Governance of Sociotechnical Transformations (GoST)

2019–2021

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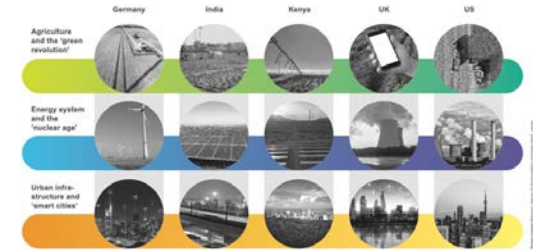GoST Team

Objectives

Exploring

o the *dimensionality* & *temporality* of T2S across sectors, and countries

o the *transformative capacity* of collective imaginations for enabling T2S

Comparing

- Identify the varieties of transformation pathways in the Global North and South, as embedded in local economic, social and material practices

- Make visible alternate imaginative pathways

- Uncover taken-for-granted assumptions that shut down alternative imaginations

- Improve institutional designs for democratic engagement

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Approach: Sociotechnical Imaginaries (STIs)

Definition:

- "Collectively held, institutionally stabilized, and publicly performed visions of desirable futures" (Jasanoff and Kim 2015)

➢ a new theoretical interpretation of the relationship of science & technology to political power

Research questions:

- How are T2S imagined and enabled?
- What do STIs tell us about potentials and shortfalls in prior efforts at T2S and choices how T2S can be best governed: by whom, to what ends, by what means, and with what welfare consequences for affected groups?

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Political Dimensions of Transformations

Aims: GOST is investigating contrasting 'imaginaries' of transformation

Transforming <u>what</u>? *(eg: 'sustainability' often treated as self-evident, but not)*

eg: 'unmaking'?   **- capitalism**? *(eg: Marx; Feola)*   - **coloniality**? *(eg: Quijano; Mignolo)*

   - patriarchy? *(eg: Firestone; Lerner)*   - **modernity**? *(eg: Weber; Parsons)*

   - technocracy? *(eg: Ellul; Illich)*   - **industrialism**? *(eg: Myers; Fortun)*

Transforming <u>how</u>? *(eg: contrasting political processes variously highlighted)*

- **'structural'**   'underlying foundations' *(eg: Marxism; political/ecol economics)?*

- **'systemic'**   'nonlinear socio/eco/technical' *(eg: ESM; DT; MLP; TM; ST)?*

- **'enabling'**   'uncertainties / agency' *(eg: STS; humanities; geography)?*

Scoones et al, 2020

Political Dimensions of Transformations

Transforming why? *(contrasting expediencies in imaginations of change)*

"Transitions"　　　　　**/**　　　　　**"Transformations"**

- **singular** driving visions	/	- plural shaping values
- focus on **technology**	/	- includes **social innovation**
- '**invited**' by incumbents	/	- independent and '**uninvited**'
- **orderly** managerial policy	/	- **unruly** emergent political
- academic & commercial **property**	/	- **open data** & open source
- **consensus**, trust, compliance	/	- plurality, scepticism, **dissent**

Incumbent power favours simplicity to justify prevailing patterns of privilege
so imperatives for "transformation" can be a major rhetoric for incumbency to persist

Some Emerging Lessons for Discussion?

Workshop for
Policy Makers,
Nairobi,
October 2019

- *Does language of 'transformation' 'trip too easily off the tongue'?*

- *Might contending interests & understandings get swamped in 'consensual' process?*

- *Can powerful voices shape even participatory discussions?*

- *Perhaps 'democracy' is neglected in struggles for transformation?*

Even for impatient practical high-level decision makers,
a 'complex' language of 'imaginaries' opened new doors

- *allowed contending visions, values and interests to engage convivially, without the need tom engineer consensus*

Most interesting results: The stakeholders launched the GoST Kenya platform with declarations on capacity building collaboration

Imagining Transformations to Sustainability in India

- 14 Jan. 2020: ESG led GoST workshop in Bangalore
- Participation from about 40 leading representatives from Karnataka Govt., academia, civil society, media, planners, farmers organisations and professionals
- Four case studies to inform ongoing GoST research: Challakere 'Science City', Pavagada Solar Park, 'Smart Cities', and Farming Futures
- Field visit to Pavagada Solar Park
- Deep interrogations of these four cases are underway
- Preliminary findings reveal how global imaginaries of sustainability transformations are being turned on their head
  - real solutions being short-changed by highly financialised, commodified and socio-culturally & environmentally unviable projects
  - hegemonically imposed on vulnerable communities as development' and largely without choice.

