

Haunted Modernities: Ruins, Resistance and Poetics of Watery Infrastructures in Georgia

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Abstract. In the complex landscape of post-Soviet transitions, infrastructures in Georgia have emerged as a material register through which broader struggles over sovereignty, dispossession, memory, and collective futures gain shape. This article examines how Georgia's watery infrastructures function not only as technical systems but also as haunted sites of affective, poetic, and political struggle. Through an ethnographic study of multiple watercourses and the infrastructural landscapes of the Mtkvari, Rioni, and the Black Sea, we show that infrastructures become an interrelated spectral image of the many lives and afterlives of modernity and its ghostly presence, affecting and shaping the social, political, and ecological landscapes in Georgia.

Keywords: Infrastructure, post-Soviet transition, resistance, water, Georgia.

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Introduction

There's nothing more depressing than seeing the cracks in the mountain on the left, while there is either an impenetrable concrete wall or a flowing river on the right. [...] The sharp structure jutting out from the top of the mountain raises the question – when will it collapse?

This expression of unease, referring to the construction of yet another infrastructural project, captures a broader affective condition in contemporary Georgia – one shaped by the fear, promises and failures of the ghostly presence of infrastructural modernity. By building on the theoretical concepts of hauntology (*hantologie*) coined by Jacques Derrida (1994) and “high modernism” by James Scott (1998), the present article showcases the spectral realities of waterscapes in Georgia, haunted by modernity's promises, failures, and its afterlives through infrastructural imagination.

Geographically and socioeconomically distinct, the three ethnographic sites presented in this paper are united by watery infrastructures for thinking about the shifting forms, failures, and politics of spectral modernisation, progress, and economic transformations in Soviet and post-Soviet Georgia. Water – whether river, coastline, or engineered channel – appears across these settings as a material register through which broader struggles over sovereignty, dispossession, memory, and collective futures gain shape. Each site reveals a different facet of haunted modernity: the muted riverfront of Tbilisi, shaped by Soviet hydraulic control; the embattled Rioni Valley, where hydroelectric development ignites political mobilisation; and the ruined industrial landscapes of Poti, where residents salvage the remnants of past regimes to sustain new forms of life. Hence, reappearing as projects of rationalisation, nationalisation, and reappropriation. Across the field sites beyond its materiality, water animates conceptual and affective engagements with the past and future of state power. Reflection on the legacy of high-modernist hydrological control and the fragmented perspectives on post-Soviet development are triggered by the presence and movement of water in Georgia.

This article examines how post-Soviet infrastructures – particularly water infrastructures – function not only as technical systems but also as haunted sites of affective, poetic, and political struggle. We argue that in Georgia, infrastructural ruination does not mark the end of modernity but rather its transition into a haunted landscape where the traces of high-modernist ambition are repurposed, resisted, and reimagined by everyday encounters with water, metal, memory, and state absence. Instead of treating these three sites as isolated illustrations, the article approaches them as interrelated moments in post-imperial transformation. Each demonstrates how infrastructural formations emerge from, reproduce, and unsettle logics of extraction, control, and developmental promise. Consequently, this article traces signs of an ongoing negotiation with power, place, and possibility and asks: *How do people inhabit, repurpose, and resist modernities that haunt and attempt to govern their lives? What counter-narratives and affective attachments emerge in spaces deemed*

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peripheral, obsolete, or marginal? And how might these practices reveal alternative forms of infrastructural relationality?

Through a multi-method anthropological approach, the present article uses participant observation as its primary tool. The fieldwork was conducted between 2022 and 2024 across multiple sites, focusing on the diverse groups connected to the River Mtkvari in Tbilisi, participants in protests in the Rioni Valley, and the daily activities of scrap metal collectors in Poti. In total, up to 30 in-depth, semi-structured interviews were conducted, along with a couple of focus groups. Alongside the formal methods, informal discussions produced significant anthropological insights as participants felt more comfortable sharing their thoughts and experiences. The research was further enriched by archival work conducted in the National Archives of Georgia.

Many Faces of Infrastructure

Infrastructures are never merely technical assemblages; they are always also political, affective, and ecological (Berlant 2016; Khan 2006; Dalakoglou 2016). In recent years, anthropological scholarship has increasingly focused on infrastructure as both a material and symbolic site of contestation, highlighting how socio-technical systems are entangled with politics, pressures, and promises (Larkin 2013; Anand, Gupta, and Appel 2018; Amin 2013).

According to the seminal anthropological definition, “infrastructures are matter that enable the movement of other matter” (Larkin 2013, 329). As argued by Larkin, infrastructures are primarily represented as materials and as grounds on which other objects and things operate, move, and connect. For Collier (2011), infrastructure is a state’s machinery, an operative system, producing and representing the narration of the governing system (Collier 2011). Infrastructures are never mere material signifiers, but the structure of ideological formations (Humphrey 2005). Scholarly explorations also delve into the material, ideological, and symbolic registers of the constructions or deconstructions, appearances, and disappearances of infrastructures in contrasting spatio-temporal conditions, specifically in the centre and the periphery, while also forming and producing hierarchical relations between those spatialities. While in the centre, infrastructure is visible in the politics of design, in the periphery, it becomes visible “because it does not deliver what is needed” (Niewöhner 2015, 6). Hence, it becomes a lens through which the multiplicity of a state’s experience can be assessed (Von Schnitzler 2016), as “we see things and name things differently under different infrastructural regimes” (Star 1999, 380). Specifically, in post-Soviet contexts, infrastructural landscapes are often marked by decay, discontinuity, and performative self-representation. These material formations provide critical lenses through which to examine the enduring legacies of empire, the ambivalent promises of neoliberal development, and emergent forms of resistance (Rekhviashvili and Gambino 2024; Rekhviashvili and Lang 2024).

