

What is a Du Bois Style visualization?

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Introduction

To help designers, artists, developers, and scholars seeking to implement or study the "Du Bois Style", this document describes aspects of the visualizations created by W. E. B Du Bois' team for the 1900 Paris exposition.

To learn more see "W.E.B Du Bois's Data Portraits Visualizing Black America" by Whitney Battle-Baptise and Britt Rusert (ISBN-978-1-61689-706-2) and the Library of Congress collection "[African American Photographs Assembled for 1900 Paris Exposition](#)"

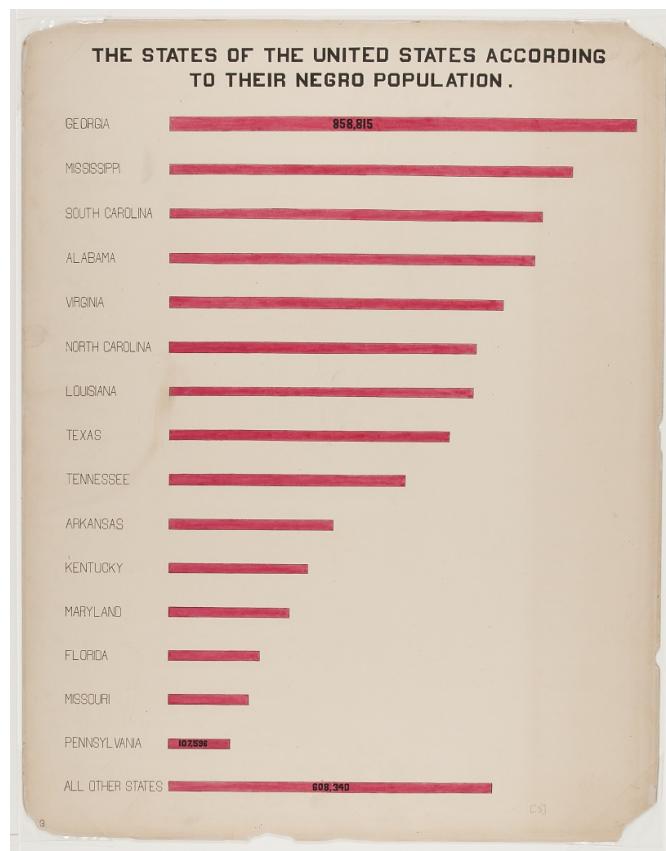
The sources above use plate numbers to indicate the visuals, this document users the same convention.

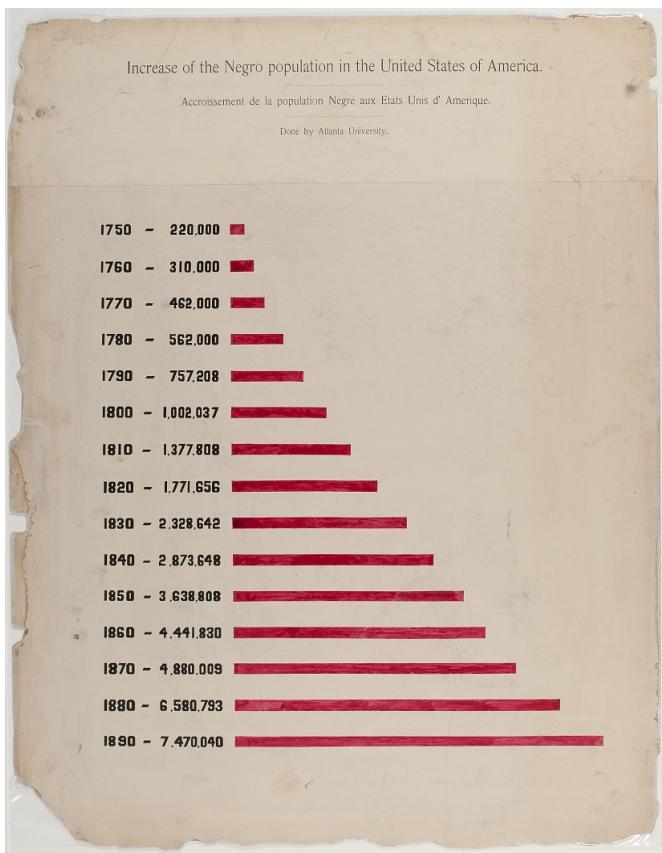
Taxonomy

The approximately 60 visuals produced for the 1900 Exposition fall into these categories: bar charts (30), maps (9), visuals with circular features (7), visuals using large blocks of color (8), and line graphs (3). The visuals also use bold primary colors and abstract forms prior to modernist movements developed later in the twentieth century.

Bars

The most prevalent type of visualization are bar charts. Some are conventional bar charts (mostly horizontal bars) with labels on the left, using a single color, with the values sorted. Red tends to be the dominate color for this type, although other colors like gray, yellow and green are also used. In one case the bars echo the shape of its subject -- the state of Georgia (plate 19)





There are three cases (plates 17, 26 and 62) where a bar is wrapped spanning 2-3 vertical lines. This use of wrapping is echoed in spirals described below.

NUMBER OF NEGRO STUDENTS TAKING
THE VARIOUS COURSES OF STUDY
OFFERED IN GEORGIA SCHOOLS.

BUSINESS 12 ■

CLASSICAL 98

PROFESSIONAL 152

SCIENTIFIC 161

NORMAL 883

INDUSTRIAL 2252

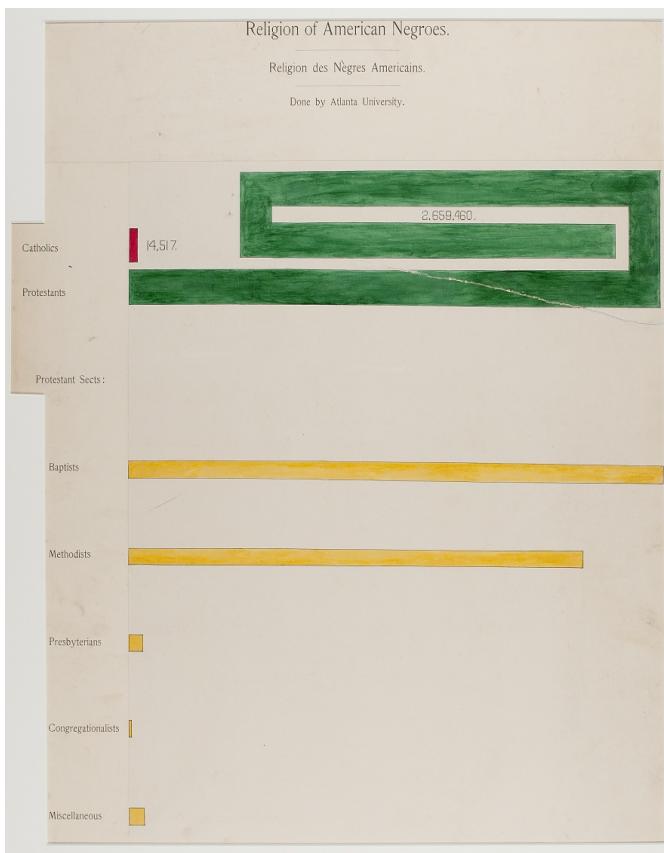
OCCUPATIONS OF GEORGIA NEGROES.

MALES OVER 10.

