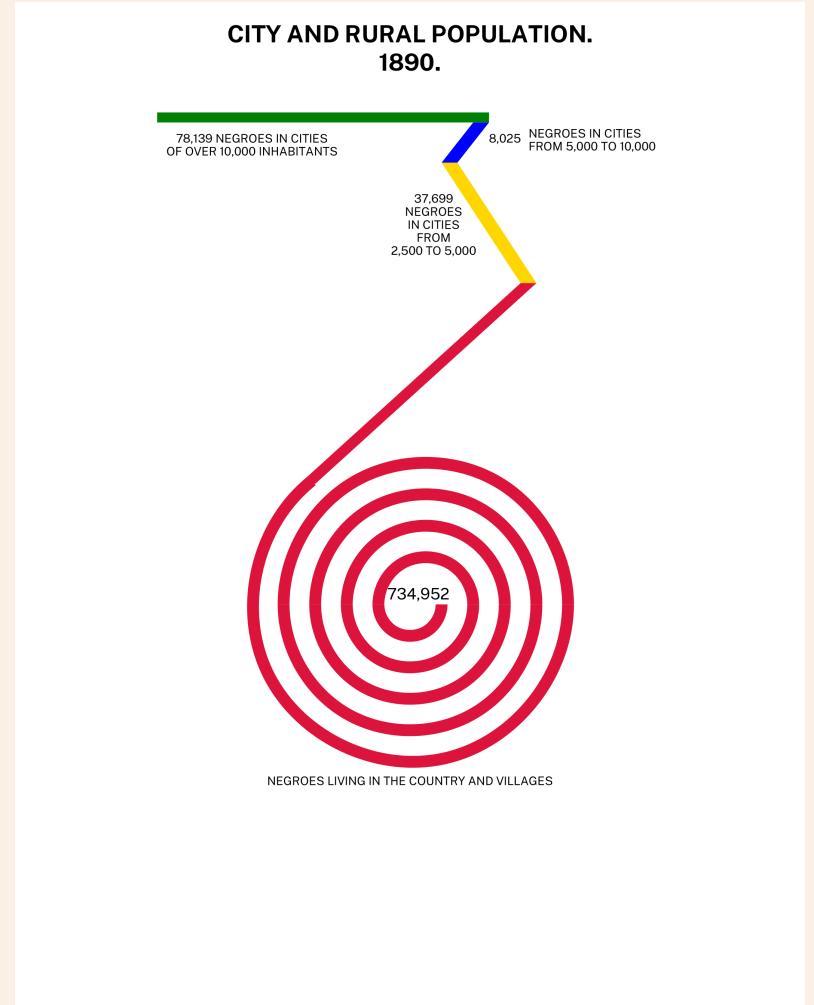
Bars



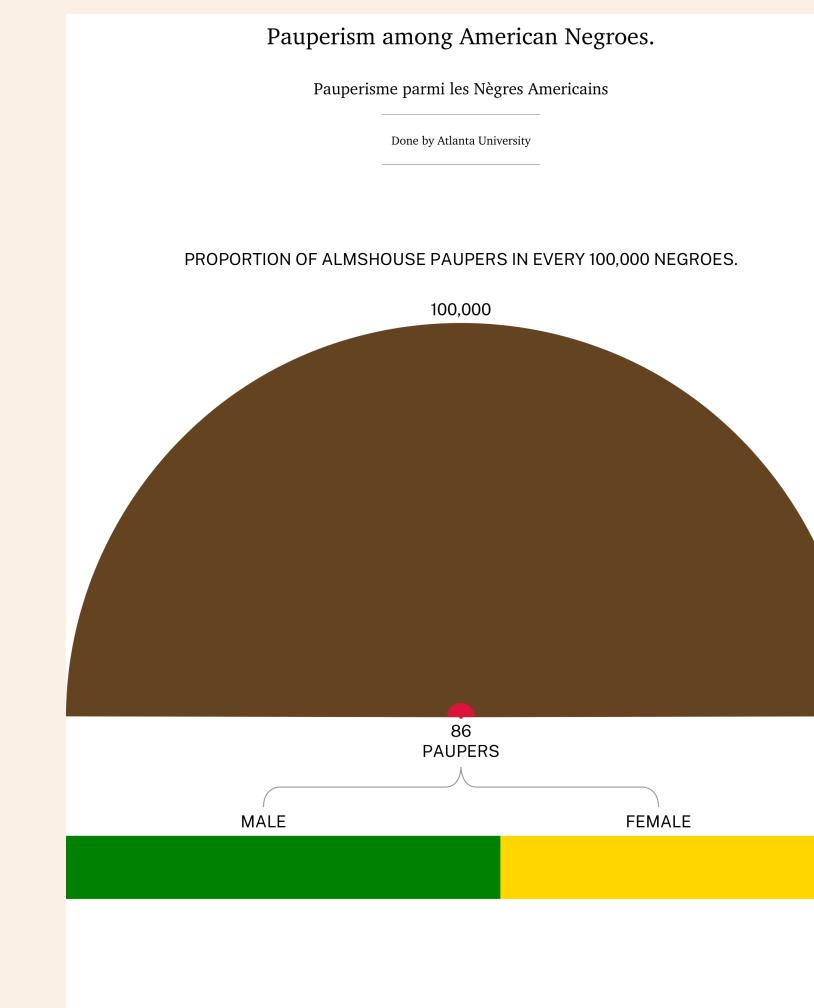
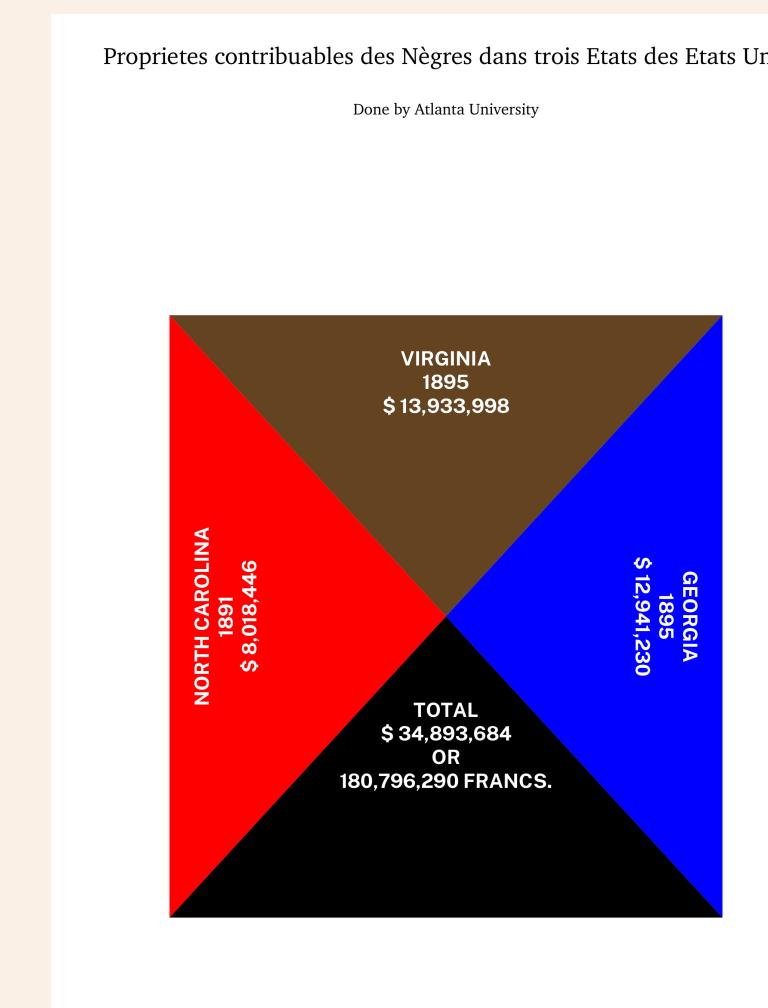
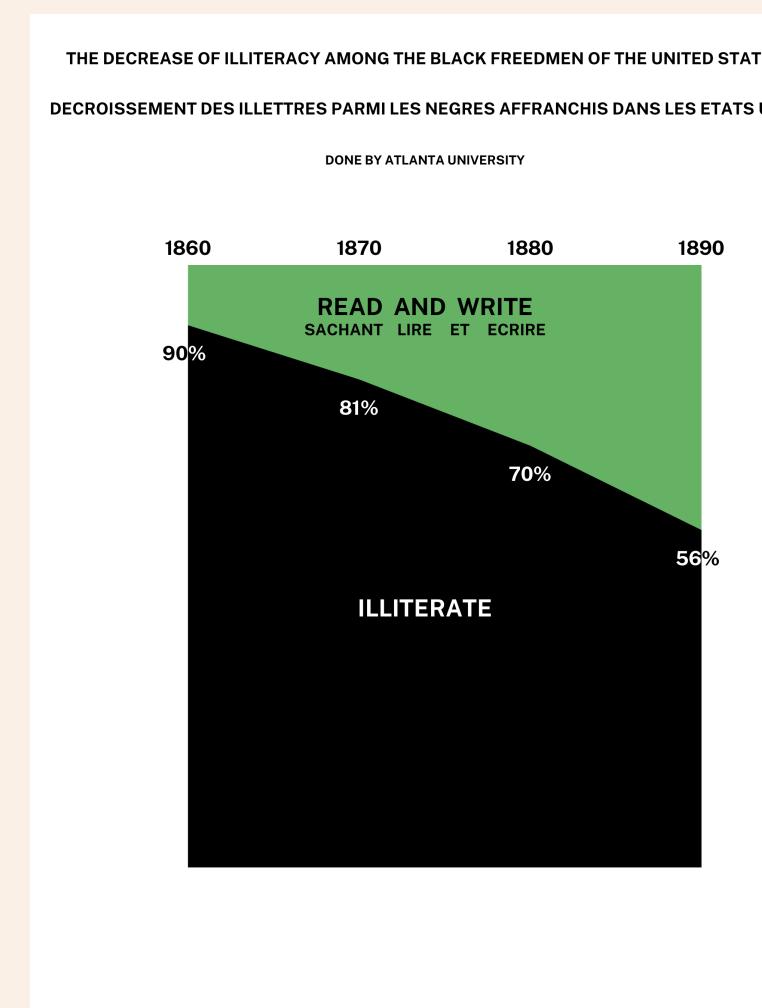
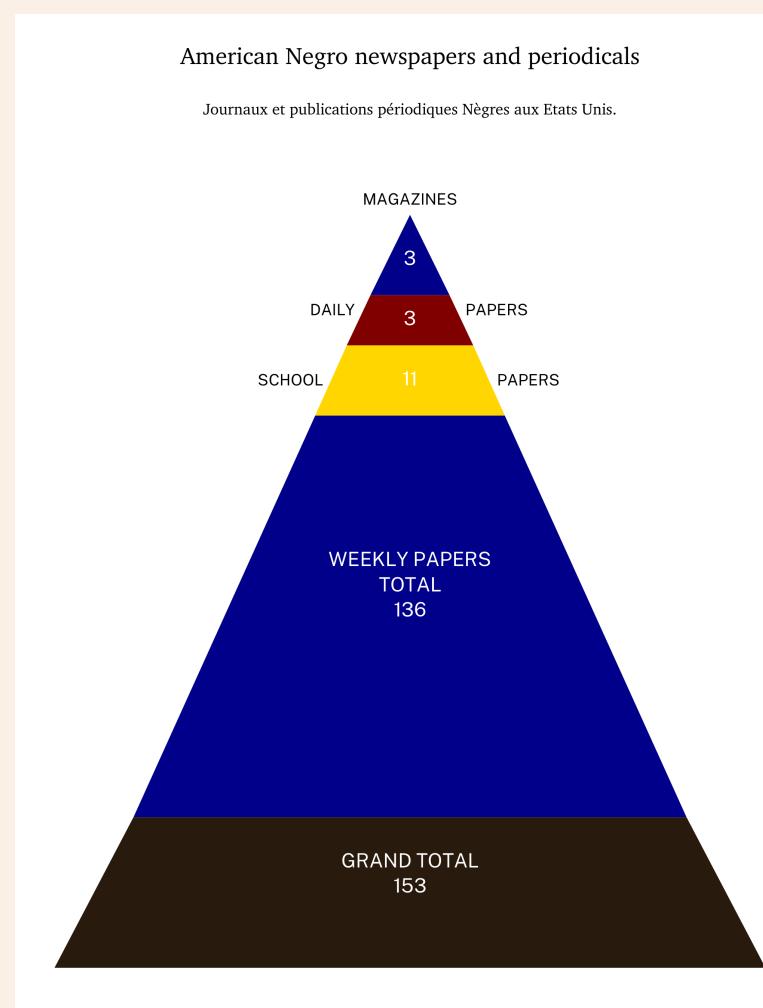
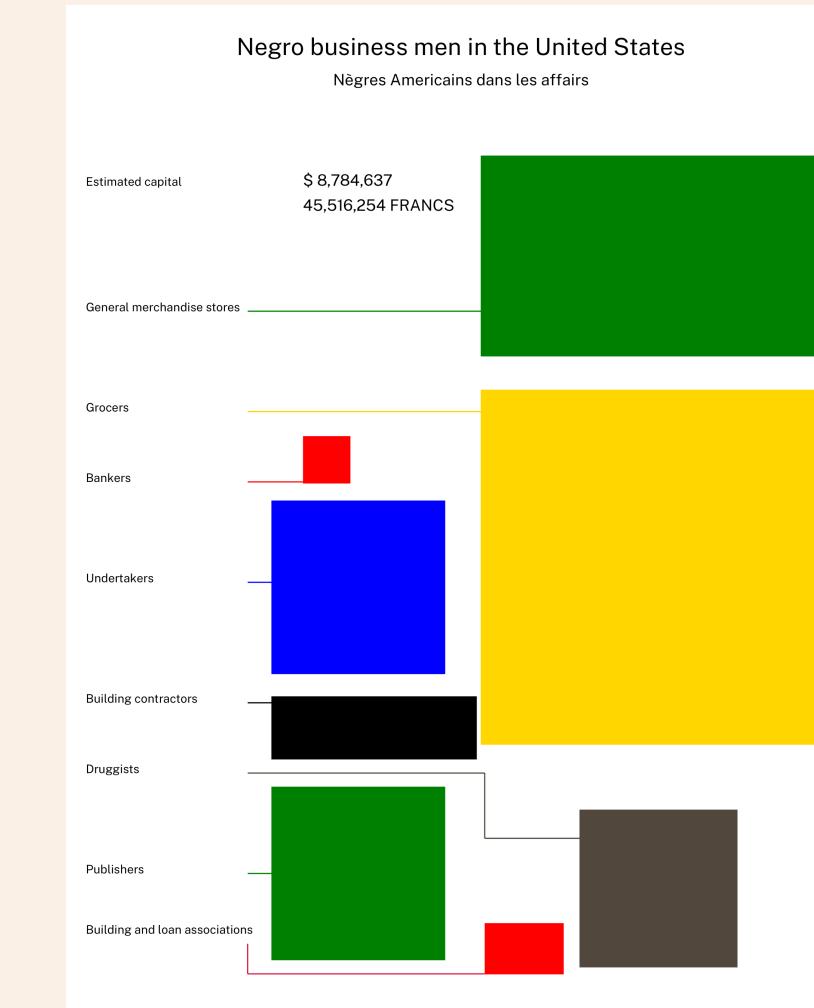
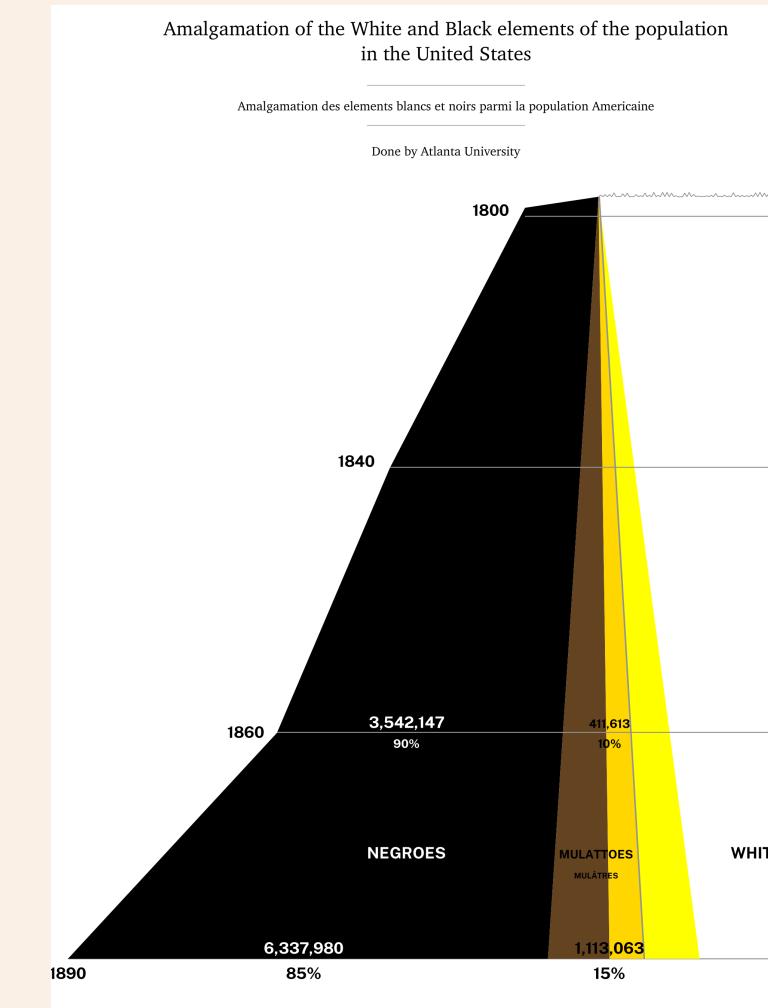
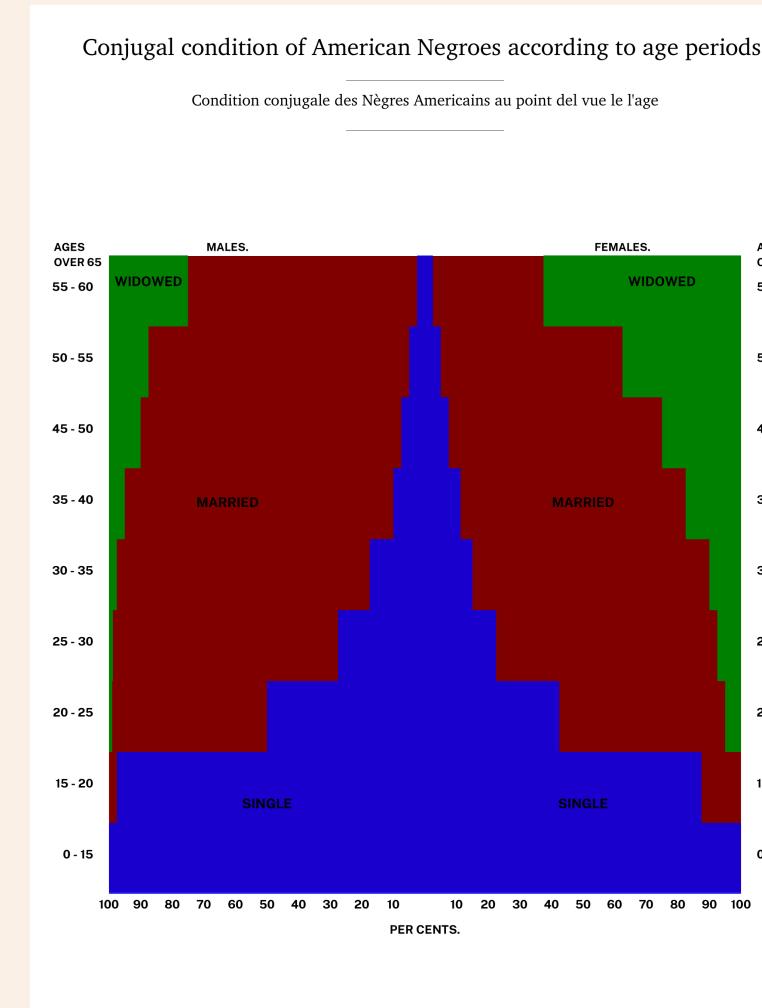
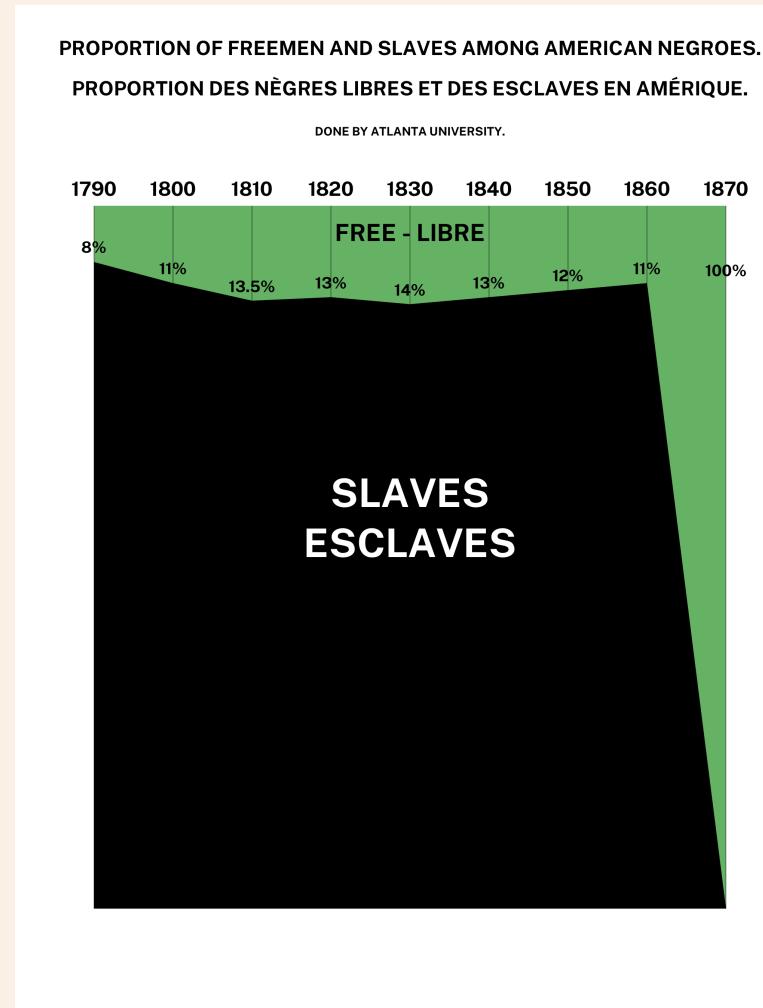
Maps



