

philosophy of technology

Teenage boys were initially hired to operate switchboards due to the labor-intensive work required to connect callers. They were eventually replaced by women because the boys were often drunk and linked to swear, wrestle, and play pranks on the callers.

Photo credit: Boys operating the switches, c. 1877 (The Telecommunications History Group)



description

The aim of this course is to help you develop an understanding of the philosophical dimensions of technology by analyzing the nature of technology through a multitude of critical lenses. Broadly speaking, we will be exploring the nature of technology (“What is technology?”), the historical role it has played in society, and the ethical implications of various technologies, even ones that aim to alleviate conditions or improve our lives. We will also be analyzing it through various critical lenses, such as feminist and Marxist critiques of technology. In conjunction, we

will also study how technology has been romanticized and/or demonized in popular culture, and how that has shaped the way we think about technology’s role in society. We will explore these topics through scholarly articles, science fiction (in book and movies), and documentaries. Specific topics include (but are not limited to) technology and learning, surveillance/privacy, design (software and hardware), inscription/assessment, artificial intelligence, robotics and cyborgs, new media, disabilities, and virtual/augmented reality.

edt 601

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office hours (Post Annex 2):

M 1-3 PM

T 4:30-6:30 PM

W 1-3 PM

you are encouraged to email me before dropping by

slack:

/philosophy

required texts

Eggers, D. (2013) *The circle*. New York, NY: Vintage Books.

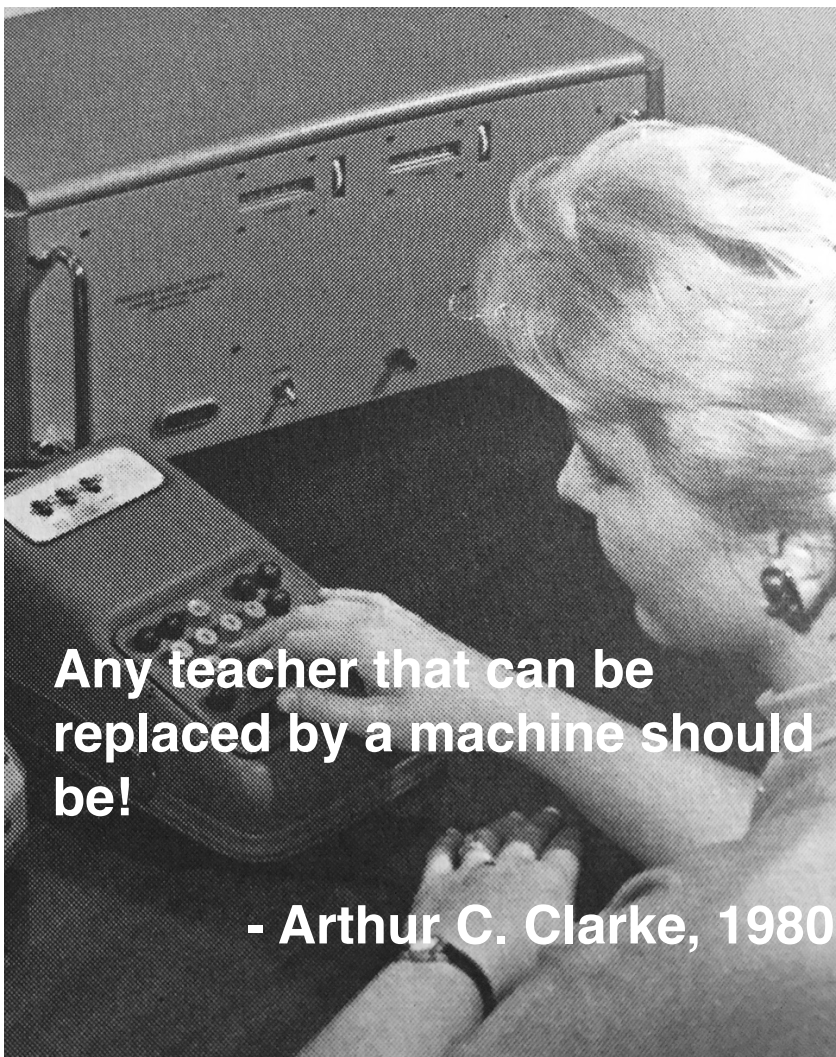
Scharff, R. C. and Dusek, V. (2014) *Philosophy of technology: The technological condition*. Malden, MA: Wiley Blackwell. (Available as e-textbook from the Adelphi library)

goals and objectives

The course provides students with a broad historical perspective of the philosophical positions on the role of technology in society. In addition to understanding how technology is used, students should also be aware of how it changes our relation to mind, perception, reality and society.