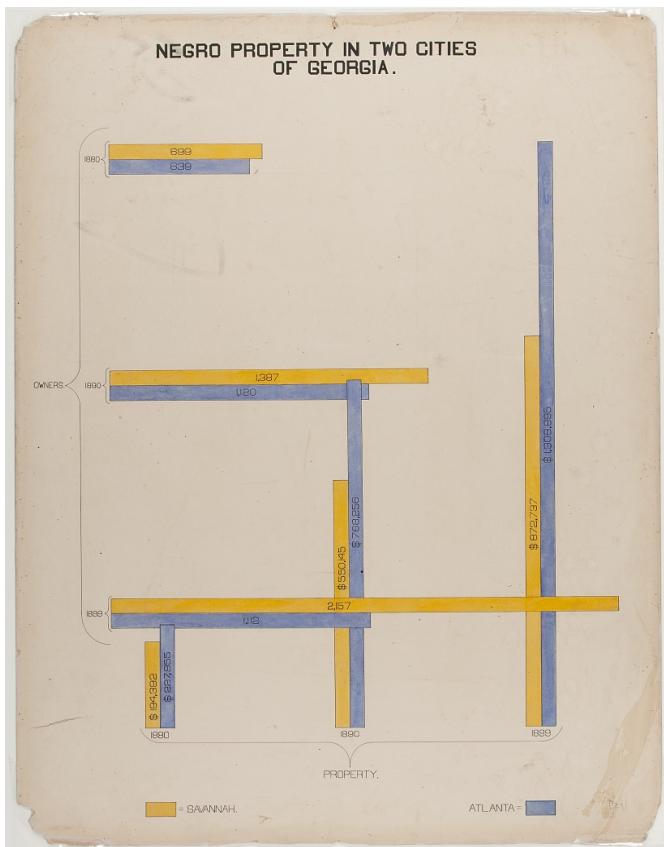
Occupation	Number of Employees
AGRICULTURAL LABORERS	98,400
FARMERS AND PLANTERS	83,012
LABORERS	29,723
STEAM RAILWAY EMPLOYEES	7,490
SERVANTS	7,000
DRAYMEN, HACKMEN	4,390
CARPENTERS AND JOINERS	3,781
SAW AND PLANING MILL EMPLOYEES	2,471
MESSENGERS	1,970
WOOD CHOPPERS	1,899
BLACKSMITHS AND WHEELWRIGHTS	1,828
CLERGYMEN	1,277
MASONS	1,243
BRICK-MAKERS AND POTTERS	977
BARBERS	898
MERCHANTS	897
PAINTERS, GLAZERS AND VARNISHERS	676
BOOT AND SHOE MAKERS	632
PROFESSORS AND TEACHERS	620
LIVERY STABLE KEEPERS	620
ENGINEERS	520
GARDENERS AND FLORISTS	518

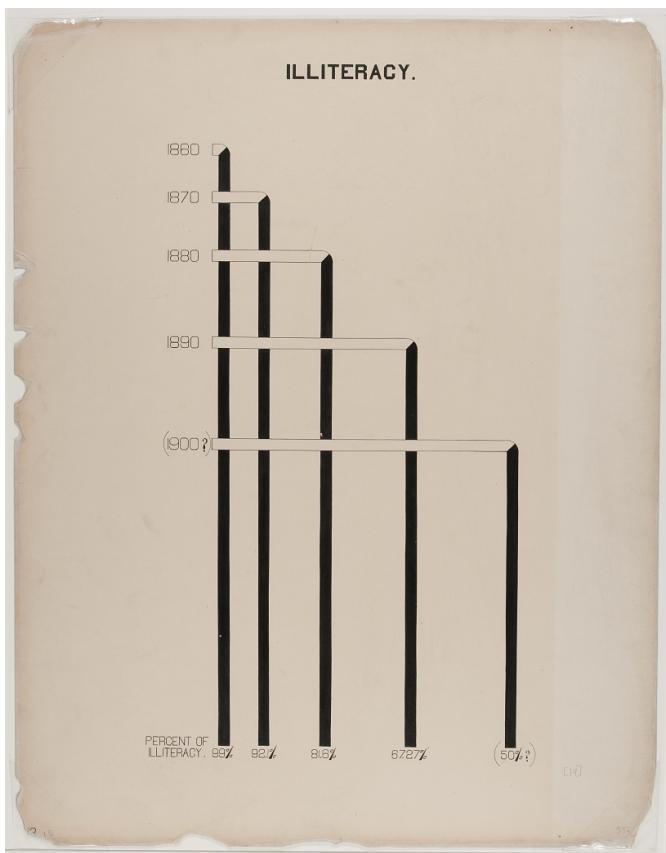
(ed)

1890.

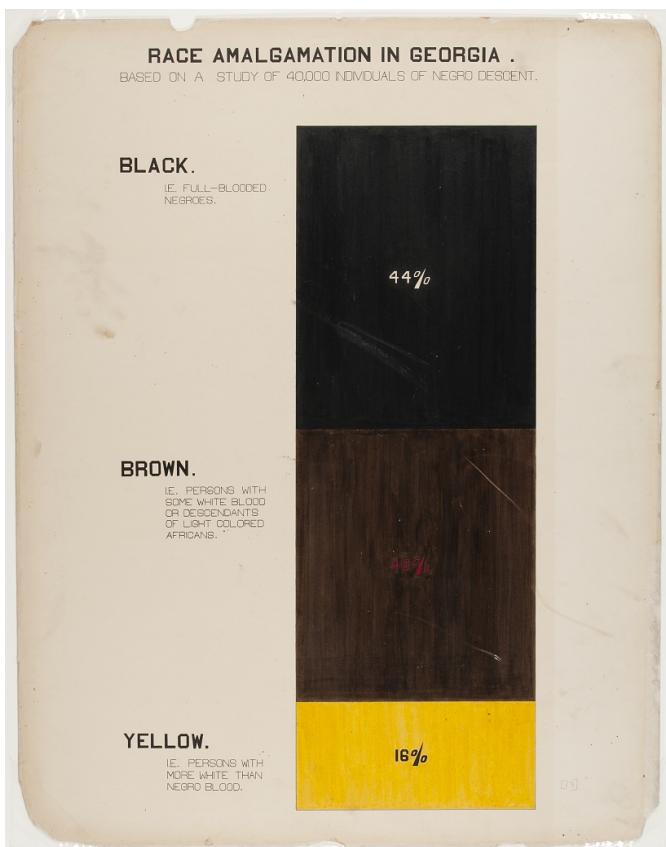


Another unconventional use of bar is a "woven" pattern of two contrasting colors (indicating two cities, plate 23.). The weave is used in plate 14 where the timeline is woven with the measure of literacy.





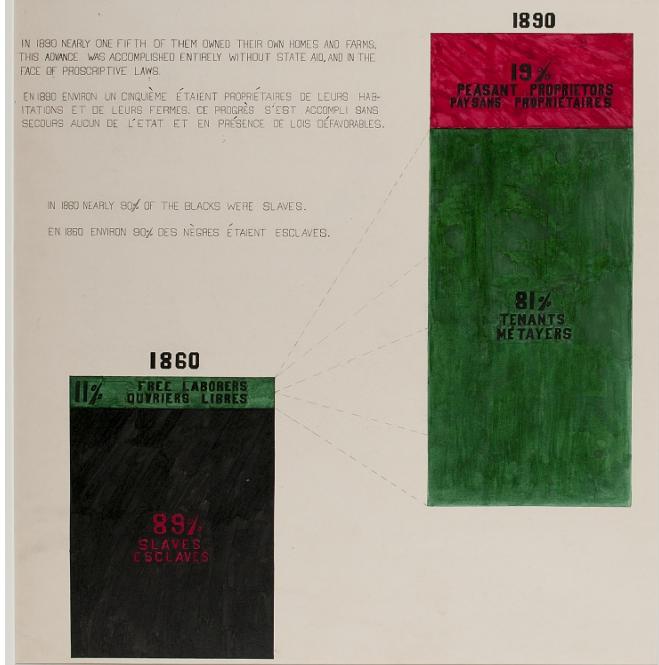
Another type uses 1-3 vertical bars to describe proportion indicated by 2-3 solid colors (plate 13). In one case, plate 60, the bar is tilted 45 degrees.



THE RISE OF THE NEGROES FROM SLAVERY TO FREEDOM IN ONE GENERATION.

PROGRÈS GRADUEL DES NÈGRES DE L'ESCLAVAGE À LA LIBERTÉ EN UNE GÉNÉRATION.

