

Roadsides

Collection no. 012 • Fall 2024

Infrastructural Anxieties



Edited by: **Mikel Venhovens** and **Mona Chettri**

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Roadsides is a diamond Open Access journal designated to be a forum devoted to exploring the social, cultural and political life of infrastructure.



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Collection no. 012 was edited by: **Mikel Venhovens** and **Mona Chettri**
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ISSN 2624-9081

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Infrastructural Anxieties: An Introduction

Mona Chettri and Mikel J.H. Venhovens

Infrastructural anxiety represents a dynamic relationship between the tangible and intangible, where both play an equal role in creating, changing or disrupting lives and realities. Infrastructure is never just simply infrastructure, nor is it just a “neutral or technical facility” (Wu 2020: 322). As an assemblage of material forms and networks of ideas that mobilise legal, socio-economic, political and cultural meanings (Larkin 2013), infrastructure generates anxiety along with other emotions. Similarly, anxiety is also not just a by-product of infrastructural intervention. It is a powerful mobiliser and plays a significant role in the social and material life cycle of infrastructure. The relationality between infrastructure and anxiety is complex. Thus, in this issue, rather than simply thinking along the linearity of causes and consequences, we look at the cyclical relationship between infrastructure and anxiety, its manifestations, impacts and politics, specifically as a result of, and response to, developmental interventions.

Anxiety is a distinct feature of the human condition. Despite its universality, it varies in its impacts and manifestations. As both “a signal and a symptom,” it organises and disorganises human (Glick 1995: 2) and more-than-human worlds. Anxiety and fear often overlap and can be used interchangeably to describe triggers for emotions, sensations and actions. However, while fear is an immediate reaction to an event, anxiety is a lingering and prolonged sensitivity (Rachman 2019: 3). It is a future-oriented, physically embodied state involving both mental and emotional distress, combined with a more diffuse sense of unease about what might (be)come (Tyrer 1999; Rachman 2019). This nebulous, free-floating anxiety often anchors itself to infrastructure.

Infrastructures are imbued with socio-political meanings and affects; they are a part of complex assemblages shaped by the “dynamic relational forms” they share with people, things, organisations and the environment (Harvey and Knox 2015: 4). While considered as the tangible, visible expression of progress, development and modernity (Jensen 2017; Reeves 2017), they are simultaneously also a source of hope and fear, memory and desire – a materialisation of people’s “conflicted, changing and contextually disparate understanding of modernity” (Masquelier 2002: 837). All that is associated with infrastructure, therefore, carries the latent potential for anxiety.

Infrastructure and Anxiety: A Cyclical Relationship

Contrary to common perceptions, infrastructure and anxiety are mutually generative: neither is the endpoint but each often leads to other affective states or tangible transformations. This issue illustrates how this cyclical relationship is not always negative or disruptive, but can pave the way for collaborations, innovation and action. Additionally, infrastructure (its absence, evolution, breakdown) has a compounding effect on pre-existing anxieties that may originate from other sources. And in turn, as the case studies in this issue show, seemingly ordinary things like fences, radio towers and even toilets are paradoxically rendered “dangerous things” (Ellis 2020), brimming with possibility to disrupt human and non-human lives.

Infrastructures condense the past, present and future into their materiality. In many parts of the world, and especially in the Global South, infrastructure is seen as a conduit for development and modernity. However, this modernity is riddled with ambiguity and uncertainty. It entails a breaking away from a past, which was stable, recognised and where communal identities were “safely anchored through the ordering of physical space” (Masquelier 2002: 833). Infrastructures also exist and operate over long timescales and across multiple temporalities, and this creates opportunities for the emergence, growth, decline and re-emergence of different affects, including anxiety (Davies 2023: 12; also see Martinez and Pikner 2019). While the visible degeneration and disintegration of infrastructure can provoke anxiety (Chettri forthcoming), prolonged uncertainty regarding the future also materialises in the present through anticipatory ruination of the social landscape, livelihoods and the environment (Paprocki 2022). Combined with infrastructure’s inherent capacity to connect and disconnect places, communities and cultures (Murzakulova 2021; Plachta 2024), all this can engender yet more anxiety about what is to come. So, anxiety imbues infrastructure with temporality, thereby extending its impact and affect beyond the present.

Seemingly mundane infrastructures are always thick with cultural meaning, shaped by and shaping what is possible for us to feel, think and imagine (Davies 2023: 11). As Cowen (2017) notes, just as we build infrastructure, it builds us. Although anxiety is often future-oriented, as infrastructures coalesce and distribute resources over time, they can also replicate past histories of injustice and realise them anew (Anand 2017), re-igniting dormant anxieties.



West Point Mall, Gangtok, Sikkim.
Photo: Karchoong Diyali, 2023.

Infrastructural anxiety can also be strategically manufactured to create and/or reinforce anxiety among those socio-economically or politically more vulnerable, making it a conduit for political control. However, the impact as well as the response to anxiety generated by infrastructure is contextual, and the same infrastructure can generate different reactions over time. For instance, even when infrastructure such as walls, fences or checkpoints is constructed to combat certain anxieties, it usually gives rise to a different set of anxieties for a different group of people, depending on whether they stand to benefit or are disadvantaged by it (Venhovens 2024).

According to Star (1999: 380), infrastructure is invisible, a part of the background required for other things to work. A functional infrastructure is therefore one that is unremarkable; however, infrastructure continues to generate effects, even when it malfunctions, breaks or is ruptured (Orlova 2021). Such failing infrastructure may lead to new collectivities, alliances and outcomes. It can also reveal how class, race, gender relations and more intersect to produce certain socio-political landscapes and effects.

Infrastructural anxiety exists on a spectrum. It can take on different forms and change over time, and not all anxieties lead to action. Response to infrastructural anxiety is mediated by the socio-economic, cultural and political structures and processes that are in place at a particular time in history. Decoding the origins of infrastructural anxieties, a reverse-engineering of sorts, can therefore be instructive as to what is considered important, valuable or at risk by an individual, community or an organisation. Hence, instead of seeking a singular, universal understanding and experience thereof, the case-studies in this issue bring to light the lived experiences and diverse contexts in which infrastructural anxiety exists, persists and proliferates.

In the first article, Sindhunata Hargyono illustrates how long-term, albeit passive, infrastructural violence is heightened by the arrival of a base transceiver station in Kayan Hulu, Indonesia. However, it is not the absence of infrastructure that causes anxiety here, but its dormancy, and the new emotions of helplessness and inequality that this engenders, as experienced by the border residents. Infrastructure can also lead to the spatio-temporal disruption of both humans and non-human actors. Focusing on dust and air pollution in the industrial suburb of Bargny in Dakar, Senegal, Charline Kopf discusses the impact of “affective infrastructures” on citizens as well as the natural and spiritual landscape of Bargny. This case study reveals how anxiety can trigger different cultural and spiritual ways of generating agency, and of addressing change and ambiguity. Similarly, Yuan Zhang’s reflections on China’s Toilet Revolution address affective and cosmological tensions in the everyday spiritual lives of rural Chinese citizens brought on by improved sanitation. While modern toilets are seen as disrupting the traditional geomantic principles of feng shui, this cosmological anxiety also leads to creative negotiations and infrastructural adaptations by local residents.

In the next article, Kirsten Nielsen considers the tensions and anxieties brought about by the promise of infrastructural modernity related to electricity and exclusion in northern Uganda. This case shows the emergence of new anxieties for the future and highlights the symbolic value of infrastructure even when it fails. Illuminating further the productive and generative capacities of infrastructural anxieties, Afra Foli’s examination of flood-prevention infrastructures in Accra, Ghana, shows how flood

anxiety leads to novel collaborations. Albeit temporary, these temporal relations and ad-hoc technological innovations also map onto and shape urban politics in the city. Jiraporn Laocharoenwong's study on Mae La refugee camp in Thailand demonstrates how anxiety can mobilise community action. For many long-term residents, the camp has a veneer of permanency through infrastructure built by the refugees themselves. With the fate of the camp unknown, however, their situational anxieties are transformed into worry about the future.

Annika Pohl Harrison and Michael Eilenberg's case study of a Danish citizen living on the Danish-German border shows how the past, present and future can coalesce in infrastructure to generate real – and at times painful – affects. Structures such as fences can bring back memories which generate trauma and anxiety, thereby forcing a reflection on the cyclical relationship between infrastructure and anxiety. Similarly, Robert Deakin's article explores anxious belonging in the urban landscape through the perspective of Jimmy, long-time resident of a housing estate in east London. Redevelopment triggers Jimmy's anxiety about the future and renews past grievances and injustices, illustrating the temporal and generative capacity of infrastructural anxieties. Finally, Aditya Kiran Kakati looks at "airy infrastructures" on the North-East Frontier of India in 1945 and 1962, two pivotal moments in the history of Indian state-building. His article investigates the paradox of cartographic anxieties and minimal infrastructure in a highly contested borderland, and how state anxieties can shape the outcome of wars as well as the histories of marginalised peoples by withholding infrastructural development.

References:

Anand, Nikhil. 2017. "The Banality of Infrastructure." *Items*. <https://items.ssrc.org/just-environments/the-banality-of-infrastructure/>

Chettri, Mona. Forthcoming. "Concrete/Fear." In *The Social Properties of Concrete*, edited by Eli Elinoff and Kali Rubali. California: Punctum Books.

Cowen, Deborah. 2017. *Infrastructures of Empire and Resistance*. London: Verso. <https://www.versobooks.com/blogs/news/3067-infrastructures-of-empire-and-resistance>

Davies, Dominic. 2023. *The Broken Promise of Infrastructure*. London: Lawrence & Wishart.

Ellis, Ryan. 2020. *Letters, Power Lines, and Other Dangerous Things: The Politics of Infrastructure Security*. Cambridge, MA: MIT Press. <https://doi.org/10.7551/mitpress/10541.001.0001>

Glick, Robert. 1995. "Freudian and Post-Freudian Theories of Anxiety." In *Anxiety as Symptom and Signal*, edited by Steven P. Roose and Robert A. Glick, 1–16. New Jersey: Routledge.

- Harvey, Penny and Hannah Knox. 2015. *Roads: An Anthropology of Infrastructure and Expertise*. Ithaca, NY: Cornell University Press.
- Jensen, Casper Bruun. 2017. "Pipe Dreams: Sewage Infrastructure and Activity Trails in Phnom Penh." *Ethnos* 82 (4): 627–647.
- Larkin, Brian. 2013. "The Politics and Poetics of infrastructure." *Annual Review of Anthropology* 42: 327–343.
- Masquelier, Adeline. 2002. "Road Mythographies: Space, Mobility, and the Historical Imagination in Postcolonial Niger." *American Ethnologist* 29 (4): 829–856.
- Martínez, Francisco and Tarmo Pikner. 2019. "The Infrastructural Side-Effects of Geo-Politics: Fortuitous Socio-Biological Modifications to Three European Borders." *Roadsides* 1: 18–27. <https://doi.org/10.26034/roadsides-20190014>
- Murzakulova, Asel. 2021. "Sensuous Nostalgia: Insecurity in the Borderlands of the Fergana Valley." *Roadsides* 6: 46–53. <https://doi.org/10.26034/roadsides-202100607>
- Orlova, Vasilina. 2021. "Malfunctioning Affective Infrastructures: How the 'Broken' Road Becomes a Site of Belonging in Postindustrial Eastern Siberia." *Sibirica* 20 (1): 28–57. <https://doi.org/10.3167/sib.2021.200103>
- Paprocki, Kasia. 2022. "Anticipatory ruination." *The Journal of Peasant Studies* 49 (7): 1399–408. <https://doi.org/10.1080/03066150.2022.2113068>
- Plachta, Nadine. 2024. "Stories of Infrastructure and Environmental Justice in Nepal." *IIAS Newsletter* (97): 36–37.
- Rachman, Stanley J. 2019. *Anxiety*. London: Routledge.
- Reeves, Madeleine. 2017. "Infrastructural Hope: Anticipating 'Independent Roads' and Territorial Integrity in Southern Kyrgyzstan." *Ethnos* 82 (4): 711–37.
- Star, Susan Leigh. 1999. "The Ethnography of Infrastructure." *American Behavioral Scientist* 43 (3): 377–91.
- Tyrer, Peter. 1999. *Anxiety: A multidisciplinary review*. London: Imperial College Press.
- Venhovens, Mikel J. H. 2024. "De facto standstill: Ruination and deterioration in the Abkhazian borderlands." *Environment and Planning C: Politics and Space* 42 (7): 1260–75.
- Wu, Ka-ming. 2020. "Infrastructure and its discontent: Structures of feeling in the age of Hong Kong-China dis/connection." *HAU: Journal of Ethnographic Theory* 10 (2): 319–24.

Acknowledgements:

We would like to thank all the authors for their contributions, hard work and inspiring ideas for this collection of *Roadsides*. We are very grateful for the generous grants from the Carlsberg Foundation and the Aarhus University Research Foundation which made it possible to organise a three-day workshop in preparation for this collection. Special thanks go out to the editorial team – Tina Harris, Agnieszka Joniak-Lüthi and Matthäus Rest – for their continued support and help along the way. Finally, we would like to thank all the reviewers who invested their time and energy in reading the articles that are part of this collection: Jason Cons, Laust Lund Elbek, Harmandeep Gill, Madlen Kobi, Duncan McDuie-Ra, Patrick Meehan, Yu Tao, Max Woodworth, Jerry Zee and Juan Zhang.

Cite as:

Chettri, Mona and Mikel J.H. Venhovens. 2024. "Infrastructural Anxieties: An Introduction." *Roadsides* 11: 1-7. <https://doi.org/10.26034/roadsides-202401201>



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Anxious Awakening of the Dormant...

Sindhunata Hargyono

His sister's condition had visibly worsened. She needed medical treatment in the city. The man knew what to do. He had to call the Mission Aviation Fellowship office in Tarakan to request a humanitarian airlift. Turning on his phone, he hoped for a miracle that was not there: cellular signal. The base transceiver station (BTS) was sleeping.¹ Thus began the journey of trying to awaken the BTS. Hastily, he grabbed a jerry can and his motorcycle key. Once the nearby shopkeeper had filled the can with overpriced gasoline, he drove to the hill where the BTS tower stands. He couldn't wait to entrust the jerry can of fuel to that expert of BTS awakening, the operator. To his surprise, though, the operator was not there. He shouted the operator's name to no avail. Hurrying on again with his motorbike, he arrived at the operator's house only to find it empty. He circled around the villages, asking people the operator's whereabouts, but nobody knew. The illusion of control collapsed; emotions resurged. Anxiety about his sister's wellbeing soured into anger. In a last-ditch effort, he repeated the first sequence: shouting the operator's name around the BTS tower. Same result. Red-faced, he flung rocks at the tower, declaring the superfluity of this infrastructural form and damaging its solar panel.²

¹ A BTS mounted on a tower allows nearby mobile devices to access cellular services.

² Reconstructed from different second-hand accounts.

