

## The Cartography of W. E. B. Du Bois's Color Line

*Mabel O. Wilson*



**T**he first plate of W. E. B. Du Bois's *The Georgia Negro: A Social Study* depicts two circles of a globe split in half. In one circle appears Asia, Europe, Africa, and Australia, and in the other North and South America. The plate, hand drawn on a twenty-two-by-twenty-eight-inch sheet of heavy paper, also includes an introductory statement written in neat script: "This case is devoted to a series of charts, maps and other

devices designed to illustrate the development of the American Negro in a single typical state of the United States.” That state, Georgia, is located on the map with a star. A gradient of black and brown hues connects the east coasts of North and South America to the west coastline of Africa to demarcate the distribution of the Negro race across the territory of two continents. Five vectors, labeled “routes of the African slave trade,” link ports in West Africa to the coasts of Brazil, Santo Domingo, the American South, and Portugal.

This introductory plate of the Georgia study mapped what has come to be called the “Black Atlantic world.” It geographically rendered the extent of the African diaspora in the wake of the four-centuries-long transatlantic slave trade that transported an estimated twelve to seventeen million Africans to Europe’s colonial holdings in the Americas. Presenting to the primarily white European and American audience visiting Paris’s Exposition Universelle, Du Bois gave a visual history lesson on the Atlantic slave trade. With this drawing he promised a scientifically documented report on the current state of black life in Georgia, and speculated on the future of race relations in the United States, announcing at the bottom of the image, “The problem of the twentieth century is the problem of the color-line.” In argument with commonly held beliefs among white Europeans and Americans, Du Bois made a compelling case that it was historically constituted racial inequalities—not the Negro’s innate moral failings—that would prove a central impediment to black Americans achieving social equality with their fellow white citizens. For Du Bois the legacy of racial castes would stall social, political, and economic advancement in the United States in the new century.

While in Europe to see the exhibit installed in situ at the Paris Exposition, Du Bois joined other American activists, including African American scholar and educator Anna Julia Cooper, in July 1900 at

the First Pan-African Conference hosted at London's Westminster Town Hall. Du Bois charted the international scope of the "color-line" in his speech "To the Nations of the World," delivered to the group dedicated to bolstering Pan-African solidarity and decolonizing the black world. To attendees from across the African continent and the diaspora, the fundamental question of the necessity of Pan-African solidarity could be discerned from, in the words of Du Bois, "how far differences of race—which show themselves chiefly in the color of the skin and the texture of the hair—will hereafter be made the basis of denying to over half the world the right of sharing to utmost ability the opportunities and privileges of modern civilization."<sup>1</sup> Also incorporated into his elegiac *Souls of Black Folk* published three years after the Paris Exposition, these words are perhaps Du Bois's most famous indictment of the centrality of race and racism to modern American sociopolitical life; thirty-five years after Emancipation had legally granted black Americans freedom and citizenship, racism was a wound in the body politic that continued to fester amid widespread racial segregation. His words were clearly meant to also reference the global legacy of the slave trade in depriving black people of their humanity.

How might we, therefore, understand the cartographic, geographic, and historical implications of Du Bois's "color-line" used first in the Georgia study, where it was juxtaposed with a graphic representation of the Black Atlantic world? Throughout the grounds of the nineteenth-century world's fairs, Europeans and Americans put the metropolitan and colonial world on view. Those stories about colonial conquests and magical foreign lands featured in books and newspapers could now be seen firsthand by people strolling through the carefully curated exposition halls, compounds, and grounds. According to scholar Tim Mitchell, "It was not always easy in Paris to tell where the exhibition ended and

the world began.”<sup>2</sup> Living displays of so-called primitive peoples from the African continent, jungles of South America, and islands of the Pacific could be found at many of the world’s fairs. Fair organizers positioned these ethnographic displays in stark contrast to modern progress evident in the myriad of steam engines and industrial goods on view in the machine halls and pavilions. The displays of primitive villages were meant to be both educational and entertaining. The representation of “savage” black and brown peoples affirmed that they lived in a state of nature outside of history, which in turn rationalized the extraction of resources and expropriation of labor from their colonized territories. According to these ethnographic displays, if black Americans had advanced beyond a savage state it was only because of white benevolence and the black adoption of white culture.

