



REFERENCES

This is a chapter-by-chapter list of data sources and literature used in Jonathan Schwabish's book, [Better Data Visualizations: A Guide for Scholars, Researchers, and Wonks](#) (Columbia University Press, 2021). This list has not undergone the same fact-checking and copyediting as the one in the manuscript. It is provided for your use and reference.

DATA REFERENCES

Chapter 1

Anscombe, Francis J. "Graphs in statistical analysis." *The American Statistician* 27, no. 1 (1973): 17-21.

CBO's August 2018 report An Update to the Economic Outlook: 2018 to 2028. www.cbo.gov/publication/54318

World Bank. "World Development Indicators." The World Bank Group. Accessed January 2020. <https://datacatalog.worldbank.org/dataset/world-development-indicators>.

Roser, Max and Esteban Ortiz-Ospina. "World Development Indicators." Our World in Data. Accessed January 2020. <https://ourworldindata.org/global-education>.

Chapter 2

Social Security Advisory Board. "Aspects of Disability Decision Making: Data and Materials References." February 2012

World Bank. "World Development Indicators." The World Bank Group. Accessed January 2020. <https://datacatalog.worldbank.org/dataset/world-development-indicators>.

Chapter 4

Institute for Health Metrics and Evaluation. "Causes of Death (COD) Visualization | Viz Hub." Accessed January 2020. <https://vizhub.healthdata.org/cod/>.

World Bank. "World Development Indicators." The World Bank Group. Accessed January 2020. <https://datacatalog.worldbank.org/dataset/world-development-indicators>.

Broderick, Ryan. "Who Watches More Porn: Republicans or Democrats?" BuzzFeed News. April 2014. <https://www.buzzfeednews.com/article/ryanhatesthis/who-watches-more-porn-republicans-or-democrats>.

Guardian. "Full US 2012 election county-level results to download." <https://www.theguardian.com/news/datablog/2012/nov/07/us-2012-election-county-results-download#data>.

NBC News. "Presidential election results." <http://elections.nbcnews.com/ns/politics/2012/all/president/#.XiZR4lNKhTZ>.

Desilver, Drew. "A record number of women will be serving in the new Congress." Pew Research Center, December 18, 2018. <https://www.pewresearch.org/fact-tank/2018/12/18/record-number-women-in-congress/>

World Bank. "World Development Indicators." The World Bank Group. Accessed January 2020. <https://datacatalog.worldbank.org/dataset/world-development-indicators>.

Organization for Economic Cooperation and Development (OECD). Social Expenditure Database. Accessed January 2019. <https://www.oecd.org/social/expenditure.htm>.

Organization for Economic Cooperation and Development (OECD). Program for International Student Assessment (PISA), 2015 Reading, Mathematics and Science Assessment.

Joint Committee on Taxation. "A Distribution of Returns by the Size of the Tax Change for the 'Tax Cuts and Jobs Act,' As Ordered Reported by the Committee on Finance on November 16, 2017." November 27, 2017.

Luxembourg Income Study. <https://www.lisdatacenter.org/>.

Project Tycho. <https://www.tycho.pitt.edu/data>.

National Highway Traffic Safety Administration. Fatality Analysis Reporting System (FARS). [https://one.nhtsa.gov/Data/Fatality-Analysis-Reporting-System-\(FARS\)](https://one.nhtsa.gov/Data/Fatality-Analysis-Reporting-System-(FARS)).

International Social Survey Programme (ISSP). "ISSP 2009 'Social Inequality IV' - ZA No. 5400." Accessed January 2020. <https://www.gesis.org/issp/modules/issp-modules-by-topic/social-inequality/2009/>

Avery, Beth. "Ban the Box: U.S. Cities, Counties, and States Adopt Fair Hiring Policies." National Employment Law Project. July 1, 2019. <https://www.nelp.org/publication/ban-the-box-fair-chance-hiring-state-and-local-guide/>

Wikipedia. "Right-to-work law." Accessed January 2020. https://en.wikipedia.org/wiki/Right-to-work_law.

Kaiser Family Foundation. "Status of State Action on the Medicaid Expansion Decision." Accessed January 2020. <https://www.kff.org/health-reform/state-indicator/state-activity-around-expanding-medicaid-under-the-affordable-care-act/>.

Wikipedia. "State income tax." Accessed January 2020. https://en.wikipedia.org/wiki/State_income_tax.

National Conference of State Legislatures. "State minimum wages | 2020 Minimum Wage by State." January 2020. <http://www.ncsl.org/research/labor-and-employment/state-minimum-wage-chart.aspx#Table>.

National Conference of State Legislatures. "State Family and Medical Leave Laws." July 2016. <http://www.ncsl.org/research/labor-and-employment/state-family-and-medical-leave-laws.aspx>

Chapter 5

Friendly, Michael. "Playfair Balance of Trade Data." September 2018. <http://www.datavis.ca/courses/RGraphics/R/playfair-east-indies.html>.

World Bank. "World Development Indicators." The World Bank Group. Accessed January 2020. <https://datacatalog.worldbank.org/dataset/world-development-indicators>.

Federal Reserve Board of Governors. "Household Debt Services and Financial Obligations Ratios." Accessed January 2020. <https://www.federalreserve.gov/releases/housedebt/>

Bureau of Labor Statistics. Unemployment rate. <https://www.bls.gov/cps/>

Centers for Disease Control and Prevention. "National, Regional, and State Level Outpatient Illness and Viral Surveillance." <https://gis.cdc.gov/grasp/fluview/fluportaldashboard.html>.

National Institute on Drug Abuse. "Overdose Death Rates." January 2019. <https://www.drugabuse.gov/related-topics/trends-statistics/overdose-death-rates>.

Centers for Disease Control and Prevention. "CDC Wonder." <https://wonder.cdc.gov/>.

Congressional Budget Office. "The Supplemental Nutrition Assistance Program." Infographic. <https://www.cbo.gov/publication/43174>.

Congressional Budget Office. “The Social Security Disability Insurance Program.” Infographic. <https://www.cbo.gov/publication/43432>

Ruggles, Steven, Sarah Flood, Ronald Goeken, Josiah Grover, Erin Meyer, Jose Pacas and Matthew Sobek. IPUMS USA: Version 9.0 [American Community Survey 2017]. Minneapolis, MN: IPUMS, 2019. <https://doi.org/10.18128/D010.V9.0>.

Chapter 6

Ruggles, Steven, Sarah Flood, Ronald Goeken, Josiah Grover, Erin Meyer, Jose Pacas and Matthew Sobek. IPUMS USA: Version 9.0 [American Community Survey 2017]. Minneapolis, MN: IPUMS, 2019. <https://doi.org/10.18128/D010.V9.0>.

United Nations. “Population by age, sex, and urban/rural residence.” <http://data.un.org/Data.aspx?d=POP&f=tableCode%3A22>.

Google Finance. <http://finance.google.com>. Accessed January 2020.

World Bank. “World Development Indicators.” The World Bank Group. Accessed January 2020. <https://datacatalog.worldbank.org/dataset/world-development-indicators>.

Chapter 7

Soffen, Kim. “To reduce suicides, look at guns.” *The Washington Post*. July 13, 2016.

Miller, Matthew, Steven J. Lippmann, Deborah Azrael, and David Hemenway. “Household Firearm Ownership and Rates of Suicide Across the 50 United States.” *The Journal of Trauma Injury, Infection, and Critical Care*. Volume 62, Number 4. April 2007.

Washington Metropolitan Area Transit Authority. Public Access to Records Policy request. October 2019.

