

# Curating The #DuboisChallenge2023

Anthony Starks

# In 1900, it began with them...



*Thomas J. Calloway*



*Du Bois in Paris*

# ...and Atlanta University



*Atlanta University Debating Team, c. 1900*



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

# Paris 1900



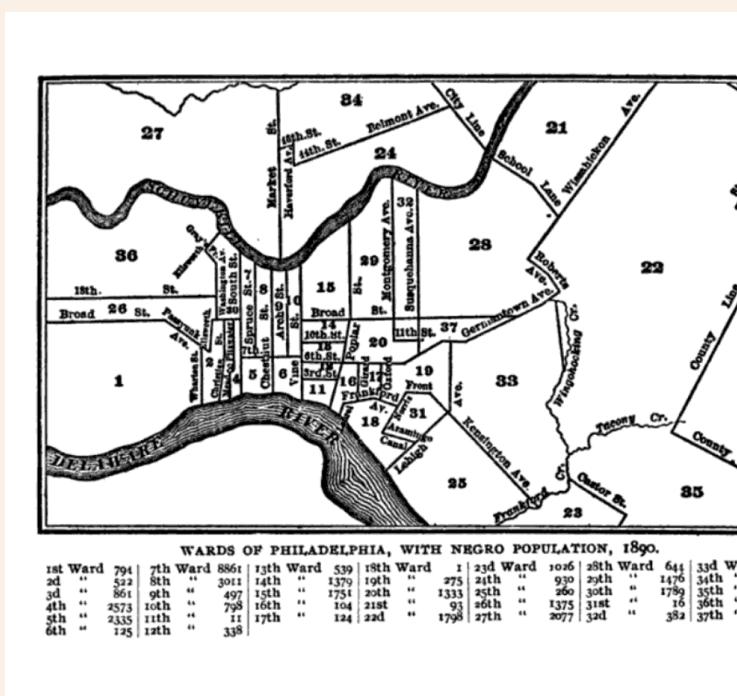
# Historical Context



“Black America” Fair



Plessy v. Ferguson



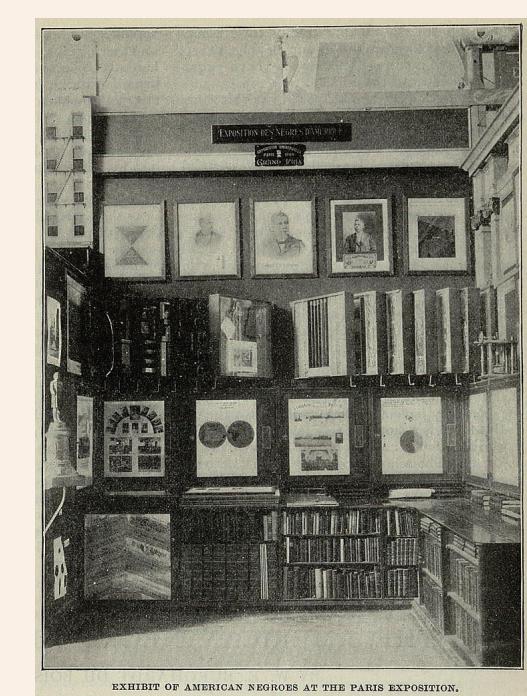
Phila. Negro begins

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

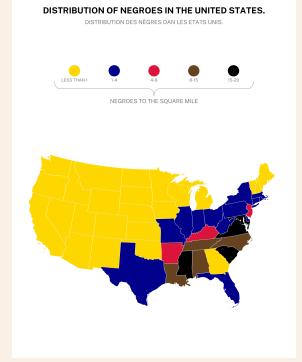
1896

1897

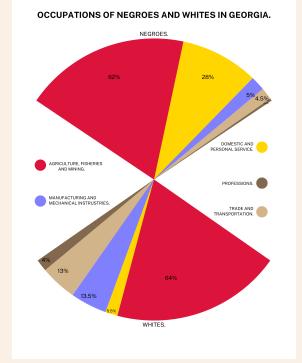
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1899

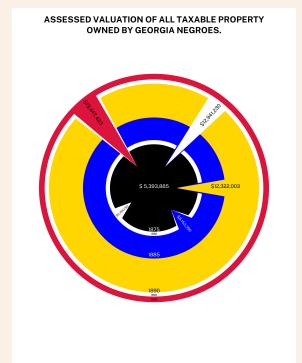
1900



# We are here



# This is who we are



# This is how far we have come

# In 2021, it began with them



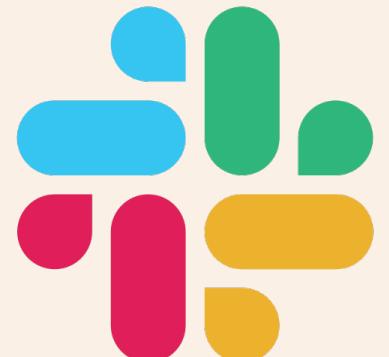
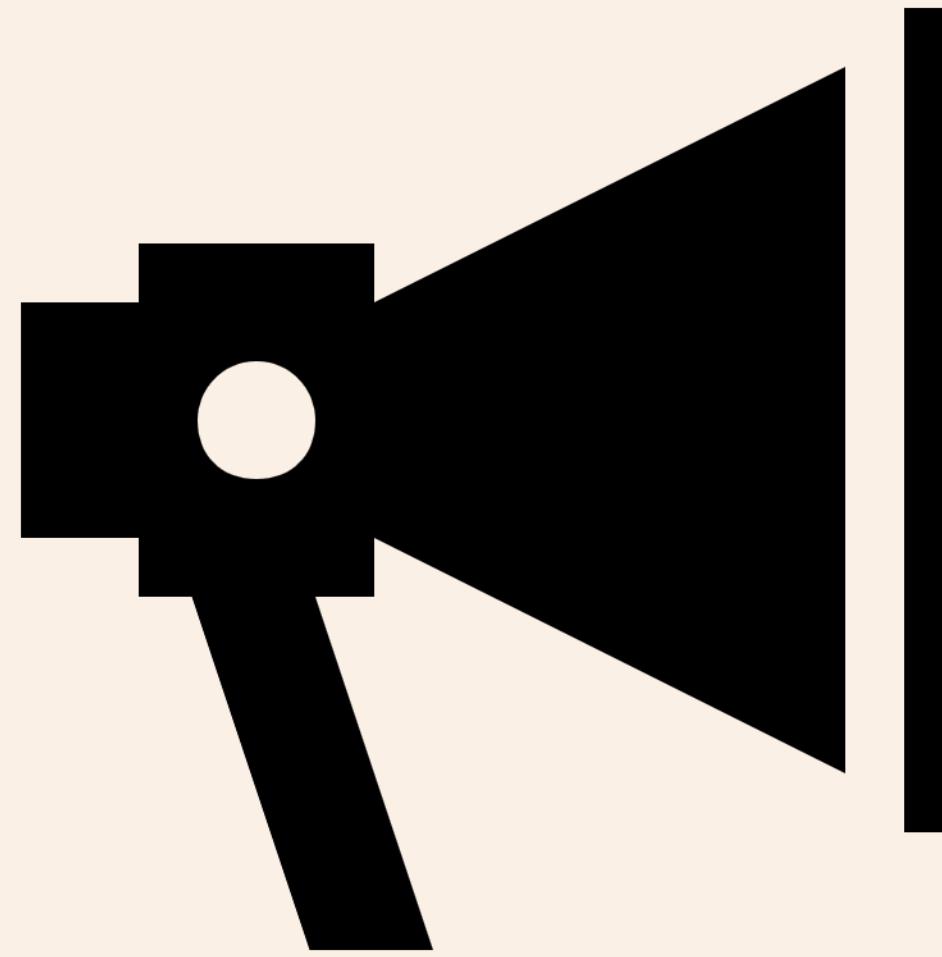
*Allen Hillery (@AlDataVizGuy)*