Circles

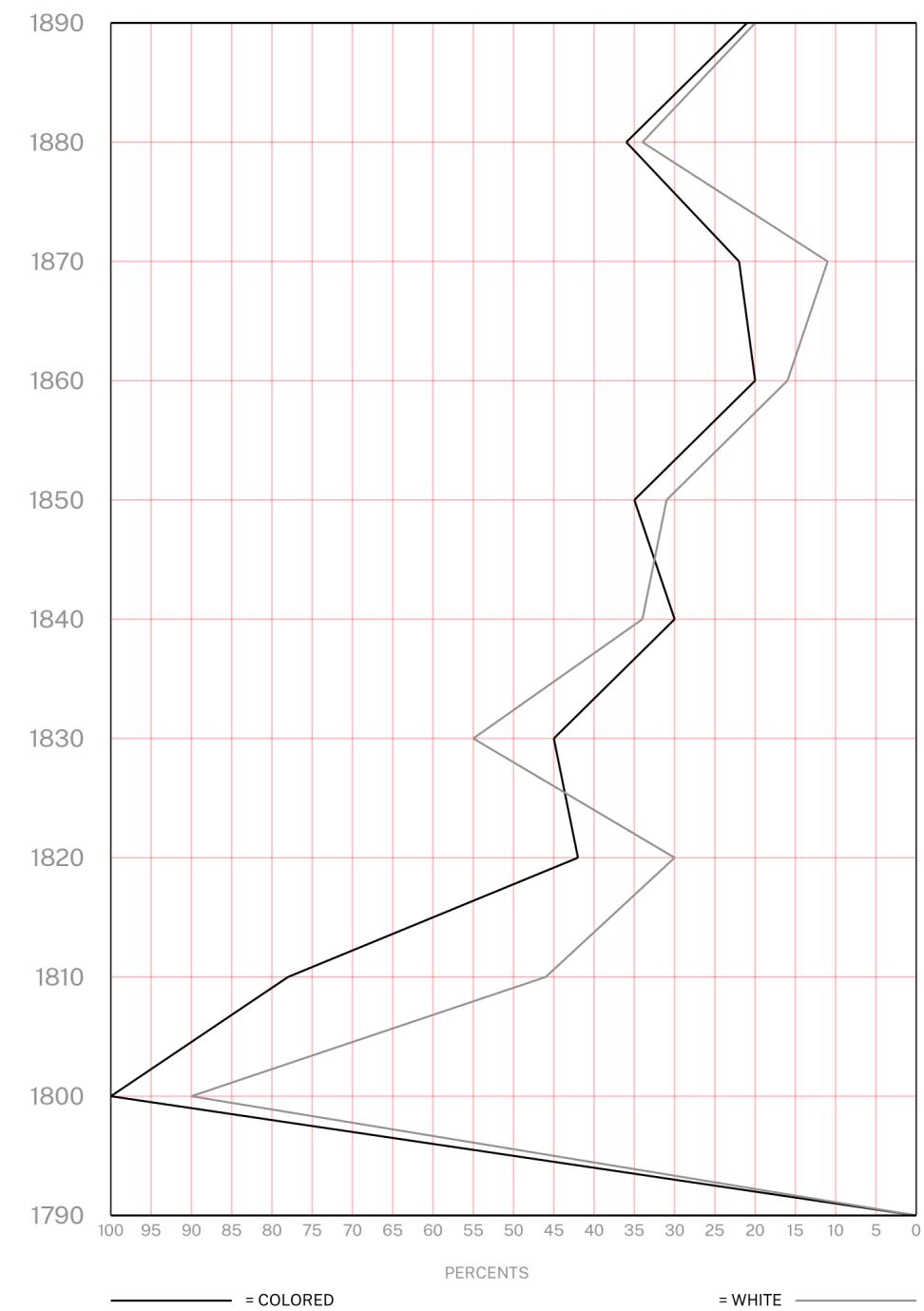


Blocks

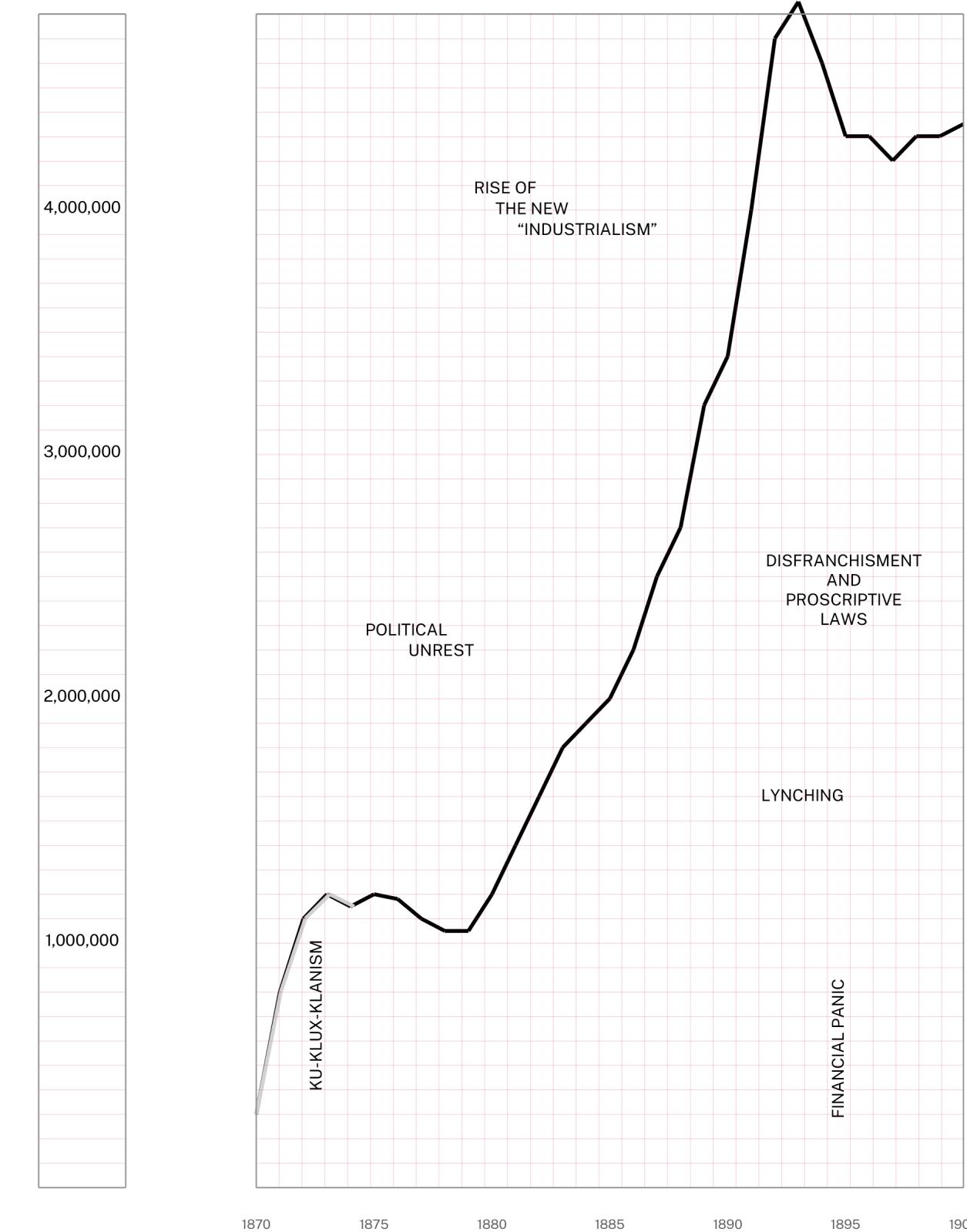


Graphs

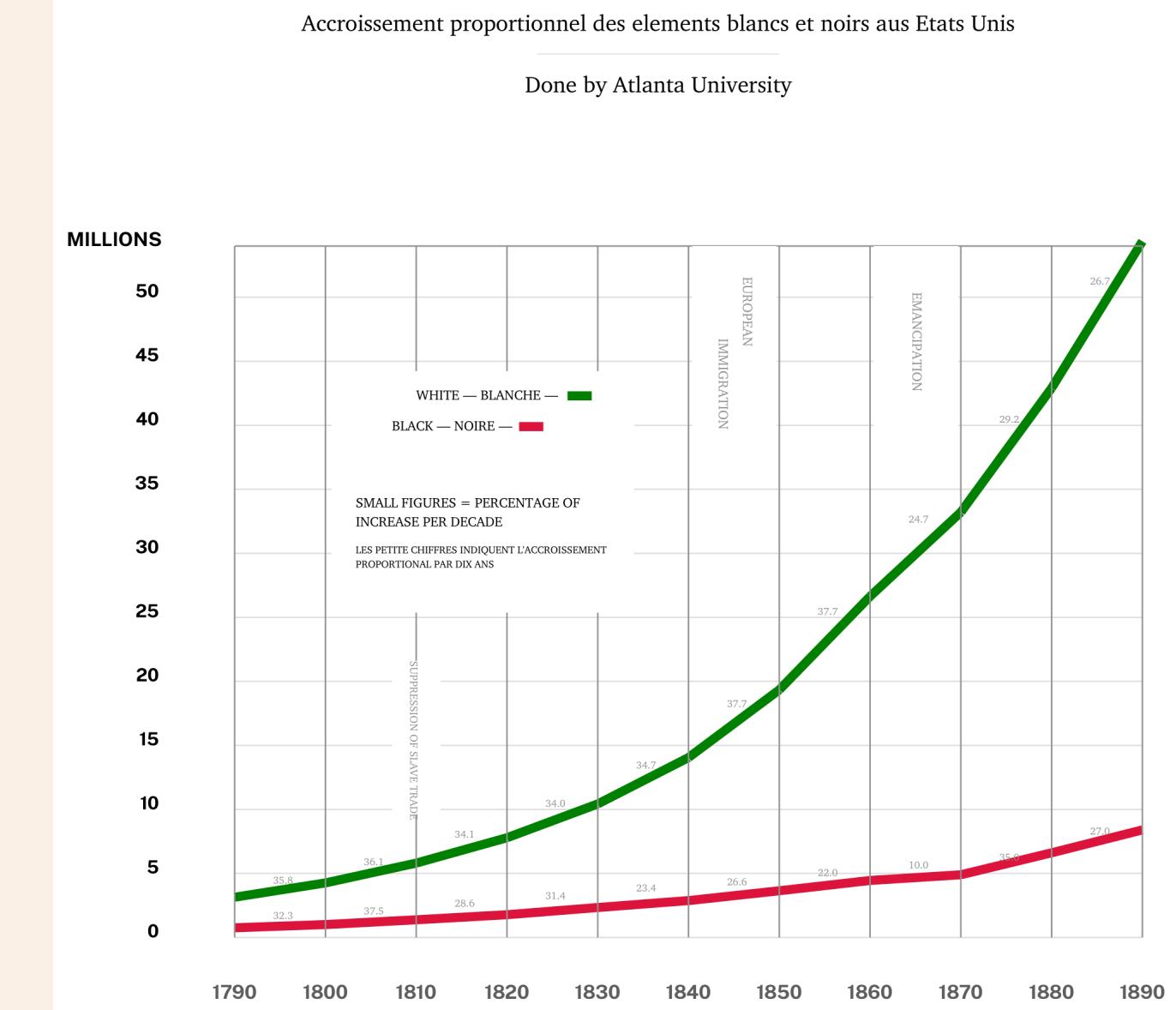
COMPARATIVE INCREASE OF WHITE AND COLORED POPULATION OF GEORGIA.



VALUATION OF TOWN AND CITY PROPERTY OWNED BY GEORGIA NEGROES



Comparative rate of increase of the White and Negro elements population of the United States



Color Palette

black



#000000

brown



#654321

tan



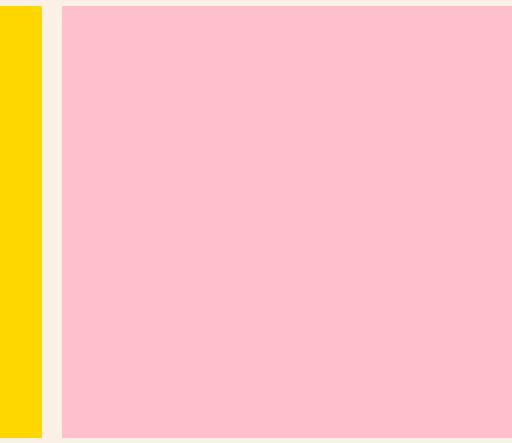
#d2b48c

gold



#ffd700

pink



#ffc0cb

red



#dc143c

green



#00aa00

blue



#4682b4

Typography

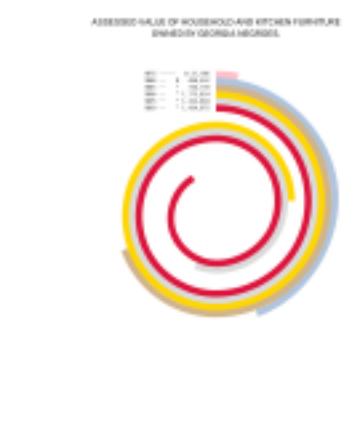
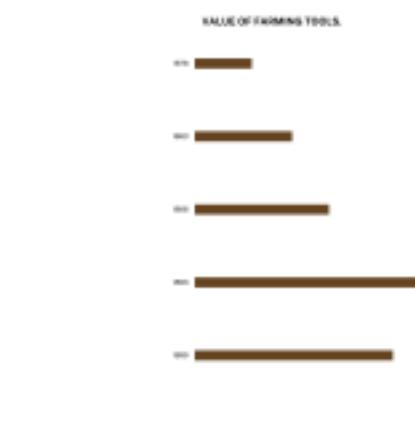
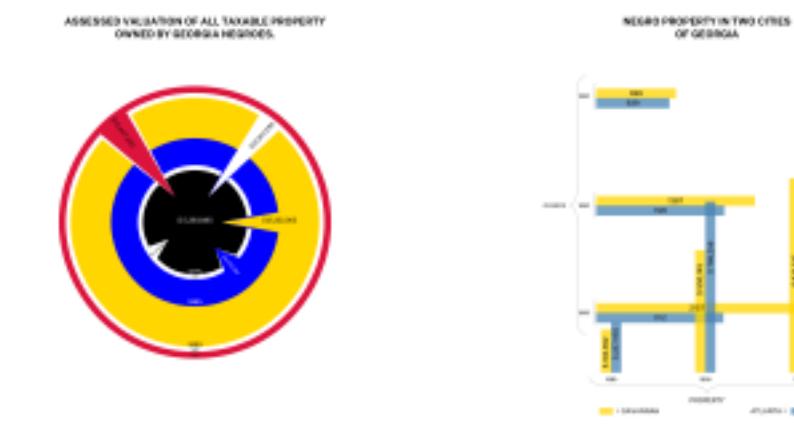
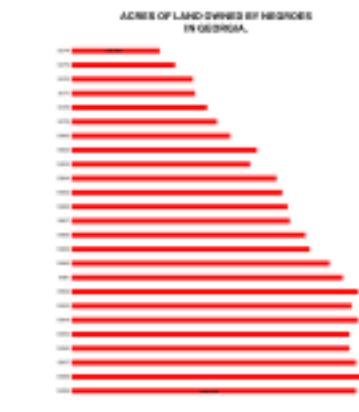
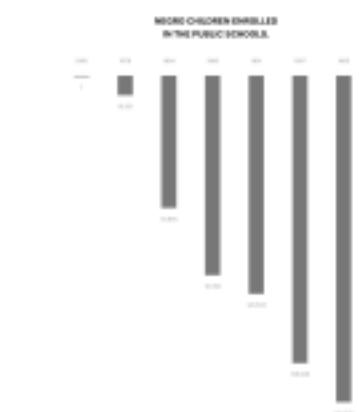
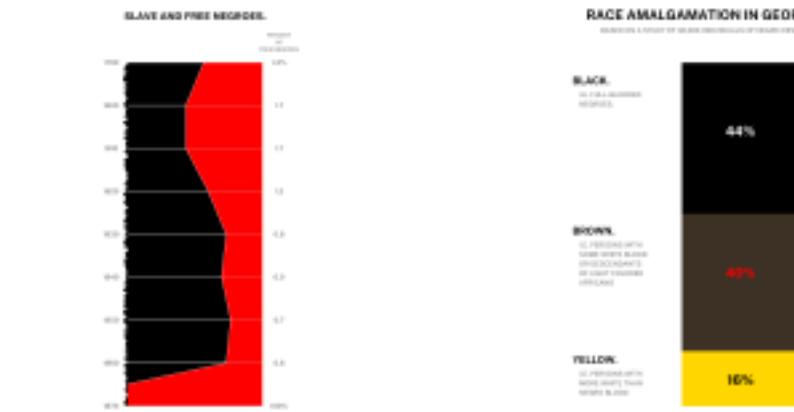
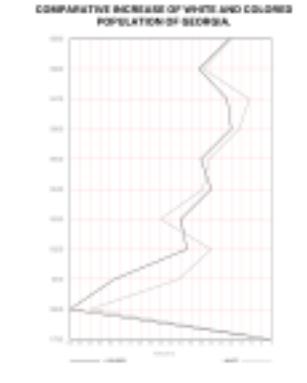
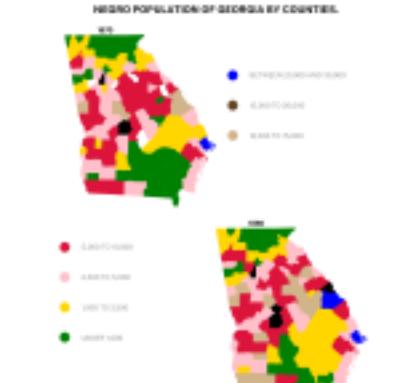
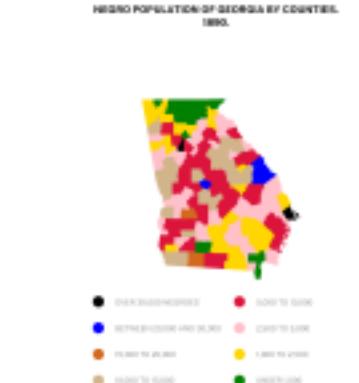
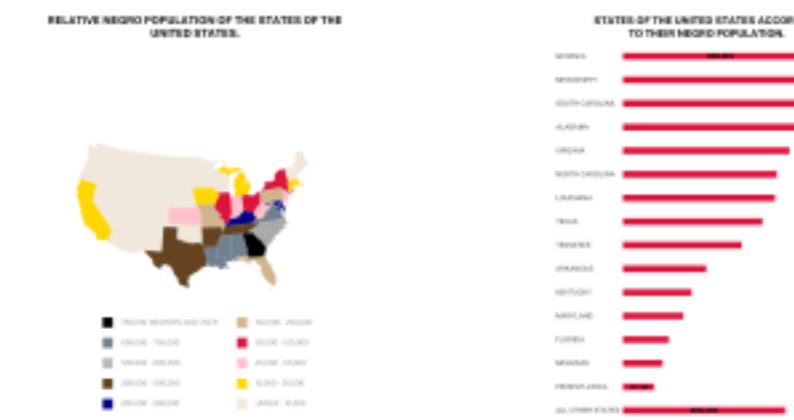
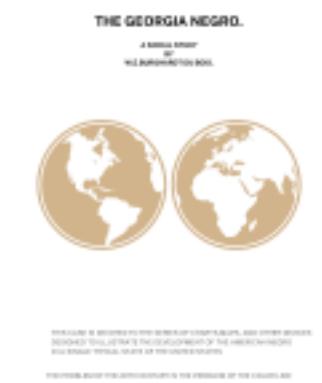
Public Sans

Charter

WILLIAM

Re-Creating the Du Bois Data Portraits

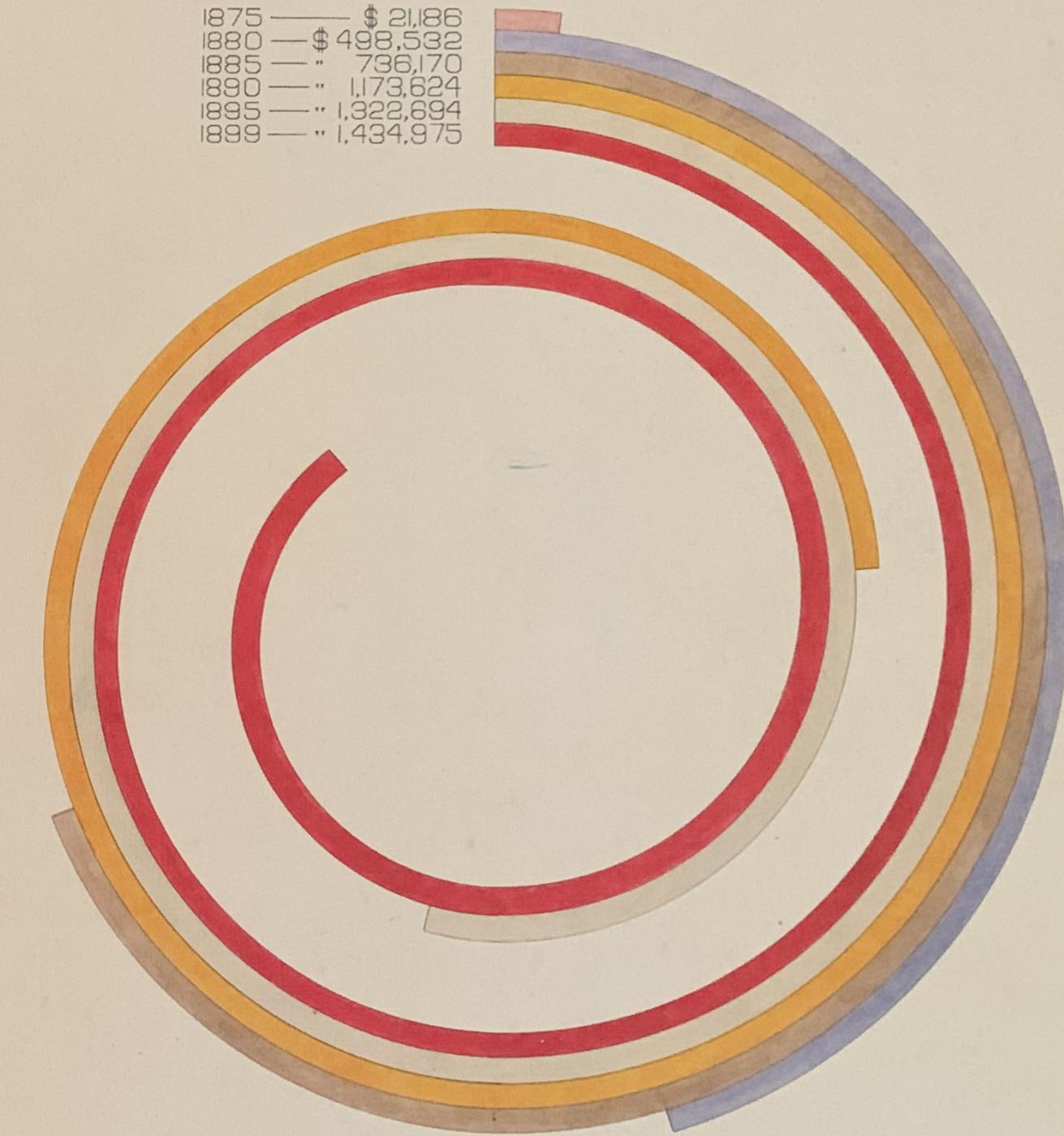




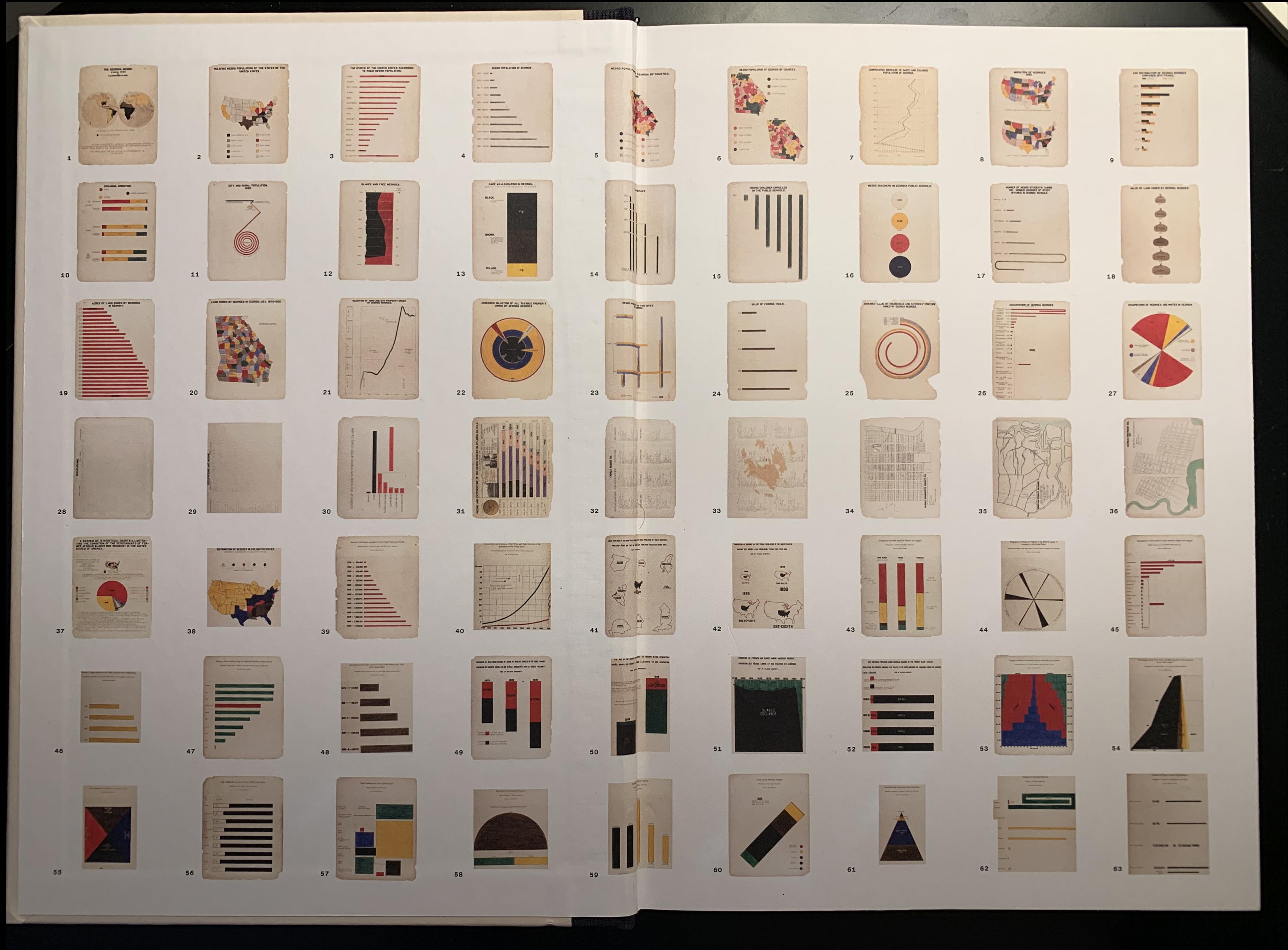
W. E. B. Du Bois's Data Portraits
Visualizing Black America