A growing body of literature on Georgia's infrastructural projects highlights the role of infrastructure as an artificial project of development narrating the fantasies of self-modernisation; Infrastructure becomes the accumulative force, the performance of sovereignty and autonomy through performative mastery of infrastructurization over urban or natural assemblages (Aroshvili 2023; Barry and Gambino 2024; Wyeth 2022; Rekhviashvili and Gambino 2024). Extending these insights to the terrains where infrastructure meets everyday ecologies, rivers and roads become sites where imaginaries of modernity are materially and symbolically forged. Rivers are shown to constitute hybrid zones in which nature, religion, and state-making intersect (Gurchiani 2022), while the construction of the Rikoti Pass demonstrates how megaprojects can simultaneously produce connectivity and disconnection (Ocaklı and Krüsmann 2025). Environmental tensions are likewise traced to longer genealogies of modernisation and imperial vision (Ocaklı and Ibele 2023). Together, this body of work highlights that Georgian infrastructures must be understood through entanglements of empire, territoriality, and competing claims to the future haunted by modernity and spectres of the past – a point of view central to this article.

The Ghost of High Modernism, Post-Soviet frontiers, and Afterlives of Infrastructure

Through its many faces, infrastructure becomes a spectral image of the many lives and afterlives of modernity, shaping the social, political, and ecological landscape of Soviet and post-Soviet Georgia in the given spatio-temporality. To describe the Soviet condition and the role of infrastructure in the process of building the Soviet state, the text draws on James Scott's concept of "high modernism". It puts it in conversation with "hauntology", an evocative theory coined by Jacques Derrida. While high modernism describes a specific form of administrative order engineering of all aspects of social life aspired in the late nineteenth and twentieth centuries, hauntology gives us the theoretical lens to see the presence between being and absence – the ghostly presence of lost futures and the traces of the past where ruined, domesticated or revived infrastructures becomes another spectre of the past which always comes back in the present (Derrida, 1994).

Soviet leaders shared the belief in high modernism – belief in linear progress, the advancement of scientific and technical knowledge, the rational organisation of social order, the desire to satisfy human needs, and increased control over nature (Scott, 1998, 89). In the 1930s, under Soviet rule, as part of state-led modernisation, natural, rural, and urban landscapes were transformed to serve state goals. The taming of the Mtkvari, the largest river in Georgia, and the draining of the Colchis Lowland in western Georgia to further develop the industrial port city of Poti were also part of the state's modernisation project.

The Mtkvari River was channelised in concrete and flanked by highways, following Lavrenti Beria's directive to align the city with Soviet ideals of rationality and control. The project aimed to enhance Tbilisi's transport capacity and align it with the Soviet vision of a modern socialist city (Komunisti 1952). These infrastructural interventions, though framed as progress, severed the river from the urban fabric, muting its presence and degrading its

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ecological vitality. Soviet planners transformed Poti's urban fabric to align with both ideological principles and pragmatic needs, making it a major centre of socialist economic development. In addition to maintaining Poti's renowned port status, the Soviet concept of industrial self-sufficiency and technological advancement was represented in the construction of new factories, shipyards, and transportation hubs. The area saw significant infrastructural interventions that radically altered its ecological and spatial configuration before Poti's industrial growth began. These included the drainage of wetlands, the fortification of the Rioni River's banks, and the redirection of its flow into a newly engineered channel (Nachkebia 1957).

The origins of the high modernist understanding of the state's mission rested on the discovery of society and nature as objects of science (Scott 1998, 91-2). Such a vision of society and nature was an ideological extension of the early modern European utilitarian state, which utilised the abstraction of nature and space to administer the territory under its control. In utilitarian discourse, the word 'nature' is replaced by 'natural resources', focusing on those aspects of nature that can be utilised for human activities (Scott 1998, 13). Along with nature, modernism believed that the future could also be tamed. As the development of humanity was considered to have a linear character, the future could be predictable through science and the laws of human evolution and be transformed by human will (Berardi 2011, 51). Whereas infrastructure should have played a key role in shaping the future for the benefit of humanity.

In contrast to the logic of high modernism, which sees time as a linear development, Derrida remarks that – “the time is out of joint” (Derrida, 1994, 161). Derrida's hauntology can be considered a contradiction to traditional 'ontology', which views being in terms of self-identical presence. Thus, what is significant about the figure of the spectre is that it cannot be fully present: “it has no being in itself but marks a relation to what is no longer or not yet” (Hägglund 2008, 82). Accordingly, hauntology refers to something that (in reality) no longer exists, but which is still effective, or something that has not yet happened (in reality) but is already effective (Fisher 2012, 19).

