

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

Туре	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	3 ECTS 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: DELIVERABLE A: 26.11 DELIVERABLE B: 10.12 DELIVERABLE C: 17.12 DELIVERABLE C: 17.12 DELIVERABLE D: 14.1 DELIVERABLE E: 4.2. Final deliverable: 12.2
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.



T. Criado

6.11.2017 Technoscience and collective 'action' beyond heroism

- The specificities of technoscientific activisms: The burden of proof and the mobilisation of technical issues.
- What can activism learn from STS, and STS from activism?

Key	•	Latour, B. (1988). Irreductions. In <i>The Pasteurization of France</i> (pp. 153–236). Cam-
readings		bridge, MA: Harvard University Press.
		Callon, M., & Law, J. (1997). Agency and the Hybrid Collectif. In B. Herrnstein Smith
		& A. Plotnitsky (Eds.), <i>Mathematics</i> , <i>Science and Postclassical Theory</i> (pp. 95–117).
		Durham, NC: Duke University Press.
	•	Gomart, E., & Hennion, A. (1999). A sociology of attachment: music amateurs, drug users. In J. Law & J. Hassard (Eds.), <i>Actor-Network Theory and After</i> (pp. 220–247). Oxford: Blackwell.

13.11.2017	Counter-expertise 1
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T. Criado

- Operation: <u>Counter-expertise</u>
- Main actor: Laypeople or the Anyone

Key	•	Jasanoff, S. (2003). Technologies of humility: citizen participation in governing sci-
readings		ence. <i>Minerva</i> , <i>41</i> (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



T. Criado

- Operation: <u>Counter-exper</u>tise
- Main actor: <u>Laypeople or the Anyone</u>

Counter-expertise 2

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. (2008). Hepatitis C and the dawn of biological citizenship: Unravelling the policy implications. In P. Moss & K. Teghtsoonian (Eds.), *Contesting Illness: Processes and Practices* (pp. 107–122). Toronto: University of Toronto Press.

27.11.2017 Translating 1

T. Criado

- Operation: <u>Translating</u>
- Main actor: <u>Emergent concerned groups</u>

Key	•	Callon, M., Lascoumes, P., & Barthe, Y. (2011). Chapters 1 'Hybrid Forums' (pp. 13-
readings		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

- Operation: <u>Translating</u>
- Main actor: <u>Emergent concerned groups</u>

Key readings	 Callon, M., & Rabeharisoa, V. (2003). Research "in the wild" and the shaping of new social identities. <i>Technology in Society</i>, <i>25</i>, 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. <i>Science, Technology & Human Values</i>, <i>33</i>(2), 230–261.
	 Rabeharisoa, V., Moreira, T., & Akrich, M. (2014). Evidence-based activism: Pa- tients', users' and activists' groups in knowledge society. <i>BioSocieties</i>, 9(2), 111–128.

11.12.2017	Issues	T. Criado

- Operation: Issues
- Main actor: <u>Publics</u>

Key	•	Marres, N. (2012). The Invention of Material Publics: Returns to American Pragma-	
readings		tism. 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	7 Cosmopolitics 1	T. Criado
• Ope • Act	eration: <u>Cosmopolitics</u> or: <u>Victims and Diplomats</u>	
Key readings	 Latour, B. (2004). Why Has Critique Reters of Concern. Critical Inquiry, 30(200) 	In out of Steam? From Matters of Fact to Mat- 04), 225–248.

adings		ters 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: <u>Cosmopolitics</u>
- Actor: Victims and Diplomats

Кеу	•	de la Cadena, M. (2010). Indigenous Cosmopolitics in the Andes: Conceptual Reflec-
readings		tions beyond "Politics." Cultural Anthropology, 25(2), 334–370.
-		Puig de la Bellacasa, M. (2011). Matters of care in technoscience: Assembling ne-

- Puig de la Bellacasa, M. (2011). Matters of care in technoscience: Assembling neglected things. Social Studies of Science, 41(1), 85–106.
 Blazer M. (2016). In Appeter Company State Describes Configuration of Science 2014.
- 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: <u>Hackers and self-managed guinea pigs</u>

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

22.1.2018	Self-experimentation 2	T. Criado
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- Operation: <u>Self-experimentation</u>
- Main actor: <u>Hackers and self-managed guinea pigs</u>

Key	•	Corsín, A. (2014). The right to infrastructure: Prototype for open source urbanism.
readings		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: Technoscientific democratizations at the documentation interface. *City*, 20(4), 619–636.