Pathways through the Polycrisis
Proceedings of the critical infrastructure lab retreat
Perast, 2025

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critical Infrastructure lab

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Workshop participants

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- Mehwish Ansari m.ansari@fordfoundation.org @ New York
- Michelle Thorne michelle@thegreenwebfoundation.org @ Berlin
- Niels ten Oever niels@criticalinfralab.net @ Amsterdam
- Patrick Brodie patrick.brodie@ucd.ie @ Dublin
- Rao, Y. (Yichen) y.rao@uu.nl @ Utrecht
- Sam Ju contact.samju@pm.me @ Berlin
- Stanislav Budnitsky budnitskiy@gmail.com @ Hamilton, NY
- Timo Seidl timo.seidl@hfp.tum.de @ München
- Zuzanna Warso zuzanna@openfuture.eu @ Warsaw

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Who is who?

Andreas Baur andreas@criticalinfralab.net @ Tübingen

Researcher, International Centre for Ethics in the Sciences and Humanities, University of Tübingen

External PhD candidate, University of Amsterdam

Research fellow, critical infrastructure lab

I have worked on research projects focusing on privacy and data protection, 'ethical' AI infrastructures, and technology ethics. I am also an external PhD candidate at the University of Amsterdam. My PhD focuses on 'The Politics of the Cloud', examining the relationship between politics and cloud infrastructures in Europe, including attempts at digital sovereignty in the cloud. Furthermore, I am a fellow at the Critical InfraLab, where I coordinate the group of fellows.

https://andbaur.net/

Asia Bazdyrieva azdireva.asia@gmail.com @ Vienna

PhD candidate, University of Applied Arts Vienna

As an art historian, I am obviously interested in *landscapes*. But not so much as passive backdrops to human activity or symbolic terrains to be imaged and imagined, but as deeply saturated sites where imperial logics are enacted and reproduced. I am interested in *how landscapes are constructed —materially and affectively—by interrelated infrastructures* of energy, war, data, and extraction through interwoven regimes of media, technoscience, and geopolitics. In my recent work I look at the ways *land itself becomes a medium*: inscribed by planetary sensing networks, shaped by sociotechnical imaginaries, and strained by the *violences of scalability*.

Dmitry Kuznetsov dmitry@criticalinfralab.net @ Amsterdam

Postdoctoral researcher, critical infrastructure lab

I joined the lab in September 2024 and since then I've been engaged with the geopolitics track.

Elizaveta (Liza) Yachmeneva elizaveta.yachmeneva@gmail.com @ Tbilisi

Community and Research Coordinator at OONI (Open Observatory of Network Interference)

I have a very mixed background of cultural studies, public policy, urban studies and activism, which I am trying to bring together in my work and research.

Currently, I am working as Community and Research Coordinator at OONI (Open Observatory of Network Interference), most of my work is focused on investigating network-level censorship in different countries.

My favourite part of this job is collaboration with digital rights organisations to gather contextual information surrounding censorship in their countries: the narratives built by the government to justify censorship,

the legislations adopted to provide the government with more power to control information flows in their countries, the disparity in how different communities are affected by censorship, etc.

https://ooni.org/

Eric Zhang eric@criticalinfralab.net @ Amsterdam

PhD candidate, critical infrastructure lab, geopolitics track

My research at the lab focuses on industrial policy of digital technologies in the EU, China, and Russia, with a focus on the role of technical standards. I have a background in Political Science and IR, with a methodological interest in applying Natural Language Processing in my research. Before joining the University of Amsterdam, I was a researcher at the Leiden Institute of Area Studies, where I studied issues such as China's role in global cyberspace and China-Russia relations.

https://criticalinfralab.net

Fieke Jansen @ Amsterdam fieke@criticalinfralab.net @ Amsterdam

Co-Principal Investigator, critical infrastructure lab, environment track

I am Fieke, one of the three co-PIs of the critical infrastructure lab. In the lab I lead the environment track. Like Niels I'm very excited about moving towards biological computing, trying to change the materiality of our infrastructures.

https://criticalinfralab.net

Gargi Sharma gargi@criticalinfralab.net @ Amsterdam

programme coordinator, critical infrastructure lab

Outside the lab, I work at the intersections of climate justice and data justice, focusing specifically on questions of *self-determination, non-discrimination, and restorative justice*. Inside the lab and at this gathering, I am helping with logistics (among others). Please let me know if there is anything I can do to support your attendance!

https://criticalinfralab.net

Grace X. Yang graceyang_pro@outlook.com @ Berlin

PhD candidate, Free University of Berlin

My research focuses on China and Russia's promotion of *"cyber sovereignty"* in global cyber governance.

Kalema, Nai Lee naigwe.kalema.20@ucl.ac.uk @ London

PhD candidate in Innovation and Public Policy at the UCL Institute of Innovation and Public Purpose

My interdisciplinary research explores the global political economy of digital transformation and AI governance, focusing on global institutions' (mainly the World Bank) translation of their global digital transformation policy agenda into national contexts through DPI initiatives and their relevant policy instruments—economic, regulatory, and informational—in several domains (e.g., digital development, digital-era government, and data- and AI-driven governance initiatives). I argue that this process is

reconfiguring governance structures, institutionalising technocratic logics, and diffusing ideological norms into the state, as well as embedding more extractivism and asymmetric power dynamics into global systems, societies, and people's everyday lives, especially in many Global South contexts. To explore the material implications of this process, my empirical case studies (primarily Kenya and Uganda) draw on critical perspectives from global political economy, economic sociology, public administration, STS, and global health, also integrating intersectional, decolonial, and postcolonial perspectives into my analysis.

I'm submitting my PhD this August (deadline) and aiming to defend early fall. Beyond academia, I'm also deeply interested in design, data, and health justice, volunteering in related efforts.

Lisa Gutermuth lisa.gutermuth@gmail.com @ Berlin

Senior Program Officer, Mozilla Foundation

To keep the country trend going: I'm Lisa Gutermuth, a Senior Program Officer at Mozilla Foundation, based in Berlin. I'm Mozilla's representative member of the Green Screen Coalition, and part of my job is to *coordinate Mozilla's sustainability efforts* across the org, from the funding programs around environmental justice and AI, to programming at MozFest around *unlearning tech immateriality* (which all, really, builds on the foundation that Michelle Thorne created in her time at Mozilla).

