

STS Encounters in Pandemic Times

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Abstract: This short essay by the departing board of STS Italia (Italian Society of Science and Technology Studies) introduces a Special Section of the Journal collecting a set of writings that present and develop some of the key themes of the VIII STS Italia Conference, held in June 2021 as a virtual event. The Special Section features an invited essay by Dimitris Papadopoulos and Andrea Ghelfi followed by a short commentary by Luigi Pellizzoni. In addition, the Section includes ten different “Conference Reflections” – as situated perspectives on the meeting – written by colleagues who had a major role in organizing the event, or who convened one of the conference thematic tracks. As a whole, the Conference Reflections help broaden and improve our understanding of the manner and extent in which contextualized meanings and local socio-material practices constitute the fabric of the socio-technical environments where we live, thus unveiling the inextricable entanglement of novel vulnerabilities and technoscience.

Keywords: Dis/Entangling Technoscience; Conference Reflections; Vulnerability; Responsibility; Justice.

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In memory of Trevor Pinch (1952 –2021)

*Our colleague Trevor Pinch passed away during the preparation of this Special Section. We publish this collection of essays in remembrance of his passing. Trevor contributed greatly to the development of this journal and of the Italian STS scientific community. The next issue of *Tecnoscienza* (June 2022) will feature a collection of articles by STS Italia members to honour his memory.*

The VIII STS Italia Conference is a tale of two meetings. Initially planned in the Italian town of Trieste in June 2020, the gathering was postponed as the Covid-19 pandemic struck in Spring 2020 and was held online one year later (June 17–19, 2021). Two utterly different events, but united by an understanding of the entanglement of science, technology and society, whose relevance Covid-19 unexpectedly and tragically reminded all of us of.

“Dis/entangling Technoscience”: that was the title, and the ambition, of the conference. While we observed Sars-Cov-2 travelling across seas and lands and we anxiously waited for biomedical advances able to counter the infection, Covid-19 called our attention to the relevance and ambivalence of such entanglement: we were all prompted to acknowledge that science and technologies play a critical role in shaping our societies – making possibilities flourish, but also creating new vulnerabilities, hence solving and creating societal challenges in equal measure (Jasanoff 2020). The pandemic was, and still is, an extreme example of how, in societies largely shaped by technoscience, vulnerability can be understood as an emergent property of the relationships between human and non-human entities, such as biological materials, technical objects and infrastructures, knowledge-making practices and social processes. And yet, the effects of these socio-technical entanglements (in terms of levels, intensities and types of vulnerabilities) are unevenly distributed across space, time, and social worlds.

Dis/entangling technoscience proves to be quite a slippery task, one possibly overwhelming due to the multivocality that the notion of “entanglement” itself assumes in the STS community. Demanding as it may be, this task is nonetheless an urgent and necessary step in effectively exploring the socio-technical fabric of human existence, as well as in grasping the issues and problems at stake when science and technological developments are normatively defined, measured, legislated and assessed in search for a just and responsible technoscience.

As the debate over vaccine supply has forcefully demonstrated, unequal distribution of such a critical preventive biotechnology points to the underlying, fundamental question of justice in technologically dense societies. Understanding the nexus between technoscience and justice requires us to explore and critically assess topics such as the forms and sources of power and public participation, the limits of social control via technical dispositifs and epistemic uncertainties, the expectations, media representations, discourses and interests of the social actors and the assumed neutrality of scientific knowledge and infrastructures, as well as the pitfalls and failures of public decision making and health policies in ordering the relations between science, technology and society. Ultimately, issues of justice demand to examine how responsibilities for this state of affairs are defined and assigned to and by different stakeholders, public agencies, research organisations and concerned groups of people. They call for addressing topics such as models of governance and regulation, ethics and values, hegemony and contestation.

Vulnerability, responsibility and justice were thus the guiding concepts of the VIII STS Italia Conference, in an effort not only to explore important research subjects for STS and related fields but also to delineate potential trajectories of STS's public. Three plenary sessions, two roundtable discussions and 28 parallel tracks, encompassing over 200 paper presentations, sparked a lively debate on these three notions and their implications for a broad range of issues and fields, from genetics and biomedical innovation to disability, from platforms and infrastructures in media industries to surveillance technologies and inclusive communities.