Pavagada Solar Park– Sea of Glass

GoST team in Pavagada

Pastoral Communities displaced for the 'Science City'

A view of the Bangalore Workshop

Traditional artisans have no place in Progress as defined by the State

'Smart Cities' for the privileged few

Where we do we stand now?

- **State of research**
  - ✓ Timelines/ Country studies
  - ✓ Workshops (Kenia, India)
  - ✓ GoST-Kick-off & midterm meeting

Time	Milestones
3/ 2019	Leipzig kickoff meeting
10/ 2019	Kenia Workshop
1/ 2020	India Workshop
3/ 2020	(Sussex) Virtual midterm meeting

- **Challenges**
  - Need to renegotiate timetable of deliverables, given huge midterm disruption
  - Specific changes in research strategies (interviews, workshops, meetings)
  - How to continue the conversation as things happen in real time?

Comparative Thematic Foci

- Nuclear power
  - Relationship to imagined national community
  - Institutional and cultural boundary work around dual use
  - Economic, climate, and safety arguments
- Agriculture and GMOs
  - Food security: two-edged argument, national vs. local imaginaries
  - Governance and scale: privatization and corporatization
  - Export or import economy; scarcity
- Smartness and digitalization
  - Forms of citizenship, modes of solidarity, public sphere vs. social media
    - Who is connected to whom through what modes of connection
  - Demonstrations of coronavirus lockdown: imaginaries of risk and responsibility
    - Socioeconomic divides: risks to essential workers (hospitals, transport, food services)
    - Digital divide? discrepant infrastructures: (in-home) highspeed wifi, smart phones, troubleshooting, workarounds, surveillance, work-life balance, home schooling

Reflections on COVID-19 Pandemic
(in relation to T2S)

- Coronavirus event reveals weaknesses in the infrastructures of modernity that are also implicated in imagining and implementing sustainable futures
- Sustainability's progressive, bottom-up imagination offset by pandemic's (potentially) regressive, top-down tendencies
- Divergent foci of attention across countries: social (age, class, race) disparities in vulnerability (health, economic) vs. virus and its lethality (statistical projections, "flattening the curve," "herd immunity")
- Crisis and opportunity as pointers to reimagine T2S

  Visions (on what, for whose good, with what solidarities?)

  Sovereignty (who rules, on what authority, over what jurisdiction [e.g., repatriation of citizens]?)

  Responsibility (whose, on what grounds, with what sanctions?)

  Counting and accounting (metrics, models, projections, comparisons, notions of abundance and scarcity)

  Getting it right (who is, who is not, measures of success and failure)

  Scaling and jurisdiction (degrees of *centralization* vs. *subsidiarity*)

Thank you for your attention!

www.gost.org

Publications

Infrastructures of the imagination: uncertainty and the politics of prefiguration?

by Martin Mahony and Silke Beck, Oct 2019

Sticky imaginaries, shifting frames, irreducible incertitude . . . the recent Politics of Uncertainty symposium gave us much to reflect upon in the context of recent shifts in the politics of global climate change, and what they might mean for the relationship between knowledge and action.

Read blog post

Picture: School Strike – Flickr, CC BY 2.0

Alternative imaginings of transformation: opening emancipatory spaces for sustainability politics

by Andy Stirling, Nov 2019

This is the second in a three-part series of blogposts reflecting on discussions at a great workshop in October 2019, convened in Nairobi by the Africa Sustainability Hub of the African Centre for Technology Studies. Drawing on work undertaken in the wider 'Governance of Socio-technical Transformations' (GOST) project, one key idea that helped frame and motivate these discussions was the notion of the 'socio-technical imaginary'.

Read blog post

SCIENCE AND HEALTH   TECHNOLOGY   CORONAVIRUS

Science Will Not Come on a White Horse With a Solution

Sheila Jasanoff, *a professor of science and technology studies, tells* The Nation *that we've modeled the progression of the disease, but not the social consequences.*

Talks

ESG Global Web Talk Series to imagine resilient and inclusive pathways in a post-COVID world

Every Friday 5pm (IST) → https://tinyurl.com/y9vylulc

Container

Website (Blog posts)

ESG global web talks

Imagining Transformations to Sustainability in Kenya

- Oct. 2019: Workshop with 25 participants, including researchers, teachers, students, activists, business-people, consultants and policy makers covering a broad range of sectors and a wide diversity of perspectives
- Approach: the workshop used informative presentation from the GoST team, world café sessions to create a network of cross sectoral dialogues among the participants, and round table discussion to offer an opportunity for participants to define and incorporate STI in sectoral development.

Contextualising Transformation in research
Stakeholders draw examples of transformation from what they are involved in; and associate the transformations with positive changes that contribute to the improvement of livelihoods.