

INFRASTRUCTURES FOR TROUBLED TIMES



University of Brighton

Centre for Spatial,
Environmental and
Cultural Politics



Image: Ron Cogswell photo of the installation 'Infinity Mirrored Room — Aftermath of Obliteration of Eternity' by Yayoi Kusama 2009 at The Hirshhorn Museum (DC) March 2017 (CC BY 2.0)

Early Career and Doctoral Researcher Symposium

Wednesday 6 June 2018, 9:30-17:00, 68 Middle Street, Brighton

PROGRAMME and ABSTRACTS

A very warm welcome to Brighton and the symposium from the co-organisers!
(doctoral candidates at the University of Brighton)

Judith Römhild-Raviart - School of Sport and Service Management

Lorenza Ippolito - School of Environment and Technology

Elona Hoover - School of Environment and Technology

Kate Monson - School of Applied Social Sciences

Shai Kassirer - School of Media

social media tags . #infrastructuresbrighton . @Centresecp

Event co-hosted by the **Centre for Spatial, Environmental and Cultural Politics & Responsible Futures** research initiative, University of Brighton.

OVERVIEW PROGRAMME

09:30 10:00	Registration	
10:00 11:10	Introduction Opening talk Infrastructures for an Elemental Commons Derek McCormack, University of Oxford Discussant: Leila Dawney, University of Brighton	
11:10 11:20	Break	
	World Café 1 (4 sessions at the same time)	
11:20 13:20	Table 1: Infrastructures and the State	Table 3: Ways of Knowing Infrastructures
	Table 2: Infrastructures, Power and Everyday Practices	Table 4: The Materiality of Infrastructures
13:20 14:15	Lunch	
	Engaging infrastructures - 1h workshops	
14:15 15:15	Table 5: Participation, Agency and Imagination	Table 7: Infrastructural Labour and Livelihoods
	Table 6: Infrastructuring research through board games	Table 8: Way of Circle
15:15 15:50	Plenary Bringing together world café and workshop discussions 20 minutes to go around the room 15 minutes to draw out themes and share insights	
15:50 16:00	Break	
16:00 17:00	Plenary discussion facilitated by Derek and Leila	
17:15	leaving 68 Middle Street	
17:30	Drinks reception at the Hop Poles (across the street) (an informal dinner will follow, anyone welcome to join! We will let you know the chosen venue on the day)	

DETAILED OUTLINE OF SESSIONS

World Café sessions (4 sessions at the same time - participants encouraged to move every 30 minutes)			
Table 1	Table 2	Table 3	Table 4
Infrastructures and the State	Infrastructures, Power and Everyday Practices	Ways of Knowing Infrastructures	The Materiality of Infrastructures
<p>Muna Dajani The Israeli National Water Carrier and Sahl Al Battuf Resistance</p> <p>Caglar Koksal The State, Planning and the Dynamics of Capital and Power in Land Development: Large-scale Infrastructure Investments in Istanbul</p> <p>Dominic Walker Institutions and infrastructures in troubled post-truth times</p>	<p>Galvao Santos Oil filtration for urban commoning</p> <p>Hanna Ruszczuk Invisible gender infrastructures</p> <p>Anshika Suri (skype) Technological determinism of users in Sanitation service provision: Understanding women's everyday encounters with infrastructural inadequacy</p>	<p>Dominic Davies Infrastructural reading: literary architectures, urban forms</p> <p>Yi Chen Ontological infrastructures (rhythmanalysis)</p>	<p>Omar Jabary Salamanca & Jonathan Silver On Material Excess of infrastructures</p> <p>William Jamieson On Parasitic Infrastructures: Land reclamation in Singapore and the spatial-cognitive fix</p> <p>Pablo DeSoto From the Sputnik to the Stack: networked infrastructures in the age of planetary-scale computation</p>
Engaging infrastructures - 1h workshops			
Table 5	Table 6	Table 7	Table 8
Participation, Agency and Imagination	Infrastructuring Research through Board Games	Infrastructural Labour and Livelihoods	Way of Circle
<p>Carla Washbourne Seeing green: what shapes our 'visions' of urban green infrastructures?</p> <p>Carol Mancke Fluid cities</p>	<p>Callum Nash Collective gameplay against global risks - visualising spatial injustice (with board game)</p>	<p>Kathleen Stokes and Alejandro De Coss Corzo Discussion on relationship between labour, livelihoods and infrastructures (discussion)</p>	<p>Sarah Kelly Experiential workshop (in the foyer)</p>

