

**STPS 560 Seminar in New Technologies: Technology and Gender
Science and Technology Policy Studies
Spring 2016**

Date and place: Thursday, 9:40-12:30 – IIBF A Building F106

M. Teoman Pamukçu (pamukcu@metu.edu.tr)

Office: MM Building, 220

Course Description

The aim of the course is to create a critical perspective towards the relationship between gender and technology. The question of which gender possesses technological competences and which does not is one of the determinants of this relationship. In terms of technological competences, women and men are unevenly associated with certain roles and despite the findings of the history of technology discipline, men are usually thought to be producers of technology, while women are accepted to be consumers of it.

The social processes that shaped technological development were historically man dominated. Women were excluded from the social and economic opportunities required to become producers of valuable technologies. In addition, machinery, the engine of capitalist production, did not offer equal opportunities to women. In this respect, technology oriented jobs in the engineering discipline were considered as a male profession because their dynamics were based on masculine tradition and empowered by capitalist relations.

This course also has a critical stance towards studies concerning gender in natural science and technological occupations and which use the acronym STEM (Science, Technology, Engineering and Mathematics) as an umbrella representation. “The Science” in STEM mainly refers to natural sciences and excludes social sciences. In addition, many studies in related literature use the acronym STEM for those fields where women are severely underrepresented. The term STEM creates and reproduces a dichotomy between natural and social sciences, which originated from the basic dualisms of nature/social, rational/irrational, analytical/emotional and finally men/women.

Therefore, students who take this course are expected to analyze and question the interactions of gender, science and technology without taking the relationship involving them as granted.

The course is divided into three parts. *In the first part*, theoretical issues will be our main focus and we will emphasize the theoretical debates concerning the relationship between science, technology and gender. *In the second part*, we will be discussing application fields of mentioned theoretical debates and major topics of science and technology studies with respect to gender. The *final part* will provide examples of current emerging topics in literature so as to assess where we are heading to in this field.

The course will be taught in an interactive seminar format.

Method

For the first part of this course, besides lectures in class, students are expected to read the assigned articles and prepare annotations for them. The second and third parts of the course load will be divided among students or groups of students (depending on the number of registered students). Each student or group of students will present an article each week. Class time will be devoted to discussions led by the students, to which the instructor will contribute and react. This way of doing will involve group discussion and formal seminar leadership by students. Students' ideas, suggestions and active participation are essential to the course, and they are expected to come to class having read *and* thought about the articles.

Paper Assignment

The first eight weeks of the class will critically examine the literature, distil the central arguments and deploy other insights to illuminate relationships between gender and technology. Having covered the key issues, students are expected to select a topic and write a proposal about it, accompanied with a bibliography containing the essential literature on their topic. Feedback for the proposals will be provided by the instructor the following week and students will then have enough time for further revision and writing. They are expected to hand in their paper at the end of the term.

Proposal due date: Week 8.

Feedback for proposals: Week 9.

Submission of papers: Final exam date is also the deadline for paper submissions. Papers will be submitted digitally.

Final exam: There will be a compulsory final exam.

Grading

Annotations for marked articles: 20 pts (annotations can either be a critical question, comment or one/more paragraph concerning the article - maximum 1or 2 page(s)).

Participation to discussions in class: 20 pts.

Paper = 25 pts

Final exam= 35 pts.

Schedule and Topics

Week 1 Introduction

What is gender? What is Technology? How do we think about technology in relation to gender? What does a feminist analysis bring to technology studies? What are the implications of a feminist analysis of technology in practice, for action?

FIRST PART: THEORETICAL DEBATES

Week 2 Is Science A Man?

*Harding, S. *The Science Question in Feminism*, 1986. Cornell University Press. (Intro., 1st chapter & Conclusion)

Jansen, S.C. "Is Science a Man? New Feminist Epistemologies and Reconstructions of Knowledge", *Theory and Society* Vol. 19, No. 2 (Apr., 1990), pp. 235-246.

Week 3 Masculinity and Technology

*Mellström, U. (2004). "Machines and Masculine Subjectivity: Technology as an Integral Part of Men's Life Experiences." *Man and Masculinities*, 6: 368-382.

Caputi, J. (1988) Seeing Elephants: The Myths of Phallotechnology. *Feminist Studies*, Vol. 14, No. 3 (Autumn), pp. 486-524.

Week 4 Social Construction of Technology

Trevor J. Pinch and Wiebe E. Bijker. *The Social Construction of Facts and Artefacts: Or How the Sociology of Science and the Sociology of Technology Might Benefit Each Other*. Source: *Social Studies of Science*, Vol. 14, No. 3 (Aug., 1984), pp. 399-441.

*Latour, Bruno. "Reassembling the social-an introduction to actor-network-theory." *Reassembling the Social-An Introduction to Actor-Network-Theory*, by Bruno Latour, pp. 63-87.

Winner, L. *Do artifacts have politics?* (1980). *Daedalus*, 109/1. Pp. 121-136.

Week 5 Feminist Science and Technology Studies

*WAJCMAN, Judy. *Feminism confronts technology*. Penn State Press, 1991. (Intro. & 1st Chapter)

Faulkner, W. "The technology question in Feminism: A view from Feminist Technology Studies. Women's Studies International Forum, 24/1., 2001.pp.79-95.

Haraway, D. "A cyborg Manifesto: Science, Technology and Socialist Feminism in the Late Twentieth Century." *Simians, Cyborgs and Women*. Routledge, 1991. 149-182.

SECOND PART: APPLICATION FIELDS OF THEORETICAL DEBATES

Week 6 Household Technologies

*Schwartz-Cowan, R. "The Industrial Revolution" in the Home: Household Technology and Social Change in the 20th Century", *Technology and Culture*, 17 Jan. 1976: 1-23.