*Sekou Tyler (@sqlsekou)*

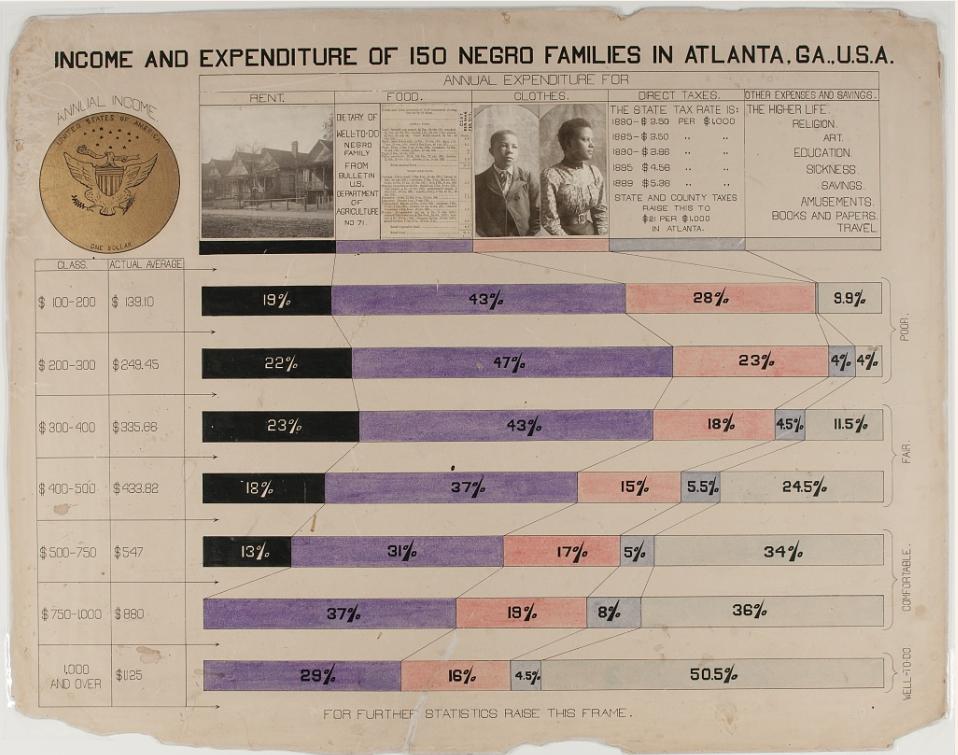
# Now: Modern Megaphone

Your Message

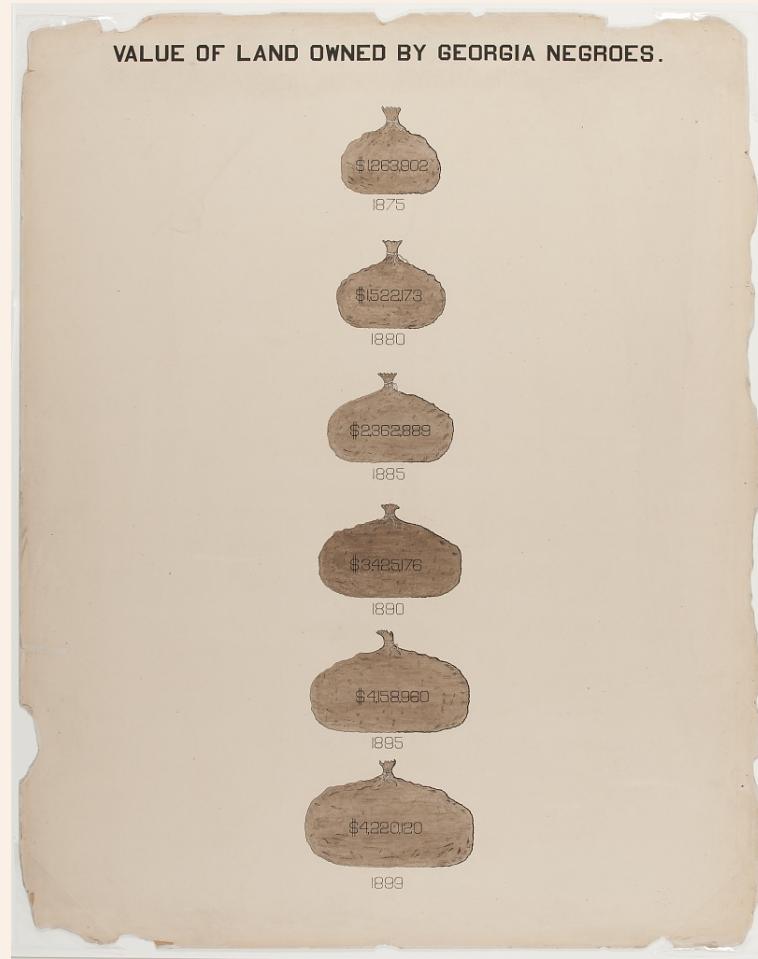


# #DuboisChallenge 2023 Entries

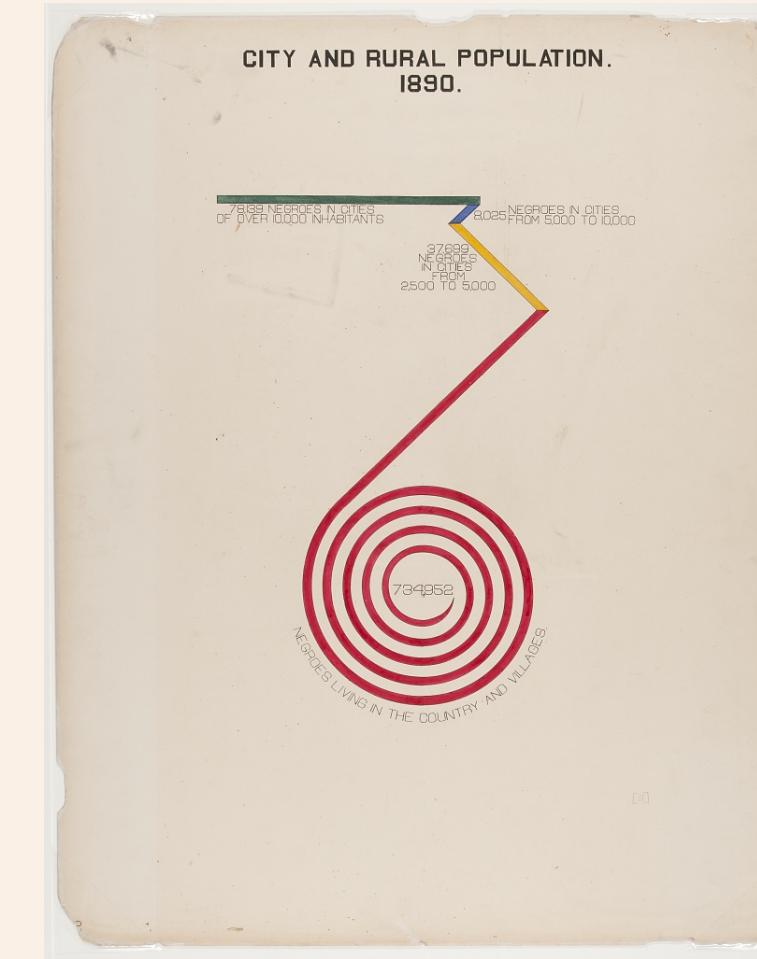
01



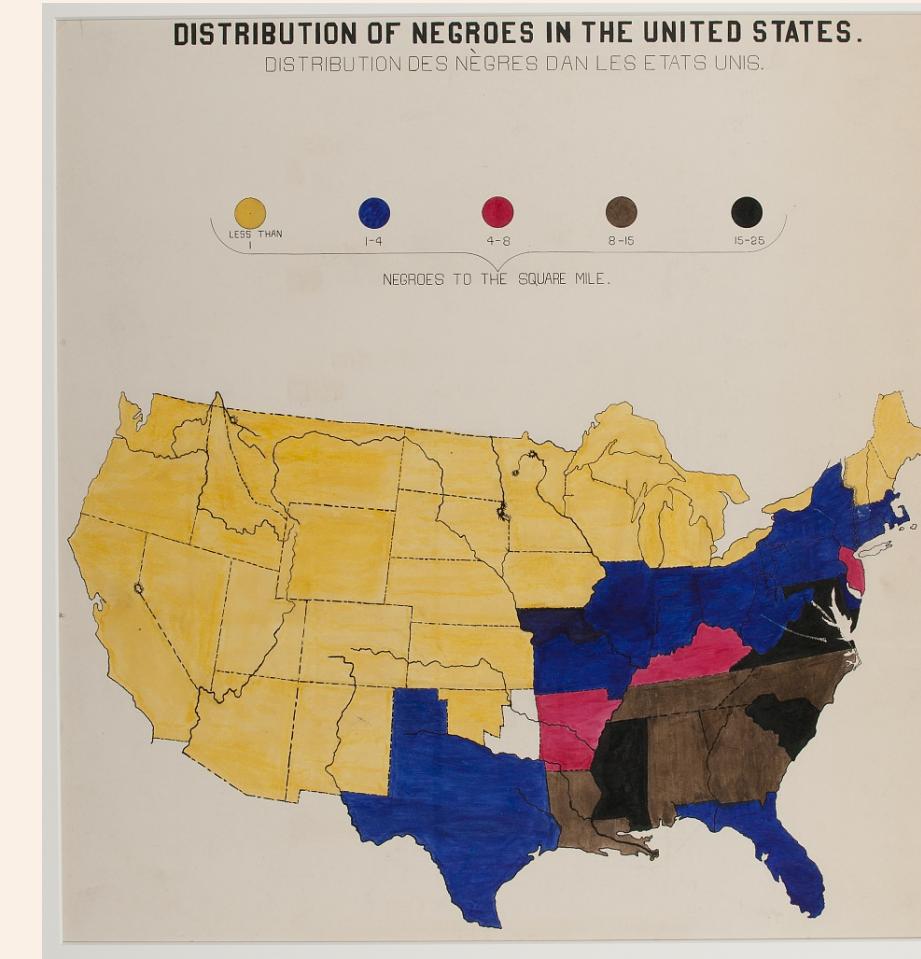
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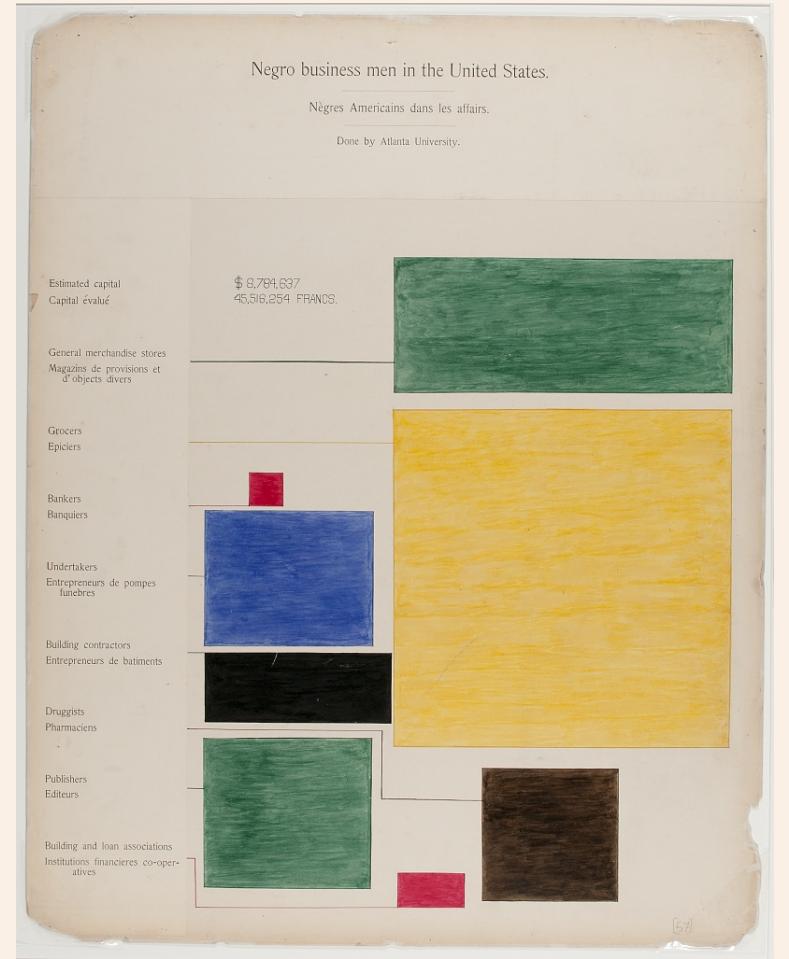
03



04



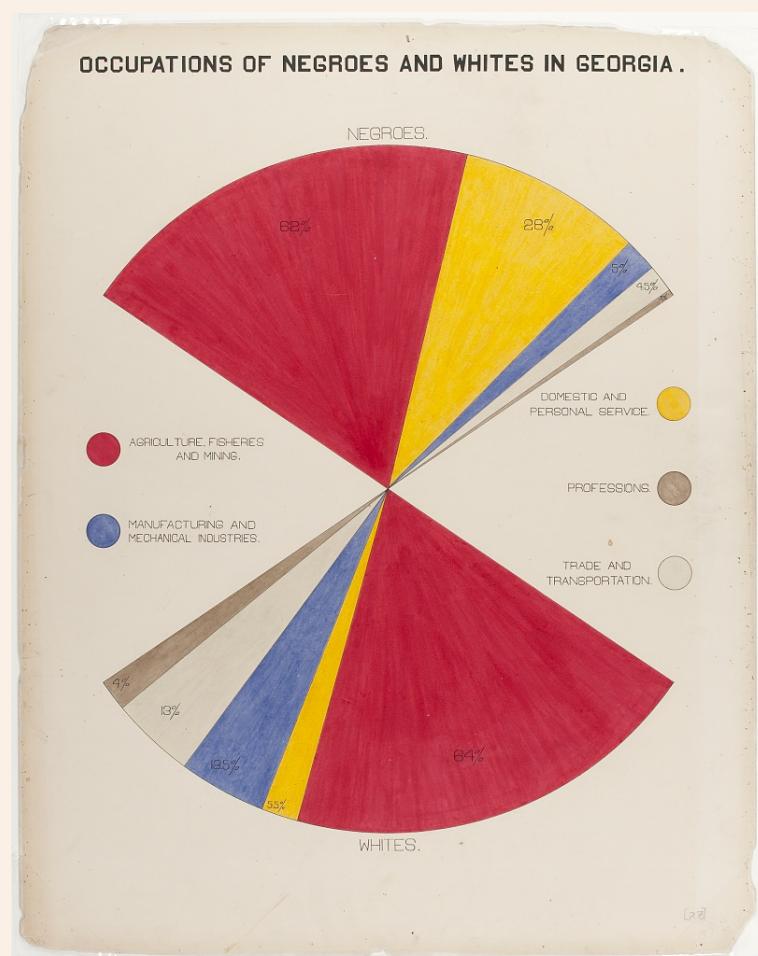
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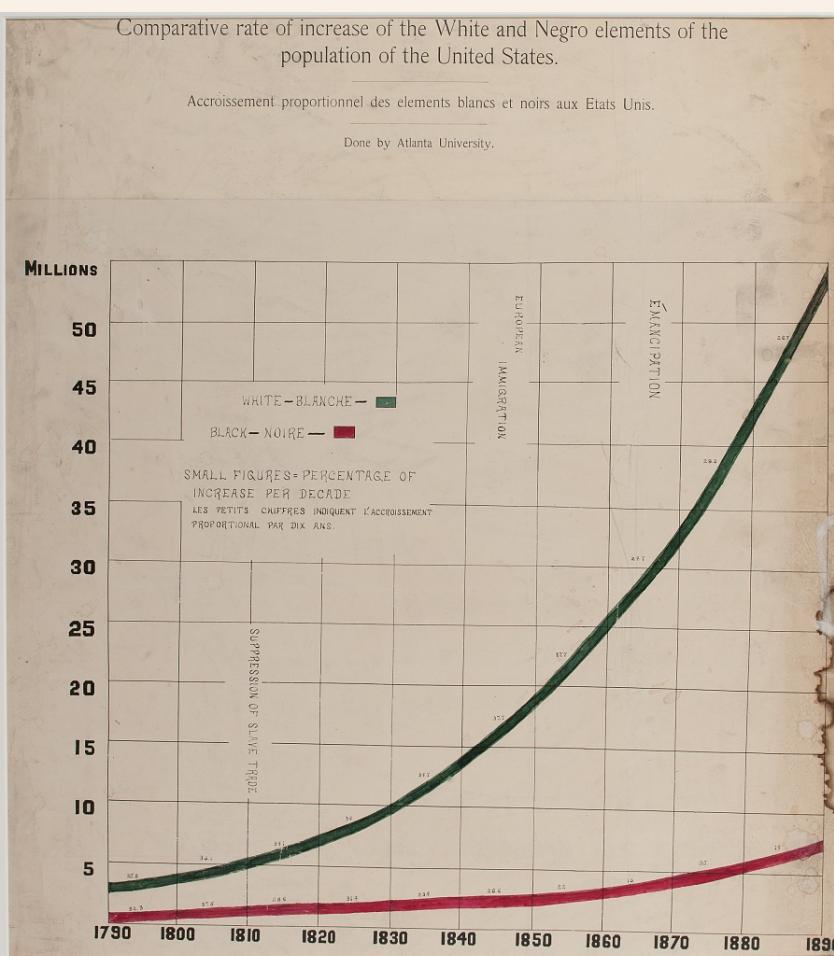
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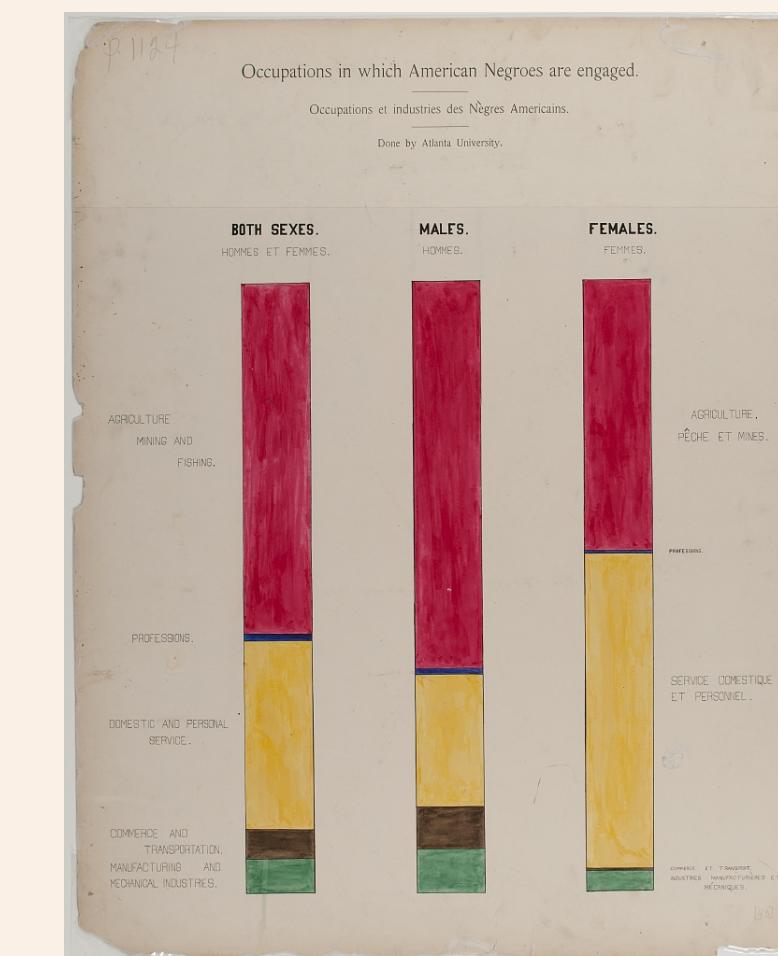
07



08



09



10



# Using github

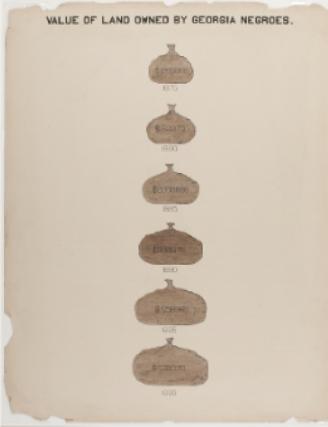
## Du Bois Visualization Challenge: 2023

#DuBoisChallenge2023

01



02



03



04



05



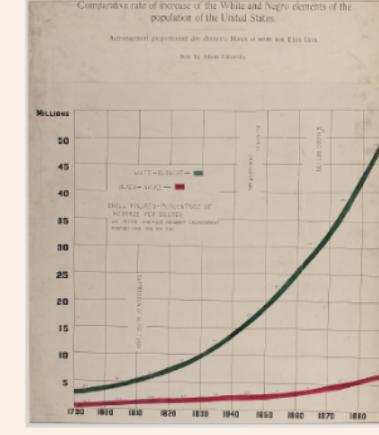
06



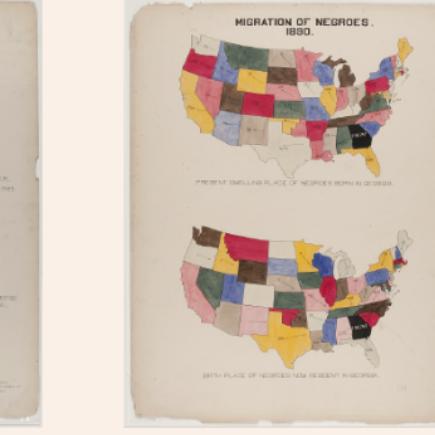
07



08



09



10



The goal of the challenge is to celebrate the data visualization legacy of W.E.B Du Bois by recreating the visualizations from the 1900 Paris Exposition using modern tools.

This directory contains the data and original plates from the exposition; your goal is to re-create the visualizations using modern tools of your choice (Tableau, R, ggplot, Stata, PowerBI, decksh, etc)

There is a folder for each challenge, which includes the images of the 1900 original plates along with the corresponding data. You may submit your re-creations to twitter using the hash tag #DuBoisChallenge2023 .