... for Good

The incident described above occurred in Kayan Hulu, a subdistrict of Indonesia's North Kalimantan province. Like most Indonesian border regions, Kayan Hulu has suffered long-term infrastructural violence of the "passive" kind (Rodgers and O'Neill 2012: 407) due to state neglect (Eghenter 2007). This passive violence not only manifests in the lack – if not total absence – of public services in the region, but also in the subdistrict's relative isolation from population centers on the coast.

Between 2012 and 2016, however, anxiety caused by the absence of infrastructure gradually declined as state institutions increasingly targeted Kayan Hulu for development. A combination of political patronage from para-state "border elites" (Eilenberg 2012: 5) at subnational levels and emerging pro-border development by the central government facilitated the unprecedented sprouting of new infrastructures. Two power plants, overhead powerlines and a BTS tower were built. Whenever infrastructure gets planned or constructed (see Gupta 2018), it simultaneously promises "circulation and distribution" as well as "modernity, development, progress, and freedom" (Anand, Gupta and Appel 2018: 3; see also Larkin 2013). Such is the case here. In 2013, as the BTS tower and overhead powerlines were virtually completed, residents had high hopes. Kayan Hulu was "becoming like a city," as one elder told me.

Infrastructures developed between 2012 and 2016 in Kayan Hulu.

Map: ESRI World Imagery via OpenStreetMap
iD-Editor, edited by the author, 2023.



But the story of infrastructure in Kayan Hulu has been a rollercoaster of anticlimactic inclusion and unevenness. Each time a new infrastructural element is seemingly complete, it typically will not operate on a permanent basis. Power plants have been constructed without corresponding powerlines, while a separate overhead powerlines project was completed without there being an actual energy source. Moreover, the BTS tower cannot function reliably due to insufficient gas supply from the regency government.

These infrastructures are either technically incomplete or facing logistical issues; they do not work all the time as is their supposed “modernist” fate (Di Nunzio 2018: 1). Nevertheless, they have become pervasive technical objects embedded in the local landscape, in the process shaping the everyday aesthetic experience of residents. Despite their failure to properly function, these infrastructures routinely convey their potentiality to do so – for example, the diesel power plant’s mechanical noises (i.e. maintenance) and the tower’s beaming red light (i.e. aviation protocol) at night have long become parts of daily life. Residents expect that with the right interventions, these infrastructures will be able to operate for good. They are not broken; they are just dormant.



Overhead powerlines with no power source and the monument commemorating Lencau Ingan, a local historical figure, Kayan Hulu. Photo: Sindhunata Hargyono, 2013.

New infrastructures promise better futures for Kayan Hulu’s residents. Yet, by quickly falling into dormancy, these same infrastructures evoke a prolonged state of potentiality, or “the future’s capacity to become future” (Bryant and Knight 2019: 107). This stretching out of their potential to be realized means that dormant infrastructures generate an anxious temporalizing affect, since their ability to function is out of the hands of local residents. After all, potentialities are equally capable of being impotentialities as long as they are not yet actualized (Agamben 1999: 182). The initial excitement of novel infrastructures, then, turns into a sense of nervousness and unease. Here, a new kind of infrastructural anxiety emerges at the intersection of state neglect and waiting in a situation of extended possibility.

When will the state awaken the dormant for good? Could these non-functioning infrastructures merely represent a glitch in the usual pattern of neglect?



... for a Moment

Living with dormant infrastructures is ironic as residents can access infrastructural objects and interfaces but not the matters they promise. These dormant infrastructures are, nevertheless, a manifestation of the state's rare investment in the region. They evoke "an affectively real and emotionally available" (Larkin 2018: 185) presence of the state. They have become focal points through which residents evaluate the work of the state and their long-deferred rights as citizens. All this sediments politically-charged "affective flickers" (Martínez and Sirri 2020: 853) of frustration and disappointment about the state, ready to become a potent political force at an apt moment. The opening vignette recounts one such moment, where an anxious episode of seeking to awaken the dormant turned into anger which resulted in a politically tangible effect that I will address at the end of this section.

Temporarily rousing dormant infrastructures is as anxiety-inducing as wishing to awaken them for good. If the latter is associated with the act of waiting for the historically unreliable state, the former rests on the illusion of exerting one's agency. This opportunity for temporary awakening is rooted in the BTS tower's distinctive "temporal fragility" (Ramakrishnan, O'Reilly and Budds 2020; see also Joniak-Lüthi 2019). Residents have a degree of control over the BTS's temporary operation, as the local authority allows private residents to procure gasoline and fire up the BTS with the help of a site operator. This

The BTS tower seen from a football field in Long Nawang village, Kayan Hulu.

Photo: Sindhunata Hargyono, 2017.

distinctive infrastructural temporality is troubling for both the residents who wake up the BTS and those who are affected by that awakening. As cellular signal unavailability is the status quo, its sudden appearance disrupts the rhythm of everyday life. Rushing against the uncertain duration of signal availability, people hastily seek to fulfill all their delayed communications. The BTS stirring into life has also been taken as a sign that someone is in medical crisis. A person must be ill, or worse, dead. On one sudden awakening, a woman told me: “This is life... people fall ill, the entire village rejoices [at the sudden availability of cellular signal].”



So, the BTS is inherently anxiety-inducing for those who attempt to awaken it. It does not fit with the common expectation of infrastructure as being “transparent to use, in the sense that it does not have to be reinvented each time or assembled for each task” (Star 1999: 381). The BTS is not transparent in this sense because it has to be reawakened whenever someone needs it to complete a single task. This arrangement inherently induces anxiety because it creates the illusion that its temporary awakening is fully subject to human agency. Awakening the BTS sounds straightforward: procure gasoline, hand it to the operator, and voilà! As the opening vignette suggests, however, this process is an open-ended endeavor contingent on numerous elements beyond one person’s control.

As the illusion of control collapsed, emotions resurged. Sedimented disappointments and frustrations became anger and climaxed in the hurling of rocks. The man was later put on public trial and had to pay a fine. Yet this scandal somehow catalyzed a reconfiguration of state–border region citizen relations, as these actions sparked

Border patrol soldiers stop chatting as cellular signal becomes available and they are able to catch up with loved ones in Java.

Photo: Sindhunata Hargyono, 2017.

debates about what to do with the dormant infrastructures. Local leaders wanted to preserve them in order to maintain a good reputation vis-à-vis the central state in the hope of further investment (Hargyono 2021). Meanwhile, a group of residents circulated a DIY plan to connect pre-existing powerplants to existing overhead lines. Anxious about the possibility of grassroots tampering with state property, local leaders began sending delegates to various national and subnational institutions to pressure state actors to awaken the dormant infrastructures for good. Here, then, the rocks that were thrown at the BTS's solar panel eventually forced local leaders to stop waiting, and made them actively pursue this awakening. A new form of infrastructure politics from the margins was born.

Closing Remarks

As “every infrastructure is an asynchronic timescape” (Joniak-Lüthi 2019: 7), the alignment between human and infrastructural temporalities is not always guaranteed despite dominating the imaginary of modern infrastructural time. In other words, functioning reliably and constantly is just one possible infrastructural temporality among many. Through attending to infrastructures’ “temporal fragility” and “their associated material and affective conditions” (Ramakrishnan, O’Reilly and Budds 2020: 676), we may discover how infrastructures mediate and/or enable situated affective political struggles. By working with a more realistic temporal image – where being dormant characterizes infrastructure’s typical temporality – we see how dormant infrastructures become intertwined with anxiety. Awakening such sleeping infrastructures, whether temporarily or for good, can be a worrisome business brimming with political potential.

References:

- Agamben, Giorgio. 1999. *Potentialities: Collected Essays in Philosophy*. Edited by Daniel Heller-Roazen. Stanford, CA: Stanford University Press.
- Anand, Nikhil, Akhil Gupta and Hannah Appel. 2018. “Introduction: Temporality, Politics, and the Promise of Infrastructure.” In *The Promise of Infrastructure*, edited by Nikhil Anand, Akhil Gupta and Hannah Appel, 1–38. Durham, NC: Duke University Press.
- Bryant, Rebecca and Daniel M. Knight. 2019. *The Anthropology of the Future*. Cambridge: Cambridge University Press.
- Di Nunzio, Marco. 2018. “Anthropology of Infrastructure.” *Governing Infrastructure Interfaces—Research Note 01* (June). London: London School of Economics and Political Science, <https://www.lse.ac.uk/cities/Assets/Documents/Working-Papers/Governing-Infrastructure-Interfaces-Anthropology-of-infrastructure-MarcoDiNunzio.pdf>

- Eghenter, Cristina. 2007. "Of Negotiable Boundaries and Fixed Lines in Borneo: Practice and Views of the Border in the Apo Kayan Region of East Kalimantan, 1900–1999." *Moussons* 11: 133–50.
- Eilenberg, Michael. 2012. *At the Edge of States: Dynamics of State Formation in the Indonesian Borderlands*. Leiden: KITLV Press.
- Gupta, Akhil. 2018. "The Future in Ruins: Thoughts on the Temporality of Infrastructure." In *The Promise of Infrastructure*, edited by Nikhil Anand, Akhil Gupta and Hannah Appel, 62–79. Durham, NC: Duke University Press.
- Hargyono, Sindhunata. 2021. "Development from the Margins: Failing Zones and Suspended Development in an Indonesian Border Village." In *Development Zones in Asian Borderlands*, edited by Michael Eilenberg and Mona Chettri, 211–30. Amsterdam: Amsterdam University Press.
- Joniak-Lüthi, Agnieszka. 2019. "Introduction: Infrastructure as an Asynchronic Timescape." *Roadsides* 1: 3–10. <https://doi.org/10.26034/roadsides-20190012>
- Larkin, Brian. 2018. "Promising Forms: The Political Aesthetics of Infrastructure." In *The Promise of Infrastructure*, edited by Nikhil Anand, Akhil Gupta and Hannah Appel, 175–202. Durham, NC: Duke University Press.
- Larkin, Brian. 2013. "The Politics and Poetics of Infrastructure." *Annual Review of Anthropology* 42 (1): 327–43.
- Martínez, José Ciro and Omar Sirri. 2020. "Of Bakeries and Checkpoints: Stately Affects in Amman and Baghdad." *Society and Space* 38 (5): 849–66.
- Ramakrishnan, Kavita, Kathleen O'Reilly and Jessica Budds. 2020. "The Temporal Fragility of Infrastructure: Theorizing Decay, Maintenance, and Repair." *Nature and Space* 4 (3): 674–95.
- Rodgers, Dennis and Bruce O'Neill. 2012. "Introduction: Infrastructural Violence: Introduction to the Special Issue." *Ethnography* 13 (4): 401–12.
- Star, Susan Leigh. 1999. "The Ethnography of Infrastructure." *American Behavioral Scientist* 43 (3): 377–91.

Acknowledgements:

I would like to thank two institutions at Northwestern University, USA: (1) Equality Development and Globalization Studies (through the Arryman Fellows and Scholars Program) and (2) the Buffett Institute for Global Affairs for funding the research underpinning this article. This work was co-funded by the European Union (European Research Council Starting Grant project: [DigID – Doing Digital Identities](#), grant number: 101039758). Views and opinions expressed are, however, those of the authors only and do not necessarily

reflect those of the European Union or the European Research Council. Neither the European Union nor the granting authority can be held responsible for them.

Cite as:

Hargyono, Sindhunata. 2024. "Anxious Awakening of the Dormant..." *Roadsides* 12: 8-15.
<https://doi.org/10.26034/roadsides-202401202>



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Anxious Atmospheres: Living in the Shadows of Coal

Charline Kopf

Once a traditional Lebou¹ fishing village, Bargny has evolved over the years into a growing industrial zone not far from Dakar, the capital of Senegal. Now the concentration of fine dust particles here exceeds Senegalese regulatory limits by four hundred times. Squeezed between different industries, Bargny's inhabitants anxiously face the impacts of a cement factory, coal plant, new mineral port and the opening of a steel mill. What does this industrial cohabitation entail for residents as well as for the natural and spiritual landscape?

¹ The Lebou are an ethnic group living around Dakar. They are primarily Lebou-Wolof-speaking, and are known for their strong tradition of fishing and for spiritual practices that blend Islamic beliefs with ancestral rituals.

To tease out how anxiety permeates life in Bargny, where I conducted fieldwork in 2024, I take the coal-powered plant, its dust and breakdowns as “affective infrastructure” (Bosworth 2021). I draw on Bosworth's twofold understanding of this concept, where, firstly, infrastructures generate affects such as anxiety, and secondly, in a more metaphorical sense, where affective infrastructure refers to the affects that shape social and political collective bodies including moments of defiance. In the first section, I examine the



atmosphere of anxiety produced by the coal plant and its ashes, emphasizing the sensorial materiality that creates feelings of breathlessness and sonic fear. In the second, I explore how this anxious atmosphere sparks more-than-human and spiritual constellations as a form of affective resistance to the power plant. Here, the residents have invoked the town's protective spirit, which is believed to have safeguarded them from external threats for centuries. Taken together, these dynamics make for an industrial cohabitation composed of atmospheric, infrastructural and spiritual convergences and divergences.

↑ *The Bargny coal plant shrouded in a haze of dust.*

Photo: Charline Kopf, 2024.

Affective Infrastructure and Anticipatory Anxiety

Attending to residents' sensorial experiences helps us grasp the affects generated by the coal-powered plant, where intermittent noise and filthy air contribute to palpable stress and worry within the community. A growing body of literature examines how both human and more-than-human entities perceive and interact with infrastructures through their senses and embodied experiences (Schwenkel 2021), highlighting the discomfort of sweltering houses (Grealy and Lea 2021), the pervasive smell of toxic industries (Welcome 2021) or the mechanical noises that overshadow natural sounds (Bormpoudakis 2021). In Bargny, the power plant's alarming noises sometimes pierce the night, resonating especially loudly in the nearby neighbourhood. Residents now recognize these sounds as signals of a breakdown, though when the site first became

² All names are pseudonyms.



A group of children in the thick air of Bargny.

Photo: Charline Kopf, 2024.

operational they were unaware of the cause. Anta², a community health worker in Bargny with whom I shared many lunches, vividly recalls the moment she heard such noises for the first time and saw a group of children running towards her: “We thought the world was collapsing. The children came rushing to us, shouting. It was awful. They were so frightened they cried, and weeks later they still had trouble sleeping.” Even now, after years of exposure, the sudden night-time noises still interrupt sleep patterns, maintaining a low-level anxiety. This chronic disturbance points to how infrastructure embeds itself into everyday life, unsettling the body’s natural rhythms and creating a form of anticipatory anxiety as residents remain on alert, waiting for the next breakdown or malfunction.

