

Analyzing the Social and the Technoscientific in the same Move: Austria's Anti-Nuclear Movement as a Case Study

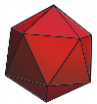
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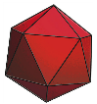
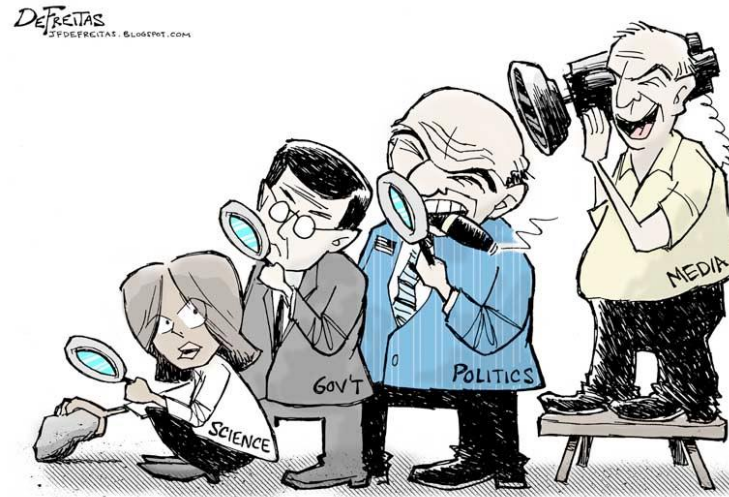
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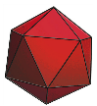
Symposium „Social Constructivism as Paradigm?“ Vienna, 28-30 April 2016

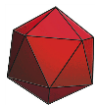


Presence of science and technology



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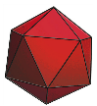


The (social) construction of ... in STS

- Bruno Latour and Steve Woolgar (1979/1986): *Laboratory Life: The Social Construction of Scientific Facts*
- Karin Knorr-Cetina (1981): *The Manufacture of Knowledge. An Essay on the Constructivist and Contextual Nature of Science*

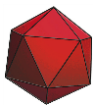
both open up a tradition to look into the **making of knowledge/facts** (etymology: “that which has been made”); the problem of facticity is relocated and seen as a problem of (laboratory) fabrication in the laboratory

=> From social constructivism to empirically grounded constructivism; questioning the meaning of “the social” in “social constructivism”



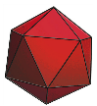
Co-production/co-construction

- Latour's (1993) „We have never been modern“ ==> questioning the divide between “the social” and “the natural” which underwrites all other ways of grasping the world; ==> contemporary matters of concern are co-construction ==> hybrids
- “The world makes us in one and the same process as we make the world.” (Pickering 1995: 26)
- the worlds already constructed **loop back** on efforts to imagine and construct new ones (Hacking 1999) ==> importance of history



Co-production/co-construction

- „the ways in which we know and represent the world (both nature and society) are inseparable from the ways in which we choose to live in it. Knowledge and its material embodiments are at once **products of** social work and **constitutive of** forms of social life; [...] Scientific knowledge, in particular, is not a transcendent mirror of reality. It both embeds and is embedded in social practices, identities, norms, conventions, discourses, instruments and institutions – in short, in all the building blocks of what we term the social. The same can be said even more forcefully of technology.“ (Jasanoff 2004, 2-3)



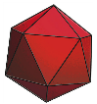
(Sociotechnical) Imaginaries

How we know as societies and how do certain realities become predominant while others fade away, can be dismissed or at least retreat to the back stage?

How do collectives—such as nation states, as in my case study—know together and how is that act of knowing entangled with scientific and technological developments?

==> notion of **IMAGINARIES**

Appadurai, Anderson, Taylor, Hecht, ...

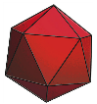


(Sociotechnical) Imaginaries

“... collectively held, institutionally stabilized, and publicly performed visions of desirable futures, animated by shared understandings of forms of social life and social order attainable through, and supportive of, advances in science and technology.”

“... sociotechnical imaginaries can originate in the visions of single individuals or small collectives, gaining traction through blatant exercises of power or sustained acts of coalition building.”

(Jasanoff 2015)

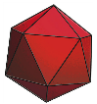


Sociotechnical Imaginaries

How can the concept of sociotechnical imaginaries help us to understand the coproduction of social and technological orders?

Case study

How does it come that Austrian's collectively share the idea that rejection of certain technologies (the nuclear, GMO's) makes them specific?