I am very interested in questions of how and why (or why not) *environmental impact measurement tools are adopted in tech development* (like CodeCarbon), and how in the world companies can be compelled or convinced to enable people to have more insights into the environmental impact of engaging with their tools/products/platforms.

And maybe one more thing to mention is that my introduction to the critical infrastructure space was via my master thesis over a decade ago focused on *satellite imagery in agriculture* and tracing its path from Landsat to commercial applications in Europe through the geopolitical and economic incentives in between.

https://mozillafoundation.org/

Maxigas @ Utrecht

Co-Principal Investigator, critical infrastructure lab, standards track

Assistant Professor of Computational Methods for Media and Culture Studies, Utrecht University

I am Maxigas, Co-PI of critical infrastructure lab, leading the track on standards. I work at Utrecht University as Assistant Professor of Computational Methods for Media and Culture Studies, which kind of describes what I do, if not necessarily in a way envisioned by the institution. Within the academia, I study the standardisation, implementation and deployment of 5G in order to find out how programmable infrastructures can serve people and planet better by incorporating public values. This work is now centred on alternative technological trajectories of 5G based on field work in India. Outside of the academia, I experiment with the low-profile, low-energy, anti-AI and anti-military Reticulum protocol stack,

collaborating with the local hacklab in Amsterdam for anarchist technologists. I come to the mud batteries infrastructure of the infralab from the direction of having built a biocomputing laboratory in the past, and a research interest in mobilising the history of cybernetics for a constructive critique of cybernetic capitalism and its infrastructural ideologies.

I am working on a primer on infrastructural ideologies as a theoretical framework, which is sketches out in this report that we compiled using an open source publication pipeline fed from plain text:

https://zenodo.org/records/10912418

Mehwish Ansari m.ansari@fordfoundation.org @ New York

Program Officer, Ford Foundation's Technology & Society Program

The Program supports people, research institutions, and civil society organizations working at the intersection of technology and social justice. Specifically, my grantmaking is focused on challenging the concentration of corporate power and the impunity of state power through a *"global governance"* approach, which includes addressing the discrete decision-making in traditional transnational institutions and processes as well as regional / national regulatory, policy, and legal decisions that impact the global business models and value chains of dominant tech companies across the stack. Prior to joining the Ford Foundation, I was the Head of Digital at ARTICLE 19 (following in Niels's footsteps), where I worked on *strengthening human rights considerations in the design, development, and deployment of Internet infrastructure.*

Michelle Thorne michelle@thegreenwebfoundation.org @ Berlin

Co-Lead of the Green Web Foundation

I'm Michelle Thorne, co-lead of the Green Web Foundation working to phase out fossil fuels in data centers as well as a co-conspirator with Fieke, Lisa and other fabulous people on the Green Screen Coalition working to bridge movements for tech justice and climate justice. Some recent projects include a joint statement on keeping AI within planetary boundaries and using open web protocols to make the materiality of digital infrastructure more findable. While we're in Montenegro, we'll also be launching the next edition of Branch Magazine that Fieke co-edited with me and a colleague featuring experiments in regenerative internet infrastructures, grid-aware websites and more.

For this event, it's my honor to be supporting the critical infar lab on the facilitation and agenda design. While we're in Perast, I will also happily be part of swimming outings or paddling on a SUP.

https://greenscreen.network/en/blog/within-bounds-limiting-ai-environmental-impact/

https://carbontxt.org/

https://branch.climateaction.tech/issues/

Niels ten Oever niels@criticalinfralab.net @ Amsterdam

Co-Principal Investigator, critical infrastructure lab

Lately I have been very inspired by building an organic data center, powered by mud batteries, and running a miniature language model. We

hope to be running this on a chip made of clay or a kombucha scoby. In the lab I also lead the geopolitics work where we look at how Europe, China, and Russia maintain interconnection but inscribe their local norms in internet networks. But most of all I am very much looking forward to seeing you all in less than two weeks!

https://nielstenoever.net

Patrick Brodie patrick.brodie@ucd.ie @ Dublin

Assistant Professor in the School of Information and Communication Studies, University College Dublin.

My work is generally interested in the political ecology of digital infrastructures, with a particular interest in the politics of *industrial development*, *extractivism*, and *environmental justice*. My most recent work is looking into the dynamics of geopolitical and technological dependency during the so-called *"twin transition,"* through the lens of an *"anti-imperialist environmental politics,"* which I've started to develop with my colleague Paddy Bresnihan in our upcoming book *From the Bog to the Cloud: Dependency and Eco-Modernity in Ireland*. I'm staring at the proofs now in the airport, which I'm happy to share with anyone interested in advance of the publication!

https://bristoluniversitypress.co.uk/from-the-bog-to-the-cloud

Rao, Y. (Yichen) y.rao@uu.nl @ Utrecht

Assistant Professor of Anthropology, Utrecht University

I study the social impact of games, fin-techs, and all sorts of digital infrastructure (broadly speaking) in global China, especially how they reshape people's subjectivities.

https://www.uu.nl/staff/YRao

Sam Ju contact.samju@pm.me @ FIXME

Former OTF Fellow

I am an internet freedom researcher with a focus on China. I study things such as chilling effects, online censorship, digital transnational repression, foreign access question, etc. Up until recently, I was an OTF fellow where I was thinking about forced identifiability and empirically testing access to Chinese online spaces from overseas.

The term "(digital/online) Sovereignty" has popped up in intros here and there; which I am excited to read, because I am very curious about it both on a policy and a political science level. My background is in political science and China studies, but I am also a self-taught data analyst.

https://www.opentech.fund/news/chinas-new-effort-to-achieve-cyber-sovereignty/

Stanislav Budnitsky budnitskiy@gmail.com @ Hamilton, NY

Visiting Assistant Professor at Colgate University

My name is Stanislav (Stas, for short) Budnitsky. I'm a Visiting Assistant Professor at Colgate University, a liberal arts college in snowy

upstate New York. (Yup, that's the same Colgate family as your toothpaste this morning!)

