

# COMM 221: Introduction to Digital Media (Spring 2018)



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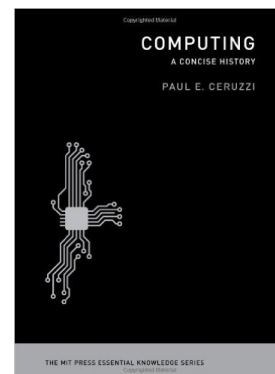
## Course Resources



Course Page

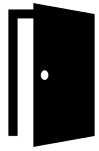


[#XUCOMM221](https://twitter.com/XUCOMM221)



[@XU Bookstore](https://mitpress.edu/bookstore)

## CONTACT How do you contact me?



Walk-In Office Hours: T/TR, 2:15-4pm  
 Appointment: Just let me know when!  
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A note about my social media accounts: Both my Twitter and LinkedIn accounts are part of my professional identity. There I share my own research, news related to digital media, fandom, and rhetoric, and discuss and critique current events. My twitter account reflects my own identity as a scholar-teacher, which means that the views expressed there are my own—not Xavier University's. If you're interested in learning more about digital media beyond what we learn here in class, you are more than welcome to follow me on Twitter and on LinkedIn.

A note about what office hours are for: Office hours are a great opportunity to get specific questions answered, to talk about the concepts and readings, and to get help with projects/papers. However, bringing a project/paper to office hours does not mean I can "pre-grade" your project/paper. It would be far too time-consuming to do that for every student. Rather, think about office hours as a chance to talk through your project/paper. Tell me about what you think is really strong, what you're unsure about, and what you're struggling with. We can talk through these issues together, helping you identify revisions you might want to make before you turn in your final copy on the due date. I strongly urge students to take advantage of office hours for this purpose.

A note about email: I will try to respond to emails within 48 hours. But, like everyone, I get a lot of emails, and that means it can be easy to miss one. If I don't respond to you within 48 hours, feel free to send me a reminder email. =)

## **DESCRIPTION: What is this course all about?**

Course objectives/goals:

1. Understand the **history** of computing, digital media, and the internet, along with the implications of that history and how it is told;
2. Understand and summarize major **theories** of digital media, including technological determinism, social determinism, and technological affordances;
3. **Analyze** digital communication, using key concepts like affordance, rhetorical choice, and audience;
4. Interrogate the **implications** digital media offers for communication today.

Course questions we will answer:

1. **Unit 1: What is the history of computing, digital media, and the internet?** What are the implications of that history? What are the implications of how that history is told? What implications does that history have for digital communication today?
2. **Unit 2: How can we critically analyze communication messages made with digital media?** How can we conceptualize the audience within a context of digital media? How can we account for the technological aspects of communication made with digital media?
3. **Unit 3: What affects who can speak and who can be heard online?** How does a networked, many-to-many system affect communication with digital media? How do race, gender, and class affect who can speak and be heard through digital media?

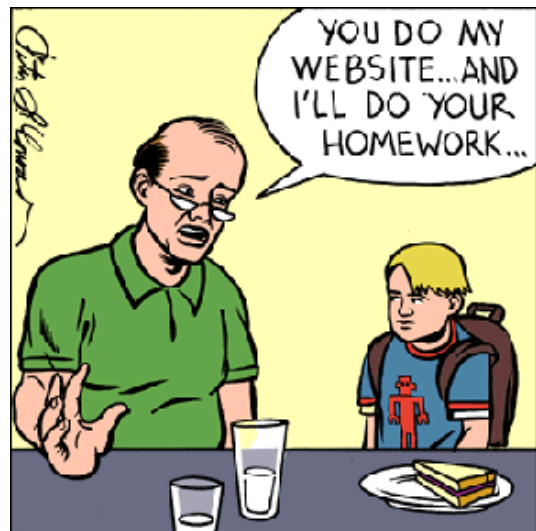
**Online Contexts:** In this class, you are asked to engage in communication in class as well as on online public sites. If you are uncomfortable with this, or if you require special considerations, please see me in the first week of class.

