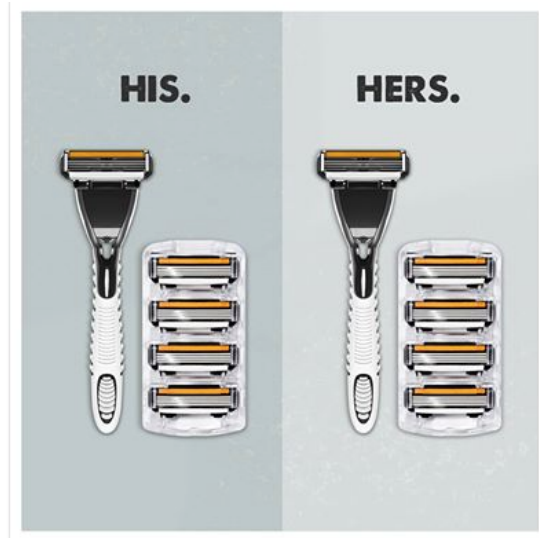# Sociology 4107: Gender and Technological Change
(Or, What is Technofeminism?)

Fall 2014   Max Liboiron
Monday & Wednesday   mliboiron@mun.ca
9-10:15   Office: AA4069
Classroom: A4049D   Office Hours: Tues 9-10am & by appointment

Course Description

This is a hybrid course that combines theoretical considerations, sociological case studies, and hands on technological creation to explore issues in technofeminism. We will look at how technological artifacts, technological practices, and socio-technical systems can be considered feminine or feminist and how they might be used to create social change. The main class project will be to build, tweak, and develop protocols for a low-cost, DIY, open source thermal flashlight that can detect changes in heat on a surface. How might we build and use this tool in a way that promotes gender equity and justice? Hoe might we make it a feminist technology? http://publiclab.org/wiki/thermal-camera

This course takes as its starting point the following questions: How are gender identities constituted in technologically mediated environments and technological artifacts themselves? What roles does technology play in changing gender and power dynamics? How does technology change, and how can you create change with technology? How are the "do it yourself" and "do it with others" ethics in technology cultures central to feminist politics? How can we link design practices and theory?

Course Objectives

(1) To make you **mindful** of technology which, because it is so pervasive and because it is taken for granted, tends to recede from our conscious awareness.

(2) To expose you to a variety of ways of thinking about the **reciprocal relationships** between technology (specialized ways of doing things) and society (the organized collection of human activity), particularly in terms of

gender and power dynamics.

(3) To develop your sensibilities and **critical thinking** skills for recognizing technology's pervasive presence, past and present, and of technology's significant influence on not only the shape and direction of society, but also on individual perceptions and behavior around gender.

(4) To engage in solving real world problems relating to gender and justice using technology within feminist frameworks. It creates an opportunity as a **citizen** to take part in the creation, use, and governance of technology.

(5) Develop skills that merge technical, hands-on aspects of learning with readings and theory. Often this is called **praxis**, or practice-based theory, and is another way to validate research and learning via hands-on case studies.

Assignments
- *Before and After 10%*
- *Midterm Exam 30%*
- *Quizzes 5%*
- *Group Work Document 5%*
- *Final Project 40%*
- *Participation 10%*

Grading
We will be following Memorial University's grading scheme, which can be found here: http://www.mun.ca/regoff/calendar/sectionNo=REGS-0661
All assignments will include clear grading criteria. If you wish to contest a grade, wait 48 hours after receiving it, then sign up for office hours.

Lates and Absences
Please do not be late. It is distracting to your peers and your instructor. Class will always start exactly on time, so come in a few minutes early to get started. I do not grade lates unless they disrupt the class to the point of impacting your participation grade, but they may be part of your collaboration agreement or the class community agreement.
If you are going to miss a class, you are responsible for making up assignments and exams. Assignments should be emailed or sent with a peer so they are not late—late assignments lost 10% per day late. Exams have to be made up within the week, and a doctor's note or other documentation should be provided for make up exams. Whenever possible, please tell me about absences in advance.

Extensions
If you and your group need an extension, I must be notified in writing the week before the due date of the assignment. Include the reason for requesting an extension and for how long. Exams, quizzes, and other tests are not granted extensions. If you or your group is given an extension, keep in mind that it may take an extended period to get grades back to you since marking would fall outside of my planned schedule.