A dedicated online conference platform (Fig. 1) was designed and set up to foster peer-to-peer interaction and engagement despite the online format of the event. Before the conference, each participant was encouraged to record a short video highlighting the key takeaways of their own presentations. Prior to the meeting, approximately 200 videos were made available online in a "Video Library" on the platform, so that track participants could spend more time in debates and discussions, thus making the conference more engaging and interactive.



Figure 1. The VIII STS Italia Conference platform

This is the backdrop of the present Special Section of *Tecnoscienza*. While this Special Section does not claim to cover all the topics discussed during the conference, the collection of articles highlights some of its most salient themes by hosting ten "Conference Reflections" – as situated perspectives on the meeting – written by colleagues who had a major role in organising the event, or who convened one of the 28 thematic tracks.

The conference thematic tracks largely benefitted from the three Conference Plenary Talks, which were invaluable in providing conceptual and methodological entry points to explore the mutual relationship between vulnerability, justice, responsibility and technoscience. In her opening lecture entitled "Postcolonial Flows and Forensics as an Art of Paying

Attention”, Amade M’charek (Professor of Anthropology of Science at the Department of Anthropology of the University of Amsterdam) shed light on the material traces of today’s migration tragedies in the Mediterranean. In her talk, she explored the current shift and extension of the notion of forensics – from a practice of conferring evidential relevance to facts and materials about a single event, to an art of paying attention that allow us to re-configure the realities of death and dying and helps to critically examine the current politics of colonial relations. The second Plenary Talk by Rene von Schomberg (Senior Research Fellow at Käte Hamburger Kolleg: Cultures of Research of RWTH Aachen University, and formerly Team Leader for Science Policy at the European Commission) called for an institutional transformation of science, technology and innovation systems to foster socially responsible research and innovation. His talk, which was entitled “Responsible Innovation: A Call for Institutional Change”, questioned the current market-centred innovation paradigm and reclaimed a stronger role for public authorities in science regulation after decades of privatisation. In doing so, von Schomberg argued for institutional changes that encompass Open Science and Responsible Innovation and that can prove effective for addressing the frequent failure of market mechanisms in delivering socially desirable outcomes of innovation. Dimitris Papadopoulos (Professor of Science, Technology and Society at the University of Nottingham) delivered the Closing Plenary Talk of the conference, on “Elemental Justice: Necrochemicals, Ecological Reparation and Generative Chemical Practice”. The talk unveiled a paradox permeating our life: if our socio-technical worlds are paradoxically unsustainable without anthropogenic chemical interventions, what does it mean to experience and live in such a toxic regime, where human made substances are deeply ingrained into ecosystems and society? What are the implications of this forced coexistence?

The great political relevance these questions have for STS is further discussed in the article “Ecological Transition: What It Is and How to Do It”, which Papadopoulos and Andrea Ghelfi (Leverhulme Early Career Research Fellow at the University of Nottingham) co-authored and which is published in this Special Section. In a companion commentary, Luigi Pellizzoni (Full Professor of Sociology of the Environment and Territory at the University of Pisa) critically examines the current convergence between an unshakeable faith in technofixes and the hollowing out of both traditional representative and participatory democracy in the context of the current ecological crisis.

A broad set of “Conference Reflections” follows these two essays. Though differing in their subject matters, theoretical questions, and epistemological stances, these articles share a common interest in investigating how shifts in socio-material and knowledge-making practices (see Viteritti and Piromalli; Cozza), living bodies (see Moretti and Morsello; Miele and Nunes), socio-technical regimes and (digital) infrastructures (see Bonini & Magauda; Olivieri and Pelizza; Sciannamblo and Zampino), instances of technological weaknesses (Bory and Di Salvo), power relations in

technologically dense environments (Bruni and Tirabeni) and public participation and jurisdictions (see Giardullo et al.) are predicated and performed, simultaneously creating novel and unexpected vulnerabilities and opening pathways for justice and responsibility. As a whole, these writings help improve our current understanding of how the local meanings of technoscience and their related practices emerge in different socio-technical environments where novel vulnerabilities and technoscience are entangled. The VIII STS Italia Conference and its legacy, coalesced in this Special Section, demonstrate that the STS community is unafraid to take up the challenges characterising our increasingly turbulent socio-technical worlds, and is experimenting with novel practices of academic knowledge-making and -sharing. However, as doing so is likely unable to demonstrate to society the promise of STS for shaping desirable, just and responsible socio-technical change, new types of affective engagement and public commitment are required in order to forge a shared responsibility to care for and nurture the human and more-than-human relations life on our planet is made of (Puig de la Bellacasa 2017).

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