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ACTIVITY AND ASSIGNMENT - Data Comics and Gerrymandering

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ACTIVITY AND ASSIGNMENT

Data Comics and Gerrymandering

TOPICS

Redistricting, gerrymandering, Voting Rights Act, data comics, data visualization

ACTIVITY TYPES

Reading comprehension, in-class discussion, textual analysis, historical analysis, comparative analysis, independent research, creative assessment, reflection

DURATION

Discussion: Four classes

Assignment: 7–10 days

Texts

UNDERSTANDING REDISTRICTING

- Corasaniti, Nick et al. 2021. "How Maps Reshape American Politics." *The New York Times,* July 11, 2021.
- Levitt, Justin. 2020. "Redistricting 101." In *All About Redistricting*. Los Angeles: Loyola Law School.
- Koeze, Ella et al. 2022. "Can You Gerrymander Your Party to Power?" The *New York Times*, January 27, 2022.

UNDERSTANDING DATA COMICS

- Bach, Benjamin et al. 2017. "The Emerging Genre of Data Comics." *IEEE Computer Graphics and Applications* 37 (3) (May): 6–13.
- Segel, Edward and Jeffery Heer. 2010. "Narrative Visualization: Telling Stories with Data." *IEEE Transactions on Visualization and Computer Graphics* 16 (6) (Nov.-Dec.): 1139–48.
- Alamalhodaei, Aria, Alexandra Alberda, and Anna Feigenbaum. 2020. "Humanizing Data through 'Data Comics': An Introduction to Graphic Medicine and Graphic Social Science." In *Data Visualization in Society*, edited by Martin Engebretsen and Helen Kennedy, 347–66. Amsterdam: Amsterdam University Press.

DATA COMICS AND DATA VISUALIZATIONS

- Warner, Andy. 2016. "Ballot Battles, part III." *KQED*. August 8, 2016.
- Walch, Olivia. 2017. "Changing the Math on Gerrymandering." *The Nib*. October 4, 2017.
- Bycoffe, Aaron et al. 2018. "The Atlas of Redistricting." *FiveThirtyEight*. January 25, 2018.
- Best, Ryan et al. 2022. "What Redistricting Looks Like in Every State." *FiveThirtyEight*. June 19, 2022.
- Brown, Justin. 2023. "America's New Majority-Minority Congressional Districts." *Battleground*. September 8, 2023.
- Levinson, Cynthia, Sanford Levinson, and Ally Shwed. 2020. "How to Cherrypick Voters." *Fault Lines in the Constitution*. New York: World Citizen Comics.

Overview

This activity combines learning about a specific issue related to voting rights with an exploration of comics as a mode of data visualization. The activities are designed to help students understand the problem of gerrymandering and to prepare them to produce their own data visualizations. Students first read about the process of redistricting and the history of gerrymandering to develop a detailed understanding of the concept. From here, students explore various visual representations of issues related to gerrymandering. Since gerrymandering is predicated on redrawing maps and altering percentages, it is fundamentally bound up with the visual organization of information. To this end, in the second part of the activity, students analyze how various artists have used comics and data visualization to help readers understand various issues related to, and specific instances of, redistricting. The activity culminates in the production of a data comic about gerrymandering, where students research a specific contemporary issue related to redistricting and voting rights and use online tools to produce their own informational data comic.

Instructors can follow the entire three-step activity or select particular steps and/or questions according to their own syllabus, course goals, and time constraints. Students can use the handout on how to close-read comics (see the How to Close-Read Comics activity) to help guide their analysis of various texts in step II and the production of their own data comic in step III. Discussion activities can be conducted in line with the principles of democratic dialogue and reflective discussion in either large or small groups (see the Deliberative Dialogue activity and assignment). Instructors may also choose to have students answer questions individually (either in class or for homework). This way, instructors have maximum flexibility in adapting the activity to the needs and goals of their own class.

Goals

Through this activity students will:

- Practice civic engagement through the principles of democratic dialogue and reflective discussion.
- Improve deep listening, collaboration, and reflection skills through structured conversation.
- Deepen their understanding of the concepts of redistricting and gerrymandering and specific historical instances of these practices, as well as past and future attempts to limit gerrymandering.
- Develop their understanding of comics history and the specificities of data comics and data visualization.
- Practice close-reading skills with a particular emphasis on elements of the comics form, as they analyze the content, structure, and style of various comics texts.
- Improve critical thinking, analytical, and argumentation skills as they articulate interpretations supported by textual evidence.
- Improve research skills as they research specific cases of, and topics related to, gerrymandering.
- Practice creative design skills as they produce and analyze their own data comics.
- Evaluate the ethical and humanistic dimensions of data visualization.

Step I: History of Gerrymandering

For this portion of the assignment, students will complete two short readings and play an online game to learn about redistricting and the problem of gerrymandering. Students will also research four recent high-profile cases—North Carolina (2016), Alabama (2021), Georgia (2021), and Wisconsin (2021).

