

## **Experimental collaborations**

**Exploring forms of research between technical experts and citizens**

**6 ECTS / WS15/16**

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**Language: English**

### **Description:**

In this module we will explore –through master classes, literature review and a small prototyping project– the contemporary importance of collaborative forms of knowledge production. Throughout the course we will engage in understanding the most salient participatory and collaborative devices seeking to democratize the relationships between technical experts and citizens -from citizens devising forms of counter-expertise, to joint exploratory attempts at dealing with uncertain and complex issues affecting our everyday life-. Besides depicting this socio-historical landscape –boosted by contemporary digital media practices, and using examples from health, architecture, and design– special attention will be put on experimenting how we could design and engage in the production of experimental collaborations, that is, exploratory and open-ended forms of collaborative/joint research between citizens and technical experts to address their matters of concern.

### **Learning Objectives:**

1. Understanding the rationale and the historic processes through which citizen participation, collaborative devices and forms of technical democracy emerged.
2. Analysing, through case studies, the material devices, knowledge politics and public imaginaries inscribed in participatory devices and processes.
3. Experimentally creating collaborative prototypes in response to a controversial scenario in order to critically reflect and evaluate their promises and compromises.

### **Course Methodology:**

#### **Unit 0: Introduction**

Master class to delineate the main issues and the work methodology of the course, as well as the kind of examples we would like to work on. The session will also be used to create groups of no more than 4 people for the reading workshops. Given that the course is offered to students in STS, Architecture and Urban Planning, the creation of interdisciplinary groups will be encouraged. Once the groups are formed, we will proceed to allocate the readings that each group will have to present in public to debate about its key concepts in Units 1-4.

#### **Units 1 – 4: Reading workshop**

Each unit will consist of two days of work, where students will have to read all compulsory readings in groups, and one of the group members will have to present the allocated reading,

summarizing the main points, its context and interests in order to develop an understanding of the rationale and the historic processes through which citizen participation, collaborative devices and forms of technical democracy emerged.

In each unit groups will also be asked to conceive potential applications of the readings to the contemporary real-life problems of their choice, in order to analyse, through case studies, the material devices, knowledge politics and public imaginaries inscribed in the participatory devices and processes under scrutiny.

The summary of the presentation and their application for a potential issue should be written down by the group in a handout (no longer than 3 pages long) to be delivered after each session.

### **Unit 5:**

Preparation of ‘experimental collaboration’ prototypes and final essay

Also, after Unit 0 students will have two weeks to think and email to the lecturer individually chosen topics of intervention (deadline: 29.10.2015 via email to [tomas.criado@tum.de](mailto:tomas.criado@tum.de)), so that it can be discussed with the lecturer– for their final essay, where they would have to reflect on the design of an experimental collaboration prototype.

**Choice of topic:** The topic should be a contemporary controversial and uncertain issue where expert advice is playing a major role; students could draw inspiration from the conflicts and problems discussed in Unit 0, but they would have to reflect on: what kind of experts are involved –e.g. physicians, health professionals, architects, psychologists, anthropologists, etc.– and how is expert advice being used to deal that situation.

**Recommended topic:** the ‘refugee crisis.’ How refugees are received and allocated; how could we collaboratively engage the refugees themselves in deciding on the design of their temporary or more stable spaces, or having a voice on the health measures concerning them; how could refugees and experts collaborate in the production of joint forms of knowledge on how to understand or tackle the situation, what sorts of spaces, procedures, methods, or materials would they need to engage in joint forms of knowledge production?

**Supervision** of the prototyping phase in regular discussions: It would be advisable that despite the final essay is an individual task the topics might be commonly decided and worked together with the rest of the group members. For the very conception of the prototype the choice of format, genre and style will vary, according to the previous experience and learning of the candidate (e.g. models, digital devices, blueprints or sketches, texts and narrations): please discuss this with the lecturer, since each project will be individually supervised.

**Public presentation of the draft:** A draft version of the individual prototype devised design an ‘experimental collaboration’ for the chosen topic will have to be presented in public, to receive comments and remarks from the lecturer and the rest of the group so as to prepare the final version.

**Delivery of the prototype and final essay:** The final essay should be of no less than 15 and no more than 25 pages long (deadline: 21.03.2016; texts should be submitted via email to [tomas.criado@tum.de](mailto:tomas.criado@tum.de); any supplementary materials should be delivered to the lecturer’s office).