However, it is not just the noise pollution that is an issue; the air quality is also affected, blurring the boundaries between the environment, the body and infrastructure (Graeter 2020; Murphy 2008). On windy days, ash from the power plant becomes more noticeable, blending with the already dust-laden atmosphere from the nearby cement factory. Those with asthma are especially vulnerable at such times. Fatou, my sixteen-year-old neighbour, was absent from school for five days after suffering an asthma attack that caused her to faint. For people like her, the air becomes a medium of unpredictability, one that can trigger frightening symptoms. When she senses increased levels of dust, she uses her mask. Yet the inability to really foresee fluctuations in air quality creates a pervasive sense of vulnerability, where breathing – normally an unconscious act – is transformed into a site of bodily surveillance and management (Zee 2022).

These sensory assaults, from the auditory shock of the plant’s breakdowns to the tactile invasion of polluted air, reveal how material infrastructures shape daily life and people’s apprehensive perception of the slow ruination of their surroundings and indeed their bodies. The atmospheric cohabitation of humans, landscapes and the coal-powered plant generates a tangible anxiety – one that is anticipatory but rooted in past and ongoing sensorial disruptions. The infrastructure’s presence, whether manifested through sound, air or ash, forces residents to maintain constant vigilance, staying attuned to environmental changes that could indicate danger.

Spiritual and Affective Cohabitation

Infrastructures are however not solely characterized by their “death-dealing” effects (Khalili 2021); rather, in their lethal consequences, they also foster the emergence of collaborative constellations that defy these effects. Almost every region in Senegal has a protective spirit. Environmentalist Adama explains that in Bargny theirs is called *Mame N’Dogol*. Its sacred site, a green patch with a water source, contrasts starkly with the grey and black of the adjacent power station. A vocal activist, Adama has protested the coal plant since its opening in 2008 and opposes plans for a new steel mill and mineral port. Beyond protests confronting pollution, he also joined a group led by a traditional Lebou priestess to invoke the spirit. Though he did not grow up believing in the Lebou spirit world, this experience changed his mind: “It’s a [piece of our] heritage that we must preserve.” Adama recounts how the sacred site was once surrounded by a baobab forest but has now seen almost all the trees vanish due to construction of the power plant. He felt apprehensive as the priestess made sacrifices,



recited prayers and declared that the protector spirit would not cohabit with the power station, and was astonished by the result. “[Since then] the plant has always had issues,” Adama explains as we sit in his office. “Built in 2008, it remained inactive until 2018, and nobody can explain its current breakdowns. The priestess’s sacrifices have functioned so far.” Here, the spirit’s influence, summoned by the priestess, accounts for the sonic disruptions described earlier, ensuring the power plant remains impaired as they refuse to cohabit with it.

Adama shows me how the sacred baobab has been imprisoned by the walls of the coal plant.

Photo: Charline Kopf, 2024.

While industrial developments in Bargny erase the sacred landscape with the demise of the baobabs, the anticipatory anxiety around pollution also reawakens the sacred and gives rise to an affective infrastructure of defiance. Adama’s words testify to a renewed interest in spiritual protection even by people who previously did not believe. The site of Mame N’Dogol provides a shared cultural resource for interpreting the threat faced by Bargny’s inhabitants and for creating a common spiritual ground to resist. Here, infrastructural anxiety triggers allying constellations of human and non-human actors that collectively shape how residents act in response to environmental and health threats. These “new practical ontologies” which include divinities, nature and infrastructures (Jensen and Morita 2016: 618) blur the boundaries between material and spiritual realms, and have implications for how we think about capacities for resistance to infrastructural toxicity and pollution.

Yet, at the same time, the engineers of the power plant have also made sacrifices to the spirit by placing milk in specific locations to appease it and reverse the spell that has hindered the plant’s operation. Consequently, divine protection for residents remains uncertain, as anyone can invoke the spirits for assistance and guidance. This relationship must thus be continuously negotiated through offerings, counter-offers,

and acts of care directed toward the spirits to ensure their assistance. Such interactions weave together infrastructure, the surrounding environment and atmosphere, resulting in intimate yet also precarious relationships between humans and spirits (see also Ishii 2017: 699).

Conclusion

The complex atmospheric and industrial cohabitation witnessed at Bargny reveals how intimate, local and spiritual histories shape our understanding of the Anthropocene, particularly highlighting the anxieties that accompany this era (Randle 2021). Experiences of the Anthropocene are variegated and “patchy,” characterized by diverse forms of ruination, as theorized by Tsing, Mathews and Bubandt (2019). In this context, the relationship between residents and the power plant unfolds through multiple layers of interaction and disruption, from frightening noises and suffocating air that harm people’s health to the invocation of spirits. Spiritual elements arise here as more-than-human acts of resistance but can be harnessed to different ends and by different actors. Together, these layers create an affective entanglement, demonstrating how infrastructure shapes not only the physical landscape but also the sensory, spiritual and emotional lives of the community.

References:

- Bormpoudakis, Dimitros. 2021. “Listening to Green Energy: Towards Charming Anthropocenes.” *Roadsides* 6: 81–87. <https://doi.org/10.26034/roadsides-202100611>
- Bosworth, Kai. 2021 “What is ‘affective infrastructure’?” *Environment and Planning C: Politics and Space* 39 (6): 1125–43.
- Graeter, Stefanie. 2020. “Infrastructural incorporations: toxic storage, corporate indemnity, and ethical deferral in Peru’s neo-extractive era.” *American Anthropologist* 122 (1): 21–26.
- Grealy, Liam and Lea Tess. 2021. “Sensing the State in Hot Houses.” *Roadsides* 6: 37–45. <https://doi.org/10.26034/roadsides-202100606>
- Ishii, Miho. 2016. “Caring for Divine Infrastructures: Nature and Spirits in a Special Economic Zone in India.” *Ethnos* 82 (4): 690–710.
- Jensen, Casper Bruun and Atsuro Morita. 2015. “Infrastructures as Ontological Experiments.” *Engaging. Science, Technology, and Society* 1: 81–87.
- Khalili, Laleh. 2021. “Apocalyptic Infrastructures.” *Noema Magazine*, 23 March 2021. <https://www.noemamag.com/apocalyptic-infrastructures/>
- Murphy, Michelle. 2008. “Chemical Regimes of Living.” *Environmental History* 13 (4): 695–703.

Randle, Sayd. 2021. "On Aqueducts and Anxiety: Water Infrastructure, Ruination, and a Region-Scaled Anthropocene Imaginary." *GeoHumanities* 8 (1): 33–52.

Schwenkel, Christina. 2021. "Sensing Infrastructure: An Introduction." *Roadsides* 6: 2–5. <https://doi.org/10.26034/roadsides-202100601>

Tsing, Anna Lowenhaupt, Andrew S. Mathews and Nils Bubandt. 2019. "Patchy Anthropocene: landscape structure, multispecies history, and the retooling of anthropology." *Current Anthropology* 60 (S20): 186–197. <https://www.journals.uchicago.edu/doi/10.1086/703391>

Welcome, Nicholas. 2021. "The Smell of Petroleum: Sensing Toxic Infrastructures." *Roadsides* 6: 54–61. <https://doi.org/10.26034/roadsides-202100608>

Zee, Jerry. 2022. *Continent in Dust: Experiments in a Chinese Weather System*. Berkeley: University of California Press.

Acknowledgements:

I extend my heartfelt gratitude to my interlocutors and friends in Bargny, particularly those referred to as Adama, Anta and Fatou in this paper. I am also thankful for the constructive feedback from the participants and editors of the special issue workshop organized by Mikel J.H. Venhovens and Mona Chettri, and the comments provided by Robert Deakin and Louis-Emmanuel Pille-Schneider.

Funding:

This work was supported by the Epidemic Traces project (NFR Fripro Projekt 324668).

Cite as:

Kopf, Charline. 2024. "Anxious Atmospheres: Living in the Shadows of Coal." *Roadsides* 12: 16–23. <https://doi.org/10.26034/roadsides-202401203>



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Infrastructural Anxieties:

Fengshui Meets China's Toilet Revolution

Yuan Zhang

In the mountain village of Xuhao¹, Shanxi, North China, the state-led 'Toilet Revolution' (厕所革命) campaign has unleashed a complex dynamic of infrastructural desires and anxieties as it collides with the everyday rhythms and ontological moorings of rural life. Launched in 2015 by President Xi Jinping, this ambitious initiative aims to transform the humble latrine in rural China into a showpiece of "hygienic modernity" (Rogaski 2004) – a symbol of the nation's rural revival and a projection of the state's own preoccupations around infrastructural development. Coordinated by multiple ministries, including Agriculture and Rural Affairs, National Health Commission and Housing and Urban-Rural Development, the campaign is implemented locally by county and township governments in collaboration with village committees. Private contractors, hired by local government, typically carry out the construction work.

¹ The author uses pseudonyms for the village, its administrative county, and all interlocutors to protect their confidentiality and anonymity.

In my fieldwork between 2021 and 2024, toilets as infrastructure underscore the ways in which state projects intertwine with domestic experiences. For Xuhao's villagers, the gleaming porcelain fixtures and impermeable septic tanks promise a new era of convenience and cleanliness. Yet even as some eagerly embrace these aspirational technologies, others meet them with unease, worrying about the cosmological, ecological and social disruptions they may bring. These infrastructural anxieties, in turn, generate new forms of resilience and creativity.

At the heart of these anxieties lies the troubled interface between the spatial logics of modern sanitation and the geomantic principles of *fengshui* (风水, literally 'wind-water'²) that have long governed the alignment of Xuhao homes. For generations, villagers have carefully oriented their dwellings to harness the flow of vital energies or *qi* (气), seeking to ensure the health and prosperity of their families (Bray 1997; Stafford 2000). This cosmology is not only spiritual but also utilitarian. In this worldview, toilets are relegated to low and distant corners of the courtyard, separate from the raised halls and cooking fires which are usually located towards the northern end of a dwelling (Knapp 1992). Moreover, the journey of waste is tightly braided into the agricultural cycle, as night soil is gathered to fertilize the corn and vegetable crops that sustain the village.

² Chinese geomantic art of spatial arrangement to harmonize with natural energies.



But as the Toilet Revolution sweeps through Xuhao, it upends these long-settled configurations of space and substance. The campaign's signature septic tanks, hailed as a hygienic seal against contamination (Santos 2021), sever the arterial link between latrine and land, interrupting the metabolic pulse of the village. Moreover, this modernizing movement is not solely state-led but also actively practised by villagers who build indoor toilets using the pans distributed by the state. Villagers themselves pursue a more modern, or *shixin* (时新, literally 'timely-new') lifestyle through these infrastructural transformations.

Panorama of Shou's courtyard house under fengshui influence.
Photos: Yuan Zhang, 2022.

Yet this pursuit of modernity does not come without anxiety. The newly furbished commodes encroach on the main inner room of the home, their very presence threatening to disrupt the delicate balance of high and low in the fengshui cosmology. For people raised on such principles, these shiny fixtures portend not progress but possible cosmological disorder. However, most villagers I met admit that the precise nature of this metaphysical disturbance is difficult to articulate clearly. Their unease is more intuitive than explicable, a vague feeling that the spatial and spiritual order of their homes has been unsettled. This suggests that the fengshui-related anxieties surrounding the intrusion of the toilet are not necessarily rooted in a coherent system of beliefs but rather emerge from a more diffuse sense of ontological discomfort.

Such concerns suffuse the story of Shou, a 91-year-old villager whose sons recently installed a ceramic toilet in her side room. Though the gleaming toilet eases the bodily burdens of age, Shou worries about its possibly inauspicious location. She pointedly refers to it as a ‘chamber pot’ (尿盆), a mobile receptacle rather than a fixture, to assuage her cosmological concerns while still benefiting from its convenience. To mitigate the potential metaphysical disturbance, Shou labours to contain the new facility’s polluting potential, scrubbing the toilet daily and hanging an embroidered curtain in front of it as a symbolic shield.



Shou's new toilet in her side room.

Photos: Yuan Zhang, 2022.

Shou's toilet tale epitomizes the way in which older Xuhao villagers seek to reconcile the practical demands of aging bodies with the cosmological imperatives of fengshui. Her makeshift bathroom is not a seamless sanctuary of modern convenience but a space of semiotic tension and material compromise, a patchwork of new and old stitched together through everyday acts of cleaning, covering and reinterpreting. In this way, Shou's side room becomes a microcosm of the wider village, a site where the Toilet Revolution's abstract ideals of hygiene and comfort must be laboriously adapted to the concrete concerns of cosmology and custom.

Embroidered curtain in front of the toilet.

Photos: Yuan Zhang, 2022.



The concerns swirling around Xuhao's toilets are not just cosmological but also diversely contextualized. Age emerges as a significant factor, with older residents (60+) generally expressing more anxiety that the Toilet Revolution's standardized facilities will sever their vital connection to the land and its cycles, uprooting them from the agricultural and fengshui rhythms that have long sustained them. Yet, simultaneously, they are attracted to the pursuit of convenience and care for younger generations. Middle-aged villagers (40–60) often display a mix of pragmatism and tradition, while younger residents (under 40) are more likely to embrace the changes without significant cosmological worry.

Another primary concern among villagers is that although the state aims for hygienic modernity, it is often families who must bear the costs of maintaining their own private toilets. Wealthier households have more resources to implement creative solutions

to perceived fengshui issues, with some incorporating specific architectural elements such as decorative towers to restore spatial hierarchies. However, these households are also more likely to have already modernized their homes, reducing the impact of the state-led campaign.

In Xuhao, rather than simply obstructing the Toilet Revolution, these anxieties play an active role in shaping its uneven unfolding. Faced with cosmological and practical unease, villagers adapt and improvise, forging hybrid solutions that interweave old and new. Some splice unauthorized pipes to siphon waste into fields, circumventing the sealed septic tanks. Others adorn new bathrooms with geomantic objects to deflect inauspicious energies. Yet others opt out entirely, quietly maintaining their old latrines. Across these diverse tactics, villagers mobilize the productive potential of anxiety to refigure the campaign's designs into the fabric of rural life, asserting their own agency in various ways. This challenges framings of anxiety as a purely negative or debilitating force, revealing instead its role as a vital affective current that animates the continual remaking of Xuhao's material and social worlds.

Crucially, Xuhao's anxieties around toilets and fengshui are deeply intertwined with larger issues of village sustainability, intergenerational care and shifting cultural norms. The collision of the hygienic and the cosmological is not a localized clash, but one that echoes the wider dilemmas of rapid transformations in rural China. As the Toilet Revolution remakes sanitary infrastructures, it also reshapes kinship bonds, ritual practices and ecological flows, catalyzing new assemblages that meld the micro-politics of waste with the macro-politics of modernity. Far from a seamless grid of modern sanitation, the campaign's infrastructure emerges as a fragmentary, porous and piecemeal patchwork. In this sense, the anxieties that pervade Xuhao's toilets are not merely reactive symptoms of a tradition-bound peasantry but productive forces that shape the very form and meaning of modern sanitation in rural China.