After the collapse of the Soviet Union, as the state of high modernism came to an end in the 1990s, the utilitarian vision did not disappear; it began to serve other purposes. Nature, the social environment, and the materiality that symbolised high modernist state-building were all transformed and destroyed in the pursuit of capitalist dreams. Therefore, high modernism has metamorphosed into a capitalist frontier – a deregulated space that blurs the boundaries between law, theft, governance, violence, and destruction. The blurring of boundaries provides the foundation for new profit economies (Tsing 2024, 27-28). “A frontier is an edge of space and time: a zone of not yet – not yet mapped, not yet regulated” (Tsing 2024, 27). Frontiers are not simply discovered, but becoming a frontier is a process. Places become wild, both imaginatively and materially, and the frontier landscape is presented as inert, with resources ready to be extracted and exported (Tsing 2024, 29). From the 1990s, Georgia entered a period marked by widespread disruption and systemic

breakdown. The dissolution of the socialist redistributive economy precipitated a political, social, and economic crisis, which in Poti was followed by the rapid and largely unregulated dismantling of the city's industrial assets. The Mtkvari River has become a landscape of ambivalent significance: the Soviet transformation of the riverbank once tamed the river, but the new era, which was marked by "rewilding", did not allow it to be untamed. Faith in high modernism had waned, and the new foundations of nature's transformation lacked credibility. The renewed attempt to modify the Rioni River, the main river in the Colchis lowland, in line with the goals of the independent Georgian state, particularly the construction of a hydroelectric power plant on the river, was met with resistance. Therefore, the horizon of the future became blurred, and destruction and unfulfilled promises began to haunt the present.

Rather than a clean break between Soviet high modernism and the post-Soviet capitalist order, the Georgian infrastructural landscape is shaped by profound and spectral continuities in power, extraction, and territorial control. Although the political rationalities of Soviet technocratic planning and contemporary neoliberal development are distinct, both rely on imaginaries that treat land, water, and labour as governable resources. The collapse of the Soviet Union displaced rather than dissolved these logics, producing the haunted realities of continuing imperial formations in material and affective terms.

Taken together, these sites allow us to trace how the ambitions of high modernism continue to reverberate in post-Soviet Georgia, not as coherent developmental promises but as fractured, lingering forces that shape both material landscapes and political imaginaries. Here, Derrida's (1994) notion of hauntology and temporality highlights how the past never truly disappears but persists spectrally in the present, challenging linear narratives of progress. Hence, here haunted modernity signifies the landscapes in which earlier developmental ambitions persist as traces, ghosts, and reconfigurations, structuring how people imagine futures, inhabit the present, and contest state projects. Haunted modernity captures how infrastructures – whether embanked, resisted, or ruined – carry the residues of earlier state visions while simultaneously giving rise to new and unpredictable relations. Accordingly, rather than narrating a linear transition from socialist modernity to the neoliberal present, the article shows how these diverse infrastructures stage the afterlives of modernist aspiration. Across these sites, the afterlives of high modernism become visible not only in physical forms but also in affects, frictions, and counter-imaginaries. Haunted modernity provides a thread tying together these ethnographic moments, illustrating how infrastructures endure as lively, contested terrains where past visions continue to shape political possibilities even as their original promises fade.

The Infrastructures of Ideology: The Mtkvari Embankments of Tbilisi

The Mtkvari River, long celebrated as a nurturing “mother river” of Tbilisi (Kardava 2013), shaped the city’s natural, historical, social, and cultural fabric for many centuries. Integral to urban life, its centrality began to erode in the 1930s under Soviet rule, in the frame of the state-led modernisation. Thus, once a vibrant symbol of Tbilisi’s identity, the Mtkvari now lingers in the background, muted, embanked, and largely forgotten in the shadow of the very infrastructure built to “modernise” it. As Gurchiani (2022) observes regarding Tbilisi’s waterscapes, this Soviet logic effectively reclassified the river from a living entity into a “water object”, a mere component of the urban “scaffolding” (*karkasi*), thereby stripping it of its ecological agency and reducing it to a functional node within the state’s infrastructural network.

The logic of this transformation is vividly captured in a 1955 issue of the newspaper *Komunisti*. Celebrating the concrete embankments, the text proclaims:

What you see in this photograph is not just a view of a city, it is a small fragment of the newly blossomed capital of Soviet Georgia. This is our beloved mother, Tbilisi, transformed and unbelievably beautified through the heroic efforts of the Five-Year Plans. Old Tbilisi now lives only in the memories of older generations. In its place, a renewed, radiant city has risen, shining as the southern sun. For this transformation, we owe deep gratitude to the Communist Party, the Soviet government, and the great Russian people.

This passage, saturated with the rhetorical excess of Soviet ideological language, offers a revealing glimpse into the narrative framework through which the transformation of Tbilisi’s urban landscape was discursively constructed and emotionally mobilised. What appears at first glance as a simple homage to modernisation can, in fact, be read as a tightly orchestrated script that reconfigures space, memory, and identity in line with the logic of Soviet progress.