DONE BY ATLANTA UNIVERSITY.

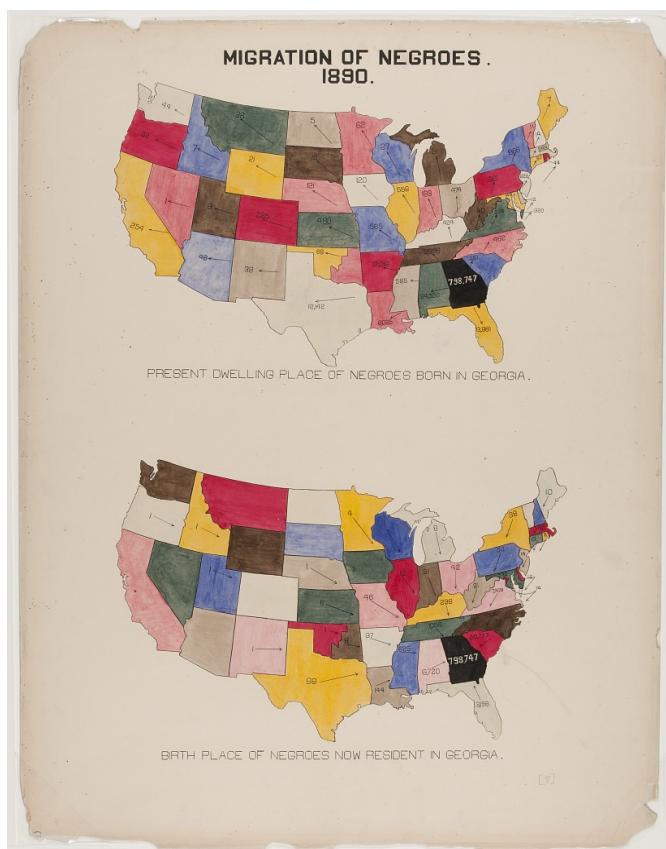
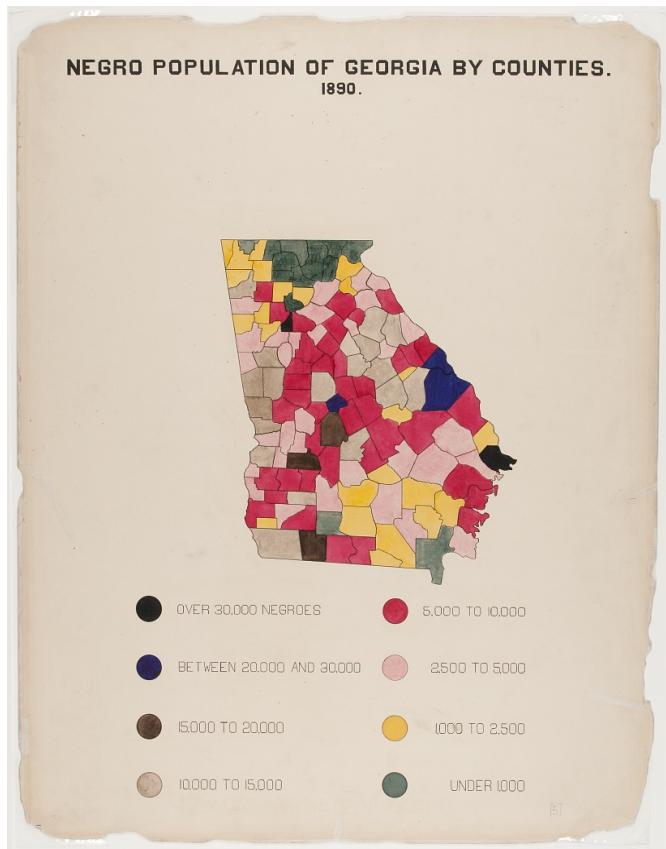


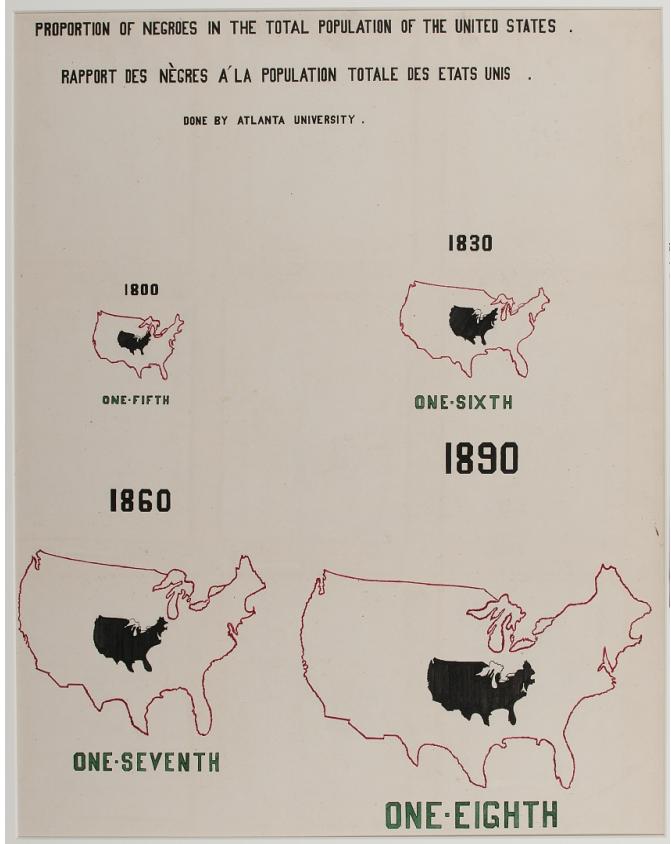
Maps

The second most prevalent type of visual is the map -- the majority of these use US state or Georgia county boundaries filled with color indicating some measure such as population distribution (plates 2, 5, 6, and 8). The maps include colored legends

with circles of color to denote the categories.

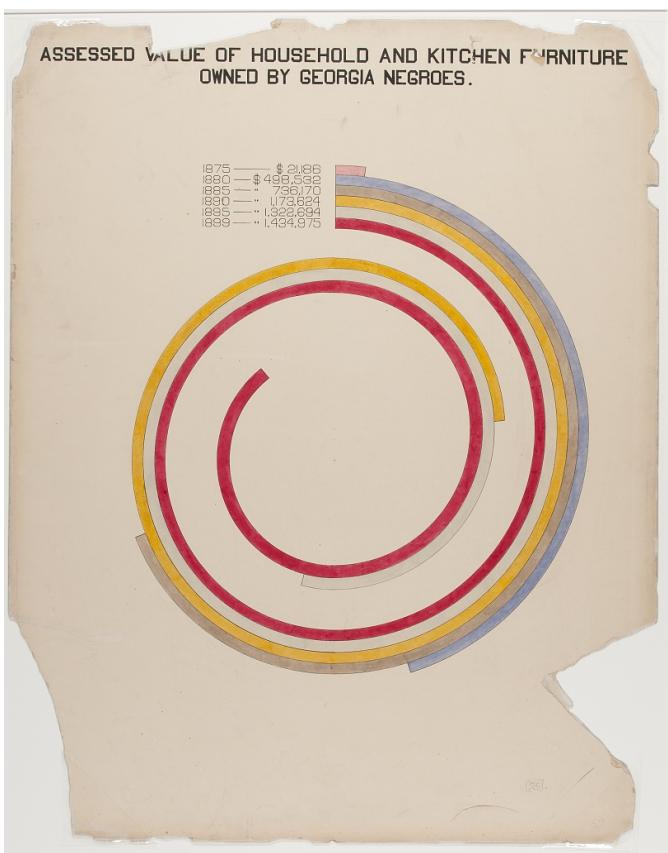
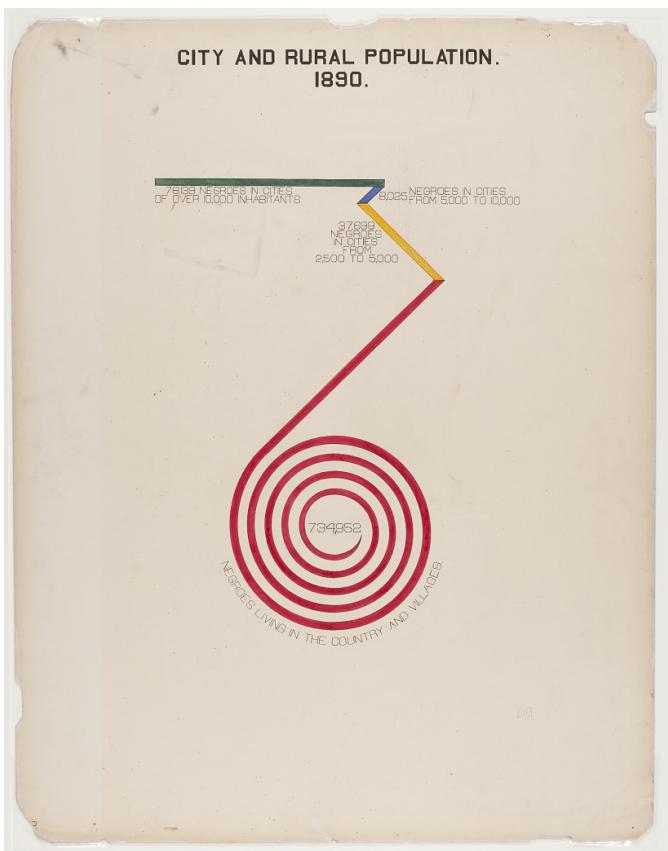
The political outlines may also be labeled with other indicia such as arrows and measures. (plates 8, 20) Two of the maps use filled and outline shapes to compare the US with other countries.