THE COLOR LINE AT THE TURN OF THE TWENTIETH CENTURY

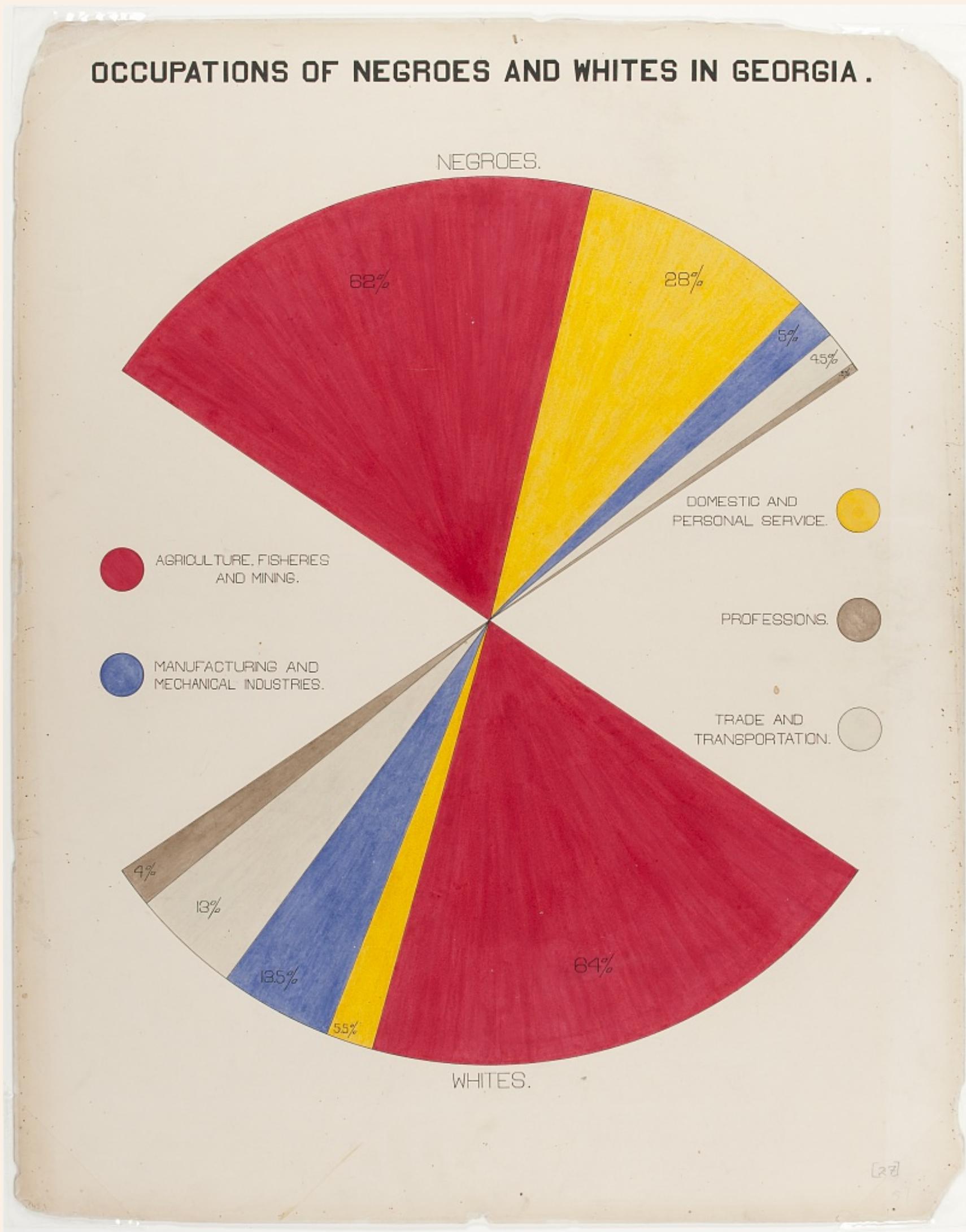
1875 — \$ 21,86
1880 — \$ 498,582
1885 — " 786,170
1890 — " 1,173,624
1895 — " 1,322,894
1899 — " 1,434,975



WHITNEY BATTLE-BAPTISTE and BRITT RUSERT, editors

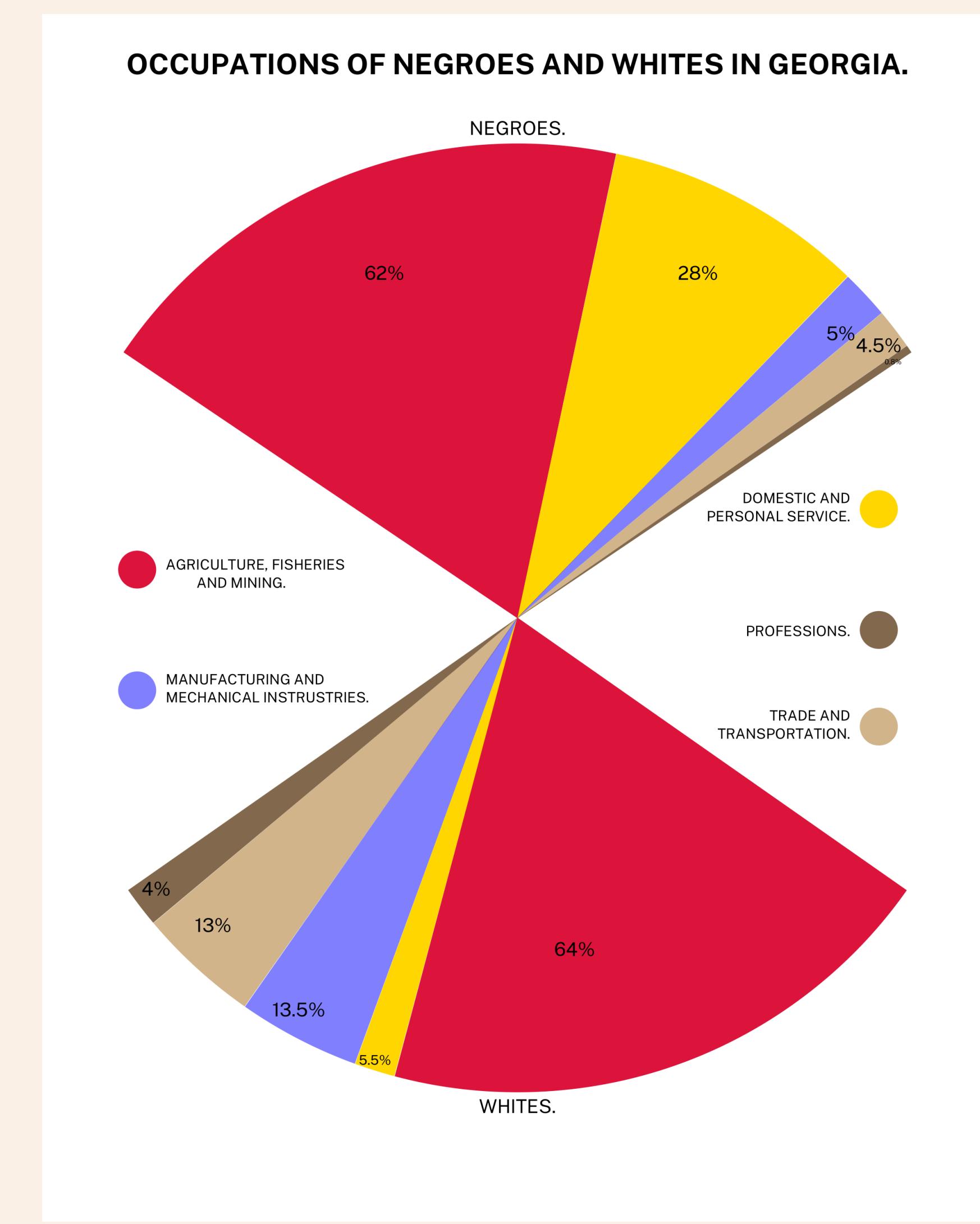


Pen, Ink, Watercolor, Paper, Expos

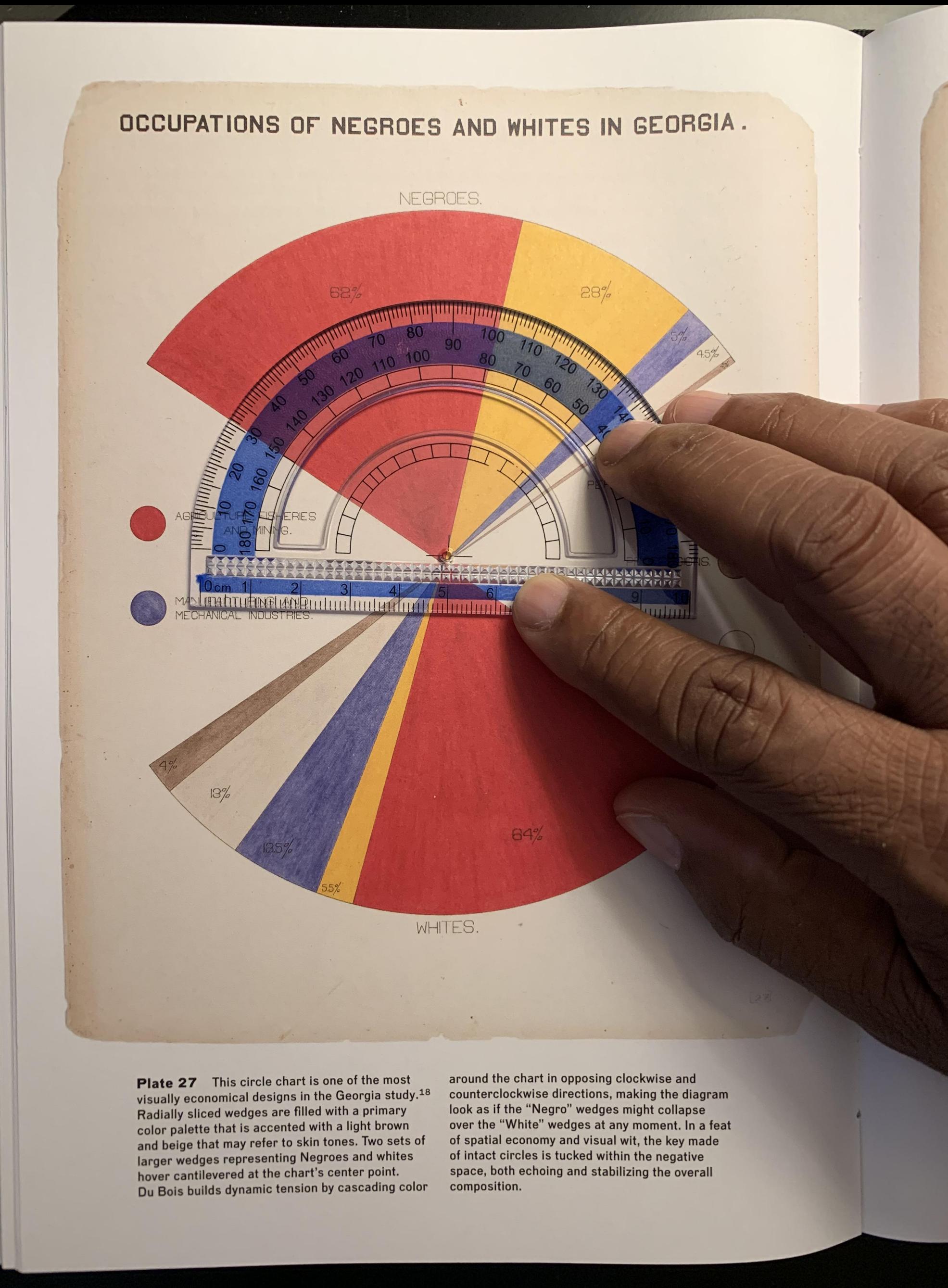
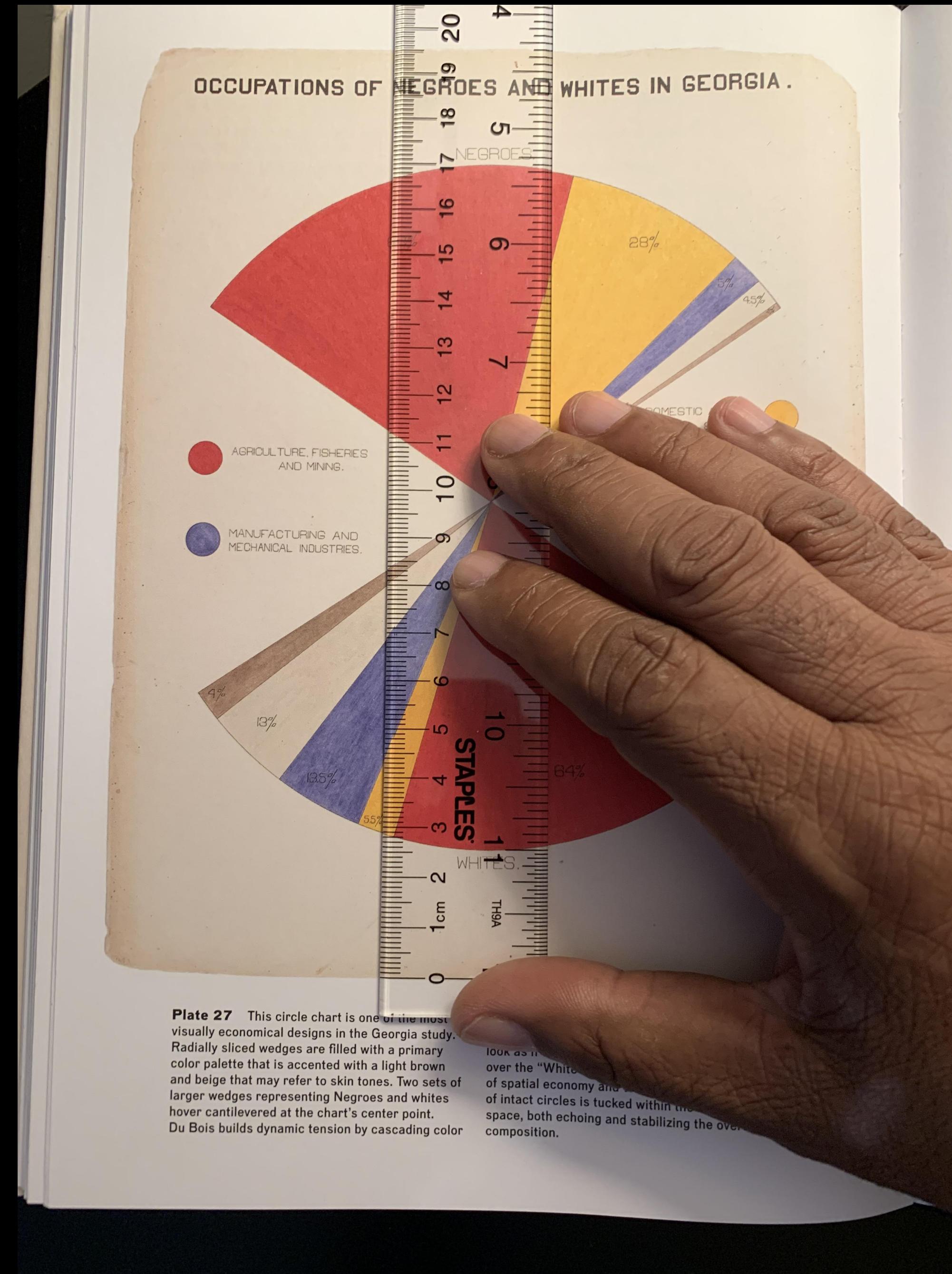


1900

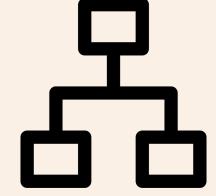
Scripting, Digital Fonts, PDF, Internet



2019



decksh

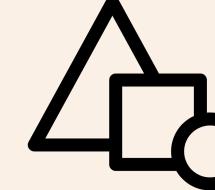
 **Structure**

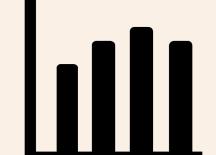
 **Text**

 **Lists**

 **Arrows**

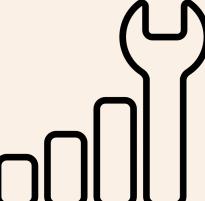
 **Images**

 **Graphics**

 **Charts**

 **Loops**

 **Data**

 **Utility**

occupation.dsh - Visual Studio Code

File Edit Selection View Go Run Terminal Help

deck

slide

```

asize=50
mx=50
my=50
subsize=2

ctext "OCCUPATIONS OF NEGROES AND WHITES IN GEORGIA." 50 95 3 "serif"
ctext "NEGROES." 50 90 subsize
ctext "WHITES." 50 9 subsize

// Negroes
arc mx my asize asize 78 146 asize "crimson"
arc mx my asize asize 46 78 asize "gold"
arc mx my asize asize 40 46 asize "blue" 50
arc mx my asize asize 35 40 asize "tan"
arc mx my asize asize 34 35 asize "rgb(101,67,33)" 80

// Whites
arc mx my asize asize 215 220 asize "rgb(101,67,33)" 80
arc mx my asize asize 220 235 asize "tan"
arc mx my asize asize 235 250 asize "blue" 50
arc mx my asize asize 250 255 asize "gold"
arc mx my asize asize 255 325 asize "crimson"

// Legends
cx1=10
cx2=88
cr=4

legsize=1.5
circle cx1 54 cr "crimson"
circle cx1 44 cr "blue" 50
cx1+=3
text "AGRICULTURE, FISHERIES" cx1 54 legsize
text "AND MINING." cx1 52.5 legsize

text "MANUFACTURING AND" cx1 44.5 legsize
text "MECHANICAL INDUSTRIES." cx1 43 legsize

circle cx2 59 cr "gold"
circle cx2 49 cr "rgb(101,67,33)" 80
circle cx2 41 cr "tan"

cx2=3
etext " DOMESTIC AND" cx2 59.5 legsize
etext "PERSONAL SERVICE." cx2 58 legsize

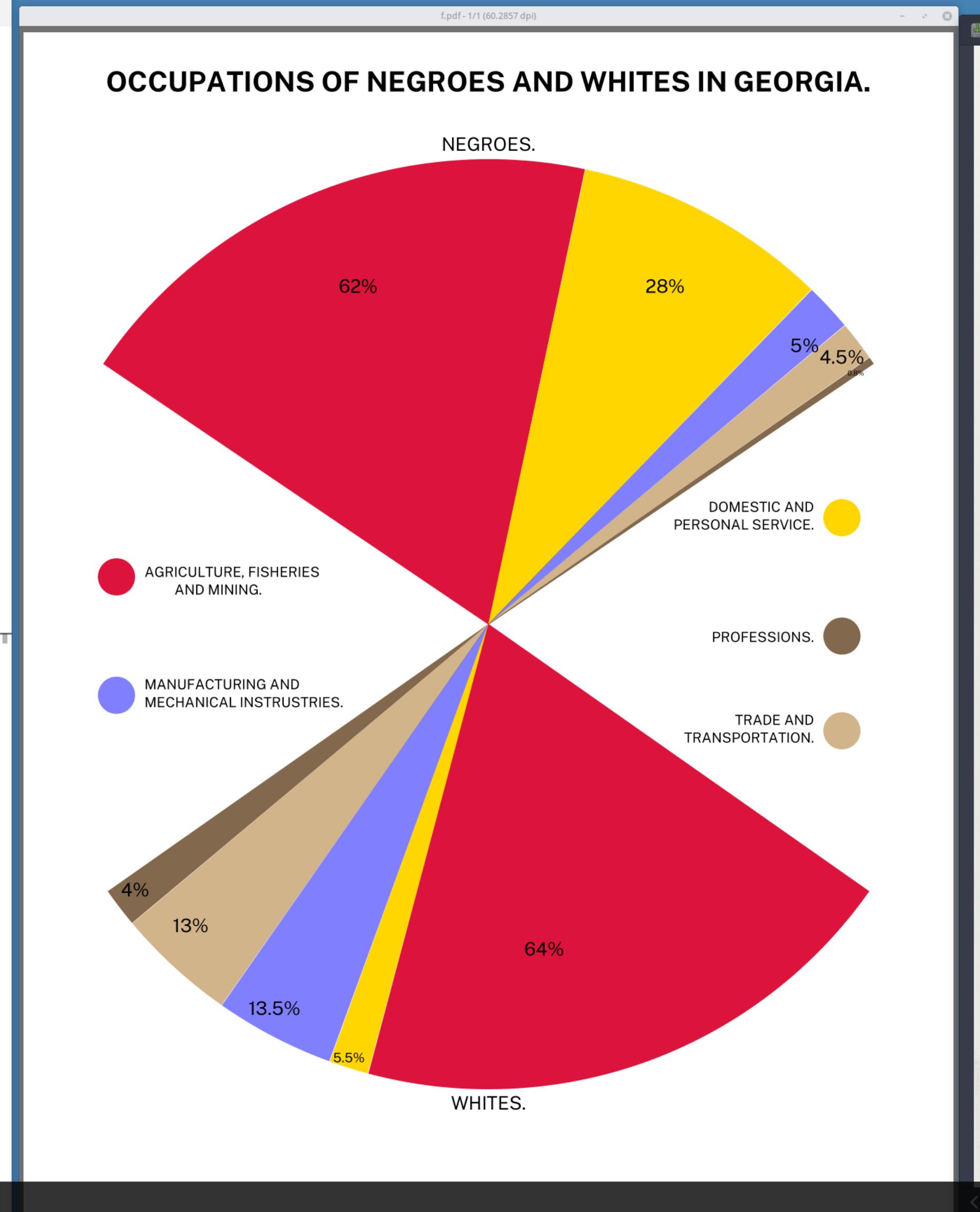
etext "PROFESSIONS." cx2 48.5 legsize

etext " TRADE AND" cx2 41.5 legsize
etext "TRANSPORTATION." cx2 40 legsize

ctext "62%" 36 78 subsize
ctext "28%" 69 78 subsize
ctext "5%" 84 73 subsize
ctext "4.5%" 88 72 subsize
ctext "0.8%" 89.5 71 0.75
ctext "64%" 56 22 subsize
ctext "5.5%" 35 13 1.4
ctext "13.5%" 27 17 subsize
ctext "13%" 18 24 subsize
ctext "4%" 12 27 subsize

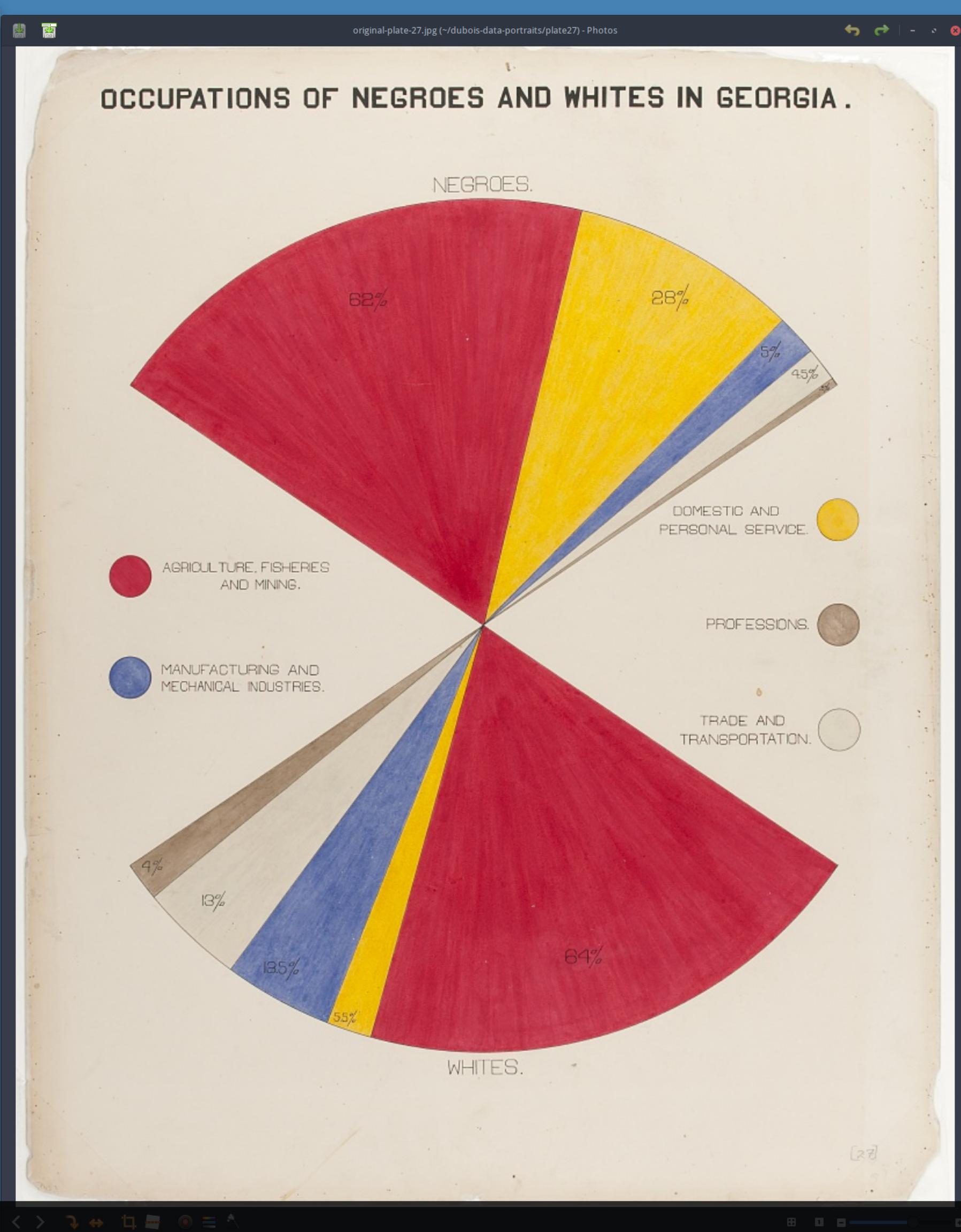
eslide
edeck