It is within this charged context that the infographics debuted in the American Negro Exhibit. The exhibit, which was arranged in an orderly fashion in wooden vitrines that included a system of wing frames displaying multiple formats of information, was located just to the right when visitors entered the pavilion of Social Economy. The two previous Negro Buildings at world’s fairs in Atlanta and Charleston, which hosted much larger displays of African American racial progress, had been segregated into separate pavilions, whereas in Paris the American Negro Exhibit was integrated into the larger American display.<sup>3</sup> The contributions to the American exhibit showed maps, diagrams, lantern slides, models, and photographs to demonstrate how new methods in the social sciences were being used to discipline and improve the lives of immigrants, the indigent, children, and African Americans. Calloway placed the visualizations created by Du Bois and his team prominently in the middle of the American Negro Exhibit, where they were mounted on the walls and in the wing frame display boxes.

Through charts and photographs, Du Bois's work provided an empirical study of the various conditions of black life, covering topics such as marriage, mortality, employment, property ownership, education, miscegenation, and various other categories of social progress. One method used for several of these subjects was cartography, which in both sets of infographics spatialized the scale and scope of the black diaspora from the local to the global. Historically, along with the creation of maps—critical tools in the European colonial project—there emerged a cartographic gaze that cultivated a way of seeing the world through evolving cartographic technologies and new modes of representing a world no longer ruled by God and monsters but guided by reason and science. Cartography had given Europeans not only a way of navigating the oceans but also a means of exploring, mapping, and claiming territories in Africa, Asia, and the New World. The desire to map the world brought Europeans in contact with peoples in diverse regions. These colonial encounters recorded in maps and noted in the diaries of explorers provided detailed narratives for natural historians and philosophers to study and invent the comparative physiognomic variations of the human species, leading to geographic-based theories of racial difference. This conceptualization of terrestrial space and time became a productive tool such that, in the words of geographer Denis Cosgrove, “global mapping of climate and physical environments and of biologically defined human groups underpinned geographical theories of race.”<sup>4</sup> By linking racial difference to geography and climate, Europeans conceived a teleology of human development that situated themselves as the vanguard of a civilization whose cultural and technological products would be placed on view at the nineteenth-century grand expositions. At the pavilion of Social Economy, conceived by sociologist Ferdinand Le Play, who masterminded the taxonomy of many of the nineteenth-century Paris

fairs, the cartographic gaze was trained on the social landscapes of nations, where modern societies were categorized and subdivided on a hierarchy ranging from those deemed socially undesirable—such as orphans, people of color, and the poor—to those who defined the social norm, such as European and Anglo-American families capable of productively contributing to modern society. The core mission of Du Bois’s sociological research was to forcefully refute the widespread belief that black Americans were innately inferior and incapable of social advancement.

In both the Georgia study and the second series of infographics exhibited at the Exposition Universelle, Du Bois and his team redeployed the Western methods of cartography that had been used to marginalize and exploit black life by inscribing the black world back into history and geography. In an essay highlighting the contents of the American Negro Exhibit published in the *American Monthly Review of Reviews*, Du Bois wrote that the entire exhibit recorded black self-determination as a portrait of a “small nation of people” who were “shown to be studying, examining, and thinking of their own progress and prospects.”<sup>5</sup> These were bold black-nationalist sentiments—that black Americans could contemplate their past, present, and future connected with an emergent Pan-African solidarity. The black consciousness of a people who understood themselves in a particular time and place strongly refuted the notion that the African had no history, no civilization, and hence no culture. By positioning world history geographically, Georg Wilhelm Friedrich Hegel, in his seminal *Lectures on the Philosophy of History* (1837), observed of Africans that “the condition in which they live is incapable of any development of culture, and their present existence is the same as it has always been.... The earliest reports concerning this continent tell us precisely the same, and it has no history in the true

sense of the word.”<sup>6</sup> The Du Bois data visualizations, and the American Negro Exhibit as a whole, rebuked beliefs that were foundational to the modern ethos of social progress, particularly the claim that black existence was steeped in what Hegel called “sensuous arbitrariness,” that black people lacked the reason and moral capacity to be citizens, poets, philosophers, and a host of other modern subjectivities.