World Bank. “World Development Indicators.” The World Bank Group. Accessed January 2020. <https://datacatalog.worldbank.org/dataset/world-development-indicators>.

Chapter 8

United Nations. “Population by age, sex, and urban/rural residence.” <http://data.un.org/Data.aspx?d=POP&f=tableCode%3A22>.

World Bank. “World Development Indicators.” The World Bank Group. Accessed January 2020. <https://datacatalog.worldbank.org/dataset/world-development-indicators>.

Organization for Economic Cooperation and Development (OECD). “Better Life Index.” Accessed December 2019. <http://www.oecdbetterlifeindex.org/>.

Chapter 9

World Bank. "World Development Indicators." The World Bank Group. Accessed January 2020. <https://datacatalog.worldbank.org/dataset/world-development-indicators>.

Chapter 10

The White House. "President Obama's Final State of the Union." February 12, 2016. <https://obamawhitehouse.archives.gov/sotu>.

Chapter 13

Arellano, Cristina, Juan Carlos Conesa, and Timothy J. Kehoe. "Chronic Sovereign Debt Crises in the Eurozone, 2010-2012," Federal Reserve Bank of Minneapolis Economic Policy paper 12-4, May 2012, https://www.minneapolisfed.org/~media/files/pubs/eppapers/12-4/epp_12-4_chronic_sovereign_debt_crisis_eurozone.pdf

Chappell, Nathan and Adam B. Jaffe. "Intangible Investment and Firm Performance," *National Bureau of Economic Research Working Paper No. 24363*, March 2018, <https://www.nber.org/papers/w24363>.

Roth, Madeline and Amma Malik. "What keeps cities in Asia and Africa from effective public service delivery?" Urban Wire blog, Urban Institute, August 2, 2016, <https://www.urban.org/urban-wire/what-keeps-cities-asia-and-africa-effective-public-service-delivery>.

Schuetz, Jenny. "Who is the new face of American homeownership?" Brookings Institution, October 9, 2017, <https://www.brookings.edu/blog/the-avenue/2017/10/09/who-is-the-new-face-of-american-homeownership/>.

Social Security Administration. "The 2019 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds," 2019, <https://www.ssa.gov/OACT/TR/2019/>.

Social Security Advisory Board. "2011 Technical Panel Report on Assumptions and Methods," 2011, https://www.ssab.gov/Portals/0/OUR_WORK/REPORTS%20TO%20THE%20BOARD/TAM_Report_2011.pdf.

US Bureau of Economic Analysis. "Gross Domestic Product by Industry and Input-Output Statistics," January 22, 2015, <https://apps.bea.gov/histdata/fileStructDisplay.cfm?HMI=8&DY=2014&DQ=Q3&DV=Quarter&dNRD=January-22-2015>.

US Department of Agriculture, Economic Research Service. "Midpoint acreage more than doubled for all five major field crops," May 10, 2018, <https://www.ers.usda.gov/data-products/chart-gallery/gallery/chart-detail/?chartId=88868>.

US Department of Education. "School Composition and the Black-White Achievement Gap," National Center for Education Statistics, June 2015, https://nces.ed.gov/nationsreportcard/subject/studies/pdf/school_composition_and_the_bw_achievement_gap_2015.pdf.

TEXT REFERENCES

PART ONE: PRINCIPLES OF DATA VISUALIZATION

Introduction

Börner, Katy, Andreas Bueckle, and Michael Ginda. "Data visualization literacy: Definitions, conceptual frameworks, exercises, and assessments." *Proceedings of the National Academy of Sciences* 116, no. 6 (2019): 1857-1864.

Bush, George W. "Address Before a Joint Session of the Congress on the State of the Union," The American Presidency Project, February 2, 2005, <https://www.presidency.ucsb.edu/documents/address-before-joint-session-the-congress-the-state-the-union-14>.

Congressional Budget Office. "Social Security Policy Options," Congressional Budget Office, July 2010, https://www.cbo.gov/sites/default/files/111th-congress-2009-2010/reports/07-01-ssoptions_forweb.pdf

Congressional Budget Office. "The Budget and Economic Outlook: Fiscal Years 2012 to 2022," Congressional Budget Office," January 31, 2012, <https://www.cbo.gov/publication/42905?index=12699>

Congressional Budget Office. "The Budget and Economic Outlook: Infographic," Congressional Budget Office," June 5, 2012, <https://www.cbo.gov/publication/43289>

Congressional Budget Office. "The 2012 Long-Term Budget Outlook | House Budget Committee," Congressional Budget Office, September 12, 2014, <https://www.youtube.com/watch?v=dqhQZYYGNnA>

Klein, Scott. "Infographics in the Time of Cholera," *Pro Publica*, March 16, 2016, <https://www.propublica.org/nerds/infographics-in-the-time-of-cholera>

Chapter 1. Visual Processing and Perceptual Rankings

Anscombe, Francis J. "Graphs in statistical analysis." *The American Statistician* 27, no. 1 (1973): 17-21.

Cairo, Alberto. *The Functional Art: An introduction to information graphics and visualization*. New Riders, 2012.

Camões, Jorge. "Perception: Gestalt Laws," excelcharts.com (blog), January 10, 2012, <https://excelcharts.com/data-visualization-excel-users/gestalt-laws/>.

Carpenter, Patricia A., and Priti Shah. "A model of the perceptual and conceptual processes in graph comprehension." *Journal of Experimental Psychology: Applied* 4, no. 2 (1998): 75.

Cleveland, William S. *Visualizing data*. Hobart Press, 1993.

FiveThirtyEight. "50 Years Of World Cup Doppelgangers," July 15, 2018, <https://projects.fivethirtyeight.com/world-cup-comparisons/romelu-lukaku-2018/>

Healey, Christopher, and James Enns. "Attention and visual memory in visualization and computer graphics." *IEEE transactions on visualization and computer graphics* 18, no. 7 (2011): 1170-1188.

Heer, Jeffrey, Michael Bostock, and Vadim Ogievetsky. "A tour through the visualization zoo." *Commun. Acm* 53, no. 6 (2010): 59-67.

Hullman, Jessica, Eytan Adar, and Priti Shah. "Benefitting infovis with visual difficulties." *IEEE Transactions on Visualization and Computer Graphics* 17, no. 12 (2011): 2213-2222.

Medina, John. *Brain rules: 12 principles for surviving and thriving at work, home, and school*. ReadHowYouWant.com, 2011.

Meeks, Elijah. "Exploratory Design in Data Visualization: Understanding and leveraging chart similarity," *Medium*, January 15, 2019, https://medium.com/@Elijah_Meeks/exploratory-design-in-data-visualization-87bc60ce7f04.

Treisman, Anne. "Preattentive processing in vision." *Computer vision, graphics, and image processing* 31, no. 2 (1985): 156-177.

Wagemans, Johan, James H. Elder, Michael Kubovy, Stephen E. Palmer, Mary A. Peterson, Manish Singh, and Rüdiger von der Heydt. "A century of Gestalt psychology in visual perception: I. Perceptual grouping and figure-ground organization." *Psychological bulletin* 138, no. 6 (2012): 1172.

Wagemans, Johan, Jacob Feldman, Sergei Gepshtein, Ruth Kimchi, James R. Pomerantz, Peter A. Van der Helm, and Cees Van Leeuwen. "A century of Gestalt psychology in visual perception: II. Conceptual and theoretical foundations." *Psychological bulletin* 138, no. 6 (2012): 1218.