Note that for 2023, we will expanding the challenge to the Data Visualization Society Slack, as well as Mastodon on vis.social

[dubois-data-portraits / challenge / 2023 / challenge01 / data.csv](#)



ajstarks fix data.csv for challenge01

last month



8 lines (8 loc) • 275 Bytes

Preview

Raw

Search this file

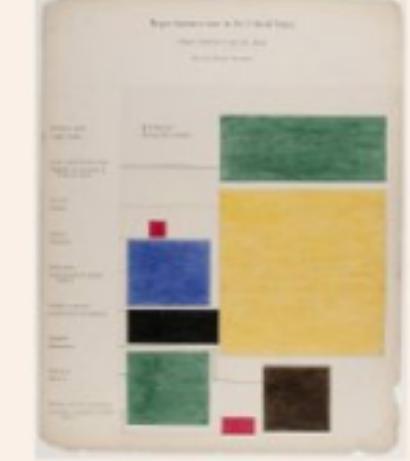
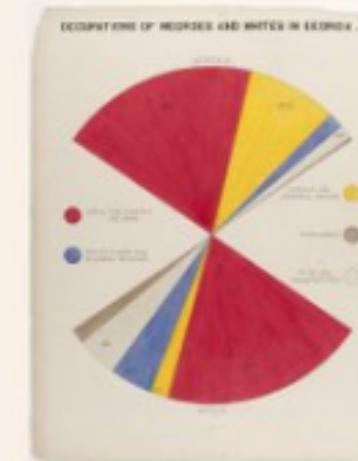
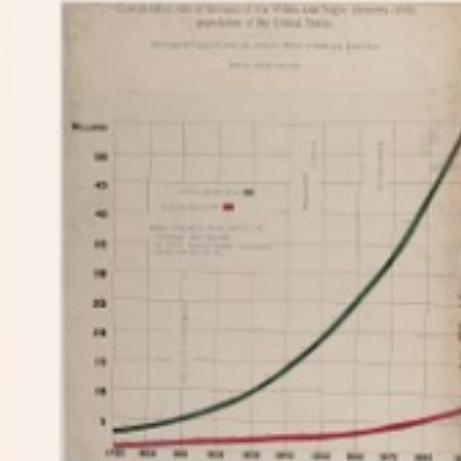
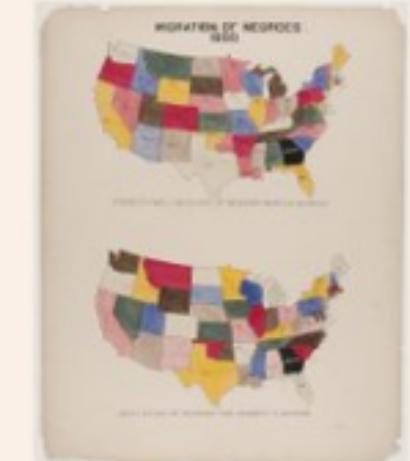
1	Class	Actual Average	Rent	Food	Clothes	Tax	Other
2	\$100-200	139.10	19	43	28	0.1	9.9
3	\$200-300	249.45	22	47	23	4	4
4	\$300-400	335.66	23	43	18	4.5	11.5
5	\$400-500	433.82	18	37	15	5.5	24.5
6	\$500-750	547.00	13	31	17	5	34
7	\$750-1000	880.00	0	37	19	8	36
8	Over \$1000	1125.00	0	29	16	4.5	50.5