The riverfront, particularly the embankments along the Mtkvari River, becomes central in this transformation. The image of a ‘renewed city shining like the southern sun’ reflects not only aesthetic embellishment but a deliberate act of ideological erasure – the replacement of the organic, layered, and chaotic textures of old Tbilisi with the rational, ordered surfaces of socialist modernity. The natural flow of the river is tamed and channelled, its banks reinforced with concrete, and its voice subdued beneath the roar of highways – infrastructural monuments to the Five-Year Plans as major Soviet economic and urban transformation frameworks and to the imagined future they sought to materialise, enacting what Caroline Humphrey (2005) describes as “unspoken strategies of harsh control”.

The invocation of gratitude toward the “Communist Party and the great Russian people” underscores the imperial hierarchy embedded in this modernisation. Urban transformation is presented not as a local achievement but as a gift bestowed by centralised

power. The riverfront thus becomes a site where local histories are submerged beneath the floodwaters of imperial modernity.

What is particularly striking to me in this passage is the melancholic aftertaste beneath the triumphal tone: “the old Tbilisi now remained only in the memories of older generations”. Framed through Derrida’s concept of hauntology (Derrida 1994), this admission functions as an unintended acknowledgement that the past is never fully “past”. Instead, memory here operates as a residue, a spectral presence that continues to haunt the “renewed, radiant city”. It marks a site where affective attachments to the pre-Soviet urban fabric endure, even as the official narrative seeks to overwrite them. Thus, in contrast to its intended goal of celebrating the erasure of the old city, the text inadvertently memorialises it. It creates a “haunted” space where the “radiant city” is forever shadowed by what was destroyed to build it. In ethnographic terms, these lingering memories, often carried by older residents and embedded in oral histories or domestic photographs, offer a quiet counterpoint to the monumentalism of state discourse. The contrast between the intimate knowledge of the city and the spectacle of its transformation is hence not merely spatial, but deeply political.

In contemporary Tbilisi, this melancholic undercurrent has materialised into physical decay. The monumental infrastructure once celebrated as a victory of planning now stands as a barrier, cutting the city off from its water and demonstrating that the logic of the independent state remains haunted by the high-modernist templates of its imperial predecessor – a continuity Ocaklı and Ibele (2023) similarly observe regarding wider infrastructural developments in the country. The embankments, crumbling and overtaken by vegetation, embody the “resource frontier” logic described by Anna Tsing (2003): a landscape where the river was “disentangled” from social relations to become a utilitarian logistical corridor.

However, the “disentanglement” is never complete. In the fracture between the river’s physical persistence and its social marginalisation, a specific urban nostalgia emerges – not for the Soviet project, but for the lost intimacy with the water, as an emotional response to change (Sweeney 2020). As one of my interlocutors, Tamar, a geographer and an environmentalist, in her mid-50s, recounted:

There are still people alive today who remember a different Mtkvari... My father, for instance, used to tell stories of how, as children, they would go there to swim. Back then, before the river was confined within artificial embankments, its flow was more open, more alive. He remembered how, in winter, the edges of the river would sometimes freeze – a detail that stayed with him over the years and he spoke about often, with a kind of quiet wonder.

Tamar’s recollection acts as a counter-narrative, resisting the flattening logic of the concrete banks. It highlights how the Mtkvari riverfront functions as a “poetics of infrastructure” (Larkin 2013), generating affect through its estrangement. The promise of beauty and progress, encoded in the 1955 text, has aged into a paradox. Ideologically, it

functions as a palimpsest, constantly rewriting the city's memory. Still, materially, it operates as an accretive infrastructure (Anand 2015), where the "half-fulfilled visions" of the past are not erased but physically accumulated, creating a sedimented landscape of concrete and ghosts.

Today, Tbilisi grapples with this inheritance, the Mtkvari riverfront becomes an emblematic site of 'haunted modernity' – a Soviet high-modernist vision that neither fully succeeded nor disappeared, continuing to structure urban experience through concrete residues and ideological shadows. Consequently, the river exists as a paradox – mythologised in collective memory yet estranged in practice. While the Mtkvari stands silenced by the legacy of Soviet hydraulic control, other waters in Georgia are finding their voice. Unlike the muted riverfront of the capital, roaring Rioni in the Rioni Valley of west Georgia has become a site where water is not merely remembered but actively defended from the ghostly presence of the modernist imaginaries.

Infrastructures of Revival: Namakhvani HPP and its Contestations

In 2020, sitting in his car, Varlam Goletiani, the leader of the Rioni Valley Movement, turned on the camera, addressing people around the country through the Facebook page "Save Rioni Valley". This marked the beginning of Georgia's largest protest against the planned construction of the Namakhvani hydropower plant on the Rioni River, in western Georgia.

The agreement between the Government of Georgia and the Turkish company ENKA Renewables to build the Namakhvani HPP on the largest river in western Georgia was signed in November 2019, with the stated aim of enhancing the country's energy security and economic development. However, scepticism over yet another infrastructure project promising a better future was apparent among local communities, who faced complete denial, unanswered questions, and financial manipulation to force them to give up their lands. The agreement itself remained secret until a journalistic investigation made it public in 2021 (iFact, 2021). The leaked legal documents had proved the illusion of a promised future of infrastructure. The Government of Georgia transferred approximately 600 hectares of land to the company for only 2000 GEL in the Rioni Valley, specifically in the Racha-Lechkhumi and Imereti regions. The transfer of the land signified the company's right to free access to resources, the river, the land, the road, and the forest without any commitment to selling energy on the domestic market, undermining the argument regarding the country's energy independence or possible economic benefits (SJC 2021).