Circles

Several charts use circular elements; notable are the spirals in plates 11 and 25 (plate 25 is on the cover of the book cited above and often shown when showing the Du Bois visuals). The spirals are used to indicate large measures; instead of stretching out the lines as in a conventional bar chart, the measures are "rolled up in a spiral".



Another use of circles include conventional pie charts (plate 37), and the not quite pie "wedge" chart (plates 27, 44). Finally, a novel "target chart" uses concentric circles with wedge-shaped pointers to the center.

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 ESKLAVES AFRIQUENS 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.

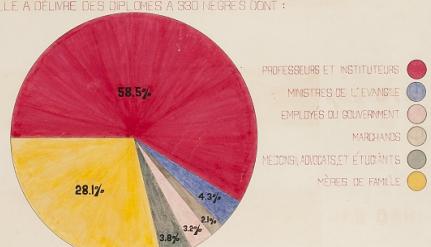


MAP OF NEGRO POPULATION,
ATLANTA UNIVERSITY.

PRÉPARÉES ET EXÉCUTÉES PAR
DES ÉTUDIANTS NÉGRÉS 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 NÉGRÉS.
IT HAS GRADUATED 330 NEGROES AMONG WHOM ARE:
ELLE A DÉLIVRÉ DES DIPLÔMES À 330 NÉGRÉS DONT:

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



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 AIDS TO RAISE
AND CIVILIZE THE SONS OF THE FREEDMEN BY TRAINING THEIR MORE CAPABLE MEMBERS IN THE LIBERA-
L ARTS ACCORDING TO THE BEST STANDARDS OF THE DAY.

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

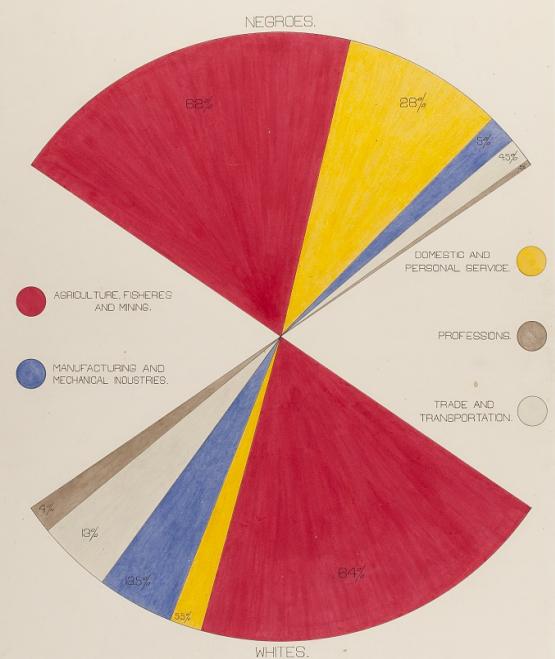
L'UNIVERSITÉ A ACTUELLEMENT 20 PROFESSEURS ET INSTRUCTEURS ET 250 ÉTUDIANTS.
ELLE EST COMPOSÉE DE DIX BÂTIMENTS, 60 ACRES (ENVIRON 24 HECTARES) DE TERRAIN GERVANT DE
COUR ET DE CHAMP DE RÉCREATION ET D'UNE BIBLIOTHÈQUE CONTENANT 11,000 VOLUMES.

SON BUT EST D'ÉLEVER ET DE CIVILISER LES FILS DES NÉGRÉS AFFRANCHIS EN DONNANT AUX MEILLEURS
DOSES UNE ÉDUCATION DANS LES ARTS LIBÉRAUX EN ACCORD AVEC LES IDÉES LES PLUS PROGRE-
SISTES DE L'ÉPOQUE.

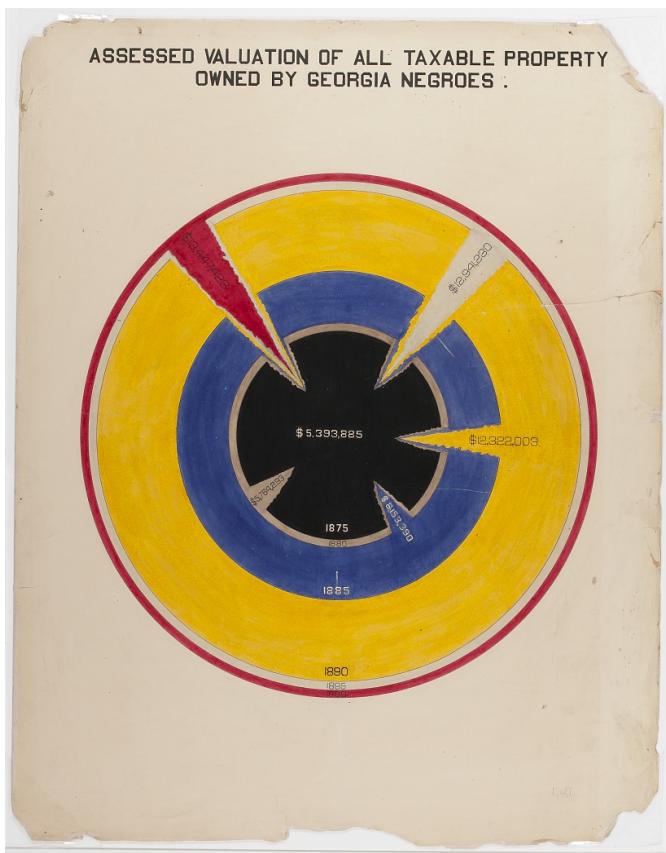
L'ACCOMPLISSEMENT DE CETTE ŒUVRE DEMANDE UNE DOTATION DE \$500,000 (2,500,000 FRANCS).

[2]

OCCUPATIONS OF NEGROES AND WHITES IN GEORGIA.