OVERVIEW OF SESSIONS and ABSTRACTS

Opening talk

Derek McCormack Professor of Cultural Geography, University of Oxford
Infrastructures for an elemental commons

In this paper I consider the kinds of infrastructures that disclose the value(s) of an elemental commons. I use the concept of elemental commons to hold together three senses of the elemental; the elemental as environmental milieu, as physico-chemical arrangement of matter, and as ontological proposition. In trying to draw together these different senses of the elemental I focus on one kind of act: the release of a balloon into the air. Rather than an isolated occasion, this kind of act can, I argue, foreground some of the infrastructural questions posed by the problem of thinking with the elemental.

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World Café and Workshop sessions

The World Café and Workshop sessions will be co-hosted by participants who have responded to the call for contributions. We have provided a bit more information about the research and questions that will be 'framing' the sessions. The aim is really to provoke and develop detailed discussions together on these thematic areas.

1. Infrastructures and the State

This session brings together three contributions. The contributors will bring together their perspectives to develop provocations throughout the session. **Shai Kassirer**, one of the co-organisers will also contribute with his research on the politics of water desalination in Israel.

Muna Dajani (PhD Candidate, Geography and Environment Department, London School of Economics)

The Israeli National Water Carrier and Sahl Al Battuf Resistance

The national water carrier (NWC) is Israel's largest water infrastructure project and can be considered to be the epitome of Israel's water hegemony over the shared transboundary water resources of the Jordan River Basin. The construction of the NWC began in 1953 and was operative by 1964 and with its operation, the Israeli state carried out the first and only out-of-basin diversion of the waters of the tributaries of the Upper Jordan River toward the coastal cities and the Naqab. It was considered one of the main factors for Syrian retaliation in the demilitarized zone in the 1950s, protest and resolution in the UN, and has been an escalating factor in the Arab-Israeli water conflict, especially as a factor for the 1967 war. Going beyond its geopolitical and regional significance as an instigator of conflict and war, this infrastructure also impacted the lives of Palestinian farmers inside Israel, especially in Sahl Al Battuf in the Galilee in the 1950s and 60s where the NWC expropriated thousands of dunums and severely restricted the livelihoods of farmers there. Drawing on sources from British and Israeli archives and extensive fieldwork in Al Battuf, my research aims to represent Palestinian fellahin (farmers) as protagonists of the untold story of water and land politics in Palestine in general and the NWC story in the Galilee in particular. Continuously framed as a state-level issue, water politics are manifested here in the continuous efforts of the farmers of Al Battuf as active agents who protested against the NWC, demanded rights to water infrastructure in the valley and re-configured agricultural practices to defy the exclusionary and discriminatory Israeli water and land policies. It also aims to shed light on the underlying conditions and materiality which shaped and configured the Israeli water sector in those critical decades following 1948 and allowed its hegemonic control of Palestinian and Arab water.

Caglar Koksal (Lecturer, Planning and Environmental Studies, University of Manchester)

The State, Planning and the Dynamics of Capital and Power in Land Development: Large-scale Infrastructure Investments in Istanbul

My doctoral research critically examined infrastructure planning in Turkey with special reference to spatial planning, urban restructuring, political economy, and the semiotics and politics of physical infrastructure. Although research on infrastructure has recently been internationally popular (Marshall 2014; Tonkiss 2015; Torrance 2009), and infrastructure development has been at the centre of political discussion and public rhetoric in Turkey for some time now (Dogan and Stupar 2017), academic research on infrastructure planning in Turkey has been very limited. In my PhD thesis, I filled this gap in the scholarly literature by, first, critically examining four large-scale infrastructure projects in Istanbul; and second, proposing a new conceptual framework to analyse the economic and political instrumentalising of infrastructure. This conceptualisation of infrastructure emphasises on theorising infrastructure in relation to culture/politics and economy at the same time.