The development of the Namakhvani hydropower project dates back to the Soviet period, beginning in the late 1960s and continuing into the 1970s. Throughout this time, its design underwent multiple revisions, and the project was reworked on several occasions. Ultimately, in 1985, a final design was approved. Still, amid the rise of the national movement in Georgia and the subsequent collapse of the Soviet Union, the Namakhvani

project was shelved for an extended period (Macharashvili, 2021). Although local opposition in Lechkhumi had been present throughout, the project never progressed beyond the planning stage, and no construction work was initiated. However, it resurfaced in 2009, when the government signed a memorandum of understanding with a Turkish Korean consortium to develop the HPP project. However, the consortium soon withdrew, and the project was suspended once again. In 2015, the Government of Georgia launched another process to attract investors to execute the Namakhvani HPP, which culminated in the 2019 agreement, and, unlike other attempts, this time modernist Soviet imaginaries have flourished in the very heart of the Rioni Valley, where construction has begun. As a result of the continued protest mobilised by the Rioni Valley Movement, in 2021, ENKA Renewables, responsible for building the Namakhvani HPP, officially terminated the contract with the Government of Georgia and suspended construction. The protest sustained and continued under the tent for 554 days and nights, mobilising and sheltering supporters across all of Georgia, resisting the modernisation fantasies of the centre, political exclusion of local communities, and the possible dispossession and ruination of the valley. However, before it was finished, it had begun, and its inception had already materialised in the local landscape. The visible traces of its beginning came to function as a haunted site where fears about the valley's future are imagined and articulated, chased by the ghost of modernist ideals of infrastructural development, it produced a visual and affective anticipation of the project's eventual completion.

As part of my fieldwork, I visited the valley in 2022, soon after the company had left the site. I stayed with Maka, a prominent leader of the Rioni Valley movement, who guided me through the developmental leftovers accompanying the environmental landscape in the Valley. Cut hills and rocks, concreted roadsides, changed water beds, abandoned construction debris, parked trucks, bunkers, iron constructions, and mud were making a local assemblage of unfinished watery infrastructure. The dysfunctional machinery and destroyed roads were all that had been left behind – between the suspended construction and the resisted destruction, the valley seemed to live in an uncertain present, caught between the future and the past. The entire landscape was filled with uncertainty, with its frozen materialities becoming a readable artefact of life after ruination.

“I saw trucks on the road, some machinery was moving” – says Lali, one of the members of the Rioni Valley Movement, while we were sitting in the kitchen and drinking wild chamomile tea, harvested in the valley.

“Where were they going, what were they doing”, I wonder, she continued.

“They're up to something; I am telling you”, responds Maka.

“We should open the eyes and minds of these people. Oh, how they are playing with these people. They are about to revive that horrible situation we went through”.

“They didn’t go anywhere, Lali. I didn’t believe even for a moment that they left. The scenario is going exactly as I thought, they can’t act differently”, says Maka.

“Shall I take out my white boots?”, asks Lali with a laugh, referring to her “protesting” boots.

“As they say, the case is now in arbitration, but despite this, the state says that they are negotiating. What nonsense. However, where would they go? There’s no other place left in Georgia; everywhere they are building something”, says Maka.

While discussing their concerns, occasionally, they would burst into laughter, while other times, a sudden sadness would cross their faces. After the protest, despite returning to their daily routines, prevailing uncertainty was throwing them into despair and anticipation of the future, that is no more – an ever-present of the infrastructural “promises” anticipated its constant return. Building on Derrida’s concept of hauntology, this is the spectral present, an afterlife, a ghost of modernist imaginaries haunting watery landscapes, although under the camouflage of state nationalism, autonomy, development, or progress, would come back again with new promises but old tools. Hence, there was no longer a “fully now” but the assemblage of the past and the future through the spectral presence of infrastructure that, although is absent, is still present and felt, not only through its repetition, but also through the landscape of the infrastructural traces left behind.

However, what these infrastructural formations are telling us is the constant presence of future and past knitted in the fabrics of the present, filled by constant destruction and its contestation. Thus, the past repeats itself not only through the developmental destruction of nature portrayed as modernist progress, but through repeated resistance and citizen mobilisation. Here, Rioni Valley becomes a site haunted by ghostly infrastructures, but the ghostly presence of resistance also haunts those infrastructures. In the following ethnography, watery infrastructures and their pasts unfold differently. By exploring Poti’s informal scrap metal economy, the next chapter shows how infrastructural decay generates new social forms, emotional ties, and survival strategies in the landscape of infrastructural ruination and its ghosts.

Infrastructures of Afterlife: Scrap Metal Collection in Poti

On a grey November day in 2023, during my routine walk to fieldwork with the fish-smokers community, I noticed a rusted booth marked “scrap metal” (*jarti*) not far from my temporary residence. I met its caretaker, Giorgi, a former factory worker who turned to scrap collection after industrial closures in the 1990s and repurposed the booth – ironically once scrap itself – into a collection point where discarded metal circulates through informal markets.