By the end of the course, students should be able to:

- Understand major topics in philosophy of technology
- Apply a philosophical lens to critique current and emerging technologies
- Compare and contrast different philosophical traditions and synthesize them to make coherent arguments and assess the role of technology in society
- Understand the various positions (e.g. feminism, anti-technology) and why they are relevant to the development and use of technology



class sessions

Note: Readings are due on the date assigned. You should also be reading Dave Eggers's *The Circle* in your own time. We will be discussing it as a class the week after Spring Break. **Dates in grey boxes meet in person in the Gallagher Lounge.**

The science fiction readings and movies are not mandatory but can help frame or anchor a difficult philosophical concept.

date	philosophical topic(s)	sci-fi theme	assignments due
1/26/16	<p>foundation</p> <p>readings Dourish, P. and Bell, G. (2014) "Resistance is futile": Reading science fiction alongside ubiquitous computing. <i>Personal and Ubiquitous Computing</i>. 14(3), 171-180.</p> <p>Marx, L. (2010) Technology: The emergence of a hazardous concept. <i>Technology and Culture</i>. 50(3). 561-577.</p>		
2/2/16	<p>plato and aristotle</p> <p>readings Plato (chapter in textbook)</p> <p>Aristotle (chapter in textbook)</p>	<p>simulation; alternate reality</p> <p>suggested sci-fi <i>The Matrix</i> (1999)</p>	
2/9/16	<p>bacon and descartes</p> <p>readings Bacon (chapter in textbook)</p> <p>Wheeler, M. (2008) God's machines: Descartes on the mechanization of mind. In P. Husbands, O, Holland and M. Wheeler (Eds.) <i>The mechanical mind in history</i> (pp. 307-330) Cambridge, MA: The MIT Press.</p>	<p>duality, mechanism; consciousness; being</p> <p>suggested sci-fi <i>Blade Runner</i> (1982)</p> <p>Philip K. Dick's <i>Do Androids Dream of Electric Sheep</i> (1968)</p>	
2/16/16	<p>writing workshop</p>		
2/23/16	<p>technology and history</p> <p>readings Heilbroner (chapter in textbook)</p> <p>Marx and Engels (chapter in textbook)</p> <p>Veblen, T. (1904). <i>The theory of the business enterprise</i>. New Brunswick, NJ: Transaction Book. (Selections)</p>	<p>technological determinism; singularity</p> <p>suggested sci-fi H. G. Well's <i>The Time Machine</i> (1895)</p>	