When Du Bois rendered a geographic history of the African slave trade and mapped present conditions in Georgia, he sutured the two together and illustrated through evidence—black lines on white pages—how centuries of racial oppression and exploitation, not a lack of natural aptitude, had shaped the current abysmal conditions of black life worldwide. This was a bold message to broadcast in Paris to a white European and American audience who had been the agents and benefactors of centuries of ruthless black dispossession. Thus for Du Bois to map the black world was to boldly visualize a cartography refuting Hegel’s assertion that “what we understand as Africa proper is that unhistorical and undeveloped land which is still enmeshed in the natural spirit.”<sup>7</sup> The series launched a powerful counter-argument, stating that blacks had always been a part of world history and that “black spirit” was evident in the range of culture on view—from literature and poetry to patents and other works of independent black genius. As Du Bois observed, the American Negro Exhibit showed “the development of Negro thought”<sup>8</sup> and revealed “a small nation of people, picturing their life and development, without apology or gloss, and above all made by themselves.”<sup>9</sup>





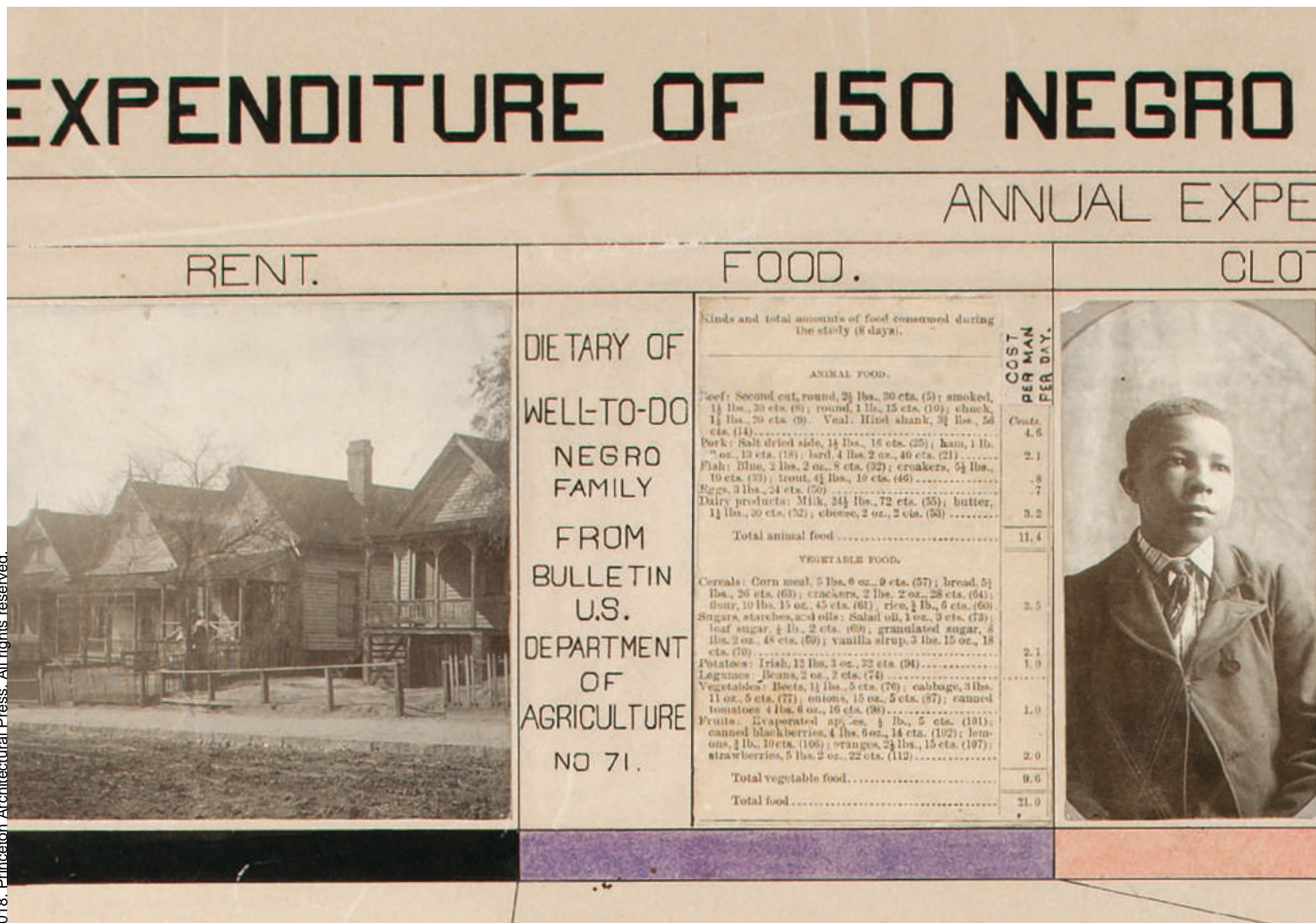
## Introduction to the Plates

*Silas Munro*