Watson, Cecelia. *Semicolon: How a misunderstood punctuation mark can improve your writing, enrich your reading and even change your life*. HarperCollins UK, 2019.

Wilkinson, Leland. "The grammar of graphics." In *Handbook of Computational Statistics*, pp. 375-414. Springer, Berlin, Heidelberg, 2012.

Chapter 2. Five Guidelines for Better Data Visualization

Borkin, Michelle A., Zoya Bylinskii, Nam Wook Kim, Constance May Bainbridge, Chelsea S. Yeh, Daniel Borkin, Hanspeter Pfister, and Aude Oliva. "Beyond memorability: Visualization recognition and recall." *IEEE transactions on visualization and computer graphics* 22, no. 1 (2015): 519-528.

Burn-Murdoch, John. "Episode #155: John Burn-Murdoch," The PolicyViz Podcast, June 18, 2019, <https://policyviz.com/podcast/episode-155-john-burn-murdoch/>.

Centers for Disease Control and Prevention. "Community Mitigation Guidelines to Prevent Pandemic Influenza—United States, 2017." *Morbidity and Mortality Weekly Report* 66, No. 1, April 21, 2017. <https://stacks.cdc.gov/view/cdc/45220>.

Chang, Kenneth. "A Different Way to Chart the Spread of Coronavirus." *New York Times*, March 20, 2020. <https://www.nytimes.com/2020/03/20/health/coronavirus-data-logarithm-chart.html>.

Chase, Will. "Why I'm Not Making COVID19 Visualizations, and Why You (Probably) Shouldn't Either" (blog post). March 31, 2020, <https://www.williamrchase.com/post/why-i-m-not-making-covid19-visualizations-and-why-you-probably-shouldn-t-either/>.

Correll, Michael. "Ethical Dimensions of Visualization Research," Tableau Research, CHI 2019, 2019.

Correll, Michael. "Visualization Design Principles for the Pandemic." Medium, April 3, 2020, <https://medium.com/@mcorrell/visualization-design-principles-for-the-pandemic-e65388280d16>.

Cox, Amanda. "Amanda Cox - Eyeo Festival 2011," <https://vimeo.com/29391942>.

D'Ignazio, Catherine and Lauren F. Klein. *Data Feminism*. The MIT Press. 2020.

Gallo, Carmine. *The presentation secrets of Steve Jobs: How to be insanely great in front of any audience*. Prentice Hall, 2010.

Guardian. "EU referendum: full results and analysis," *The Guardian*, <https://www.theguardian.com/politics/ng-interactive/2016/jun/23/eu-referendum-live-results-and-analysis>

Horowitz, Juliana Mesace, Kim Parker, and Renee Stepler. "Wide Partisan Gaps in U.S. Over How Far the Country Has Come on Gender Equality," Pew Research Center,

October 18, 2017, <https://www.pewsocialtrends.org/2017/10/18/wide-partisan-gaps-in-u-s-over-how-far-the-country-has-come-on-gender-equality/>

Hullman, Jessica. "Leading with the Unknowns in COVID-19 Models." *Scientific American*, April 11, 2020. <https://blogs.scientificamerican.com/observations/leading-with-the-unknowns-in-covid-19-models/>.

Malkulec, Amanda. "Leading with the Unknowns in COVID-19 Models." *Medium*, March 11, 2020, <https://medium.com/nightingale/ten-considerations-before-you-create-another-chart-about-covid-19-27d3bd691be8>.

Noble, Safiya Umoja. *Algorithms of Oppression: How Search Engines Reinforce Racism*. New York University Press, 2018.

Ondov, Brian, Nicole Jardine, Niklas Elmqvist, and Steven Franconeri. "Face to face: Evaluating visual comparison." *IEEE transactions on visualization and computer graphics* 25, no. 1 (2018): 861-871.

O'Neill, Catherine. "Weapons of math destruction." *How Big Data Increases Inequality and Threatens Democracy* (2016).

Perez, Caroline Criado. *Invisible Women: Exposing Data Bias in a World Designed for Men*. Random House, 2019.

Porter, Mark and Rhys Blakely. 2020. "Coronavirus: How Safe Are You? All Your Health Questions Answered." *Australian*, March 31, 2020, <https://www.theaustralian.com.au/world/the-times/coronavirus-how-safe-are-you-all-your-health-questions-answered/news-story/c40ec5841763c6d57f986c3ea3e19e4f>.

Richards, Neil. "Is white space always your friend?" blog post, January 6, 2018, <https://questionsindataviz.com/2018/01/06/is-white-space-always-your-friend/>.

Roser, Max, Hannah Ritchie, and Esteban Ortiz-Ospina. "Coronavirus Disease (COVID-19)—Statistics and Research." *Our World in Data*, <https://ourworldindata.org/coronavirus#the-growth-rate-of-covid-19-deaths>, accessed April 2020.

Roser, Max and Esteban Ortiz-Ospina. "Global Education." *Published online at OurWorldInData.org*. Retrieved from: '<https://ourworldindata.org/global-education>' [Online Resource]. 2020.

Rothstein, Richard. *The color of law: A forgotten history of how our government segregated America*. Liveright Publishing, 2017.

Schleuss, Jon and Rong-Gong Lin II. "California crime 2013," *Los Angeles Times*, <https://graphics.latimes.com/california-crime-2013/>

Social Security Advisory Board, Aspects of Disability Decision Making: Data and Materials, February 2012.

https://www.ssab.gov/Portals/0/OUR_WORK/REPORTS/Chartbook_Aspects%20of%20Disability%20Decision%20Making_2012.pdf

The Economist. "Flattening the Curve: Covid-19 Is Now in 50 Countries, and Things Will Get Worse." *The Economist*, February 29, 2020.

<https://www.economist.com/briefing/2020/02/29/covid-19-is-now-in-50-countries-and-things-will-get-worse>.

Chapter 3. Form & Function

Alda, Alan. *If I understood you, would I have this look on my face?: My adventures in the art and science of relating and communicating*. Random House Trade Paperbacks, 2018.

Brehmer, Matt. "Visualizing Ranges over Time on Mobile Phones," Medium, November 3, 2018, <https://medium.com/multiple-views-visualization-research-explained/ranges-900a04d7d32a>.

Brehmer, Matthew, Bongshin Lee, Petra Isenberg, and Eun Kyoung Choe. "Visualizing ranges over time on mobile phones: a task-based crowdsourced evaluation." *IEEE transactions on visualization and computer graphics* 25, no. 1 (2018): 619-629.

Bremer, Nadieh. "Techniques for Data Visualization on both Mobile & Desktop." Visual Cinnamon (blog). April 17, 2019. <https://www.visualcinnamon.com/2019/04/mobile-vs-desktop-dataviz#recap>.

Byron, Lee, and Martin Wattenberg. "Stacked graphs—geometry & aesthetics." *IEEE transactions on visualization and computer graphics* 14, no. 6 (2008): 1245-1252.

Cairo, Alberto. "Annotation, narrative, and storytelling in infographics and visualization." *The Functional Art* (blog), April 16, 2014, <http://www.thefunctionalart.com/2014/04/annotation-narrative-and-storytelling.html>.

Cairo, Alberto. "Visual Storytelling w/ Alberto Cairo and Robert Kosara." *The Data Stories Podcast*, Episode #35, April 16, 2014, <https://datastori.es/data-stories-35-visual-storytelling-w-alberto-cairo-and-robert-kosara/>.

