

TRACK 20. ENGINEERING PRACTICE: PERFORMING A PROFESSION, CONSTRUCTING SOCIETY

The engineering profession is central to the construction of the material relationships that constitute modern society. Engineering is itself a social practice. The knowledge, values and social relationships that are performed every day in engineering offices, sites and factories shape the social performance of the artefacts, technologies and infrastructures they produce. Engineering knowledge is highly performative, involving collective agreement on 'rules of thumb' or the 'state of the art', the development and application of 'scientific' theories, the use of design and analysis tools ranging from pencils to high performance computers, and working in both specialised and interdisciplinary teams. As political and economic agents, engineers are implicated in decision making regarding research and development, regulation of technology, sustainable development, and infrastructure provision, as well as the implementation of the outcomes of such decisions. Compared with the societies that engineers serve, women remain underrepresented in the profession, and its ethnic diversity is contestable. Despite the enormous impact of engineering on modern society, engineers are often stereotyped as asocial, apolitical and technology fixated. Engineer education and professional development face the challenge of ensuring sound technical knowledge and competence, whilst providing professionals with the capacity to apply such knowledge in varying social, political, and economic contexts. Users, clients, financiers, policy makers and other actors implicated in engineering projects face the challenge of engaging with engineering practice as a key site where material relationships are proposed and formalised.

This thematic track will explore the relationships among the social, political, economical, epistemological, and ethical performance of professional engineering practice and how the larger societal context influences those practices, and the role of engineers in shaping the technologies and infrastructures that constitute a large part of the materiality of modern life. We welcome papers on topics such as:

- ethnography of engineering practice
- the relationship between engineering and policy
- social studies of engineering knowledge
- public engagement with engineering
- incorporating contextual considerations into engineering education
- gender and diversity in engineering
- theoretical contributions from science and technology studies to the understanding of engineering knowledge and practice.

Abstracts of no more than 500 words should be sent by email (following website instructions) by 2010 March 15th.

Convenors

Sarah Bell is a senior lecturer in environmental engineering at University College London. Her research focuses on the role of engineers as mediators between technology and society in helping to achieve more sustainable cities.

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Track sponsored by the Committee on Philosophy, Engineering and Technology (cPET), a committee of philosophers, engineers, and those who have related interdisciplinary interests assembled for the purpose of encouraging conversation and understanding between practitioners of engineering and technology and those who study such matters.

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