**Acceptance of any assignments implies compliance with the following requirements:**

**Quotations** will always be marked and referred to in the bibliography at the end of a text. No unauthorized copying of existing texts or plagiarism will be tolerated.

**Recommended style:** A4 paper, 11 font size, single line spacing, page numbers in footer, author names in header (all the group's names for the handout, individual name for the final essay). Cover sheet with course title and number, name(s) and student ID(s), title of assignment/ topic and date.

**Assessment:**

Students must submit (1) an oral presentation's handout prepared in groups, summarizing the readings presented and thinking of possible applications to design a collaborative prototype to address a contemporary technoscientific issue of their choice; and (2) a final essay, developed through regular discussions with the lecturer, reflecting on the design of one collaborative research prototype to address a contemporary issue, providing a justification for its design according to the course's readings.

The oral presentation's handout is a means to measure not only the student's ability (a) to read critically the suggested readings and to understand the rationale and the historic processes through which citizen participation, collaborative devices and forms of technical democracy emerged, but also (b) to conduct a discussion, through case studies, analysing the promises, effects, and problems of different participatory devices and processes. The regular discussions with the tutor measure the student's ability to develop the prototype in response to a controversial scenario from initial concepts to the completion of the proposal for the final essay. The final essay will measure not only the student's ability to critically reflect and evaluate the promises and compromises, the knowledge politics and the imaginaries of politics inscribed in different participatory devices and processes, but also the capability of adapting and inventing innovative proposals in response to a contemporary real-life problem requiring the design of 'experimental collaboration' prototypes.

The final grade is an averaged grade from the oral presentation's handout (30%) and from the final essay (70%).

## WORKPLAN

<b>UNIT 0</b>	<b>Introductory lecture: The rise and fall of expertocracy, or the emergence of non-expert participation and the creation of ‘devices’ for epistemic collaboration</b>
<p>Date: 15.10</p> <p>Time: 14-16</p> <p>Room: 270 @MCTS, Augustenstr. 46</p>	<p>Compulsory reading for the master class</p> <p>Law, J., &amp; Ruppert, E. (2013). The Social Life of Methods: Devices. <i>Journal of Cultural Economy</i>, 6(3), 229–240.</p> <p>References used for the preparation of the master class</p> <p>Borasi, G., &amp; Zardini, M. (Eds.). (2012). <i>Imperfect Health: The medicalization of architecture</i>. Montreal: Canadian Centre for Architecture &amp; Lars Müller.</p> <p>Cupers, K. (Ed.). (2013). <i>Use Matters: An Alternative History of Architecture</i>. London: Routledge.</p> <p>Miessen, M. (2011). <i>The Nightmare of Participation</i>. New York: Sternberg Press.</p> <p>Van Abel, B., Evers, L., Klaassen, R., &amp; Troxler, P. (Eds.). (2011). <i>Open Design Now: Why Design Cannot Remain Exclusive</i>. Amsterdam: BIS Publishers. Retrieved from <a href="http://opendesignnow.org/">http://opendesignnow.org/</a></p> <p>Williamson, B. (2012). Getting a Grip: Disability in American Industrial Design of the Late Twentieth Century. <i>Winterthur Portfolio</i>, 46(4), 213–235.</p>
<b>UNIT 1</b>	<b>Devices to democratize technoscience: From the deficit &amp; co-production models to technical democracy</b>
<p>Date: 5.11</p> <p>Time: 14-16</p> <p>Room: 270 @MCTS, Augustenstr. 46</p>	<p>Compulsory readings for the session</p> <p>Lengwiler, M. (2007). Participatory Approaches in Science and Technology: Historical Origins and Current Practices in Critical Perspective. <i>Science, Technology &amp; Human Values</i>, 33(2), 186–200.</p> <p>Callon, M. (1999). The Role of Lay People in the Production and Dissemination of Scientific Knowledge. <i>Science Technology &amp; Society</i>, 4(1), 81–94.</p> <p>Jasanoff, S. (2003). Technologies of humility: Citizen participation in governing science. <i>Minerva</i>, 41(3), 223–244.</p> <p>Supplementary readings for the session</p> <p>Marres, N. (2007). The Issues Deserve More Credit: Pragmatist Contributions to the Study of Public Involvement in Controversy. <i>Social Studies of Science</i>, 37(5), 759–780.</p> <p>Quet, M. (2014). Science to the people! (and experimental politics): Searching for the roots of participatory discourse in science and technology in the 1970s in France. <i>Public Understanding of Science</i>, 23(6), 628–45.</p>
<p>Date: 12.11</p> <p>Time: 14-16</p> <p>Room: 270 @MCTS, Augustenstr. 46</p>	<p>Compulsory readings for the session</p> <p>Callon, M., Lascoumes, P., &amp; Barthe, Y. (2011). Chapters 1 ‘Hybrid Forums’ (pp. 13-36), 3 ‘There’s Always Someone More Specialist’ (pp. 71-106), 4 ‘In Search of a Common World’ (pp. 107-152) &amp; 5 ‘The Organization of Hybrid Forums’ (pp. 153-190). <i>Acting in an Uncertain World: An Essay on Technical Democracy</i>. Cambridge, MA: MIT Press.</p> <p>Supplementary readings for the session</p> <p>Mol, A. (2008). ‘Managing versus doctoring’ (pp. 42-56) &amp; ‘The good in practice’ (pp. 73-94). In <i>The Logic of Care: Health and the Problem of Patient Choice</i>. London: Routledge.</p>