Federal Home Loan Bank Board. Home Owners' Loan Corporation. 1933-7/1/1939. "City of Richmond, Virginia and Environs." U.S. National Archives and Records Administration. <https://catalog.archives.gov/id/85713737>

Gee, Alastair, Julia Carrie Wong, Paul Lewis, Adithya Sambamurthy, Charlotte Simmonds, Nadiyah Bremer, and Shirley Wu. "Bussed Out: How America moves its homeless," *The Guardian*, December 20, 2017, <https://www.theguardian.com/us-news/ng-interactive/2017/dec/20/bussed-out-america-moves-homeless-people-country-study>.

Katz, Josh. "Who Will Be President?" *The New York Times*, November 8, 2016, <https://www.nytimes.com/interactive/2016/upshot/presidential-polls-forecast.html>

Koblin, Aaron. "Flight Patterns," <http://www.aaronkoblin.com/work/flightpatterns/>

Koblin, Aaron. "Visualizing ourselves...with crowd-sourced data," TED2011, March 2011, https://www.ted.com/talks/aaron_koblin_visualizing_ourselves_with_crowd_sourced_data

McKee, Robert. "Substance, structure, style, and the principles of screenwriting." (1997).

Munzner, Tamara. "Visualization Analysis and Design, ser. AK Peters visualization series. AK Peters, 2014."

New York Times. Twitter post. August 7, 2016, 10:52 p.m. https://twitter.com/nytgraphics/status/762481520565030919?ref_src=twsrc%5Etfw

New York Times. Paths to the White House.

Rosenberg, Daniel. "Joseph Priestley and the graphic invention of modern time." *Studies in Eighteenth-Century Culture* 36, no. 1 (2007): 55-103.

Shneiderman, Ben. "A Grander Goal: A Thousand-Fold Increase in Human Capabilities," *Educom Review*, 32, 6, Nov/Dec 1997, <http://www.ifp.illinois.edu/nabhcs/abstracts/shneiderman.html>

Szűcs, Krisztina. "Spotlight on Profitability," <http://krisztinaszucs.com/my-product/hollywood/>

Tse, Archie. "Why We Are Doing Fewer Interactives," presentation at the 2016 Malofiej Conference, <https://github.com/archietse/malofiej-2016/blob/master/tse-malofiej-2016-slides.pdf>

Walker, Mason. "Americans favor mobile devices over desktops and laptops for getting news," Pew Research Center, November 19, 2019, <https://www.pewresearch.org/fact-tank/2019/11/19/americans-favor-mobile-devices-over-desktops-and-laptops-for-getting-news/>.

PART TWO: CHART TYPES

Chapter 4. Comparing Categories

Bard Graduate Gallery. "Marimekko: Fabrics, Fashion, Architecture," <https://www.bgc.bard.edu/gallery/exhibitions/43/marimekko>.

Battle-Baptiste, Whitney, and Britt Rusert. "WEB Du Bois's Data Portraits: Visualizing Black America: The Color Line at the Turn of the Twentieth Century." *Amherst, Massachusetts: WEB Du Bois Center at the University of Massachusetts Amherst* (2018).

Béland, Antoine, Le Devoir, and Thomas Hurtut. "Unit Visualizations for Visual Storytelling." *Éducation* 28: 449.

Bennet, Tim. "How 52 ninth-graders spell 'camouflage', Sankey Diagram," https://www.reddit.com/r/dataisbeautiful/comments/6a4pb8/how_52_ninthgraders_spell_camouflage_sankey/?st=J2NBTE0Q&sh=ddd5c5e1

Berinato, Scott. "The Power of Visualizations' 'Aha!' Moments," *Harvard Business Review*, March 19, 2013, <https://hbr.org/2013/03/power-of-visualizations-aha-moment>.

Brinton, Willard Cope. *Graphic methods for presenting facts*. Engineering magazine company, 1919.

Broderick, Ryan. "Who Watches More Porn: Republicans or Democrats?," *BuzzFeed News*, April 11, 2014, <https://www.buzzfeednews.com/article/ryanhatesthis/who-watches-more-porn-republicans-or-democrats>

Correll, Michael, Enrico Bertini, and Steven Franconeri. "Truncating the Y-Axis: Threat or Menace?" In *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems*, ed. Regina Bernhaupt et al., 1–12. New York: Association for Computing Machinery. 2020.

Desilver, Drew. "A record number of women will be serving in the new Congress." Pew Research Center, December 18, 2018. <https://www.pewresearch.org/fact-tank/2018/12/18/record-number-women-in-congress/>

DeBold, Tynan and Dov Friedman. "Battling Infectious Diseases in the 20th Century: The Impact of Vaccines," *Wall Street Journal*, February 11, 2015, <http://graphics.wsj.com/infectious-diseases-and-vaccines/>.

Du Bois, William Edward Burghardt, ed. *The College-bred Negro: Report of a Social Study Made Under the Direction of Atlanta University; Together with the Proceedings of the Fifth Conference for the Study of the Negro Problems, Held at Atlanta University, May 29-30, 1900.* No. 5. Atlanta University Press, 1900.

Cleveland, William S. *The elements of graphing data.* Wadsworth Publ. Co., 1985.

Cleveland, William S., and Robert McGill. "Graphical perception: Theory, experimentation, and application to the development of graphical methods." *Journal of the American statistical association* 79.387 (1984): 531-554.

Eurostat, "Graphical style guide—A practical layout guide for Eurostat publications—2016 edition," Eurostat News, February 25, 2016, https://ec.europa.eu/eurostat/web/products-eurostat-news/-/STYLE-GUIDE_2016

Few, Stephen. "Unit Charts Are For Kids," Perceptual Edge, Visual Business Intelligence Newsletter, October, November, December 2010, https://www.perceptualedge.com/articles/visual_business_intelligence/unit_charts_are_for_kids.pdf.

Few, Stephen. "Bullet Graph Design Specification," Perceptual Edge, Visual Business Intelligence Newsletter, October 10, 2013, https://www.perceptualedge.com/articles/misc/Bullet_Graph_Design_Spec.pdf.

Florence, Philip Sargant. *Only an ocean between.* Essential Books, 1946.

Fontenot, Kayla, Jessica Semega, and Melissa Kollar. "Income and Poverty in the United States: 2017," US Bureau of the Census, September 2008, <https://www.census.gov/content/dam/Census/library/publications/2018/demo/p60-263.pdf>.

Groeger, Lena V. "A Big Article About Wee Things." ProPublica (blog), September 25, 2014, <https://www.propublica.org/nerds/a-big-article-about-wee-things>.

Haroz, Steve, Robert Kosara, and Steven L. Franconeri. "Isotype visualization: Working memory, performance, and engagement with pictographs." In *Proceedings of the 33rd annual ACM conference on human factors in computing systems*, pp. 1191-1200. ACM, 2015.

Ingraham, Christopher. "Kansas is the nation's porn capital, according to Pornhub," Wonkviz, no date, <https://wonkviz.tumblr.com/post/82488570278/kansas-is-the-nations-porn-capital-according-to>

Joint Committee on Taxation. "Distributional Effects of Public Law 115-97," Scheduled for a Public Hearing Before the House Committee on Ways and Means on March 27, 2019, March 25, 2019, JCX-10-19.

Kirk, Andy. "The Problems with B'Arc Charts," Visualisingdata.com, September 1, 2017, <https://www.visualisingdata.com/2017/09/problems-barc-charts/>.

Likert, Rensis. "A technique for the measurement of attitudes." *Archives of psychology* (1932).

Mayr, Eva and Günther Schreder. "Isotype Visualizations: A Chance for Participation and Civic Education," *Journal of Democracy* 6(2): 136-150, 2014.