```



Code

Output

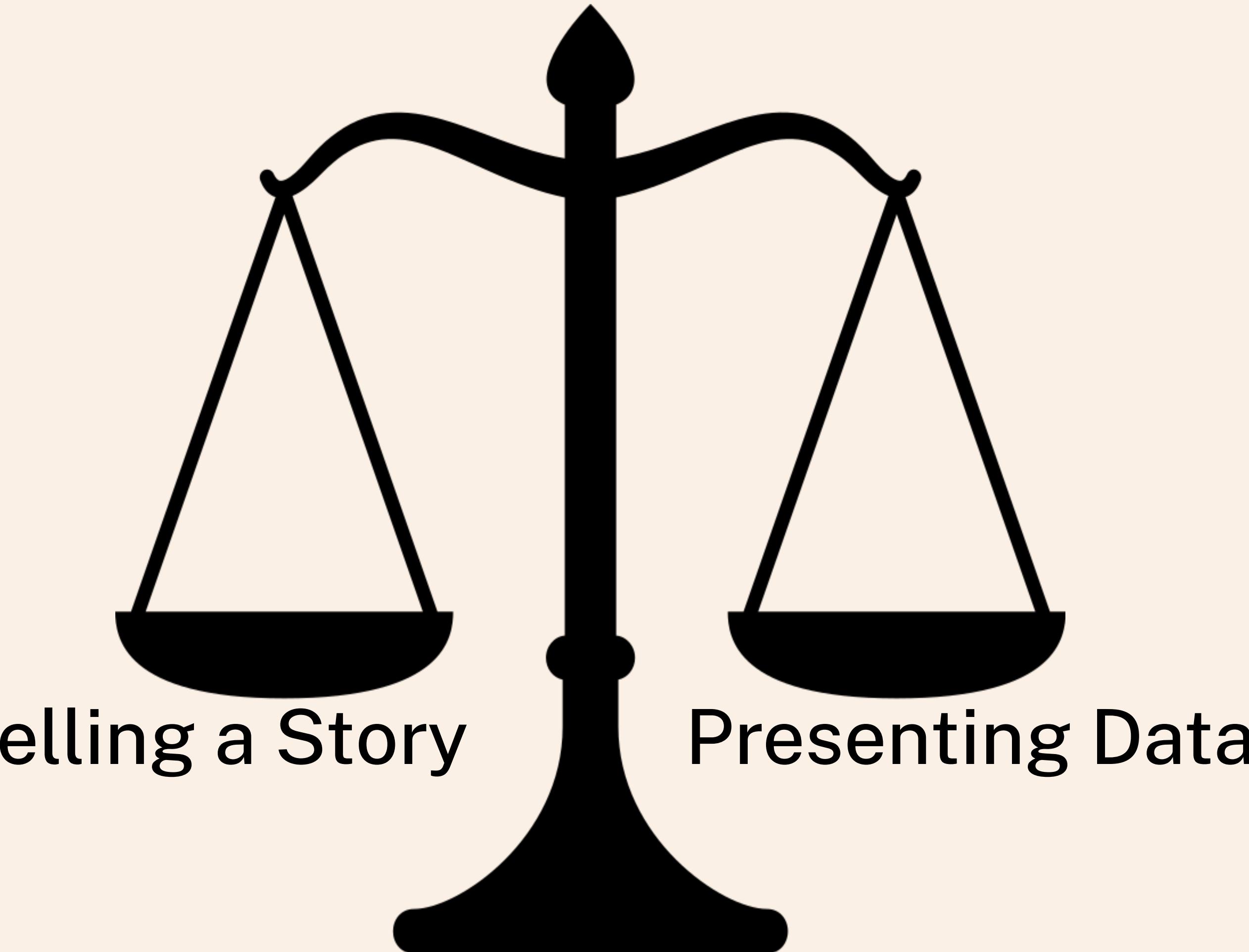


Reference

Storytelling



Storytelling is about balance

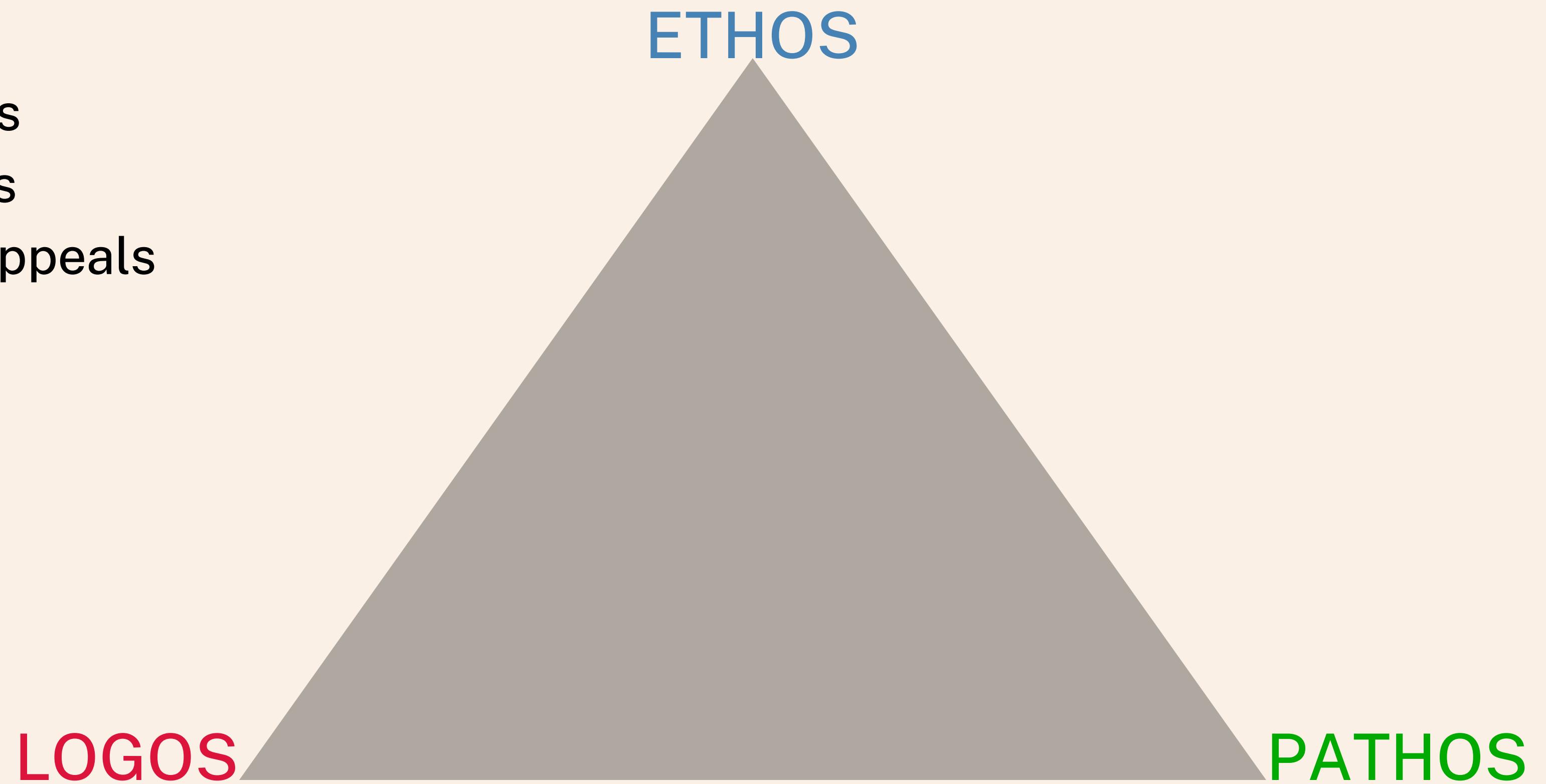


W.E.B. Du Bois sought to combine science, data, and methodology into sociology. His research into Black American culture told a story of resilience

Aristotle's Rhetorical Triangle

Aristotle thought that a speaker's ability to persuade an audience is based on how well the speaker appeals to them through

- ETHOS: Ethics (Credibility)
- PATHOS: Emotion (Feeling)
- LOGOS: Logic (Data)



Du Bois developed a sociological framework to show Black Americans are capable of functioning as social equals, social Darwinism has no data to back its theory.

Tell Stories Like Pixar

Once upon a time there was _____

Every day _____

One day _____

Because of that _____

Because of that _____

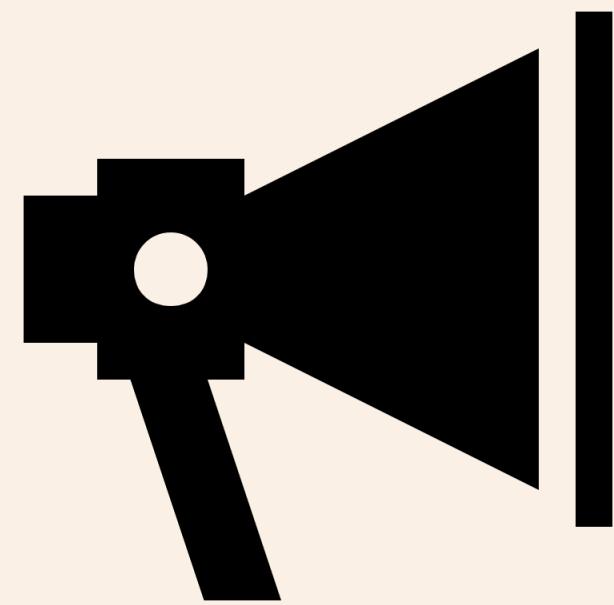
Until finally _____



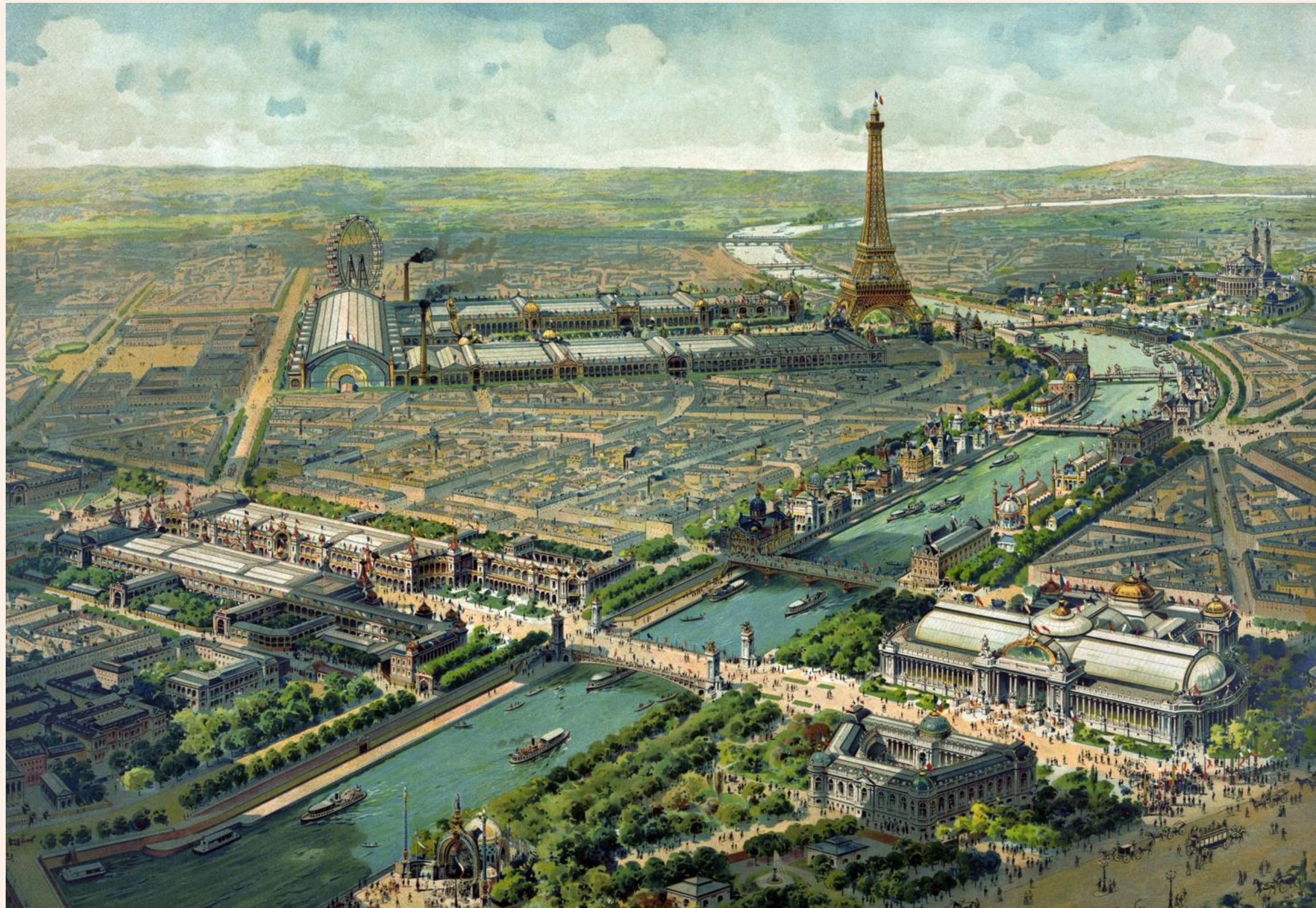
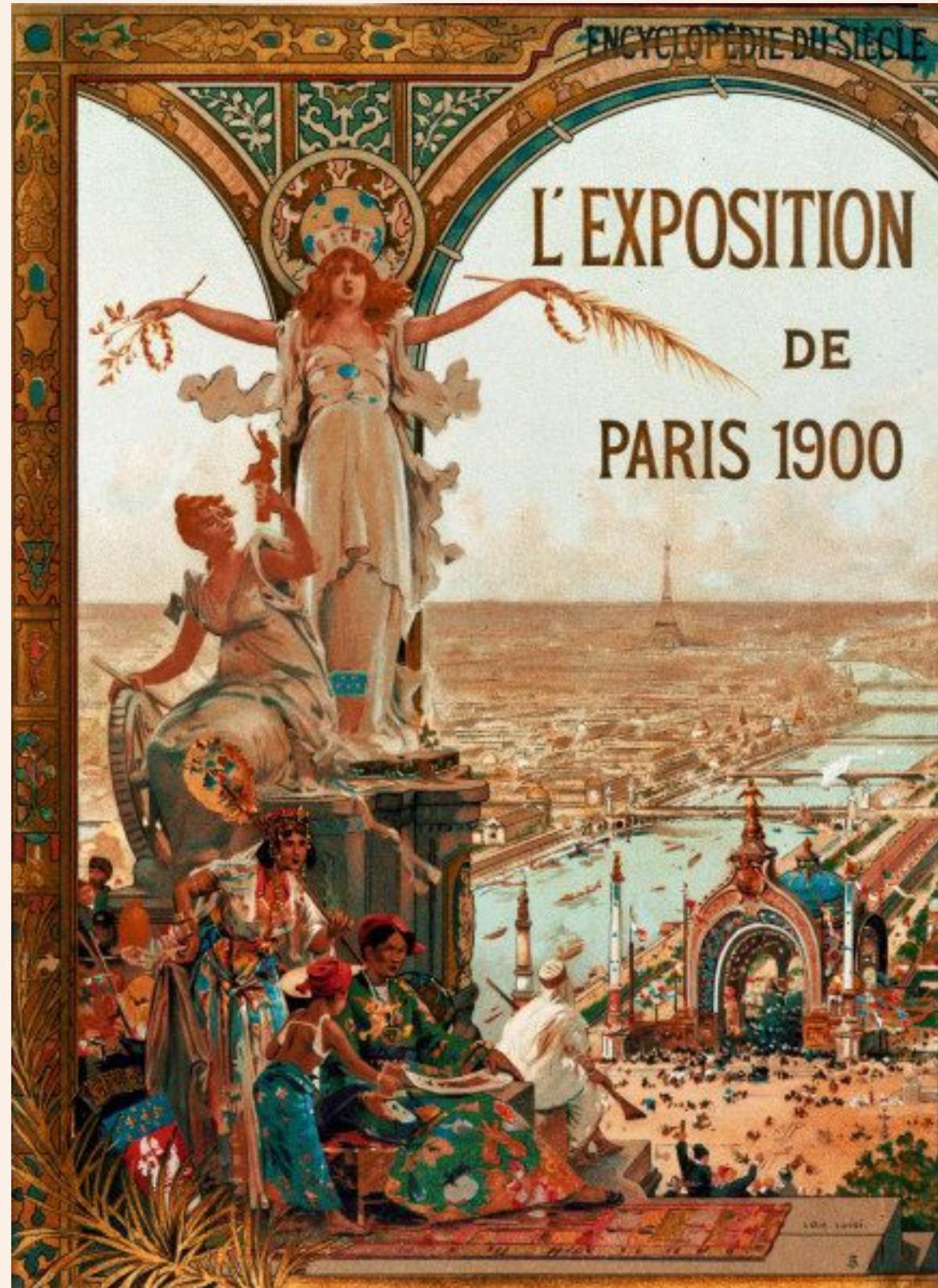
Themes from Great Stories

1. Coming of Age	You have arrived	Experience, Strength
2. Constant Evolution	You are always adapting	Adapability
3. Overcoming Obstacles	You came out on top	Relisience
4. Rebirth	You have reinvented yourself	New Hope and Direction
5. The Quest	It's been quite a Journey	Commitment, Dedication
6. True as it Ever Was	Remained true to yourself	Reinforce Trust

