[Review of: J. Calvert (2023) A place for science and technology studies : observation, intervention, and collaboration]

Pols, J.

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BOOK REVIEW

A place for science and technology studies. Observation, collaboration and intervention, by Jane Calvert, Cambridge, London, MIT Press, 2023, USD 40,00 (paperback), ISBN: 9780262546942

This is a great, concise and extremely clear and well-written book about complex questions. It is about STS work. Even if the author does not see many places that could be a home for STS researchers, the book radiates a homely feeling even so. The book is also about synthetic biology. I started this review with a homely metaphor because one of the brilliant moves this book makes is that the reader gets to visit a different room in each chapter. In each room the concern is synthetic biology. There is the conference room, the laboratory, the classroom, the art studio, the coffee room, the bioethics building (they get a whole building!), the policy room and there is even an ivory tower. It is more or less possible to visit each of the rooms as an outsider (read: STS researcher).

In these respective rooms, we visit STS researcher Jane/professor Calvert/creative collaborator/severe criticaster/thinker/observer who are together the authors of this book. They report on their relationship with the then emerging field and scholars (friends/scientists/critics/creative constructors/beneficiates …) of synthetic biology. The reader is invited to visit the different rooms to receive glimpses of the history and emergence of synthetic biology, and how social scientists and others could or could not relate to the questions that came with the possibilities of 'designing living things.'

Each room sets different priorities, and makes it possible to discuss different concerns in different languages, and create different ways of engaging with synthetic biology. The authors explore how they could *observe*, *collaborate* or *intervene* in synthetic biology in each of the rooms, and where each of these activities could be done best. This is again a brilliant move, as it distinguishes collaboration (thinking with) from intervention (arguing against). Scholars generally advocate one metaphor or the other, without addressing the concerns with its counterpart. The risk then looms of becoming fellow travelers who are colluding with their field of study (a field that also often provides them with a salary). Alternatively, the risk is to be too far away, and generate an outsiders' critique that is futile. Both are typical STS concerns.

The book provides rich examples. The position to be avoided is the industry's ruthless money making through synthetic biology, instrumentalizing the field, while excluding counter voices and discussions about public concerns, such as the consequences of producing genetically manipulated crops (or, for that matter, the desirability of designing singing bacteria!). The authors show how such discussions have been summarized as the 'ELSI' (ethical legal social impact)-side of the scientific work. The authors firmly object to this understanding, because the social and the ethical questions then seem to emerge separately from and after the actual science and fact making. The typical STS move in the book is to show how facts and normativity, matters of epistemology, ethics and politics, are always intertwined.

In this way, the authors put normativity on the agenda of STS itself. If STS researchers observe, but also collaborate and intervene, how would they do this? If normativity cannot be separated from factmaking, as seems to be assumed in ethics buildings and laboratories alike, what could this STS normativity be? Debates were and are raging in STS about epistemological chickens, matters of concern and matters of care in STS work. The authors state that the emergence of STS has always been political, and dub this a politics of 'otherwising.' Otherwising means showing how things are framed and enacted in some places, and how they could be framed and enacted differently. What possible worlds and futures are in the making? The economic instrumentalizing of synthetic biology sweeps any political and social questions under the carpet, closing off the field for social scientists and concerned others. This is very different from the open, interdisciplinary field synthetic biology wanted to be in its early stages.

'Otherwising' is a great metaphor to develop further. When, where, is it wise to otherwise, to what effects and for whom? Would *any* form of otherwising do, or is this always a situated question? When is otherwising collaborative, when interventionist? Does it entail the empirical work of juxtaposing different epistemological and normative framings (enactments, rooms), or also a speculative work of imagining different worlds, for example, supported by a visit to the arts room? The metaphors of the rooms point to the necessity of moving around, of being elsewhere, to observe and engage with different 'wises' that can then be othered -or not.

Such questions deal with questions about knowledge and society and how these emerge together. As the authors note, such questions are pertinent in many places. STS researchers have strayed in many different directions (to schools, court rooms, parliaments, health care, refugee camps, oceans) where they ask similar questions. Is STS, then, a discipline after all, even if it often does not have a room of its own? One of the difficulties for students to access STS, is the field's insistence on having the liberty to, well, theorize things otherwise. The authors suggest that STS can still be a harbor, a place to meet, but also a set of concerns with knowledges and normativities and their social entanglements. If there are common grounds for STS research, even if approaches differ, this book is about STS's empirical way of conducting philosophy of science (which is also an

empirical way of conducting ethics or politics, and a conceptual way of conducting social science). As such it is a must-read for anyone interested in STS. Even if we may have no proper room, we at least now have ‘a book of our own.’

Jeannette Pols
Department of Anthropology, University of Amsterdam, Amsterdam, Netherlands
Department of Ethics, Law & Humanities, University Medical Centre Amsterdam, Amsterdam, Netherlands
a.j.pols@uva.nl