# The Announcement

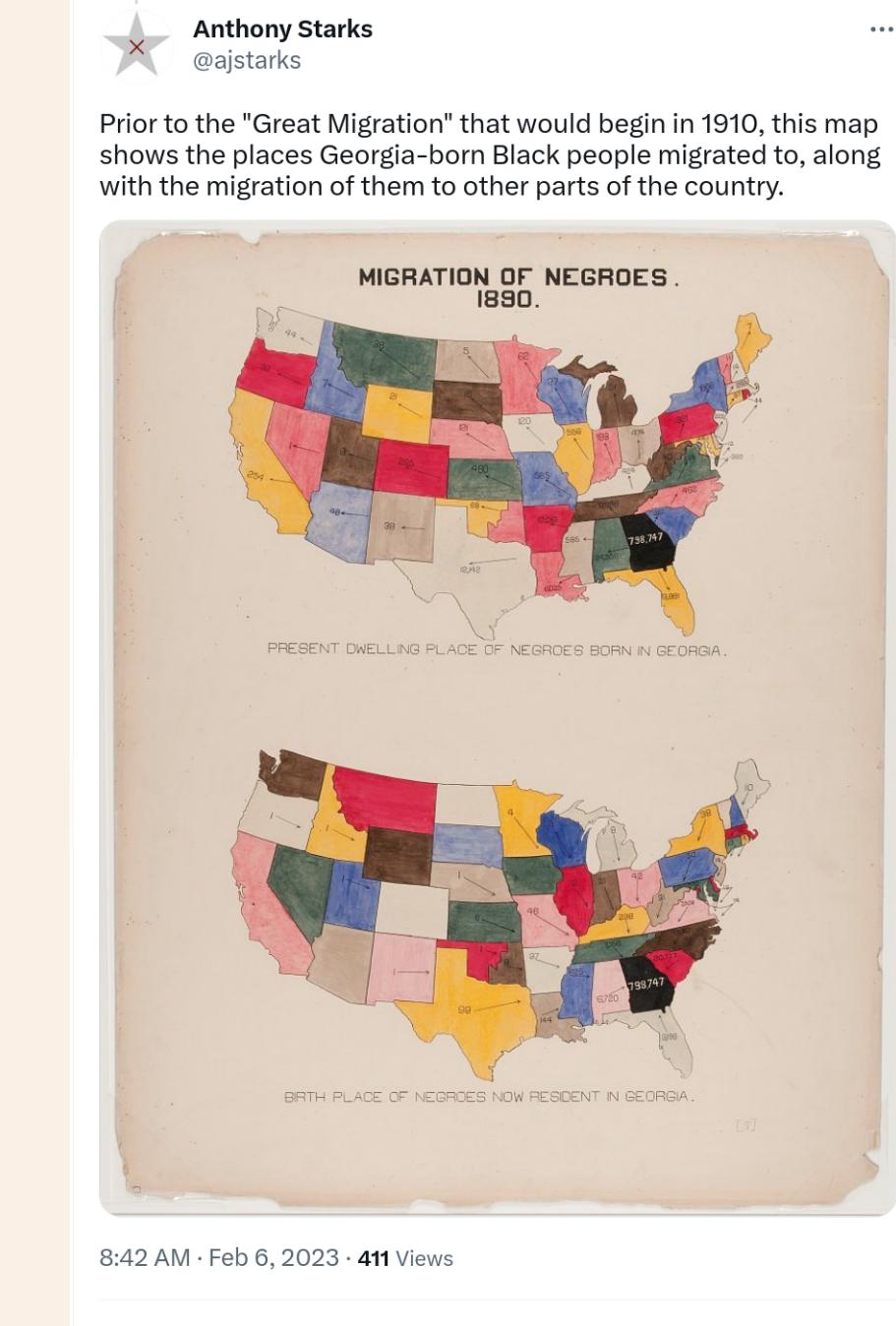
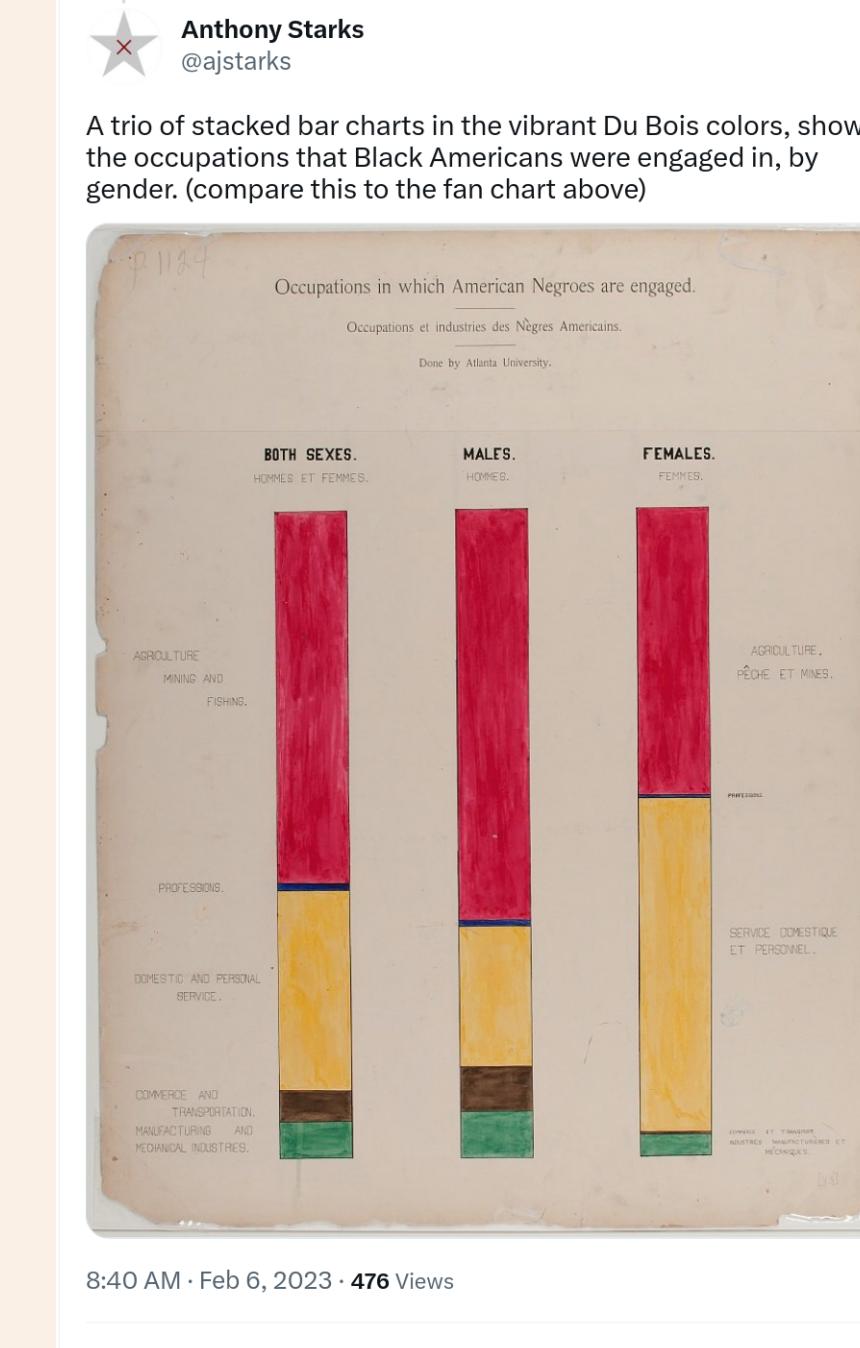
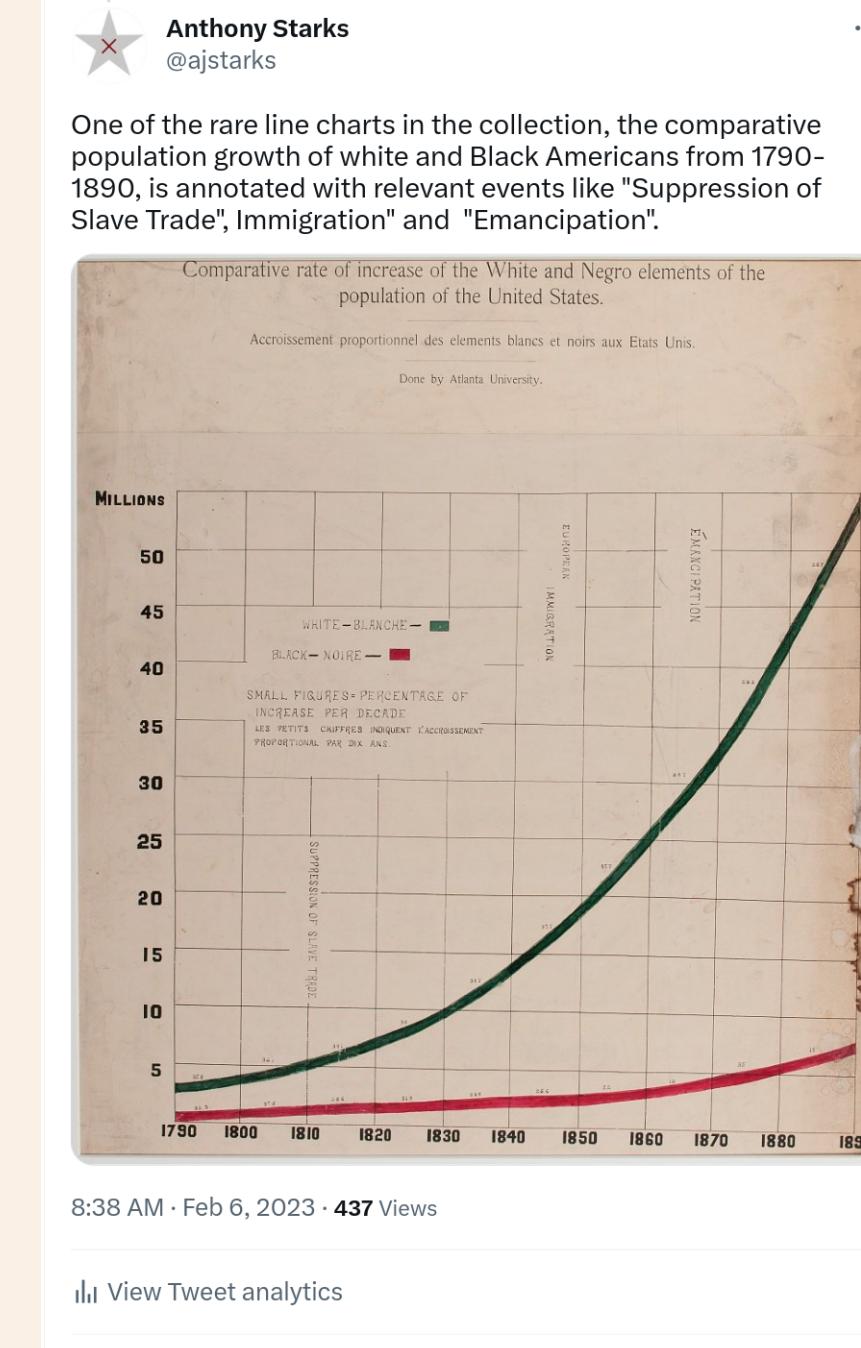
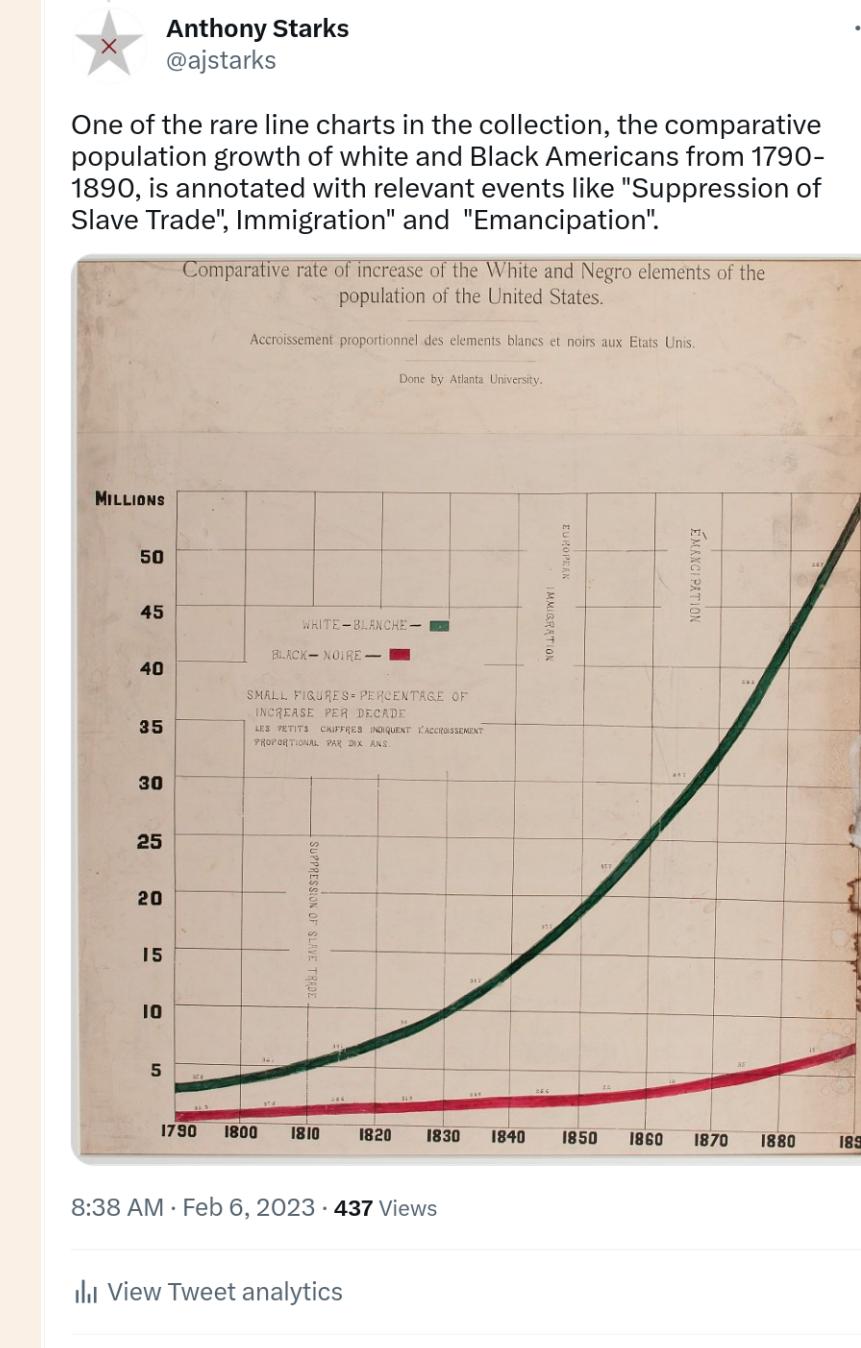
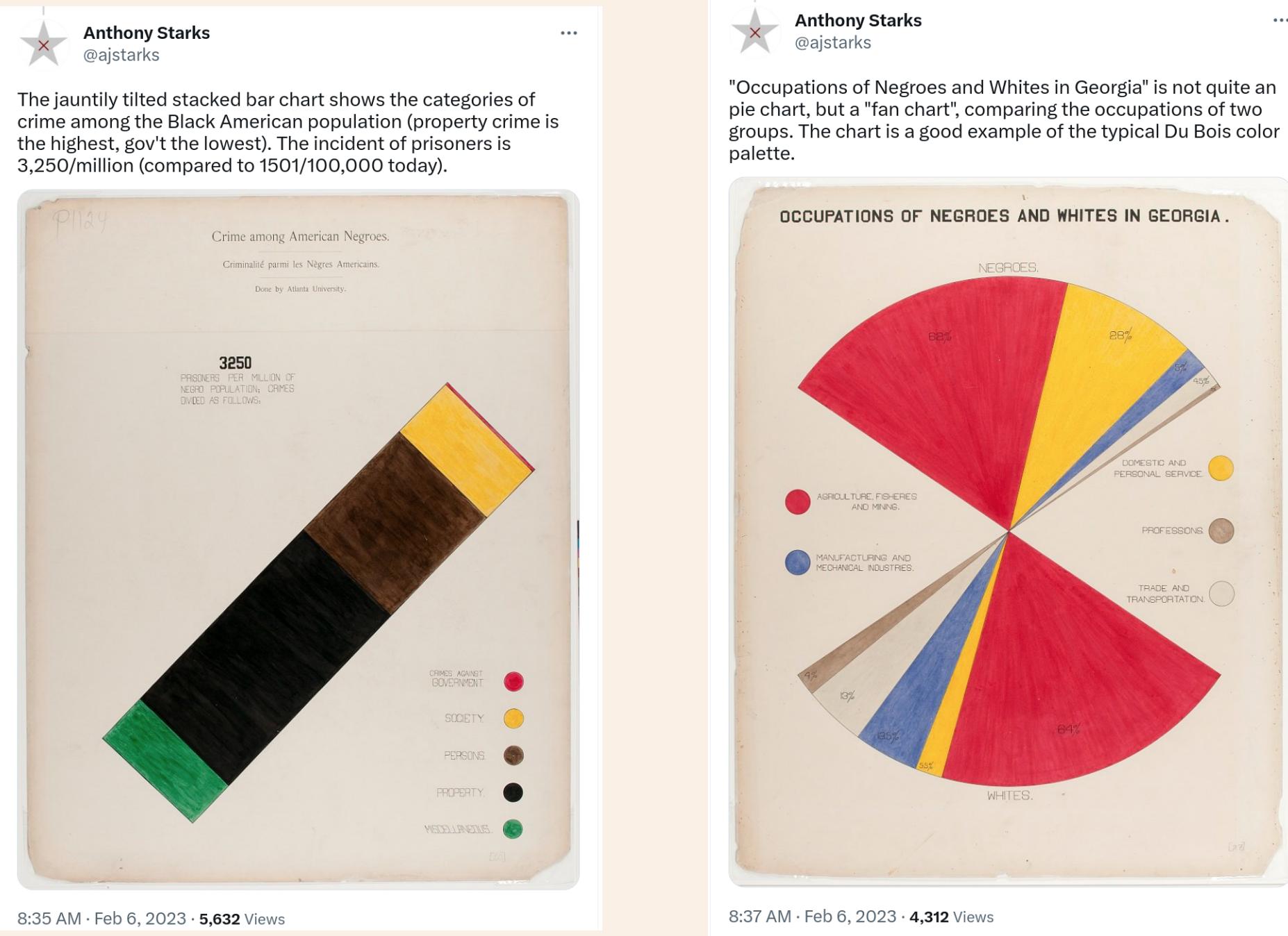
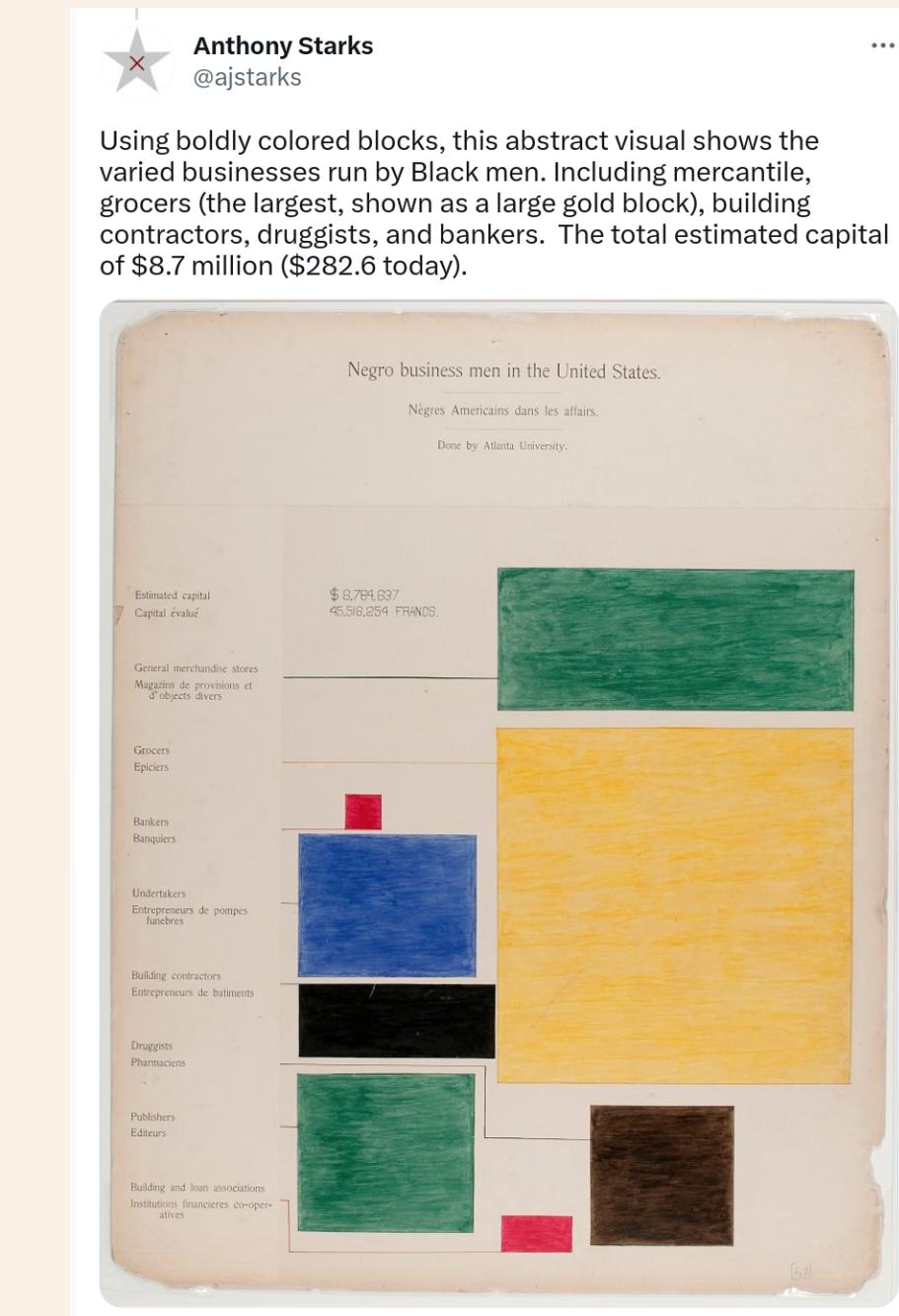
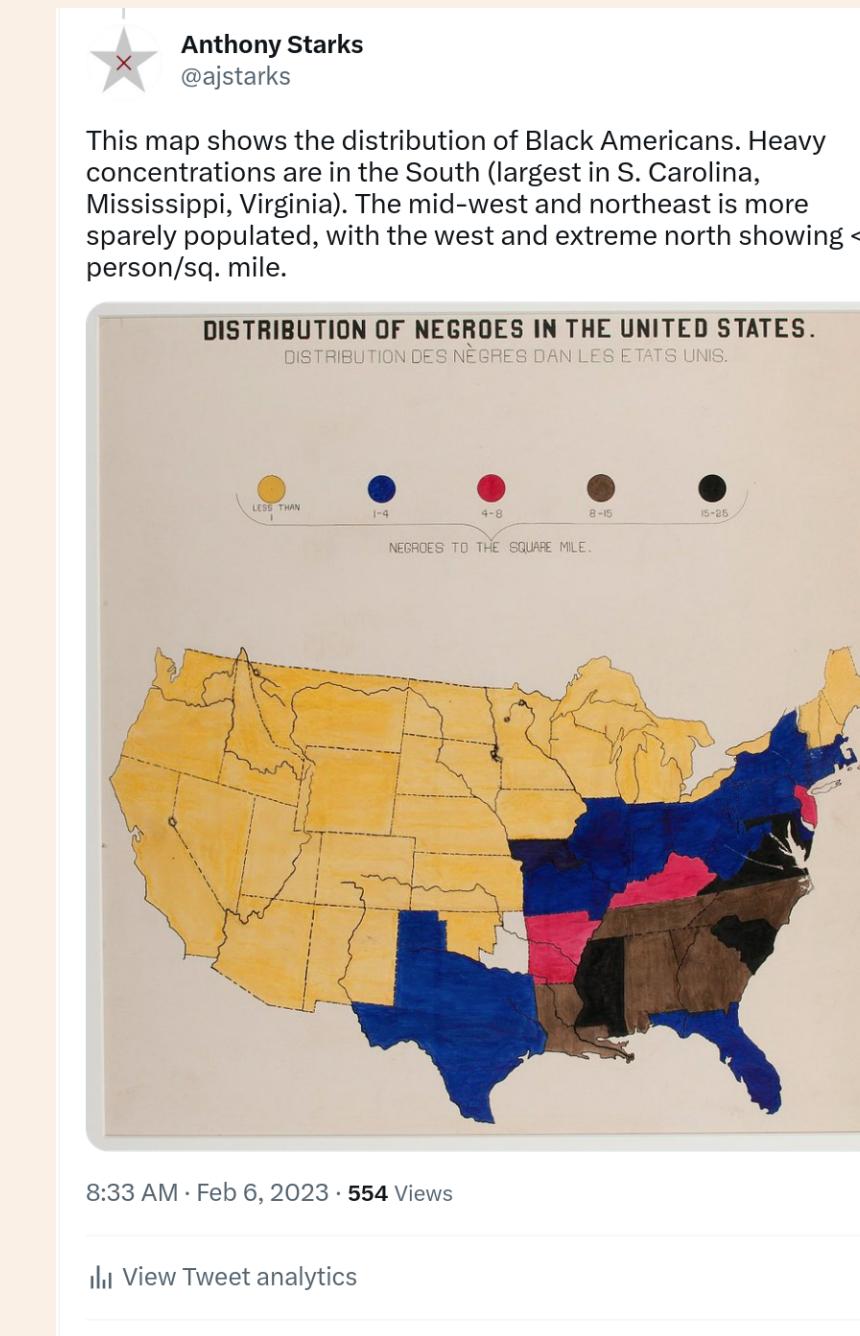
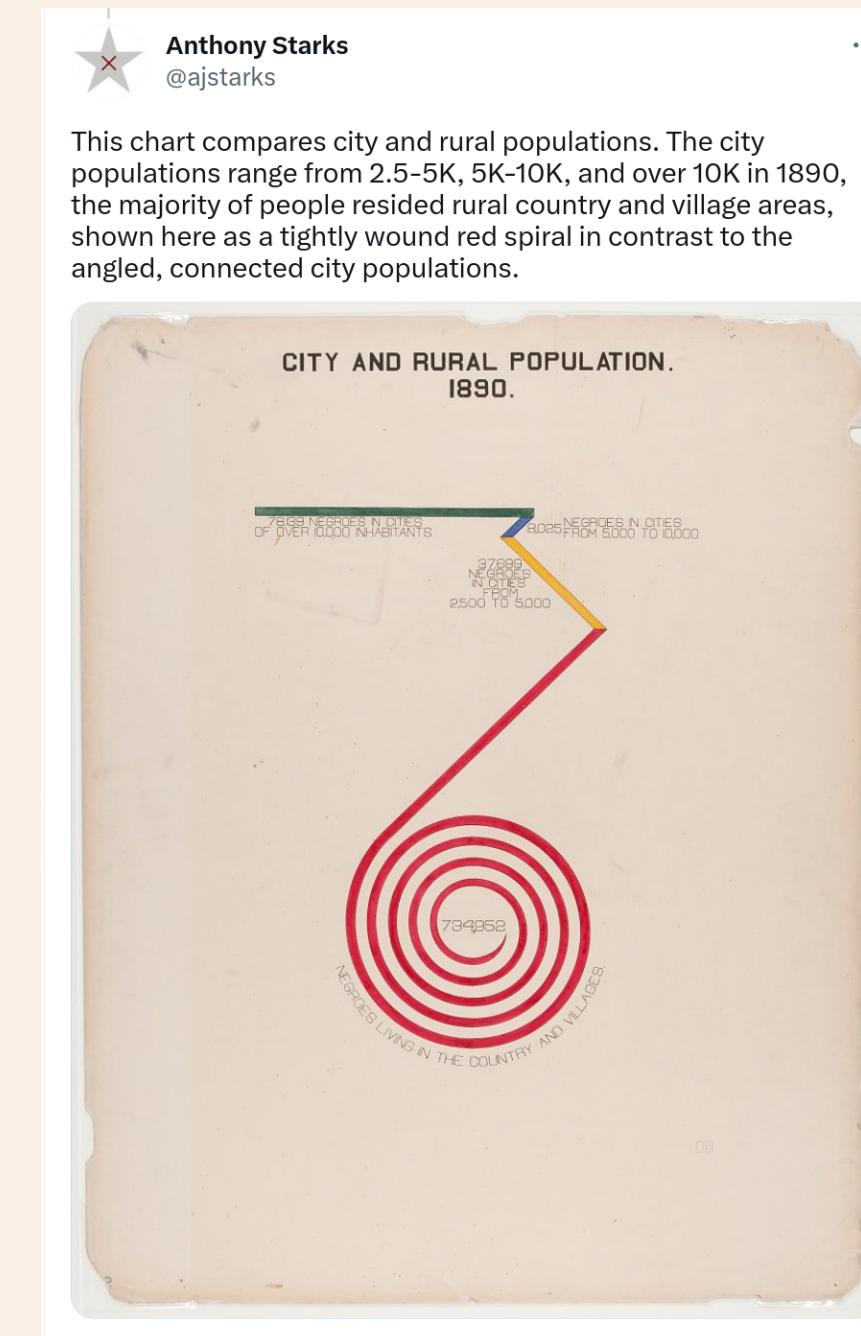
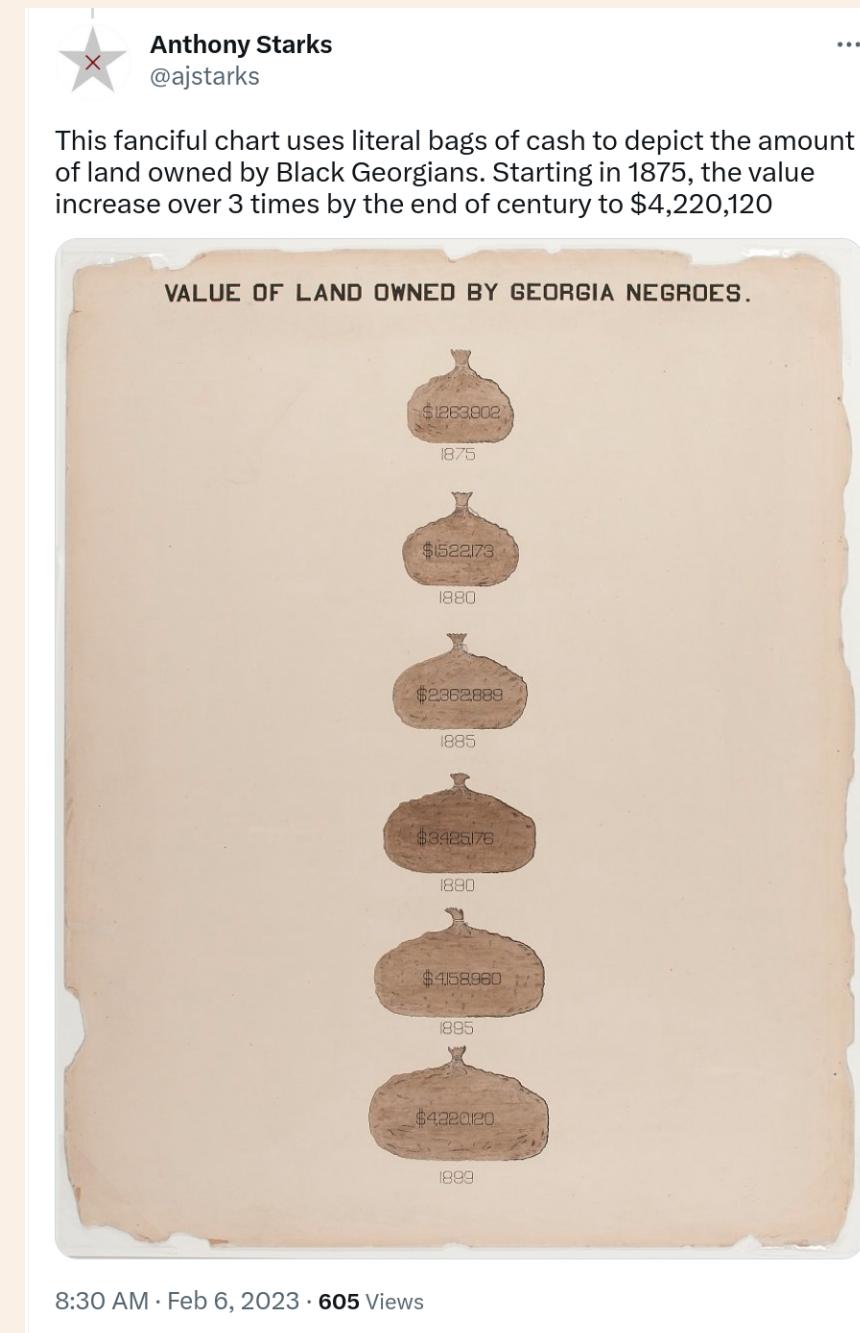
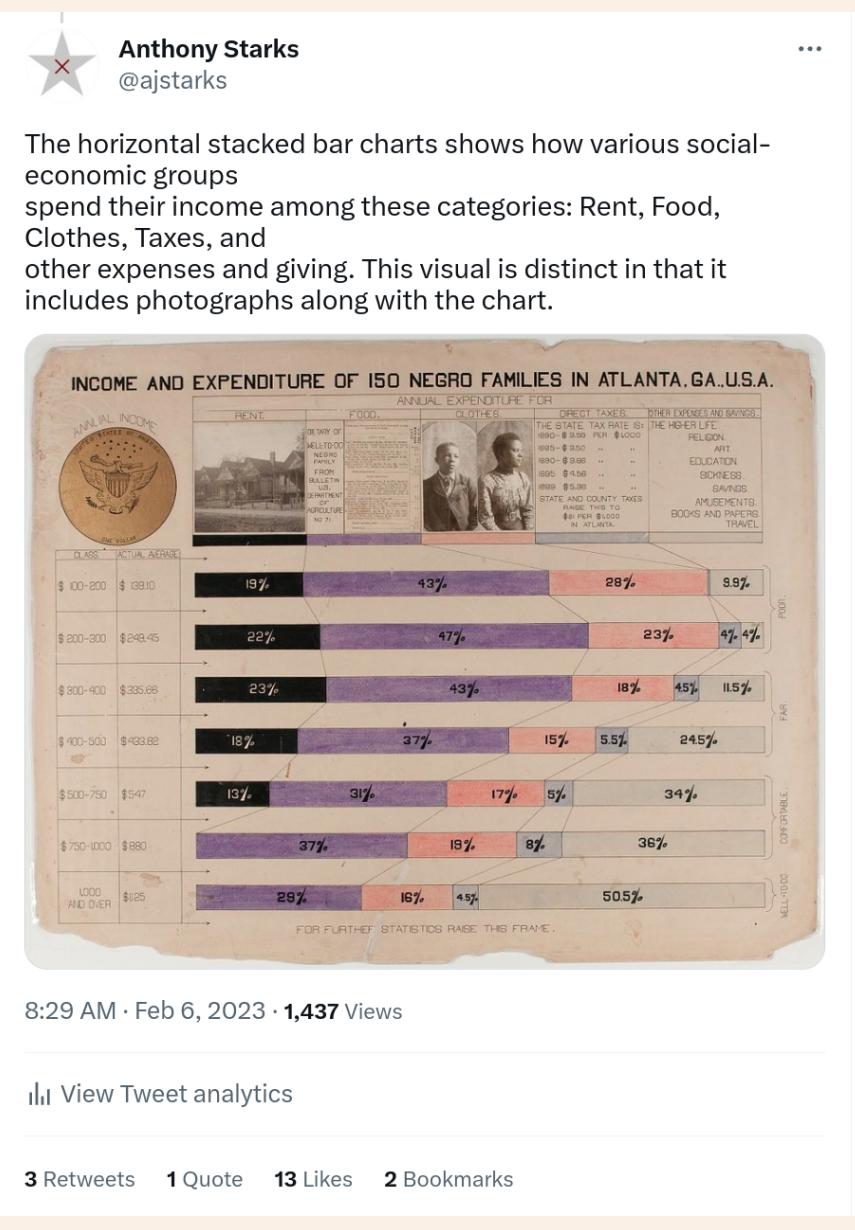
 Anthony Starks  
@ajstarks ...