I am delighted to be joining this brilliant group at the last minute, after clearing some bureaucratic hurdles for traveling. I've been fascinated to read about your personal and professional trajectories on this thread.

My critical-cultural research on global communication spans multiple concurrent agendas, including global digital politics, strategic humor in global politics, and the role of George Soros and his Open Society Foundations in shaping the post-Cold War information order (from a non-conspiratorial, archive-based perspective, to be clear).

This summer, I'm working on my book proposal about the connection between state nationalism and global technology policy. The project demonstrates this idea by comparing how Russia's and Estonia's official national identities have shaped their respective approaches to global governance of digital technologies from the early 1990s to the present. At the same time, I'm developing an article that traces the history of the "digital solidarity" concept, which recently reappeared in the 2024 US State Dept global cyber strategy.

Timo Seidl timo.seidl@hfp.tum.de @ Munich

Assistant Professor of Political Economy, Technical University of Munich

My research focuses primarily on the political economy of technological change. That means I explore how technological transformations are both shaped by—and themselves shape—dynamics at the intersection of politics and economics. I ask questions like: Why do different countries respond so differently to emerging technologies, and what political, economic, and social consequences follow from that? Who—or what—determines which technologies are developed and how they're deployed? How do narratives and ideas influence how new technologies are perceived, regulated, or promoted? And what role do geopolitical shifts play in all of this? In my research, I try to unpack these developments—whether it's the return of industrial policy in an era of strategic technologies, the rivalry between competing digitalisation models from the US, China, and Europe, or the peculiar world of cryptocurrencies and 'Web3'. In the coming years, I also hope to look more closely at the convergence of what may be the two most consequential technological waves of our time: artificial intelligence on the one hand, and biotechnology on the other.

https://www.timoseidl.com/

Zuzanna Warso <zuzanna@openfuture.eu @ Warsaw

Director of Research, Open Future

I'm Zuza, one of the co-directors of Open Future, a think tank focusing on EU policy around digital infrastructure. I lead our work related to public digital infrastructure, which we deliberately distinguish from the more commonly used term *digital public infrastructure/DPI*. Lately, much of this work has centered on the concept of *digital sovereignty*. Together with a coalition of other organizations, we're exploring whether this term can be framed as part of a progressive agenda. I'm also very interested in how EU industrial policy can move beyond a narrow focus on "competitiveness" to

shape markets that serve the public interest and ensure that *public funding creates public value*.

https://openfuture.eu/author/zuzanna/

https://ainowinstitute.org/publications/xii-toward-public-digital-infrastructure-from-hype-to-public-value

Programme

Monday: *It's a lab adventure!*

◈ Introductions

◈ Context: Welcome and introduction in the morning
◈ Lab adventure:
   ◇ Lab adventure with Dmitry
   ◇ Lab adventure with Eric
   ◇ Lab adventure with Fieke
   ◇ Lab adventure with Niels
   ◇ Lab adventure with Maxigas

◈ Books mentioned over lunch:
   ◇ The Mechanic and the Luddite
   ◇ The Price is Wrong
   ◇ Abundance

   Afternoon groupwork

◈ Reading with Pat
   ◇ We will discuss the report *Hyper-Imperialism: A Dangerous Decadent New Stage* by the Tricontinental Institute for Social Research

◈ The First Space discussion

Tuesday: *How did we get here?*

◈ Group 1 - Defining infrastructures
◈ Group 2 - Histories of digitalisation and decarbonisation
◈ Group 3 - Histories of digital sovereignty
◈ Group 4 - Histories of modernity

◈ Infrastructure Reading Group notes
◈ More info on the reading group including book downloads

◈ 18:30 start the procession of boats to the Lady of the Rocks
◈ 21:00 concert of Dalmatian music on the main square

◈ World Cafe 1 Downstairs: Russia
◈ World Cafe 1 Terrace: China
◈ World Cafe 2 Terrace: Serbia
◈ World Cafe 2 Downstairs: EU

   "Nerd out with me" & check out my project:

◈ [Self-organised session 1: *Knowledge Management Tools*
◈ Self-organised session 2: *Activist researcher*
◈ Self-organised session 3: *Natural Language Processing (NLP)*

Wednesday: *What is happening?*

◈ Group 1 - Industrial policies: states and infrastructures
◈ Group 2 - Governing through standardisation
◈ Group 3 - Alternative technological trajectories
◈ Group 4 - War, Extraction and Infrastructure

◈ Book Publishing
◈ Creative Writing and Speculative Design
◈ Civil society in the age of the capacitive state

Thursday: *Building the research, policy and practitioner agenda*

◈ Group 1 - Building a research agenda about information controls
◈ Group 2 - Building a research agenda about expanding communication infrastructures
◈ Group 3 - Building a practitioner agenda
◈ Group 4 - Building a technology governance policy agenda

Friday *Choose your own future!*

◈ Group 1 - Strategy / Future (global)
◈ Group 2 - Strategy / Future (states and corporations)
◈ Group 3 - Strategy / Future (environment)
◈ Group 4 - Strategy / Future (civil society)

Last discussion slot

Choose Your Adventure 1: Defining infrastructures

There is a lot of talk about infrastructure, but how do we define it? In this choose-your-own-adventure, your group is tasked to start answering the following questions:

◈ *What is infrastructure?*
◈ *What is not infrastructure?*
◈ *How does something become infrastructure?*
◈ *How does something stop being infrastructure?*
◈ *What are the neighbouring concepts on infrastructure?*
◈ *What is the opposite of infrastructure?*
◈ *If you could replace infrastructure, which words would it be?*

First round

◈ Who is there?
  ◇ Yichen
  ◇ Andreas
  ◇ Lisa
  ◇ Oli

Discussion

Infrastructure time machine. How does infrastructure we're researchsing become infrastructure, and what makes it infrastructure

◈ Example: payment apps in China, taxis barely accept cash anymore, so in a sense they've become infrastructure.
◈ Lens: if it becomes hard to get through your day or run your life without it, it has become infrastructure

What is the difference between a technology and an infrastructure?