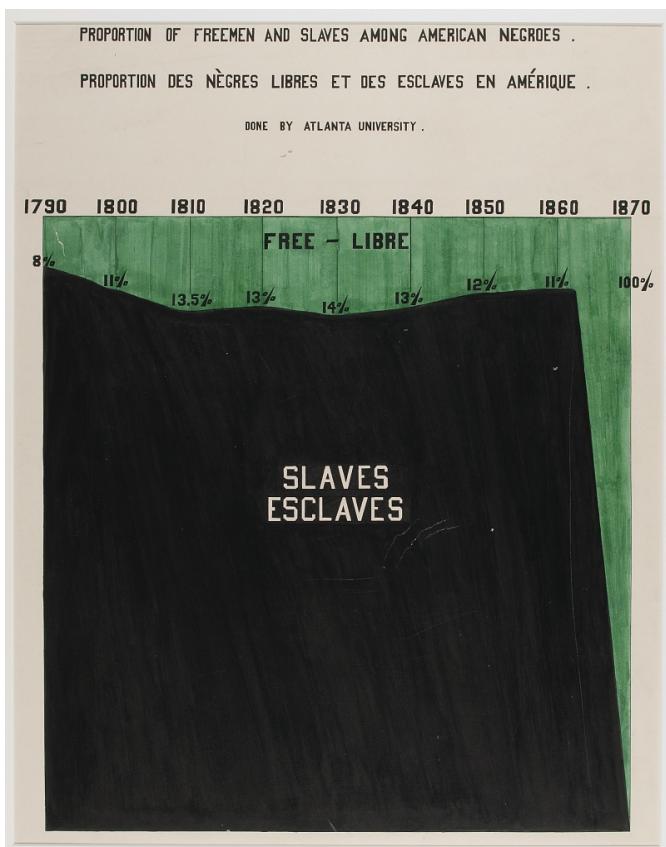


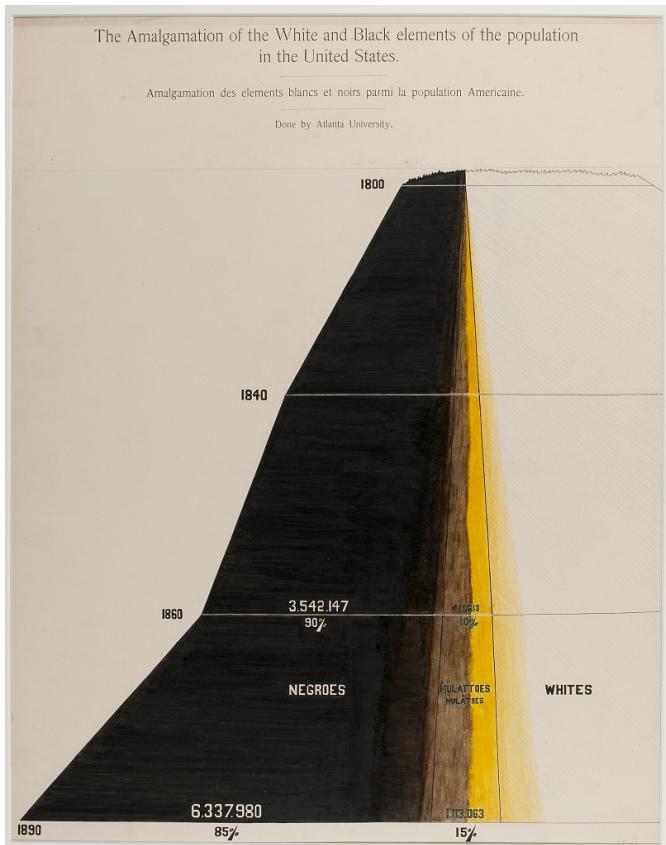
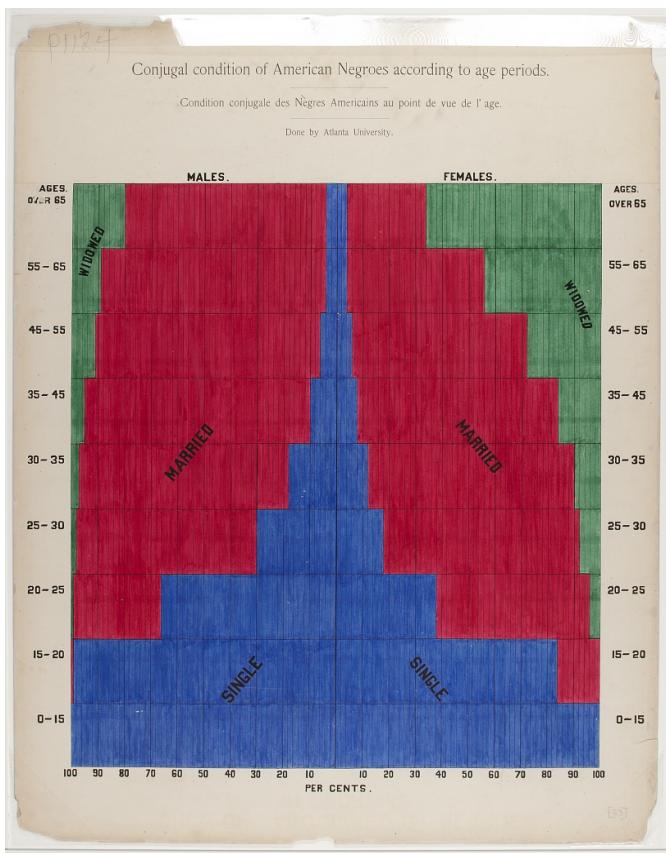
[2]



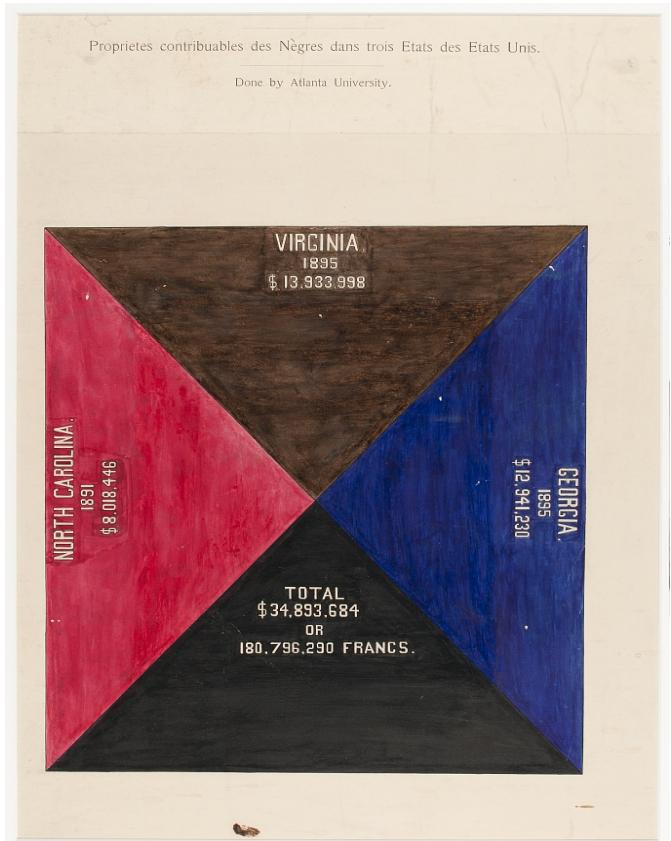
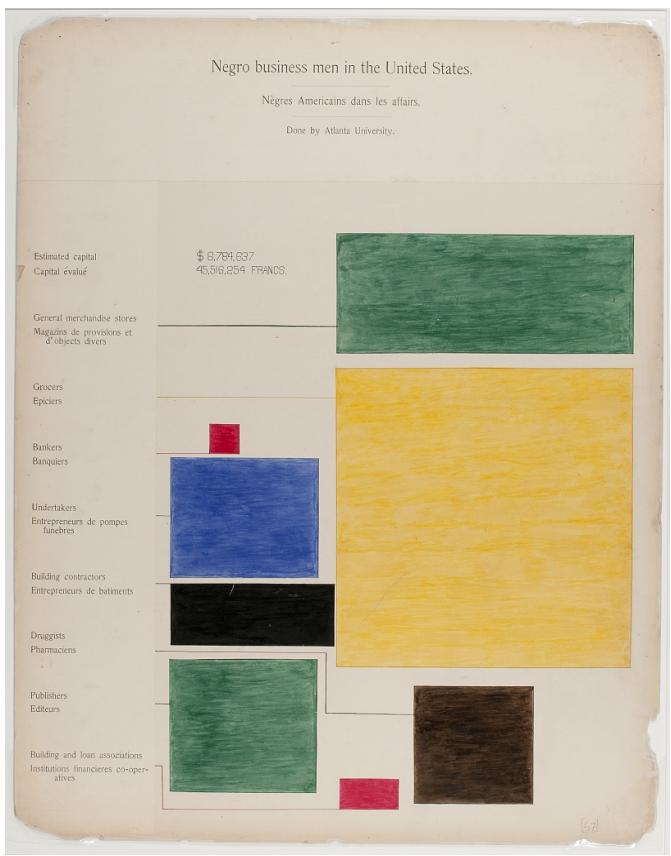
Blocks