## DM: The Digital Media Major and Minor:

While the course objectives and course questions above help you understand what this course in particular is all about, the description below helps you understand what the Digital Media Major and Minor are all about (what it includes, what it doesn't include, its goals, and its justification). This course is part of the Digital Media Major/Minor and as such helps achieve the goals set out below.

### Description of the Digital Media Major/Minor:

The digital native discourse shows up in newspapers, on television, at the dinner table, and in our schools. This discourse positions young people as digital media experts, asserting that because the Millennial generation (born between the 1980s and 2000s) grew up with digital technologies, they automatically know how to use technology. Employers expect Millennial job candidates to have the digital media skills that schools assume they don't need to teach. Yet, scholars like danah boyd assert, "Many of today's teens are indeed deeply engaged with social media and are active participants in networked publics, but this does not mean that they inherently have the knowledge or skills to make the most of their online experiences."<sup>1</sup> Indeed, the majority of Xavier students will not have the media literacy necessary to understand how Google determines search results or the technical expertise to create their own YouTube video without coursework in digital media. Xavier students recognize this need too, and increasingly tell faculty that they want to acquire those skills while at Xavier. The Digital Media Major and Minor gives students those skills.



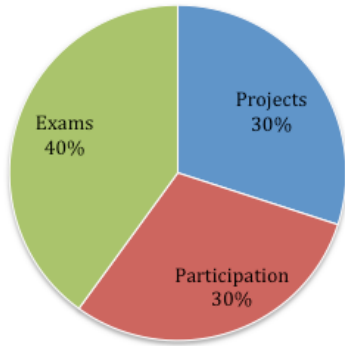
We define digital media as more than just social media like Twitter or Facebook. While analog media (like cassette tapes, records, and landline telephones) work by fully translating the wave created by the original sound or image, digital media work by sampling the wave and turning it into 1's and 0's (or on's and off's) to be reproduced later by a CD player or a DVD player. The shift from analog to digital media has made networked technologies like the internet possible— allowing us to communicate across great geographic distance and opening up digital media production to the everyday person. Thus, the Digital Media Major/Minor examines **social media** (like Facebook),

**digital cultures** (like online communities and vlogging culture), and **online politics** (like Gamergate). The Digital Media Major and Minor seek to provide students with skills and expertise in **digital media production, online communication, and digital culture**.

Expertise in digital media is crucial for our students in two ways. First, an understanding of digital media is critical to being **a full and active citizen** in today's networked and digital world. Scholars like Lance Bennett, Alexandra Sergerberg, Michael Xenos, and Sarah Florini demonstrate that social justice, activism, and citizenship are networked and digital.<sup>2</sup> At stake is whether students have the literacy, experience, and contextual knowledge to be full citizens and powerful agents in today's world. If we want students to be able to create social change as "men and women for and with others," our students must be able to deploy digital media.<sup>3</sup>

Second, expertise in digital media is an important requirement for **today's jobs**. The National Association of Colleges and Employers isn't yet tracking digital media as a distinct discipline or job field. Thus, national and regional statistics aren't available. But there have been increasing reports about the need for digital media skills in new hires. Vivian Giang in *Fortune Magazine* identifies a growing trend in job advertisements to list digital media skills as required.<sup>4</sup> A columnist for *Forbes Magazine* said, "Almost every single job out there involves being online in some capacity. That means that, at some point in your career—this year or 30 years from now—you'll likely have to access the back end of a company site, a blog or an email marketing service."<sup>5</sup> Apple CEO Tim Cook asserts that learning to code is as important as learning to speak a foreign language. Ultimately, students who have digital media expertise will have an advantage in the job market. The Digital Media Major and Minor aim to give students these skills.

**GRADES: What will you have to do in this class?**



<u>Participation (30%):</u>	
Twitter Posts:	30 points
<u>Projects (30%):</u>	
Communication Analysis Paper	30 points
<u>Exams (40%):</u>	
Midterm Exam	20 points
Final Exam	20 points
<u>Total possible:</u>	100 points

No late work is accepted: No late work is accepted in this class. **You will receive a zero for any assignment not turned in before the deadline.** There are two reasons for this policy. 1) I simply cannot accommodate rolling submissions. Having students turn in work on time means that I can grade more effectively and spend less time on logistical issues. 2) If you miss project deadlines at work, you won't have a job for long. Deadlines are important whether you are collaborating with colleagues informally, working at a professional job, or in school.

