Professur für Partizipative Technikgestaltung (Prof. Dr. Ignacio Farías) Munich Center for Technology in Society and Department of Architecture Technische Universität München



# **Engineering and Experimenting Democracy**

3 ECTS / SS2017

# Lecturer: Dr. Laurie Waller

# **Description:**

Do science and technology need to be democratised? Can parliaments deal with complex issues as diverse as GMOs, fracking, nuclear waste or air pollution? Is there such a thing as "technical democracy"?

This course will introduce students to some challenges that science and technology raise for contemporary democracies. In this course students will explore a range of participation methods, including citizen juries and consensus conferences, developed to democratise science and technology. The course will look at both the practical design of these participation methods and the democratic political theories informing them. The course will focus on debates in the field of science and technology studies (STS), but will also draw on democratic theory from across the 20th century.

In workshops students will critically explore the design and practice of a range of participation methods. These workshops will draw on a range of materials from activists, designers, policy makers and social scientists that have been used to experiment with novel forms of participation. Alongside the workshops, students will attend a series of seminars that will critically explore theories of "technical democracy". Students will learn to design and critically assess experimental participation methods and evaluate their role for democratic politics and governance.

#### Learning Objectives:

1. Broad theoretical and historical understanding of "participation" as a democratic problem.

2. Learn to distinguish between a range of contemporary approaches to participation and their relation to democratic forms and procedures.

3. Critically evaluate the concept of "technical democracy" in relation to debates about democracy in the field of science and technology studies (STS).

4. To assess the design and public value of participation experiments.

#### Methodology:

#### 1. Method focused workshops

Students will take part in workshops examining the design and practice of a range of contemporary participation methods developed by activists, policy makers, social scientists and designers. Through close analysis and discussion, students will evaluate the aims of methods designed to democratise science and technology, how they relate to existing participation processes and more generally to the theory and history of democracy. Professur für Partizipative Technikgestaltung (Prof. Dr. Ignacio Farías) Munich Center for Technology in Society and Department of Architecture Technische Universität München



### 2. Theory-focused seminars

In seminars students will explore the democratic theory informing the design of the participation methods discussed in the workshops. Students will be expected to read the compulsory readings and come prepared for critically discuss the concept of "technical democracy"

### Written assessment: modify a participation method!

Students will be asked to propose a modification to an existing participatory method. Assessments will draw on the materials and theories covered throughout the course. Students will be expected to demonstrate an understanding of both the practicalities of designing participatory methods and the relevant theoretical contexts. The assessment has two components:

## a. Workshop (40%)

Students will attend a workshop session where they will present their ideas for the assessment (their proposed participatory method and theoretical considerations), and receive feedback from both the lecturer and their peers. Students will be expected to present their idea in 10 minutes, according to the structure of the assessment.

## b. Written submission (60%)

The assessment will be written (2,000 words) but other materials may be produced/included (e.g. sketches, diagrams, prototypes), though are not compulsory. The written assessment will include theoretical discussion of democratic theory appropriate to the chosen participation method, and an engagement with the concept of "technical democracy".

# Deadline for submission: February 21st 2017

#### Requirements for passing the course

To pass the course, students are expected to complete the following tasks:

Prepare and actively participate in workshops and seminars, read the materials set and engage in discussion.

Present their assessment proposal on participatory methods to the lecturer and their peers in a workshop, in preparation for the assessment.

Write a final individual essay which will propose a participatory technology to address a contemporary controversy (set by the lecturers). The essay will outline the problem, dis cuss the relevant theoretical contexts, highlight a range of participation options and the relative merits of each, and propose their own participatory technology for addressing the controversy.

Acceptance of any assignments implies compliance with the following requirements:

Citations are always marked and referred to in the bibliography at the end of a text

No unauthorized copying or pirating of existing texts; plagiarism will not be tolerated!

Cover sheet with course title and number, name, student ID, title of assignment/topic and date



Style: A4 paper, 11 point font, 1 1/2 line spacing, page numbers in footer, author name and text title in header

Proofreading and language checks before submission of texts

# Grading Scheme:

40% oral presentation/ 60% final individual essay.

Grades are between 1 and 5, 1 being the best grade, 5 being a fail.