◈ There is a network aspect, and you can build something on top.
◈ It is not a single thing, but enabling other things.
◈ It becomes invisible once it is fully implemented (you only realize infrastructures when they break down)

Is electricity infrastructure? Probably even more foundational than what we consider "infrastructure" Smartphones? It's an end-user device with a user interface.

Clarifications between infrastructure and medium. Water infrastructures, as an example.

What features do we want to aim for?

◈ choice and agency
◈ transparency
◈ interoperability (is this intrinsic?)

What is not infrastructure?

Money (bills, coins) is not infrastructure, but payment systems and the banking system is an infrastructure Money here would be defined as a medium

One can take the framework of layers of the internet stack, from cables to the application layer, but that is not the only lens.

Infrastrucure and Platform Plantin, J.-C., Lagoze, C., Edwards, P. N., & Sandvig, C. (2016). Infrastructure studies meet platform studies in the age of Google and Facebook. New Media & Society, 20(1), 293-310. https://doi.org/10.1177/1461444816661553 (Original work published 2018)

"Politics and Poetics of Infrastructure: Infrastructures are material forms that allow for the possibility of exchange over space" - Brian Larkin

When is an infrastructural moment:

◈ before it's an infrastructure, it's raw materials (copper wires are copper before then) [AB: or technology]
◈ Payment app example: once it is able to enable an exchange effectively (and reaches a tipping point in adoption?). Also requires government and regulatory negotiations/compliance.

Transition from one type of infrastructure to another: graduation of credit cards from being a mail based service.

How does something stop becoming infrastrucure?

It becomes obsolete/irrelevant. People stop using it and/or it stops being useful. Infrastructures are still infrastructures even if nobody uses them but they still would work? Only stops being an infrastructure if by lack of use and maintenance functionality is not given anymore.

Maintenance! things get maintained often by how "critical" or relevant/highly used it is. Maintenence goes down as use/relevance go down, then things actually don't work anymore. Perpetual. Example: 2G

New strand: discourses can become infrastructure. Ideologies embedded in infrastructure, whether overtly intentional or not. China is an example of discourses very intentionally translated into infrastructures. Government states that we need something, we're going to invest, etc. Essentially comes from top-down, strong state-led vision of the future.

There's also the ideal that infrastructures would respond to problems or desires of the people and communities, but that is rarely done. There isn't the– infrastructure? :) for it– or perhaps the will of the state. Also a question of scale- states have that perspective of planning for society, individuals and communities don't have that mandate and would have a harder time planning.Also an

Infrastructure as frozen governance, conservation of values and power which continue to act through the inrastructure, sedimentation of values/ideology?

What is the opposite of an infrastructure

A material form that obstructs the exchange of things? - Great firewall; COVID restrictions; OR, are those things also different types of infrastructure focused on restricting or gatekeeping connectivity?

Or is it the absence of- the Void.

Followup

Thining about how infrastructure can be built up by the people and for the people- bottom-up, not being something "imposed". Reframing of "infra".

Choose Your Adventure 2: Histories of digitalisation and decarbonisation

In this choose-your-own-adventure, your group is tasked to explore how digitalisation and decarbonisation are connected to broader forces like geopolitics, tech monopolies, and the legacies of industrialisation. Try to map out the power dynamics and ecological impacts involved in these connections. Think about how these play out at different scales—local, national, regional, or beyond—depending on what makes most sense for your case. The goal is to help us better understand how imperial power continues to shape today's green and digital transitions, even if it looks different from the past.

Who was there?

◈ Who is there?
  ◇ Pat
  ◇ Michelle
  ◇ Asia
  ◇ Nai
  ◇ Gargi

Discussion

Michelle - digital rights and open source movements had a logic to digitise everything, make it open, ... world peace. ingo exchange would lead to better outcomes. but didn't talk much about ecological implications. There is a reckoning now. how industrial policy and activist movements respond to the ecological considerations.

Asia - past work deals with energy transitions in Ukraine and Germany. Differences between addressing the issue at the planetary and regional scales. Framework of resourcification to share how hierarchies between humans and resources are made and how some people and geographies are made into resources.

Nai - think about power and resources in her work, but not decarbonisation as much. interested in understanding how tech sovereignty is being pursued as a policy objective - still premised in the reproduction of similar patterns of extraction.

Pat - centrality industrial policy in geopolitics keeps coming up in conversations.

◈ US and EU chips acts focused on security narratives.
◈ problematising decarbonisation as a central issue of sustainability allows for resourcification of some places. greenwashing
◈ fourth industrial revolution
◈ the first one was powered by colonial plunder and the displacement of local peasants and the creation and disempowerment of the working classes.

Nai - racial capitalism allows the compartmentalisation of progress in Europe and the exploitation of peoples and lands in the colonies - is

decarbonisation going to make the world better for people who are subordinated and dispossessed right now?

Asia - blind reproduction of discursiveness. need to start finding other territories and narratives that go beyond discussing merely western imperialism. russias co-optation of decolonial rhetoric. Mignolo and propaganda.

Nai - just because you are against western imperialism, doesn't mean that you are decolonial (in response to Russia co-opting decolonial rhetoric)

Pat - there are dueling imperial powers, and people/countries caught in between

Asia - that is a convenient answer, resourcification more effective explanation of dynamics at play

Michelle - electronics workers in Taiwan advocating for labour rights in the semiconductor industry. industrial expansion at the cost of human dignity. spaces of hope and solidarity in shared struggle.

Gargi - Non-Aligned Tech Movement has the possibility to provide an umbrella for non-US, EU, Russia, and China movements to collaborate from the ground up.

Nai - Benedict Anderson's (Imagined Community) idea about the 'other' - used in the past and even now Fanon - decolonising the mind justice - legal or moral?

Asia - it is necessary to create changes in the law to create a path to justice and not replicating the same power dynamics

Pat - maps and epistemology

parts of Ireland were stripmined for 40-50 years with the project of energy independence - used British colonial maps that had details about what land is rich and thus exploitable.