During my fieldwork in Poti, residents consistently identified scrap metal collection as a crucial means of survival following the dissolution of the Soviet Union. While informal scrap economies enabled many locals to support their families, those who had held privileged positions during the Soviet era – or who acquired different infrastructures cheaply during privatisation – were often best positioned to profit from industrial collapse. One of my interlocutors' phrases, "we started feeding on the Empire's remnants", made me think about the nature of these remnants, the repercussions of their collection, people's attitudes toward the trophies of the Empire, and how the values introduced during the Soviet Union era have transformed into scrap metal, consequently evolving into capitalist commodities.

Georgia's material landscape was dramatically reconfigured in the 1990s through privatisation, which intensified late socialist inequalities and dismantled cooperatively administered industrial complexes. In Poti, naval infrastructure was among the first to be disassembled: ships were scrapped, sold, or abandoned, while the Poti Shipyard fell into disrepair. Already weakened by economic abandonment, these infrastructures were steadily undone by the sea, whose salt air and humidity accelerated corrosion and generated debris that sustained informal scrap economies. Water thus operates not merely as an erosive force but as an active collaborator in Poti's infrastructural afterlives, linking global commodity flows to local survival practices.

Emerging private actors in Poti stripped components from factories and port machinery and frequently sold them to adjacent Turkey. Industrial carcasses, the remains of broken promises, were all that were left. These remains/ruins are shaped by industrial decay and the atmospheric presence of the sea, whose humidity, salt, and cycles of erosion inscribe watery temporalities into the city's material textures. Here too, the promise of modernity persists in spectral form: Soviet infrastructures survive as fragmented matter generating improvised economies and forms of life in the ruins of the project that produced them. In Poti, water mediates not only ecological transformation but also the affective and political afterlives of modernity, rendering Soviet infrastructures present as fragmented, ghostly matter within everyday survival practices.

It is within this spectral, watery landscape that residents like Levan, an artist in his forties, made sense of ruination as an ordinary feature of life rather than an exceptional condition: "for years, I thought ruins and destroyed factories were just a normal part of reality because there were so many abandoned buildings around". These ruins, however, were anything but inactive. In emerging informal economies, corroded machinery, rusted pipes, and rebar were appropriated as material resources. "Imperial debris" (Stoler 2013) found a second life as living things within daily survival struggles rather than as sentimental symbols of loss. The socialist infrastructure in Poti was not merely lamented; rather, it was reclaimed, reoccupied, and emotionally rearranged.

Building on Jovanović's (2021) notion of "matter in another right place" and Gordillo's (2014) concept of "rubble", I approach ruins not as static symbols of loss but as

generative sites where new infrastructures, economies, and social relations emerge. In Poti, infrastructural ruination is not an endpoint but a dynamic process through which breakdown and decay produce new ecologies of practice and meaning. Following Tsing's (2021) concept of "salvage accumulation", the process of reassembling and extracting value from the ruins of empire is placing ruination within the larger framework of global capitalism. To challenge prevailing narratives of post-socialist degeneration and to provide a more nuanced understanding of how communities, materials, and landscapes endure, transform, and thrive amidst systemic collapse, my analytical attention shifts from ruination as symbolic death to ruination as a generator of life. Although Soviet-era scrap is increasingly scarce, informal scrap economies are sustained by ongoing development and uncontrolled construction. In post-industrial Georgia, scrap collection remains a dangerous, labour-intensive practice that links household survival to global commodity flows and constitutes an improvised infrastructure within a decaying material landscape.

Scrap collection, processing, and transportation dynamics reveal the complex network of unofficial labour practices entwined with the remains of deteriorating infrastructure. The afterlife of Soviet ruins emerges as a catalyst influencing capital relations in this complex world, as scrap collectors negotiate the hazy boundaries between autonomy and wage labour. The afterlife of Soviet ruins, as illuminated through the lens of scrap metal, invites us to explore the linkages between informal economies and the remains of a demolished empire. The scrap collectors are improvising actors navigating a world where infrastructural failure has become the primary condition of possibility; they are neither free agents nor passive victims. Metal's materiality – its weight, volatility, and scrap value – joins the collectors in their endeavours. Together, they compose an infrastructure of survival.

Affect is also intertwined with these material practices. Scrap collectors traverse a city full of melancholic attachments. Consequently, ruins in Poti are active mediators of memory and emotion rather than passive relics. They exemplify what Boym (2007) refers to as "reflective nostalgia", which is a critical approach to the past that considers loss rather than restoration. These affectively charged ruins evoke forms of reflective nostalgia, shaping how residents navigate precarity through adaptive and imaginative labour. This dynamic is aptly encapsulated by the notion of "social navigation" (Vigh 2009). People in Poti do not just live with destruction; they navigate it, adjusting their tactics as conditions change. Scrap collectors seem independent, yet they are intricately linked to unstable local and global systems, much like Tsing's mushroom pickers in impaired forests.

Ultimately, the infrastructural ruins of Poti demand a rethinking of how we theorise infrastructure itself. As Star and Ruhleder (1996) famously noted, infrastructure becomes visible when it fails. In Poti, failure is a constant condition, but it is also productive.