Cockburn, Cynthia, and Susan Ormrod. *Gender and Technology in the Making*. SAGE Publications Ltd, 1993. Pp. 45-75.

Week 7 Machinery and Design

*Hofmann, Jeanette. "Writers, texts and writing acts: gendered user images in word processing software." *The social shaping of technology 2* (1999): 222-243.

Bennet, S. "The typical twitter user is white, female and in their early 30s. Retrieved from www.mediabistro.com/alltwitter/social-media-demographics_b8850.

Week 8 Work and Technology I (Paper Proposal Due date)

Artun, A. (1999). *Fordizmin ve Mühendisin Dönüşümü*. Ankara: TMMOB.

Miller, G. E. (2002). The Frontier, Entrepreneurialism, and Engineers: Women Coping with a Web of Masculinities in an Organizational Culture. *Culture and Organization*, 8/2, pp. 145-160.

*Collinson, David L. "'Engineering Humour': masculinity, joking and conflict in shop-floor relations." *Organization Studies* 9.2 (1988): 181-199.

Week 9 Feedbacks for the Proposals & Presentation of North Country the Movie and discussion

Week 10 Work and Technology II

Cech, E. A. & Waidzunas, T. (2011). Navigating the Heteronormativity of Engineering: The Experiences of Lesbian, Gay, and Bisexual Students. *Engineering Studies*, April. pp.1-24.

Chinn, P.W. U. (1999). Multiple Worlds/Mismatched Meanings: Barriers to Minority Women Engineers. *Journal of Research in Science Teaching* 36 (6), 621–636.

Week 11 Reproduction Technologies

*Elizabeth Ettorre Reproductive Genetics, Gender and the Body: 'Please Doctor, may I have a Normal Baby?' *Sociology* 2000; 34; 403-420.

Braidotti, Rosi. "Organs without bodies." *differences* 1.1 (1989): 147-61.

THIRD PART: EMERGING TOPICS IN FEMINIST SCIENCE AND TECHNOLOGY STUDIES

Week 12 Digital Games and Gender

Bryce, Jo and Jason Rutter. "Killing like a girl: Gendered gaming and girl gamers' visibility" in CGDC Conference Proceedings, F. Mayra (ed.), Tampere: Tampere University Press, 2002, 243-255.

*Jenson, Jennifer and Suzanne de Castell. "Gender, simulation and gaming: Research review and redirections," *Simulation and Gaming*, 41, 51-71, 2010.

Week 13 Ecofeminism & Technology

Wallis, Victor. "Vision and Strategy: Questioning the Subsistence Perspective." *Capitalism, Nature, Socialism* 17, no. 4 (2006): 38–43.

Isla, Ana. "An Ecofeminist Perspective on Biopiracy in Latin America." *Signs: Journal of Women in Culture and Society* 32, no. 2 (2007), 323-332.

Week 14 Surveillance and Technology

*Licoppe, Christian. "Connected' Presence: The Emergence of a New Repertoire for Managing Social Relationships in a Changing Communication Technoscape." *Environment and Planning D: Society and Space* 22 (2004): 135–56.

Gray, Mitchell. "Urban Surveillance and Panopticism: Will We Recognize the Facial Recognition Society?" *Surveillance & Society* 1, no. 3 (2003): 314–30.

SELECTED BIBLIOGRAPHY

Bleier, R. (1984). *Science and Gender: A Critique of Biology and Its Theories on Women*. Teachers College Press.

Cockburn, C. (1983). *Brothers: Male Dominance and Technical Change*, London: Pluto Press.

Cythia Cockburn (1990). *Machinery of Dominance: Women, Men, and Technical Know-How*. Pluto Press, London, 1985, ISBN 0 7453 0065 0.

Easlea, B. (1983) *Fathering the Unthinkable: Masculinity, Scientist and the Nuclear Arms Race*. London.

Eisenstein, Z. (1998). *Global Obscenities: Patriarchy, Capitalism and the Lure of Cyberfantasy*. New York University Press: London, New York.

Fox-Keller, E. (1985). *Reflections on Gender and Science*. Yale University Press: New Haven.

Göle, N. (2008). *Mühendisler ve İdeoloji: Öncü Devrimcilerden Yenilikçi Seçkinlere*. 4th Edition. İstanbul: Metis Yayınları.

Hacker, S. L. (1989). *Pleasure, Power and Technology: Some Tales of Gender, Engineering and the Cooperative Workplace*. Unwin Hyman: Boston.

Harding, S. (1986). *The Science Question in Feminism*. Cornell University Press: USA.

Harding, S. (1991). *Whose Science? Whose Knowledge?. Thinking from Women's Lives*. Ithaca: Cornell University Press.

Köse, A. H. & Öncü, A. (2000). *Kapitalizm, İnsanlık ve Mühendislik: Türkiye'de Mühendisler Mimarlar*. Ankara: TMMOB.

Laslett, N., Kohlstedt, S.G, Longino, H. & Hammond, E. (Eds) (1996). *Gender and Scientific Authority*. Chicago University Press: Chicago.

Latour, Bruno. (1996). *Aramis or the Love of Technology*. Harvard University Press, Cambridge, Mass.

Latour, Bruno. & Woolgar, Steve. (1979) *Laboratory Life: the Construction of Scientific Facts*. Princeton University Press, Princeton.

Nicholson, P. (1996), *Gender, Power and Organizations*, Routledge, London, N.Y.

Oakley, Ann. *Sex, gender and society*, temple smith, 1972, p. 189.

Oldenziel, R. (1999). *Making Technology Masculine*. Amsterdam: Amsterdam University Press.

Wacjman, J. (1991), *Feminism Confronts Technology*, The Pennsylvania State University Press, Pennsylvania.