date	philosophical topic(s)	sci-fi theme	assignments due
3/1/16	<p>technology and media</p> <p>readings Ellul (chapter in textbook)</p> <p>Kittler, F. (1985) <i>There is no software. C-Theory: Theory, Technology, Culture</i>. 32.</p> <p>Postman, N. (1992) <i>Technopoly: The surrender of culture to technology</i>. New York, NY: Vintage Books. (Selections)</p>	<p>mass entertainment; consumerism</p> <p>suggested sci-fi M. T. Andersen's <i>Feed</i> (2002)</p> <p>Suzanne Collin's <i>The Hunger Games</i> (2008)</p> <p>Aldous Huxley's <i>Brave New World</i> (1932)</p> <p><i>WALL-E</i> (2008)</p>	philosophy in fiction
3/8/16	<p>technology and education</p> <p>readings Dewey, J. (1897) <i>My pedagogic creed</i>. New York, NY: E. Kellogg & Co.</p> <p>Skinner, B. F. (1958) Teaching machines. <i>Science</i>. 128(1330), 969-977.</p>	<p>behaviorism; schooling</p> <p>suggested sci-fi Isaac Asimov's <i>The Fun They Had</i> (1951)</p> <p>Isaac Asimov's <i>The Feeling of Power</i> (1958)</p> <p>Ray Bradbury's <i>The Veldt</i> (1950)</p> <p>B. F. Skinner's <i>Walden Two</i> (1948)</p> <p>Vernor Vinge's <i>Fast Times at Fairmont High</i> (2002)</p>	
3/15/16	spring break		
3/22/16	<p>technology and control</p> <p>readings Foucault (chapter in textbook)</p>	<p>privacy; security; surveillance</p> <p>suggested sci-fi Dave Egger's <i>The Circle</i> (2013)</p>	fishbowl discussion
3/29/16	<p>technology and society</p> <p>readings Cowan, R. S. (1985). How the refrigerator got its hum. In D. A. MacKenzie & J. Wajcman (Eds.), <i>The social shaping of technology</i>. (pp. 202–218). Philadelphia, PA: Open University Press.</p> <p>Kline, R. (2003). Resisting consumer technology in rural America: The telephone and electrification. In N. Oudshoorn & T. J. Pinch (Eds.), <i>How users matter: The co-construction of users and technologies</i> (pp. 51–66). Cambridge, MA: The MIT Press.</p> <p>Latour (chapter in textbook)</p>	<p>technology and society</p> <p>suggested sci-fi E. M. Forster's <i>The Machine Stops</i> (1909)</p> <p>William Gibson's <i>The Difference Engine</i> (1990)</p>	compare and contrast

date	philosophical topic(s)	sci-fi theme	assignments due
4/5/16	writing workshop		
4/12/16	<p>robots and artificial intelligence</p> <p>readings Forsythe, D. E. (2003). <i>Studying those who study us: An anthropologist in the world of artificial intelligence</i>. Stanford, CA: Stanford University Press. (Selections)</p> <p>Suchman, L. A. (2006). <i>Human-machine reconfigurations: Plans and situated actions</i>. Cambridge: Cambridge University Press. (Selections)</p> <p>Turing, A. M. (1950) Computing machinery and intelligence. <i>Mind</i>. 59(236), 433-460.</p>	<p>sentience</p> <p>suggested sci-fi <i>A.I.</i> (2001)</p> <p><i>Ex Machina</i> (2014)</p> <p>Isaac Asimov's <i>I, Robot</i> (1950)</p>	case study
4/19/16	<p>users and affordance</p> <p>Readings Curinga, M. (2014). Critical analysis of interactive media with software affordances. <i>First Monday</i>, 19(9).</p> <p>Lindsay, C. (2003). From the shadows: Users as designers, producers, marketers, distributors, and technical support. In N. Oudshoorn & T. J. Pinch (Eds.), <i>How users matter: The co-construction of users and technologies</i> (pp. 29-50).</p> <p>Norman, D. A., & Nielsen, J. (2010). Gestural interfaces: A step backward in usability. <i>Interactions</i>, 7(5), 46–49.</p>	<p>design; chaos</p> <p>suggested sci-fi <i>Jurassic Park</i> (1993)</p>	
4/26/16	<p>cyborgs, feminism, and post-humanisms</p> <p>Readings Forsythe, D. E. (2003). <i>Studying those who study us: An anthropologist in the world of artificial intelligence</i>. Stanford, CA: Stanford University Press. (Selections)</p> <p>Haraway (chapter in textbook)</p>	<p>post-humanism</p> <p>suggested sci-fi Mary Shelley's <i>Frankenstein</i> (1818)</p>	
5/3/16	writing workshop		
5/10/16	conclusion		extended paper

grading scale

participation and attendance	20%
fishbowl	10%
philosophy in fiction	15%
compare and contrast	15%
case study	15%
extended paper	25%

assignments

participation and attendance

This is a graduate course where you are expected to complete weekly readings and fully participate in discussions in class and on Moodle. In order for the discussion to flow smoothly online, you should respond to the forum discussion by the dates noted on the syllabus, and spend the remainder of the week responding to what your peers have posted. Your responses to your peers should be thoughtful, critical and substantive. Your participation grade will be based on the timeliness and quality of your posts, your responses to your peers, and any other activities that might be associated with the week.