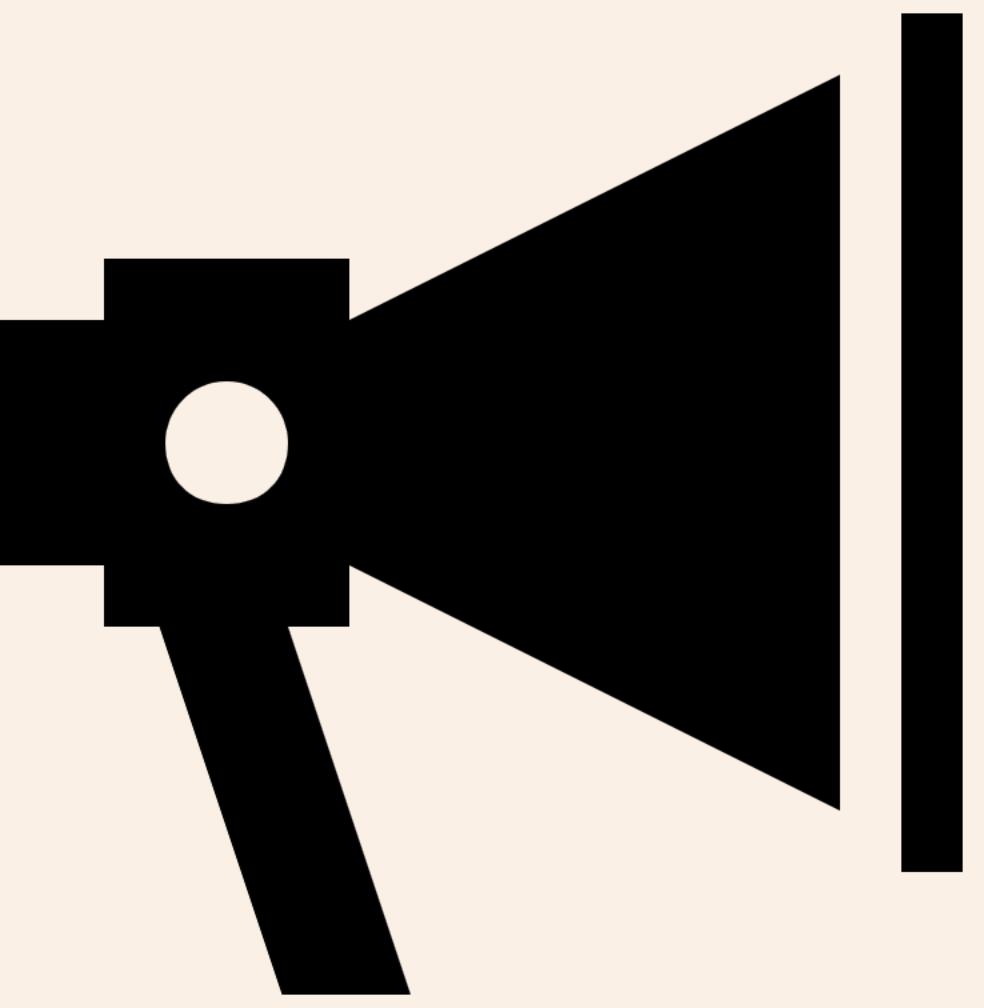
The Modern Megaphone



Paris 1900



Your Message



Now

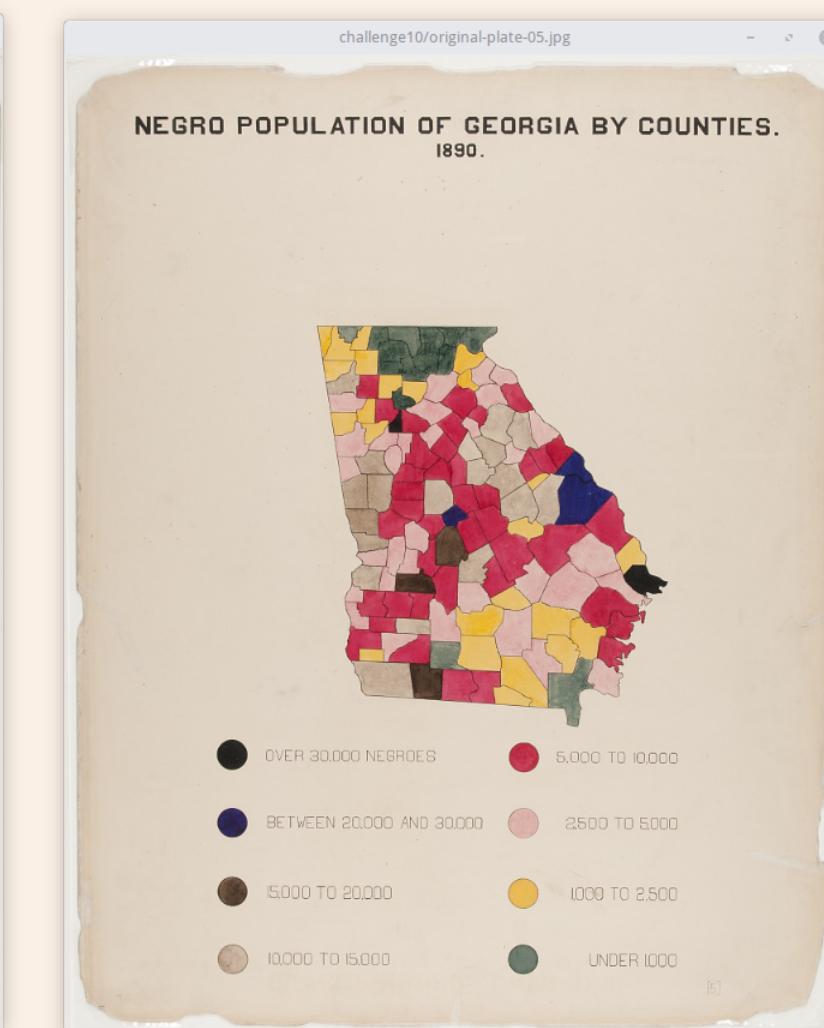
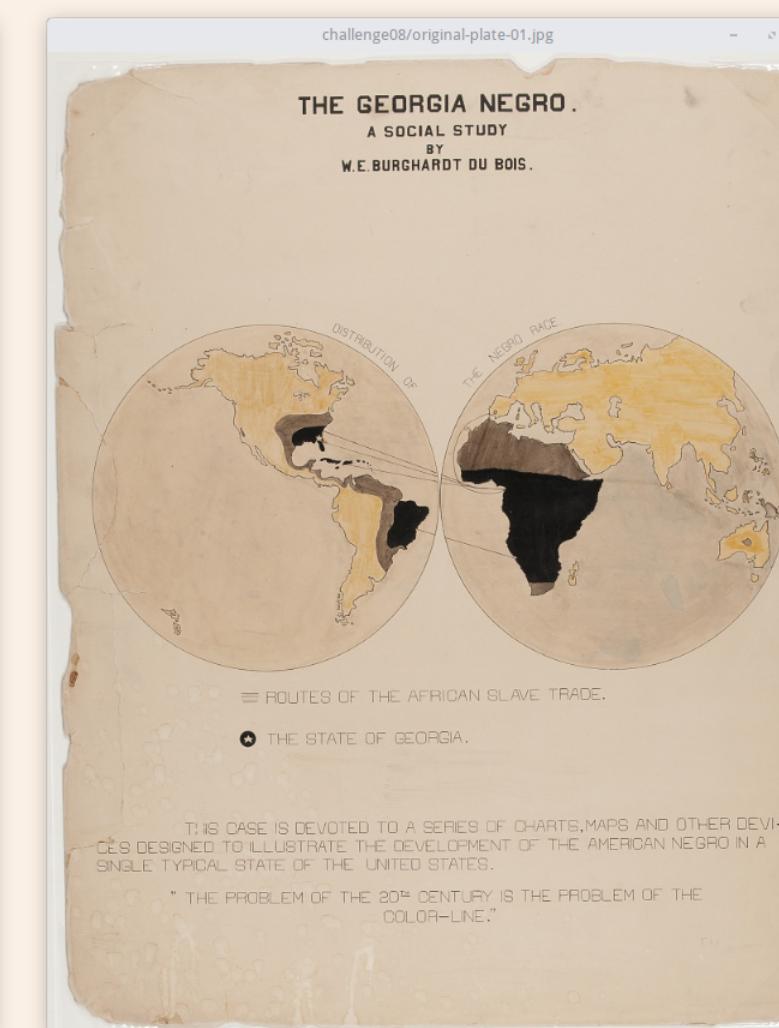
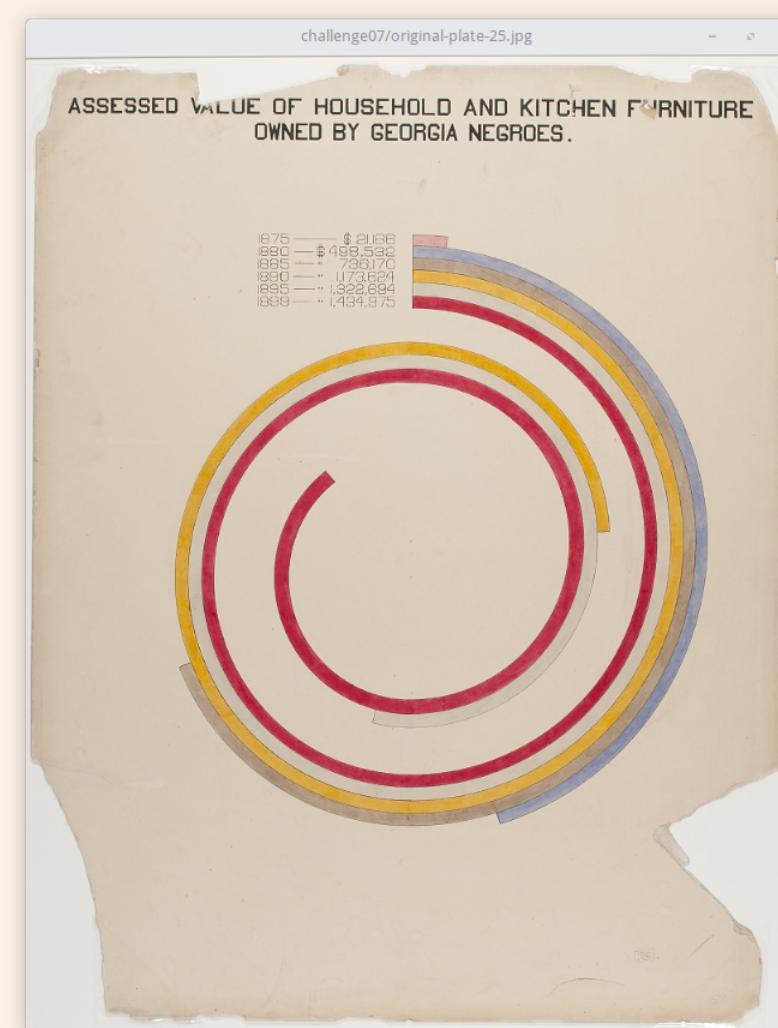
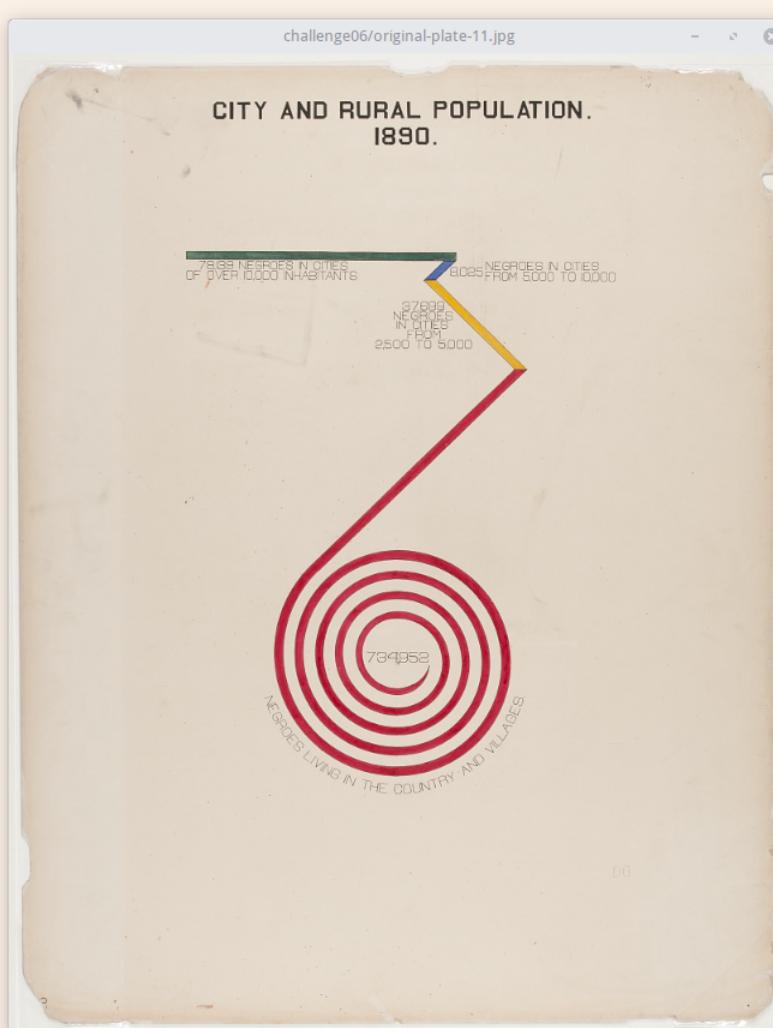
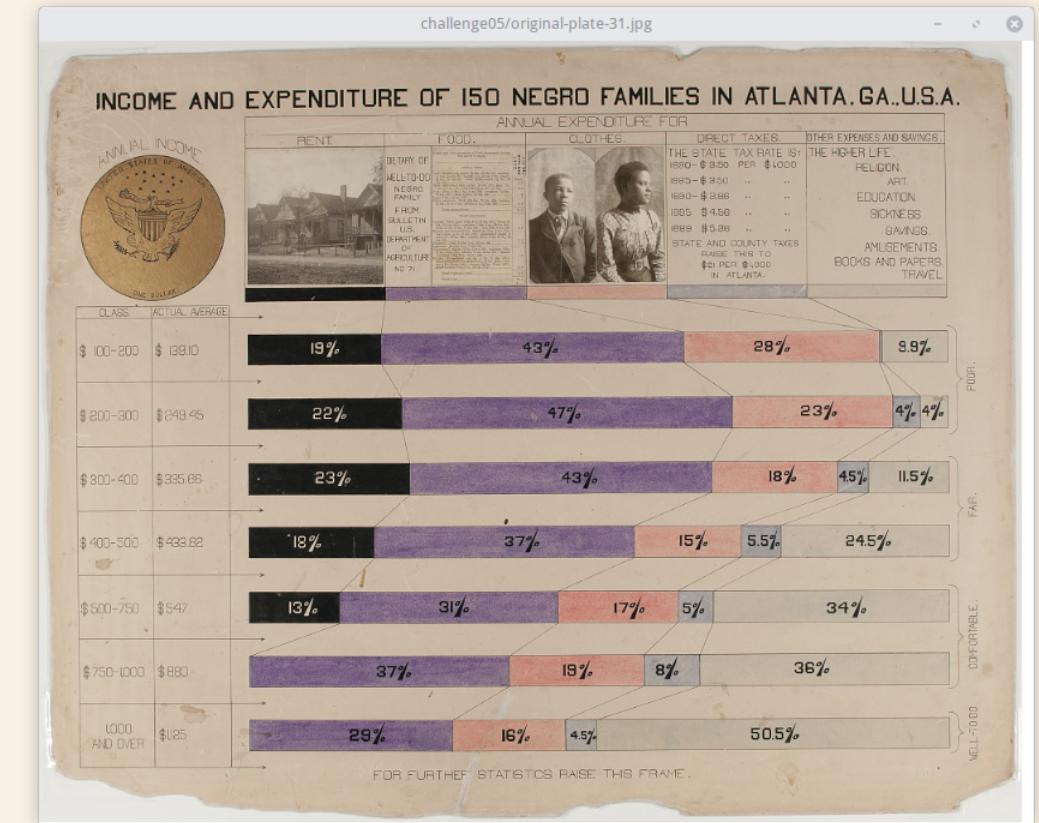
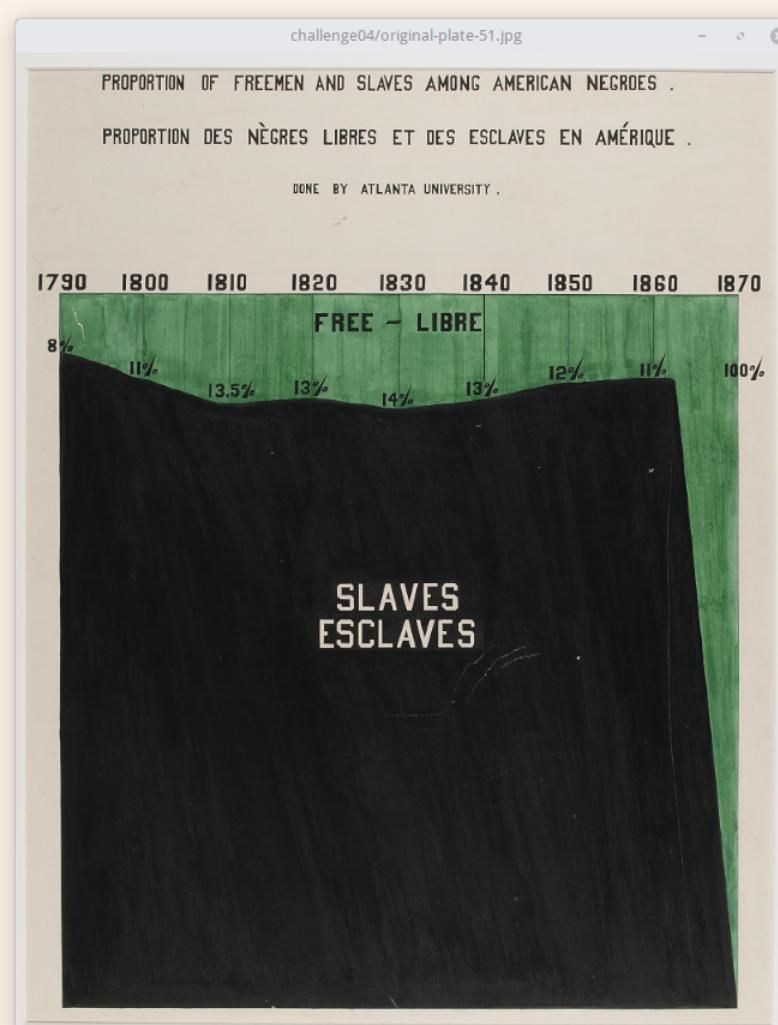
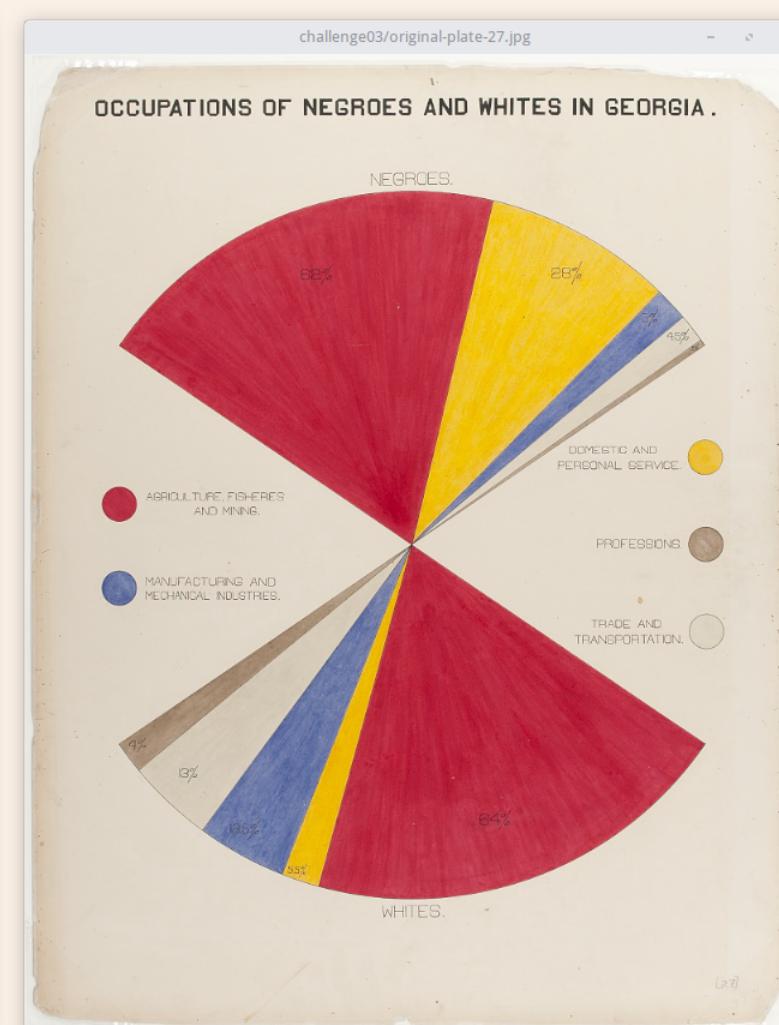
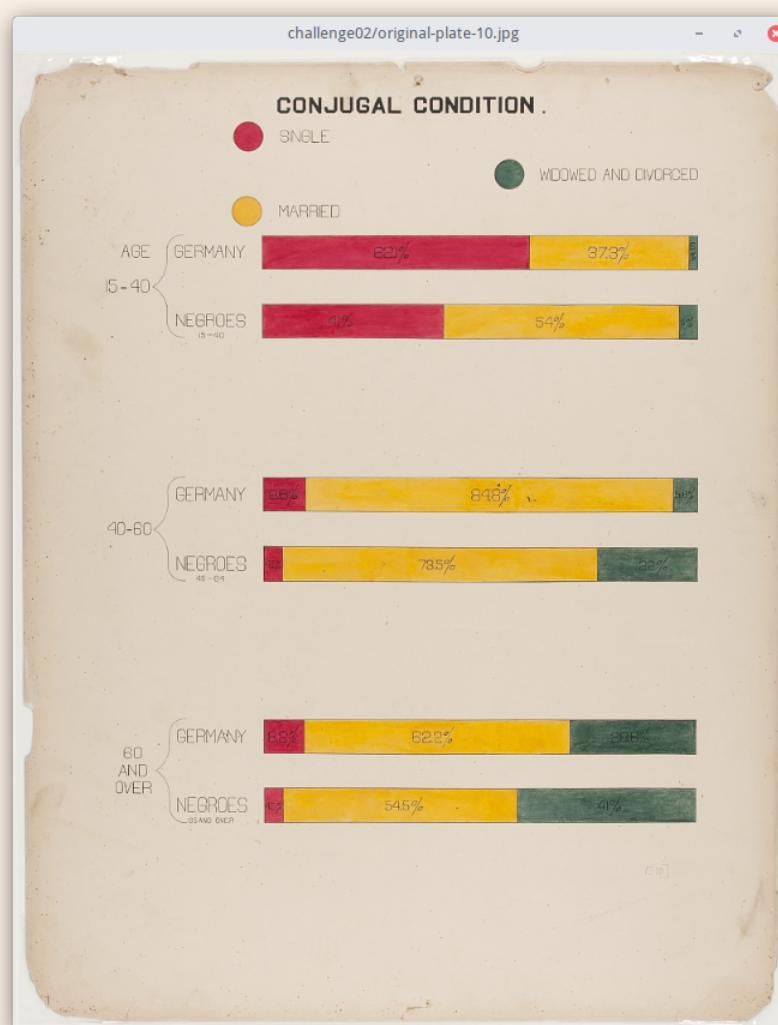
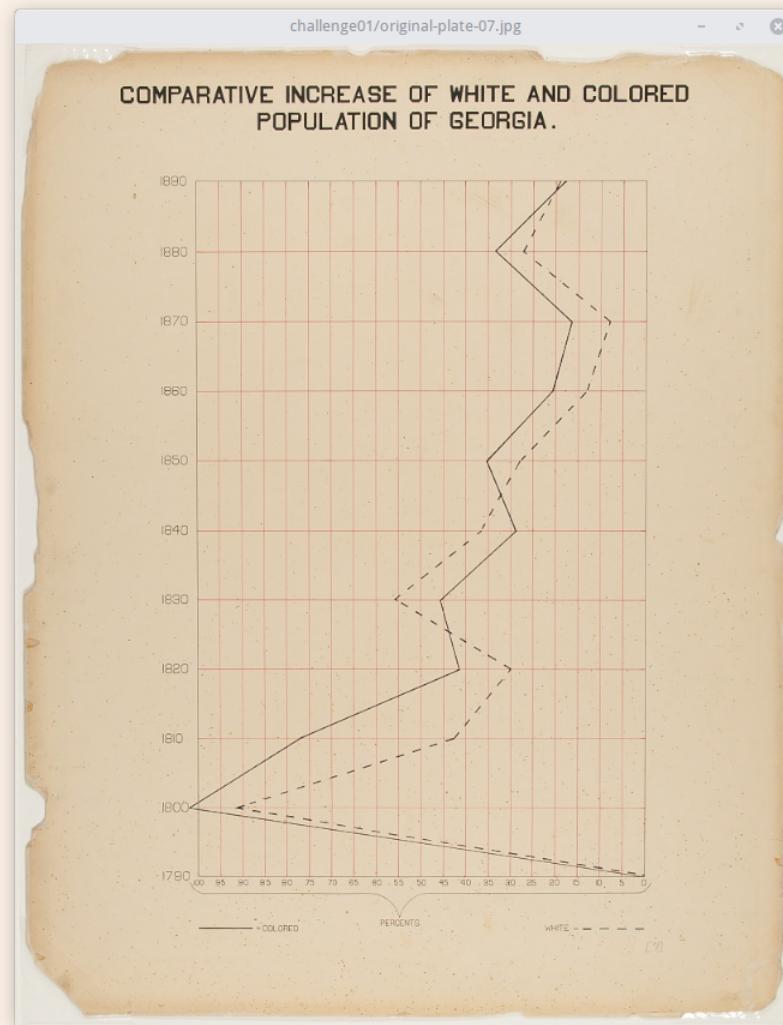