PART I: UNDERSTANDING REDISTRICTING

Students should use these readings to discuss the following questions and develop their understanding of the processes and issues related to redistricting.

READINGS

- Corasaniti, Nick et al. 2021. "How Maps Reshape American Politics." *New York Times*, July 11, 2021.
- Levitt, Justin. 2020. "Redistricting 101." In *All About Redistricting*. Los Angeles: Loyola Law School.
- Koeze, Ella et al. 2022. "Can You Gerrymander Your Party to Power?" *New York Times*, January 27, 2022.

COMPREHENSION QUESTIONS

1. Why are congressional district boundaries redrawn? How often are they redrawn and who redraws them?
2. Are there any federal standards related to redistricting? How did the 1965 Voting Rights Act impact the redistricting process? What kinds of regulations can states place on the redistricting process?
3. What is gerrymandering? Where does the term come from? What are the most common techniques used to gerrymander a district?
4. Why do political parties engage in gerrymandering? What are the possible consequences? How does gerrymandering impact the democratic principle of "one person, one vote"?

PART II: RESEARCHING GERRYMANDERING

Working in groups, research one of following recent high-profile cases of gerrymandering: North Carolina (Rucho vs. Common Cause), Alabama (Allen vs. Milligan), Georgia (Alpha Phi Alpha Fraternity vs. Raffensperger), Wisconsin (Clarke vs. Wisconsin Elections Committee). Your goal is to research this case and find answers to the following questions:

1. Who redrew the congressional maps and when?
2. Which specific districts are being contested, by whom, and on what grounds?
3. What do these new district maps look like compared with the previous maps?
4. What legal action was taken? Where is the case currently? What is the current status of the contested maps?
5. What is the significance of this case in terms of the precedent it upholds/sets for future cases?

Step II: Visualizing Gerrymandering

In this portion of the activity, students first read about the emerging genre of data comics. Using discussion questions, students explore the aims and investments of data comics as well as the genre's relationship to other data-driven visual media, including infographics, data visualizations, and graphics journalism. After developing a shared vocabulary for talking about the form and function of data comics, students analyze a series of data comics and data visualizations focused on gerrymandering.

PART I: UNDERSTANDING THE GENRE

READINGS

- Bach, Benjamin et al. 2017. "The Emerging Genre of Data Comics." *IEEE Computer Graphics and Applications* 37 (3) (May): 6–13.
- Segel, Edward and Jeffery Heer. 2010. "Narrative Visualization: Telling Stories with Data." *IEEE Transactions on Visualization and Computer Graphics* 16 (6) (Nov.-Dec.): 1139–48.
- Alamalhodaei, Aria, Alexandra Alberda, and Anna Feigenbaum. 2020. "Humanizing Data through 'Data Comics': An Introduction to Graphic Medicine and Graphic Social Science." In *Data Visualization in Society*, edited by Martin Engebretsen and Helen Kennedy, 347–66. Amsterdam: Amsterdam University Press.

COMPREHENSION QUESTIONS

1. What do Bach et. al understand as the four essential components of data comics, and what are the key questions and concerns that define each one?
2. What do Segel and Heer mean by author- versus reader-driven visualizations? How do messaging and interactivity relate to this tension?
3. How do Segel and Heer classify the design strategies of genre, visual narrative, and narrative structure? Which specific strategies in each of these areas do you think are the most effective in the examples they give and why?
4. Why do Alamalhodaei and her coauthors think that it is important to humanize data? What are the benefits of explaining data through comics? How do they humanize abstract information?

PART II: ANALYSIS OF SPECIFIC DATA COMICS AND DATA VISUALIZATIONS

READINGS

- Warner, Andy. 2016. "Ballot Battles, part III." *KQED*. August 8, 2016.
- Walch, Olivia. 2017. "Changing the Math on Gerrymandering." *The Nib*. October 4, 2017.
- Bycoffe, Aaron et al. 2018. "The Atlas of Redistricting." *FiveThirtyEight*. January 25, 2018.
- Best, Ryan et al. 2022. "What Redistricting Looks Like in Every State." *FiveThirtyEight*. June 19, 2022.
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DISCUSSION QUESTIONS

Compare one of the data comics with one of the data visualizations that you read for today and discuss the following questions:

1. What techniques and forms do the comic and visualization use to visually represent data and information? How do text and image interact and to what effect? Do these visualization techniques make it easier to understand this information? Why/why not?
2. What stories do the comic and visualization tell? Are they telling the same kind of story? Are certain kinds of narratives about gerrymandering better suited to one or the other form? Why/why not?
3. How are the narratives organized in the comic and the visualization? Are they more author- or reader-driven? How challenging is it to follow the logic of the comic or the visualization, to discern cause-and-effect relationships, or to connect discrete pieces of information to form a deeper understanding?
4. How do the aesthetic styles of the comic and the visualization differ? How do choices about color, page layout, and graphiation grab and maintain your attention? How do they impact your impression of the accuracy and reliability of the information and data?
5. Does the comic or visualization have an emotional impact? How, if at all, do they humanize the data and/or articulate the lived experiences and impacts of gerrymandering? Whose experiences do they center? Whose are left out?