Nai - rejecting colonisers, but replicating the same extractive patterns

general discussion: transition minerals, limiting consumption, would have to cover the whole planet in renewables and it still wouldn't meet our energy demands, so we need to reduce demand. small-scale farmers feed the world.

what does the world look like after Europe achives it's decarbonisation goal? it comes at the expense of the Global South and involves large scale extraction.

degrowth is nice and everything, but we need to kill that subject - Asia

Discussion

Redistribution- there is enough food in the world but it's a distribution issue.

Merchants of Doubt- these are reds in green shirts. Being an environmental defender is super dangerous thing, because it's a threat to a certain way of life.

Absurdity- it's not from a lack. in terms of trying to fix that. this is not a technical problem.

Gargi: U.S. funders- large agreement that the climate crisis is real. But there's a limit of not getting out of their own ideology/lens.

We need to have things that align with reduction, etc. but are also attractive. Eating vegetarian in the Netherlands (it's healthier, etc.)

But we have to be careful to not target individuals as the bearers of the brunt of corrections (carbon taxes who will impact everyone, including the poorest, vs. banning private jets)

Fast Fashion + Treat Culture: someone else is subsidizing this. * Instead of getting bringing about the conditions that lead to people leading less precarious lives, we instead are redirected toward consumerism

Treating yourself doesn't have to be consumerism- you can also sit under a tree in the sunshine as

Trap of individualisation. This is actually weaponized by companies so people put their energy into trying to change their individuaqbehaviours whereas perhaps their energy would be better used by directing it toward to industrial actors who are having an outsized impact.

Religions enable people to feel that they are part of a community. It's quite sad that in many societies the thing that can enable people to get a psychological boost from buying something online– surely there's a narrative shift to show people that there's a more fulfilling path though connection rather than consumption.

Choose Your Adventure 3: Histories of digital sovereignty

In this choose-your-own-adventure, your group is tasked to map out how struggles over digital sovereignty have played out across the different layers of communication networks throughout history. This can include the telegraph. What key moments, actors, and power struggles stand out? What values or norms were built into the technologies or systems involved? Are there periods that can be characterised in a special way? Can you find examples where digital sovereignty was used in progressive, empowering ways? And just as importantly, what mistakes or patterns from the past should we be careful not to repeat?

Participants

◈ Grace
◈ Stas
◈ Zuza
◈ Sam
◈ Eric
◈ Mehwish
◈ Andreas (2nd round)

Discussion

Zuza: how does this come up in your work? In my work it did not come up much in my work in digital rights Now it carries political right?

Eric: in incorporation of geoeconomic considerations in digital sovereignty more recently in the EU context. perhaps securitisation of digital economy.

Stas: at the state-level: individual level digital soveignty, i.e. not as top-down state power.

Mehwish: now implicates the full tech-stack, an evolution of discussions around data localisaton. US big tech companies are complex constellations of legal entities across different jurisdictions - full-stack sovereignty is a fallacy. Sovereignty is part of a larger backlash against globalisation?

Stas: big tech branding products as sovereign. how would the branding work? Companies buy contracts from Google.

Grace: China and Russia's perspective is important, but often not considered by Western states.

Sam: Two-level debate: policy-level and conceptual-level. Conceptual/political science level. 'Digital Sovereignty' is reduced to the idea of who can enforce law digitally. policy-level includes tech-autonomy

Eric/Grace/Mehwish/Sam: sovereignty is a legal and theoretical concept that has specific dependencies. State is sovereign if it has territory, people, government, functional control. Sovereignty is used in political tech governance to mean something broader, but comes from the same place of re-entrenching state power.

Zuza: sovereignty is about being able to trust the products.

Sam: Indiviual as sovereign? The difference between individual as sovereign or 'the people' as sovereign.

Grace: competition of control of infrastructure in the 19th century about telegram. In the 20th century 1970s Chinese concepts like 'information sovereignty' - discourse power. It's more contested when there is no American hegemony.

Sam/Grace: Foreign control of infrastructure in China and India instigated pushback using sovereignty rhetoric. States historically tend to use sovereignty narrative when in a position of relative weakness.

Sam/Zuza/Mehwish: where's the balance between digital sovereignty and openness.

Andreas: Regulation is often seen as an integral part of digital sovereignty, but the Eurostack is now reversing this trend arguing for less regulation to enable European tech champions. EU should not focus to copy American/Chinese big tech (too late, but more important: which leads to new dependencies, oligopoles, power concentration), but focus more on niches, open/public infrastuctures with smaller companies/actors using them/building on them.

Mehwish/Grace/Andreas: popular soveignty? are government representating the people's rights and interests?

Andreas: sovereignty comes with a lot of baggage and ideas of absolute sovereignty, focus on state sovereignty. Perhaps the EU example (shared sovereignty in some areas, giving up sovereignty in some and retaing sovereignty in others) could be an inspiration to less absolute ideas of digital sovereignty which allow for mor individual digital sovereignty.

Grace: Digital sovereignty is at rise across the world and in every aspect, what matters is how the state is organized

Mehwish: growing sense of sovereignty - digital and otherwise - is also correlating with growing crisis of international cooperation and impunity of state power.

Followup

Collect ideas of and work on progressive/empowering forms and means of digital sovereignty (Andreas)

Choose Your Adventure 4: Histories of modernity

Is the very idea of infrastructure tied to modernity? Particularly, the promise of progress resulting from extending essential services like water, energy, transport, and communication to broad populations? How have infrastructures historically been connected to public utilities, and what is the role of the state in guaranteeing access and equality?

In this choose-your-own-adventure, your team will reflect on how this relationship has evolved: What happens when infrastructures are privatised, automated, or rendered invisible? And what happens when they break down, become obsolete, or fail to serve the public good? In particular, can they break down for some people while continuing to serve others?

Looking ahead, what comes on top of or after these 'modern' infrastructures? Can we think beyond them — toward infrastructures of transformation? Are there examples of systems or networks (digital, ecological, social, or otherwise) that support more just, sustainable, or democratic ways of living? How might we design, reclaim, or reimagine infrastructures to serve such goals?