You Tube

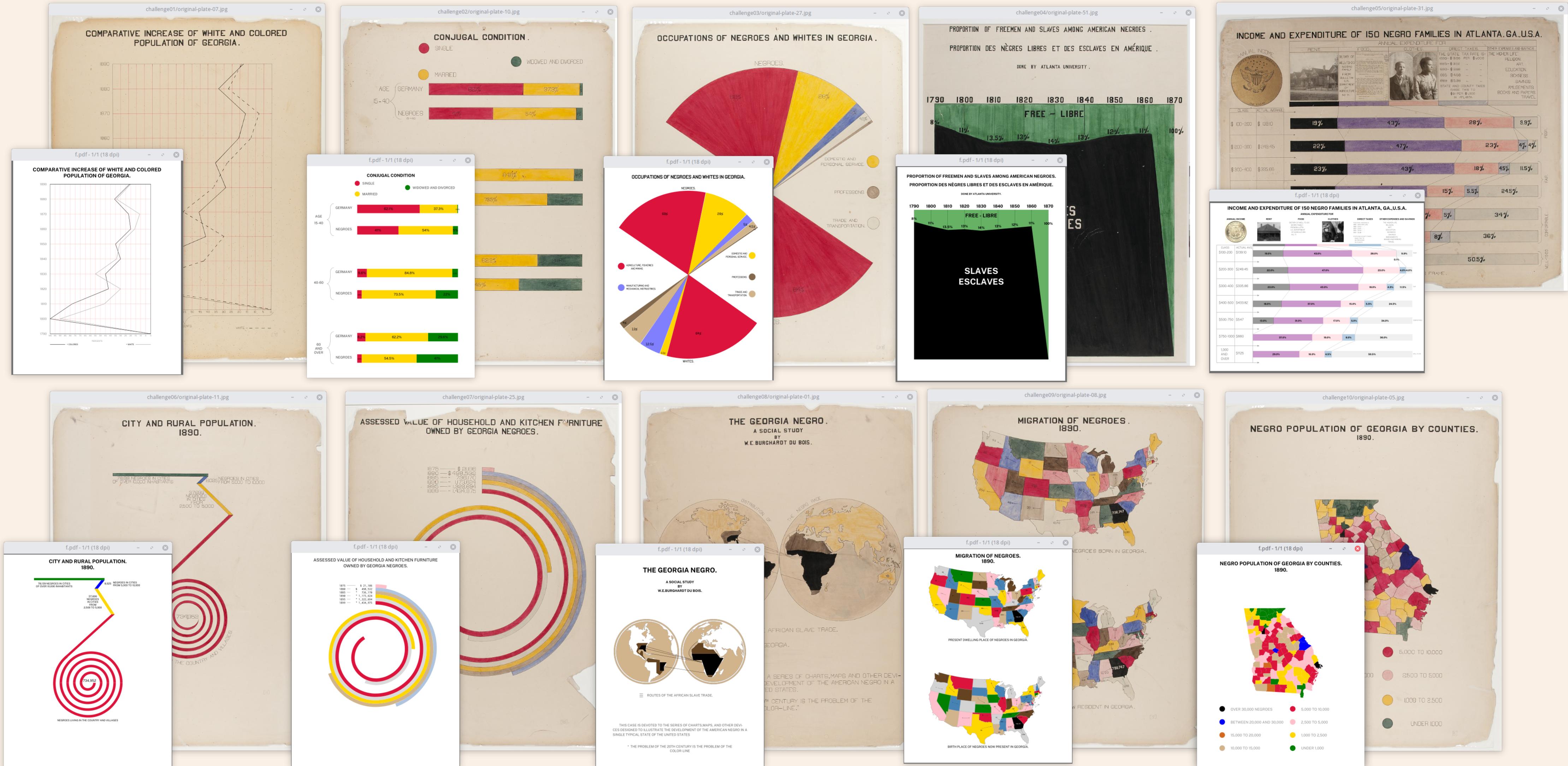


zoom

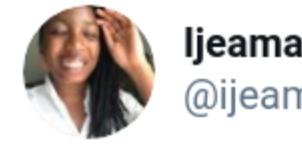
#DuboisChallenge



#DuboisChallenge



#DuboisChallenge

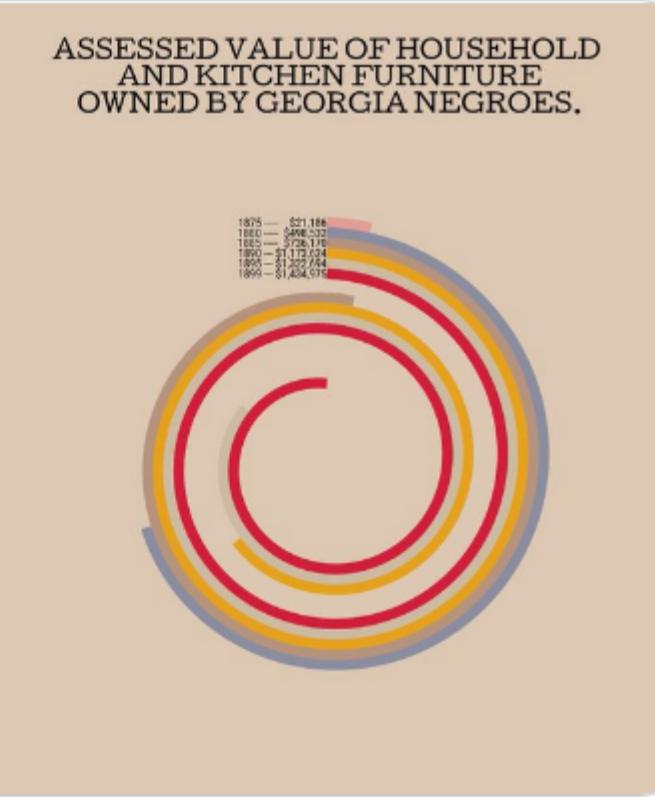
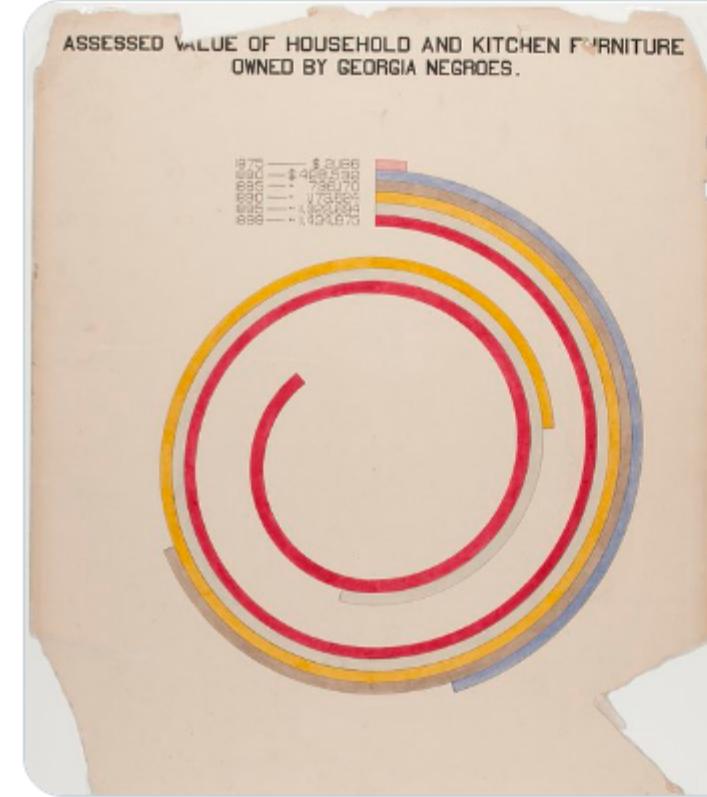


Ijeamaka A

@ijeamaka_a

#TidyTuesday and #DuBoisChallenge

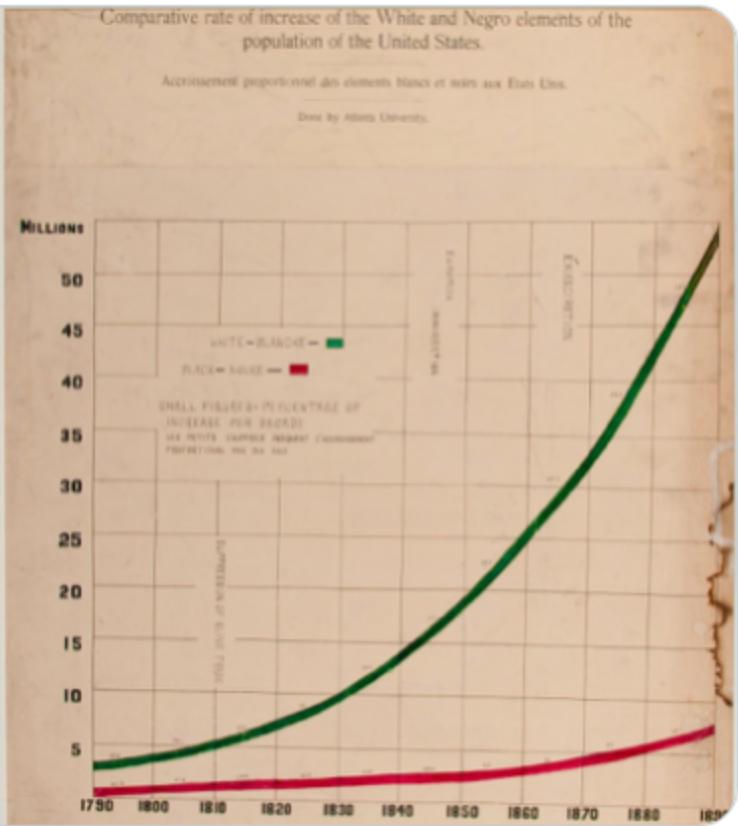
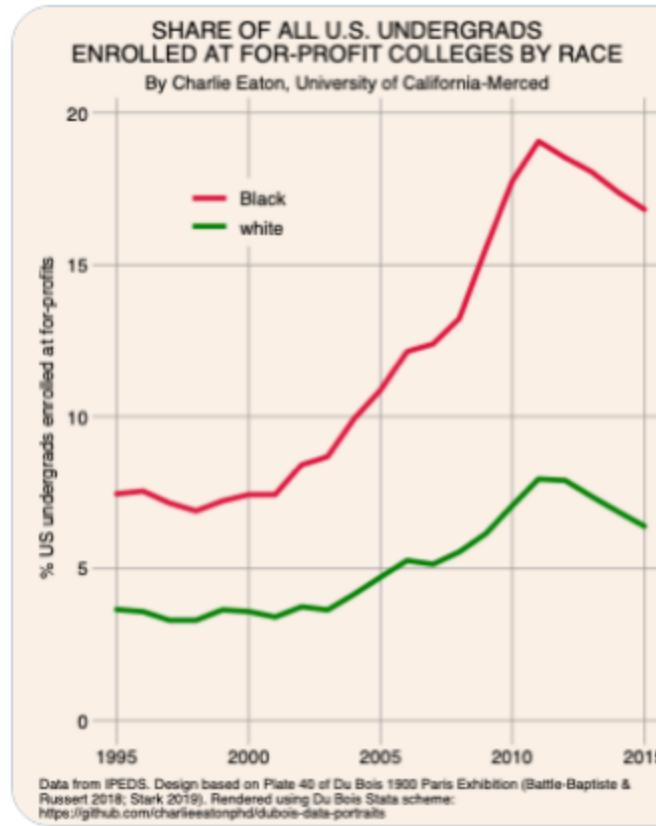
I decided to recreate challenge 07 using only coord_polar. It is not a perfect recreation, but I am happy with it (mostly because I didn't have to use my very rusty trigonometry knowledge).



Charlie Eaton

@CharlieEatonPhD

I'm thrilled that any @Stata user can now add the Du Bois graphing scheme to their machine using the *ssc install dubois* command. After installing, check *help dubois* for tips to use the scheme for the #DuBoisChallenge or modern replications like this one!

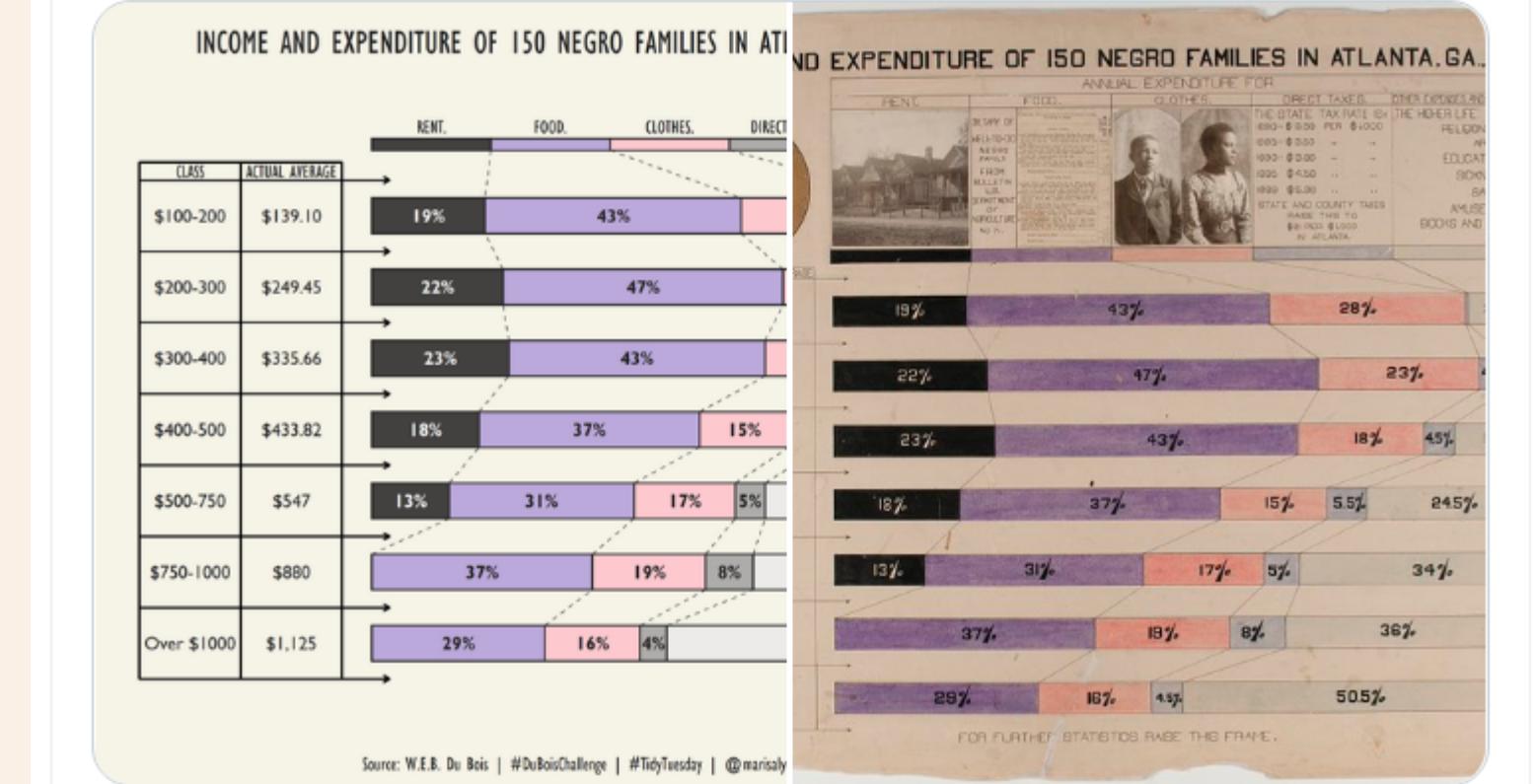


Marisa Henry

@marisalyn

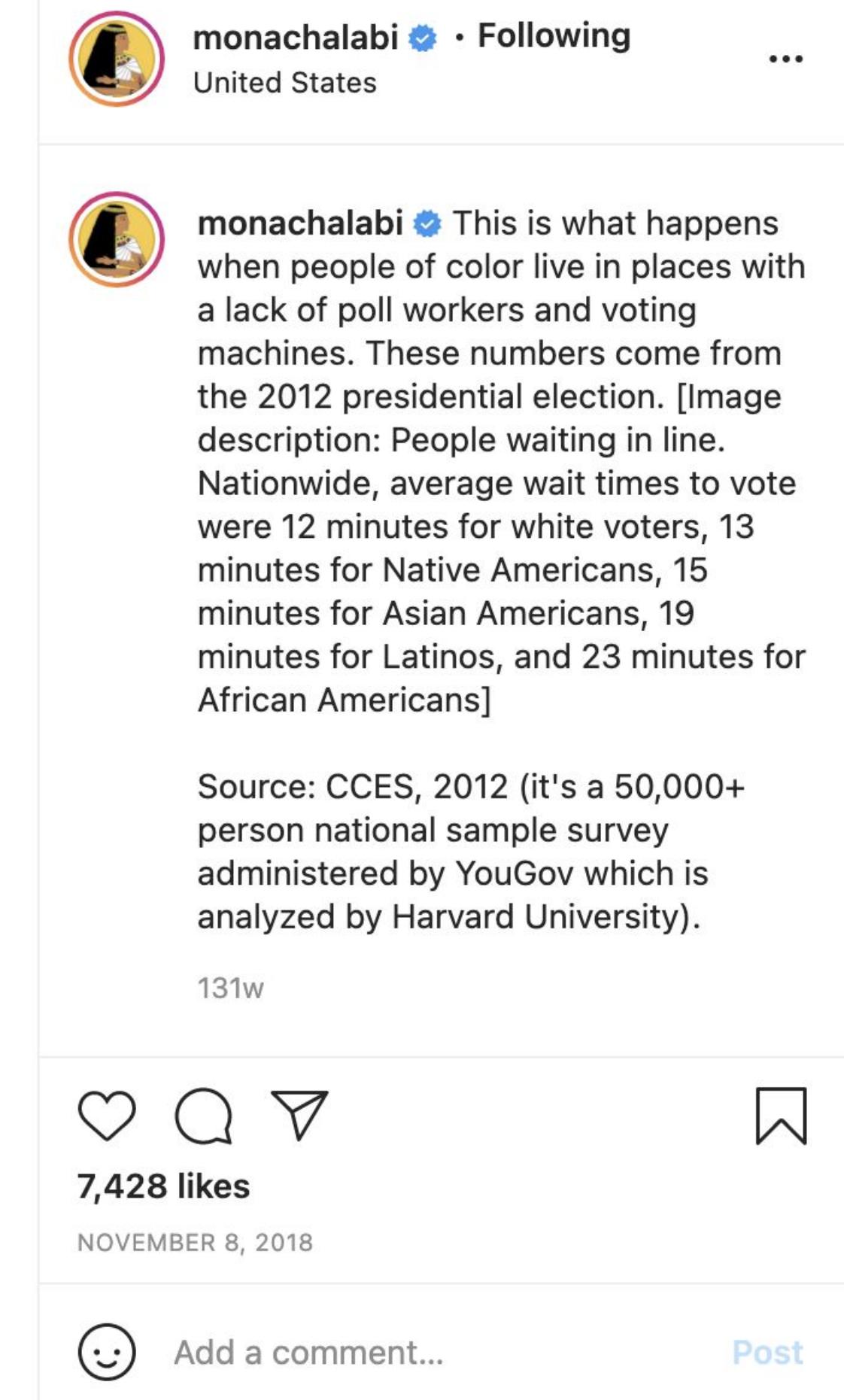
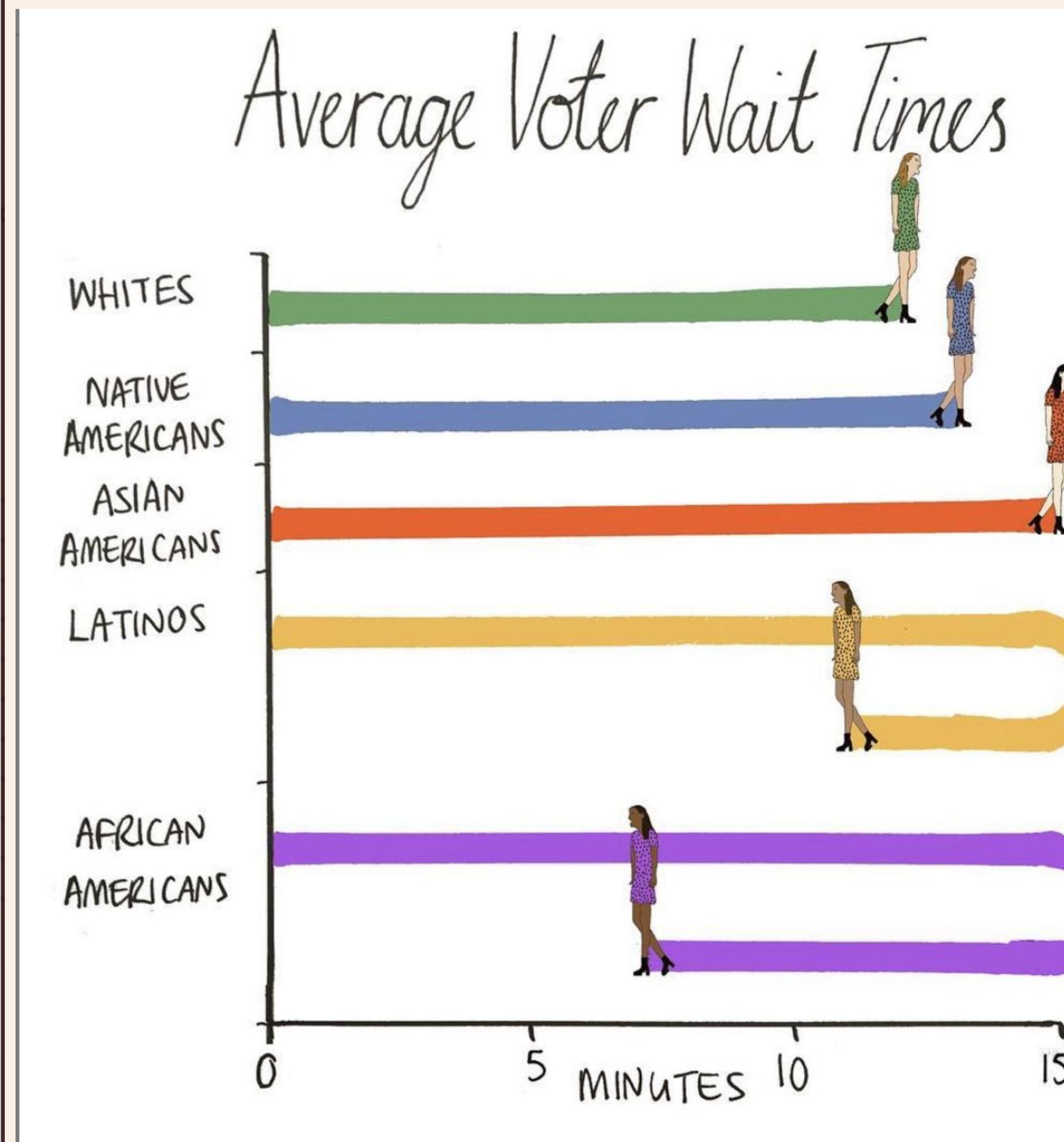
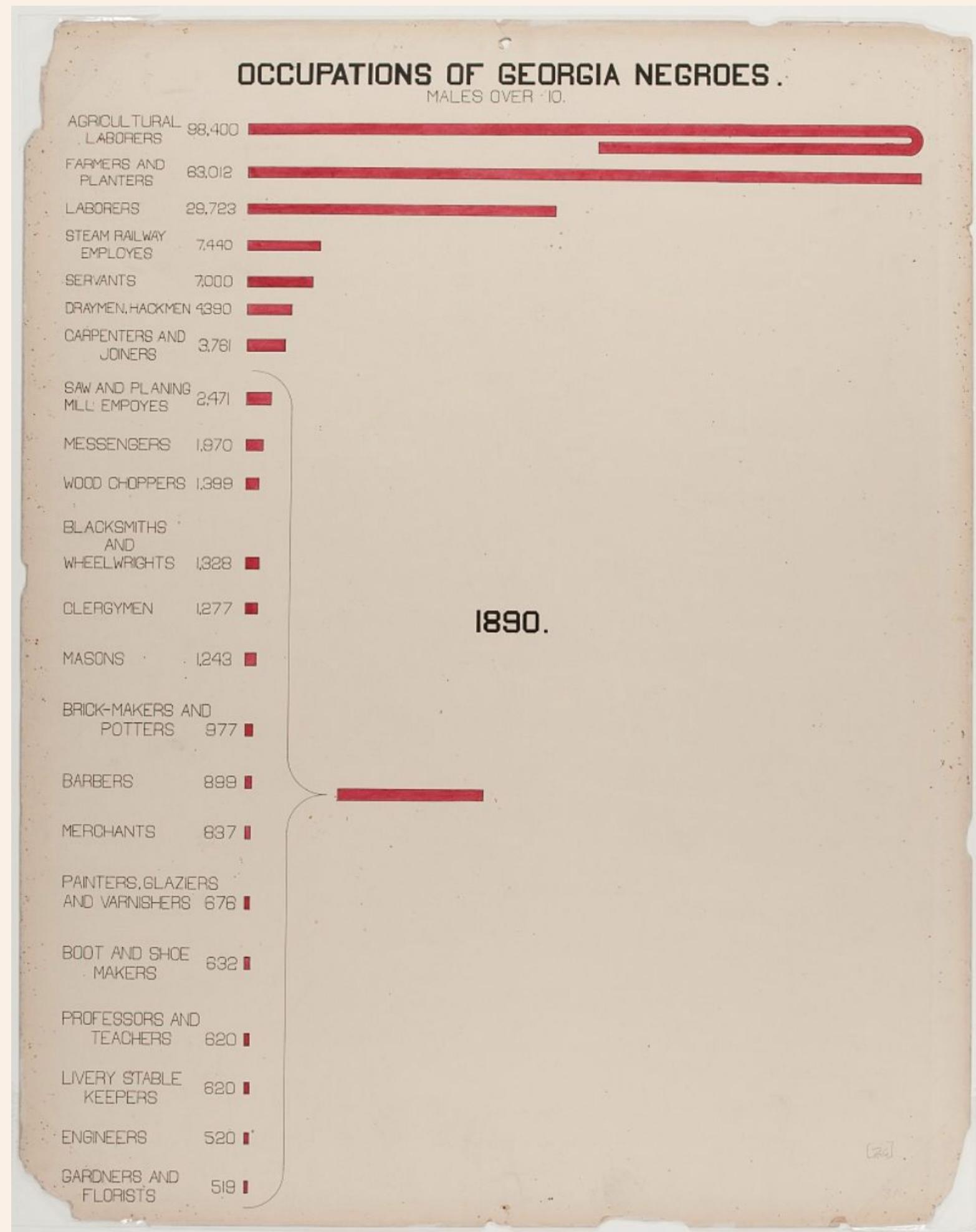
had lots of fun learning more about W.E.B DuBois and attempting to recreate one of his figures for the #DuBoisChallenge and #TidyTuesday this week!

: github.com/marisalyn/tidy...