Conclusions

Infrastructure projects that were supposed to embody ambitions of high modernism involved modifying human living environments, taming nature, and transforming traditional landscapes. Infrastructure development had its own future-oriented promises, focused on realising collective aspirations and goals. However, in the 1990s, aspirations crumbled, and faith in infrastructure as a tool for engineering a better future was lost. Material infrastructure, as a spectre of the past and a future that has not come, has begun to haunt the present, turning future infrastructure projects into a source of anxiety, amid the fear of history repeating itself. The crumbling infrastructure of Poti and the silent Mtkvari River have become affective sites, not only because they embody the unfulfilled promises of the past, but also because they predict the fate of future infrastructure projects, such as the Namakhvani hydroelectric power plant.

Therefore, this article proposes to rethink infrastructure not as a neutral foundation of development or a static legacy, but as a haunted terrain where past ambitions remain, collide, and are continually renegotiated. It also argues for understanding infrastructure as a dynamic and relational formation – simultaneously a site of material breakdown, repetitive afterlives, but also a site of political becoming. In Tbilisi, the Mtkvari embankments demonstrate a project of control and ecological silencing that ultimately reveals the state's failure to create an ideological palimpsest. Rather than overwriting the past, the concrete has become an accretive infrastructure (Anand 2015) where the “river's ghost” lingers beneath the stone, signalling an estrangement that the contemporary city cannot fully resolve. The Rioni Valley illustrates how infrastructures planned from afar are actively resisted on the ground. However, it also shows how the modernist imagination keeps returning. Here, hydropower projects repeat themselves under the guise of different ideologies, with a persistent belief in nature tamed and controlled. Lastly, in Poti, infrastructural ruination emerges not merely as a symptom of economic collapse but as an active condition fostering new socio-material practices, informal economies, and affective attachments that navigate the complex aftermath of empire. Far from exemplifying coherent progress or technocratic mastery, infrastructures across these sites reveal modernity as a haunted, fragmented, and continually negotiated terrain.

Employing theoretical insights from the anthropology of infrastructure and hauntology, this article demonstrates that infrastructures in post-Soviet Georgia cannot be understood simply as a backdrop for state-led modernisation projects or neoliberal transformations; they do not simply fail or succeed but persist as haunted formations that shape contemporary political imaginaries, anxieties, and resistances. This ever presence of modernist imagination constitutes social, ecological, and political relations, providing critical lenses through which to understand broader processes of sovereignty, memory, and resistance. Infrastructures are socially and affectively charged terrains where power,

nostalgia, and everyday life intersect. Moreover, infrastructure is not merely a space or a terrain where feelings, contradictions, and conflicts converge, but an active agent that, contrary to its intended purpose and assigned function, itself becomes a very source of what it was planned, built, destroyed, or promised to prevent.

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Bibliography

- Amin, Ash. 2013. "The Urban Condition: A Challenge to Social Science." *Public Culture* 25 (2): 201–208.
- Anand, Nikhil, Akhil Gupta, and Hannah Appel, eds. 2018. *The Promise of Infrastructure*. Durham and London: Duke University Press.
- Arshvili, Alexandra. 2023. "The Extractive Operation on Water and Its Social Costs: An Attack on Life." In *January February March*, 231–271. Publication for the Georgian Pavilion at La Biennale di Venezia. Tbilisi: Tbilisi Architecture Biennial.
- Barry, Andrew, and Evelina Gambino. 2024. "Projects of Transition." *Economy and Society* 53 (3): 351–375.
- Berlant, Lauren. 2016. "The Commons: Infrastructures for Troubling Times." *Environment and Planning D: Society and Space* 34 (3): 393–419.
- Berardi, Franco. 2011. *After the Future*. Edited by Gary Genosko and Nicholas Thoburn. Oakland, CA: AK Press.
- Boym, Svetlana. 2007. "Nostalgia and Its Discontents." *The Hedgehog Review* 9 (2).
- Collier, Stephen J. 2011. *Post-Soviet Social: Neoliberalism, Social Modernity, Biopolitics*. Princeton, NJ: Princeton University Press.
- Derrida, Jacques. 1994. *Specters of Marx: The State of the Debt, the Work of Mourning, and the New International*. New York and London: Routledge.
- Fisher, Mark. 2012. "What Is Hauntology?" *Film Quarterly* 66 (1): 16–24.
- Gordillo, Gastón. 2014. *Rubble: The Afterlife of Destruction*. Durham, NC: Duke University Press.
- Gurchiani, Ketevan. 2023. "Rivers between Nature, Infrastructure, and Religion." *Central Asian Survey* 42 (1): 21–40.
- Hägglund, Martin. 2008. *Radical Atheism: Derrida and the Time of Life*. Stanford, CA: Stanford University Press.
- Humphrey, Caroline. 2005. "Ideology in Infrastructure: Architecture and Soviet Imagination." *Journal of the Royal Anthropological Institute* 11 (1): 39–58.
- iFact. 2021. "ნამახვანი – რას გვაკარგვინებს და რას გვაძლევს? [Namakhvani: What Does It Cost Us and What Does It Give Us?]." *iFact.ge*. <https://ifact.ge/namakhvani/>
- Jovanović, Deana. 2021. "Infrastructural Stripping and 'Recycling' of Copper: Producing the State in an Industrial Town in Serbia." *Social Anthropology* 29 (3): 586–601.
- Kardava, Dato. 2013. *მტკვარი და მისი ორი ნაპირი [The Mtkvari and Its Two Banks]*. Tbilisi.
- Khan, Naveeda. 2006. "Flaws in the Flow." *Social Text* 24 (4): 87–113.
- Komunisti. 1952. "Partovdeba Sakartvelos Dedaqalaqis Ketilmotskobis Samushaoebi [Improvement Works in the Capital of Georgia Are Expanding]." *Komunisti* 204.
- Larkin, Brian. 2013. "The Politics and Poetics of Infrastructure." *Annual Review of Anthropology* 42 (1): 327–343.
- Latour, Bruno. 2005. "From Realpolitik to Dingpolitik: An Introduction to Making Things Public." In *Making Things Public: Atmospheres of Democracy*, edited by Bruno Latour and Peter Weibel, 14–41. Cambridge, MA: MIT Press.