In the flickering interplay of celestial towers and earthly commodes, we glimpse the uneven weft of China's rural revival, where the ancient art of geomantic arrangement meets the temporal anxieties of infrastructural change. Even as the Toilet Revolution heralds a new era of hygienic rationality, it has unleashed a torrent of cosmological creativity in Xuhao, as villagers strive to align the alien hardware of the state with traditions, spirituality and everyday hygiene. The infrastructure of toilets thus serves as a field of contact zones and sites of negotiation between the material and the symbolic, the hygienic and the cosmic, the old and the 'timely-new'.

References:

- Bray, Francesca. 1997. *Technology and Gender: Fabrics of Power in Late Imperial China*. Berkeley and London: University of California Press.
- Knapp, Ronald G. 1992. *Chinese Landscapes: The Village As Place*. Honolulu: University of Hawai'i Press.

Santos, Gonalo D. 2021. *Chinese Village Life Today: Building Families in an Age of Transition*. Seattle: University of Washington Press.

Stafford, Charles. 2000. *Separation and Reunion in Modern China*. Cambridge: Cambridge University Press.

Rogaski, Ruth. 2004. *Hygienic Modernity: Meanings of Health and Disease in Treaty-Port China*. Berkeley and London: University of California Press.

Cite as:

Zhang, Yuan. 2024. "Infrastructural Anxieties: *Fengshui* Meets China's Toilet Revolution." *Roadsides* 12: 24-29. <https://doi.org/10.26034/roadsides-202401204>



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Not Yet Connected:

Anxieties of Rural Electrification

Kirsten Milo Nielsen

Introduction

In 2019 at a trading centre in northern Uganda which had been electrified through the national grid five years earlier, I was interviewing Onyango, a man in his mid-forties whose house was among those that had not yet been connected. Since I had already experienced the grid to be highly unreliable, causing difficulties for those who ran businesses reliant on the availability of electricity, I was trying to make a case for solar panels as an alternative. Onyango was a primary school teacher, but he and his wife ran a small restaurant on the side to make ends meet. They already owned a 100-watt solar panel for lighting and phone charging. When I asked if they had considered upgrading the solar panel instead of getting connected to the grid, Onyango answered that they would keep the solar panel as a backup and perhaps buy a bigger battery, but he still wanted to pursue grid connection.

The conversation continued like that for a little while – me arguing for solar and him arguing for the grid – until he finally contended: “The place is now developing. Why should I not be developed?” He had said this in a raised voice and was seemingly upset, so I feared that I had gone too far and what had been driven by an honest concern about the effects of the unreliable grid had turned into me directly questioning his choices and entitlement. Yet, recalling this conversation later allowed me to reflect on how infrastructure developments can generate anxieties in certain contexts.

In this article, I argue that Onyango’s expression of anxiety during our conversation emerges from a broader experience of watching others hook up to the grid while his own prospects of connection looked less certain. It shows that energy vulnerability is deeply relational (Cross 2019) and pinned upon the promises of centralized infrastructures despite their unreliability, associated risks and the availability of alternatives, such as solar (PV) modules in this case.

Infrastructural Vulnerabilities in Northern Uganda

While infrastructures are usually associated with modernity, progress and the general improvement of life, anthropologists have noted how infrastructural development can contribute to the production of sites of vulnerability (Anand, Gupta and Appel 2018). In Lalogi, a trading centre in northern Uganda with a population of around 1,300, people initially imagined that the availability of grid electricity, facilitated through Uganda’s state-led rural electrification programme, would bring economic opportunities and make life easier. These hopes and imaginaries emerged in the aftermath of twenty years of violent conflict that ravaged the region from 1986 to 2006, and which left it with an “infrastructure deficit” compared to the rest of the country (UNDP 2015: 123). Similar to the ways in which anthropologists have described electrification’s symbolic value in other contexts (Winther and Wilhite 2015), people in Lalogi saw the arrival of the grid as a sign of modernization, development and national inclusion. They envisaged opening businesses, being relieved of strenuous labour and getting access to better healthcare. However, what they actually received was a punctuated supply of electricity that only partially fulfilled these hopes and imaginaries. Caused by a self-reinforcing combination of infrastructural breakdowns and lack of maintenance, exacerbated by the economically precarious situation of the distributor (Nielsen and Eriksen 2022), power cuts came to be expected. But their occurrence and duration remained unpredictable, sometimes lasting for hours, at other times several days and even continuing for weeks on end.

One particular cause of unreliable electricity supply was so-called *pole magoro*¹ (Eng./Ach. for ‘weak poles’). You did not have to travel far outside of the trading centre before encountering the first pole leaning dangerously over the road. The electricity cooperative blamed this on traditional farming practices, notably burning the fields after harvest, which would then ignite the wooden electricity poles. There were indeed poles along the line that were visibly burnt; however, locals claimed that it was due to wild bush fires, and that the practice of burning the fields in a controlled manner would in fact prevent such incidents. They instead complained that the state had erected poor-quality poles that put people in danger. As the owner of a convenience store remarked:

¹ The local language in Lalogi is Acholi Luo but many of my interlocutors were fluent in English. Thus, using English loanwords was common when speaking Acholi Luo.

“The poles that these people planted, they are very weak. They can anytime break and cause death because when the pole falls down when there is power in it, it can kill!” In early 2019, a stretch of the line fell and electrocuted a cow that was passing below. This was a sole incident, but nonetheless a clear sign of electricity’s lethal potential.



↑ ***A broken electricity pole that has been provisionally repaired leans dangerously over a field.***

Photo: Kirsten Milo Nielsen, 2019.

← ***A lineman working to replace a faulty electricity pole.***

Photo: Kirsten Milo Nielsen, 2019.

During my fieldwork, I focused specifically on small-scale business owners, most of whom were young men. Electrification had paved the way for new types of work and business ventures in Lalogi, including welding workshops, printing and copying services, and electrified grinding machines. But their dependence on the grid made them vulnerable. When the power went off, business owners were forced to close their shops. Those who ran small restaurants were less dependent on electricity, but prolonged power cuts resulted in losses for them, too, when food stored in refrigerators or freezers turned bad. Unreliable electricity also made it difficult to plan new investments. As the owner of a casino – a room with two slot machines – told me: “I was thinking of starting another business here, but as I see the power is not constant it is affecting my plan.” Electrification in Lalogi thus presents a case ripe with potential triggers of anxiety, from the overhanging danger of weak poles and wires to the uncertainty involved in running a small business in the context of unreliable electricity supply. Yet, it was during my interview with Onyango that I first witnessed the expression of anxiety as an embodied experience of distress and underlying worry about the future (Tyrer 1999) in relation to the electricity grid.



Pouring groundnuts into an electric grinding machine. Businesses in Lalogi that rely solely on grid electricity are vulnerable to power cuts.
Photo: Kirsten Milo Nielsen, 2019.

Real Power versus Solar Power

The main barrier to getting connected in Lalogi is the price of wiring one's house. The exact cost depends on the size of the dwelling, the number of sockets and lightbulb holders, and the deal that one is able to strike with the electrician doing the wiring. In practice, this means that many low-income households are not connected even where the grid is available. In Lalogi, approximately half of the buildings were connected in 2019, without taking into account traditional huts that are also a common type of dwelling but which are not suitable for grid connection. Like Onyango and his family, many households and businesses without grid electricity used solar power, which became widely available and affordable in northern Uganda at around the same time as the grid was constructed. Those who had obtained grid connection used solar panels or diesel generators as backups when the grid went down, which enabled them to extend their hours with access to electricity.

Onyango was not interested in upgrading his solar panel as an alternative to pursuing grid connection. His view reflects the general attitude among people I spoke to in Lalogi, where connection was widely desired and grid electricity labelled “real power” - in comparison to solar panels and gadgets such as lamps and radios that were referred to simply as “solar”. Among aid donors, NGOs and private companies, decentralized solar technologies have been promoted as a means for people in places like Lalogi to leapfrog into the post-fossil-fuel power future, simultaneously addressing uneven patterns of energy access and the demand for low-carbon energy transitions (Cross and Murray 2018; Ulsrud 2020). However, people in Lalogi saw solar first and foremost as an inferior, temporary solution only to be used as the primary source of electricity until they could afford to be hooked up to the grid. Their preference for grid electricity reflects Dean's (2022) ethnographic observations in Zanzibar. There, after the initial excitement about solar modules dissipated, solar power was viewed as “a stigmatized technology of the poor” and understood in terms of waiting, anticipation and exile (Dean 2022: 64).



Solar (PV) panels leaning against a telecom provider booth next to power lines forming part of the grid.

Photo: Kirsten Milo Nielsen, 2019.



While electrification is always uneven, creating exclusion as well as connection (Cross 2019), it is striking that in a context where the infrastructure poses both danger and uncertainty for those running small businesses, and with alternatives such as solar modules widely available, grid connection is still highly desired. Based on the ethnographic example presented, I have demonstrated that here it is the experience of not being connected to the unreliable infrastructure and the uncertainty of whether one will be able to get connected in the future that generates anxiety, thereby underscoring the strong symbolic value attached to centralized infrastructures even when they do not work as intended.

A Sunny Money solar-powered lamp.
Photo: Kirsten Milo Nielsen, 2019.

References:

- Anand, Nikhil, Akhil Gupta and Hannah Appel (eds). 2018. *The Promise of Infrastructure*. Durham, NC: Duke University Press.
- Cross, Jamie. 2019. "No Current: Electricity and Disconnection in Rural India." In *Electrifying Anthropology: Exploring Electrical Practices and Infrastructures*, edited by Simone Abram, Brit Ross Winthereik, Thomas Yarrow, 65–82. New York: Bloomsbury.
- Cross, Jamie and Declan Murray. 2018. "The afterlives of solar power: Waste and repair off the grid in Kenya." *Energy Research and Social Science* 44: 100–109.

Dean, Erin. 2020. "Uneasy Entanglements. Solar Energy Development in Zanzibar." *The Cambridge Journal of Anthropology* 38 (2): 53–70. <https://doi.org/10.3167/cja.2020.380205>

Nielsen, Kirsten Milo and Thomas Hylland Eriksen. 2022. "The Problem of Power: Partial Electrification in Northern Uganda." *Anthropology Today* 38 (4): 15–18. <https://doi.org/10.1111/1467-8322.12743>

Tyrer, Peter J. 1999. *Anxiety: A Multidisciplinary Review*. London: Imperial College Press.

Ulsrud, Kirsten. 2020. "Access to electricity for all and the role of decentralized solar power in Sub-Saharan Africa." *Norwegian Journal of Geography* 74 (1): 54–63.

UNDP, United Nations Development Programme. 2015. *Uganda Human Development Report 2015: Unlocking the Development Potential of Northern Uganda*. New York: United Nations Organization. <https://hdr.undp.org/content/uganda-human-development-report-2015>

Winther, Tanja and Harold Wilhite. 2015. "Tentacles of Modernity: Why Electricity Needs Anthropology." *Cultural Anthropology* 30 (4): 569–77. <https://doi.org/10.14506/ca30.4.05>

Cite as:

Nielsen, Kristen Milo. 2024. "Not Yet Connected: Anxieties of Rural Electrification." *Roadsides* 12: 30–36. <https://doi.org/10.26034/roadsides-202401205>



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Preparing for Rain: Flood Defences in Accra's Waterways

Afra Foli

Accra's rainy season is accompanied by floods every year, and so residents, especially those living by the waterways, anticipate overflow with significant anxiety. Warnings abound both in the news and in daily conversation, and people share memories of past flooding events. Citizens often seek to prevent disaster by taking matters into their own hands. They construct flood barriers using sandbags, cement, concrete and rubble left over after construction. In this article, I discuss the politics that arise around these interventions. As residents' fears mobilize this infrastructural response, it maps onto and shapes the spatial politics of the city's watercourses in ways that touch on affect, materiality and party rivalry.



Self-constructed Flood Interventions

Accra's waterways are naturally occurring rivers and streams that primarily facilitate the runoff of surface water. They also channel various kinds of solid and liquid waste. As the conurbation grows in terms of population and across space, pressure increases on waste management and the drainage of surface water. The vulnerability to flooding in Ghanaian cities is the result of interlinked socio-political processes manifesting against a backdrop of rapid urbanization (Poku-Boansi et al. 2020; Cobbinah et al. 2023). During my research, engineers and technocrats impressed on me that the infrastructure was "overwhelmed."

Sandbags and tires serve as flood barrier in Mempeasem, Accra.
Photo: Afra Foli, 2020.

A concern for future flooding motivates different kinds of infrastructural intervention. I build on the recognition that the creation and maintenance of infrastructure can and does involve actors other than the state (Mwaura and Lawhorn 2023), opening up my analysis to the relational and affective processes through which storm drains are constructed. From this perspective, residents' efforts are a response to an increasingly complex set of dynamic factors that shape the flows of water through the city (Acosta and Ley 2023). Precipitation patterns become harder to predict, the built environment changes runoff and flows in the watercourses, while the state's capacity to protect and to help after disaster is also uncertain. In addition, residents must contend with infrastructure that is unreliable, whether self-constructed or centrally organized, and

deal with the fickleness of others, whether as collaborators in responding to the threat of flood or as upstream neighbours whose interventions may change the intensity of flow downstream.

In June 2018, a doctor was swept off a road bridge in her car by strong floodwaters in the Teshie neighbourhood. The death of this young woman was brought to my attention by residents of Teshie Demo during my research on drainage infrastructure in 2020 and 2021. When I asked about people's interventions in the watercourses I was told about this tragedy, which served as warning of what the rains could bring. In the months leading up to the rainy season, which usually starts in May, pressure mounts for those living in flood-prone areas to prepare adequately. An elderly man in that neighbourhood – I will call him Nana – expressed in hyperbolic terms that he had built his high wall out of concrete blocks in preparation against the “tsunami” that would one day come. Nana lived by the Kordzor waterway, and the wall he constructed was two meters high, covered in tiles and sat on top of a concrete base that stretched to the bank of the waterway. He explained to me that he worked outside of Accra but he called from time to time when it rained to find out how things were going. Usually, his family would tell Nana that the gutter (as the waterway is generally called) was full but not flooding.

Elsewhere in the city, by the Odaw river, I spoke with a woman in her sixties, Esi, who had been living in a compound house in the low- to mid-income neighbourhood of Alajo for thirteen years.¹ Every rainy season it would flood, so before June Esi and the other families in the compound made preparations. She explained in Ewe: “Before leaving the house in this period we ready the building and our belongings so that they are protected.” Esi started this after the floods of 3 June 2015, when she lost everything.² In 2018 the landlord increased the rent and used part of the extra funds to build a low wall around the property. The wall and the raised entrance serve as protection from the floods. All the tenants raised their doorways as well, at their own cost. In 2005, a concrete drain had been constructed on the other side of the bridge, just fifty metres away. It prevented flooding in that area, but Esi's side remained as it was. She said that because the elected member of parliament thought of their neighborhood as a National Democratic Congress (NDC) stronghold, he did not build new drains. Despite being their local representative, he was affiliated with the New Patriotic Party (NPP).³

Esi also relayed how one neighbour had rented a small excavator and began dredging their gutter to increase flow. He was not a politician, just an ordinary citizen; however, when he started some young men told him that this was not what they desired – they wanted the gutter to be lined with concrete like the other side. He got angry and left. “The elder women in the community, myself included, went to plead with him and he came back to finish the job.”