**A** prolific author, renowned sociologist, fierce civil rights advocate, co-founder of the NAACP, and a historian of black lives, W. E. B. Du Bois was also a pioneer of data visualization. The plates that follow are grouped into two distinct but highly related sets. *The Georgia Negro: A Social Study* consists of twenty-nine brightly colored diagrams, plus three maps and four tables. *A Series of Statistical Charts Illustrating the Condition of the Descendants of Former African Slaves Now Resident in the United States of America* includes a group of twenty-seven additional diagrams. Working in ink, gouache watercolor, graphite, and sprinklings of photographic prints, Du Bois and his collaborators at Atlanta University generated crisp, dynamic, and modern graphics as a form of infographic activism. Instead of solely relying on the diorama, a table-top model presentation often used at world's fairs during the time, Du Bois and his team used information design as a rhetorical

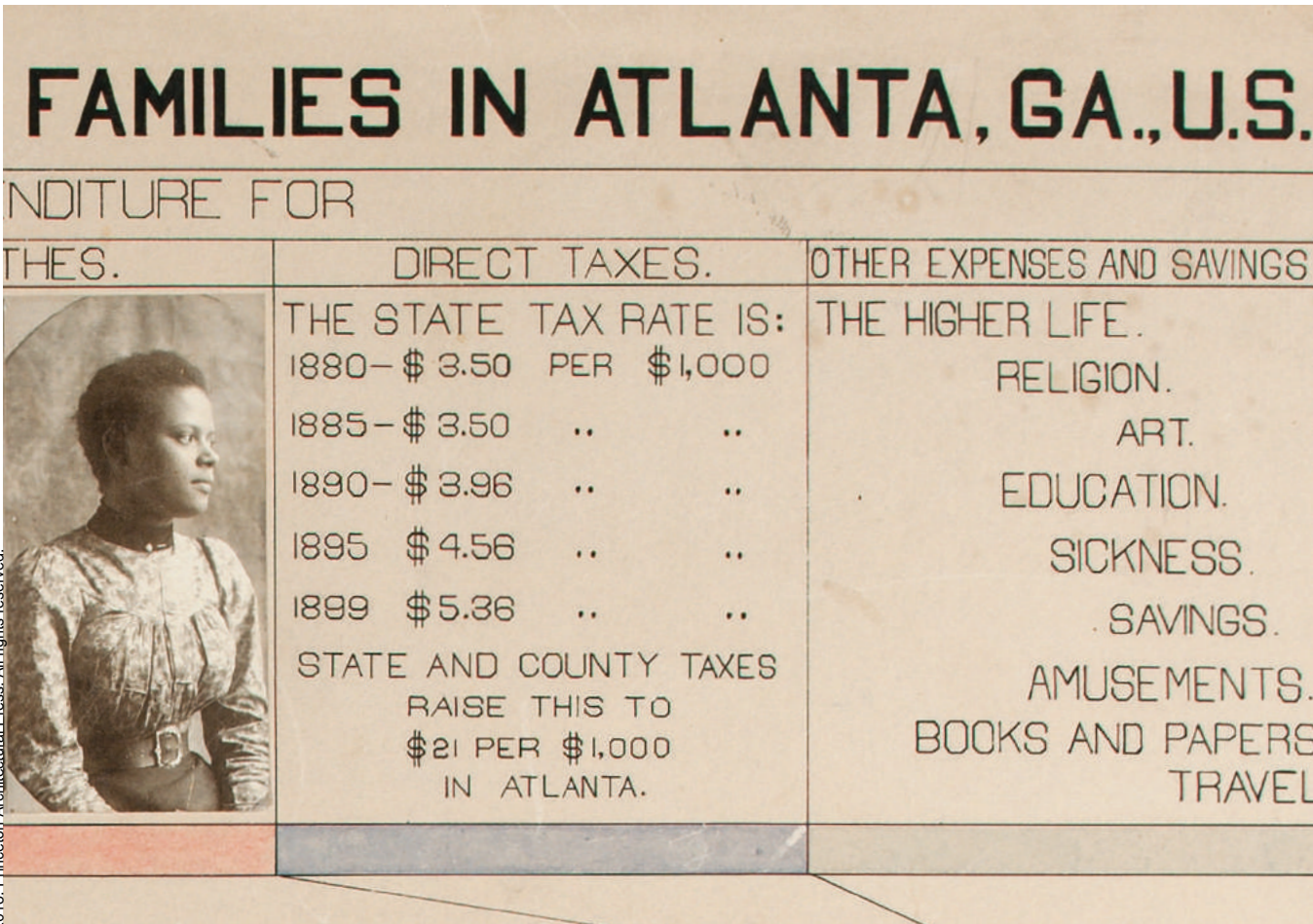
device.<sup>1</sup> Extant photo documentation shows at least half of the present diagrams mounted in wing frames set on movable standards that allowed fairgoers to flip through large, double-sided plates of the rich data at eye level.<sup>2</sup> Tracing from the slave trade, through the Middle Passage, to Emancipation and beyond, Du Bois's datasets used a unique visual form to make arguments for the equality and sophistication of black Americans living under Jim Crow and the shadow of enslavement.

