

Module Guide

Sociotechnical Systems



Six Silberman

How the ‘technical’ and the ‘nontechnical’ shape each other

‘Technical’ things like train cars, computer systems, power plants, and standards are shaped by ‘nontechnical’ things like laws, politics, business models, organisational culture, and the psychology of user groups and influential individuals. ‘Nontechnical’ things can in turn be (re-)shaped by new possibilities — or constraints — afforded by technical systems.

This module has no fixed curriculum. It aims to support Fellows’ projects and other ongoing work by serving as a place to discuss the interplay between the apparently ‘technical’ and the apparently ‘nontechnical.’ We will work out concrete ways in which to do this as we go along. This could include going to external events, formal presentations, informal discussions, reading, empirical research, system building, or other (joint or individual) activities, as best support Fellows’ ongoing work.

Silberman has previously worked as a programmer in nonprofits and social enterprises and as a trade union official, and now works in a law school studying technology policy. Silberman’s practical experiences and some familiarity with literatures in human-computer interaction, sociology of technology, and technology policy will support our discussions. It is expected that Fellows also have diverse experiences and backgrounds. Fellows will be expected to bring these experiences into our discussions to reflect on, understand, and support one another’s ongoing work.

How to Participate

All activities are optional. You can show up to any of the sessions. There are no prerequisites or ongoing obligations. The goal of this module is to help you clarify and pursue your project(s) successfully, especially by talking, thinking, and reading about how the apparently ‘nontechnical’ and the apparently ‘technical’ interact with one another, and

especially how ‘nontechnical’ factors can influence the success or failure of technical projects.

Registration for the sessions will be possible through the [Newspeak House events page](#).

Overview of Module Sessions

- Introductory event during orientation weekend
- Group discussions: Second Monday of every month, 4pm–6pm, Newspeak House (to be confirmed), start date TBD
- Possible external speaker events at Newspeak House, once every ~2 months
- Office hours: First and third Monday of every month, 4pm–6pm, Newspeak House (to be confirmed), start date TBD
- Silberman will be available for informal discussions at most [Ration Club](#) events

Sociotechnical observations & advices

- [Sociotechnical observations and advices in 1 A5 page](#)

Readings (Entirely Optional)

- adrienne maree brown, [Emergent Strategy](#)
- Patricia Shaw: *Changing Conversations in Organizations: A Complexity Approach to Change*
 - [Publisher info](#)
 - [Full text PDF](#)
- Andrew Russell and Lee Vinsel, [‘Innovation is overvalued; maintenance often matters more’](#) (2016)

- Sara B. Pritchard, '[An Envirotechnical Disaster: Nature, Technology, and Politics at Fukushima](#)' (2012)
- Izabella Kaminska, '[Blockchain's governance paradox](#)' (*Financial Times*, 2017 [[original](#)])
 - See also:
 - Vili Lehdonvirta, '[The blockchain paradox](#)'
 - Caitlin Lustig, '[Algorithmic authority: the case of Bitcoin](#)' (2015)
- Ted Chiang, '[Will AI become the new McKinsey?](#)' (*New Yorker*, 2023)
- Donella Meadows:
 - '[Leverage points: places to intervene in a system](#)' (1999)
 - '[Thinking In Systems: A Primer](#)' (2008)
- Elinor Ostrom and colleagues:
 - '[Beyond markets and states: polycentric governance of complex economic systems](#)' (2010)
 - '[The struggle to govern the commons](#)' ([PDF](#)) (2003)
 - '[Understanding Institutional Diversity](#)' (2005)
 - '[Governing the Commons](#)' (1990)
- John Gall, *Systemantics: How Systems Work and Especially How They Fail* (1975/77, later editions published as 'The Systems Bible')
 - [Well-structured collection of the main points](#)
 - [Wikipedia entry with historical info and main points](#)
 - [PDF full text \(1975 edition\)](#)