These narratives demonstrate what is at stake for residents as they negotiate the risk of flooding. In retelling the story of the fatal disaster with the doctor on the bridge, or in invoking a “tsunami,” my interlocutors expressed the weight of stress they experienced living along the waterway. The intensity of these feelings has not immobilized them. Their justified fears have fuelled individual or collective efforts to intervene in material terms, involving (micro-)political dynamics.

¹ A typical compound house consists of multiple households occupying a single building complex (Manful 2010).

² June 2015 saw some of the worst floods in Accra's history. A fuel station where people were sheltering from the storm caught fire and many people died.

³ The NDC and NPP are the two largest political parties in Ghana.

Infra-politics of Flood Response

The experiences of and responses to flood risk are not equal. In documenting infrastructural interventions along the waterway, I also noted the discrepancy between makeshift interventions such as sandbag barriers created by poorer residents and the cement and concrete reinforcements available to the city's upper classes. For some residents the threat of rain caused concern as to whether one's home would stay dry or even remain standing. While both Nana and Esi were worried about flooding and so took infrastructural measures, there were differences in the resources at their disposal. Their responses to anxiety were mediated by socio-economic status. The ubiquitous fear of floods did not translate to shared material configurations of infrastructure.

Interventions into the waterways are both the medium and the materialization of negotiations about flood risk and about politics (Ojani 2023). This is evident at the micro-level in interactions between neighbours, as they forged coalitions but also contested each other's activities vis-à-vis the waterways. Residents coordinated with their neighbours, sometimes successfully and sometimes clashing over how best to manage the risk of flooding, while also continuing to make claims on the government. They formed groups to pool funds, carry out construction work and pressure local politicians to intervene. I often saw these forms of collaboration at the scale of a compound or a street, for example where residents contributed either their money or their labour in the construction of a gutter to channel runoff. This was not always a smooth process, reflecting the fact that while fears may be shared, the impact of flooding and the state's response to self-constructed flood barriers are not the same among all residents.



Sand and nylon bags used to construct flood barriers in the upmarket and upstream neighbourhood of East Legon, Accra.
Photo: Afra Foli, 2020.

In addition, I witnessed politics at work between residents and their government representatives, as drainage became the site of negotiations about authority (Foli 2023) and belonging (Anand 2017). Esi's reading of electoral politics in the construction of the concrete drain in the Alajo neighborhood exemplifies this. Regardless of its veracity, her feeling that local politicians designate drainage infrastructure based on party politics reflects a common understanding of how infrastructure is provided. It reified lines of separation in the neighbourhood, heightening her worries with regard to the upcoming rainy season.

Flood barrier in the mid-stream and mixed-income East Airport neighborhood, Accra.
Photo: Afra Foli, 2020.



In the end, the DIY efforts of Accra's residents to protect their homes, their livelihoods and indeed their lives demonstrate infrastructure as a locus of material and affective negotiations (Scaramelli 2019). By paying attention to these tangible manifestations of flood anxiety, it becomes clear how unevenness is exacerbated, reflecting patterns of difference elsewhere (Batubara et al. 2018). However, in the moments of collaboration I see potential for anxiety to mobilize toward collective action. As the state struggles to expand infrastructural capacity to match the recurring floods⁴, these everyday interventions indicate that infrastructural anxiety could shape diffuse but interconnected urban collectivities that connect to but go beyond top-down infrastructural development.

⁴ These urban floods have been recurring for decades. In a 2024 press conference, a project coordinator termed them "perennial" (Asare 2024).

References:

- Acosta, Raúl and Lukas Ley. 2023. "Urban Bioinfrastructure: An Introduction." *Roadsides* 10: 1–8. <https://doi.org/10.26034/roadsides-202301001>
- Anand, Nikhil. 2017. *Hydraulic City: Water and the Infrastructures of Citizenship in Mumbai*. Durham, NC: Duke University Press.
- Asare, Benedicta Adobea. 2024. "Measures are implemented to address perennial flooding during rainy season – GARID Project Coordinator." *My Joy Online*, 13 April. <https://www.myjoyonline.com/measures-are-implemented-to-address-perennial-flooding-garid-project-coordinator/>
- Batubara, Bosman, Michelle Kooy and Margreet Zwarteveen. 2018. "Uneven Urbanisation: Connecting Flows of Water to Flows of Labour and Capital Through Jakarta's Flood Infrastructure." *Antipode* 50 (5): 1186–205.
- Cobbinah, Patrick Brandful, Clifford Amoako and Ata Senior Yeboah. 2023. "Informality and the politics of urban flood management." *Environment and Planning C: Politics and Space* 41 (4): 826–43.
- Foli, Afra. 2023. "The heterogeneous politics of infrastructure: Claims of authority in Accra's drainage." *Environment and Planning C: Politics and Space* 41 (7): 1459–73.
- Manful, Kuukuwa. 2010. "The Ghana Compound House Typology." *Kuukuwa Manful Blog*. <https://kuukuwa.com/blog/34ys6tmnpnkdpmedifv5c5aj45ziv4>
- Mwaura, Mwangi and Mary Lawhorn. 2023. "A Biotoilet for the Future?" *Roadsides* 10: 42–47. <https://doi.org/10.26034/roadsides-202301006>
- Ojani, Chakad. 2023. "Material Engagements with Fog in Lima." *Roadsides* 10: 17–25. <https://doi.org/10.26034/roadsides-202301003>
- Poku-Boansi, Michael, Clifford Amoako, Justice Kufuor Owusu-Ansah and Patrick Brandful Cobbinah. 2020. "What the state does but fails: Exploring smart options for urban flood risk management in informal Accra, Ghana." *City and Environment Interactions* 5: 100038.
- Scaramelli, Caterina. 2019. "The delta is dead: Moral ecologies of infrastructure in Turkey." *Cultural Anthropology* 34 (3): 388–416.

Cite as:

Foli, Afra. 2024. "Preparing for Rain: Flood Defences in Accra's Waterways." *Roadsides* 12: 37-43. <https://doi.org/10.26034/roadsides-202401206>



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Infrastructure and Anxiety of Return

Jiraporn Laocharoenwong

Introduction

Refugee camps are often places of uncertainty and anxiety. Makeshift living conditions, little contact with outside communities and no right to work or do other activities harm refugee wellbeing (Bjrertrup et al. 2018). Powerless to influence asylum decision processes, refugees and undocumented migrants are forced to wait, which can be detrimental to their mental health (El-Shaarawi 2015; Phillimore and Cheung 2021). Hage (2009) has termed this situation “stuckedness,” while Khosravi (2021: 203) articulated the notion of “border waiting,” referring to “all waiting times that citizens and racialized citizens are pushed towards.”

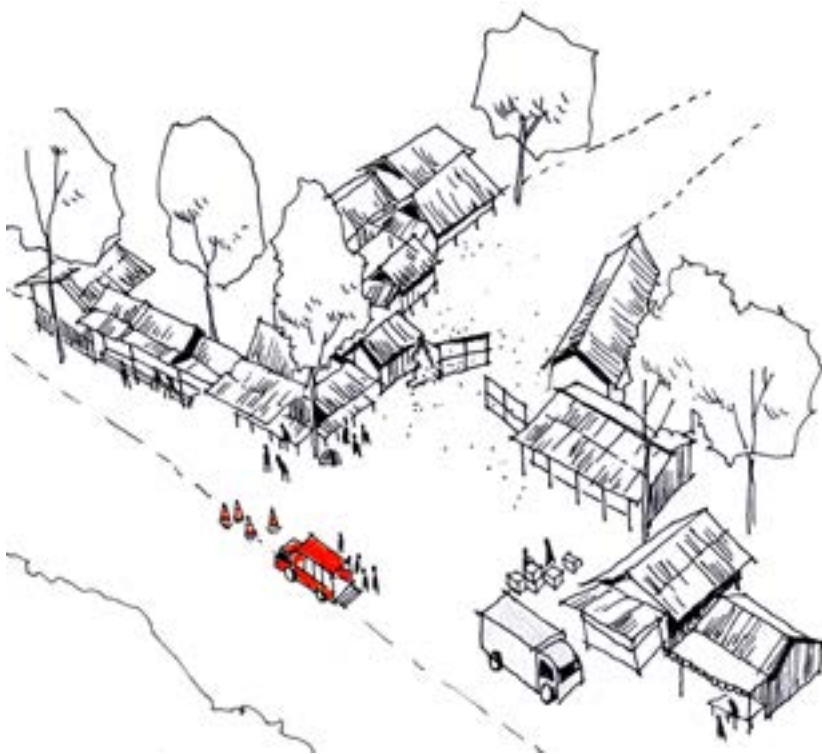
In the case of long-term camps which have been in existence for decades, this article proposes that anxiety is experienced differently, because of the way temporality is perceived. In the Mae La camp on the Thailand–Myanmar border, anxiety and uncertainty have given way to an attention to the present, which is channelled into building durable infrastructure. This has anchored refugees and attached their lives to the camp, which they now call home. Infrastructure and temporal logics have thus turned waiting into living. Anxiety about their current situation in the camp, I argue, thereby morphs into anxiety about the future of the camp itself.¹

¹ This article is based on long-term ethnographic fieldwork in the refugee camps along the Thailand–Myanmar borderland from 2015 to 2024.

Permanent Temporariness and Infrastructure

Mae La refugee camp was formally established in 1984 as a response to political conflict and war between the Burmese military and various ethnic armed groups. Currently, it hosts approximately forty thousand refugees (IOM 2020). Despite the fact that the camp has been there for almost four decades, the Thai government still considers it as ‘temporary shelter’ (พื้นที่พักพิงชั่วคราวสำหรับผู้หนีภัยจากการสู้รบ). This temporary condition functions as a narrative of the status quo to inform refugees that they are only guests, allowed to stay for just a short period – with the implied expectation that the camp’s inhabitants will return to their homeland someday (Betts and Bloom 2014). Over time, the temporary condition of the camp has become complex due to protracted wars and political-economic instabilities in Myanmar. Durable solutions provided by international communities have helped resettle registered refugees, but many unregistered refugees remain in nine refugee camps in Thailand, the largest being Mae La. The conditions in the camp have therefore become a situation of “permanent temporariness” (Bailey et al. 2010: 125), “frozen transience” (Bauman 2002: 345), or of a place where temporariness and permanence coexist (Herz 2017).

As a camp endures, longer-lasting and more durable shelter and infrastructure tends to replace initial makeshift structures – for example the houses in Palestinian camps in Lebanon (El Masri 2020) and the public buildings that used stucco and concrete materials in refugee camps of the Western Sahara (Herz 2017). In Mae La, a similar transformation of camp space has taken place, through the building of more robust infrastructure. There are three different types of infrastructure at Mae La: Thai government, humanitarian and refugee-built.



*One of the camp gates:
the Thai security staff
patrol the gate to check
refugees going in and out.
Drawing: Siriluck Songsri,
2020.*

The Thai government segregates the camp from outside communities with barbed wire, gates and military checkpoints, controlling the flows of refugees and undocumented migrant workers going into and out of the camp and along the border. Inhabitants who want to go outside in order to visit a hospital, a school or a relative's house must pass through the checkpoints guarded by local Thai authorities.

There are several humanitarian infrastructures in the camp, including a primary healthcare hospital, schools and a disability support centre. These are operated by humanitarian agencies and the refugee camp committee. Education available ranges from kindergarten up to college level, including vocational training and religious education. Inhabitants with suitable knowledge and administrative skills are hired to work as local camp staff, taking up roles such as medic, teacher, rations provider or administrator. This infrastructure of care and services not only somewhat mitigates the miserable conditions, but also transforms the camp into a more liveable and emotionally fulfilling space (cf. Feldman 2015). Naw Gyi, who works as a medic at a camp hospital, shared the sense of time and liveable conditions that exist here:

“Conducting day-to-day life here is not easy, but better than what I experienced in Myanmar. Because when the armies fought, we had to flee and stayed in the forest for maybe a week or months. Here, I can work and earn some money. My children can go to school. To see my children grow up and pass from grade one to grade six, it already gives me a sense of continuity and ordinary life” (Fieldwork interview, January 2020).



Temporary house transformed into a concrete building.
Photo: Jiraporn Laocharoenwong, 2020.

Naw Gyi's experience at Mae La shows a two-way interaction where infrastructure not only provides a service but also reduces refugees' anxiety by giving a sense of continuity and agency to those who participate in it.



↑ Water system built by the camp section committee.

Photo: Jiraporn Laocharoenwong, 2018.

← This concrete bridge, built in 2015, was still in use during my fieldwork in 2024.

Photo: Jiraporn Laocharoenwong, 2024.

Finally, there is the housing and community infrastructure built by refugees themselves. They renovate houses using durable materials, and carry out floor and roof extensions, making the camp a more liveable space. To solve conflicts and tensions over long queues for water, a pipeline was constructed by the camp committee that itself comprises refugees. This required some complex infrastructure. Mae La has a fleet of streams at the back of the camp, but that raw water needs to be pumped into a tank and then purified. To lay the pipelines, camp section staff had to understand the topography of the area, before creating a line going to every house. A concrete bridge was built in 2015, also with money and labour contributed by camp-dwellers. Other examples of refugee-initiated projects are infrastructure that facilitates communal life: teahouses where people watch football together, temples and other religious buildings where they congregate and pray, markets, and places for ceremonial purposes and celebrations.

Anxiety of Return

From 2015 to 2019, the voluntary return program for refugees, introduced by international civil society organizations, was a cause for concern and the topic of regular discussions at Mae La and in other refugee camps in Thailand. The recurring question from many refugees and camp inhabitants whom I met was: “Will the Thai government send us back to Myanmar, and if so, will it be soon?” They shared their worries about returning to their homeland – which for most was Karen state in Myanmar – such as their concerns about the political situation there and the living conditions. They also talked about their dream of staying in Thailand and becoming Thai citizens after several years in the camp, and their attachment to the place where they had lived for so long. All of these individuals gave out a strong message that they did not want to return. An excerpt from my conversation with Saw Tu Tu, a camp section leader, represents the refugees’ anxiety well:

“Of course the news about closing the camp worries me. I do not want to return to Myanmar. I would like to live [in Mae La camp] until I die. I left Karen state when I was fifteen years old, now I am sixty years old. I have often crossed the border to visit my relatives in the village or work with many local communities in Karen state. I love Karen state and its people, but I feel safe and settled in the camp. My family also lives together with me. My children were born in the camp ... I have been working as a camp committee member for more than twenty years. Our team built a lot of infrastructure for the refugee community. We laid out a network of water pipelines with the help of volunteers from the USA. The wooden bridge which was slippery to cross during the rainy season was replaced with a concrete one. Some parts of the busy road were paved with cement, so the camp-dwellers who live near the road would not get affected by dust when a motorcycle passes. Those infrastructures have been built by refugee labour and their money. We don’t know when the camp is going to close – maybe the day after tomorrow, next month or next year. We built it because the community needs it” (Fieldwork interview, November 2018).