- Macharashvili, I. 2021. “‘ნამახვანი ჰესის’ ისტორია – რა არის მთავარი პრობლემა [The History of Namakhvani HPP: What Is the Main Problem].” *Mtis Ambebi*. <https://mtisambebi.ge/news/ecology/item/1303>
- Nachkebia, Nodar. 1957. *Poti Ekonomikur-Geograpiuli Narkvevi [Poti: Essay on the Economy and Geography]*. Tbilisi.
- Niewöhner, Jörg. 2015. “Infrastructures of Society, Anthropology Of.” In *International Encyclopedia of the Social & Behavioral Sciences*, 119–125. Amsterdam: Elsevier.
- Ocaklı, Beril, and Benedikt Ibele. 2023. “Georgia’s Modern (Not so Environmental) Problems: The Nature of Road and Energy Infrastructures.” In *Ecological Concerns in Transition: A Comparative Study on Responses to Waste and Environmental Destruction in the Region*, edited by Ninna Mörner, 133–143. Huddinge: Centre for Baltic and East European Studies, Södertörn University.
- Ocaklı, Beril, and Valentin Krüsmann. 2025. “Whom the Roads Bypass: Rikoti’s East-West Connections in a Disconnecting Georgia.” *Mobilities*: 1–21.
- Povinelli, Elizabeth A. 2016. *Geontologies: A Requiem to Late Liberalism*. Durham and London: Duke University Press.
- Rekhviashvili, Lela. 2022. *Struggle for the Rioni Valley in between Political and Civil Society Terrains: Contested Infrastructures and Development Politics*. Tbilisi: Heinrich Boell Foundation South Caucasus.
- Rekhviashvili, Lela, and Evelina Gambino. 2024. “Failed Infrastructures and the Promise of Development in Georgia.” *Second Cold War Observatory*, Dispatch 2024.4. <https://www.secondcoldwarobservatory.com/dispatch-2024-4>
- Rekhviashvili, Lela, and Thilo Lang. 2024. “Chinese Investments as Part of Infrastructure-Led Development: Multi-Scalar Contestations around Georgia’s Flagship Infrastructure Projects.” *Eurasian Geography and Economics*: 1–30.
- Scott, James C. 1998. *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed*. New Haven: Yale University Press.
- . 2025. *In Praise of Floods: The Untamed River and the Life It Brings*. New Haven: Yale University Press.
- Social Justice Center. 2021. “Violations, Inconsistencies and Unsubstantiated Concessions: A Brief History of Namakhvani HPP Cascade Project.” https://socialjustice.org.ge/uploads/products/pdf/Namakhvani_ENG_1627_034834.pdf
- Star, Susan Leigh. 1999. “The Ethnography of Infrastructure.” *American Behavioral Scientist* 43 (3): 377–391.
- Star, Susan Leigh, and Karen Ruhleder. 1996. “Steps Toward an Ecology of Infrastructure: Design and Access for Large Information Spaces.” *Information Systems Research* 7 (1): 111–134.
- Stoler, Ann Laura, ed. 2013. *Imperial Debris: On Ruins and Ruination*. Durham and London: Duke University Press.
- Sweeney, Paula. 2020. “Nostalgia Reconsidered.” *Ratio* 33 (3): 184–190.
- Tsing, Anna Lowenhaupt. 2003. “Natural Resources and Capitalist Frontiers.” *Economic and Political Weekly* 38 (48): 5100–5106.
- . 2021. *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins*. New paperback printing. Princeton and Oxford: Princeton University Press.

- . 2024. *Friction: An Ethnography of Global Connection*. New paperback edition with a new preface by the author. Princeton: Princeton University Press.
- Vigh, Henrik. 2009. “Motion Squared: A Second Look at the Concept of Social Navigation.” *Anthropological Theory* 9 (4): 419–438.
- Von Schnitzler, Antina. 2016. *Democracy’s Infrastructure: Techno-Politics and Protest after Apartheid*. Princeton: Princeton University Press.
- Wyeth, Ryan David. 2022. “White Coal Nation? Resource-Making, Identity, and Hegemony in the Struggle over Georgia’s Hydropower Development.” PhD thesis, Durham University.

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