Neurath, O. (1936). *International picture language. The first rules of Isotype*. London: Kegan Paul.

Neurath, O. (1939). *Modern man in the making*. New York: A. Knopf.

Wexler, Steve, Jeffrey Shaffer, and Andy Cotgreave. *The big book of dashboards: visualizing your data using real-world business scenarios*. John Wiley & Sons, 2017.

Witt, Jessica. "Graph Construction: An Empirical Investigation on Setting the Range of the Y-Axis." http://amplab.colostate.edu/reprints/Witt_Graphs_YaxisRange.pdf.

Yau, Nathan. "Vehicles involved in fatal crashes," FlowingData blog, January 11, 2012, <https://flowingdata.com/2012/01/11/vehicles-involved-in-fatal-crashes/>.

Chapter 5. Time

Cleveland, William S., and Robert McGill. "Graphical perception: Theory, experimentation, and application to the development of graphical methods." *Journal of the American statistical association* 79.387 (1984): 531-554.

Friendly, Michael. "Playfair Balance of Trade Data," September 13, 2018, <http://www.datavis.ca/courses/RGraphics/R/playfair-east-indies.html>.

Gantt, Henry Laurence. "A Graphical Daily Balance in Manufacture," No. 1002 in American Society of Mechanical Engineers. *Transactions of the American Society of Mechanical Engineers*. New York City: The Society, 1880. <https://babel.hathitrust.org/cgi/pt?id=mdp.39015023119541&view=1up&seq=1363>

Hofmann, Heike, and Marie Vendettuoli. "Common angle plots as perception-true visualizations of categorical associations." *IEEE transactions on visualization and computer graphics* 19.12 (2013): 2297-2305.

O'Brady, Kevin. "Fight to Repeal," Joint Economic Committee Republicans, 2010, <https://kevinbrady.house.gov/obamacare/fighting-to-repeal-obamacare.htm>.

Playfair, William. *Playfair's commercial and political atlas and statistical breviary*. Cambridge University Press, 2005.

Priestley, Joseph. "A Specimen of a Chart of Biography," 1765.

Robbins, Naomi B. *Creating more effective graphs*. Wiley, 2012.

Sankey, M.H. "Minutes of Proceedings of The Institution of Civil Engineers," Vol. CXXXIV, Session 1897-98. Part IV.

Spence, Ian, and Howard Wainer. "William Playfair: A daring worthless fellow." *Chance* 10, no. 1 (1997): 31-34.

Tufte, Edward R. *Beautiful evidence*. Vol. 1. Cheshire, CT: Graphics Press, 2006.
Urban Institute. "Urban Institute Data Visualization Style Guide," No date,
<http://urbaninstitute.github.io/graphics-styleguide/>.

Vigen, Tyler. Spurious Correlations. Website. <http://www.tylervigen.com/spurious-correlations>.

Wainer, Howard, and Ian Spence. "Playfair's Commercial and political atlas and Statistical breviary." (2005).

Chapter 6. Distribution

Bremer, Nadieh. "More fun data visualizations with the gooey effect." Visual Cinnamon (blog). June 20, 2016. <https://www.visualcinnamon.com/2016/06/fun-data-visualizations-svg-gooey-effect.html>.

Cairo, Alberto. "How charts lie." (2019).

Chalabi, Mona. Presentation, Tapestry Conference, University of Miami, November 29, 2018.

Christiansen, Jen. "Pop Culture Pulsar: Origin Story of Joy Division's Unknown Pleasures Album Cover," *Scientific American*, February 18, 2015,
<https://blogs.scientificamerican.com/sa-visual/pop-culture-pulsar-origin-story-of-joy-division-s-unknown-pleasures-album-cover-video/>.

Congressional Budget Office. "Changes in the Distribution of Workers' Annual Earnings Between 1979 and 2007," Congressional Budget Office, October 2009, <https://www.cbo.gov/sites/default/files/111th-congress-2009-2010/reports/10-02-workers.pdf>.

Correll, Michael, and Michael Gleicher. "Error bars considered harmful: Exploring alternate encodings for mean and error." *IEEE transactions on visualization and computer graphics* 20.12 (2014): 2142-2151.

Dallas Morning News. *Dallas Morning News Graphics Stylebook*. https://knightcenter.utexas.edu/mooc/file/tdmn_graphics.pdf.

The Economist. "The climate issue," <https://www.economist.com/leaders/2019/09/19/the-climate-issue>

Few, Stephen. "The DataVis Jitterbug: Let's Improve an Old Dance," Perceptual Edge, Visual Business Intelligence Newsletter, April/May/June 2017, https://www.perceptualedge.com/articles/visual_business_intelligence/the_datavis_jitterbug.pdf

Gramacki, Artur. *Nonparametric kernel density estimation and its computational aspects*. Springer International Publishing, 2018.

Hawkins, Ed. ShowYourStripes.com. <https://showyourstripes.info/>

Hawkins, Ed. "147 | Iconic Climate Visuals with Ed Hawkins," Data Stories podcast, September 10, 2019, <https://datastori.es/147-iconic-climate-visuals-with-ed-hawkins/>.

Hofman, Jake M., Daniel G. Goldstein, and Jessica Hullman. "How visualizing inferential uncertainty can mislead readers about treatment effects in scientific results."

Hullman, Jessica and Matthew Kay. "Uncertainty + Visualization, Explained," Medium, Visualization Research Explained (blog), <https://medium.com/multiple-views-visualization-research-explained/uncertainty-visualization-explained-67e7a73f031b>.

Hullman, Jessica, Eytan Adar, and Priti Shah. "Benefitting infovis with visual difficulties." *IEEE Transactions on Visualization and Computer Graphics* 17, no. 12 (2011): 2213-2222.

Hullman, Jessica, Paul Resnick, and Eytan Adar. "Hypothetical outcome plots outperform error bars and violin plots for inferences about reliability of variable ordering." *PloS one* 10, no. 11 (2015).

Kiefer, Len. Twitter post. September 26, 2019, 4:44 p.m., <https://twitter.com/lenkiefer/status/1177323018143580160>.

Kight, Stef W. and Harry Stevens. "By the numbers: How Trump properties profited from his presidency," *Axios*, June 28, 2018, <https://www.axios.com/donald-trump-properties-taxpayer-campaigns-presidency-91e3755d-23cd-42d1-897d-c0c81ac509dd.html>.

Kommenda, Niko, Caelainn Barr, and Josh Holder. "Gender pay gap: what we learned and how to fix it," *The Guardian*, April , 2018, <https://www.theguardian.com/news/ng-interactive/2018/apr/05/women-are-paid-less-than-men-heres-how-to-fix-it>.

Manski, Charles F., and Francesca Molinari. "Rounding probabilistic expectations in surveys." *Journal of Business & Economic Statistics* 28, no. 2 (2010): 219-231.

Meeks, Elijah. "Sketchy Data Visualization in Semiotic." Medium (blog), September 11, 2017, https://medium.com/@Elijah_Meeks/sketchy-data-visualization-in-semiotic-5811a52f59bc.

Meyer, Bruce D., Wallace KC Mok, and James X. Sullivan. "Household surveys in crisis." *Journal of Economic Perspectives* 29, no. 4 (2015): 199-226.

Meyer, Bruce D., Nikolas Mittag, and Robert M. Goerge. *Errors in survey reporting and imputation and their effects on estimates of food stamp program participation*. No. w25143. National Bureau of Economic Research, 2018.