Most originally and effectively, the thesis showed how large infrastructure projects have been a key weapon in the Turkish state's ongoing political national project to change constitutional regime and overcome opposition from many directions, with Istanbul at its spatial and imaginary heart. Key themes include gigantism (of construction), the mobilisation of history (Ottomanism), and, most importantly, the priority given to the public-private partnership model in delivery and finance of infrastructure. The thesis showed that infrastructure building is a political and ideological choice, and made to be a legitimate one.

The paper that I am currently writing aims to bridge the extremely political processes of infrastructure planning with economics of urban land market. It seeks to better conceptualise infrastructure in relation to economic growth and political power and move thinking on large infrastructure forward into fresh territories, geographically and intellectually, in many different countries, more and less developed, in the present period.

Dominic Davies (Lecturer, Royal Holloway, University of London)

Institutions and infrastructures in troubled post-truth times

This research contribution explores how institutions (Foucault, in Mills, 2003) – alongside and/or as examples of social infrastructures – might seek to change in the face of troubling political 'posttruth' (Flood, 2016; Norman, 2016) times. Building on recent research around the 'experimental turn' (Walker, 2017; Braun, 2015; Powell and Vaseduvan, 2007), this contribution asks if experiments might form one part of a creative solution to some of the challenges posed by a 'post-truth' political landscape in which institutions – especially those around science and technology – and other social infrastructures built around advancement and development of knowledge production and maintenance, are banished in favour of populism (Keeton, 2018). Or, when explored from another angle, how can the challenges of a post-truth landscape represent fruitful opportunities for improving and re-invigorating existing scientific and technological institutions to become more robust on the one hand, and respected by publics on the other.

2. Infrastructures, Power and Everyday Practices

This session brings together three contributions - the brief abstracts are outlined below.

Galvão dos Santos (Independent researcher, Barcelona, Spain)

Being currently based in Barcelona, the project I would like to introduce to the peers that will attend the symposium is taking place close to the city, bridging my own university (Autonomous University of Barcelona) with a valley near the city where peak-oil activists are engaged in local politics of self-management. I collaborate with the group of Serge Latouch called Research and Degrowth and the rural squat Can Masdeu to create an oil filtration station that produce gas for transformed vehicles used by emancipatory projects. The goal is to reduce waste, carbon emissions and non renewable energies, while providing a service that aims to increase the mobility of the community.

The practical tasks of experimenting ways to filter oil are complemented with an academic writing project about travel and urban commons in collaboration with Uppsala University (Sweden). With a colleague, we're working on the relationships that exist between mobility and (travel) infra-structure and their importance to the process of commoning.

Hanna Ruszczuk (Post Doctoral Research Associate, Dept Geography / Institute of Hazard, Risk and Resilience, Durham University)

Invisible gendered infrastructure

Peake and Rieker, paraphrasing Simone (2004), argue “the urban, now more than ever, is a political stake that opens up and close off new possibilities and constraints” (2013, 12). When considering the everyday urban landscape in Nepal, the individual does not have much power and control especially if the individual is a woman. The vital yet invisible role of women’s groups who serve as providers of social, economic and environmental infrastructure in cities of the urban South warrants consideration. This ‘we’ ness of women’s groups cannot be underestimated because it allows for unexpected yet powerful manoeuvrings in the city. Women provide for those who are unable to manage on their own.

Using a case study based on one of the largest cities in Nepal (Bharatpur), a space is created to showcase the invisible and vital role of women. Women provide socially just infrastructure in the city through social reproductive services as well as advocacy for social justice in regards to vulnerable members of society. Women provide economic infrastructure through the financial provision of funds in times of crisis to those in need. The urban risk governance landscape allows women to be resilient (Katz 2004) yet invisible urban infrastructure. They are not allowed by the existing governance structures to rework (Ibid) the urban to suit the needs of themselves, their families and their networks. Through the intersection of infrastructure, invisibility and gender, considerations of social justice are furthered.