Classroom Community
Let's operate under the assumption that all of us have important insights to offer, but that each of our perspectives is limited. You are asked to play your part in creating a classroom environment where people are free to learn by challenging and being

challenged by others' contributions. You are also asked to be respectful and sensitive to others and to work to make our classroom environment safe and welcoming to everyone. It also means we all have a responsibility to share what we know, as well as our question, so that others may learn from us. This class will succeed if we all embrace the challenge to read and think and talk in ways that you have never read and thought and talked before. To help make this class a community of learners, there are a few structures in place:

- **Community Agreement**: One of our first classes will involve collaboratively creating a document that outlines what our responsibilities are to each other to enable and support the best learning and listening environment possible.
- **Timekeeper**: At the beginning of every class, a student will be asked to keep time and tell us when we have 10 minutes left in class or to time various in-class activities. This person is allowed to respectfully interject if someone is talking to give these notices. This is part of your participation grade.
- **Note taker**: At the beginning of every class, a student will be asked to be the designated note taker for the session. They will share their notes with the rest of the class, posting them online within 24 hours. This way, absent students have notes, and present students can relax knowing that someone will catch anything they miss. This is part of your participation grade.
- **Group work**: This class involves group work. Yes, I also hate group work. Or I used to. Most of us do not know good group work habits, and they are habits we need to succeed professionally (and personally!) in most settings. The final project will include the crafting of a collaboration agreement with others in your group. If you have a problem in your group, use the group agreement first to work it out together. Come to me only after that fails.

Classroom Technology Experiment: Thermal Flashlight
The major project in this class will be to create a DIY technology called a Thermal Flashlight and think about how to use it to address some of the issues that come up in class around gender, justice, and change.
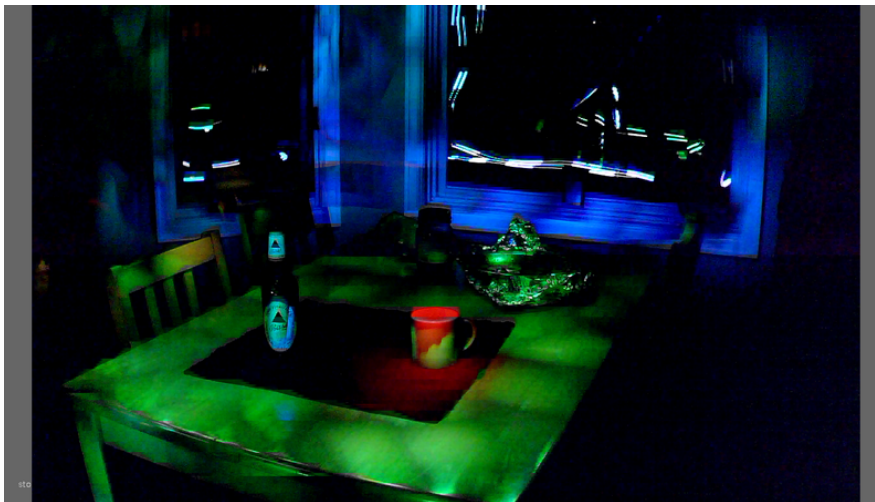
Prototype of a Thermal Flashlight that shows cold windows (blue), a warm table (green), and a hot drink (red).

Readings
There are two books for the class: Ellen Ullman's *Close to the* Machine and Virgina Eubanks' *Digital Dead End*. These are available at the campus bookstore. All other readings will be available on the class website (D2L) or online. Links to online readings are provided in the schedule below.

Class Schedule
Subject to change: an up to date version will always be available on the class website.

M 9/1	No classes	
W 9/3	Intro to syllabus	Homework due 9/8 or during class if time, before doing any reading: Part one of Before and After.
M 9/8	Safe Spaces	Sophie Toupin, "Feminist Hackerspaces as Safer Spaces?" http://dpi.studioxx.org/feminist-hackerspaces-safer-spaces Aorta Collective: Anti-Oppression Facilitation Worksheet Reading Questions: Why might we want to make this classroom a safe space? How would we do it? How does this relate to the purpose of the class? We will make a community agreement in class. Due: Part one of the Before and After assignment. Hand in hard copy.
W 9/10	What is Technology?	Volti, Rudi. "Chapter 1: The Nature of Technology." *Society and Technological Change*. Macmillan, 2014: 3-18. Reading question: How might we amend some of our earlier ideas about technology in the before and after assignment? Class exercise: A social reading of a technological artifact. Note: Monday is a fairly long reading (though it is not difficult), so start early.
M 9/15	What is Feminism? What does it have to do with technology?	Read: http://finallyfeminism101.wordpress.com/purpose/ Choose several to read: http://finallyfeminism101.wordpress.com/the-faqs/faq-roundup/ Lerman, Oldenzeil and Mohun, "Interrogating Boundaries" and "Why Feminine Technologies Matter," *Gender and Technology: A Reader*. New York, John Hopkins Press: 1-36. Reading Question: What would a feminist technology look like? Make a list of 3-5 things that might apply to all feminist technologies. Note: Wednesday is a fairly long reading, so feel free to start ahead.
W 9/17	Technology as Gendered Artifact	Van Oost, E. (2003). Materialized gender: how shavers configure the users' femininity and masculinity'. *How Users Matter: The Co-construction of Users and Technology, eds N. Oudshoorn, 8*, 193-208. Reading Question: How are gender norms "baked" into artifacts? Can they be changed?
M 9/22	From artifacts to practices to systems	Wajcman, Judy. "Feminist Theories of Technology." *Cambridge Journal of Economics*, 2009: 1-10. Winner, Langdon. "Do Artifacts Have Politics?" *Daedalus*. 1980: 121–136.
W 9/24		Volti, Rudi. "Chapter 2: Winners and Losers: The Differential Effects of Technological Change." *Society and Technological Change*. Macmillan, 2014: 21-38. Rittel, Horst W. J., and Melvin M. Webber. "Dilemmas in a General