Newman, George E., and Brian J. Scholl. "Bar graphs depicting averages are perceptually misinterpreted: The within-the-bar bias." *Psychonomic bulletin & review* 19.4 (2012): 601-607.

Padilla, Lace, Matthew Kay, and Jessica Hullman. "Uncertainty Visualization." PsyArXiv. April 27, 2020. doi:10.31234/osf.io/ebd6r.

Rousseeuw, Peter J., Ida Ruts, and John W. Tukey. "The bagplot: a bivariate boxplot." *The American Statistician* 53, no. 4 (1999): 382-387.

Schwabish, Jonathan A. "Take a penny, leave a penny: The propensity to round earnings in survey data." *Journal of Economic and Social Measurement* 32, no. 2-3 (2007): 93-111.

Spear, Mary Eleanor. *Charting statistics*. New York: McGraw-Hill, 1952.

Torres, Nicole. "Why It's So hard for Us to Visualize Uncertainty." *Harvard Business Review*, November 11, 2016, <https://hbr.org/2016/11/why-its-so-hard-for-us-to-visualize-uncertainty>.

Tukey, John W. *Exploratory Data Analysis*, vol. 2. Reading, MA: Addison-Wesley, 1977.

Turner, Cory. "Is There A Better Way To Pay For America's Schools?" *NPR*, May 1, 2016, <https://www.npr.org/2016/05/01/476224759/is-there-a-better-way-to-pay-for-america-s-schools>.

Uncertainty Toolkit for Analysts in Government. Website. Accessed February 2020. <https://analystsuncertaintytoolkit.github.io/UncertaintyWeb/index.html>.

van der Bles, Anne Marthe, Sander van der Linden, Alexandra LJ Freeman, James Mitchell, Ana B. Galvao, Lisa Zaval, and David J. Spiegelhalter. "Communicating uncertainty about facts, numbers and science." *Royal Society open science* 6, no. 5 (2019): 181870.

Wickham, Hadley, and Lisa Stryjewski. "40 years of boxplots." *Am. Statistician* (2011).

Wilkinson, Leland. "Dot plots." *The American Statistician* 53, no. 3 (1999): 276-281.

Wilkinson, Leland. *The grammar of graphics*. Springer Science & Business Media, 2013.

Wood, Jo, Petra Isenberg, Tobias Isenberg, Jason Dykes, Nadia Boukhelifa, and Aidan Slingsby. "Sketchy rendering for information visualization." *IEEE Transactions on Visualization and Computer Graphics* 18, no. 12 (2012): 2749-2758.

Japanese: <https://seibu.ekitan.com/pdf/20180310/235-16-1-0.pdf>

Chapter 7. Geospatial

AxisMaps. "Cartography Guide." <https://www.axismaps.com/guide/general/map-projections/>, accessed November 2019.

Berman, Jacob, "Washington Metro Map Print Original Art," Esty listing, 2019, <https://www.etsy.com/listing/647623499/washington-metro-map-print-original-art>

Bortins, I., Demers S., & Clarke, K. (2002). Cartogram types. http://www.ncgia.ucsb.edu/projects/Cartogram_Central/types.html

Dorling, Daniel. "Area cartograms: their use and creation." *The map reader: Theories of mapping practice and cartographic representation* (2011): 252-260.

DeBelius, Danny. "Let's Tessellate: Hexagons For Tile Grid Maps," *NPR visuals team*, May 11, 2015, <https://blog.apps.npr.org/2015/05/11/hex-tile-maps.html>.

Field, Kenneth. *Cartography*. Esri Press, 2018.

Hermann, E.P. "Maps and Sales Visualization" *Personal Efficiency: The How and Why Magazine*, Published by the LaSalle Extension University, US Department of Education, July 1922, pages 6-7.

Irvin-Erickson, Yasemin, Jonathan Schwabish, and Nicole Weissman. "What we know about gun violence in the United States: Who's affected?" *Urban Wire Urban Institute*, October 4, 2016, <https://www.urban.org/urban-wire/what-we-know-about-gun-violence-united-states-whos-affected>.

Johnson, Matt. "Which Metro stations are the most balanced?" *Greater Greater Washington*, November 29, 2012, <https://ggwash.org/view/29468/which-metro-stations-are-the-most-balanced>.

Koblin, Aaron. "Flight Patterns," <http://www.aaronkoblin.com/work/flightpatterns/>

Miller, Matthew, Steven J. Lippmann, Deborah Azrael, and David Hemenway. "Household firearm ownership and rates of suicide across the 50 United States." *Journal of Trauma and Acute Care Surgery* 62, no. 4 (2007): 1029-1035.

Minard, Charles-Joseph. "[*Carte figurative des pertes successives en hommes de l'Armée Française dans la campagne de Russie 1812-1813*](#)," 1861, Photo courtesy of Ecole nationale des ponts et chaussées

Monmonier, Mark, 2018. *How to lie with maps*. University of Chicago Press.

Olson, J.M., 1976. Noncontiguous area cartograms. *The Professional Geographer*, 28(4), pp.371-380.

Rendgen, Sandra. *The Minard System: The Complete Statistical Graphics of Charles-Joseph Minard*. Chronicle Books, 2018.

Schwabish, Jonathan. "How a map's 'bins' can influence your perception of an important policy issue," *Urban Wire Urban Institute*, November 14, 2017, <https://www.urban.org/urban-wire/how-maps-bins-can-influence-your-perception-important-policy-issue>.

Soffen, Kim. "To reduce suicides, look at guns." *Washington Post*, July 13, 2016, https://www.washingtonpost.com/graphics/business/wonkblog/suicide-rates/?tid=a_inl

Chapter 8. Relationship

Andris, Clio, David Lee, Marcus J. Hamilton, Mauro Martino, Christian E. Gunning, and John Armistead Selden. "The rise of partisanship and super-cooperators in the US House of Representatives." *PloS one* 10, no. 4 (2015): e0123507.

Bontemps, Xtophe. "Why you should never use radar plots," A post from data.visualisation.free.fr, March 2017, <https://rpubs.com/Xtophe/268920>.

Cairo, Alberto. "Download the Datasaurus: Never trust summary statistics alone; always visualize your data," *The Functional Art* (blog), August 29, 2016, <http://www.thefunctionalart.com/2016/08/download-datasaurus-never-trust-summary.html>.

Fruchterman, Thomas MJ, and Edward M. Reingold. "Graph drawing by force-directed placement." *Software: Practice and experience* 21, no. 11 (1991): 1129-1164.

Gee, Alastair, Julia Carrie Wong, Paul Lewis, Adithya Sambamurthy, Charlotte Simmonds, Nadiyah Bremer, and Shirley Wu. "Bussed Out: How America moves its homeless," *The Guardian*, December 20, 2017, <https://www.theguardian.com/us-news/ng-interactive/2017/dec/20/bussed-out-america-moves-homeless-people-country-study>.

Krzywinski, Martin, Inanc Birol, Steven JM Jones, and Marco A. Marra. "Hive plots—rational approach to visualizing networks." *Briefings in bioinformatics* 13, no. 5 (2011): 627-644.

Krzywinski, Martin. "Hive plots—rational approach to visualizing networks," <http://www.hiveplot.com/>.

Matejka, Justin, and George Fitzmaurice. "Same stats, different graphs: generating datasets with varied appearance and identical statistics through simulated annealing." In *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems*, pp. 1290-1294. ACM, 2017.

McCann, Adam. "Arc Chart in Tableau," August 27, 2015, <http://duelingdata.blogspot.com/2015/08/arc-chart-in-tableau.html>.

New York Magazine. "Approval Matrix," provided via email.