Welcome to the [#DuboisChallenge2023](#), where we ask the community over 10 weeks to recreate the visuals of W.E.B Du Bois from the Paris Expo of 1900. In this thread, I'll describe each visual.  
see: [github.com/ajstarks/duboi...](https://github.com/ajstarks/duboi...)

#DuBoisChallenge2023

01	02	03	04	05
				
06	07	08	09	10
 <b>ALT</b>				

8:28 AM · Feb 6, 2023 · 35.7K Views



**Toochukwu Ifezie** [@TIfize37321](#)

Hi everyone! My name is Toochukwu Ifezie, and I am participating in the #DuBoisChallenge2023 as part of my Data Science for Social Justice class at Fisk University. My data shows the income and expenditure of 150 black families in Atlanta GA.

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

ANNUAL EXPENDITURE FOR	Tax	Rent	Other	Food	Clothes
\$100-200	\$139.10	19%	43%	28%	10%
\$200-300	\$249.45	22%	47%	23%	5%
\$300-400	\$335.66	23%	43%	18%	12%
\$400-500	\$433.82	18%	37%	15%	6%
\$500-750	\$547.00	13%	31%	17%	5%
\$750-1000	\$880.00	37%	19%	8%	36%
Over \$1000	\$1,125.00	29%	16%	5%	51%

**VALUE OF LAND OWNED BY BLACK PEOPLE IN GEORGIA.**

8:20 PM · Mar 14, 2023 · 840 Views

2 Retweets 2 Quotes 13 Likes 1 Bookmark

**ícaro Bernardes** [@IcaroBSC](#)

This week's #DuBoisChallenge2023 #dataviz shows the number of incarcerated people in Brazil by race (2nd half of 2021). The length of each section is proportional to this number.

I used the #RStats code made by @UST\_MSDS to add simulated brushstrokes.

**INCARCERATED PEOPLE BY RACE IN BRAZIL (2ND HALF OF 2021).**

PERSONNES INCARCÉRÉES PAR RACE AU BRÉSIL (2ÈME SEMESTRE 2021).

INSPIRED BY: W.E.B. DU BOIS | DATA FROM: SENAPPEN AND IBGE | GRAPHIC BY: ÍCARO BERNARDES  
@IcaroBSC | @IcaroBernardes | @icarobsc

**3664** PRISONERS PER MILLION OF BLACK POPULATION.

Applied Data Science at UST @UST\_MSDS · Mar 5

**Arnold Platon** [@Arnold\\_Platon](#)

Third #DuBoisChallenge2023 chart, this time looking at the differences in educational attainment between the Roma minority and wider 🇷🇴 Romanian society.

A shocking difference. 🤯

**EDUCATIONAL ATTAINMENT OF THE ROMA AND GADJE (NON-ROMA) IN ROMANIA**

DATA: 2011 ROMANIAN CENSUS (AGE: 10+) #DUBOISCHALLENGE2023 - @ARNOLD\_PLATON

**Klaus Schulte** [@ProfDrKSchulte](#)

My take on Challenge 2 of the #DuBoisChallenge2023.

I twisted the original a little bit and leveraged @ladataviz's Beeswarm Generator, created a custom shape, and transformed everything to a unit chart. Viz on @tableaupublic : [lnkd.in/eXg-ekuY](https://public.tableau.com/exploration.jsp?#1) @ajstarks

**VALUE OF LAND OWNED BY BLACK PEOPLE IN GEORGIA.**

#DuBoisChallenge2023 Data: Anthony Starke | @ajstarks | Klaus Schulte | @profdrkschulte

6:12 AM · Feb 11, 2023 · 2,681 Views

2 Retweets 35 Likes 1 Bookmark

**ícaro Bernardes** [@IcaroBSC](#)

Another #dataviz work made in #RStats for the #DuBoisChallenge2023. It shows the tragic number of homicide victims in Brazil by sex and race (2020).

Black men alone are the target of more than 70 percent of these crimes. More than half of them have ages between 15-29.

**HOMICIDE VICTIMS BY RACE AND SEX.**

DEATHS IN BRAZIL IN 2020.

INSPIRED BY: W.E.B. DU BOIS | DATA FROM: IBGE | GRAPHIC BY: ÍCARO BERNARDES  
@IcaroBSC | @IcaroBernardes | @icarobsc

ALT

9:47 AM · Feb 24, 2023 · 7,144 Views

16 Retweets 2 Quotes 65 Likes 5 Bookmarks

**Hemed** [@725Hemeed](#)

My Adaptation entry for #DuBoisChallenge2023 by @DataVizSociety A Map showing Distribution Of Black Americans created in #QGIS. #dataviz #DataVisualization #gischat #geospatial @DuBoisChallenge

**DISTRIBUTION OF BLACK AMERICANS IN UNITED STATES**  
RÉPARTITION DES NOIR-AMÉRICAINS AUX ÉTATS-UNIS

Black americans to square miles

ALT

11:29 AM · Feb 10, 2023 · 2,577 Views

8 Retweets 30 Likes

**Applied Data Science at UST** [@UST\\_MSDS](#)

#DuBoisChallenge2023 week 5 using ggplot. Code available at [github.com/follisj/DuBois..](https://github.com/follisj/DuBois..)

Negro business men in the United States.  
Nègres Américains dans les affaires.

Done by Atlanta University.

1:19 PM · Mar 5, 2023 · 3,645 Views

3 Retweets 1 Quote 14 Likes 3 Bookmarks

**becca b.** [@geeky\\_bb](#)

#DuBoisChallenge2023 @tableaupublic

Link: [tinyurl.com/4nme5ny9](https://tinyurl.com/4nme5ny9)

Comparative population growth of white and Black Americans between 1790-1890.

Original data visualization: W.E.B. Du Bois  
Modern recreation: Becca Basin  
#DuBoisChallenge2023

9:42 PM · Feb 16, 2023 · 1,130 Views

2 Retweets 1 Quote 11 Likes

**Patrick Stephenson** [@stepminer2](#)

Another entry, this time for week 9 of #DuBoisChallenge2023. It is a reproduction of DuBois' Occupation of Blacks in the United States. #Rstats #blackhistorymonth2023.

Occupations in which American Negroes are engaged  
Occupation et industrie des Noirs Américains

Done by Atlanta University

BOTH SEXES HOMMES ET FEMMES MALES HOMMES FEMALES FEMMES

AGRICULTURE MINING AND FISHING DOMESTIC AND PERSONAL SERVICE COMMERCIAL AND MANUFACTURING INDUSTRIAL AND MECHANICAL INDUSTRIES

PROFESSIONS SERVICE DOMESTIQUE ET PERSONNEL

12:17 PM · Mar 11, 2023 · 998 Views

3 Retweets 9 Likes

**Patrick Stephenson** [@stepminer2](#)

I finally found time to complete part 2 of #DuBoisChallenge2023 Challenge 10. The arrow angles are approximate, I gave up calculating precise angles, and my coding and math skills are limited. #Rstats #patchwork #blackhistorymonth2023.

MIGRATION OF NEGROES.  
1890.

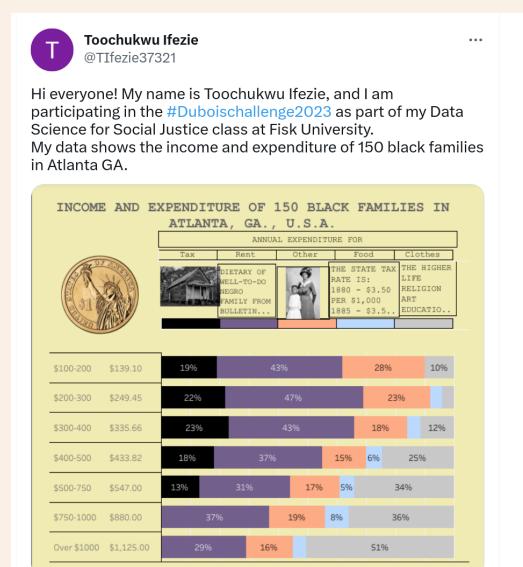
PRESENT DWELLING PLACE OF NEGROES BORN IN GEORGIA

BIRTHPLACE OF NEGROES NOW RESIDENT IN GEORGIA

12:34 AM · Mar 10, 2023 · 933 Views

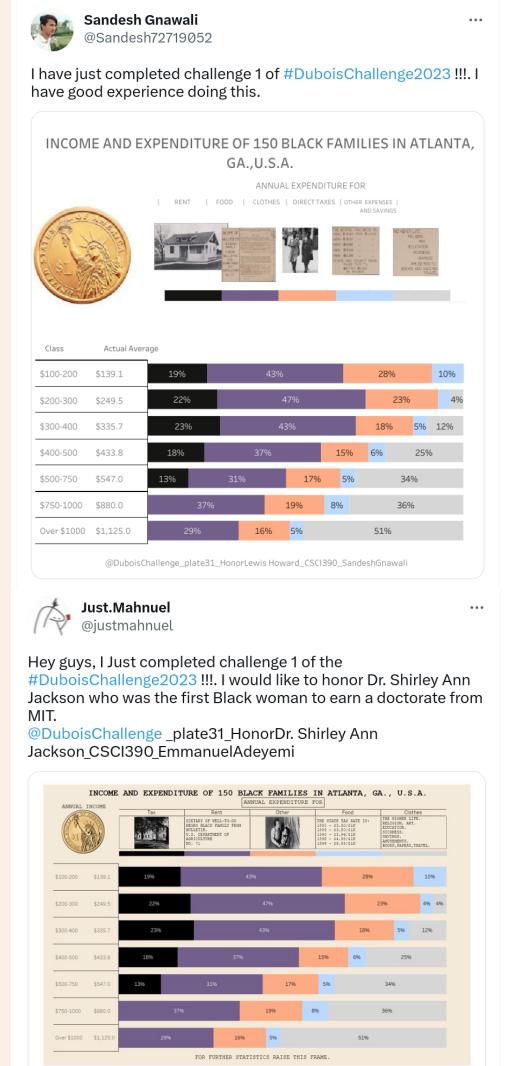
3 Retweets 11 Likes

# Fisk Students



Laila Eliotti  
@only1\_laila

Trent and I just finished challenge 1 of the #DuboisChallenge2023! @lena\_is\_light



