

Technoscientific activisms: Collective action with, against, and beyond the burden of proof

Dr. Tomás Criado

Schedule	Mondays, 13:00 - 14:30	MCTS, room 270
6.11.2017	Technoscience and collective 'action' beyond heroism	Tomás Criado
13.11.2017	Counter-expertise 1	Tomás Criado
20.11.2017	Counter-expertise 2	Tomás Criado
27.11.2017	Translating 1	Tomás Criado
4.12.2017	Translating 2	Tomás Criado
11.12.2017	Issues	Tomás Criado
18.12.2017	Cosmopolitics 1	Tomás Criado
8.1.2017	Cosmopolitics 2	Tomás Criado
15.1.2017	Self-experimentation 1	Tomás Criado
22.1.2017	Self-experimentation 2	Tomás Criado
29.1.2017	Preparation of the final presentation (Homework)	Tomás Criado
5.2.2017	Final group presentation	Tomás Criado

Description of the seminar

This course will seek to provide an introduction to the wide STS literature providing insights on the transformation entailed by the irruption of many groups and collectives in the once sacred space and activities of science and technology production. From the participatory engagements of lay people in expert-driven processes—such as citizen science— to articulations of counter-expertise and evidence-based activism—such as the work on affected communities, concerned groups, embodied health and environmental justice activisms to engage in conversations with experts—, many of these practices and activities are not only transforming the who and the how of technoscientific production, but also its spaces and outputs. Hence, the main idea of this course would be to chart STS accounts on technoscientific activisms, paying minute attention not only to the complex distributions and attributions of agency they entail, but also to the particular relations these forms of collective action have with the burden of proof and different forms of 'truth politics.'

Course Information

Type	Advanced Topics in STS
Course No.	
Time	Monday 13:00-14:30
Place	MCTS, Augustenstr. 46 Room 270
Language	English
Lecturer	Dr. Tomás Criado
Resources	
Creditable to	Master's program in STS
Credits & Requirements	<p>3 ECTS</p> <p>Final group essay of 8,000-10,000 words, composed by the slight rewriting of the 1,500-2,000 word essays written per bloc:</p> <p style="text-align: center;">DELIVERABLE A: 26.11 DELIVERABLE B: 10.12 DELIVERABLE C: 17.12 DELIVERABLE D: 14.1 DELIVERABLE E: 28.1.</p> <p>Final deliverable: 12.2</p>
Consultation	tomas.criado@tum.de

Methodology

Students will be asked to work in 'groups' (3 people per group being the ideal number) in which they will select and analyse a particular dispute, issue or mobilisation, searching to apply the contents of the course to dialogue with their case study as a way to identify the particular mode of 'collective action' at stake.

The first task, beyond grouping, will be to discuss the title/name and mode of 'collective' these groups want to be addressed as, something which will bear on the 4 particular outputs required from the group (5 essays– one per bloc of texts, each having a maximum of 1,500-2,000 words, the first one including a detailed description of the phenomenon–, ideally using an online text editor, allowing their compilation in a final single 8,000-10,000 words essay), but also on the grading system.

For instance, two possibilities modes could be: (a) a collective entity–where all texts should bear the mark of such collective trace, not distinguishing between people and their arguments, and being graded as a single entity; (b) a concatenation of free individuals–identifying who said what, and receiving individual marks. But students are free to choose their particular mode of collective address, which could even change from output to output in a dynamic fashion.

6.11.2017 **Technoscience and collective 'action' beyond heroism (LECTURE)** T. Criado

- How to understand collective action from an STS standpoint? Science, Technology, and Social Movements.
- The ANT challenge: (1) the role of controversies to open up a 'non-modern' and 'agnostic' tale of collective action; (2) a focus on 'hybrid collectifs,' or how to chart forms materially heterogeneous forms of composition, delegation, distribution and attribution of agency; (3) an 'irreductive' account, or why we should focus not only on 'action', but also on 'passion' to go beyond heroism.
- The specificities of 'technoscientific activism:' Acting with, against or beyond the burden of proof and the mobilization of technical issues.
- A program for the course: Through a detailed attention to the literature of ANT/STS on collective action and social movements, we will try to identify 'operations' of technoscientific activism whereby particular 'actors' appear as relevant or are attributed or granted relevance.
- A constant corollary in the back of our minds: What can activism learn from STS, and STS from activism?