Attendance: You cannot participate meaningfully in class if you were not present in class. What we do in class is not easily replaced by reading the textbook or reading another student's notes. Students learn from in-class activities, from other students' contributions during class discussions, from other questions they hear, and from engaging the material for during class each day. Make every possible arrangement to attend all class periods. There will be a **sign-in sheet** for every class period. If you come to class late, it is your responsibility to make sure you sign your name on the sign-in sheet. Otherwise, you will be counted as absent. My goal is to reward students who engage our course material actively and consistently. Each student gets **three "freebie" days** to miss class for being sick, funerals, personal reasons, etc. For every class that you miss beyond your freebie, **you lose 2 points** (or the equivalent of 2%) from your total grade. You do not need to email me to let me know you are using one of your freebie days.

94%-100%	A
90%-93%	A-
87%-89%	B+
84%-86%	B
80%-83%	B-
77%-79%	C+
75%-76%	C
70%-74%	C-
67%-69%	D+
65%-66%	D
60%-64%	D-
0%-59%	F

Extra Credit: There may be opportunities for extra credit throughout the semester. The number and types of opportunities will vary depending on the semester and class. The **maximum** amount of extra credit any single student may earn is **2%**.

## **POLICIES: How will we go about learning in this class?**

Assignments due: All assignments are due before class begins.

Feedback: As an instructor, I work hard to give students useful feedback on their assignments. I want students to fully understand the feedback I give them. Therefore, I hope you will come talk to me about the feedback you receive on papers, projects, and other assignments. Receiving your grade shouldn't be a signal that our conversation is over. I encourage you to bring any questions to me during office hours—**I love talking with students about their work.**

Grade Disputes: If you would like to dispute a grade, you must do two things. 1) **Meet with me** face-to-face during office-hours. Email is a time-consuming and difficult way to engage in a dialogue about student projects. 2) **Ask questions first.** Try to understand the feedback you received and why it warranted a particular grade. After we talk for a bit, if you still feel like your grade doesn't accurately reflect your project, you may explain your argument. But you must ask questions first.

Readings due: Readings come from our textbooks, pdfs, and links online. Readings are listed on the day we will discuss them. Be sure to read them before class that day.

Types of Readings: In this class, we will engage a wide variety of “readings.” Very few of these will be chapters from traditional undergraduate textbooks. Part of that is because there simply isn't an undergraduate textbook written yet about digital communication that meets our needs. Instead, many of our readings will be academic documents: **book chapters and journal articles.**

This means that the writing level will be more challenging. But by working through the readings together in class, I think we'll be able to understand the main points quite well. This also means that the articles you're reading are part of larger conversations (the articles will likely cite other articles that you haven't read) and the book chapters you're reading are part of a larger book. I'll make sure to give you all of the background information you need to understand what any particular author is saying. But if you feel like you're entering a challenging conversation mid-way, that's OK. In fact, that's to be expected. Our discussions in class will work through these challenges.

While some of our readings will be original academic research, not all will. We also have readings that are **blog posts, videos, and comics.** These come from academics as well as leaders and activists working on the ground. Please watch the videos from

YouTube with the same care and attention that you read chapters from academic books.

Final Exams: All students must take the Final Exam during the designated time. This is required of all faculty members by the Dean's Office. **No exceptions can be made for travel or any other reasons.**

Academic Dishonesty: Like any course at Xavier, academic dishonesty will not be tolerated in this class. I expect you to cite your sources completely and appropriately. Penalties for academic dishonesty **range from a zero for the assignment to an F for the course**. You can find more information about Xavier's Academic Honesty policy here: <http://www.xavier.edu/handbook/standards/Academic-Honesty.cfm>.



## VALUES: How will this class value inclusion and respect?

Respect: Learning about communication involves risks. Our classroom needs to be a safe place to explore communication contexts and an open place to reconsider our preconceptions of communication, its power, and its use in our everyday lives.

Gender-Inclusive Language: Everyone should be referred to by the name they prefer, the correct pronunciation of their name, and the **pronoun they prefer** (like she, ze, he, or they). Please be respectful throughout the course. If you feel uncomfortable, do not hesitate to talk to me privately during office hours.