As temporal logics at Mae La camp over four decades have changed it from a temporary, largely makeshift environment into a liveable space with durable infrastructure built by

and for refugees, feelings of anxiety have changed accordingly. Conventional anxiety emanating from a lack of agency and sense of being powerless while waiting for a potential resettlement decision has mostly dissipated as refugees have made lives for themselves in the camp, expecting to stay. The standard linearity of being a refugee – from fleeing their place of origin via a temporary shelter to a final destination – has been broken. Some refugees were born in this camp or gave birth to their children there; many have few bonds with Myanmar and do not see any future there if they had to leave the camp. Accordingly, many refugees invest their savings not in an imagined future elsewhere, but in the present, where they live now. As they have anchored their lives to the camp through infrastructure, a new type of anxiety rears its head: that they might be forced to depart, leaving behind their lives and everything they have built.

References:

- Bailey, Adrian J., Richard A. Wright, Alison Mountz and Ines M. Miyares. 2002. "(Re) producing Salvadoran transnational geographies." *Annals of the Association of American Geographers* 92 (1): 125–44.
- Bauman, Zygmunt. 2002. "In the lowly nowherewilles of liquid modernity: Comments on and around Agier." *Ethnography* 3 (3): 343–49.
- Betts, Alessandro and Louise Bloom. 2014. "Humanitarian Innovation: The State of the Art." *Ocha policy and studies series* November 2014 (9). <https://www.unocha.org/publications/report/world/humanitarian-innovation-state-art>
- Bjertrup, Pia Juul, Malika Bouhenia, Philippe Mayaud, Clément Perrin, Jihane Ben Farhat and Karl Blanchet. 2018. "A life in waiting: Refugees' mental health and narratives of social suffering after European Union border closures in March 2016." *Social Science and Medicine* 215: 53–60.
- El-Shaarawi, Nadia. "Living an uncertain future: Temporality, uncertainty, and well-being among Iraqi refugees in Egypt." *Social Analysis* 59 (1): 38–56.
- El Masri, Yafa. 2020. "72 Years of Homemaking in Waiting Zones: Lebanon's 'Permanently Temporary' Palestinian Refugee Camps." *Frontier in Sociology* 5: 587063. <https://doi.org/10.3389/fsoc.2020.587063>
- Feldman, Ilana. 2015. "What is a Camp? Legitimate Refugee Lives in Spaces of Long-Term Displacement." *Geoforum* 66: 244–52.
- Hage, Ghassan. 2009. "Waiting Out the Crisis: On Stuckedness and Governmentality." In *Waiting*, edited by Ghassan Hage, 97–106. Carlton, Vic.: Melbourne University Press.
- Herz, Manuel. 2017. "From Camp to City: 'Permanent is not the Opposite of Temporary.'" *The Architectural Review*. <https://www.architectural-review.com/essays/from-camp-to-city-permanent-is-not-the-opposite-of-temporary>

Khosravi, Shahram. 2021. "Waiting, a state of consciousness." In *Waiting and the Temporalities of Irregular Migration*, edited by Christine M Jacobsen, Marry-Anne Karlsen and Shahram Khosravi, 203–207. Routledge: Oxon and New York.

Phillimore, Jenny and Sin Yi Cheung. 2021. "The violence of uncertainty: Empirical evidence on how asylum waiting time undermines refugee health." *Social Science and Medicine* 282: 1–9.

Cite as:

Laocharoenwong, Jiraporn. 2024. "Infrastructure and Anxiety of Return." *Roadsides* 12: 44–50. <https://doi.org/10.26034/roadsides-202401207>



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Fenced In: Infrastructural Anxieties at the Danish–German Borderlands

Annika Pohl Harrisson and Michael Eilenberg

Nestled in the rural borderlands between Denmark and Germany, and passed down through five generations since 1875, Elmegård is the ancestral farmstead of Danish citizen Jens.¹ What distinguishes Jens's home is its unique locality: although it lies in Denmark, the road out front marks the German border. To reach his farm buildings and fields, Jens must traverse several hundred metres along a road situated within German jurisdiction.

¹ Names and toponyms have been anonymized.

The positioning of Jens's property is a testament to the endeavours of his ancestors during the 1920 border delineation, striving for official recognition as Danes. Though the farm was on the German side, Jens's ancestors identified as Danes, so the border was adjusted around their property, creating a dent in the map.² Despite the assurance from both countries of unimpeded passage to Denmark, Jens and his family have encountered persistent challenges stemming from their cross-border life. Memories of tense encounters with heavily armed border patrols, episodes of detainment due to inadequate documentation, and the uneasiness of growing up in a border zone under constant surveillance are etched vividly into Jens's consciousness. He describes these memories as almost embodied, things that still make him shiver with discomfort.

² In 1864, Denmark lost territory to Germany. After Germany's defeat in World War I, referendums in 1920 led to redrawing the border.



Despite initially moving away from his ancestral homestead and thus relinquishing the, at times, burdensome struggle of borderland existence, Jens's return was prompted by the implementation of the Schengen agreement in the mid-1990s, which facilitated unhindered movement within the Schengen Area. The abolition of frontier controls brought relief and marked a new chapter of ease and freedom in everyday life on the farm. However, recent developments have reignited past anxieties. In 2019, the Danish authorities decided to erect a wild boar fence along the entire length of the border, aimed at preventing the spread of African Swine Fever which poses a severe threat to the Danish pig industry (Eilenberg and Harrison 2023). Following our conversations with affected borderlanders³, we argue that this fence triggers a kind of existential anxiety as it both stirs up memories of past conflict and disturbs their sense of safety in the domestic sphere (Roshier 2022).

Looking through the fence.

Photo: Michael Eilenberg, 2021.

³ This article is based on research conducted in 2021.

Comprised of steel bars and metal sheets 1.5 meters high and firmly embedded into the ground, this infrastructural barrier should prevent infected 'German' wild boars from entering Denmark. However, the fence also serves as a stark symbol of division and regression, evoking unsettling memories of past border tensions. As we walk around his land, Jens shows where the borderline is and how the fence cuts through his grounds. He recounts the difficulties this caused during his youth, prior to the Schengen Agreement. He indicates the former positions of the border guards, recalling the anxiety and discomfort associated with their presence and regular patrols, characterized by rudeness and hostility. These unpleasant memories are rekindled by the fence, which

serves as a physical manifestation of the border and a barrier that impedes free passage across his land. Jens recalls instances when his father was detained for not carrying an ID card while working on fields that extended across territory of both nation-states, and the intimidation faced from guards wielding machine guns.



The Danish-German border region.
Map: Annika Pohl
Harrison and Michael
Eilenberg, 2023.

Although the current wild boar fence lacks the presence of border guards and their weapons, the negative emotions resurface around it. Jens states that “it is difficult for me to separate [present from past]. The Wild boar fence (*vildsvinehegnet*) is a daily reminder of this feeling I had when I grew up – that you really must be careful where you step.”

The farmhouse and barn are on opposite sides of the border.
Photo: Annika Pohl
Harrison, 2021.



Fences embody a complex fusion of fears, aspirations and aesthetics, influencing landscapes and prompting diverse intellectual and emotional responses. While they provide protection, they also create division (Davis and Williams 2008). The erection of fences can carry adverse implications, excluding individuals from resources and opportunities while reinforcing societal and cultural rifts. Consequently, the act of constructing fences remains a contentious issue globally, particularly in the context of migration and border control, where governments utilize physical barriers to regulate the movement of people. Moreover, fencing processes reflect broader political and social tensions surrounding migration and identity. In border zones, fences come to reflect state regulation, control and exceptional forms of governance (Jones 2012; Rosière and Jones 2012; McDuie-Ra 2014). Here scholars draw attention to the disconnect between the political imaginations that conceptualize borders as unambiguous and linear and the realities of border-dwellers such as Jens, who frequently experience social, emotional and geographic spaces to be overlapping (Troschenko 2016; Wilson 2024).



A large cattle grid hinders access to Jens' field on foot.

Photo: Annika Pohl
Harrison, 2021.

Symbolically, fences represent ideas like ownership and protection, yet they have also been utilized as tools of colonialism, displacing Indigenous populations or disrupting traditional livelihoods under the guise of conservation efforts (Guha 1991; Scott 2009). Fencing, as a form of securitization through separation, embodies both liberation and alienation simultaneously, offering comfort while also provoking offense. Security technology, such as fences, can sometimes engender unintended emotional responses contrary to its intended purpose. For instance, while fences are typically erected to provide security (to keep unwanted life either in or out), they can paradoxically convey feelings or meanings that are antithetical to security (Coaffee, O'Hare and Hawkesworth 2009; Murzakulova 2021). Fences alter the material environment and, as in the cases of residents who are directly confronted with such barriers on their properties, elicit affective responses. At Elmegård the fence is a materialization of a negative state effect. Jens feels abandoned and disenchanted by the Danish authorities who have not recognized his protests against the erection of the fence and its physical and

emotional impacts on his everyday life: “I feel really, really bad about the need to mark that border again. It stirs up many old emotions and concerns. It just affects people when there is a physical border again. It’s like living in an open prison (*åbent fængsel*).”



Anxiety is a condition characterized by agitation, inner turmoil and worry about future events. It manifests physically, combining mental and emotional distress with a pervasive sense of unease about potential outcomes (Tyrer 1999). In our case, the fence infrastructure prompts both uneasiness and distress about what has been and what might happen again. This aligns with the insight by Harvey and Knox (2015) that infrastructure can render the social and political visible in our contemporary world. Via a wild boar fence, the relationality between populations, infrastructure and the resulting concerns thereby becomes tangible. How are these anxieties dealt with by affected border populations and the relevant authorities, and how does this influence their coexistence? Jens has on occasion reacted angrily and verbally assaulted fence construction workers. In turn, the authorities dismiss his complaints with bureaucratic double-speak and a lack of empathy, failing to grasp the complexity of life on the border, with its past conflicts and the emotional ballast rooted in this landscape.

The home has particular importance for an individual’s sense of ontological security (Dupuis and Thorns 1998). Ontological security refers, according to Giddens (1991), to a feeling of stability and continuity in an individual’s or a society’s identity and understanding of the world. When this is disrupted, individuals and societies can experience unease. Harries (2008) associates ontological security with the consistent material elements of a home, highlighting the interconnectedness of visual representation and emotional reassurance. In this context, the construction of a physical barrier like a

The wild boar fence separating agricultural fields.

Photo: Annika Pohl
Harrison, 2021.

fence can disrupt the visual embodiment of home as well as undermining one's sense of control, thus impacting the fundamental ontological security that should be provided by the domestic sphere. For Jens and other borderlanders, the wild boar fence evokes feelings of anxiety and discomfort, stirring up memories of past border tensions and injustices that transmigrate into present social relations and harm emotional wellbeing.

Beyond the immediate borderland, fencing strategies and the accompanying discourse on biosecurity also reflect broader popular societal anxieties of the perceived risk of outside threats and hence offer an interesting example of how the movement of various forms of unwanted life across borders are politicized and securitized (Hinchliffe et al. 2013). While the Danish fence might present a more benign case of infrastructural fencing, the Schengen Area more widely is experiencing a growing move towards neo-Westphalian rebordering through fencing. For example, starting in 2015, Slovenia built a fence along its border with Croatia, and the Hungarian government erected fences both at the Croatian and the Serbian border (Székely and Kotosz 2018; Korte 2020). Triggered by, among others, the current migration crisis in Europe and biosecurity concerns, this trend negatively impacts freedom of movement. But on a broader scale, such moves give rise to anxiety both emotional and physical and produce a general sense of ontological insecurity (Mitzen 2018).

References:

- Coaffee, Jon, Paul O'Hare and Marian Hawkesworth. 2009. "The Visibility of (In) security: The Aesthetics of Planning Urban Defences Against Terrorism." *Security Dialogue* 40 (4-5): 489–511.
- Dupuis, Ann and David C. Thorns. 1998. "Home, Home Ownership and the Search for Ontological Security." *The Sociological Review* 46 (1): 24–47.
- Eilenberg, Michael and Annika Pohl Harrisson. 2023. "Fencing, Biosecurity and Wild Boar Politics in the Danish-German Borderland." *Journal of Borderlands Studies*: 1–19.
- Giddens, Anthony. 1991. *Modernity and Self-identity*. Cambridge: Polity Press.
- Guha, Ramachandra. 1991. *The Unquiet Woods: Ecological Change and Peasant Resistance in the Himalaya*. Delhi: Oxford University Press.
- Harries, Tim. 2008. "Feeling secure or being secure? Why it can seem better not to protect yourself against a natural hazard." *Health, Risk & Society* 10 (5): 479–90.
- Harvey, Penny and Hannah Knox. 2015. *Roads: An Anthropology of Infrastructure and Expertise*. Ithaca, NY: Cornell University Press.
- Hinchliffe Steve, Allen John, Lavau Stephanie, Bingham Nick and Simon Carter 2013. "Biosecurity and the topologies of infected life: from borderlines to borderlands." *Transactions of the Institute of British Geographers* 38 (4): 531–43.

Jones, Reece. 2012. *Border Walls: Security and the War on Terror in the United States, India, and Israel*. London: Zed Books.

Korte, Kristina. 2022. "Who Is the Animal in the Zoo? Fencing In and Fencing Out at the Hungarian-Serbian Border. A Qualitative Case Study." *Journal of Borderlands Studies* 37 (3): 453–74.

McDuie-Ra, Duncan. 2014. "The India–Bangladesh Border Fence: Narratives and Political Possibilities." *Journal of Borderlands Studies* 29 (1): 81–94.

Mitzen, Jennifer. 2018. "Feeling at Home in Europe: Migration, Ontological Security, and the Political Psychology of EU Bordering." *Political Psychology* 39 (6): 1373–87.

Murzakulova, Asel. 2021. "Sensuous Nostalgia: Insecurity in the Borderlands of the Fergana Valley." *Roadsides* 6: 46–53. <https://doi.org/10.2634/roadsides-202100607>

Rosher, Ben. 2022. "'And now we're facing that reality too': Brexit, ontological security, and intergenerational anxiety in the Irish border region." *European Security* 31 (1): 21–38.

Rosière, Stéphane and Reece Jones. 2012. "Teichopolitics: Re-considering Globalisation Through the Role of Walls and Fences." *Geopolitics* 17 (1): 217–34.

Scott, James C. 2009. *The Art of Not Being Governed: An Anarchist History of Upland Southeast Asia*. New Haven. Yale University Press.