- Key readings**
- Hess, D., Breyman, S., Campbell, N., & Martin, B. (2008). Science, Technology, and Social Movements. In E. J. Hackett, O. Amsterdamska, M. Lynch, & J. Wajcman (Eds.), *The Handbook of Science and Technology Studies, Third Edition* (pp. 473–498). Cambridge, MA: MIT Press.
 - Callon, M., & Law, J. (1997). Agency and the Hybrid Collectif. In B. Herrnstein Smith & A. Plotnitsky (Eds.), *Mathematics, Science and Postclassical Theory* (pp. 95–117). Durham, NC: Duke University Press.
 - Rodríguez-Giralt, I. (2011). Social movements as actor-networks: Prospects for a symmetrical approach to Doñana's environmentalist protests. *Convergencia*, 18(56), 13–35.

- Further or background reading**
- Van Ginneken, J. (1992). *Crowds, Psychology & Politics, 1871-1899*. Cambridge: Cambridge University Press.
 - Della Porta, D., & Dani, M. (2006). *Social Movements: An Introduction* (2nd ed.). Oxford: Blackwell.
 - Latour, B. (1988). Irreductions. In *The Pasteurization of France* (pp. 153–236). Cambridge, MA: Harvard University Press.
 - Gomart, E., & Hennion, A. (1999). A sociology of attachment: music amateurs, drug users. In J. Law & J. Hassard (Eds.), *Actor-Network Theory and After* (pp. 220–247). Oxford: Blackwell.

13.11.2017 **Counter-expertise 1** T. Criado

- Operation: Counter-expertise
- Main actor: Laypeople or the Anyone

- Key readings**
- Jasanoff, S. (2003). Technologies of humility: citizen participation in governing science. *Minerva*, 41(3), 223–244.
 - Callon, M. (1999). The Role of Lay People in the Production and Dissemination of Scientific Knowledge. *Science Technology & Society*, 4(1), 81–94.
 - Rancière, J. (1998). The Cause of the Other. *Parallax*, 4(2), 25–33.

20.11.2017

Counter-expertise 2

T. Criado

- Operation: Counter-expertise
- Main actor: Laypeople or the Anyone

Key readings

- Epstein, S. (1995). The Construction of Lay Expertise: AIDS Activism and the Forging of Credibility in the Reform of Clinical Trials. *Science, Technology & Human Values*, 20(4), 408–437.
- Brown, P., Zavestoski, S., McCormick, S., Mayer, B., Morello-Frosch, R., & Gasior Altman, R. (2004). Embodied health movements: new approaches to social movements in health. *Sociology of Health & Illness*, 26(1), 50–80.
- Orsini, M., & Smith, M. (2010). Social movements, knowledge and public policy: the case of autism activism in Canada and the US. *Critical Policy Studies*, 4(1), 38–57.

27.11.2017

Translating 1

T. Criado

- Operation: Translating
- Main actor: Emergent concerned groups

Key readings

- Callon, M., Lascoumes, P., & 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) & 5 'The Organization of Hybrid Forums' (pp. 153-190). *Acting in an Uncertain World: An Essay on Technical Democracy*. Cambridge, MA: MIT Press.

