

## EDITORIAL NOTES

---

### INFRASTRUCTURING THE COMMONS TODAY, WHEN STS MEETS ICTS

by Mariacristina Sciannamblo, Maurizio Teli,  
Peter Lyle & Christopher Csíkszentmihályi

This special issue of the Journal of Peer Production collects a set of papers that address in different ways the relationship between Science and Technology Studies (STS) and the field of Information and Communication Technologies (ICTs). The genealogy of this collection dates back to the European Association for the Study of Science and Technology (EASST) Conference held in Lancaster in July 2018. At that time, we (guest editors of this special issue) responded to the call for tracks of the conference, whose overarching theme revolved around the word ‘meeting’. As typical of STS, the central topic of ‘meeting’ was unpacked across multiple layers: aesthetic, epistemological, ethical, ontological, political. Therefore, the conference aimed to promote “generative mixing through meetings in all senses of this word: as a practical activity, a substantive topic, a political engagement and as theoretical exploration”.

For us – people and researchers trained in different and neighbouring fields such as sociology, participatory design, human-computer interaction, arts, and, of course, STS – this has sounded as a compelling input to effectively reflect upon the several meetings marking our research path, starting from our personal and professional encounter in the remote Portuguese island of Madeira, as well as from our mutual sense of belonging to and curiosity towards STS. As a result, we submitted a track proposal titled “STS meet ICT: politics and the collaborative turn in STS” to the

EASST Conference, which received relevant feedback in terms of proposals. In this respect, the high quality of research and discussions shared in Lancaster has pushed us to pursue the intention to follow up this work by assembling a larger reflection focused on the intersections among the topics and issues discussed at the EASST Conference, which, not with surprise, reflect some of our own research interests: infrastructuring, collaboration and participation, the politics of technology and design.

Against this backdrop, we found the emergence of the so called “collaborative turn” in STS (Farías 2017) an engaging and fruitful framework whereby to develop a promising relation between collaborative forms of technological design and the politically-engaged character of STS (Sismondo 2008). In a 2016 editorial note for the EASST Review, Ignacio Farías discussed the wider transformations that STS might involve as intellectual practice. According to Farías, questions concerning ethical and political commitments of those researching around science and technology have become of interest for other disciplines (e.g. design, geography, architecture), contributing to an important transformation for STS to expand its theoretical grounds, analytical categories, and empirical sensibilities: “But what is now becoming apparent is again something different, namely, the consolidation of a *collaborative mode of practicing STS* involving *committed action-research projects* based on dialogue, mutual learning and caring relationships within *heterogeneous collectives*” (Farías, 2016, p. 5, emphasis added). Such a “collaborative mode of practicing STS” has been nurtured by the increasing general prominence of critical approaches such as feminist and postcolonial perspectives as well as the meetings with more

applied fields such as participatory design, information science, and critical technical practice.

As this special edition goes “to press” its editors are in lockdown because of the coronavirus, and the memory of a live international conference devoted to meetings seems very distant. Indeed, the lockdown has accelerated and reified the trend (especially for academics and other “knowledge workers”) toward work largely defined by mediated electronic communications, simply by removing alternatives. Software was already eating the world, but the global pandemic has sped up the digestive process by pushing many more of our daily acts – from securing food to saying last goodbye to sick loved ones – onto ICT-based platforms. The importance of understanding how our societies are building and in turn being affected by an infrastructure of ICTs is even more urgent than when we launched the call.

In particular, as many countries face a novel situation of having to conduct decorporalized politics and elections, the interplay of politics and technical platforms – long a consideration of STS – takes center stage. Papers in this collection look at civic and community engagements with the crafting of ICTs, including citizen science approaches and community networks. Several papers explicitly detail the tensions between the kind of formalized relationships that ICTs typically reify, i.e. through “roles” and monetary modeling, with relationships of commons and care. Bidwell, for example, warns that certain approaches to sustainability “promote monetary metrics over more nuanced evaluations of human connectivity,” and argues that emphasizing social coordination may help disentangle community networks from capitalism. This work takes on a new kind of urgency now, as the global pandemic transitions to a global depression, the likes of which we may never have seen. How will we construct ICTs as a form of civic infrastructure which can help us tend to each other, our communities, and our democracies?