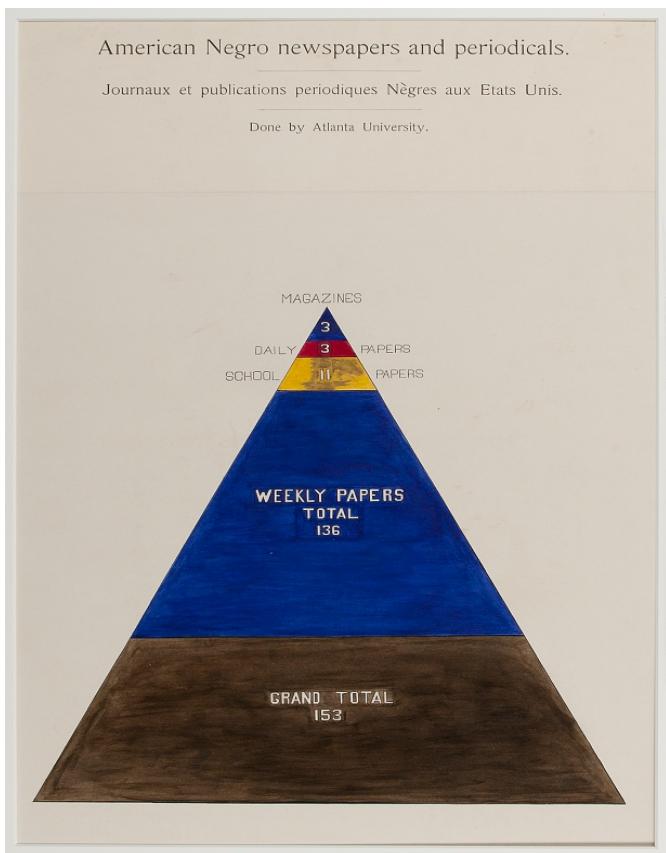
Bold blocks of color are used in several charts, for example, area graphs in plates 51, 53, 54:





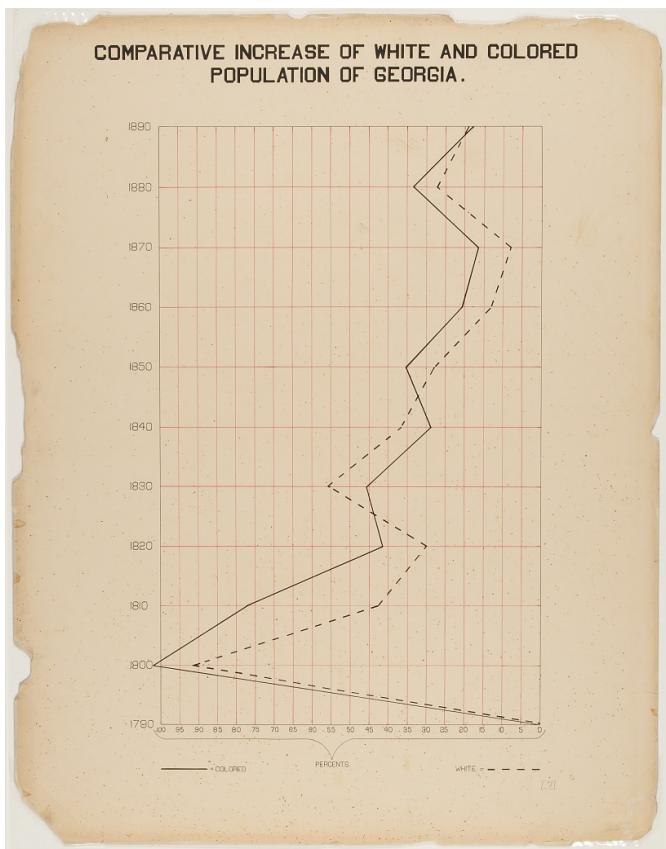
Some visuals use geometric (rectangular, triangular, pyramidal) blocks (plates 57, 55, 61)

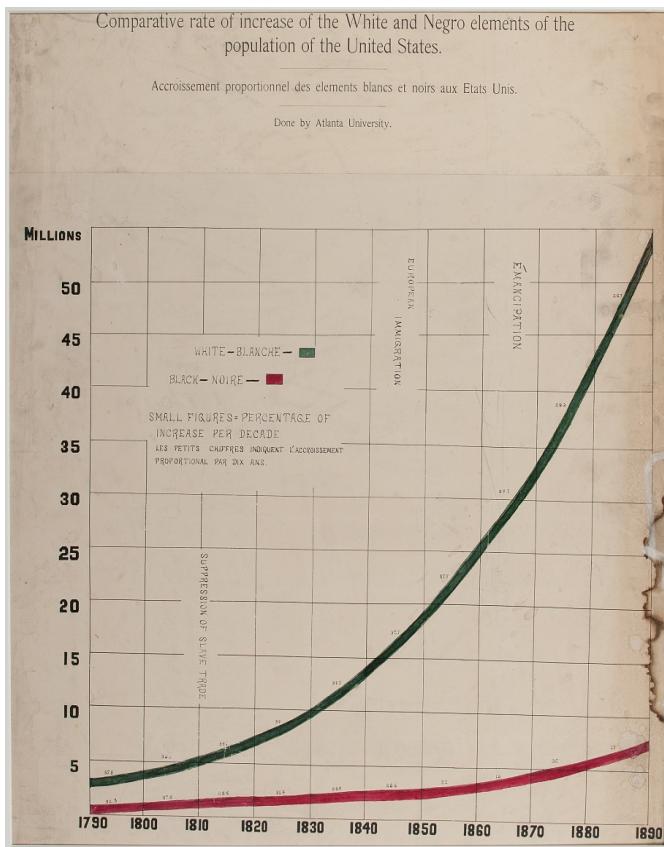
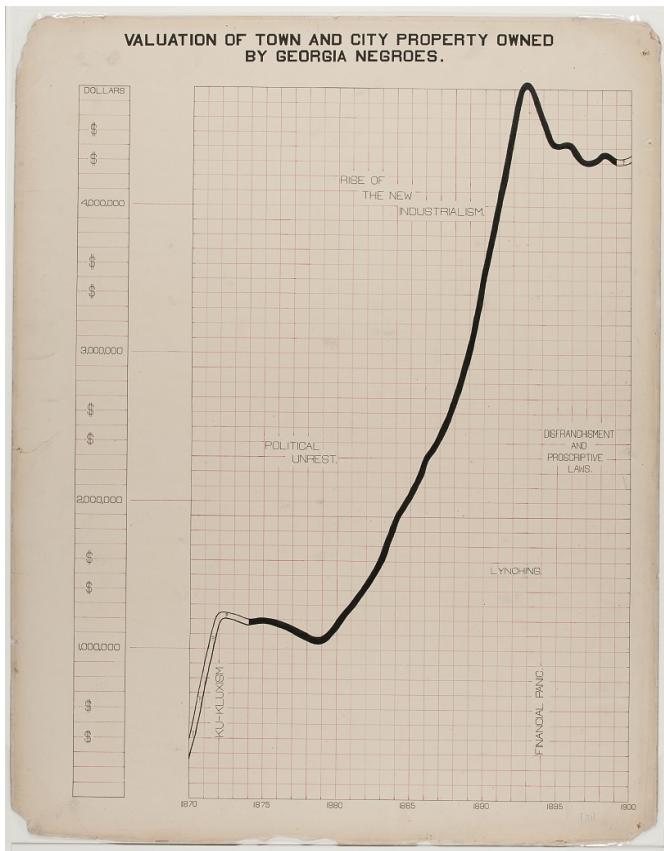




Graphs

Only three of the visuals use the traditional line chart. Two of the three use red grid lines (plates 7, 21). Plate 7 in unusual in that the date is the y axis and the measure is the x.