Made a decade before the rise of dominant European avant-garde movements, these works predate modular design elements often

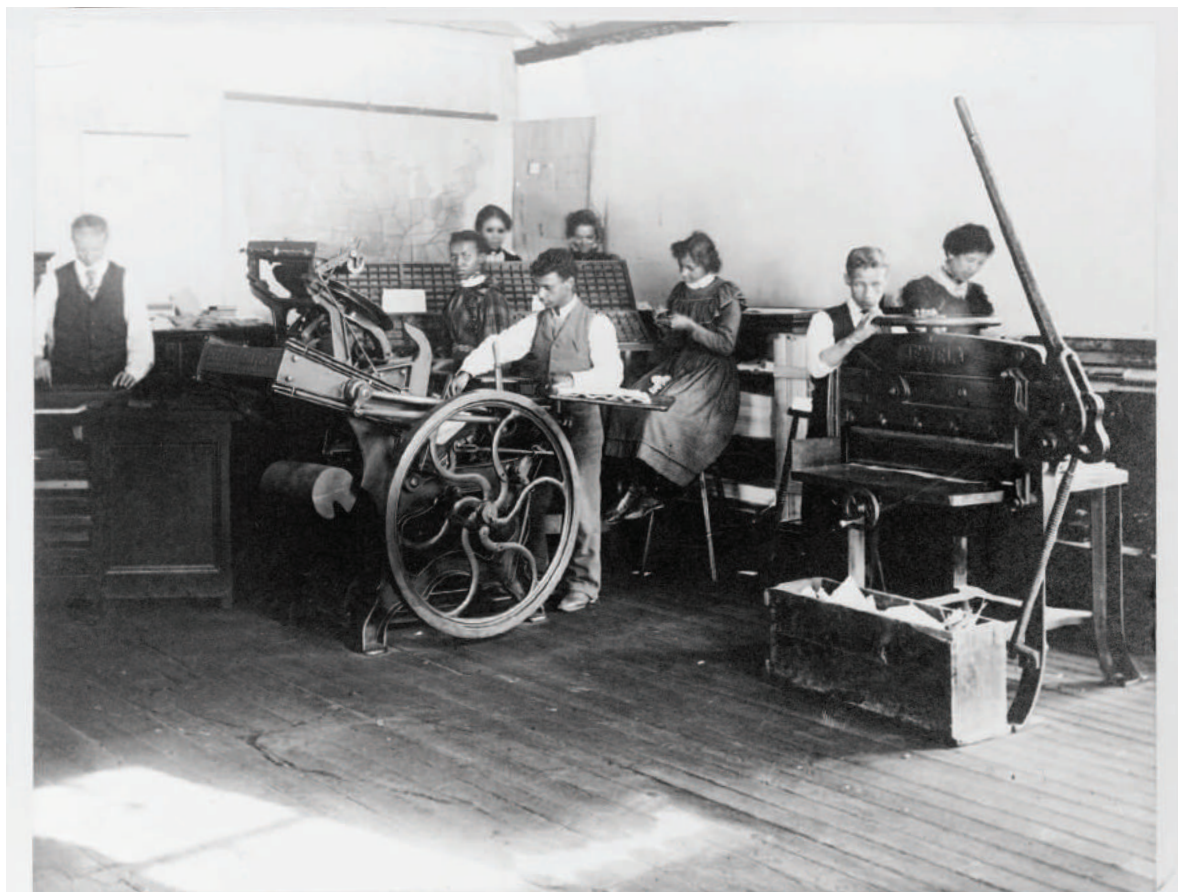


Detail of plate 31: *Income and Expenditure of 150 Negro Families in Atlanta, GA, U.S.A.*

considered to have their origins in Russian constructivism, De Stijl, and Italian futurism. These modular elements are typically composed of abstract shapes built from circles, triangles, and rectangles in bright primary colors or black and white. The Du Bois infographics were published twenty years before the founding of the Bauhaus, a German art and design school famous for a rigorous foundation, in part focusing on modular design elements. The colors, shapes, and typography of the charts also foreshadow critical developments in the history of data visualization, including simplified pictographic form defined in the Isotype



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Printing.

Students working printing presses at Clafin University,  
Orangeburg, South Carolina, ca. 1899.

picture language, minimal typographic palettes used by the International Typographic Style, and visual narratives in chart form explained in the research of Edward Tufte.<sup>3</sup>

The Georgia study utilizes data gleaned from state census data as well as original research from the department of sociology at Atlanta University, while *A Series of Statistical Charts Illustrating the Condition of the Descendants of Former African Slaves Now in Residence in the United States of America* zooms out to include a wider set of facts and figures on black populations across the United States. Both sets use a range of visual strategies including geographic maps, circle and spiral diagrams, bar and area charts, and complex tables and grids, giving a vivid variety to the data. In multiple instances across the two sets, the Atlanta University team took similar subjects, such as education, colorism, and economic class, and reproduced them twice, with different visual structures. There are considerable differences between the two series of images, including different typographic treatments, level of finish, and consistency of visual language. Yet Du Bois and his team clearly intended a specific reading order to both sets that builds a persuasive narrative through visual data over time.