Rosling, Ted. "The best stats you've ever seen," TED2006, TED Talk, February 2006, https://www.ted.com/talks/hans_rosling_the_best_stats_you_ve_ever_seen.

Rost, Lisa Charlotte. "How to read a log scale." *Chartable*, (a blog by Datawrapper). May 31, 2018. <https://blog.datawrapper.de/weeklychart-logscale/>

The R Graph Gallery. "Network Graph." <https://www.r-graph-gallery.com/network.html>.

Wattenberg, Martin. "Arc diagrams: Visualizing structure in strings." In *IEEE Symposium on Information Visualization, 2002. INFOVIS 2002.*, pp. 110-116. IEEE, 2002.

Wattenberg, Martin, and Fernanda B. Viégas. "The word tree, an interactive visual concordance." *IEEE transactions on visualization and computer graphics* 14, no. 6 (2008): 1221-1228.

XKCD. “Correlation,” <https://xkcd.com/552/>.

Chapter 9. Part-to-Whole

Andrews, R. J. *Info We Trust: How to Inspire the World with Data*. John Wiley & Sons, 2019.

Andrews, R. J. “Florence Nightingale is a Design Hero,” Medium, July 15, 2019, <https://medium.com/nightingale/florence-nightingale-is-a-design-hero-8bf6e5f2147>.

Cairo, Alberto. “How charts lie.” (2019).

Chase, Will. “Voronoi treemap,” May 2, 2019, <https://observablehq.com/@will-r-chase/voronoi-treemap>.

Gambino, Megan. “Do Our Brains Find Certain Shapes More Attractive Than Others?” *Smithsonian Magazine*. November 14, 2013. <https://www.smithsonianmag.com/science-nature/do-our-brains-find-certain-shapes-more-attractive-than-others-180947692/>.

Johnson, Brian, and Ben Shneiderman. *Tree-maps: A space-filling approach to the visualization of hierarchical information structures*. IEEE, 1991.

Lima, Manuel. *The book of circles: Visualizing spheres of knowledge*. Chronicle Books, 2017.

Lima, Manuel. “Why humans love pie charts,” Medium (blog). July 23, 2018. <https://blog.usejournal.com/why-humans-love-pie-charts-9cd346000bdc?>

Rogers, Simon. “Jon Snow’s data journalism: the cholera map that changed the world,” *Guardian Datablog*, March 15, 2013, <https://www.theguardian.com/news/datablog/2013/mar/15/john-snow-cholera-map>.

Shneiderman, Ben. “Tree Visualization with Tree-Maps: 2-d Space-Filling Approach.” *ACM Transactions on Graphics (TOG)* 11, no. 1 (1992): 92–99.

Skau, Drew, and Robert Kosara. “Arcs, angles, or areas: Individual data encodings in pie and donut charts.” *Computer Graphics Forum*. Vol. 35. No. 3. 2016.

Skau, Drew, and Robert Kosara. “Judgment Error in Pie Chart Variations.” In *Short Paper Proceedings of the Eurographics/IEEE VGTC Symposium on Visualization (EuroVis)*, pp. 91–95. 2016.

Texas Tribune News Apps Style Guide. <https://apps.texastribune.org/styles/>

Wellcome Collection. “Diagram of the causes of mortality in the army,” <https://wellcomecollection.org/works/sz9sms2m>

Chapter 10. Qualitative

Ahmed, Naema, Cassi Pollock, and Alex Samuels. "How the Texas Democratic and Republic party platforms compare." *Texas Tribune*, July 5, 2018, https://apps.texastribune.org/features/2018/party-platforms/?_ga=2.129478090.770685496.1576106215-1729798919.1576004948.

Center on Budget and Policy Priorities. "Working-Family Tax Credits Help at Every Stage of Life." Graphic, <https://www.cbpp.org/working-family-tax-credits-help-at-every-stage-of-life-0>.

Daniels, Matt. "The Largest Vocabulary In Hip Hop." *The Pudding*, January 21, 2019, <https://pudding.cool/projects/vocabulary/index.html>.

Fry, Ben. "Tracing the Origin of Species." <https://fathom.info/traces/>.

Hearst, Marti, Emily Pedersen, Lekha Priya Patil, Elsie Lee, Paul Laskowski, and Steven Franconeri. "An Evaluation of Semantically Grouped Word Cloud Designs." *IEEE transactions on visualization and computer graphics* (2019).

Jarreau, Paige. "#MySciBlog Interviewee Motivations to Blog about Science." Figshare.com (blog), March 21, 2015, https://figshare.com/articles/MySciBlog_Interviewee_Motivations_to_Blog_about_Science/1345026/2.

Nediger, Midori. "How to Use an Icon Story to Take Your Infographic to the Next Level." Venngage (blog), April 27, 2018, <https://venngage.com/blog/icon-story/>.

Obama, Barack. "Remarks of President Barack Obama – State of the Union Address As Delivered." State of the Union Address, Washington, DC, January 13, 2016, <https://obamawhitehouse.archives.gov/the-press-office/2016/01/12/remarks-president-barack-obama-%E2%80%93-prepared-delivery-state-union-address>.

Pätzold, André, Julius Tröger, Joachim Fahrún, Christopher Möller, David Wendler and Marie-Louise Timcke. "These candidates live the furthest away from their voters." *Berliner Morgenpost*, September 8, 2016, <https://interaktiv.morgenpost.de/waehlernaeh-e-berlin/>.

Texas Tribune. "What the Texas delegation says about impeachment," *Texas Tribune*, accessed September 26, 2019, <https://graphics.texastribune.org/graphics/impeachment-delegation-tracker-2019-09/>.

USA Today. "All of Obama's State of the Union speeches in word clouds." *USA Today*, January 12, 2016,

<https://www.usatoday.com/story/news/politics/onpolitics/2016/01/12/obama-state-of-the-union-word-clouds/78712780/>.

Wattenberg, Martin, and Fernanda B. Viégas. “The word tree, an interactive visual concordance.” *IEEE transactions on visualization and computer graphics* 14, no. 6 (2008): 1221-1228.

Wilkinson, Krista M., and William J. McIlvane. “Perceptual factors influence visual search for meaningful symbols in individuals with intellectual disabilities and Down syndrome or autism spectrum disorders.” *American Journal on Intellectual and Developmental Disabilities* 118, no. 5 (2013): 353-364.

Chapter 11. Tables

Cherdarchuk, Joey. “Clear off the Table.” Dark Horse Analytics (blog). March 27, 2014, <https://www.darkhorseanalytics.com/blog/clear-off-the-table>.

Correll, Michael, and Michael Gleicher. “Error bars considered harmful: Exploring alternate encodings for mean and error.” *IEEE transactions on visualization and computer graphics* 20, no. 12 (2014): 2142-2151.

Few, Stephen. *Show Me the Numbers: Designing Tables and Graphs to Enlighten*. Oakland, CA: Analytics Press, 2004.

Hansen, Wallace R. *Suggestions to authors of the reports of the United States Geological Survey*, US GPO, January 1991.

Kastellec, Jonathan P., and Eduardo L. Leoni. “Using Graphs Instead of Tables in Political Science.” *Perspectives on Politics* 5, no. 4 (2007): 755–771.

US Department of Agriculture. “Food Distribution Program on Indian Reservations,” <https://www.fns.usda.gov/fdpir/food-distribution-program-indian-reservations>.

Vessey, Iris. “Cognitive Fit: A Theory-Based Analysis of the Graphs Versus Tables Literature.” *Decision Sciences* 22, no. 2 (1991): 219–240.