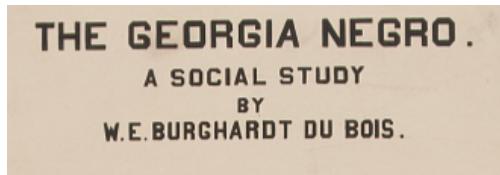
Dimensions

In the context of the Paris exposition, the Du Bois visualizations were large format, 22x28 inch posters, mostly in portrait orientation. (exceptions include plates 30 and 31). To duplicate this layout use a aspect ratio of approximately 0.78 (portrait)

or 1.27 (landscape). For example setting your canvas to 1584x2016 pixels, at 72 pixels/inch, will duplicate the original canvas. Alternatively smaller sizes can be used preserving the aspect ratio.

Typography

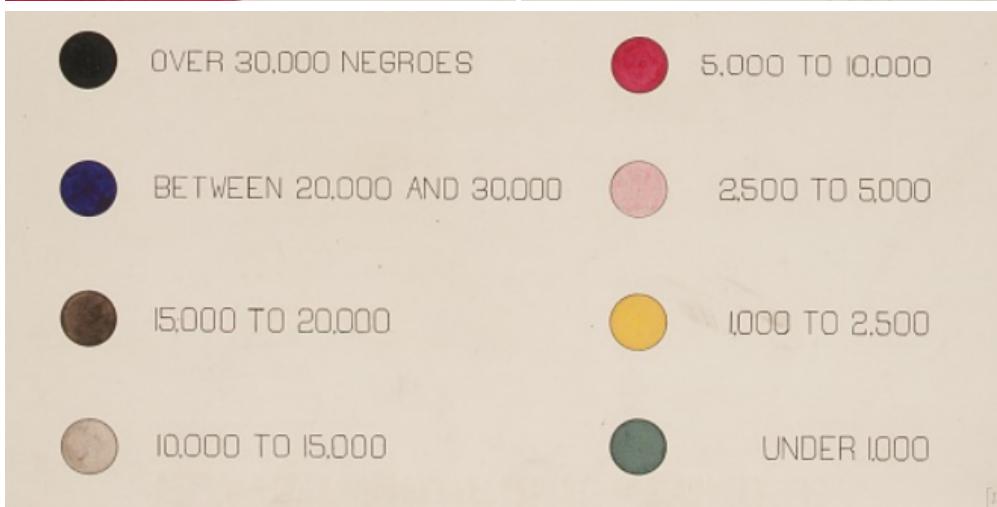
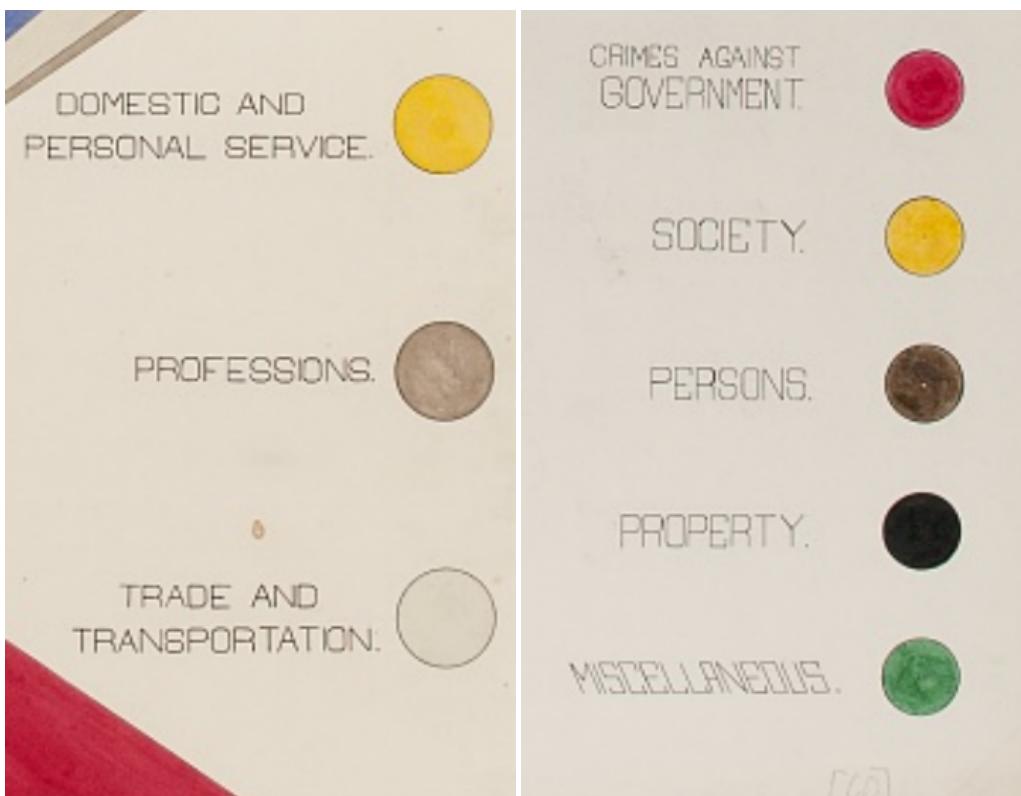
Each visual includes a title: typically hand-lettered, sans-serif bold, centered all-caps with a period at the end. The titles may span 2-3 lines and its size of typically 3%-4% if the overall width. In some cases a typeset title is used using a serif font.



To duplicate using modern tools, [Public Sans](#) and [Charter](#) can be used for sans-serif and serif fonts. Other choices are [B52-ULC W00](#) for titles and [Vasarely-Light](#) for running text.

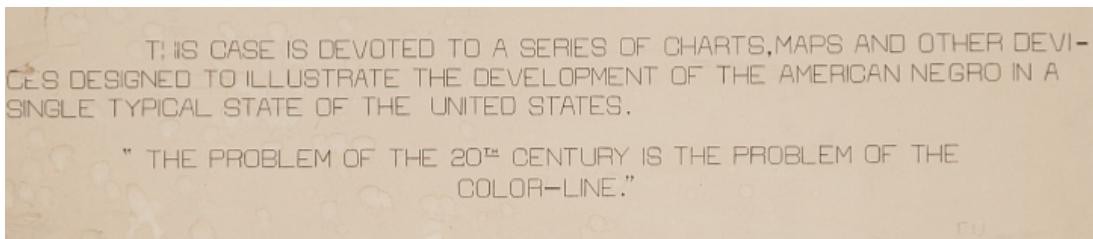
Legends

Several visuals use colored legends (plate 2, plates 5-6, 37,38, 60). The legends usually use a circle of color, (except for plate 2), and may be horizontal or vertically oriented.