		Theory of Planning." *Policy Sciences* 4, no. 2 (June 1, 1973): 155–69. MCC 2013. "Best Practices of Defining Wicked Problems." Due: Collaboration document. Reading question: How might we address some of these issues with a specific technology or technological practice? Like, say, a thermal flashlight?
M 9/29	From artifacts to practices to systems	Ullman, *Close to the Machine: Technophilia and its Discontents,* Chapters 0-5. Reading Question: This is about lifestyle, practices, and ways of thinking and relating to others rather than artifacts themselves. What changes when you add the wider community, society, or economy?
W 10/1	Technological Change	Heilbroner, Robert. 1967. "Do Machines Make History?" *Technology and Culture* 8(3): 335-345. Volti, Rudi. "Chapter 3: The Sources of Technological Change" *Society and Technological Change*. Macmillan, 2014: 39-60.
M 10/6 W 10/8	Exam time	Study period, in or out of the classroom, with or without peers Midterm exam
M 10/13 W 10/15	Thermal Flashlight	Thanksgiving. No class. Public Lab: http://publiclab.org/ & http://publiclab.org/wiki/thermal-camera Today we build a thermal flashlight! **Please do not miss this class!**
M 10/20		Arduino software lesson
W 10/22		*Digital Dead End*: Chapters 1 &2
M 10/27 W 10/29		*Digital Dead End*: Chapters 3&4 Introduction to final project, group collaboration contracts. Bring your midterms to class.
M 11/3		*Digital Dead End*: Chapters 5&6
W 11/5		Thermal Flashlight work period. Making a robust research question, or, how to do sociology with a flashlight. Short excerpt from Foss, Sonja K., and William Waters. *Destination dissertation: A traveler's guide to a done dissertation*. Rowman & Littlefield Publishers, 2007.
M 11/10		*Digital Dead End*: Chapter 7
W 11/12		Thermal Flashlight work period: readings as needed/requested
M 11/17		Thermal Flashlight work period: readings as needed/requested
W 11/19		Thermal Flashlight work period: readings as needed/requested
M 11/24		Thermal Flashlight work period: readings as needed/requested
W 11/26		Thermal Flashlight work period: readings as needed/requested

M 12/1	Presentations	Each group will present their work on the Flashlight project so far, and the class will give feedback.
W 12/3		Presentations, continued. Due: Part 2 of Before and After assignment.
M 12/8	First day of exams	Final project due on exam day, date TBA.

Resources:

Finally a Feminism 101 Blog describes common concepts, political positions and misconceptions about feminism. Discussions between women about issues are sometimes interrupted by men who want to have issues broken down and explained from the beginning, which can derail the conversation. This page is designed to be the place to have those elementary discussions instead. http://finallyfeminism101.wordpress.com/

The Ada Initiative supports women in open technology and culture through activities like producing codes of conduct and anti-harassment policies, advocating for gender diversity, teaching allies, and hosting conferences for women in open tech/culture. Most of what they create is freely available, reusable, and modifiable under Creative Commons licenses. http://adainitiative.org/

Feminist Frequency is a video web series that explores the representations of women in pop culture narratives. The video series was created by Anita Sarkeesian in 2009 and largely serves as an educational resource to encourage critical media literacy and provide resources for media makers to improve their works of fiction. http://www.feministfrequency.com/

The Geek Feminism blog exists to support, encourage, and discuss issues facing women in geek communities, including science and technology, gaming, SF fandom, and more. http://geekfeminism.org/

LinuxChix is a community for women who like Linux and Free Software, and for women and men who want to support women in computing. The membership ranges from novices to experienced users, and includes professional and amateur programmers, system administrators and technical writers. http://www.linuxchix.org

OBN OBN stands for Old Boys Network. OBN is regarded as the first international Cyberfeminist alliance and was founded in 1997 in Berlin. OBN is a real and a virtual coalition of Cyberfeminists. Under the umbrella of the term 'Cyberfeminism', OBN contributes to the critical discourse on new media, especially focussing on its gender-specific aspects. http://www.obn.org/inhalt_index.html