fishbowl

We'll be holding a fishbowl discussion of Dave Eggers's *The Circle*. During this discussion, you are expected to talk about the book in relation to the readings we have done so far in class. To prepare for the fishbowl, be sure to have read the book by then and to come with discussion questions for your peers.

philosophy in fiction

Throughout the class we'll be referencing science fiction stories as a way of anchoring our philosophical discussions. Many science fiction authors were inspired by philosophical readings and concepts, and many philosophers were in turn influenced by science fiction stories. For this assignment, you're asked to write a short 3-5 page paper that analyzes a science fiction story (short story, novel or film) and its underlying philosophical message. The philosophical message has to be one that has been covered in our readings. You may use some of the stories listed in the syllabus and on Moodle, or find one on your own.

writing workshop

The major assignments for this course are the philosophical essays, which are formal academic papers. Writing workshops have been built into the semester to help you develop your ideas. The best ways to use the workshops are:

- Use it to brainstorm ideas with your peers or with me
- Bring outlines and drafts
- Use concept maps, graphic organizers or anything else if it helps you think
- Pay attention to how you organize your essay. Formal essays should roughly follow a particular format.
- Look at other readings are guidelines on how to develop your own ideas and arguments

compare and contrast

Pick two philosophers or philosophical views and write a short 3-5 page compare and contrast paper. The paper should follow the formal organization of a compare and contrast paper. Your paper should also discuss your own views in relation to the two philosophers/philosophies.

case study

Select a particular example of technology and use this as a case study to show how particular philosophical concerns are at work. Write a short 3-5 page paper that draws on the class readings and discussions.

extended paper

Pick one of the three short papers and expand it into a major academic paper (8-10 pages). In this paper, you should connect the discussion with education (either formal or informal) and how the philosophical questions raised impact the use of technology on education and society.

additional scifi readings

short stories

- Asimov, Isaac. (1951) *The Fun They Had*
- Asimov, Isaac. (1958) *The Feeling of Power*
- Bradbury, Ray. (1950) *The Veldt*
- Bradbury, Ray. (1954) *All Summer in a Day*
- Dick, Philip K. (1968) *Do Androids Dream of Electric Sheep?*
- Dick, Philip K. (1969) *The Electric Ant*
- Forster, E. M. (1909) *The Machine Stops*
- Vinge, Vernor. (2001) *Fast Times at Fairmont High*

novels

- Abrashkin, Raymond and Jay Williams. (1958) *Danny Dunn and the Homework Machine*
- Andersen, M. T. (2002) *Feed*
- Asimov, Isaac. (1950) *I, Robot*
- Burgess, Anthony. (1962) *A Clockwork Orange*
- Card, Orson Scott. (1985) *Ender's Game*
- Cline, Ernest (2011) *Ready Player One*
- Collins, Suzanne (2008) *The Hunger Games*
- Doctorow, Cory. (2008) *Little Brother*
- Doctorow, Cory. (2013) *Homeland*
- Gibson, William (1990) *The Difference Engine*
- Heinlein, Robert. (1957) *Citizen of the Galaxy*
- Hesse, Hermann. (1943) *The Glass Bead Game*
- Huxley, Aldous. (1931) *Brave New World*
- Le Guin, Ursula. (1976) *The Word for World is Forest*
- Orwell, George. (1949) *Nineteen Eighty-Four*
- Sheffield, Charles and Jerry Pournelle. (1996) *Higher Education*
- Shelley, Mary (1818) *Frankenstein*
- Skinner, B. F. (1948) *Walden Two*
- Stephenson, Neal. (1984) *The Big U*
- Stephenson, Neal. (1995) *Diamond Age: or A Young Lady's Illustrated Primer*
- Stephenson, Neal. (2011) *Reamde*
- Vinge, Vernor. (2006) *Rainbow's End*
- Vonnegut, Kurt. (1952) *Player Piano*

Wells, H. G. (1895) *The Time Machine*
Zamayatin, Yevgeny. (1924) *We*

films

A.I. (2001)
Blade Runner (1982)
Ex Machina (2014)
The Matrix (1999)
WALL-E (2008)