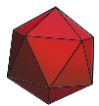
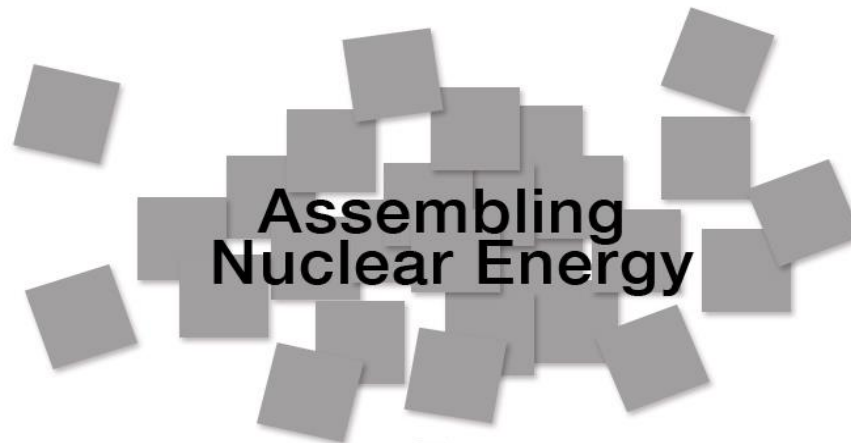


Assembling: Where, when, how, involving whom and connecting which “elements” do individuals or collectives build an imaginary of the nuclear in the Austrian context?

It involves questions of: Knowledge, experience, expertise, history, normative dimensions (how things ought to be; who should care),

Actors as diverse as nuclear scientists and mothers against the nuclear

=> creation of a first draft of a „socio-technical imaginary“, i.e. a specific socio-technical reality which seems capable to sufficiently attractive; yet still fragile



increased-energy-need narrative

Austrian Nuclear Program as a proof of „future-ability“

rebuilding Austria

IAEA in Vienna

atom for peace

strong past in nuclear physics

unclear health issues

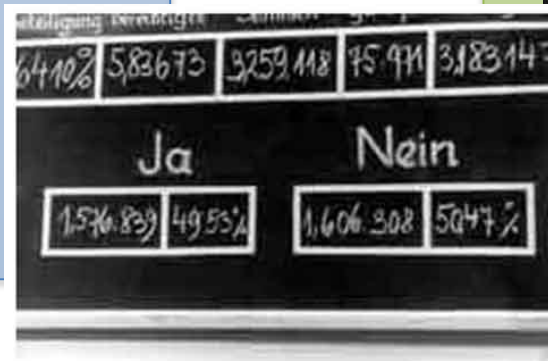
unclear security issues

nuclear waste

atomic lobby from out-side

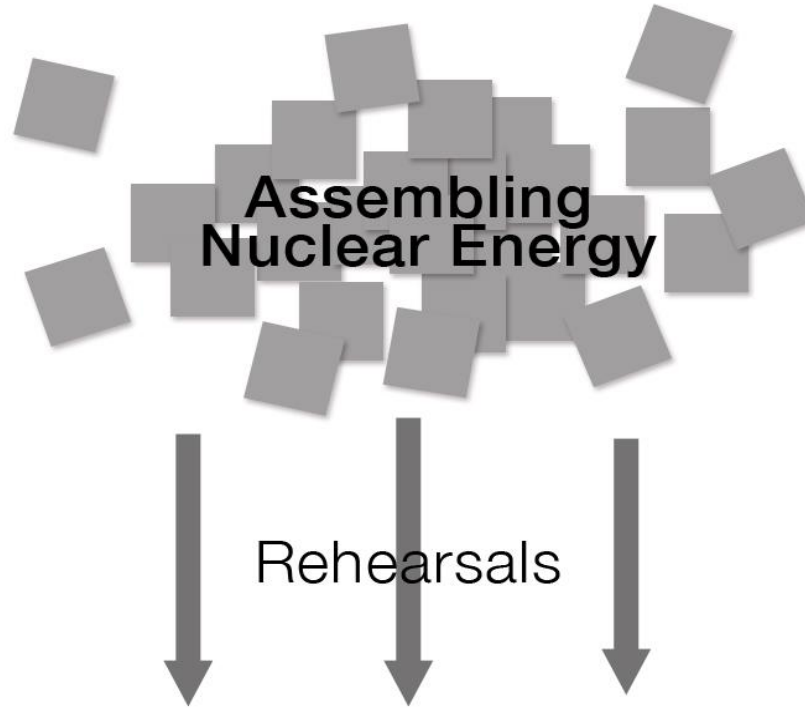
environmental movements

Assembling Nuclear Energy



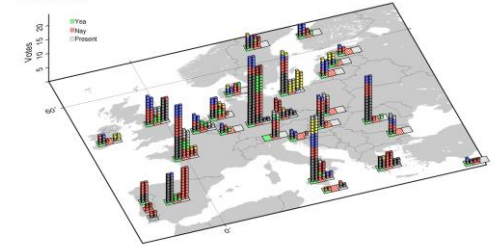
Hauptwahlbehörde, 5.11.1978





■ Group of the European People's Party (Christian Democrats) and European Democrats
 ■ Socialist Group in the European Parliament
 ■ Group of the Alliance of Liberals and Democrats for Europe
 ■ Union for Europe of the Nations Group
 ■ Group of the Greens European Free Alliance
 ■ Confederal Group of the European United Left - Nordic Green Left
 ■ Independence/Democracy Group
 ■ Non-attached Members