Our own work has been interested in the ways in

which tools, practices and people cross the bounds of design and use, and understanding such a process as one of infrastructuring. Where infrastructuring is used to help understand commoning activities has been part of our own background – in particular with the recent Commonfare project – and thus part of our motivation for this special issue. For the submitted papers, each contributes to different aspects of the connection between these concepts, be they in different empirical contexts, in different working situations.

Thus, with the question of infrastructuring the commons as a background, we evoked the disciplinary intersection of STS with design studies and information science; the epistemological meeting between STS and critical perspectives; the making of new alliances between researchers, activists and local population; the convergence of institutional interests and research practices to promote alternative sociotechnical infrastructures.

This resulted in seven papers by nine different authors from a diversity of countries and institutions which have been included in this issue, after reviews by a multitude of reviewers (thanks to all!) and two rounds of editing of the papers themselves. The rich and multi-faceted special issue that has emerged in responding to our call on “Infrastructuring the Commons today, when STS meets ICT” provides theoretical, empirical, and diverse contributions, reflecting a debate that is alive and productive.

For example, *Mirka Muilu* revisits Hannah Arendt’s thinking, pointing to the philosopher’s materialism to discuss and question how we can think about the relationship between the production of the commons and political action, providing a new lens to critique the concept of the tragedy of the commons. With a different angle, *Nic Bidwell* takes the example of community networks, infrastructures for connectivity managed at the local level, to point to the contradictions between the local governance and the monetary implications of mainstream sustainability discourse. Adding further to the

framing of the experiences of commoners, *Giacomo Poderi* interrogates the affective dimensions of commoning by drawing on feminist technoscience, depicting affect as a relational force moving between the bodies of the commoners. Both Bidwell and Poderi provide rich theoretical reflections but they ground them on the lived experiences of the commoners they work with, being them respectively in the 'South' or the 'North' of the world.

The centrality of the empirical experience is even more visible in the following papers. *Pablo Piquinela and Gonzalo Correa* discuss the construction of a tent of the Uruguayan Solidarity Economy Network (USEN) and, in doing so, they adopt the concept of 'cosmogram' to account for the inextricable relation between commoning practices and the human and non-human entities that make them up. *Ileana Apostol and Panos Antoniadis* bring the empirical investigation even further, describing a case of participatory design of a new urban space in Zurich, Switzerland, considered as a commons since its conceptualization. *Rodolfo Hernand-Pérez* focuses on the production of scientific knowledge as a commons, taking the case of citizen science in China as the object of his investigation. Finally, *Andrea Gaspar* helps us going recursively further, focusing on the professional figure of the interaction designer, the ones who have a crucial skill set in designing the infrastructures we rely upon as commons, and she discusses the working conditions of interactions designers in the light of their required flexibility – being both flexibility to adjust to the wicked problems of design and the precarity of unstable working conditions.

The papers included in this special issue revolve around and expand the word 'meeting' that has generated this collection, allowing us to realize that

our "things" (being them concepts, methods, as well as the very mundane tools through which we make a living) can be themselves practical experiences of commoning and political engagement. Thinking with Leigh Star, the papers we present offer an angle of vision according to which the relations of people-things-technologies can be considered not only as an object naturalized in one centered world (such as the objects of Western science), but mainly as "heralds of other worlds, and of a wildness that can offset our naturalizations in liberatory ways" (Star, 1994).

## ACKNOWLEDGMENT

This special issue would not have been possible without the voluntary work of the reviewers. We want to thank all of them, Mako Hill, Liesbeth Huybrechts, Stefania Milan, Midas Nouwens, Linda Tonolli, as well as the ones who have preferred to remain anonymous.

This project has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (grant agreement No 740548).

## REFERENCES

- Farias, I. (2016) A collaborative turn in STS? *EASST Review*, 35(3), 4-5.
- Star, S. L. (1994). Misplaced Concretism and Concrete Situations: Feminism, Method and Information Technology, presented at the Gender, Culture. In *Nature Workshop at Århus University, Århus, Denmark*. Republished in Bowker, G. C., Timmermans, S., Clarke, A. E., & Balka, E. (Eds.). (2016). *Boundary objects and beyond: Working with Leigh Star*, pp. 143-167. MIT Press