Participants

◈ Dmitry
◈ Lisa
◈ Maxigas
◈ Stan
◈ Timo
◈ Zuza

Summary

A few general themes emerged from our discussion (the minutes of which you can find below). This is not an exhaustive summary but a selective prioritzation of themes that we found particulary interesting and/or important.

1. **STATE/INFRA:** States are always involved, one way or the other, in the provision of infrastructures, from the city states of Mesopotamia to today. However, infrastructures don't have to be mangaged or provided by the state but can also be managed through different (communal) governance mechanisms (see the work of Elinor Ostrom on the commons).
2. **PUBLIC/PRIVATE:** There is a complex push and pull of factors that shape whether infrastructures are managed publicly or privately, with often wildly different distributional consequences. On the one hand, infrastructures (often?) have a public goods character and there are clear efficiency advantages of managing them collectively. However, infrastructures are always attrative to private actors as they can provide potentially enomous rents. An important task is to think more systematically about the conditions under which infrastructures are provided publicly or privately, e.g., what are the political conditions of possiblity for privatization, or, conversely, what are the limits of *infrastructural rentierism*?

3. **STATE INFRASTRUCTURES:** While we generally did not think that infrastructures are tied to modernity or the modern state, We discussed whether there are infrastuctures that are particular to the modern state. One idea that was floated was the infrastructure of modern travel, in particular passports.

4. **DEFINITION OF MODERNITY:** We discussed how we should define modernity in the first place. There are a couple of defining features for modernity such as i) rationalisation, i.e. an outlook on the world based on reason and science, rather than myth, scripture, or tradition; ii) individualisation, i.e. people primarily understanding themselves as individuals and a grounding of morality in humanistic values as opposed to things like the glory of the tribe or serving a higher power, etc; iii) the domestication of nature, understanding it not as the context to which one is connected and which ensures one's surival but as a resource to be exploited and an object to be controlled (and which is controllable).

5. **INFRA MEDIATES NATURE:** Building on that last point, we discussed how infrastructures mediate our (human) relationship with nature, assuming that humans are somehow outside of nature and not a part of it. In other words infrastructure contribute to or maybe even play a key role in alienating people from nature. Infrastructure becomes the signifier for modernity as it occupies the same physical space as nature. Mode

6. **FUTURE WORK**: In retrospect, we realised that we did not mention the relevant concept of *progress*. Some relevant books we could have mentioned are also *Dreamscapes of Modernity* and *Splintering Urbanism*.

References

BOOK: Tilly Goes to Church
https://www.broadstreet.blog/p/tilly-goes-to-church-the-medieval-and-religious-origins-of-the-european-state

World Cafe 1 Downstairs: Russia

Discussion

question about borders (please edit and add)

◈ does geography matters?

◈ geography differed widely throughout the centuries

◈ but invasions matter. by mongols (golden horde 13th-15th CE), polish lithuanian comminwealth, napoleon, Nazi Germany. and to some extent territorial contesations still matter until today

◈ people would be better informed if they spent time reading the official speeches by Russian officials (they have been very clear for years)

◈ bordering society: is an important element in the Ruso-Chinese relations. there have been real conflicts between the two countries, but today no real threat of invasion. rather cultural and economic conflict

◈ The population in Russia is predominantly populated in the West thus the anxieties about land becomes an allie of sorts.

Russia is so large and thus where does its anxieties about insecurtiy comes from? Why does this perception persist despite its size.

◈ Stas: These anxieties may perist due to it being large and thus it has more to anxious about?

Stas: first of all, there is a lot of land to protect. Common trope: RU has not been respected for its size. RU deserves much more since RU has been big for a long time. Vlad: In Serbia, they havethis informatiion and security services entity. Russia is not as much of a political player in Serbia. Are there any psychological process (production of paraeel reality?)

Censorship

Q Niels: Is there an informational [project?] ??: Control of the informational platforms (social media and news outlets) enables the state to limit the access to information and the moderation system there is quite robust - government is producing very specific information about the war on Ukraine and other aspects of life. Russian state media: very consistent wording and narratives - Telegram and WhatsApp is forbidden, yandex.ru is available (the russian branch), VKontakte is basically state owned and censorship is quick and strong –Mechanisms: Governemnt owned NGOs and think tanks, blogs, and other media platforms –Counterpoint: Since 2010, the conversational talking points on talk shows is primairly about Ukraine – Political Technology: PR, Image promotion playing that game quite effectively [Russian Communications Committee?]

–In terms of access to information, because telegram is a very popular platform, even with a VPN, it is not so hard to get access to alternate information flows beyond those that are official, thus the infrooamation environment remains relatively heterogenous. But with the changing of the infromational control environment and implementation of blocklistsand verifircatin that is being implemented has changed things a bit. Since 2019, they have been building up a different system that has come further into effect since 2022 (TSPU). There they invested a lot of money in mapping ISP

netwrks to undertasnd the topolgy of the network and locate where external flows are coming in to ceate a map and next requirement that every node with over 10 Gbit/s[???] has to implement the TSP. Essentially internet control happens as it circulates around the country rather than simply at the point of entry to understand its patterns of circulation and this is distinguished from the Chinese model.To compel networks compliance the TSP intervention is offered for free and where not adopted, it becomes substaintially more risky. This will have implications for how Telegram is currently being utilised in the country as a way to...

◈ no costs, no liability, no maintenance.
◈ no blocking necessarily, but very slow.
◈ Roskomnadzor has an own telegram channel (and many other institutions also), although it is forbidden

Russian plans are often downplayed (like soverein internet act): can't be done, won't work. But in the end it often works and is competently done. not difficult to access information on

◈ main narratives about Ukraine are produced in talk shows (have been for years)

Overview of Russian Media

◈

In the 1990s, Russian media became more centralised and subject to oligarchic control in the [???] as it became effectively run by 4 to 5 media houses. The central Russian media office [Minkomsvyaz?] exercised more control over the media environmentas it had to coordinate (or orchestrate) the practices of fewer media heads.

◈

Especially, amongst the older generation, television remains pretty popular and influential, especially among older generations not withstanding the effects of the high level of centralisation occuring in the overall media environment.SOme of the effects of this were that overall media ecosystem is somewhat self-enclosed and feedback effects quite strong.