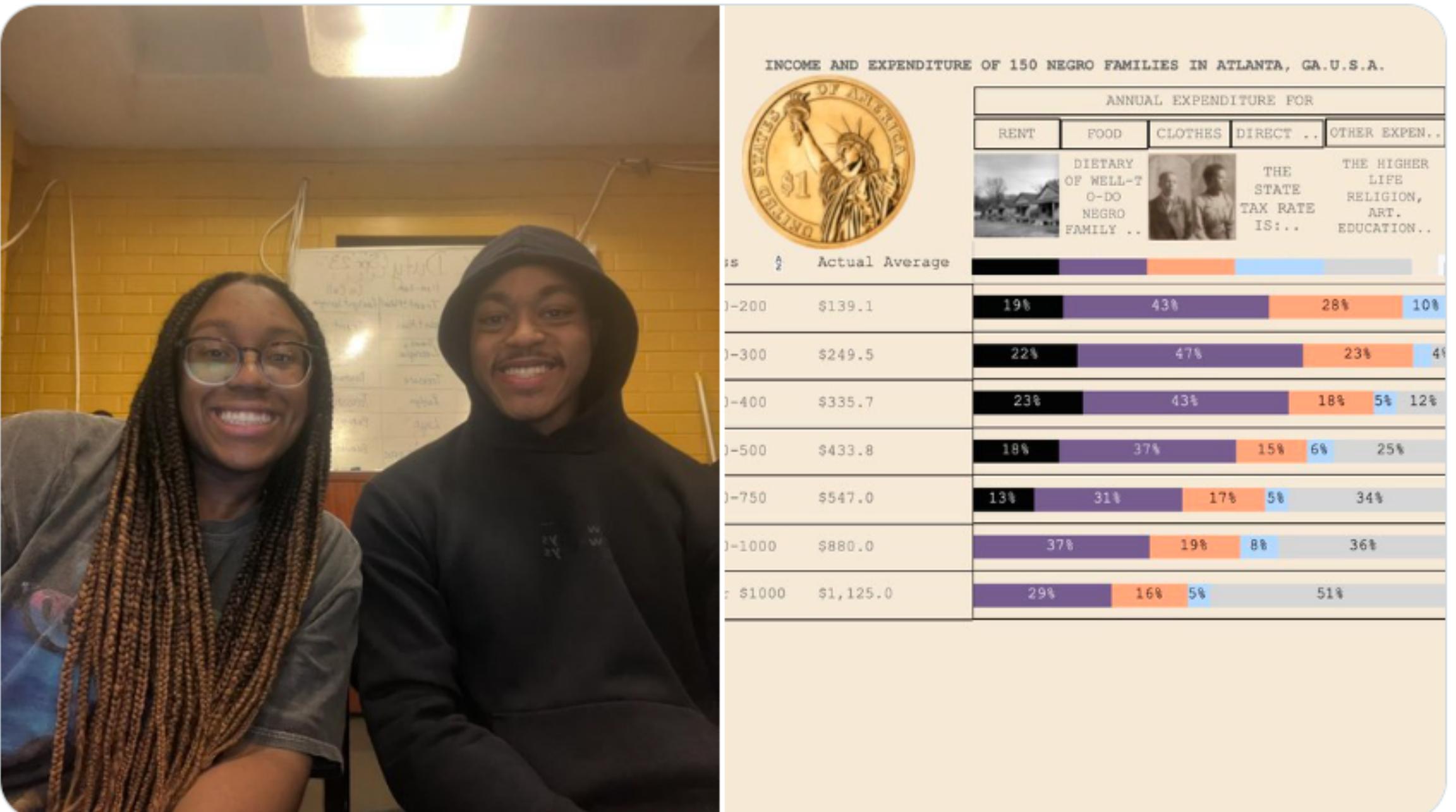
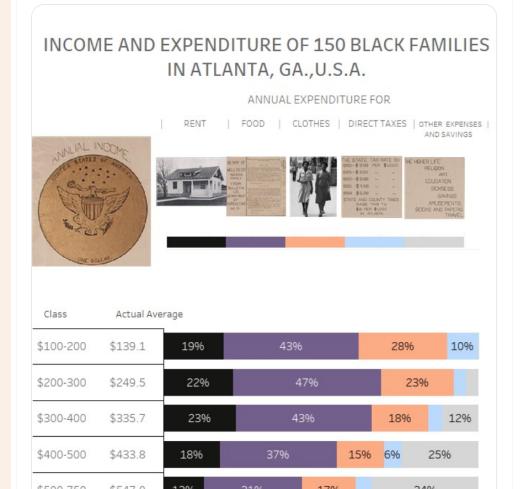
12:14 AM · Feb 2, 2023 · 198 Views

2 Retweets 5 Likes

Diamond GC  
@mr\_diamondGC

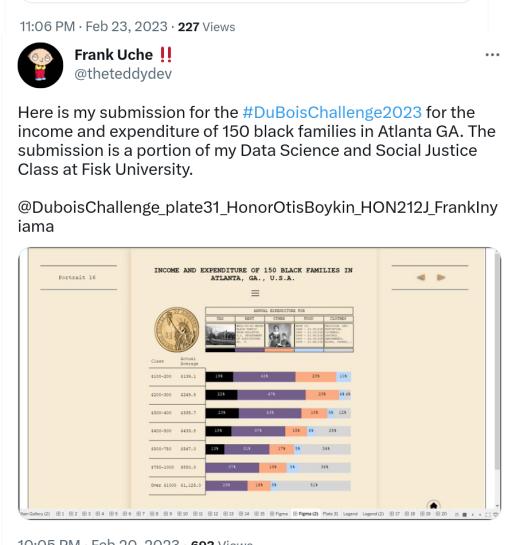
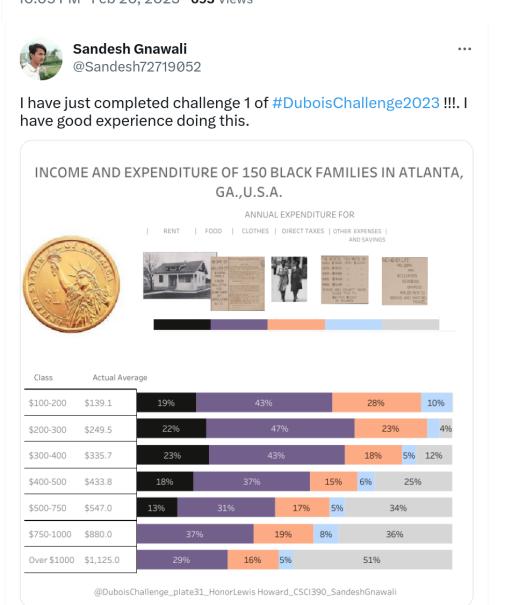
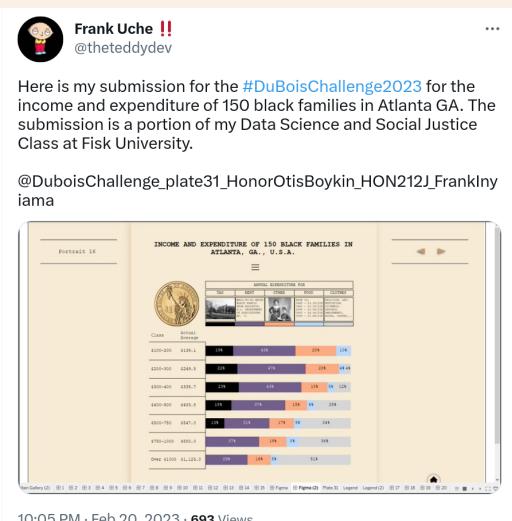
Here is my submission for the #DuboisChallenge2023 challenge 1. The submission is a portion of my Data Science and Social Justice Class at Fisk University.

@DuboisChallenge\_plate31\_HonorLewisHoward,CSCI390,DiamondGC



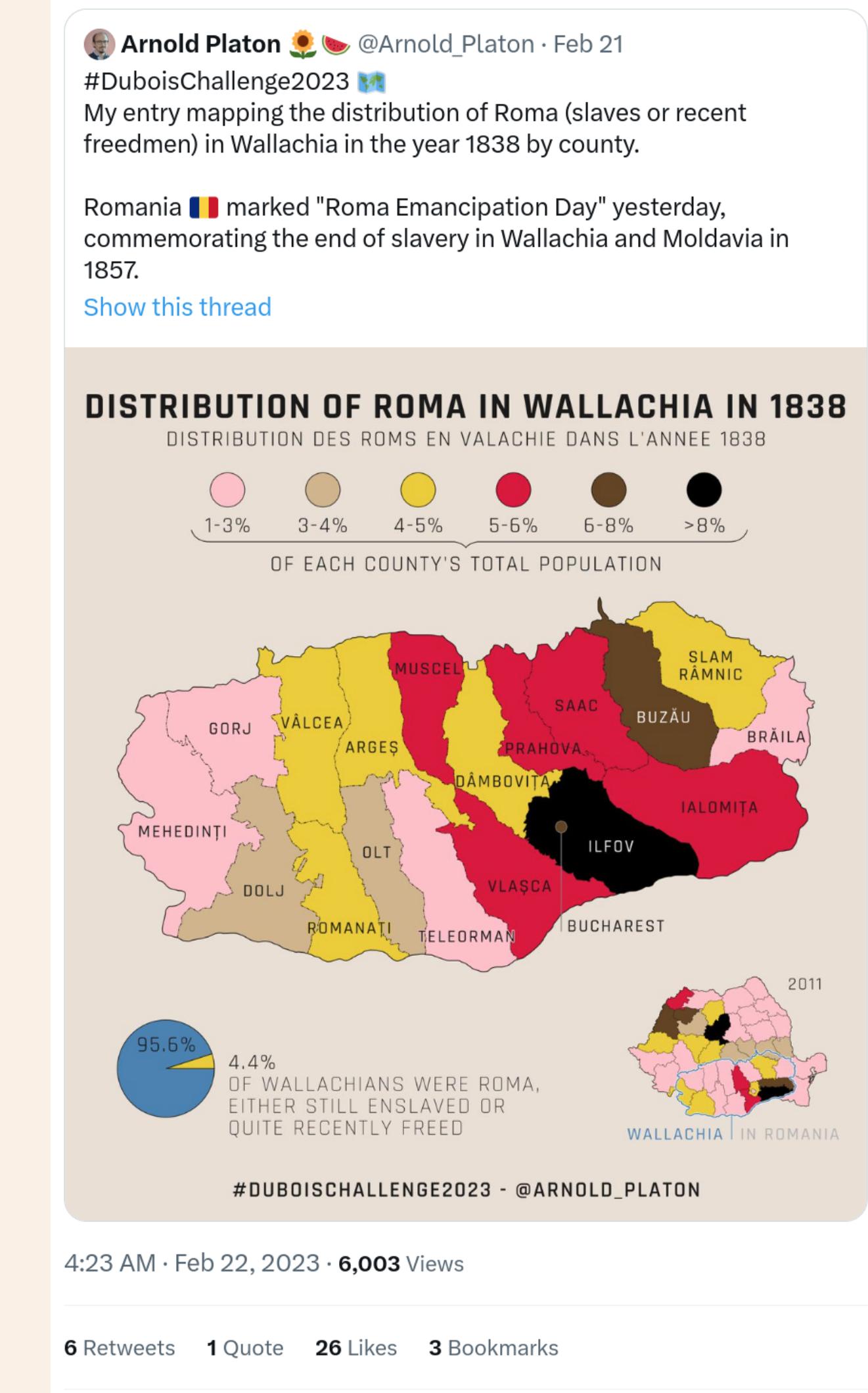
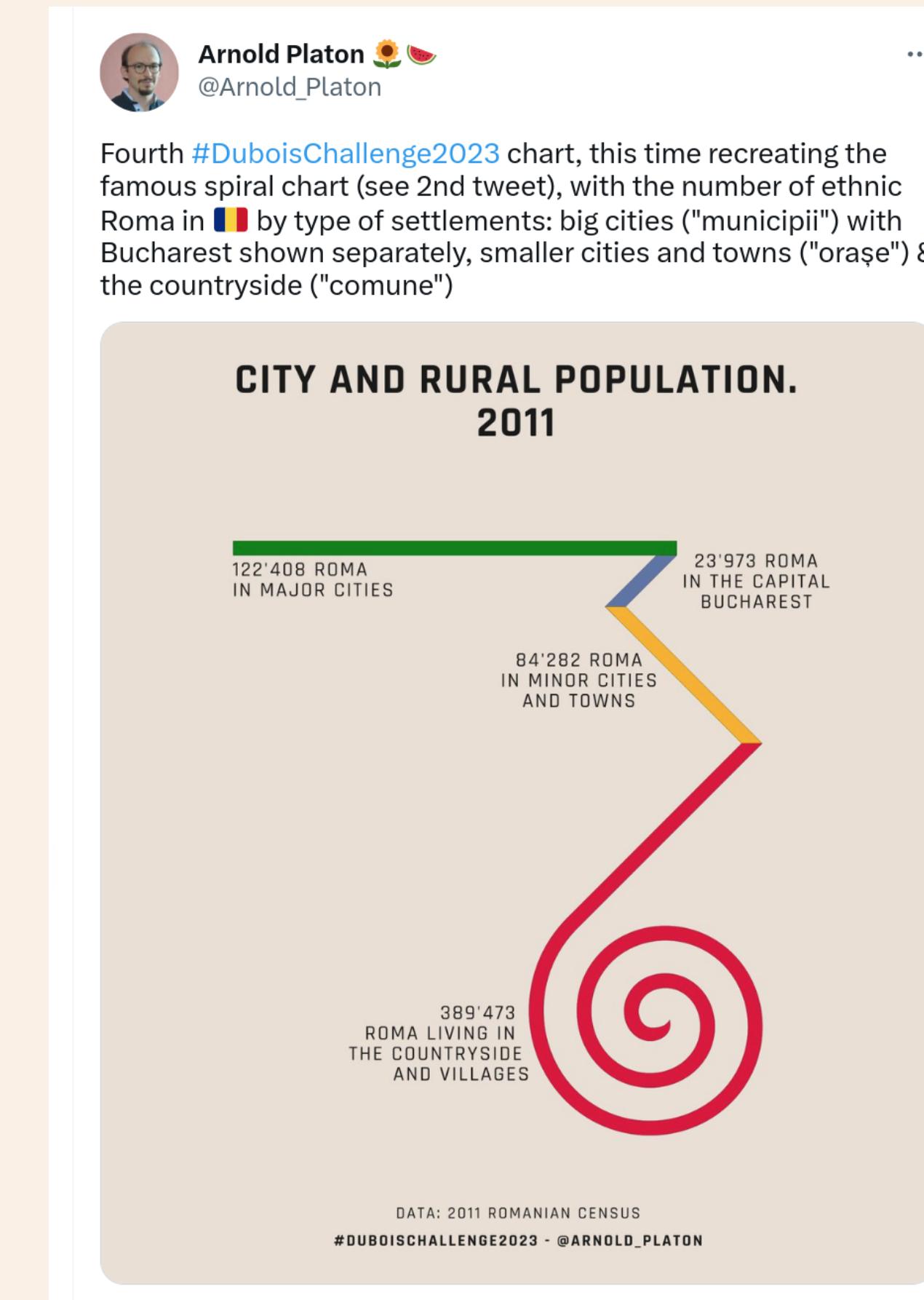
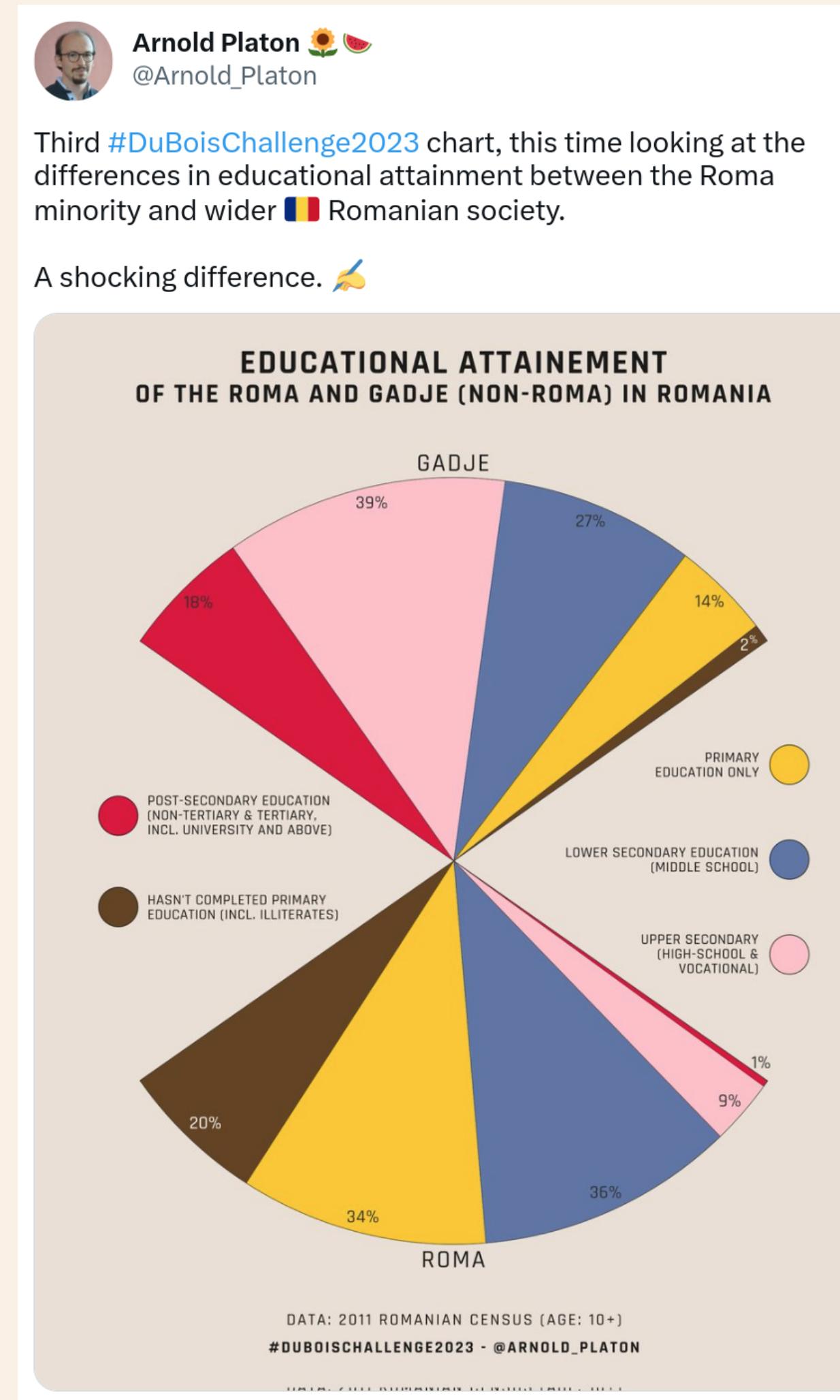
11:10 PM · Feb 15, 2023 · 1,905 Views