## Schedule:

Workshops and seminars	
Date: 24.10.2016	Introduction: Technical democracy and the participation problem
Time: 09:45-11:15	Course overview.
Room: 270 Augustenstr. 46	Introduction to the problem of technical democracy.
	References Lippmann, W. (1930). The phantom public. New York: Macmillan. Chapters 1&6 'Prologue' in Callon, M., Lascoumes, P., & Barthe, Y. (2011). Acting in an
	Uncertain World: An Essay on Technical Democracy. (G. Burchell, Trans.). Cambridge, MA: MIT Press.
Date: 31.10.2016	Workshop: The consensus conference
Time: 09:45-11:15	Materials: http://www.participedia.net/en/methods/japanese-consensus-conference
Room: 270 Augustenstr. 46	<i>References</i> Horst, M., & Irwin, A. (2010). Nations at ease with radical knowledge on consensus, consensusing and false consensusness. Social studies of science, 40(1), 105-126.
Date: 07.11.2016	Seminar: Expertise and liberal democracy
Time: 09:45-11:15	Turner, S. (2001). What is the Problem with Experts?. <i>Social Studies of Science</i> , <i>31</i> (1), 123-149.
Room: 270 Augustenstr. 46	Jasanoff, S. (2003). (No?) Accounting for expertise. <i>Science and Public Policy</i> , <i>30</i> (3), 157-162.
Date: 14.11.2016	Workshop: The citizen jury
Time: 09:45-11:15	Materials: http://www.participedia.net/en/methods/citizens-jury
Room: 270 Augustenstr. 46	<i>References</i> Lezaun, J., & Soneryd, L. (2007). Consulting citizens: technologies of elicitation and the mobility of publics. Public understanding of science, 16(3), 279-297.
Date: 21.11.2016	Seminar: The limits of rationalism
Time: 09:45-11:15 Room: 270	Wolin, S. S. (2009). <i>Politics and vision: Continuity and innovation in West-</i> <i>ern political thought</i> . Princeton University Press. Chapter 14 'Liberalism and the Politics of Rationalism'
Augustenstr. 46	Dewey, J. (2012). The public and its problems: An essay in political inquiry. Penn State Press. Chapter 1 'Search for the Public'
	Popper, K. S. (2012). <i>The open society and its enemies</i> . Routledge. Chapter 3 'Plato's Theory of Forms or Ideas'
Date: 28.11.2016	Workshop: Polling & Petitions
Time: 09:45-11:15 Room: 270 Augustenstr. 46	http://ec.europa.eu/public_opinion/archives/eb_special_419_400_en.htm https://www.avaaz.org https://home.38degrees.org.uk/
	<i>Reference</i> Osborne, T., & Rose, N. (1999). Do the social sciences create phenomena?: the example of public opinion research. The British journal of sociology, 50(3), 367-396.



Date: 05.12.2016	Seminar: Discursive methods
Time: 09:45-11:15	Lezaun, J. (2007). A market of opinions: the political epistemology of focus groups. <i>The Sociological Review</i> , 55, 130–151.
Room: 270 Augustenstr. 46	Callon, M., & Rabeharisoa, V. (2004). Gino's lesson on humanity: genetics, mutual entanglements and the sociologist's role. Economy & Society, 33(1), 1-27.
Date: 12.12.2016	Workshop: Citizen science
Time: 09:45-11:15	Enrol in an online citizen science project here: https://www.zooniverse.org/projects
Room: 270 Augustenstr. 46	<i>References</i> Wynne, B. (1992). Misunderstood misunderstanding: Social identities and public uptake of science. <i>Public understanding of science</i> , <i>1</i> (3), 281-304.
Date: 19.12.2016	Seminar: Public experiments
Time: 09:45-11:15 Room: 270 Augustenstr. 46	References Shapin, S. (1984). Pump and circumstance: Robert Boyle's literary technology. Social studies of science, 14(4), 481-520.
	Collins, H. M. (1988). Public experiments and displays of virtuosity: The core-set revisited. Social studies of science, 18(4), 725-748.
	Additional Barry, A. (1999). Demonstrations: sites and sights of direct action. Economy and Society, 28(1), 75–94.
	Ezrahi, Y. (1990). <i>The descent of Icarus: Science and the transformation of contemporary democracy</i> . Chapter 3 'Science and the Visual Culture of Liberal-Democratic Politics'
Date: 16.01.2017	Seminar: Material governance
Time: 09:45-11:15 Room: 270 Augustenstr. 46	References Barry, A. (2001). Political machines: Governing a technological society. A&C Black. Chapter 3 'Harmonised States'
	Mitchell, T. (2009). Carbon democracy. <i>Economy and Society</i> , 38(3), 399-432.
	Additional Marres, N. (2015). Sustainable Living Experiments or a 'Coming Out'for the Politics of Things. In <i>Material Participation</i> (pp. 84-107). Palgrave Macmillan UK.
Date: 23.01.2017	A new republic of things?
Time: 09:45-11:15	Latour, B. (2005). From realpolitik to dingpolitik. <i>Making things public: Atmospheres of democracy</i> , 14-44.
Room: 270 Augustenstr. 46	Callon, M. (2009). Acting in an uncertain world. MIT press. Chapter 1 'Hybrid Forums'
Date: 30.01.2017 Time: 09:45-11:15	Assessment workshop: Reverse-engineer a participation method of your choice!
Room: 270 Augustenstr. 46	Please prepare a 10 minute presentation of your proposed modification to a participation method; each presentation will be followed by 5 minutes of discussion. This will count for 40% of your grade.