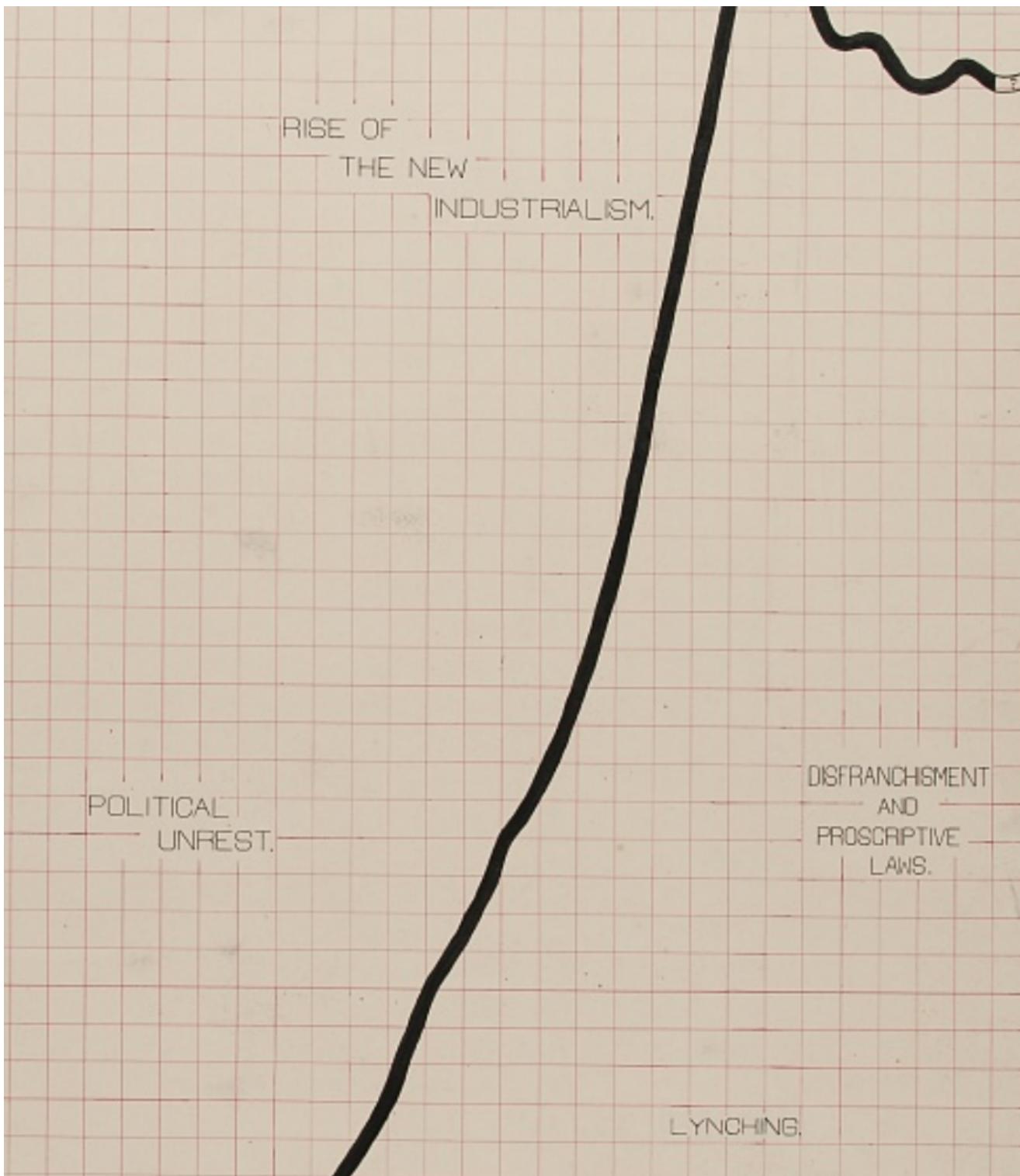


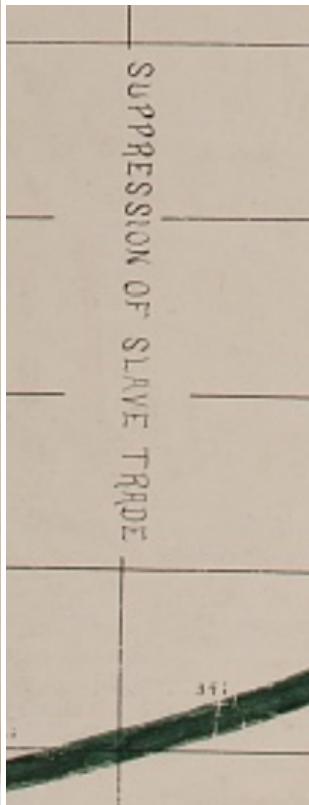
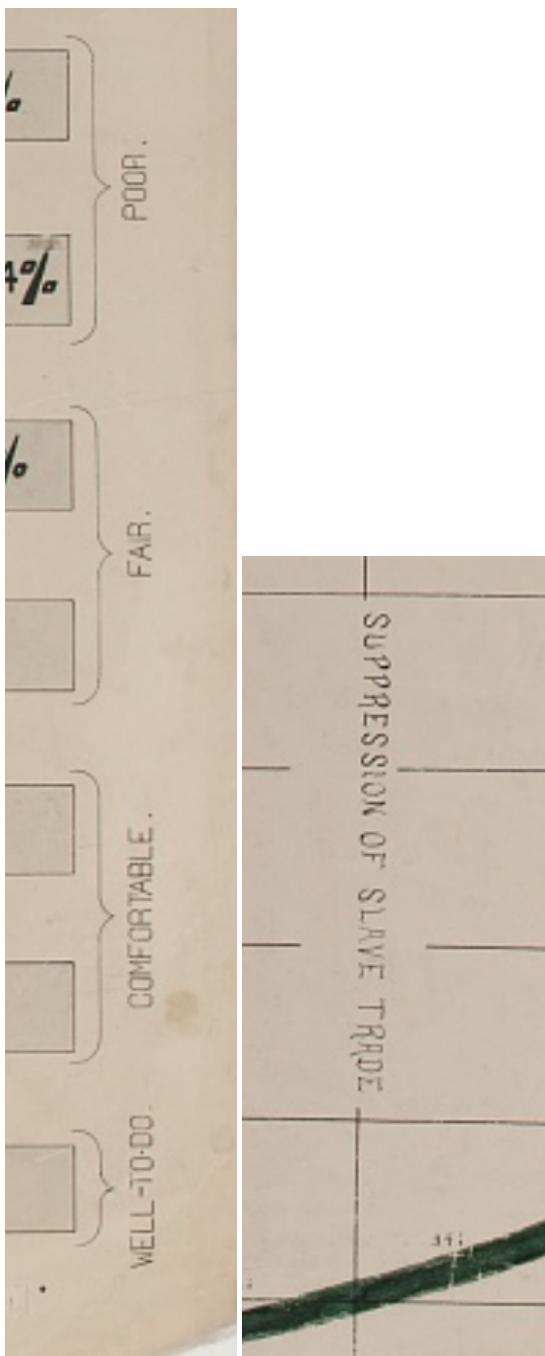
Annotations

Many visualizations include commentary and annotations, which are typically done in a lighter weight and color. All text is in ALL-CAPS.



Annotations are also used to clarify the message of the visual display, (often using rotated text)





Colors

The use of bold solid colors is a characteristic of the DuBois style. Here are the colors in the Du Bois palette:

Name	RGB	Hex
black	rgb(0,0,0)	#000000
brown	rgb(101,67,33)	#654321
tan	rgb(210,180,140)	#d2b48c
gold	rgb(255,215,0)	#ffd700
pink	rgb(255,192,203)	#ffc0cb
crimson	rgb(220,20,60)	#dc143c

Name	RGB	Hex
green	rgb(0,128,0)	#00aa00
blue	rgb(70,130,180)	#4682b4
purple	rgb(126,101,131)	#7e6583



Note the use the Pan-African colors red (crimson), yellow, green, and black in this set.

The black, brown, and gold are used to indicate racial makeup in plates 1, 13 and 54. Plates 12, 50 and 51 use black to indicate slavery.