Extra Life: A Short History of Living Longer
Episode 2 - Data
Environmental Racism

In the second episode of _Extra Life_, science author Steven Johnson and historian David Olusoga discuss how data has been a powerful tool in extending human lifespans across the globe.

Warm-up:

1. Brainstorm responses to the following questions about data:

- What is data?
- How do you capture data?
- What does data _look_ like?

2. Review this definition of data found on Merriam-Webster website.

data   noun, plural in form but singular or plural in construction, often attributive

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da·ta | \ ˈdā-tə 🔊, ˈda- 🔊 *also* ˈdä- 🔊 \

Definition of *data*

1   **:** factual information (such as measurements or statistics) used as a basis for reasoning, discussion, or calculation
    // the *data* is plentiful and easily available
    — H. A. Gleason, Jr.

    // comprehensive *data* on economic growth have been published
    — N. H. Jacoby

2   **:** information in digital form that can be transmitted or processed

3   **:** information output by a sensing device or organ that includes both useful and irrelevant or <u>redundant</u> information and must be processed to be meaningful

- How does this definition of data compare to your definition of data?
- Is this definition missing anything?
- How do we use data in the world?
- How do you use data in your life?

3. In this lesson, we'll be focusing on the contributions of sociologist and civil rights activist W.E.B. Du Bois. To learn more about Du Bois before watching this clip, review any of the following publications that summarize who he was and how he contributed to the advancement of Black people and communities in the United States.

- [W.E.B. Du Bois | NAACP.com](#)
- [W.E.B. Du Bois | History.com](#)
- [W.E.B. Du Bois | Stanford Encyclopedia of Philosophy](#)
- [W.E.B. Du Bois | Brittanica.com](#)

Key Vocabulary:
Data
Living conditions
Child mortality
Health outcomes
White establishment
Life expectancy
lifespan
Surveying
Overcrowding
Systemic racism
Data visualization
White establishment
Weathering

Introducing the Video: *Extra Life* **| Episode 2: Environmental Racism**

In this video clip, we see how sociologist and civil rights activist W.E.B. Du Bois used data and data visualization to highlight an injustice that was shortening the lifespans of Black Americans in Philadelphia in 1896.

Watch the clip (8 minutes and 50 seconds) and answer the comprehension questions below.

Comprehension Questions:

At the beginning of this clip, Johnson describes an openly racist belief about Black Americans. What was that belief? How did this belief motivate Du Bois' research?	
What was the key question driving Du Bois' research in the 7th ward of Philadelphia?	
Describe Du Bois' research process. How did he collect data?	
What did Du Bois' learn about living conditions in the 7th Ward? Make a list.	
Based on the data, what conclusion did Du Bois make about the way living conditions were affecting Black Americans?	

How did Du Bois use data visualization to highlight injustices that affected Black Americans?	
Describe the term *weathering*. How has *weathering* impacted the experiences of Black Americans in the past and today?	

Discussion Questions:

1. How did Du Bois use data collection to dispel a myth about Black Americans in the late 1800s? What was unique about his process and how did he focus on the experiences and voices of Black people to reveal a greater truth about society?
2. Are the conclusions that Du Bois made in 1896 still relevant today? Why or why not?
3. When referring to Du Bois' findings, historian David Olusuga talks about "a parallel America that never happened that could have happened."
   a. In what ways do you agree with this statement? In what ways do you disagree with this statement?
   b. Imagine yourself in 1896. The city of Philadelphia wants you to use Du Bois' research and data to improve living conditions in the 7th Ward. What changes would you make? How would you use data collection to learn more information or check your progress?
   c. If the world had really embraced Du Bois' findings in 1896, how might our lives be different today?

Extension Activity:

Steven Johnson says, "When I look at these bold and colorful images, it's almost like looking at modern art, but it's art in the service of social progress. Not so much speaking truth to power as it is using data to reveal truths — to make the invisible visible."
1. Choose one of the Pulitzer Center articles below that uses data and data visualization.
   - [Women on the Move](#)
   - [Refugees from the Earth](#)
   - [Tracking the Vaccine: Eye on Equity](#)
2. Then answer the questions:
   ○ What kind of data is being collected and why?
   ○ How is the data being represented visually?

For more curricular materials connected to *Extra Life* and "The Living Century" by Steven Johnson, visit
www.pulitzercenter.org/extralife.

- ○ What truth is being revealed?
- ○ Given the data, what steps should be taken?
3. Identify a problem in your own community. Craft a plan to collect data around the problem. Then create a data visualization that captures all the information that you collected.