Weissgerber, Tracey L., Natasa M. Milic, Stacey J. Winham, and Vesna D. Garovic. “Beyond bar and line graphs: time for a new data presentation paradigm.” *PLoS biology* 13, no. 4 (2015): e1002128.

PART THREE: DESIGNING AND REDESIGNING YOUR VISUAL

Chapter 12. Developing a Data Visualization Style Guide

More data visualization style guides are available at:
<https://policyviz.com/2016/11/30/style-guides/>.

BBC. "BBC Audiences Tableau Style Guide," <https://public.tableau.com/profile/bbc.audiences#!/vizhome/BBCAudiencesTableauStyleGuide/Hello>.

Burn-Murdoch, John. Twitter post. October 28, 2019, 4:04 a.m., <https://twitter.com/jburnmurdoch/status/1188728193945100288>.

Cesal, Amy. "The Sunlight Foundation's Data Visualization Style Guidelines," Sunlight Foundation, March 12, 2014, <https://sunlightfoundation.com/2014/03/12/datavizguide/>.

Choi, Jinho, Sanghun Jung, Deok Gun Park, Jaegul Choo, and Niklas Elmqvist. "Visualizing for the Non-Visual: Enabling the Visually Impaired to Use Visualization." In *Computer Graphics Forum*, vol. 38, no. 3, pp. 249-260. 2019.

Cook, Albert M., and Janice Miller Polgar. *Assistive Technologies-E-Book: Principles and Practice*. Elsevier Health Sciences, 2014.

Cousins, Carrie. "Color and Cultural Design Considerations." WebDesignerDepot (blog), June 11, 2012, <https://www.webdesignerdepot.com/2012/06/color-and-cultural-design-considerations/>.

Colour Blindness Awareness. "Colour Blindness." <http://www.colourblindawareness.org/colour-blindness/>, accessed November 2019.

Dallas Morning News. *Dallas Morning News Graphics Stylebook*. https://knightcenter.utexas.edu/mooc/file/tdmn_graphics.pdf.

The Economist. "The dragon takes wing," May 1, 2014, <https://www.economist.com/news/finance-and-economics/21601568-new-data-suggest-chinese-economy-bigger-previously-thought-dragon>.

Eurostat, "Graphical style guide—A practical layout guide for Eurostat publications—2016 edition," Eurostat News, February 25, 2016, https://ec.europa.eu/eurostat/web/products-eurostat-news/-/STYLE-GUIDE_2016

Lekovic, Jovan. "How we made the BBC Audiences Tableau Style Guide," Medium, August 29, 2018, <https://medium.com/bbc-data-science/how-we-made-the-bbc-audiences-tableau-style-guide-4f0a6b7525ce>.

Liu, Yang, and Jeffrey Heer. "Somewhere over the rainbow: An empirical assessment of quantitative colormaps." In *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems*, pp. 1-12. 2018.

Rost, Lisa Charlotte. “An alternative to pink & blue: Colors for gender data,” Chartable, a blog by Datawrapper, July 10, 2018, <https://blog.datawrapper.de/gendercolor/>.

Presentitude. “A guide to 44 safe fonts & 74 safe combos for PowerPoint.” Presentitude (blog) no date, access January 2020, <http://presentitude.com/fonts/>.

Schwabish, Jonathan, and Alice Feng. “Applying Racial Equity Awareness in Data Visualization.” (2020). <http://osf.io/x8tbw/>

St. Clair, Kassia. *The secret lives of color*. New York: Penguin, 2017.

Strunk Jr, William, and E. B. White. *The Elements of Style*. New York: Macmillan, 1959.

US Department of Agriculture. “Visual Standards Guide,” January 2013, <https://www.usda.gov/sites/default/files/documents/visual-standards-guide-january-2013.pdf>.

Urban Institute. “Urban Institute Data Visualization Style Guide,” No date, <http://urbaninstitute.github.io/graphics-styleguide/>, accessed January 2020.

van Gogh, Vincent. Vincent van Gogh to Theo van Gogh, Amsterdam, October 28, 1885, <http://www.vangoghletters.org/vg/letters/let537/letter.html>

Ware, Colin. *Information visualization: perception for design*. Morgan Kaufmann, 2020.

Web Content Accessibility Guidelines (WCAG) 2.0. <https://www.w3.org/TR/WCAG20/#understandable>, accessed November 2019.

Wilke, Claus O. *Fundamentals of Data Visualization: A Primer on Making Informative and Compelling Figures*. O'Reilly Media, 2019.

Chapter 13. Redesigns

Arellano, Cristina, Juan Carlos Conesa, and Timothy J. Kehoe. “Chronic Sovereign Debt Crises in the Eurozone, 2010-2012,” Federal Reserve Bank of Minneapolis Economic Policy paper 12-4, May 2012, https://www.minneapolisfed.org/~media/files/pubs/eppapers/12-4/epp_12-4_chronic_sovereign_debt_crisis_eurozone.pdf

Chappell, Nathan and Adam B. Jaffe. “Intangible Investment and Firm Performance,” *National Bureau of Economic Research Working Paper No. 24363*, March 2018, <https://www.nber.org/papers/w24363>.

Roth, Madeline and Amma Malik. “What keeps cities in Asia and Africa from effective public service delivery?” Urban Wire blog, Urban Institute, August 2, 2016,

<https://www.urban.org/urban-wire/what-keeps-cities-asia-and-africa-effective-public-service-delivery>.

Schuetz, Jenny. "Who is the new face of American homeownership?" Brookings Institution, October 9, 2017, <https://www.brookings.edu/blog/the-avenue/2017/10/09/who-is-the-new-face-of-american-homeownership/>.

Slobin, Sarah. "Two maps explain the racial history behind Alabama's senate vote." Quartz, December 13, 2017, <https://qz.com/1155837/how-doug-jones-beat-roy-moore-maps-of-alabama-in-1860-and-2017-offer-a-startling-comparison/>.

US Bureau of the Census. "Map Showing the Distribution of the Slave Population of the United States," https://www.census.gov/history/pdf/1860_slave_distribution.pdf

US Bureau of Economic Analysis. "Gross Domestic Product by Industry and Input-Output Statistics," January 22, 2015, <https://apps.bea.gov/histdata/fileStructDisplay.cfm?HMI=8&DY=2014&DQ=Q3&DV=Quarter&dNRD=January-22-2015>.

US Department of Agriculture, Economic Research Service. "Midpoint acreage more than doubled for all five major field crops," May 10, 2018, <https://www.ers.usda.gov/data-products/chart-gallery/gallery/chart-detail/?chartId=88868>.

US Department of Education. "School Composition and the Black-White Achievement Gap," National Center for Education Statistics, June 2015, https://nces.ed.gov/nationsreportcard/subject/studies/pdf/school_composition_and_the_bw_achievement_gap_2015.pdf.

Appendices

Bostock, Michael, Vadim Ogievetsky, and Jeffrey Heer. "D³ data-driven documents." *IEEE transactions on visualization and computer graphics* 17, no. 12 (2011): 2301-2309.

Cruz, Pedro de, John Wihbey, and Felipe Shibuya. *Simulated Dendrochronology of the United States*. 2018.

Rost, Lisa Charlotte. "What I Learned Recreating one Chart Using 24 Tools," Source (blog), December 8, 2016, <https://source.opennews.org/articles/what-i-learned-recreating-one-chart-using-24-tools/>.

Wilkinson, Leland. *The grammar of graphics*. Springer Science & Business Media, 2013.