Anshika Suri (Post-doctoral scholar, Technische Universität Darmstadt, Germany)

Technological determinism of users in Sanitation service provision: Understanding women’s everyday encounters with infrastructural inadequacy

Women’s everyday encounters with technological artefacts are rarely recognized with one in three women still lacking access to safe toilets worldwide; which leads them to confront health issues, harassment, fear, shame and indignity. Previous studies reveal that sanitation infrastructure planning is often far removed from women’s needs, their socio-cultural practices, existing gender constructs and is rather determined by engineering, environmental and public health concerns.

Although substantial research on gender and sanitation is focused on health and hygiene, it fails to comprehend the magnitude of gender-based disparities and inequality in accessing sanitation infrastructure. Feminist scholarship in science and technology studies has theorized that innovators construct many different representations of users and objectify them in technological choices; which often reveals gendered scripts implicit in the infrastructure and exclusion of specific users. Hence, the female body becomes a site of not only oppression, but also contestation, negotiations and a socio-political tool within urban infrastructure regimes. Therefore, based on inappropriate technological determinism of users, the question this proposal seeks to raise is firstly, whether an intersectional approach can help strengthen investigation into access to sanitation provision by analysing the embodied and lived experiences of women as users of infrastructure. Additionally, could an inquiry into techno-feminist perspectives within urban infrastructure planning further strengthen investigation into access to sanitation infrastructure provision as not just a technological problem but as technologies immersed in systems of power.

3. Ways of Knowing Infrastructures

Dominic Davies (Lecturer, English, City University of London)

Infrastructural Reading: Literary Architectures, Urban Forms

In *Imperial Infrastructure and Spatial Resistance in Colonial Literature, 1880-1930* (2017), I attempted to develop a methodology called ‘infrastructural reading’, a process in which the critic identifies depictions of infrastructures in literary or cultural texts (railways, roads, bridges, etc.) to ask what they tell us about the infrastructures of those texts (the social and economic forces of empire, racism, capitalism, etc.). When critical attention is paid to these representations of infrastructure, I argued, the contradictions of the modern world-system became detectable at the level of textual form, thematic and symbolic tropes, and genre. Especially concerned to emphasise infrastructural reading as a self-consciously resistant methodological

practice, where I had focused on literatures of empire and colonialism I tentatively outlined, in conclusion, what an 'infrastructural reading of the present' might look like.

In this session, I want to ask participants: first, to engage with the idea of infrastructural reading as a methodology, and to reflect critically on both its potentials and limitations; and second, to contemplate what form an infrastructural reading of our troubled present might take. I have examples from my own and others recent research, including the essays included in the forthcoming collection, *Planned Violence*, which gathers together commentaries that consider the value of the literary as a powerful tool in the evaluation of and resistance to violent infrastructural developments, and also my current project, *Urban Comics*, which asks how the infrastructural form of graphic narratives can revise and even rebuild the contemporary global city, especially in the South. But I will be especially keen to hear how participants might apply this methodology to their own fields of knowledge and research; to consider with participants whether it might extend across disciplinary boundaries; and to think through other literary, cultural, social and indeed, infrastructural forms to which it might be applied.

Yi Chen (Lecturer, Contextual and Theoretical Studies, University of the Arts London)

Ontological infrastructures

By formulating the method in its broad orientations and ways of operating, I am particularly interested in its intervention in looking at infrastructure being agential for the rendering of social rhythms. Infrastructure, at the level of rhythms, is conceived as having an agential role in the moving, exchanging and ordering of social entities, and it is a characteristically temporal-spatial system. The concept of 'polyrhythmia', for instance, describes the porosity of infrastructural sites and in translating their interrelations via the lenses of rhythmic relations (thus it chimes with Larkin's [2013] notion that systems of infrastructure awaits identification, as opposed to having defined technological and institutional boundaries). The intention of such translation is not only to animate the work of infrastructure on cultural political life, but also in opening up contexts for exploring the constitution of infrastructural problems to cultural experiences (therefore, this area of study on infrastructure is seen to bear a broader resonance with other fields of work). Therefore, I intend to highlight the ontological significance of infrastructures as having a materiality, a timing-spacing, patterning of social life in rhythms.