UNIT 2	Devices for counterexpertise and technoscience otherwise
<p>Date: 19.11</p> <p>Time: 14-16</p> <p>Room: 270 @MCTS, Augustenstr. 46</p>	<p>Compulsory readings for the session</p> <p>Callon, M., &amp; Rabeharisoa, V. (2003). Research “in the wild” and the shaping of new social identities. <i>Technology in Society</i>, 25, 193–2004.</p> <p>Callon, M., &amp; Rabeharisoa, V. (2008). The Growing Engagement of Emergent Concerned Groups in Political and Economic Life: Lessons from the French Association of Neuromuscular Disease Patients. <i>Science, Technology &amp; Human Values</i>, 33(2), 230–261.</p> <p>Rabeharisoa, V., Moreira, T., &amp; Akrich, M. (2014). Evidence-based activism: Patients’, users’ and activists’ groups in knowledge society. <i>BioSocieties</i>, 9(2), 111–128.</p> <p>Supplementary readings for the session</p> <p>Akrich, M. (2010). From Communities of Practice to Epistemic Communities: Health Mobilizations on the Internet. <i>Sociological Research Online</i>, 15(2), <a href="http://www.socresonline.org.uk/15/2/10.html">http://www.socresonline.org.uk/15/2/10.html</a></p>
<p>Date: 26.11</p> <p>Time: 14-16</p> <p>Room: 270 @MCTS, Augustenstr. 46</p>	<p>Compulsory readings for the session</p> <p>Murphy, M. (2006). ‘Indoor Pollution at the Encounter of Toxicology and Popular Epidemiology’ (pp. 81-110) &amp; ‘How to Build Yourself a Body in a Safe Space’ (pp. 151-178). In <i>Sick Building Syndrome and the Problem of Uncertainty: Environmental Politics, Technoscience, and Women Workers</i>. Durham, NC: Duke University Press.</p> <p>Murphy, M. (2004). Immodest witnessing: The epistemology of vaginal self-examination in the US feminist self-help movement. <i>Feminist Studies</i>, 115–147.</p> <p>Supplementary readings for the session</p> <p>Tironi, M. (2014). Modes of technification: Expertise, urban controversies and the radicalness of radical planning. <i>Planning Theory</i>, 14(1), 70–89.</p>
UNIT 3	Digital devices and ‘open’ forms of knowledge production
<p>Date: 10.12</p> <p>Time: 14-16</p> <p>Room: 270 @MCTS, Augustenstr. 46</p>	<p>Compulsory readings for the session</p> <p>Kuznetsov, S., &amp; Paulos, E. (2010). Rise of the Expert Amateur: DIY Projects, Communities, and Cultures. In <i>NordiCHI 2010, October 16-20</i> (pp. 295–304). Reykjavik: ACM.</p> <p>Corsin, A. (2014). The right to infrastructure: Prototype for open source urbanism. <i>Environment and Planning D: Society and Space</i>, 32(2), 342–362.</p> <p>Supplementary readings for the session</p> <p>Ruppert, E., Law, J., &amp; Savage, M. (2013). Reassembling Social Science Methods: The Challenge of Digital Devices. <i>Theory, Culture &amp; Society</i>, 30(4), 22–46.</p>
<p>Date: 17.12</p> <p>Time: 14-16</p> <p>Room: 270 @MCTS, Augustenstr. 46</p>	<p>Compulsory readings for the session</p> <p>Dickel, S., Ferdinand, J.-P., &amp; Petschow, U. (2014). Shared Machine Shops as Real-life Laboratories. <i>Journal of Peer Production</i>, 5. URL: <a href="http://peerproduction.net/issues/issue-5-shared-machine-shops/peer-reviewed-articles/shared-machine-shops-as-real-life-laboratories/">http://peerproduction.net/issues/issue-5-shared-machine-shops/peer-reviewed-articles/shared-machine-shops-as-real-life-laboratories/</a></p> <p>Wylie, S., McLaughlin, M., &amp; McIlvain, J. (2013). Public Laboratories: Designing and Developing tools for Do-It-Yourself Detection of Hazards. <i>Limn</i>, 3. URL: <a href="http://limn.it/public-laboratories-designing-and-developing-tools-for-do-it-yourself-detection-of-hazards/">http://limn.it/public-laboratories-designing-and-developing-tools-for-do-it-yourself-detection-of-hazards/</a></p>