Title IX and Gender-Based Violence: Xavier (and my classroom specifically) should be a **safe place for you to be and for you to learn**. That's why Xavier takes gender-based violence (including sexual violence, intimate partner violence, stalking, and sexual harassment) seriously.

There are lots of gender-based violence prevention and response resources on campus, including Xavier's Title IX director, Kate Lawson. She can help you find the right resources and information (including your rights and legal options). You can contact Kate Lawson at lawsonk1@xavier.edu or 745-3046. There are also confidential services you can access if you are not yet ready to report any gender-based violence you may be experiencing. Confidential resources include: the Advocate Program, Women Helping Women, counselors, physicians, and nurses at McGrath Health and Wellness and Psychological Services, clergy, and private mental health counselors. You can find more information here: <http://www.xavier.edu/titleix/index.cfm>

Disability: I work to make sure that my classroom and my course are not ableist—making sure that **everyone can easily access my course**. Xavier takes that goal seriously as well, and Disability Services provides resources for both Xavier students and faculty. If you have a disability that requires accommodation, please see Disability Services to obtain a letter specifying the particular accommodations you require. Then, bring that letter to me at the beginning of the course so that I can prepare your accommodations. If you have any questions at any point throughout the semester, please feel free to talk with me and/or Disability Services. You can find more information here: <http://www.xavier.edu/learning-assistance-center/Disability-Services.cfm>

## **SCHEDULE: When are readings and assignments due?**

### **COURSE INTRODUCTION:**

#### Day 1: T 1/9 (Syllabus)

- Read the Syllabus before class
- Read the “Advice for Future Students”:

#### Day 2: R 1/11 (Learning/Pedagogy)

- Freire, Chapter 2 (pdf)
- Watters: <http://hackededucation.com/2014/09/05/beyond-the-lms-newcastle-university>

### **UNIT 1: DIGITAL MEDIA HISTORY:**

#### Day 3: T 1/16 (Technological Determinism)

- Baym Chapter 2 (pdf):

#### Day 4: R 1/18 (Components of a Computer)

- Ceruzzi, Intro and Chapter 1 (textbook)
- Crash Course: Early Computing:  
[https://www.youtube.com/watch?v=O5nskjZ\\_Gol](https://www.youtube.com/watch?v=O5nskjZ_Gol)

#### Day 5: T 1/23 (Ada Lovelace)

- Padua (pdf) [be sure to read the footnotes, not the endnotes]
- Read Ceruzzi, page 28 (he refers to Ada Lovelace as Ada Augusta)
- Poke around online searching for Ada Lovelace Day

#### Day 6: R 1/25 (The First Computers)

- Ceruzzi, Chapter 2 (textbook)
- Crash Course: Electronic Computing:  
<https://www.youtube.com/watch?v=LN0ucKNX0hc>

#### Day 7: T 1/30 (Colossus and ENIAC Programmers)

- Abbate, Chapter 1 (pdf)
- Discuss Midterm Exam

#### Day 8: R 2/1 (Mainframes)

- Ceruzzi, Chapter 3 (textbook)

#### Day 9: T 2/6 (The Integrated Circuit)

- \*\*Tweets #1 due (1/11-2/1)
- Ceruzzi, Chapter 4 (textbook)
- Crash Course: Integrated Circuits & Moore’s Law:  
<https://www.youtube.com/watch?v=6-tKOHICqrI&list=PL8dPuuaLjXtNIUrzyH5r6jN9ullgZBpdo&index=18>

#### Day 10: R 2/8 (Navajo Women and Microchips)

- Nakamura: <http://www.computerhistory.org/atcm/indigenous-circuits/>

#### Day 11: T 2/13 (The Personal Computer)

- Ceruzzi, Chapter 5 (textbook)
- Crash Course: The Personal Computer Revolution:  
<https://www.youtube.com/watch?v=M5BZou6C01w&list=PL8dPuuaLjXtNIUrzyH5r6jN9ullgZBpdo&index=26>

Day 12: R 2/15 (The Internet)