Székely, Andrea and Balázs Kotosz. 2018. "From fence to wall? Changes in the mental space of border zones in Eastern Europe." *Regional Science Policy and Practice* 10: 269–82. <https://doi.org/10.1111/rsp3.12120>

Troschenko, Elina. 2016. "With a Border Fence in the Backyard: Materialization of the Border in the Landscape and the Social Lives of Border People." In *Eurasian Borderlands. Approaches to Social Inequality and Difference*, edited by Tone Bringa and Hege Toje, 87–106. New York: Palgrave Macmillan.

Tyrer, Peter. 1999. *Anxiety: A Multidisciplinary Review*. London: Imperial College Press.

Wilson, Thomas M. 2024. *Borders, Boundaries, Frontiers: Anthropological Insights*. Toronto: University of Toronto Press.

Cite as:

Harrison, Annika Pohl and Michael Eilenberg. 2024. "Fenced In: Infrastructural Anxieties at the Danish–German Borderlands." *Roadsides* 12: 51–58. <https://doi.org/10.26034/roadsides-202401208>



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Ambivalent Decay: Regeneration Anxieties in East London

Robert Deakin

This multimedia essay explores the relationship between infrastructural anxiety, class and agency in Poplar, east London's former docklands. It draws on multimodal ethnographic fieldwork conducted in 2019 alongside Jimmy – a white, working-class man in his early sixties and long-term resident of a social housing estate undergoing redevelopment. Jimmy experiences clinically diagnosed and sometimes debilitating anxiety. This has many causes and triggers, but the ongoing regeneration of his estate is a particular cause of distress. He is anxious about the future, amid the uncertainties of regeneration. But equally, Jimmy is preoccupied with the past. Here infrastructural anxiety is not the same as “displacement anxiety” (Watt 2021: 28) discussed in gentrification literatures, whereby the uncertain prospect of an imminent, forced move effects a psychological toll. Rather it stems from how contemporary gentrification aggravates, and brings to the surface, older injuries of class characteristic of this post-Fordist milieu.¹ Here I try to make sense of these affective dynamics with reference to the anthropological literature on ‘post-Fordist affect’, while also – through text, still images and video emerging from our research – conveying something of Jimmy’s agency vis-à-vis anxiety. More than a symptom of structural inequality, how might infrastructural anxiety be engaged as a “life force trapped and twisted at an impasse, awaiting a chance to break through” (Biehl and Locke 2010: 332)?

¹ 16.1 percent of residents in Tower Hamlets (which includes Poplar) self-report depression and anxiety – the highest across all London boroughs (LBTH 2019).



Jimmy's Lament

The redevelopment of Jimmy's estate sees low- and medium-rise housing blocks, built by municipal authorities in the postwar era, demolished and replaced by a denser, mostly private development. This is part of a process of state-led gentrification occurring throughout London's extensive network of twentieth-century modernist social housing (Watt 2021). On long walks around his neighbourhood, Jimmy described to me his feelings of loss regarding the regeneration and his frustrated aspirations to claim some influence through his intermittent involvement in a residents' group. But while I had expected our conversations to be focused on the present redevelopment, Jimmy – a lifelong resident of Poplar – often dwelt on changes that had occurred further back in time. Prominent among these reflections was the loss of local pubs, the former sites of which Jimmy would often point out to me; they had usually been redeveloped into housing or, in one case, simply demolished and left as a fenced-off void in the landscape.²

These walks were important in our evolving multimodal research collaboration. I began by audio recording the walks and later gave Jimmy a DSLR camera to take his own photographs. This subsequently developed into improvised filmmaking when, standing on the street where he had lived until his mid-twenties, Jimmy began to tell me about two pubs that had closed in the early 2000s.

*"Motorcycle in Repose,"
Aberfeldy Estate.*

Photo: Jimmy Watters,
mid-1990s.

² Long-term UK pub closure trends have accelerated in recent decades, with numbers falling by more than 25 percent since 2000 (BBPA 2024).



"It's gone, it's just gone" is Jimmy's repeated refrain. His sense of loss – and anger about this loss – is palpable. At other moments in the video he is more wistfully nostalgic. Talking about the photographs in the Princess of Wales pub showing customers outside, one taken in the 1930s and another in the 1970s, he conveys a sense of historical continuity now lost. He also engages in self-reflection: "You have to try and be objective about change, but it's an emotional thing; what I used to know, and feel comfortable about, is not there anymore."

After long days driving a London Black Cab, Jimmy used to frequent local pubs several nights a week. For him they were a vital source of community and wellbeing, a place to meet friends and acquaintances, to listen to live music, even to embark on romantic relationships. Without this "social infrastructure" as he calls it, and with his immediate family having moved out of London, he feels increasingly isolated.³

Jimmy's complaints of loneliness and social isolation are connected to the loss of pubs as spaces of friendship and acquaintanceship (Thurnell-Read 2021). But his complaints also emerge from a more generalised affective disorder. Having given up his job as a taxi driver not long before we met, he subsequently suffered what he described as a "breakdown" and was diagnosed with anxiety and depression. Jimmy would sometimes talk about these affective disorders as his "industrial injuries" – the attritional result of driving a taxi around London for thirty years. This was a job that he had found increasingly stressful, in part because of growing competition from ride-hailing apps. He also recounted the day-to-day emotional toll of sharing his private space with so many strangers, and sometimes feeling looked down upon or judged because of his working-class appearance and accent.

↑ *Gasometer at Leven Road Gasworks, north side of Aberfeldy Estate.*
Photo: Jimmy Watters, mid-1990s.

³ This story of outmigration reflects broader trends. For discussion of the white "Cockney Diaspora," see Watt, Millington and Huq 2014.

Electricity substation with Beatles graffiti on the Aberfeldy Estate.
Photo: Jimmy Watters, mid-1990s.



Through the anthropological literature on post-Fordist affect we can also think of these as post-industrial injuries (Muehlebach 2011; Muehlebach and Shoshan 2012). Alongside the attritional impact of Jimmy's working life, it was the growing absence of employment, the social infrastructures associated with it, and an intense desire to return to something approximating this life that troubled him so deeply.⁴

⁴ For discussion of race/ class entanglements in discourses of pub closure, see Deakin 2023 and Singh, Valluvan and Kneale 2024.



Stairs to railway bridge linking Lansbury Estate and Teviot Estate.
Photo: Jimmy Watters, mid-1990s.

Post-industrial Injuries

The recording and watching back of this first footage ignited in Jimmy a desire to make further videos and led to an iterative process of playback, feedback and re-recording. Most of this [subsequent filming took place in Jimmy's one-bedroom flat](#), focusing on his extensive collection of artefacts and memorabilia relating to his life and local history (Deakin and Watters 2022). This collection included four images of his neighbourhood, taken using a disposable camera sometime in the mid-1990s: a small motorbike lying abandoned in the middle of the pavement, one of the gasholders at the nearby gasworks, old graffiti memorialising The Beatles on the back of an electricity substation, and a crumbling brick wall near a railway bridge. Ordinary, decaying infrastructures, all since demolished. Jimmy was pleased when I remarked how much I liked the images, and we discussed them in detail.

"Motorcycle in repose" was the title that Jimmy jokingly suggested for the first photograph, which he said conveyed "despair, abandonment, lack of engagement [laughs]. Something's been discarded and not cared for, a bit like what the neighbourhood was then."

The mid-1990s were a time when the area was suffering heavily from the impacts of deindustrialisation (most notably with the closure of the docks) but before programmes of urban regeneration had taken hold. Jimmy's wry laughter about the abandoned

*Jimmy at the site of
"Motorcycle in Repose."*
Photo: Robert Deakin,
2019.



motorcycle conveying a “lack of engagement” captures his ambivalence about contemporary regeneration in relation to this larger historical picture. No one wants to live in a place that is “discarded and not cared for” and Jimmy has actively supported some of the regeneration projects, in the hope of seeing some long-overdue financial investment in his estate. But at the same time, the language of engagement employed by those overseeing the regeneration could seem hollow. Jimmy would frequently communicate to me his fears that the regeneration ultimately was not for working-class people like him, who he saw gradually being displaced while multinational developers turned a profit. Going to visit him at his flat, I would often find him despondent about his prospects of having any significant influence on local regeneration, and ambivalent about staying in Poplar.

Ambivalent Endings

The literature on post-Fordist affect has shown how the regimes of industrial employment known as Fordism – and the forms of social provision and organisation that accompanied it – are “less helpfully thought of as an era past than as a locus of sensibility and yearning that leaves crucial traces in the neoliberal present” (Muehlebach 2011: 62). For Muehlebach and Shoshan (2012), paradigmatic post-Fordist affects such as melancholia and anxiety are both symptomatic of – and reinforce – structural inequalities. Such dynamics are present in Jimmy’s ambivalent attachment to regeneration. Caught between a desire for investment in long-neglected infrastructure and a fear that further changes might only compound his sense of loss, Jimmy was at an impasse (Berlant 2011).

In this way we might tragically characterise Jimmy as one of the “melancholic subjects” of post-Fordism, “often found at the bottom of the social ladder, scavenging for the approximations of Fordist security and stability for which many of their hyper-privileged counterparts tend to have little patience” (Muehlebach and Shoshan 2012: 336). But, building on articulations of an anthropology of becoming (Papadopoulos, Stephenson and Tsianos 2008; Biehl and Locke 2010) and a multimodal “politics of invention” (Dattatreyan and Marrero-Guillamón 2019), I invite another reading of the research materials presented here. If the infrastructural transformations associated with urban regeneration provoked anxiety in Jimmy, manifesting long-running and multifaceted class injuries, our making infrastructures the subject of a collaborative artistic practice generated other affects, capacities and lines of escape.

References:

- Berlant, Lauren. 2011. *Cruel Optimism*. Durham, NC: Duke University Press.
- Biehl, João and Peter Locke. 2010. “Deleuze and the Anthropology of Becoming.” *Current Anthropology* 51 (3): 317–51.
- BBPA, British Beer and Pub Association. 2024. “Pubs and Breweries in Numbers.” <https://beerandpub.com/data-statistics/>

- Dattatreya, Ethiraj Gabriel and Isaac Marrero-Guillamón. 2019. "Introduction: Multimodal Anthropology and the Politics of Invention." *American Anthropologist* 121 (1): 220–28. <https://research.gold.ac.uk/id/eprint/25120/>
- Deakin, Robert. 2023. "Poplar Stories: Whiteness, Class Loss and the Affective Infrastructure of Urban Regeneration in East London's Former Docklands." Goldsmiths, University of London. <https://doi.org/10.25602/GOLD.00034448>
- Deakin, Robert and James Watters. 2022. *Jimmy's Archive*. UK. <https://filmfreeway.com/projects/2019708>
- LBTH, London Borough of Tower Hamlets. 2019. "Working Together to Improve the Mental Health and Wellbeing of Tower Hamlets Residents."
- Muehlebach, Andrea. 2011. "On Affective Labor in Post-Fordist Italy." *Cultural Anthropology* 26 (1): 59–82.
- Muehlebach, Andrea and Nitzan Shoshan. 2012. "Introduction: Post-Fordist Affect." *Anthropological Quarterly* 85 (2): 317–43.
- Papadopoulos, Dimitris, Niamh Stephenson and Vassilis C. N. Tsianos. 2008. *Escape Routes: Control and Subversion in the Twenty-First Century*. London: Pluto Press.
- Singh, Amit, Sivamohan Valluvan and James Kneale. 2024. "A Pub for England: Race and Class in the Time of the Nation." *European Journal of Cultural Studies*. <https://doi.org/10.1177/13675494231225742>
- Thurnell-Read, Thomas. 2021. *Open Arms: The Role of Pubs in Tackling Loneliness*. Loughborough University. https://repository.lboro.ac.uk/articles/report/Open_arms_the_role_of_pubs_in_tackling_loneliness/13663715/1?file=26224472
- Watt, Paul. 2021. *Estate Regeneration and Its Discontents: Public Housing, Place and Inequality in London*. Bristol: Policy Press.
- Watt, Paul, Gareth Millington and Rupa Huq. 2014. "East London Mobilities: The 'Cockney Diaspora' and the Remaking of the Essex Ethnoscape." In *Mobilities and Neighbourhood Belonging in Cities and Suburbs*, edited by Paul Watt and Peer Smets, 121–44. Basingstoke England and New York: Palgrave Macmillan.

Acknowledgements:

The author would like to thank Jimmy for his long-term engagement with this research project and for allowing the use of his images within this article. An earlier draft was presented at a *Roadsides: Infrastructural Anxieties* workshop in Sandbjerg Gods, Sønderborg, Denmark in April 2024. The author is grateful to the organisers of

the workshop – Mikel Venhovens and Mona Chettri – and the other participants for their very useful feedback. Funding for this research was provided by a studentship from the UK Arts and Humanities Research Council AH/L503861/1.

Cite as:

Deakin, Robert. 2024. "Ambivalent Decay: Regeneration Anxieties in East London." *Roadsides* 12: 59-67. <https://doi.org/10.26034/roadsides-202401209>



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Airy Infrastructures: Anxieties and Eastern Himalayan ‘Remoteness’ (1945-1962)

Aditya Kiran Kakati

Anxious State(s)

In mid-1945, the Assam government and military officials discussed the threat of a “sustained attack” on an Assam Rifles outpost in Walong.¹ In the easternmost Lohit Valley of the North-East Frontier, Walong sits near the Tibetan outpost of Rima, at the junction of British India, Tibet and Burma. Concerned about its vulnerability, the Assam Rifles commandant suggested airborne supply as the only way to sustain the outpost against possible invasions by China. Discussions also proposed training platoons in parachute jumping for emergency reinforcements. Although some of the pressures of the Second World War had eased by this point, including Japan’s occupation of Burma and the 1944 invasion of India, China’s wartime presence reignited anxieties about securing the Tibetan border.

¹ Arunachal Pradesh State Archives (APSA), Correspondence, 28.08.1945 in “Defense of the North-East Frontier” TR/124/45/AD. Here “sustained” means holding mountain territory by maintaining supply lines.

In 1944, British officers had set up an outpost in Walong due to tensions with Tibetan authorities in Rima. Political Officer² J.H.F. Williams previously attempted to build landing strips for light aircraft to supply outposts and parachute troops.³ He warned that an “air-minded enemy” could replicate this tactic if they matched British aerial capabilities. Given the difficulty of maintaining roads in the high-altitude terrain, officials debated withdrawing from the outpost unless airborne supply was feasible. The Royal Air Force (RAF) conducted surveys but found that large aircraft could not descend below 14,000 feet here because of the low density of the air, complicating supply drops because parachutes would not be effective.⁴ Meanwhile, some officials dismissed the likelihood of an attack through Walong due to the rugged terrain.

² Political Officers were agents of British indirect rule posted to frontier areas. Representing state presence when necessary, they exemplified ‘thin’ governance.
³ The British Library (BL), “J.H.F Williams’ Tour Diary, September–November 1944” in G.E.D. Walker’s collection, MSS EUR D1191/1.
⁴ APSA, Memo to Political Officer, 24.10.1945, TR/124/45/AD.