	<p>Supplementary readings for the session</p> <p>Sánchez Criado, T. et al. (2015). Care in the (critical) making: Open prototyping, or the radicalisation of independent-living politics. ALTER. European Journal of Disability Research, , <a href="http://dx.doi.org/10.1016/j.alter.2015.07.002">http://dx.doi.org/10.1016/j.alter.2015.07.002</a></p>
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<b>UNIT 4</b>	<b>Materializing collaborative knowledge production devices</b>
<p>Date: 14.01</p> <p>Time: 14-16</p> <p>Room: 270 @MCTS, Augustenstr. 46</p>	<p>Compulsory readings for the session</p> <p>Asaro, P. M. (2000). Transforming society by transforming technology: the science and politics of participatory design. Accounting, Management and Information Technologies, 10, 257–290.</p> <p>Marres, N. (2011). The costs of public involvement: Everyday devices of carbon accounting and the materialization of participation. Economy and Society, 40(4), 510–533.</p> <p>Supplementary readings for the session</p> <p>Björgvinsson, E., Ehn, P., &amp; Hillgren, P. (2012). Agonistic participatory design: working with marginalised social movements. CoDesign, 8(2-3), 127–144.</p>
<p>Date: 21.01</p> <p>Time: 14-16</p> <p>Room: 270 @MCTS, Augustenstr. 46</p>	<p>Compulsory readings for the session</p> <p>Suchman, L. (2012). Configuration. In C. Lury &amp; N. Wakeford (Eds.), <i>Inventive Methods: The happening of the social</i> (pp. 48–60). London: Routledge.</p> <p>DiSalvo, C. (2014). Critical Making as Materializing the Politics of Design. The Information Society, 30(2), 96–105.</p> <p>Supplementary readings for the session</p> <p>Michael, M. (2012). De-signing the object of sociology: Toward an “idiotic” methodology. The Sociological Review, 60, 166–183.</p>

<b>UNIT 5</b>	<b>Preparation of ‘experimental collaboration’ prototypes</b>
<p>Dates: 28.01 &amp; 04.02</p> <p>Time: 14-16</p> <p>Room: 270 @MCTS, Augustenstr. 46</p>	<p>These dates will be used for public presentations of each individual draft project.</p> <p>Compulsory readings for the preparation of the essay</p> <p>Mattern, S. (2013). Infrastructural Tourism. Places Journal. URL: <a href="https://placesjournal.org/article/infrastructural-tourism/">https://placesjournal.org/article/infrastructural-tourism/</a></p> <p>Estalella, A., &amp; Sánchez Criado, T. (2015). Experimental collaborations: An invocation for the redistribution of social research. Convergence: The International Journal of Research into New Media Technologies, 21(3), 301-305.</p> <p>Some other inspiring references for the final essay</p> <p>Dunne, A., &amp; Raby, F. (2013). <i>Speculative Everything: Design, Fiction, and Social Dreaming</i>. Cambridge, MA: MIT Press.</p> <p>Kelty, C. et al. (2009). Collaboration, Coordination, and Composition: Fieldwork after the Internet. In J. D. Faubion &amp; G. E. Marcus (Eds.), <i>Fieldwork is Not What it Used to Be: Learning Anthropology’s Method in A Time of Transition</i> (pp. 184–206). Ithaca, NY: Cornell University Press.</p>