5 Retweets 1 Quote 16 Likes





# Arnold Platon (@Arnold\_Platon)





# Ícaro Bernardes (@IcaroBSC)

Ícaro Bernardes  
@IcaroBSC

This week's #DuBoisChallenge2023 #dataviz exhibit shows the number of Higher Education enrollments by race and field in Brazil (2020). The arc length is proportional to this number.

Fortunately, it was fairly easy to do this "fan chart" in #RStats thanks to {ggforce} 😊

**HIGHER EDUCATION ENROLLMENTS BY RACE AND FIELD.**  
ENROLLMENTS ON REMOTE AND IN PERSON COURSES IN BRAZIL (2020).

INSPIRED BY: W.E.B. DU BOIS | DATA FROM: IBGE | GRAPHIC BY: ÍCARO BERNARDES  
• @IcaroBSC | Ⓜ️ @IcaroBernardes | 📈 @icarobsc

**BLACKS.**

The chart displays the distribution of higher education enrollments for Black individuals across various fields. The segments are proportional to their enrollment numbers. The legend includes: LAW AND BUSINESS (red), EDUCATION AND OTHERS (blue), ENGINEERING & PRODUCTION, COMPUTER AND NATURAL SCIENCES (yellow), ARTS, SOCIAL AND HUMAN SCIENCES (brown), and HEALTH AND WELLNESS (light brown). The data is summarized in the following table:

Field	Percentage
LAW AND BUSINESS	29%
EDUCATION AND OTHERS	25%
ENGINEERING & PRODUCTION, COMPUTER AND NATURAL SCIENCES	20%
ARTS, SOCIAL AND HUMAN SCIENCES	19%
HEALTH AND WELLNESS	7%

**WHITES.**

The chart displays the distribution of higher education enrollments for White individuals across various fields. The segments are proportional to their enrollment numbers. The legend includes: LAW AND BUSINESS (red), EDUCATION AND OTHERS (blue), ENGINEERING & PRODUCTION, COMPUTER AND NATURAL SCIENCES (yellow), ARTS, SOCIAL AND HUMAN SCIENCES (brown), and HEALTH AND WELLNESS (light brown). The data is summarized in the following table:

Field	Percentage
LAW AND BUSINESS	30%
EDUCATION AND OTHERS	19%
ENGINEERING & PRODUCTION, COMPUTER AND NATURAL SCIENCES	23%
ARTS, SOCIAL AND HUMAN SCIENCES	19%
HEALTH AND WELLNESS	9%

10:35 AM · Mar 21, 2023 · 1,206 Views

7 Retweets 19 Likes 2 Bookmarks

Ícaro Bernardes  
@IcaroBSC

This week's #DuBoisChallenge2023 #dataviz shows the number of incarcerated people in Brazil by race (2nd half of 2021). The length of each section is proportional to this number.

I used the #RStats code made by @UST\_MSDS to add simulated brushstrokes.

**INCARCERATED PEOPLE BY RACE IN BRAZIL (2ND HALF OF 2021).**  
PERSONNES INCARCÉRÉES PAR RACE AU BRÉSIL (2ÈME SEMESTRE 2021).

INSPIRED BY: W.E.B. DU BOIS | DATA FROM: SENAPPEN AND IBGE | GRAPHIC BY: ÍCARO BERNARDES  
• @IcaroBSC | Ⓜ️ @IcaroBernardes | 📈 @icarobsc

**3664**  
PRISONERS PER MILLION OF BLACK POPULATION.

The infographic features a large, dark blue brushstroke representing the total number of incarcerated people. To its right is a legend indicating racial categories: UNKNOWN (pink), ASIANS (yellow), WHITES (brown), BLACKS (black), and NATIVES (green). The data is summarized in the following table:

Race	Percentage
BLACKS	~95%
WHITES	~3%
ASIANS	~1%
NATIVES	~1%
UNKNOWN	~1%

Applied Data Sciences at UST @UST\_MSDS · Mar 5

Ícaro Bernardes  
@IcaroBSC

"Favela (🇧🇷 slums) is power, not poverty" said the Favela Holding CEO, @celsoathayde. Carnaval is a feast where Afro-Brazilians combine Art and Tech on a budget.

This #DuBoisChallenge2023 #dataviz made in #RStats shows all Rio Samba Schools winners in almost a century of parades.

**RIO SAMBA SCHOOLS PARADE WINNERS (1932-2023).**  
GAGNANTS DU DÉFILÉ DES ÉCOLES DE SAMBA DE RIO (1932-2023).

INSPIRED BY: W.E.B. DU BOIS | DATA FROM: GALERIA DO SAMBA | GRAPHIC BY: ÍCARO BERNARDES  
• @IcaroBSC | Ⓜ️ @IcaroBernardes | 📈 @icarobsc

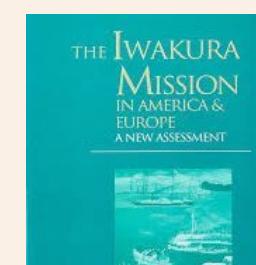
**15**  
SAMBA SCHOOLS WON THE MAIN PARADE COMPETITION IN RIO.

The infographic lists 15 samba schools that have won the main parade competition in Rio. Each school is represented by a colored square with a leader's name and a small brushstroke. The schools are: Unidos da Capela (red), Acadêmicos do Salgueiro (blue), Unidos da Tijuca (light blue), Vizinha Faladeira (light blue), Recreio de Ramos (red), Imperatriz Leopoldinense (green), Beija-Flor de Nilópolis (blue), Acadêmicos do Grande Rio (green), Estação de Sá (red), Império Serrano (green), Portela (blue), Macidade Independente de Padre Miguel (green), Unidos do Viradouro (red), Estação Primeira de Mangueira (pink), and Unidos de Vila Isabel (pink). The data is summarized in the following table:

Samba School	Leader
Unidos da Capela	Unidos da Capela
Acadêmicos do Salgueiro	Acadêmicos do Salgueiro
Unidos da Tijuca	Unidos da Tijuca
Vizinha Faladeira	Vizinha Faladeira
Recreio de Ramos	Recreio de Ramos
Imperatriz Leopoldinense	Imperatriz Leopoldinense
Beija-Flor de Nilópolis	Beija-Flor de Nilópolis
Acadêmicos do Grande Rio	Acadêmicos do Grande Rio
Estação de Sá	Estação de Sá
Império Serrano	Império Serrano
Portela	Portela
Macidade Independente de Padre Miguel	Macidade Independente de Padre Miguel
Unidos do Viradouro	Unidos do Viradouro
Estação Primeira de Mangueira	Estação Primeira de Mangueira
Unidos de Vila Isabel	Unidos de Vila Isabel

9:18 AM · Mar 7, 2023 · 2,144 Views

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# Hemeed (@725Hemeed)

Hemed  
@725Hemeed

My Third entry Adaptation for #DuBoisChallenge2023 A Map showing Distribution Of Black Race a cross the Globe 🌎 A Social Study 🇺🇸 By W.E.B Du Bois #QGIS #dataviz #DataVisualization #gischat #geospatial @DuboisChallenge

**THE GEORGIA BLACKS**  
A SOCIAL STUDY  
BY  
W.E.BURGHARDT DU BOIS  
DISTRIBUTION OF BLACK RACE

ROUTE OF AFRICAN SLAVE TRADE  
GEORGIA STATE

THIS CASE IS DEVOTED TO A SERIES OF CHARTS, MAPS AND OTHER DEVICES DESIGNED TO ILLUSTRATE DEVELOPMENT OF BLACK AMERICAN IN A SINGLE TYPICAL STATE OF UNITED STATES.

"THE PROBLEM OF 20th CENTURY IS THE PROBLEM OF COLOR-LINE"

Created by Hemed Lugo | #DuBoisChallenge2023

ALT

5:21 PM · Feb 23, 2023 · 1,940 Views

12 Retweets 1 Quote 38 Likes 1 Bookmark

Hemed  
@725Hemeed

My Adaptation entry for #DuBoisChallenge2023 by @DataVizSociety A Map showing Distribution Of Black Americans 🇺🇸 created in #QGIS. #dataviz #DataVisualization #gischat #geospatial @DuboisChallenge

**DISTRIBUTION OF BLACK AMERICANS IN UNITED STATES**  
RÉPARTITION DES NOIR-AMÉRICAINS AUX ÉTATS-UNIS

Black americans to square miles

Less than 1 1-4 4-8 8-15 15-25

ALT

11:29 AM · Feb 10, 2023 · 2,577 Views

8 Retweets 30 Likes

Hemed  
@725Hemeed

My Second entry Adaptation for #DuBoisChallenge2023 A Map showing Black Population of United states 🇺🇸 compare to other countries created during 1900 Paris Exposition #QGIS. #dataviz #DataVisualization #gischat #geospatial @DuboisChallenge

**BLACK POPULATION OF UNITED STATES COMPARE TO TOTAL POPULATION OF OTHER COUNTRIES**  
LA POPULATION NOIRE DES ÉTATS-UNIS COMPARE À LA POPULATION TOTALE DES AUTRES PAYS

DONE BY ATLANTA UNIVERSITY

COUNTRY	POPULATION
ESPAÑA	17,500,000
AUSTRALIA	3,036,570
NORVÉGE	2,000,917
SUÈDE	4,774,409
DANMARK	2.4M+
NEDERLANDEN	4,500,000
LA BELGIQUE	6,000,000
U.S.A	BLACK AMERICAN POPULATION POPULATION NOIRE AMÉRICaine 7,500,000
HONGRIE	17,500,000
BAYERN	5,800,000
ENGELAND	27,500,000