- Ceruzzi, Chapter 6 and 7 (textbook)
- Curiosity 180, "How does the Internet work?":  
<https://www.youtube.com/watch?v=olUGO-cnLLg>
- Review for Midterm

Day 13: T 2/20 (Midterm Exam)

- \*\*Midterm Exam

**UNIT 2: KEY THEORETICAL TERMS**

Day 14: R 2/22 (Rhetorical Choices)

- Campbell & Huxman, Preface & Introduction (pdf)

Day 15: T 2/27 (Rhetorical Choices)

- Palczewski, Ice, and Fritch, Chapter 2 (pdf)
- Context for Obama's speech:
  - Read this excerpt from Robert Terrill's article:
  - To see the video that caused such a controversy, watch the first 2 ½ minutes of this YouTube video:  
<https://www.youtube.com/watch?v=tFYeTrQMHA8>
- Watch the first 15 minutes of Obama's speech "A More Perfect Union" while following along with the text of the speech.
  - Video: <https://www.youtube.com/watch?v=zrp-v2tHaDo>
  - Text to follow along in:  
<http://www.americanrhetoric.com/speeches/barackobamaperfectunion.htm>

Day 16: R 3/1 (Context & Audiences)

- Hauser, Chapter 3 (pdf)
- Context for Fisher's speech
  - Excerpt from Lucas' *Top 100 American Speeches* (pdf):
  - Excerpt from McGee (.doc):
- Watch Mary Fisher's 15-minute speech, "A Whisper of AIDS", while following along with the text of the speech.
  - Video: [https://www.youtube.com/watch?v=zB5K9k\\_\\_SOo](https://www.youtube.com/watch?v=zB5K9k__SOo)
  - Text to follow along in:  
<http://www.americanrhetoric.com/speeches/maryfisher1992rnc.html>

Spring Break: T 3/6 (No class)

Spring Break: R 3/8 (No class)

Day 17: T 3/13 (Audience Online)

- PBS Idea Channel, "Are there internet dialects?": <https://youtu.be/SDPasRas5u0>
- Baym, Chapter 4 (pdf)

Day 18: R 3/15 (Technical Affordances)

- \*\*Tweets #2 due (2/6-3/13)
- Winner (pdf)
- Pandel, "An Oral History of the History of Hashtag":  
<https://www.wired.com/2017/05/oral-history-hashtag/>

Day 19: T 3/20 (Putting it all together)

- In class practice analysis

Day 20: R 3/22 (Peer Review)

- \*\*Draft of Analysis Paper due (bring 3 copies to class)

Day 21: T 3/27 (Revision Workshop)

- \*\*Bring revised draft of paper, based on Peer Review comments
- In class revision workshop and writing

Easter Break: R 3/29 (No class)

- \*\*Analysis Paper due

**UNIT 3: WHO GETS TO SPEAK AND WHO GETS TO BE HEARD ON THE INTERNET?**

Day 22: T 4/3 (Networked Publics)

- Watch short 10 minute mini-lecture on the public sphere:
- Benkler, Chapters 6-7 (pdf)

Day 23: R 4/5 (The Long Tail)

- Hindman, Chapter 3 (pdf)

Day 24: T 4/10 (Gender)

- Allen, "Gender Matters" (pdf)

Day 25: R 4/12 (Gender Online)

- Cauterucci, "New Chrome App Helps Women Stop Saying 'Just' and 'Sorry' in Emails,"  
[http://www.slate.com/blogs/xx\\_factor/2015/12/29/new\\_chrome\\_app\\_helps\\_women\\_stop\\_saying\\_just\\_and\\_sorry\\_in\\_emails.html](http://www.slate.com/blogs/xx_factor/2015/12/29/new_chrome_app_helps_women_stop_saying_just_and_sorry_in_emails.html)
- Hess, "Why women aren't welcome on the internet":  
<http://www.psmag.com/navigation/health-and-behavior/women-arent-welcome-internet-72170/>
- Paling: "How Wikipedia is hostile to women":  
<http://www.theatlantic.com/technology/archive/2015/10/how-wikipedia-is-hostile-to-women/411619/>

Day 26: T 4/17 (Race)