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

Modern Megaphone: Mona Chalabi

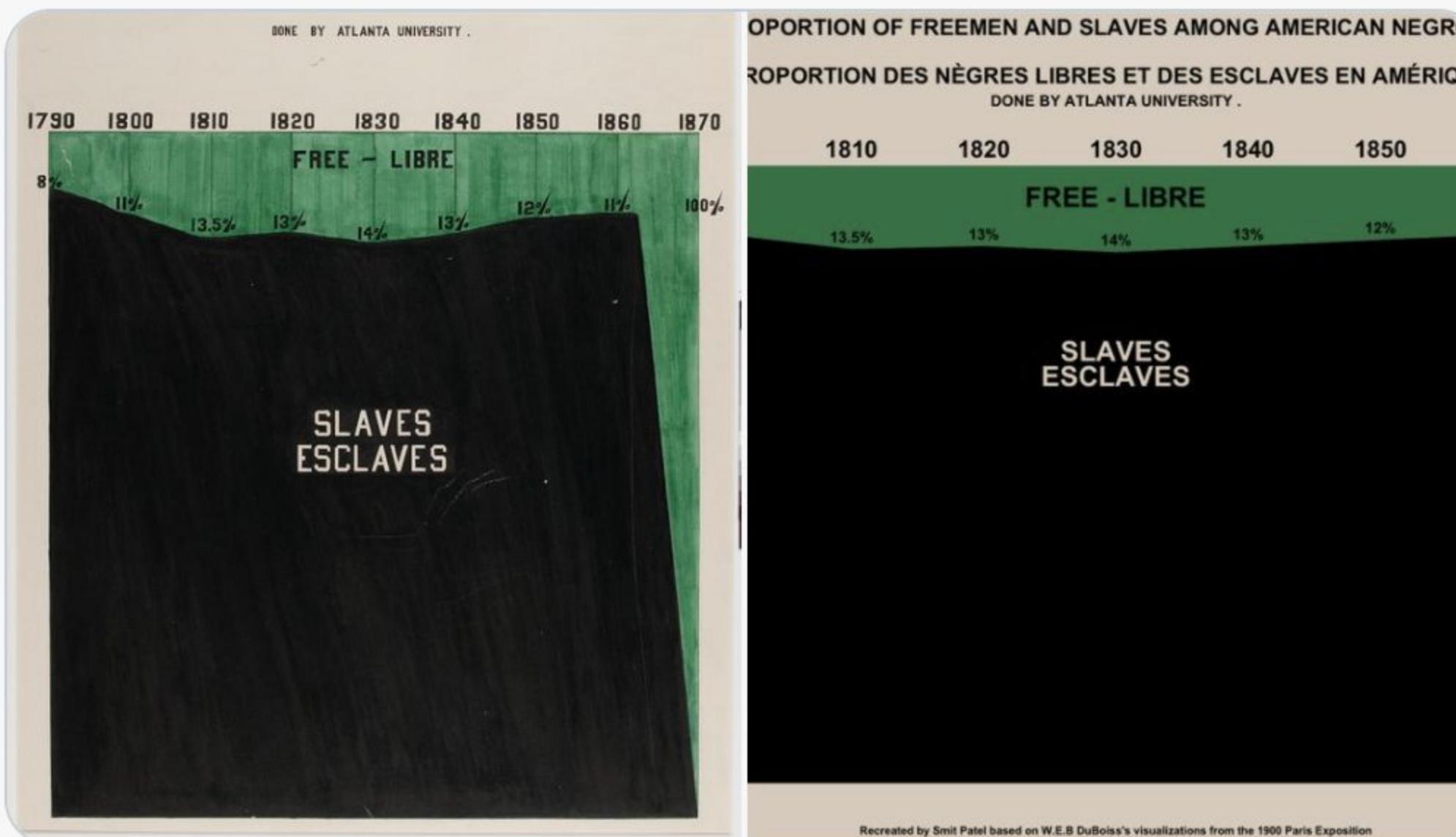


Smit Patel and Rebecca Stevick



Smit Patel @Smit_Patel1 · Feb 16

This weeks #TidyTuesday is in collaboration with the #DuBoisChallenge, to celebrate the data viz legacy of W.E.B Dubois by recreating his visualizations from the 1900 Pair Exposition. From his visualizations, I wanted to recreate one which I found the most powerful. #rstats



1

5

23

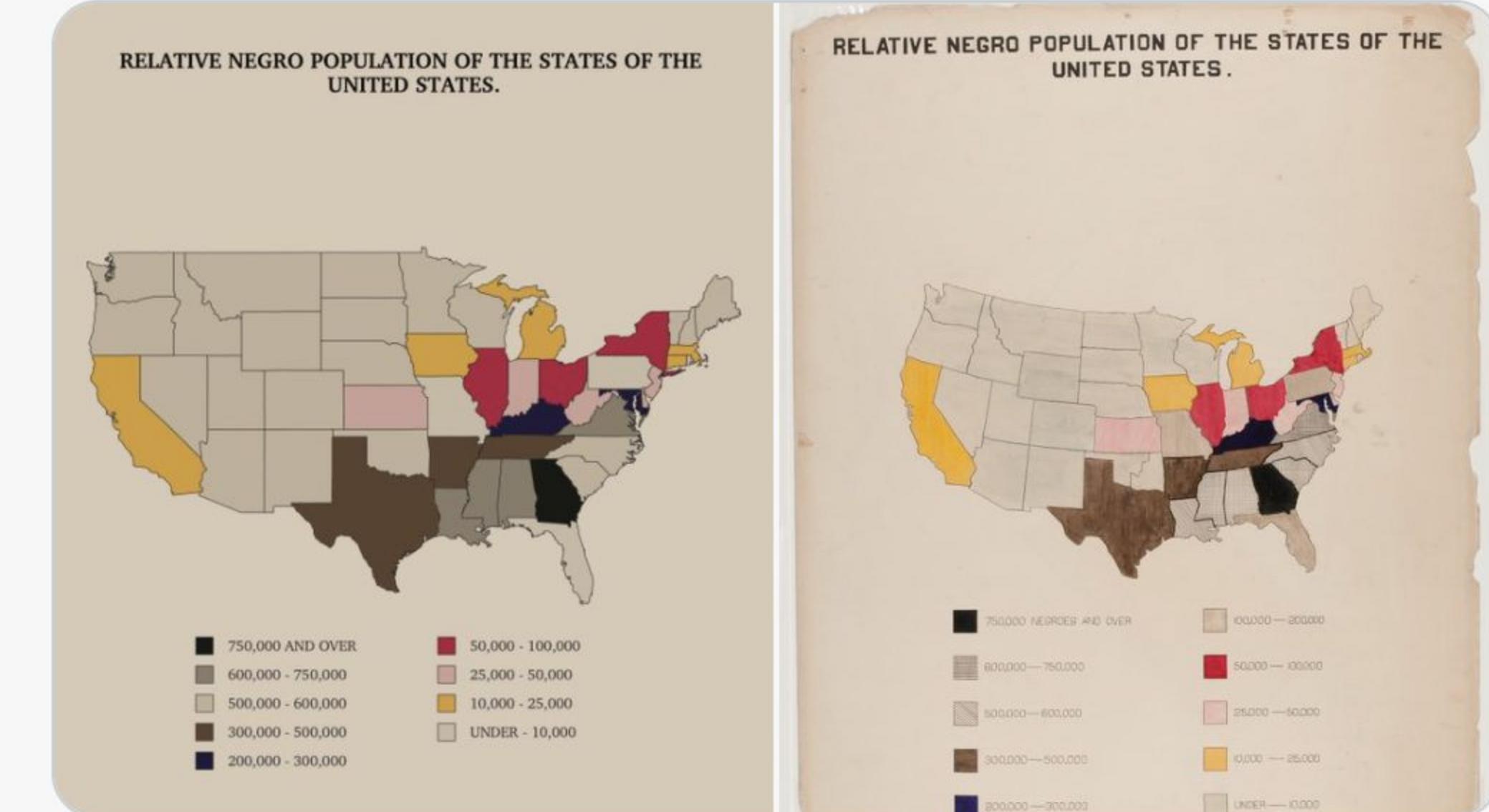


Rebecca Stevick @rjstevick · Feb 16

Here's my version of W.E.B Du Bois's plate 2 from the #DuBoisChallenge for #TidyTuesday. Anyone else totally amazed how he and his students created these visualizations by hand!?

code here: github.com/rjstevick/Tidy...

more on Du Bois here: [medium.com/nightingale/da...](https://medium.com/nightingale/data-visualizations-by-w-e-b-du-bois-plate-2-1900-paris-exposition-1900-1901-1902-1903-1904-1905-1906-1907-1908-1909-1910-1911-1912-1913-1914-1915-1916-1917-1918-1919-1920-1921-1922-1923-1924-1925-1926-1927-1928-1929-1930-1931-1932-1933-1934-1935-1936-1937-1938-1939-1940-1941-1942-1943-1944-1945-1946-1947-1948-1949-1950-1951-1952-1953-1954-1955-1956-1957-1958-1959-1960-1961-1962-1963-1964-1965-1966-1967-1968-1969-1970-1971-1972-1973-1974-1975-1976-1977-1978-1979-1980-1981-1982-1983-1984-1985-1986-1987-1988-1989-1990-1991-1992-1993-1994-1995-1996-1997-1998-1999-2000-2001-2002-2003-2004-2005-2006-2007-2008-2009-2010-2011-2012-2013-2014-2015-2016-2017-2018-2019-2020-2021-2022-2023-2024-2025-2026-2027-2028-2029-2030-2031-2032-2033-2034-2035-2036-2037-2038-2039-2040-2041-2042-2043-2044-2045-2046-2047-2048-2049-2050-2051-2052-2053-2054-2055-2056-2057-2058-2059-2060-2061-2062-2063-2064-2065-2066-2067-2068-2069-2070-2071-2072-2073-2074-2075-2076-2077-2078-2079-2080-2081-2082-2083-2084-2085-2086-2087-2088-2089-2090-2091-2092-2093-2094-2095-2096-2097-2098-2099-20100)



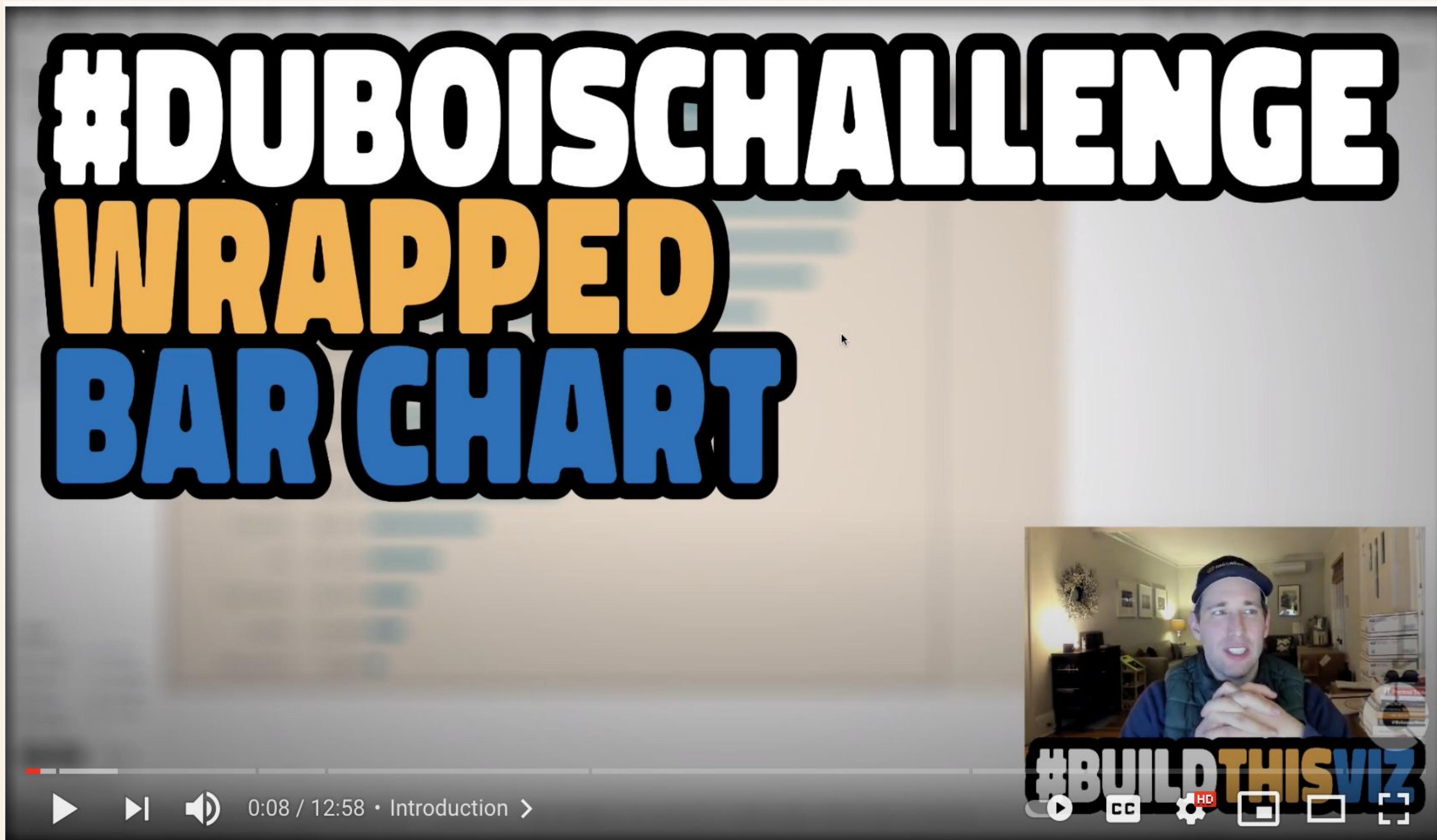
3

6

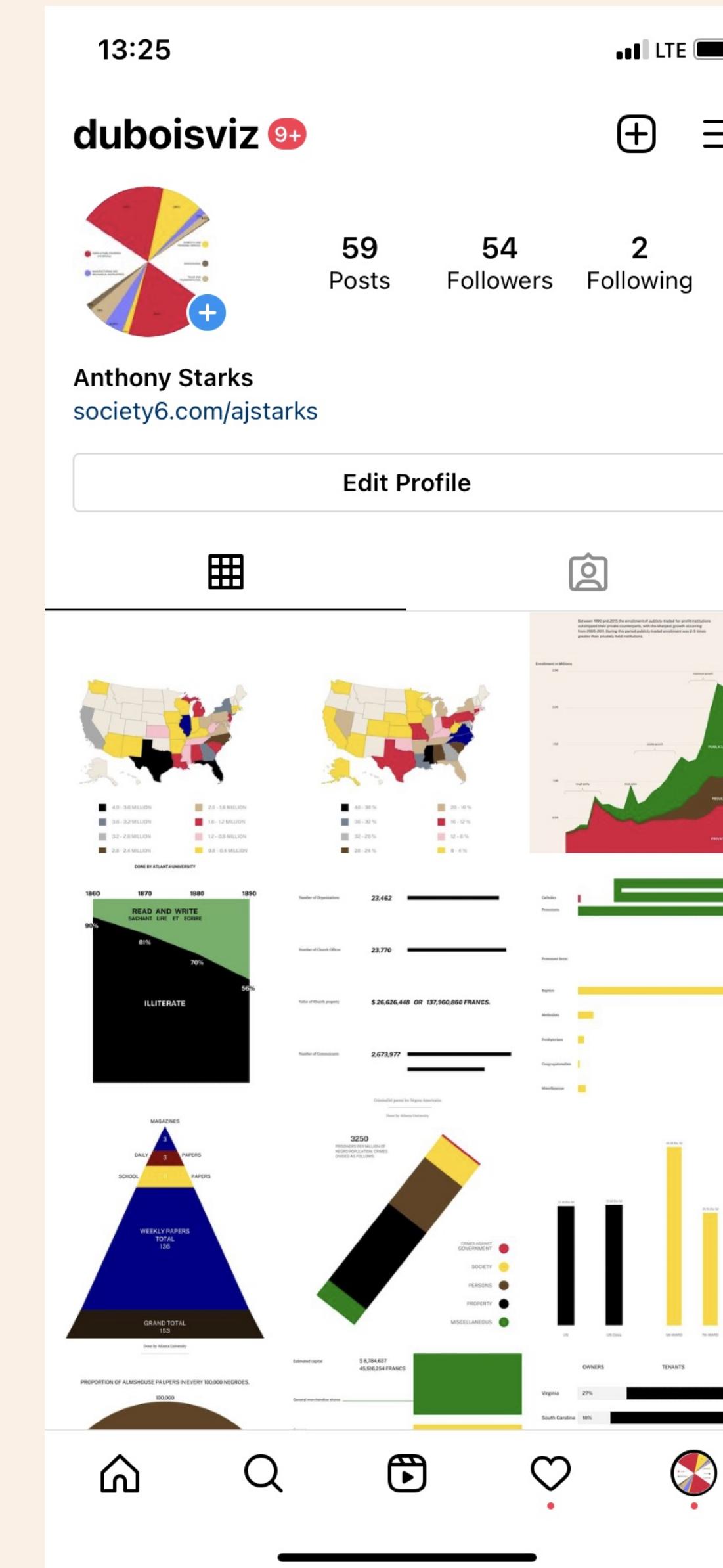
46



Luke Stanke on YouTube



Modern Megaphone: @duboisviz



#DuboisChallenge Twitter Dashboard

#DuBoisChallenge Twitter Usage

The goal of the challenge is to celebrate the data visualization legacy of W.E.B DuBois by recreating the visualizations from the 1900 Paris Exposition using modern tools.
This dashboard takes a look at the twitter usage of the challenge.

Total Tweets

445

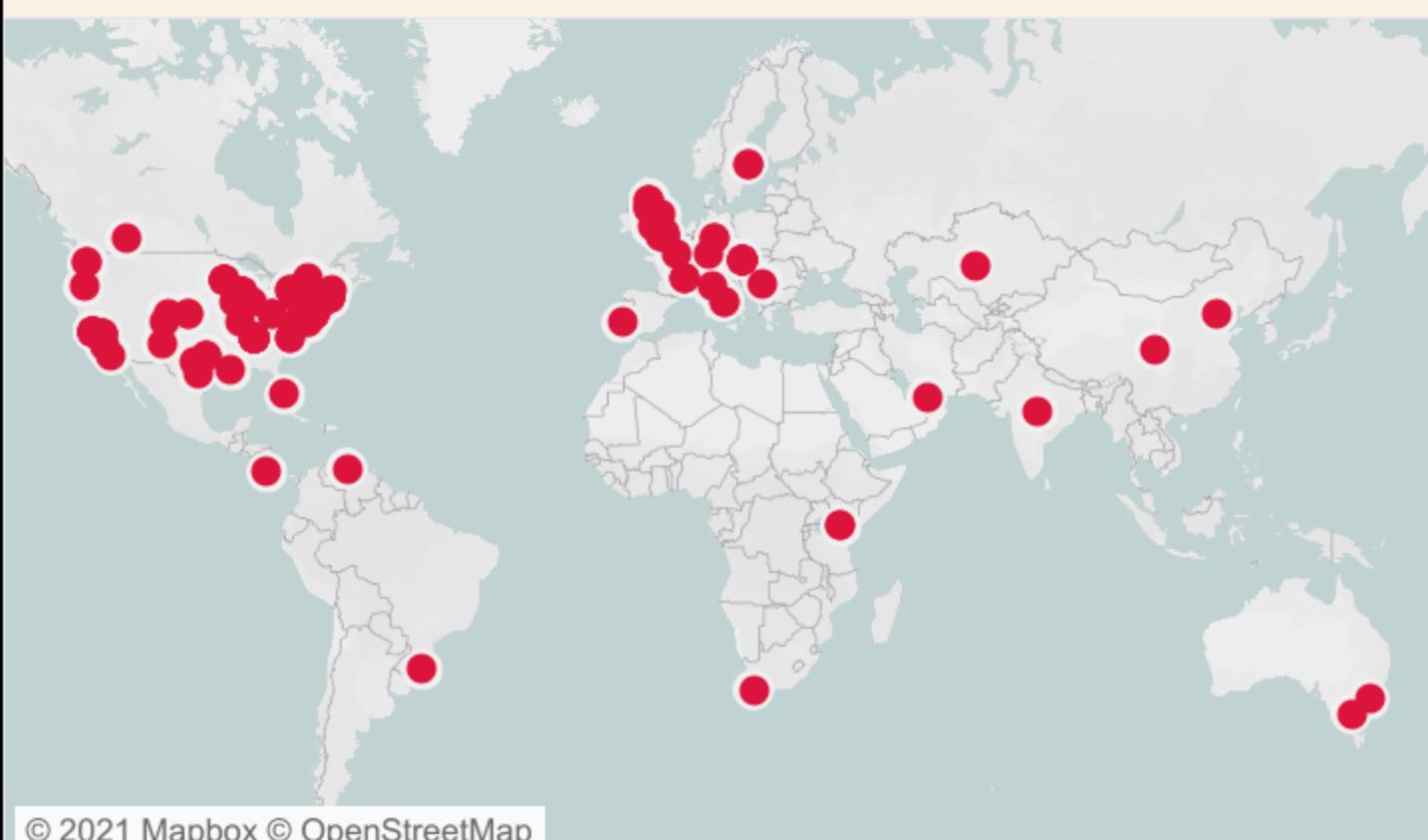
Total Unique Users

167

Date with the most activity

February 16th (74 Tweets)

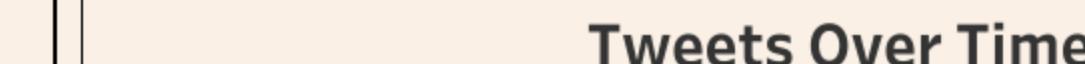
Twitter Activity



Top 10 Users with the Highest Follower Count

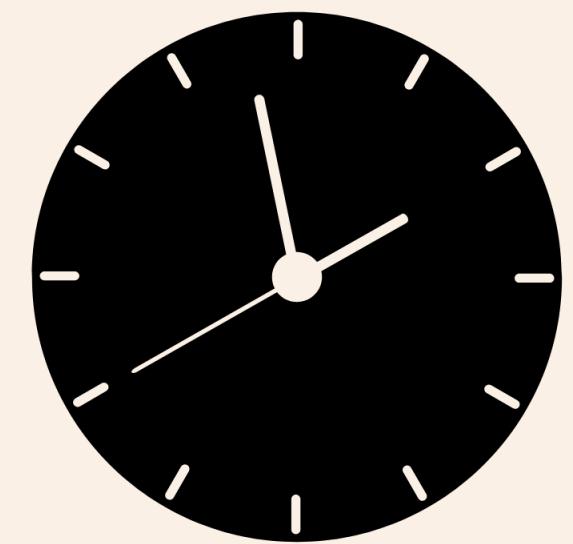
* Verified Users

@AlbertoCairo	59,745
@ftdata	44,464
@familyunequal	22,383
@mioana	21,866
@R4DScommunity	15,768
@thomas_mock	11,629
@sarahlovesdata	9,965
@vsbuffalo	9,260
@abtran	8,018
@theneilrichards	6,334