ALT

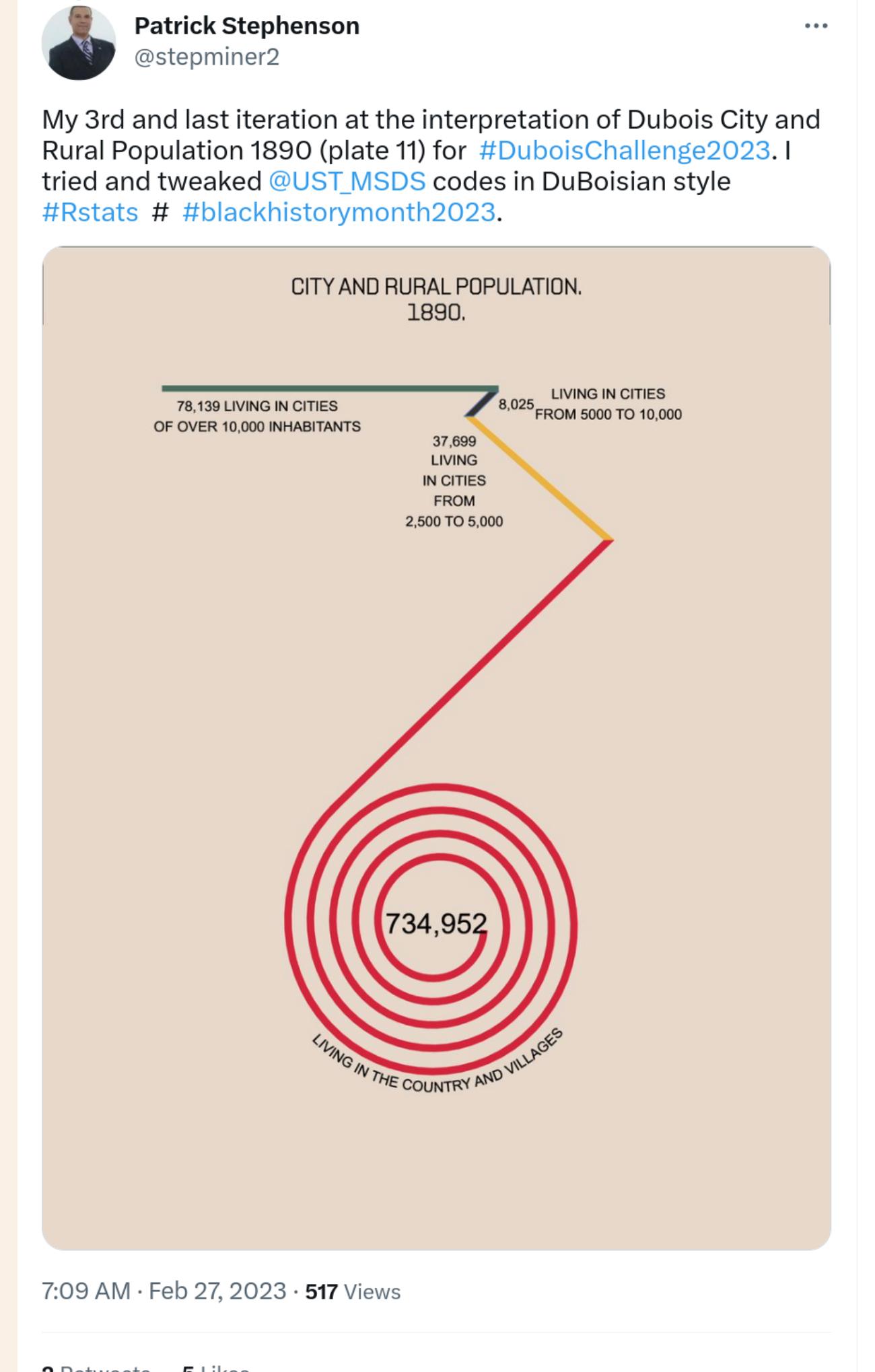
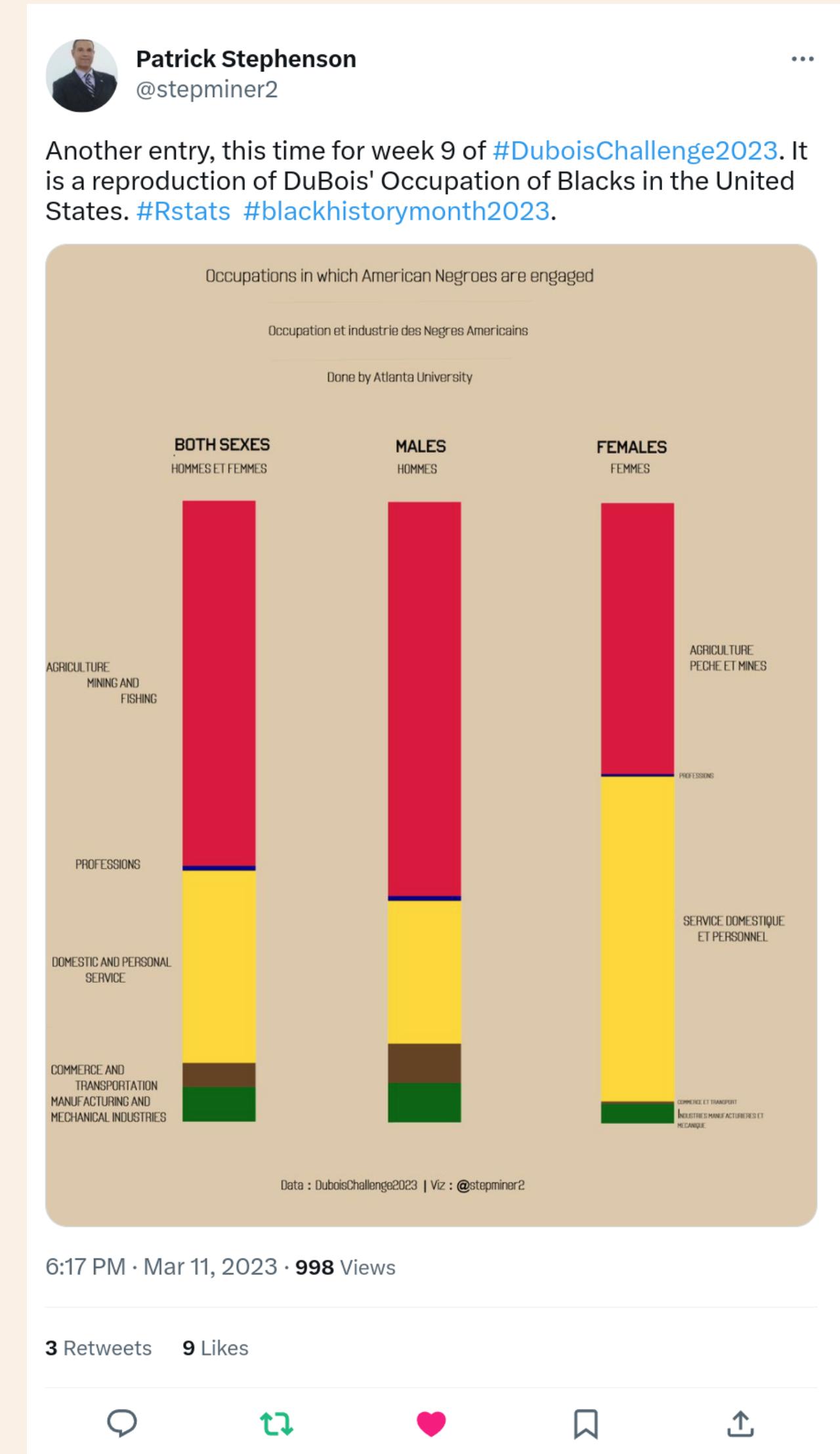
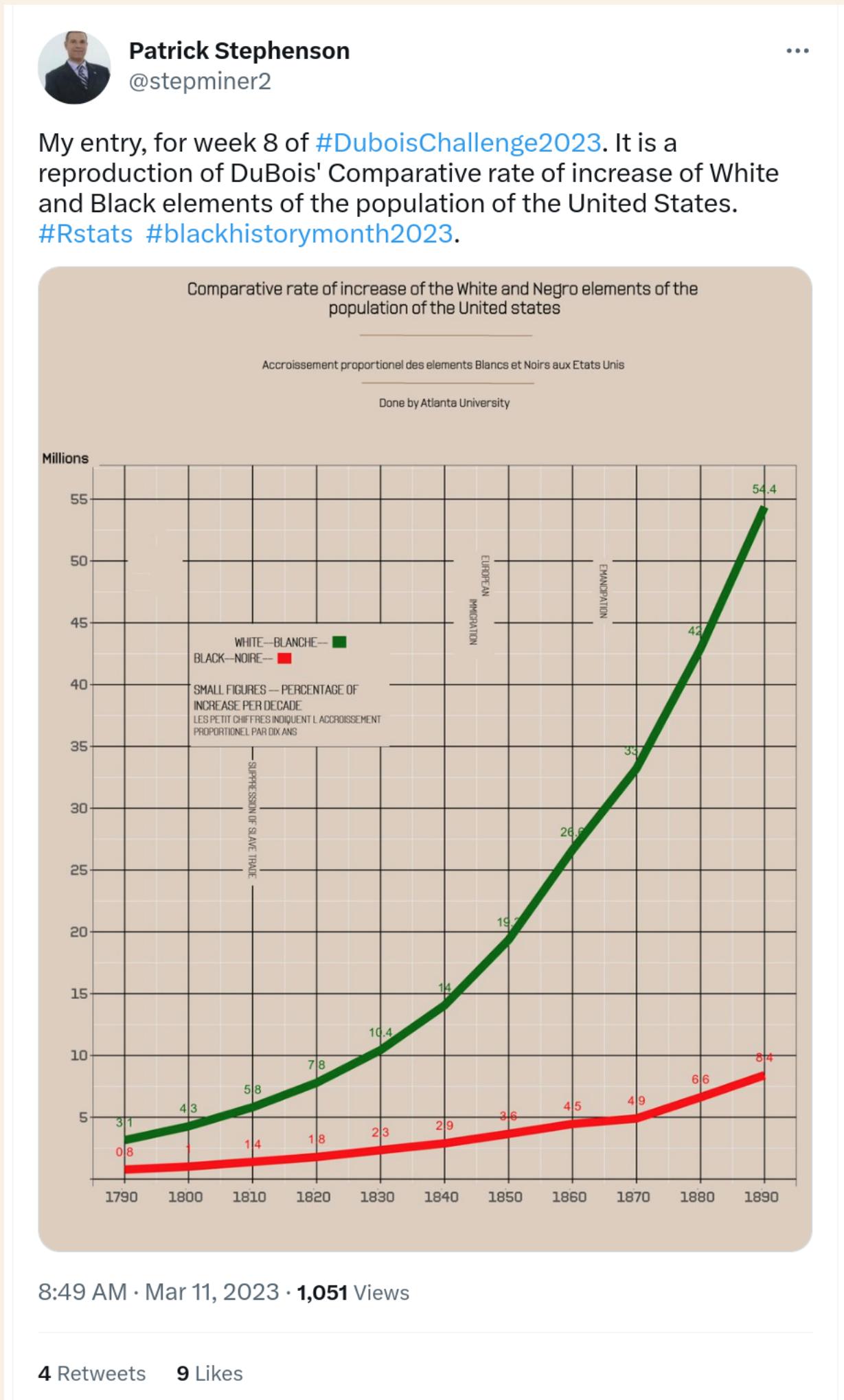
#DuBoisChallenge | Created by Hemed Lugo

4:46 PM · Feb 19, 2023 · 1,275 Views

5 Retweets 16 Likes



# Patrick Stephenson (@stepminer2)



# Galleries

## Raisa Hannus

 **Raisa Hannus**  
@Blu7ip

#DuboisChallenge2023 - Recreated the 10 historical charts of W.E.B Du Bois with Tableau (+ a ruler, protractor and spreadsheets).

[t.ly/8s9o](https://t.ly/8s9o)

Thank you @ajstarks, @AlDatavizguy, @menscuriosa and @sqlsekou for the fascinating challenge, resources and inspiration!

**RE-VISUALIZING THE BLACK AMERICA OF W.E.B. DU BOIS**

W.E.B. Du Bois (1868-1963) was an American sociologist, socialist, historian, and Pan-Africanist civil rights activist. He contributed over 60 handmade charts to the Exhibit of American Negroes at the 1900 World's Fair in Paris. The collection is now housed at the Library of Congress in Washington, DC.

CLICK ON AN IMAGE TO VIEW

01 PLATE 31  
02 PLATE 18  
03 PLATE 11  
04 PLATE 38  
05 PLATE 57  
06 PLATE 60  
07 PLATE 27  
08 PLATE 40  
09 PLATE 43  
10 PLATE 8

#DUBOISCHALLENGE2023 | DATA BY @AJSTARKS | DESIGN BY RAISA HANNUS

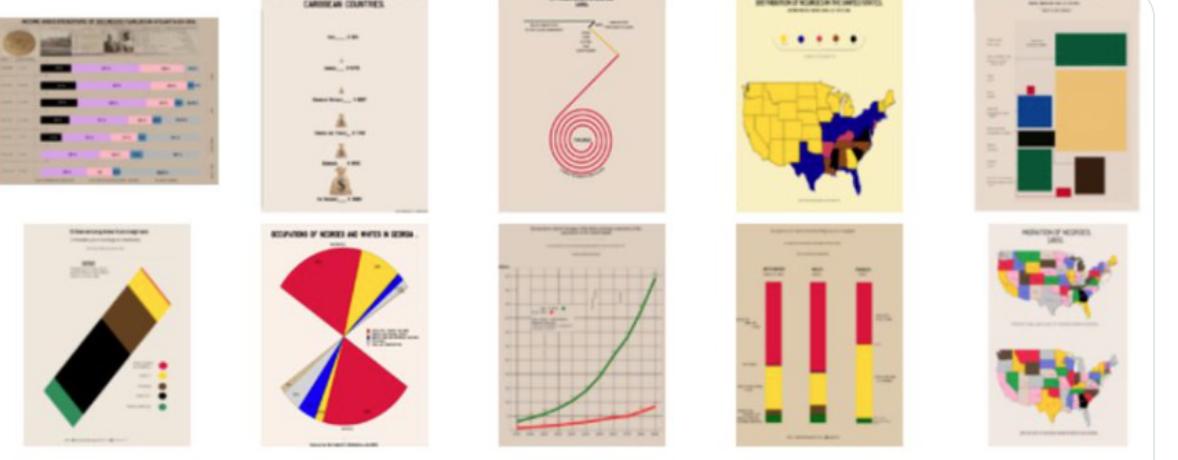
3:42 PM · Mar 12, 2023 · 2,322 Views

7 Retweets 55 Likes 5 Bookmarks

## Patrick Stephenson

 **Patrick Stephenson**  
@stepminer2

I can now have my own #DuboisChallenge2023, Gallery. #Rstats #magick #blackhistorymonth2023.



Pat Stephenson (@stepminer2) Gallery  
#DuboisChallenge2023

12:43 PM · Mar 12, 2023 · 147 Views

1 Retweet 7 Likes

**Tweet your reply** 

 **Raisa Hannus** @Blu7ip · Mar 12  
Replying to @stepminer2  
Great work, very impressive! 🎉

 **Carlos Cámar Menoyo - ccamara@...** @carle... · Mar 19  
Replying to @Blu7ip and @stepminer2  
Indeed! Do you have your code available somewhere?

## Elisa Davis

 **Elisa Davis**  
@ItsElisaDavis

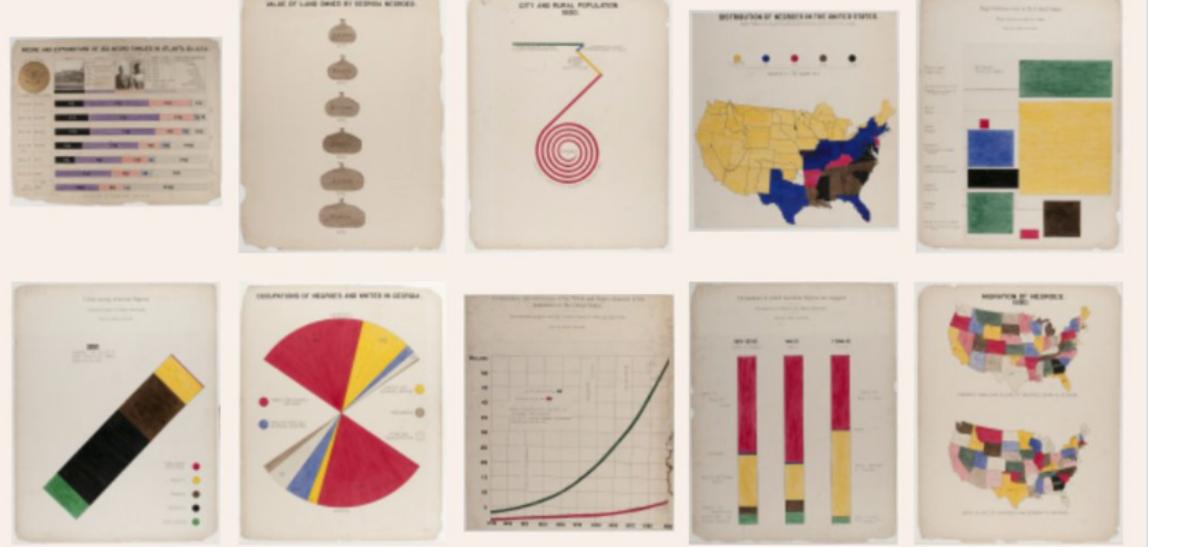
 **New Viz**  
In honor of W.E.B Du Bois and Black History Month, I completed the entire 2023 #duboischallenge using @tableaupublic:  
[tabsoft.co/3y2J0o9](https://tabsoft.co/3y2J0o9)

Thank you to @aldatavizguy and @menscuriosa for hosting this fantastic challenge, and to @ajstarks for the data.

Original Plates by W.E.B. Du Bois for the 1900 Paris Exposition.  
Reinterpreted by Elisa Davis.

#DuBoisChallenge2023

Click images to see "modern" versions of these visualizations generated with Tableau.



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.

Note: titles are taken from the 1900 originals and use antiquated terms to refer to populations of color.

3:55 PM · Mar 1, 2023 · 8,951 Views