To substantiate my theoretical framework of using Rhythmanalysis to conduct ontological investigations, I would like to share a case study that I undertook in my monograph *Practising Rhythmanalysis*. Working from an initial focal point on the re-orientation of postal service in the late 1970s, I employed rhythm analytical thinking to unveil the concatenation of rhythmic changes intersected with postal rhythms. The seemingly disparate changes of communication rhythms (postal system, the advent of information technology, shopping by post, financial exchange and the transport networks) were indeed interlaced in their rhythmic interconnections and negotiations. It shows a method of historiography that foregrounds the ontological conditions of cultural history.

4. The Materiality of Infrastructures

Omar Jabary Salamanca (Lecturer, Department of Conflict and Development, Ghent University)

Jonathan Silver (Research Fellow, Urban Institute, University of Sheffield)

On the Material Excess of Infrastructures

Building on an ongoing conversation, as we have individually undertaken fieldwork for nearly a decade, and collectively travelled across diverse urban contexts, alongside organizing a series of events, panels and discussions, we find ourselves, in these troubled times, persistently drawn to the role of infrastructure in consolidating racialized, gendered and classed forms of oppression, accumulation and dispossession. In our explorations across infrastructural landscapes from Detroit, New York, Manchester and Paris to San Cristobal de las Casas, Accra, Johannesburg and Jerusalem, we have witnessed first hand the centrality of infrastructure in the (re)ordering of territory, everyday life and power relations across time and space. It is from this position that we would like to advance the following provocation for this presentation: infrastructures—the material power networks that enable the movement of matter, seamlessly weaving people and spaces together or apart—have historically been and are fundamentally violent technologies that enable and drive colonial capitalism. This provocation seeks to question common sense understandings on the nostalgic imperial legacies of infrastructures in the so called Global South as well as to problematize the notion of the infrastructural ideal in so the called Global North. Yet, it also aims to introduce what we call the material excess of infrastructure, that is the sometimes explicit, often hidden violence contained within these socio-technical systems and resistance(s) to it. To do this we propose three figures or analytical devices—archives, constellations and cracks—which we find useful for advancing a historically grounded analysis that captures

the complex, relational and contested nature of these networks. In this way we want to unbound infrastructures from its traditional socio-technical moorings and move towards alternative theoretical and analytical understandings that contribute to generate spaces for political possibility and solidarity around contemporary infrastructure struggles.

William Jamieson (PhD candidate, Geography, Royal Holloway University of London)

On Parasitic Infrastructure: Land reclamation in Singapore and the spatial-cognitive fix

Singapore has been continuously expanding for five decades through land reclamation, with 25% of its current land-mass consisting of reclaimed land, and 100km² more to be completed by 2030. Initially used for social housing and infrastructure, more recently reclaimed land has been devoted to the Marina Bay Sands Integrated Resort and Casino, and the Gardens by the Bay, becoming critical in the construction of Singapore's national identity as a Global City. To resource its construction of land and concrete, Singapore has been importing hundreds of millions of tonnes of sand extracted from the periphery of other Southeast Asian countries through a network of contractors. This has produced tensions with its neighbours, as multiple ASEAN countries have banned sand export to Singapore. However, the sand still flows, legally or illegally.

This contribution will map the commodity chain of sand, and thread together the fragmented geographies of resource extraction and land reclamation through extracts of fiction from a cognitive mapping project, outlining how they produce an infrastructure of the Singaporean State's political subjectivity by converting regional hinterland into Singapore's urban and infrastructural core. The Singaporean State inverts colonisation's dynamics of geographical expansion through this commodity chain: by extracting another country's territory through superior purchasing power, the Singaporean State converts commodified hinterland into its own urban territory through land reclamation.

This provocation wishes to argue that sand in the Southeast Asian context offers us an opportunity to explore urbanisation without an inside, by inverting the focus from the centripetal flux of materialities and milieus towards the horizon of the urban to the centrifugal externalities that shear from the commodity chain of sand. The question of infrastructure is challenged by the ever-expanding frontiers of resource extraction, bundling the contradiction and construction of capital and territory into the very ground of the citystate.