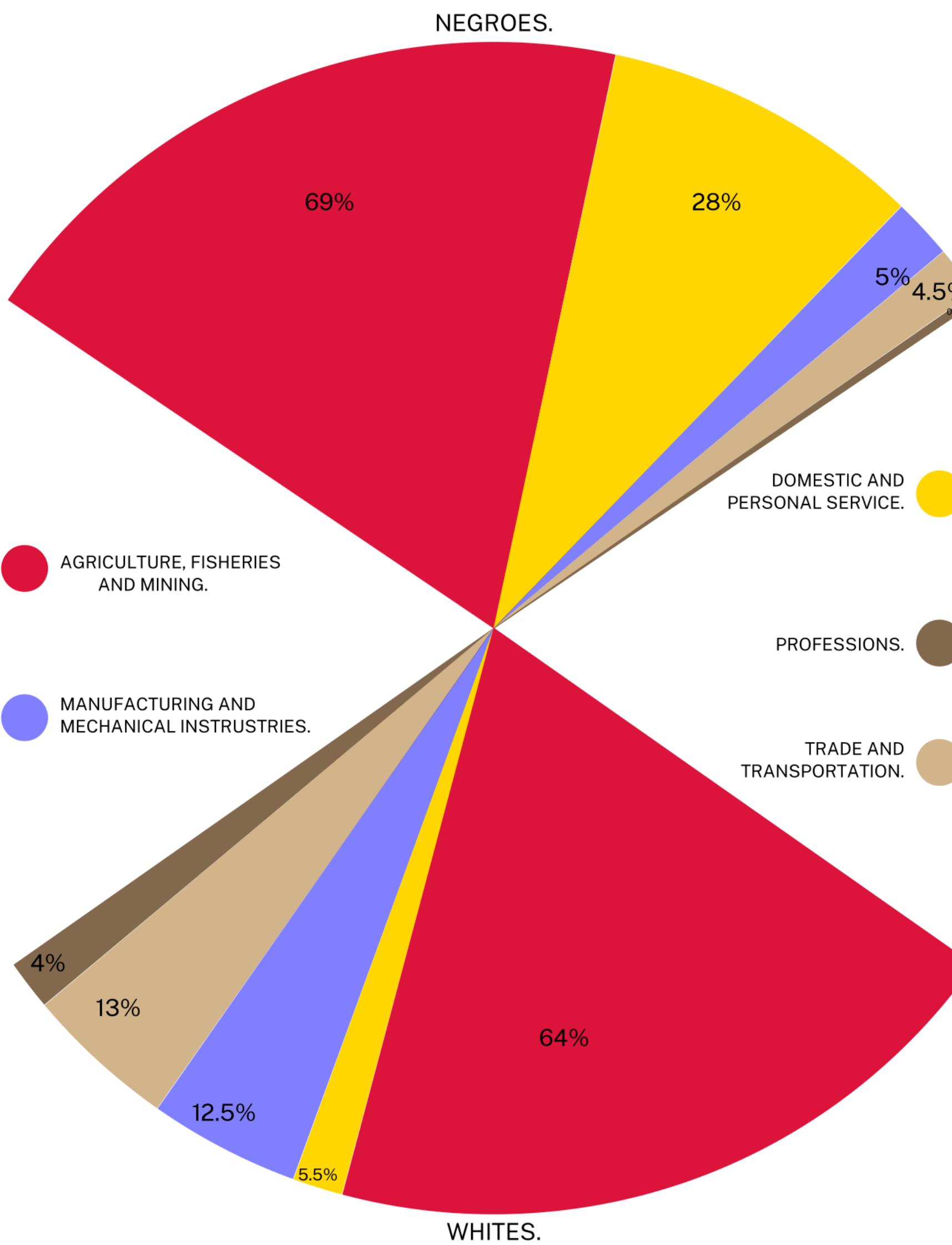


Datetime	Twitter Handle	Tweet	Link	Like Count	Retweet Count	Quote Count
2/7/2021 4:36:48 PM	@AIDatavizguy	Happy Weekend! @sqlsekou has amped up the #WEBDuBois festivities with a challenge! In honor of his awesome ..	🔗	22	7	5
2/7/2021 4:36:48 PM	@AIDatavizguy	I'm excited about the #DuBoisChallenge. If you need to immerse yourself into his work, @Jasonforrestftw has cre..	🔗	13	5	0
2/7/2021 4:36:48 PM	@AIDatavizguy	More details to come but let's get inspired by @ajstarks journey into re-creating the visualizations for modern ti..	🔗	1	1	0
2/7/2021 4:36:49 PM	@AIDatavizguy	Excited about the submissions! We also get to hear from @ajstarks and @Jasonforrestftw later this month, Feb 2..	🔗	7	4	1
2/7/2021 6:45:32 PM	@AIDatavizguy	@ajstarks @sqlsekou Thanks for sharing and kicking off the #DuBoisChallenge!	🔗	0	0	0
2/7/2021 6:50:00 PM	@AIDatavizguy	Check out some of @ajstarks work kicking off the #DuBoisChallenge! The use of color here draws you in. Can't wai..	🔗	0	0	0
2/7/2021 6:56:00 PM	@AIDatavizguy	One of the cool things @ajstarks did was to not only recreate the #WEBDuBois visualizations, he also updated th..	🔗	4	0	0
2/7/2021 8:39:58 PM	@sqlsekou	Yesâ€¼, After a convo with @AIDatavizguy, we decided it would be fun to recreate some of #WEBDuBois data ..	🔗	62	18	6
2/7/2021 8:56:19 PM	@DiversityinData	A great challenge by @sqlsekou and @AIDatavizguy #DuBoisChallenge https://t.co/A7BYjXPeVe	🔗	2	0	0
2/7/2021 9:45:23 PM	@AIDatavizguy	Recreating the #WEBDuBois visualizations for the #DuBoisChallenge	🔗	2	0	0

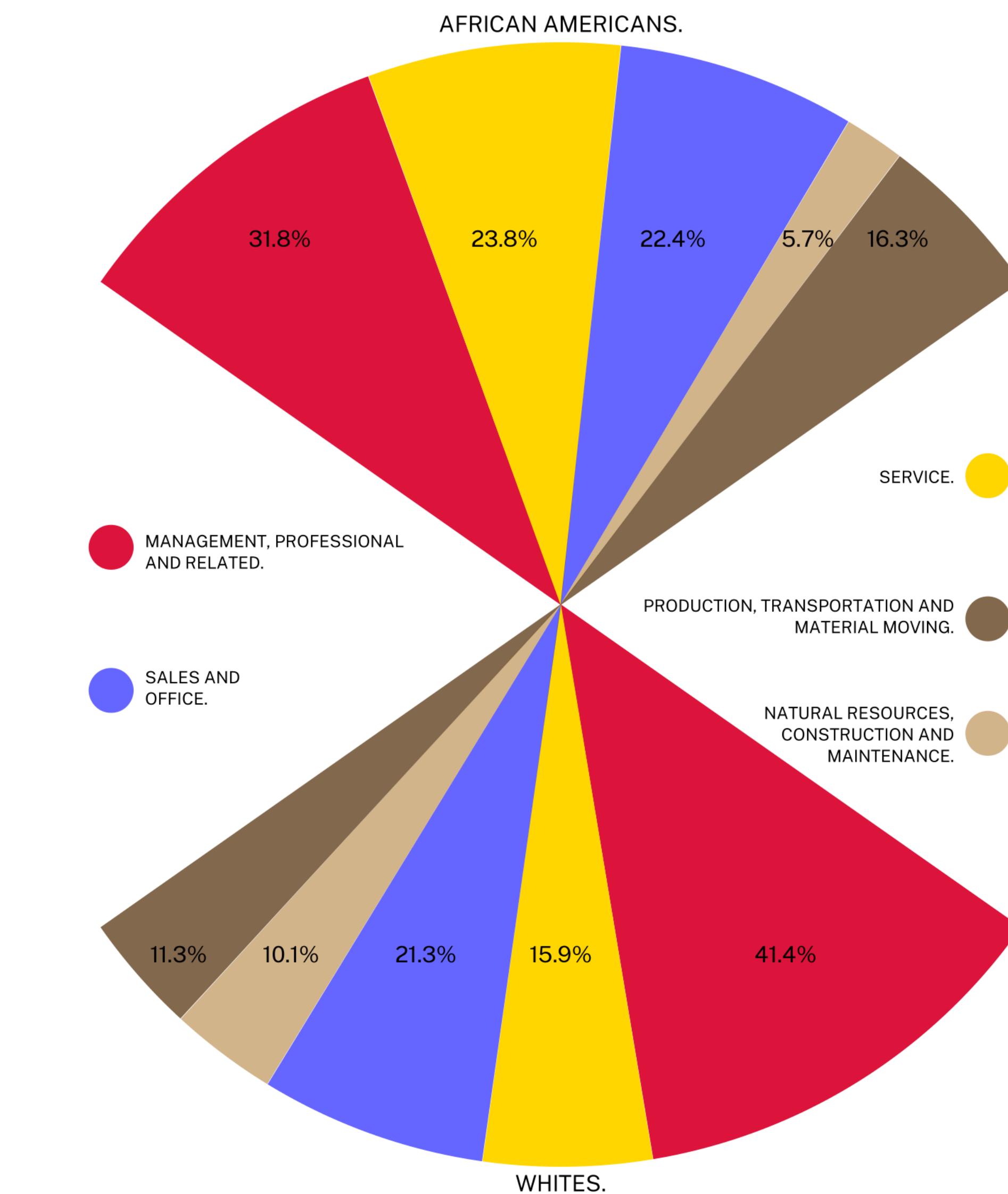
Contemporary Data



OCCUPATIONS OF NEGROES AND WHITES IN GEORGIA.

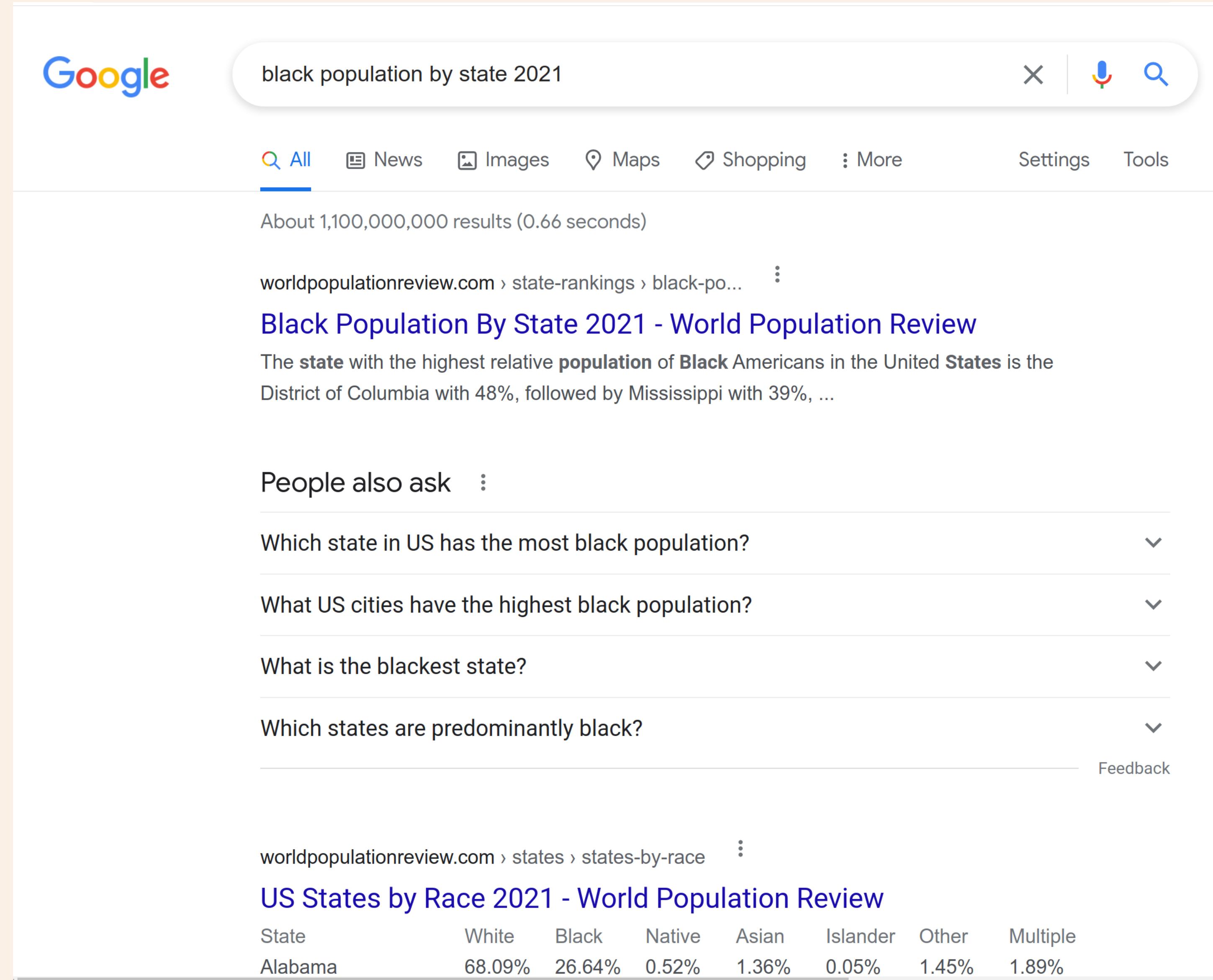


OCCUPATIONS OF AFRICAN AMERICANS AND WHITES IN THE USA (2019).



Source: US Bureau of Labor Statistics, Labor Force Statistics from the Current Population Survey

Start with the Question



Google search results for "black population by state 2021".

Search bar: black population by state 2021

Navigation: All | News | Images | Maps | Shopping | More | Settings | Tools

Results count: About 1,100,000,000 results (0.66 seconds)

First result:

[worldpopulationreview.com › state-rankings › black-po...](#)

Black Population By State 2021 - World Population Review

The **state** with the highest relative population of **Black** Americans in the United **States** is the District of Columbia with 48%, followed by Mississippi with 39%, ...

People also ask:

- Which state in US has the most black population?
- What US cities have the highest black population?
- What is the blackest state?
- Which states are predominantly black?

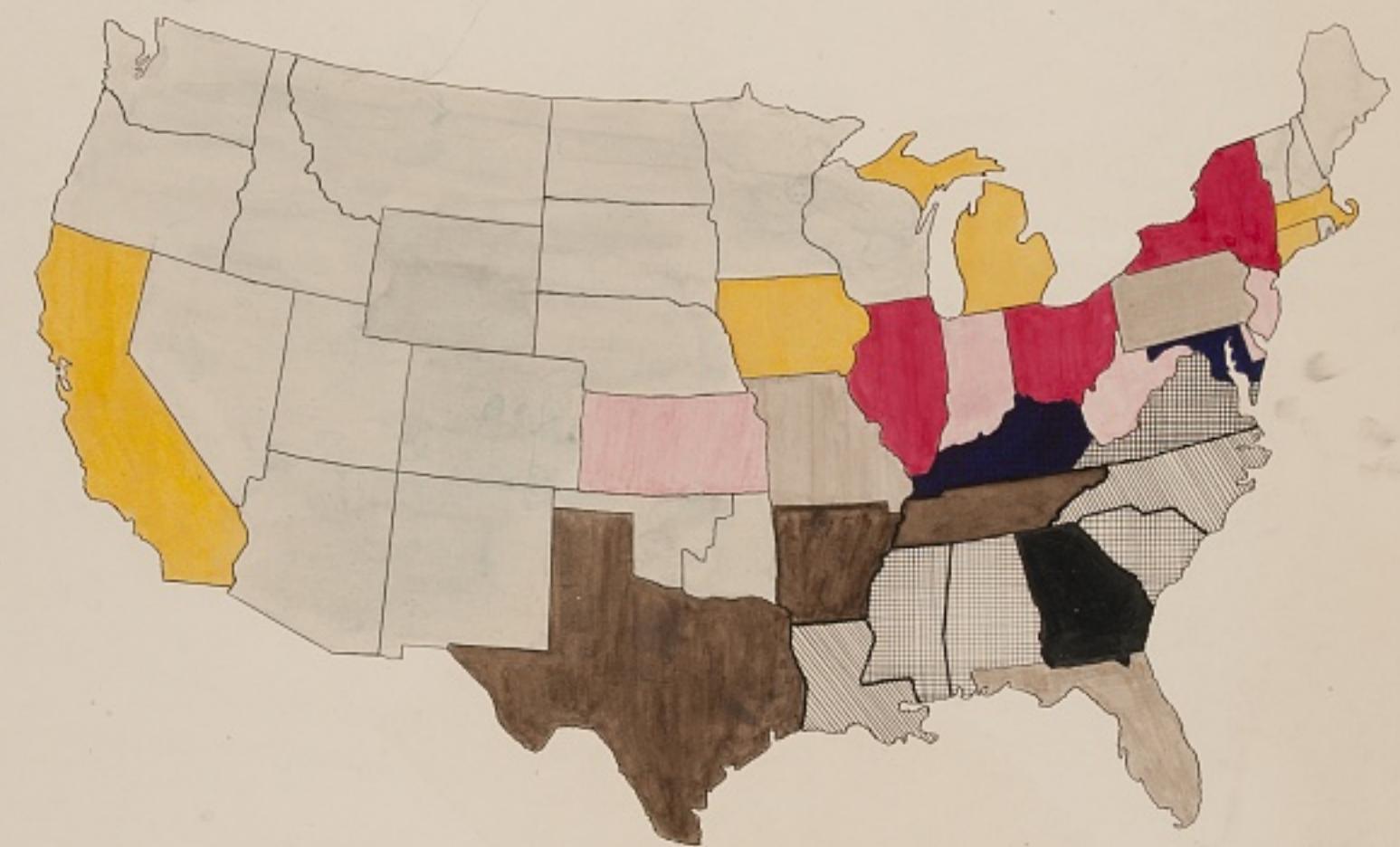
Feedback

worldpopulationreview.com › states › states-by-race

US States by Race 2021 - World Population Review

State	White	Black	Native	Asian	Islander	Other	Multiple
Alabama	68.09%	26.64%	0.52%	1.36%	0.05%	1.45%	1.89%

RELATIVE NEGRO POPULATION OF THE STATES OF THE UNITED STATES.



■ 750,000 NEGROES AND OVER

■ 100,000 — 200,000

■ 600,000 — 750,000

■ 50,000 — 100,000

■ 500,000 — 600,000

■ 25,000 — 50,000

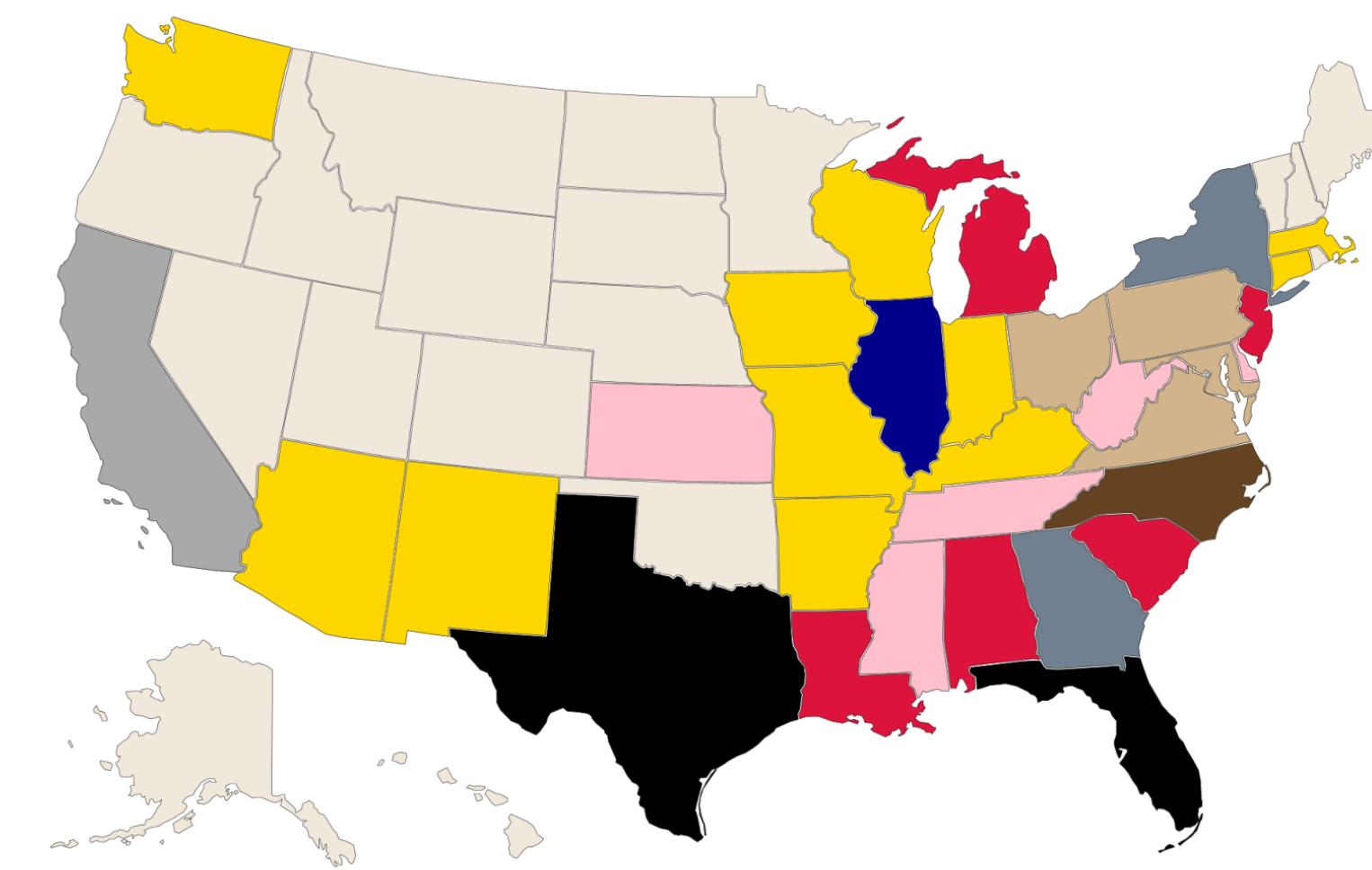
■ 300,000 — 500,000

■ 10,000 — 25,000

■ 200,000 — 300,000

■ UNDER — 10,000

RELATIVE BLACK POPULATION OF THE STATES OF THE UNITED STATES. (2021)



■ 4.0 - 3.6 MILLION

■ 2.0 - 1.6 MILLION

■ 3.6 - 3.2 MILLION

■ 1.6 - 1.2 MILLION

■ 3.2 - 2.8 MILLION

■ 1.2 - 0.8 MILLION

■ 2.8 - 2.4 MILLION

■ 0.8 - 0.4 MILLION

■ 2.4 - 2.0 MILLION

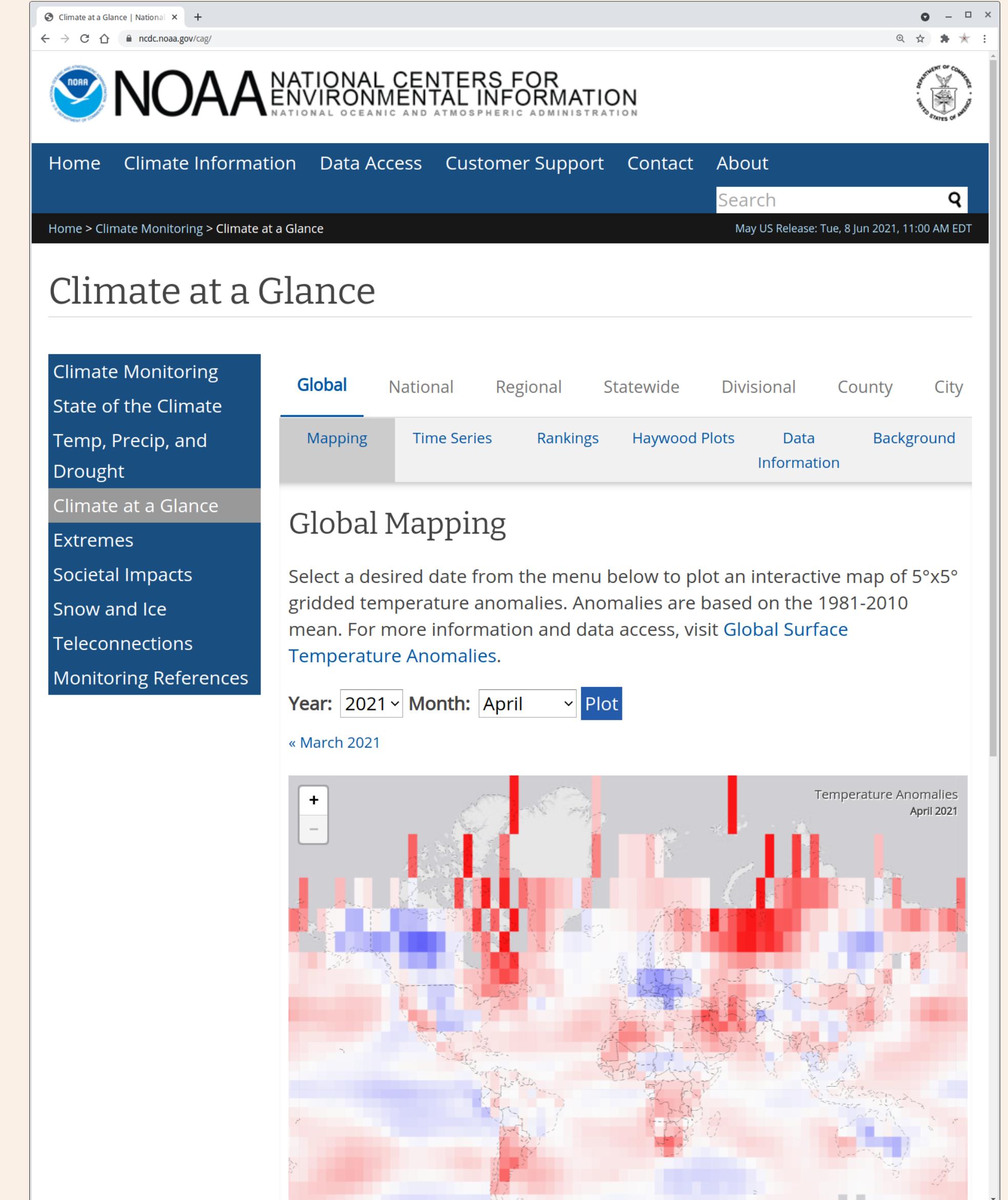
■ UNDER 0.4 MILLION

Washington Post Shooting Database



<https://www.washingtonpost.com/graphics/investigations/police-shootings-database/>

NOAA Climate Data



<https://www.ncdc.noaa.gov/cag/>

Authorship, after all,
is not only what is
created but also what
is selected.

Teju Cole