← “The Geography and Ethnic of India’s Northern Frontiers” showing the North-East Frontier in 1960. Source: Caroe 1960: 302.

↓ Sketch map of the North-East Frontier, showing Rima and Walong 1946. Source: BL, IOR/L/PS/12/3119.



However, in October 1945, G.E.D. Walker, another Political Officer, warned against abandoning the Walong outpost, arguing that it would undermine British efforts to uphold the McMahon Line, the border with Tibet.⁵ Significantly, he believed that doing so would weaken British prestige among the upland Mishmi communities, whose loyalty determined the state's ability to assert sovereignty, with its seasonally 'thin' presence as a "fair-weather state" (Guyot-Réchart 2016: 21). This anxiety over frontier loyalties persisted into postcolonial India (Gagné 2017). Due to the rarefied air above Walong, airborne-supply plans were ultimately abandoned. India later built temporary landing places and supply-drop zones to assert territorial claims and reassure local populations.

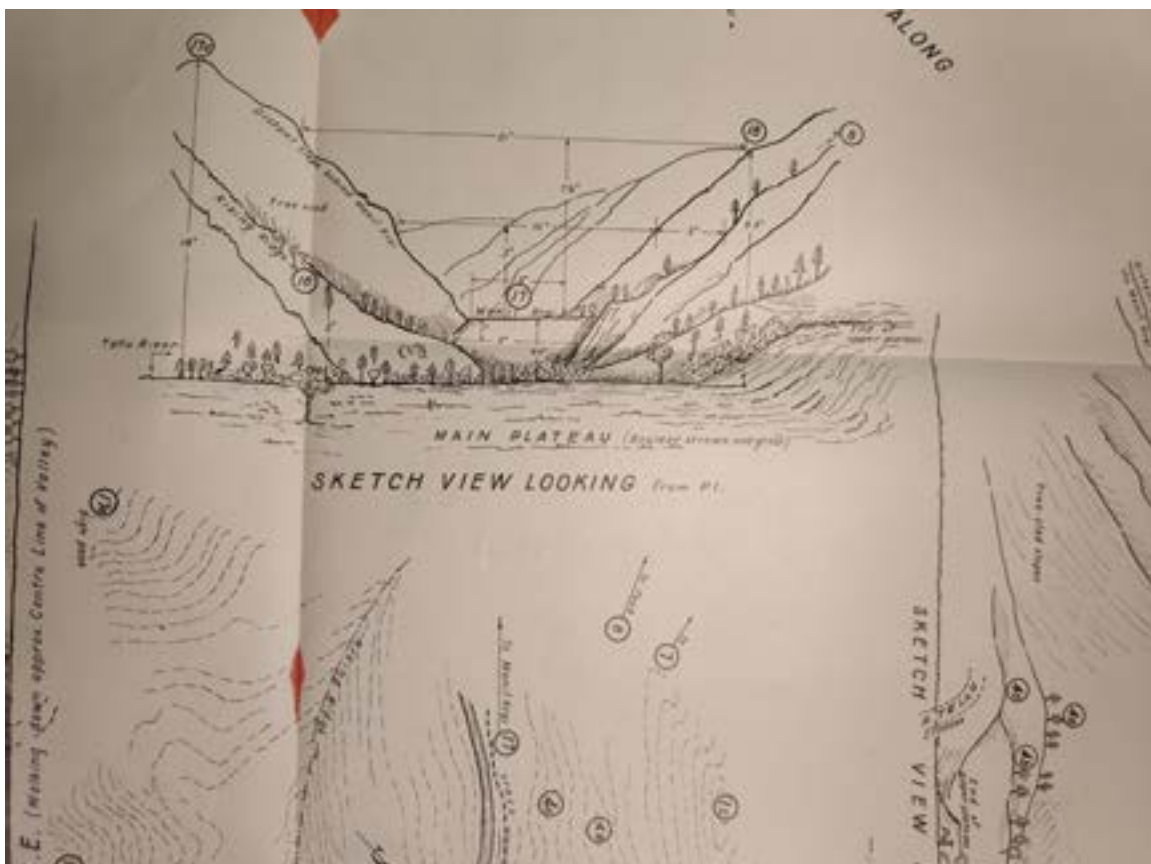
⁵ APSA, Letter from Walker, 13.10.1945, TR/124/45/AD.

Frictions of, and Above, Terrain

These episodes highlight the British Indian state's longstanding strategy of maintaining minimal or 'airy' infrastructures despite geopolitical contestation. Airy here has three meanings. First, it refers to the state's light footprint. Second, it signifies the arrival of aerial technology in the 1940s with the Second World War, to overcome rugged terrain. Finally, it indicates some of the inconsistent anxieties that erupted around border security and state prestige. The paradox of such sparse infrastructure-building despite intense "cartographic anxiety" (Krishna 1994) is my focus in this article. Why was state presence so limited in these contested borderlands when infrastructure often symbolizes sovereignty and influences local populations (Rippa, Murton and Rest 2020)?

Sketches of the Walong plateau with 'voluminous' dimensions.

Source: Walter E. Cross, Lohit Valley Reconnaissance (December–February 1942), BL, IOR/ L/ PS/12/4615.



I argue that deliberate state policies maintained remoteness, even with access to aerial technology, aiming to keep these areas isolated despite the geopolitical anxieties.

James Scott has suggested that “distance-demolishing technologies” such as roads, railways and aerial infrastructure integrated remote upland regions after the Second World War (Scott 2009: xii, 11). Contrary to Scott’s thesis, I contend that aerial provisioning, chosen over permanent infrastructure to cut costs, in fact, maintained remoteness rather than fostering state integration of peripheries after the war. Using archival sources, I present a statist view of the ‘thin’ infrastructural experiments of the 1940s, contrasting them with what emerged during the 1962 Sino-Indian War. Colonial and postcolonial officials saw upland terrain’s remoteness as a strategic defensive asset – a belief that collapsed during the 1962 war, prompting India’s shift towards greater militarization. While not all frontiers are necessarily remote, remoteness on the Walong border was deliberately produced through limited infrastructure, with aims beyond simply resource concerns, such as projecting state presence to rivals and local populations. The anxieties underpinning these actions are obscured by Westphalian sovereignty models, which miss the “voluminous” (Billé 2020: 5) dimensions of territoriality. As aerial technology is central in modern warfare, I use this approach to help read air-based historical events.

The concept of “lag” in voluminous approaches to studying sovereignty and territory highlights the friction between time and terrain, adding depth to spaces traditionally viewed as flat (Harris 2020). We can extend this by considering aerial space, enabled by 1940s air power, as a new domain for sovereignty, overcoming terrain and introducing volume into governance. Though ‘thin’, the skies thus became a platform for sovereignty and securitization.⁶ Postwar and postcolonial policies on the North-East Frontier (now Arunachal Pradesh) continued “selective state-making” (Gohain 2019, 2020), maintaining remoteness for strategic purposes while disconnecting people’s regional socio-economic ties (Saxer and Andersson 2019). Minimal infrastructure here reflected deliberate state policy, leaving the region ambiguous and inconsistent until the 1960s despite episodic geopolitical anxieties. Instead of durable infrastructure for local connectivity, British and Indian policies favored small airfields and drop zones near outposts like Walong.

⁶ Rarefied air was an impediment in 1945. Low-density air over China’s mountainous western borders has been a strategic asset to India in more recent times. For details see Som 2017.

Airy States

In the 1940s, Sino-Tibetan cartographic tensions and incursions along the North-East Frontier, drew officials’ focus to the McMahon Line. In 1935, the British Foreign Secretary Olaf Caroe who began pushing a policy shift towards consolidating the border, “rediscovered” this line using 1914 documents and maps referencing an agreement with Tibet (Maxwell 2016: 102; see also Mehra 1974).⁷ After India’s 1947 decolonization, these cartographic anxieties escalated into territorial conflicts. Following Tibet’s annexation by China in 1950, India and China engaged in infrastructural competition in the Himalaya, driven by concerns over territorial control and population loyalties (Guyot-Réchard 2016). Minimal infrastructure projects in the 1940s, supported by aerial supply, reflected a governance approach of maintaining remoteness in Walong, unlike India’s use of its air force for famine relief and counterinsurgency in the Naga and Mizo Hills bordering Burma.

⁷ “Rediscovered” appears in academic and policy debates because British officials did not define this border until periodic tensions with Tibet or China made it necessary.



**Sketches of contested
boundary markers of 1912.**

Source: Walter E.
Cross, Lohit Valley
Reconnaissance
(December–February
1942), BL, IOR/ L/
PS/12/4615.

In October 1962, despite Walker's belief that the terrain of the Lohit Valley would deter invasion⁸, China entered Indian territory, including Walong, routing Indian forces before declaring a unilateral ceasefire in November. India underestimated the logistical challenges, with Chinese troops climbing only 5,000 feet from the Tibetan Plateau, compared to the 20,000 feet that Indian forces had to scale. China's rapid road-building outpaced India's, which relied on scarce local labor and mules (Ispahani 1989: 172–73). Oral histories suggest Chinese soldiers postured as "benevolent," helping locals build houses and harvest crops, unlike Indian forces (Gohain 2020: 25). Despite China's

⁸ BL, Newspaper collection, G.E.D. Walker, "Letter to the Editor," The Times 31.10.1962.



The river Lohit (Luit in Assamese) enters India near Kibithu, flows alongside Walong and joins the River Brahmaputra in Assam.
Photo: A. J. T. Johnsingh, 2012. [WikiCommons](#).

military superiority, border populations aligned with India, seeing it as a weaker but negotiable military power. India, wary of aiding another Chinese invasion, forbade road construction near the frontier, continuing the colonial policy of limiting infrastructure to maintain remoteness (Guyot-Réchard 2016). Only recently India has shifted to building roads and airfields to secure the Walong sector (PTI 2015; Bhaumik 2017).

Since the 1962 Sino-Indian War, security anxieties and infrastructure development have escalated, particularly considering ongoing cartographic and territorial disputes fueled by asymmetric infrastructural competition in the Himalayas. In regions like western Tawang, Indian military “hyper-presence” is notable, as Gohain (2020: 25) observes. The disputed Sino-Indian border refers not only to two-dimensional cartographic lines for these nation-states but encompasses the whole of Arunachal Pradesh.

Conclusion

Selective state-making through airy infrastructures kept some eastern Himalayan border regions of India remote despite the state’s geopolitical anxieties. In the 1940s, officials relied on minimal infrastructure, using aerial provisioning from makeshift airfields and drop zones. This sparked mixed reactions, reassuring populations of state presence, and the state of its own prestige, albeit both were thin. In contrast, China’s superior ‘thick’ road infrastructure in 1962 caused anxiety among the local people. In both cases, infrastructure primarily served state needs over local communities. Securing voluminous territory (upland terrain and airspace) entailed decades of lags due to the challenging topography and thin air. Today, geopolitical reorientations and grand infrastructure projects such as China’s Belt and Road Initiative fuel discursive skirmishes and territorial anxieties among rivals. Such transnational mega-infrastructural projects also bring

politically peripheralized highland Asian regions into stark view, including how new forms of connectivity and remoteness result from these interventions (Rippa, Murton and Rest 2020: 85). Discursive projections of remoteness in Asian highlands overlook historical connectivity via routes and pathways that populations have long navigated (Harris 2013; Saxer and Andersson 2019). Projections of remoteness can be actualized by states through the voluminous politics of airy infrastructures.

References:

- Bhaumik, Subir. 2017. "India Opens Longest Bridge on China Border." *BBC News*, 26 May 2017. <https://www.bbc.com/news/world-asia-india-40042438>
- Billé, Franck. 2020. *Voluminous States: Sovereignty, Materiality, and the Territorial Imagination*. Durham, NC: Duke University Press.
- Caroe, Olaf. 1960. "The Geography and Ethnics of India's Northern Frontiers." *The Geographical Journal* 126 (3): 298–308.
- Gagné, Karine. 2017. "Building a Mountain Fortress for India: Sympathy, Imagination and the Reconfiguration of Ladakh into a Border Area." *South Asia: Journal of South Asian Studies* 40 (2): 222–38.
- Gohain, Swargajyoti. 2020. *Imagined Geographies in the Indo-Tibetan Borderlands: Culture, Politics, Place*. Amsterdam: Amsterdam University Press.
- Gohain, Swargajyoti. 2019. "Selective Access: or, How States Make Remoteness." *Social Anthropology* 27 (2): 204–20.
- Guyot-Réchart, Bérénice. 2016. *Shadow States: India, China and the Himalayas, 1910–1962*. Cambridge: Cambridge University Press.
- Harris, Tina. 2020. "Lag: Four-Dimensional Bordering in the Himalayas." In *Voluminous States: Sovereignty, Materiality, and the Territorial Imagination*, edited by Franck Billé, 78–90. Durham, NC: Duke University Press.
- Harris, Tina. 2013. "Trading Places: New Economic Geographies across Himalayan Borderlands." *Political Geography* 35 (July): 60–68.
- Ispahani, Mahnaz Z. 1989. *Roads and Rivals: The Political Uses of Access in the Borderlands of Asia*. Ithaca, NY: Cornell University Press.
- Krishna, Sankaran. 1994. "Cartographic Anxiety: Mapping the Body Politic in India." *Alternatives* 19 (4): 507–21.
- Maxwell, Neville. 2016. "Olaf Caroe's Fabrication of the 'McMahon Line.'" *Economic and Political Weekly* 51 (32): 100–105.

Mehra, Parshotam Lal. 1974. *The McMahon Line and After: A Study of the Triangular Contest on India's North-Eastern Frontier between Britain, China, and Tibet, 1904–47*. Delhi: Macmillan.

PTI, Press Trust of India. 2015. "Arunachal Pradesh Walong Landing Ground Ready for Operations." *India TV News*, 23 October 2015. <https://www.indiatvnews.com/news/india/aranachal-pradesh-walong-landing-ground-ready-for-operations-55497.html>

Rippa, Alessandro, Galen Murton and Matthäus Rest. 2020. "Building Highland Asia in the Twenty-First Century." *Verge: Studies in Global Asias* 6 (2): 83–111.

Saxer, Martin and Ruben Andersson. 2019. "The Return of Remoteness: Insecurity, Isolation and Connectivity in the New World Disorder." *Social Anthropology* 27 (2): 140–55.

Som, Vishnu. 2017. "Exclusive: Why Indian Air Force May Best Chinese Jets In An Air Battle Over Tibet." *VDTV.Com*, 8 September 2017. <https://www.ndtv.com/india-news/exclusive-why-indian-air-force-may-best-chinese-jets-in-an-air-battle-over-tibet-1735052>

Scott, James C. 2009. *The Art of Not Being Governed: An Anarchist History of Upland Southeast Asia*. New Haven, CT: Yale University Press.

Cite as:

Kakati, Aditya Kiran. 2024. "Airy Infrastructures: Anxieties and Eastern Himalayan 'Remoteness' (1945–1962)." *Roadsides* 12: 68–75. <https://doi.org/10.26034/roadsides-202401210>



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