◈

In a 2019 the Finnish Institute for [??] put out a report on the discussing Russian digital sovereignty. This report was influential as it emphasised several key points. First, the effects of the state-controlled television environement, conerning its shaping of public narratives should not be viewed in a discreet sense, whereas its effects are viewwed as being discontinuis from those occuring in other informational environments (e.g., social media). Both modalities somewhat feed into each other, perhaps in ways that more targeted to certain generational cohorts but still oconsistnet in its advancement of a specific public narrative.

◈

VPNs hold multiple significances. First, VPNs are tools of resistance in that enable people to access informationl from outside the state controlled media ecosystem. However, if one was either implicated in or alleged to be engaging in illicit that at also involved use of a VPN, alleged acts could

become somewhat enhanced. Essentially, the percpetion of VPN use was in itself stigmatising.

◈

VPN was not a problem for a long time, but it has been more difficult to find an vpn

World Cafe 1 Terrace: China

https://globalchinapulse.net/demystifying-chinas-global-digital-empire-data-infrastructure-platforms-and-ai-power/?fbclid=IwY2xjawLshdFleHRuA2FlbQIxMABicmlkETFka1JIeDlMVjFMcnl5SEViAR4Xw4I

Do people in China know about the Tianmen Massacre?

Yichen:

We watched it on a random video in the university dorm room.

Is there a collective Chinese identity and what would be its characteristic? (Fieke)

Eric:

(From political science point of view.) What do people identify with? Religion? Ethnicity? Their home city? Yes, I do believe there is a Chinese identity, their identity as Chinese precedes other kind of identities.

But what qualifies such an identity?

Yichen (who grew up in FIXME):

If you grow up in the 1990s in Southern China then there is a strong sense that everyone around you agrees on the Chinese national spirit, nationalistically constructed against Western ideologies and invasions. The *sleeping dragon* is a common orientalist trope about China, but it is used in propaganda as the *waking up dragon*. Different from US and Europeans, but they also look up on powerful countries: "we are catching up with them". People look at US and China as competitors, so Chinese have to work harder to deserve the treatment that US citizens get. At the same time there is also the sense that China has something different and valuable than the US. But it can get complicated: oversees Chinese, Hong Kong Chinese, Chinese identity person in Taiwan, second generation of Chinese living in Italy, etc.

Eric:

National rejuvelation is what the state promotes but it is questionable how deep it is entrenched in individuals. Some people come forward and say that they believe in the Chinese Dream, that's what they are all about. The younger generation might be more nationalistic than our generation. Why is it? Extrinsic or instrinsic causes? Etc.

Eric:

It is also interesting what it means to be oversees Chinese. Your identification with the PRC can be different if you are in Singapore, or another place, you can identify as Chinese without endorsing the PRC. This line is being blurred by the PRC these days, but there is a distinction between Chinese heritage and endorsing Chinese foreign policy positions.

Cult of personality (Giorgi)

Who is more relevant? Mao or Xi Jinping? Are there other figures?

Yichen:

Long time I was in primary school, but at that time it was about Mao and FIXME.

Eric:

FIXME

Yichen:

Recently the state "Learning to empower the country" app that has to be installed. It is interesting "studying FIXME". It teaches students how to understand what the state is communicating.

Yichen:

There is an app for ordering food from China to your doorstep in the Netherlands. Digital platform. Not state control. People debate on it what it means to be Chinese.

Eric:

A way to measure your Chinese identity is to look at their smartphones. Almost everyone has WeChat because that is how you can talk to your family. Rednote would be

ochama (?)
How to identify American Chinese? They don't photoshop their selfies.

Demographic question

There is a steep rise in terms of age. Fastest urbanisation of history is coupled with the fastest aging in history!

Yichen:

I was just on a panel on "elderly care crisis" last week. From there I understand that China is launching a lot of things to economically accomodate these changes. One is called *gray hair econonmy* amidst a general economic downturn. Young people have less spending power, but old people receive a pension. Young people are needed in the elderly care industry, there are ideas for robots/AI carers – that market is quite informal.

Ecological civilisation

It is a Chinese policy initiative.

Yichen:

There is a book that came out recently by Steven FIXME who gave a talk. It is about shaping people's opinions on the environment. You can use AliPay to plant trees in North-Western China through a foundation run by AliPay, and you can visualise them through the app. They have drones.

What does Chinese people think about the EU

Depends on who you ask. In Shenzen I asked people about their work ethics (overworking). "We have to work very hard to catch up with the US. In Europe there is an easy-going work-life balance. Especially the Dutch people know how to relax, because they are already developed. We cannot do that here because we have to catch up, but they are already there!"

The idea of "development" shapes the world views of even ordinary Chinese citizens. The average income of people is not very high. The role in the global economy is important because of scale, but people have not

What do you think is the biggest misconception about Chinese?

Social credit system. What does it really do? An ideal version is being promoted in Western media but it is nothing like that. They look up at the US that has credit scoring. China wants to hold every market actor accountable. It is a blacklist: you cannot take the high-speed railway, register in the school, take a plane – it is a humilitation.

Eric: there is a good article that I can recommend about this. I will put it in the chat.

Reference recommendations

https://link.springer.com/article/10.1007/s13280-023-01897-2
https://link.springer.com/book/10.1007/978-981-99-6515-1

World Cafe 2 Terrace: Serbia

Context: It started with the train station collapsing. Protests started from the University.

Context

Serbia is part of ex-Yugoslavia. It was a bloody breakup. After the 90s there were some new approaches to govern, a new direction, some level of democracy, some economic transition- an effort to join the EU.

There are however many remaining issues. Who recognizes Koso, which countries are recognized as independent, etc.

Independent media is very small. Not everyone has access to free media. You have benefits from being part of the ruling party (job access, etc.)

Blockade Cookbook is a reference the protesters have used for how to block the university. They used it as a tactic without understanding the greater political context in which they were operating.

[Request to not take notes on further details around the current situation to preserve privacy.]

World Cafe 2 Downstairs: EU

◈ Session location: Downstairs

Omnibus effect

EU had regulation but now the new European Parliament politicians see it as an obstacle for competitiveness, or in other words, an obstacle to "catching up" with US and China.