- Allen, "Race Matters" (pdf)
- Watch the videos in the "What is Systemic Racism?" playlist (8 1-minute videos):  
<https://www.youtube.com/watch?v=GPVXdjCkCA&list=PL4ruTyc9FHOXSQYNEOQ7ePGQReN9sf5tb>

Day 27: R 4/19 (Race Online)

- Vogt and Goldman, "Race Swap": <http://www.onthedia.org/story/tldr-31-race-swap/>
- Hempel, "For Nextdoor, eliminating racism is no quick fix":  
<https://www.wired.com/2017/02/for-nextdoor-eliminating-racism-is-no-quick-fix/>
- Ellis, "Want to profit off your meme? Good luck if you aren't white":  
[https://www.wired.com/2017/03/on-fleek-meme-monetization-gap/?mbid=social\\_fb\\_onsiteshare](https://www.wired.com/2017/03/on-fleek-meme-monetization-gap/?mbid=social_fb_onsiteshare)

- Jackson, “We need to talk about digital blackface in reaction GIFs”:  
<http://www.teenvogue.com/story/digital-blackface-reaction-gifs>

Day 28: T 4/24 (Final Exam Review & Reflection)

- \*\*Optional Revision of Analysis Paper due
- Instead of responding to the reading, I'd like you to reflect back on the active learning style we embraced this semester, setting aside the banking model for a problem-posing orientation. In your three tweets for today, reflect a little bit about how you adjusted your learning practices. What worked well for you? What didn't work well? What tips do you have to share with others? What would you tell future students taking COMM221 about how they should go about learning?
- Review for Final Exam

Day 29: R 4/26 (Floater Day)

- \*\*Tweets #3 due (3/15-4/24)
- This is a floater day that gives us some flexibility as the semester goes on— flexibility to spend a day longer on a concept if we need to, flexibility to talk about a relevant current event that might come up, or flexibility in case Dr. Hinck gets sick!

Final Exam: 5/1-5/3

- \*\*Final exam for Section 1: Tuesday, 5/1 @10:30am-12:20pm
- \*\*Final exam for Section 2: Thursday, 5/3 @10:30am-12:20pm

**BIBLIOGRAPHY: Where did our course readings come from?**

- Abbate, Janet. *Recoding Gender: Women's Changing Participation in Computing*. History of Computing. Cambridge, Mass: MIT Press, 2012.
- Allen, Brenda. *Difference Matters: Communicating Social Identity*. Long Grove IL: Waveland Press, 2004.
- Baym, Nancy. *Personal Connections in the Digital Age*. Malden, MA: Polity, 2010.
- Benkler, Yochai. *The Wealth of Networks: How Social Production Transforms Markets and Freedom*. New Haven [Conn.]: Yale University Press, 2006.
- Campbell, Karlyn Kohrs, and Susan Schultz Huxman. *The Rhetorical Act: Thinking, Speaking, and Writing Critically*. 4th ed. Boston, MA: Wadsworth Cengage Learning, 2009.
- Cauterucci, Christina. "New Chrome App Helps Women Stop Saying 'just' and 'sorry' in Emails." *Slate*, December 19, 2015. [http://www.slate.com/blogs/xx\\_factor/2015/12/29/new\\_chrome\\_app\\_helps\\_women\\_stop\\_saying\\_just\\_and\\_sorry\\_in\\_emails.html](http://www.slate.com/blogs/xx_factor/2015/12/29/new_chrome_app_helps_women_stop_saying_just_and_sorry_in_emails.html).
- Ceruzzi, Paul E. *Computing: A Concise History*. The MIT Press Essential Knowledge Series. Cambridge, Mass: MIT Press, 2012.
- CrashCourse. *Crash Course Computer Science YouTube Channel*, 2017. [https://www.youtube.com/watch?v=O5nskjZ\\_Gol&list=PLME-KWdxl8dcaHSzzRsNuOLXtM2Ep\\_C7a&index=1&t=316s](https://www.youtube.com/watch?v=O5nskjZ_Gol&list=PLME-KWdxl8dcaHSzzRsNuOLXtM2Ep_C7a&index=1&t=316s).
- Ellis, Emma Grey. "Want to Profit off Your Meme? Good Luck If You Aren't White." *WIRED*, March 1, 2017. <https://www.wired.com/2017/03/on-fleek-meme-monetization-gap/>.
- Freire, Paulo. *Pedagogy of the Oppressed*. 30th anniversary ed. New York: Continuum, 2000.
- Hauser, Gerald A. *Introduction to Rhetorical Theory*. Reissued. Illinois: Waveland Press, 1991.
- Hempel, Jessi. "For Nextdoor, Eliminating Racism Is No Quick Fix." *WIRED*, February 16, 2017. <https://www.wired.com/2017/02/for-nextdoor-eliminating-racism-is-no-quick-fix/>.
- Hess, Amanda. "The Next Civil Rights Issue: Why Women Aren't Welcome on the Internet." *Pacific Standard*, January 6, 2014. <http://www.psmag.com/navigation/health-and-behavior/women-arent-welcome-internet-72170/>.
- Hindman, Matthew. *The Myth of Digital Democracy*. Princeton: Princeton University Press, 2009.
- Jackson, Lauren Michele. "We Need to Talk About Digital Blackface in GIFs." *Teen Vogue*, August 2, 2017. <http://www.teenvogue.com/story/digital-blackface-reaction-gifs>.
- Nakamura, Lisa. "Indigenous Circuits." *Computer History Museum*, January 2, 2014. <http://www.computerhistory.org/atcm/indigenous-circuits/>.
- Padua, Sydney. *The Thrilling Adventures of Lovelace and Babbage: With Interesting & Curious Anecdotes of Celebrated and Distinguished Characters Fully Illustrating*