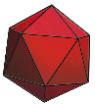
A6-0013/2009 Resolution



2009 Feb 24 12:00:00



Rehearsing: Where, when and by whom do these imaginaries get repeated, reworked and validated? Where are the sites and the configurations of diverse sets of actors (social and technoscientific ones) in which that happens?





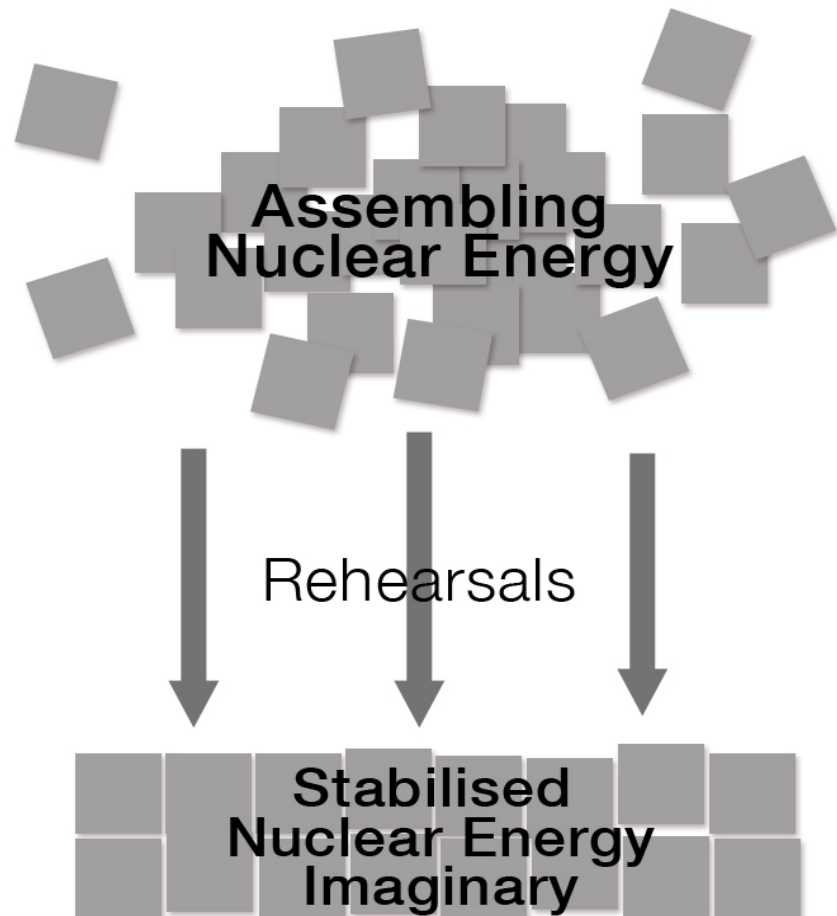
Fukushima was a perfect occasion to rehearse & remember and thus stabilise again the Austrian anti-nuclear position → „Coalition of reason against nuclear energy“ (Austrian Chancellor)

BUNDESGESETZBLATT FÜR DIE REPUBLIK ÖSTERREICH

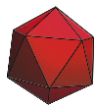
Jahrgang 1999 Ausgegeben am 13. August 1999 Teil I

149. Bundesverfassungsgesetz: Atomfreies Österreich
(NR: GP XX AB 2026 S. 179. BR: AB 6033 S. 657.)

149. Bundesverfassungsgesetz für ein atomfreies Österreich



Stablising: How do sociotechnical imaginaries become "socialised"? Through which processes at hand in a particular cultural context can these imaginaries be made robust in order to need increasingly less explication, rehearsal and protection? – "invention of tradition" (Hobsbawn & Ranger 1983: 2)



Concluding observations

- Absences or presences of science and technology in contemporary societies need to be studied in the same ways as both contribute to the making of what is perceived as a shared reality
- constructivist approach with a strong co-productivist sensitivity: importance of studying social and technoscientific orders together
- Technoscientific change needs new concepts to complement our understanding of how knowledges and their technological materializations matter in the making of societal realities
- Often invisible work needed to make and keep stable an imaginary
- Science and technology participate in the making of a specific national identity and create a shared *narrative infrastructure* to draw on when making sense of change/"the new", and in anticipatory work