EU Origins

Post WW2 — the Treaty of Versailles: How to ensure economic growth without ending up with tanks?

if countries are working together, we won't have national champions anymore.

Tension between national interests and promotion of Big European Champions.

Everyone spends money on X, but the money gets spent in your country.

Timo: Treaty of Rome had a strong geopolitical angle. Summer of 1956, leading up to Noever, Suez Crisis happens that humilitates big European powers (colonial at the time). Czechoslovakia sees Western European powers being powerless.

EU integration is an attempt of becoming geopolitically relevant again. Means of keeping up economically and technologically with global competitors.

T of Rome: prohibition on aiding specific companies or countries — with exceptions such as for the delivery of aid. There is also an exception for national champions. It was dormant. The only thing that you can do is to work through collaborative structures. Trans-european cross-national industrial ecosystems. For batteries, hydrogen, semi-conductors, etc. They have to demonstrate spill-over effects, etc. Other routes are blocked politically. 1970s and 1980s had national champion policies and then it started to be enforced 1990s. National champion examples: ASML now, Philips in the past – both in the Netherlands.

Embedded neoliberalism.

Any parallels with Japan as a threat to the US?

Any parallels with Japan as a threat to the US that is trying to become competitive with the US? What was the EU strategy towards Japan?

It was very discussed in the EU and US in the early 1980s. Suddenly EU is falling behind US and also additionally Japan, who are less friendly. Heated debate.

Ideas: neo-mercantilism, protecting EU champions companies instead of national champions — but what won out was to make a Single Market as a launching pad for emerging European champions. Creating the single market *was* the industrial policy, that would enable these companies. Coordinating, liberalising, privatising. The companies could choose the priority technologies/market-segments so there was not a lot of "innovation".

https://ww1.econpol.eu/sites/default/files/2024-07/econpol-forum-2024-4-dorn-fuest-etal-innovation.pdf — here they argue that EU ever

invested in cars, whereas in Japan also chips, whereas in the US there are shifting priorities and a lot of private investment in R&D.

Dmitry:

Did they manage a Sony or something?

Timo:

Nokia could scale up based on these policies, they benefitted, but no clear policy that fostered innovation in key strategic technologies – this is coming back at this moment!

New regulatory framework: rules are not necessarily static. — But now there are counterarguments that promote new regulations.

Eurostack vs. Indiastack

Lot of in-fighting and ego in this debate. From ID cards to AI apps. Political response to US technological dependency. Taking countries with a very poor human rights record as the ideal to follow, arguing for those choices from a pragmatic point of view. It is outrageous. "We were so naive with the whole human rights thingie." And Dmitry is right that there are good existing European examples such as Estonia. Yet in the India reference point the state did not just provide digital infrastructure but succeeded in enabling adoption by private companies.

(Here: rant on Chinese industrial policy by Eric. Policy is defined on a high-level and specified in more detail on lower regional levels. Zuza: I can see how this is similar to Europe.)

How GDPR... tech sovereignty... why not use Estonia instead of Indiastack?

Nai: I read the Eurostack report. I am critical of it. EU wants to advance tech sovereignty? How does it relate to other activities? Extraterritorial borders in coutnries that they support financially through development aid (kind of like colonisers). Will tech sovereignty of EU be advanced *against* other (small) countries?

The Eurostack is only about catching up not setting up a new standard, so it is quite huma

Frontex militarisation: there were two reports EU report on Technological Sovereignty and Infrastructural Sovereignty, autonomy and freedom are the key words there. Another report was about Europe's digital strategy to the outside world. Zuza can show this. On the level of narrative it is skizophrenic: it sets double standards between the EU and other countries.

Nai: Why would other countries buy into Eurostack or similar? What is the selling point?

Niels: Militarisation of borders are techniques that are different that are aimed (now) at European citizens. In fact these borders are built to contain the rise of the far right in Europe, not directly to stop refugees, immigrants, etc. Borders are exempt from the AI Act. In contrast to the GDPR, which protected everyone.

What do you see as best point of intervention in the coming times? Multi-annual budget? Other ways?

T: Interdependence weaponised. Resilience, econonic security call for autonomy in the digital stack. But it is questionable that Europe can do it. Absurd and unnecessary, why compete for instance with china in solar?

Japan - strategic indespensability. Prioritise things we are good it, realise capacities such as European elements of the semiconductor supply chain. Investing in indespensibility will mean that others will be dependent on you for that technology, encouraging trade.

Z: What do we actually need? Think beyond indispensibility for others, rethink what is critical, adopt policies that will enable delicate pinpoint investment.

N: How to do this in a shrinking civil space and the rise of the right?

G: Ideas can be corrupted by the right, such as the notion of being self-sufficient.

T: If you leave the space to far right and conservative spaces, the priorities will be set by others. Given the current oppenness of what is strategically important, there is a window of opportunity.

In one of the reports that was mentioned the commision asks the EU to make a list of technologies that should be prioritised. The industry and the hype is the biggest problem: virtual world and blockchain will be on this list. The far-right is not that of a problem in this area.

Followup

A particular intervention angle: the ICPEI process

[Timo explains.] how eu identifies icpi worthy techs. member states negotiate in coalitions and work in a technical group to work out a pitch. which working group? there is a need to combine two workgroups. DG Connect provides expertise and lobby member states. there are no established processes. civil society can find tbe email of the the Dutch representative.

coordinated approach? needs coalition building. getting industry moving.

what are the priorities? there is no state capacity for strategic identification. institutional innovation. icpi work that Timo is involved in influenced the evaluation process. it takes too long to complete the process, so the recommendation was to speed up the process.

https://competition-policy.ec.europa.eu/state-aid/ipcei/joint-european-forum-ipcei_en

https://competition-policy.ec.europa.eu/state-aid/ipcei/joint-european-forum-ipcei_en

https://files.osf.io/v1/resources/f63gd_v1/providers/osfstorage/66ace9d03e5edf93ee51a38e?action=download&direct&version=1

https://digital-strategy.ec.europa.eu/en/policies/edic

critical
Infrastructure
lab