- a Variety of Instructive and Amusing Scenes; as Performed within and without the Remarkable Difference Engine*. New York: Pantheon Books, 2015.
- Palczewski, Catherine Helen, Richard Ice, and John Fritch. *Rhetoric in Civic Life*. State College, Pa: Strata Pub, 2012.
- Paling, Emma. "Wikipedia's Hostility to Women." *The Atlantic*, October 21, 2015. <http://www.theatlantic.com/technology/archive/2015/10/how-wikipedia-is-hostile-to-women/411619/>.
- Pandell, Lexi. "An Oral History of the #Hashtag." *WIRED*, May 19, 2017. <https://www.wired.com/2017/05/oral-history-hashtag/>.
- PBS Idea Channel. *Are There Internet Dialects?* PBS Digital Studios: PBS Idea Channel, 2014. <https://www.youtube.com/watch?v=SDPasRas5u0&feature=youtu.be>.
- Vogt, PJ, and Alex Goldman. *Race Swap on the Web*. Accessed August 21, 2015. [http://www.onthedia.org/story/tldr-31-race-swap/?utm\\_source=sharedUrl&utm\\_medium=metatag&utm\\_campaign=sharedUrl](http://www.onthedia.org/story/tldr-31-race-swap/?utm_source=sharedUrl&utm_medium=metatag&utm_campaign=sharedUrl).
- Watters, Audrey. *The Monsters of Education Technology*, 2014.
- Winner, Langdon. "Technologies as Forms of Life, and Do Artifacts Have Politics?" In *The Whale and the Reactor: A Search for Limits in an Age of High Technology*, 3-18-39. Chicago: University of Chicago Press, 1989.

## **Endnotes.**

<sup>1</sup> boyd, *It's Complicated*, 176.

<sup>2</sup> Bennett and Segerberg, *The Logic of Connective Action*; Bennett, "Changing Citizenship in the Digital Age"; Xenos and Foot, "Not Your Father's Internet: The Generation Gap in Online Politics"; Earl and Kimport, *Digitally Enabled Social Change*; Banaji and Buckingham, *The Civic Web*; Pfister, *Networked Media, Networked Rhetorics*; Xenos, "New Mediated Deliberation"; Florini, "This Week in Blackness, the George Zimmerman Acquittal, and the Production of a Networked Collective Identity."

<sup>3</sup> "Center for Mission and Identity - Mission Statement."

<sup>4</sup> Giang, "Recruiting for 'Digital Natives' Is Age Discrimination, Lawyers Say."

<sup>5</sup> The Muse, "Five Tech Skills That Will Help Your Career (No Matter What You Do)," 1.

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