Step III: Producing your own Data Comic

For the final part of this activity, students will create their own data visualization about a specific topic related to redistricting and gerrymandering. This assignment draws on the knowledge students have learned about the history of gerrymandering, the impact of the Voting Rights Act, and particular instances of gerrymandering, as well as the function of data comics and the principles of data visualization and graphic design.

ASSIGNMENT OVERVIEW

For this assignment, you will design a data comic or data visualization that meaningfully communicates key information about a specific issue related to redistricting. You will also write a reflection essay that explains the creative decisions you made in composing your data comic/visualization.

TOPIC

Exactly what your comic focuses on is up to you; you may explore one of the four cases of redistricting that we've looked at in class; you may take up a different, particular case of redistricting, either contemporary or historical; or you may focus on how certain parts of the Voting Rights Act, or their erosion, have impacted redistricting, for example. At a minimum your topic should be clearly related to redistricting, involve data that can be represented visually, and be focused enough to be expressed in a short data comic or data visualization.

FORM

Similarly, you will need to decide whether you wish to create a data comic or a data visualization. Again, it's up to you which you choose, and you should base your decision on which mode best suits the information you're presenting and the way you wish your reader to experience it. If you choose to create a data visualization, you can use an online program to help with design (for example, Piktochart, Venngage, Infogram, Canva, or Adobe Illustrator). Alternatively, you may draw your data visualization by hand. If you choose to create a data comic, it must be hand-drawn.

LENGTH

The length of your comic or visualization will depend on the particular form you choose. If you create a data visualization this may be one page or a series of pages (if you're planning something with an author-driven narrative and/or interactivity). Similarly, if you choose to create a data comic, it will be several pages long. The actual length of your project will also vary depending on page dimensions, as you may change the shape and size of the page so that it better suits the organization of your information. However, you can use the following as a general guide to length:

- For a single page data visualization: one page at 17×22 or equivalent
- For a multipage data visualization: 5–6 pages at 5×7 or equivalent
- For a data comic: 3–4 pages at 8.5×11 or equivalent

REFLECTION ESSAY

Alongside your data comic or visualization, you will submit an accompanying essay that explains how you approached the construction of your comic or visualization and the decisions you made regarding content, narrative form, and stylistic techniques. This essay is also the place for you to explain your intent should the final comic or visualization not quite meet the vision you had in your mind (this isn't an art or a graphic design class, and I appreciate that your technical skills in these areas may make it difficult to effectively express your ideas!). The goal is for you to reflect on the design process and more deeply consider how the various formal, stylistic, and narrative techniques that you've attempted to incorporate in your design generate meaning and shape the reading experience. This essay should be about 5–6 pages in length. Since it is a reflection essay, use of the first person ("I") is perfectly acceptable.

GRADING CRITERIA

Taken together, your comic/visualization and the accompanying reflection essay will be graded based on how well they demonstrate the following criteria. You will not be graded on your artistic ability; rather, your grade will be based on your thought processes and intentions and how well you explain these in your reflection essay:

FOCUS AND PURPOSE

Does the comic/visualization focus on a specific issue related to redistricting? Is that issue clearly defined? Does the comic/visualization set boundaries around the issue so that it fits the parameters of the assignment? Does it make its purpose clear to its reader?

DEVELOPMENT

Is the comic/visualization thoroughly researched using quality sources? Does it engage with the topic in-depth and demonstrate a relatively comprehensive and detailed understanding of the issue at hand? Does it incorporate specific data related to its topic? Is this data well explained and easy to understand? Is its relationship to the issue and the larger function of the comic/visualization clear?

STRUCTURE AND ORGANIZATION

Is the information clearly and intentionally organized? Is it clear how the reader should interact with and "read" the comic/visualization, and does this narrative organization reinforce its larger function? Does the comic/visualization frame data in ways that are ethical, easy to understand, and meaningful? Does it demonstrate a considered application of the techniques of comics style and/or graphic design? Does it use these techniques to effectively communicate information, establish relationships, create rhetorical emphasis, and help the reader understand the function of the comic/visualization?

TONE AND STYLE

Is the comic/visualization visually appealing and engaging for the reader? Does its tone reinforce its larger function? Does the comic/visualization demonstrate an understanding of how tone can be manipulated via comics style and graphic design? Does it demonstrate an understanding of how these techniques and stylistic choices impact the reader's engagement with the information?