Pablo DeSoto (Guest lecturer, School of Architecture, Umeå University, Sweden)

From the Sputnik to the Stack: Networked Infrastructures in the Age of Planetary-Scale Computation

From the Soviet Sputnik to Bratton's proposition of the Stack, networked infrastructures have become a global architecture of computer mediation which produces a distributed and largely uncontested new expression of power (Zuboff 2016).

If radical cartography is the practice of mapmaking that subverts conventional notions in order to actively promote social change, the contribution explores an update of the term in the current Age of planetary-scale computational infrastructures, algorithmic governance and Surveillance Capitalism.

By contesting the Silicon Valley consensus about the future, counter-hegemonic mapping initiatives work both in visualizing the neoliberal world order complexity but also as ways of imagining and organising new citizen-based networked infrastructures.

5. Participation, Agency and Imagination

Carla Washbourne (Lecturer, Science, Technology, Engineering and Public Policy, University College London)

Seeing green: what shapes our 'visions' of urban green infrastructure?

This session is intended to gather and explore insights and ideas from participants around the way in which green infrastructure in our cities could be shaped. It pivots upon a set of questions around our 'vision' of green infrastructure in cities: How do we imagine green spaces in cities should look and function? What and who should green spaces in cities be for? This session would also start to explore some of the underpinnings of our ideas around urban green space, considering what these might be inspired and / or limited by and how we can go beyond this to explore more creative visions.

This could be a standalone session in the programme or as part of another 'green infrastructures' session if appropriate. It would consist of a short introduction, an elicitation exercise around sharing and documenting experiences and ideas and reflections on the likely sources of these.

Carol Mancke (PhD Candidate, Royal College of Art, London)

My research explores frameworks for collaborative thinking. Many believe that the public realm has been co-opted by neo-liberal forces resulting in a sense of hopelessness that limits our ability to imagine anything else. My research explores ways to counter the sense of 'hopelessness' and generate glimpses of alternative social structures and the real spaces in which they might flourish.

At the centre of my project is the table understood both as a physical object that might serve as setting for collaborative thought, and as a metaphorical image that is richly relational and intensively entangled with politics. The site of the practice is modest and grounded in the everyday. I make tables and use them to explore possibilities for public collaborative thinking at the neighbourhood scale. I attempt this by mobilising the affordances of situations to create opportunities for thinking around limits together using aesthetics, physicality, humour, play and hospitality.

I propose to bring a version of a workshop, Fluid cities, I developed with artist Trena Noval for the Human Cities Initiative (Stanford University 12/2017) to Brighton. Drawing on the writing of Wendell Berry, Ted Purves and Max Haiven, Fluid cities invited responses to two linked challenges: about settings – how can we organise the flow of cities to meet the needs of the land we co-inhabit with other living things; and the other – and processes – how can we organise the flow of cities to support more authentic human to human exchanges. The aim of the workshop in Brighton will be to draw out hunches, half-formed proposals and ideas hovering in peripheral vision for the creation of infrastructures for productive joint thinking. As such, the workshop could relate to a number of topics on your list including: human-nature relations, spatial politics, communicating infrastructures, commoning and everyday politics of infrastructure.

6. Infrastructuring Research through Board Games

Callum Nash (Doctoral researcher in social design, Northumbria University)

My work seeks to determine the value of design methods in supporting 'social innovators' as they develop communities to crowdsource organisational viability. I have a long standing interest in cybernetics, and utilise many other forms of mapping, including socio-spatial and behaviouristic mapping processes, in understanding these organisations, their goals, and the communities in which they are situated.

These research partners consider themselves activists, and whilst, from a marxist perspective, the key to political change lies not within small scale social entrepreneurship, but rather larger fundamental economic changes, this situated research offers an opportunity to critique establishment neoliberal ideas around community development (communitarian paternalism) and many of the design methodologies which present themselves as 'democratic' (such as participatory design) but utterly lack criticality around the power and agency gifted to designer and client in designing generally, and in the contemporary phenomenon known loosely as 'social design.'

In contradistinction to conventional designing, I am motivated towards developing processes where the 'users' hold the agency from the inception of the design process.