The diverse chart types show that the Du Bois data portraits are part of a long lineage of visualizing statistical data. The Scottish statistician William Playfair pioneered the bar chart and the line graph (1786), and the pie chart (1801), all of which deeply inform the visual structure of the Du Bois plates.<sup>4</sup> Building on Playfair's work, Florence Nightingale (1820–1910) linked data visualization to social action with her own novel form, the rose diagram (1858), to convince the British government to improve the care of its wounded soldiers.<sup>5</sup> As a well-read and well-traveled intellectual, Du Bois would have had exposure to these and other examples of data in graphic form.

The infographics were the product of multiple forms of collaboration and co-creation. Across the diagrams there are many references to Atlanta University, and the lead infographic of the second series of images explicitly states that it was “prepared and executed by Negro students under the direction of Atlanta University.” Contemporary sources suggest that an Atlanta University alumnus, William Andrew Rogers, who had recently received his bachelor’s degree in sociology, was the point person responsible for making and coordinating the design and production of the actual graphics.<sup>6</sup> Few records remain about the working methods of Rogers, who may have been living in Petersburg, Virginia, when he worked on the project. Based on the volume of the designs, each piece’s complexity and detail, and the compressed project timeline of only a few months to prepare their portion of the American Negro Exhibit, it seems implausible that Rogers and Du Bois worked alone to complete the project.<sup>7</sup> Rogers and Du Bois no doubt facilitated renderings and typesetting from additional unnamed Atlanta University students and alumni, who also assisted with the collection of field data.

Although Du Bois and his team were hardly the first to visualize data with this level of rigor in the pre-computation era, these designs are unique and important. The rhetorical innovation in the social sciences coupled with a visual aesthetic very much at home in the twenty-first century makes for a prescient body of design work. These visualizations offer a prototype of design practices that were not widely utilized until more than a century later, anticipating the trends—now vital in our contemporary world—of design for social innovation, data visualization in service to social justice, and the decolonization of pedagogy.