4.12.2017

Translating 2

T. Criado

- Operation: Translating
- Main actor: Emergent concerned groups

Key readings

- Callon, M., & Rabeharisoa, V. (2003). Research “in the wild” and the shaping of new social identities. *Technology in Society*, 25, 193–2004.
- Callon, M., & Rabeharisoa, V. (2008). The Growing Engagement of Emergent Concerned Groups in Political and Economic Life: Lessons from the French Association of Neuromuscular Disease Patients. *Science, Technology & Human Values*, 33(2), 230–261.
- Rabeharisoa, V., Moreira, T., & Akrich, M. (2014). Evidence-based activism: Patients’, users’ and activists’ groups in knowledge society. *BioSocieties*, 9(2), 111–128.

11.12.2017

Issues

T. Criado

- Operation: Issues
- Main actor: Publics

Key readings

- Marres, N. (2012). The Invention of Material Publics: Returns to American Pragmatism. In *Material Participation: Technology, the Environment and Everyday Publics* (pp. 28-59). New York: Palgrave Macmillan.
- Marres, N. (2007). The Issues Deserve More Credit: Pragmatist Contributions to the Study of Public Involvement in Controversy. *Social Studies of Science*, 37(5), 759–780.
- Marres, N., & Lezaun, J. (2011). Materials and devices of the public: an introduction. *Economy and Society*, 40(4), 489–509.

18.12.2017 **Cosmopolitics 1**

T. Criado

- Operation: Cosmopolitics
- Actor: Victims and Diplomats

Key readings

- Latour, B. (2004). Why Has Critique Run out of Steam? From Matters of Fact to Matters of Concern. *Critical Inquiry*, 30(2004), 225–248.
- Latour, B. (2005). From Realpolitik to Dingpolitik or How to Make Things Public. In B. Latour & P. Weibel (Eds.), *Making Things Public. Atmospheres of Democracy* (pp. 14–41). Karlsruhe / Cambridge, MA: ZKM / MIT Press.
- Stengers, I. (2005). The cosmopolitical proposal. In B. Latour and P. Weibel (eds.), *Making Things Public* (pp. 994–1003). Cambridge, MA: MIT Press.

8.1.2018 **Cosmopolitics 2**

T. Criado

- Operation: Cosmopolitics
- Actor: Victims and Diplomats

Key readings

- de la Cadena, M. (2010). Indigenous Cosmopolitics in the Andes: Conceptual Reflections beyond “Politics.” *Cultural Anthropology*, 25(2), 334–370.
- Puig de la Bellacasa, M. (2011). Matters of care in technoscience: Assembling neglected things. *Social Studies of Science*, 41(1), 85–106.
- Blaser, M. (2016). Is Another Cosmopolitics Possible? *Cultural Anthropology*, 31(4), 545–570.

15.1.2018

Self-experimentation 1

T. Criado

- Operation: Self-experimentation
- Main actor: Hackers and self-managed guinea pigs

Key readings

- Murphy, M. (2004). Immodest witnessing: The epistemology of vaginal self-examination in the US feminist self-help movement. *Feminist Studies*, 115–147.
- Murphy, M. (2006). How to Build Yourself a Body in a Safe Space. In *Sick Building Syndrome and the Problem of Uncertainty: Environmental Politics, Technoscience, and Women Workers* (pp. 151-178). Durham, NC: Duke University Press.
- Delgado, A. (2013). DIYbio: Making things and making futures. *Futures*, 48, 65–73.

22.1.2018

Self-experimentation 2

T. Criado

- Operation: Self-experimentation
- Main actor: Hackers and self-managed guinea pigs

Key readings

- Corsín, A. (2014). The right to infrastructure: Prototype for open source urbanism. *Environment and Planning D: Society and Space*, 32(2), 342–362.
- Sánchez Criado, T., Rodríguez-Giralt, I., & Mencaroni, A. (2016). Care in the (critical) making. Open prototyping, or the radicalisation of independent-living politics. *ALTER - European Journal of Disability*, 10(2016), 24–39.
- Sánchez Criado, T., & Cereceda, M. (2016). Urban accessibility issues: Techno-scientific democratizations at the documentation interface. *City*, 20(4), 619–636.