This builds on prior work which investigated civic games as a means of promoting discussion about global inequality — and the notion of global civics — titled 'UtopiaNOW.' The game comprises an operationalised map of global productivity and wealth distribution, in which players collaborated to problematise an imagined global government, allowing us to probe notions of democracy in global risk management and levels of militancy in dealing with them.

The workshop will involve a test game-play of UtopiaNOW.

7. Infrastructural Labour and Livelihoods

Kathleen Stokes (PhD Candidate, Human Geography, University of Manchester)

Alejandro De Coss Corzo (PhD Candidate, Sociology, London School of Economics)

Human work and labour - wage labour, distributional labour, reproductive labour - has always been necessary to the development, repair and maintenance of infrastructures. Despite this, its role has rarely been explored in depth in contemporary debates about the role of infrastructures in shaping social and material worlds. This

human labour often remains hidden, sustaining infrastructures far from the public eye. Yet, as infrastructures breakdown, the human labour that sustains them comes into focus.

Amidst speculation of technological automation and mass labour redundancy, we question what role human labour has played in the development and maintenance of infrastructures, and how such contributions are perceived and valued. We also interrogate how analyses of human work can further our understandings of the role of infrastructures in diverse contexts - urban and rural, global north and south, etc.

Relations between labour and infrastructures are highly differentiated. In some cases, labour intensive approaches to infrastructural development are prioritised as a means of social protection, efficiencies or cost savings. In other cases, infrastructural practices, relations and knowledges are excluded, devalued or co-opted by private markets or state providers. Moreover, these relations are not linear. Just as infrastructures shape collective livelihoods through their services and metabolisms, the conditions and relations of infrastructural labour also inform workers' livelihoods.

Starting from the position that human labour matters, we wish to explore the relation between infrastructure, labour, and livelihoods. Group discussion will focus on gathering a shared literature which speaks to this triple relation, formulating questions that can inform subsequent research agendas and contribute towards a more politicized study of infrastructural processes and their relation to labour. We also commit to summarising the results of the session in a blog on the [Situated Urban Political Ecology Collective website](#).

The session will be framed through consideration of particular labour relations (e.g. formal wage labour, informal workers, individual and incremental practices), and broaden into a discussion centred around the following questions:

- Is there a relation between this particular labour relation and certain types of infrastructures? If so, why is this the case?
- How would these infrastructural processes look like without human labour that goes into/through them?
- How would human livelihoods be without labour, both for infrastructural workers and for service users?
- How can more just and sustainable relations be made through infrastructure and what would be the role of human labour in these desirable futures?

8. Way of Circle

Sarah Eliza Kelly (PhD Candidate, Royal College of Art, London)

Way of circle

It may be a common experience to spend much of our lives sat in circular forms around meeting room or seminar space tables. Could our communication be said to be circular within these spaces, or how much of it might still tend toward searching out the linearities of departure, progress and arrival within our conversations? Speaking and listening from within a circular spatial structures is a well explored method for inviting alternative conversational dynamics. Round tables are historically rooted in many cross cultural traditions and are themselves highly politicised. The circle may stand for a flattening of hierarchical order yet it can also suggest imposition, an obligation for participation and vulnerability of exposure. Could circular spaces also provide a type of scaffolding upon which further explorations into how infrastructures of an ethics of care could be conceived?

Participating in a 'way of circle' is to speak to, from and within a moving and weaving of shared narrative. Intended to be a non-invasive, restorative and nurturing group interaction, participants in the circle actively hold reciprocal space for each other through bringing their own rhythms of silence and speech. It offers a gentle paradox of interaction, both through active listening and receptive contributing. We are asked to arrive in spontaneous communication, speaking from where we find ourselves from one moment to the next. This invites active engagement with the intimacies of both shared and differentiated experience, drawing attention to our relationship with an everyday politic of communication. As a vessel for such emotional expression it might also be described as radically inappropriate, a defiant being-with ourselves and with each-other. The theme for this circle will be 'troubled times'. Grief, anger, overwhelm, enthusiasm, frustration, fear, hope, distraction, cynicism, boredom, joy, excitement, anxiety will all be variably present, in co-creation, and welcome.