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Spectacular infrastructure and its breakdown in socialist Vietnam

ABSTRACT

No material resource and public good is more critical to sustaining urban life than water. During postwar reconstruction in Vietnam, planners showcased urban infrastructure as a spectacular socialist achievement. Water-related facilities, in particular, held the potential for emancipation and modernity. Despite East German-engineered systems, however, taps remained dry in socialist housing. Lack of water exposed existing hierarchies that undermined the goal of democratic infrastructure yet enabled new forms of solidarity and gendered social practice to take shape in response to the state's failure to meet basic needs. Infrastructural breakdown and neglect thus catalyzed a collective ethos of maintenance and repair as the state shifted responsibility for upkeep to disenchanted tenants. I track these processes in a housing complex in Vinh City, where water signified both the promises of state care and a condition of its systemic neglect. [*materiality, infrastructure, socialist modernity, urbanization, decay, maintenance and repair, water, Vietnam*]

The reality of communism is utterly spectacular: an impeccable monumental assemblage of factories, chimney-stacks, construction sites, parading masses, flying tip-wagons, magic words and slogans, a mausoleum, a Mummy surrounded by the tough figures of the future.

—Vladislav Todorov, *Red Square, Black Square*

The leak had been ongoing for more than a week. At the advice of neighbors, I had decided to ignore it. Yet, one morning, in the midst of fieldwork in a social housing complex in Vinh City, northern Vietnam, I woke to find the bathroom and hallway flooded with water.¹ I had traced the leak to the bathroom ceiling several days earlier but had decided not to attempt to fix it. Leaks were common in the now-decaying buildings East Germany had constructed in a gesture of “international solidarity” in the aftermath of the war with the United States. Here, breakdown was not catastrophic but part of a routine, fractal “always-almost-falling-apart” world in which the residents lived (Jackson 2014:222). Every household had leaks; generally, though, no one knew or invested time and energy in tracing the sources. Such knowledge meant having to confront the complicated and fuzzy issue of accountability and to address, if not rethink, the complexities around a social and moral ethics of maintenance and repair. Most leaks eventually stopped: Some were self-healing; others required minor tinkering with the system. Breakdown as routine meant a certain routine of breakdown—one that could generate endless innovation and improvisation but that also marked a state of increasing disaffection toward local government and its negligent maintenance that led to unsafe living conditions in many of the apartment blocks.²

When I first mentioned the leak to my landlord and upstairs neighbors, they shrugged their shoulders ambivalently. But after the flooding incident, I decided to take action. I asked around for the number of a plumber, assuming that a chronic state of disrepair meant a bustling business in maintenance, but no one in my housing block used such services. Finally, a friend of a friend (a nonresident), dressed in business attire, came and opened the ceiling. Water streamed out. He then left; as a computer scientist, he had no experience with plumbing, but he promised to find someone who did. My landlord started to show signs of irritation. “I take care of my house,” she told me in private, revealing a morally critical stance

that lay beneath the collective facade of ambivalence about the responsibility for upkeep. “Others don’t, and now it’s affecting me.” But when it came to the issue of repairs, she waved her hand dismissively and told me that I could worry about it if I pleased. Clearly, and understandably, she had no intention of investing her limited funds in fixing just another problem encountered in social housing. Neither did the upstairs neighbors.

A plumber eventually found that the leak was coming from the upstairs neighbors’ toilet. But the neighbors also avoided responsibility for it, even though the cause was only an eroded steel nut. What could have been a simple fix had escalated to a larger structural problem for which, given the building’s existing state of decay, they could not assume liability. A friend suggested that building management (the Division of Housing under the jurisdiction of the Provincial People’s Committee) should be held accountable, and everyone laughed. The last major repair that residents remembered had been in the late 1990s, when housing authorities had added steel braces to crumbling support beams along the corridor.³ Typically, residents collectively funded repairs; in fact, the month prior to the leak, each household had contributed 100,000 Vietnam *đồng* (US\$5) toward patching up broken stairs in the stairwell.

Because the dampness in my unit had begun to take on a strong musty smell, and the walls and floor were starting to mold in the dank winter weather, I asked the plumber to complete the job and offered to cover the costs, despite my friend’s protests that it was not my responsibility. My monetary intervention—and bringing in an outside expert—was, for me, the most expedient solution to maintaining a healthful and comfortable living environment. Nonetheless, that action threatened to disrupt the established ethos of improvisation and denial of responsibility that hinged on collective rather than individuated action. This ethos had generated important solidarities in the complex since the late 1970s, when the blocks were built and allocated to civil servants and workers. One week after the neighbors’ toilet had been repaired and the slats between the floors supporting the water heater and storage tank had dried out, the plumber reaffixed the laminated ceiling panel and presented me with the bill for 160,000 Vietnam *đồng* (US\$8). The next day, puddles of water began to form on my kitchen floor: A slow drip from the pipes under the sink had expanded to a larger leak, requiring the plumber’s services yet again.

I start with this story from my December 2010 field notes to situate my discussion of the materiality of goods and resources—those technical objects of infrastructure at the center of urban disputes and negotiations that unfold between (and among) state and nonstate actors and that are vital to sustaining social and political life (Barry 2013). There is perhaps no natural resource and public good more critical to maintaining urban life than water.

Its management, distribution, and use reveal a contested politics of resource making, on the one hand (Barnes 2014), and highly uneven experiences of urban infrastructure that require diverse arrangements and practices, on the other (Anand 2011). Here, I examine water in an urban setting in the Socialist Republic of Vietnam as a problematic materiality—one that emerged as a signifier both of the promise of state care in a system of centralized distribution of goods and services, and of an enduring condition of neglect tied to the state’s inability to adequately provide for its citizens. My use of “the state” here refers to the bureaucratic apparatus of governing actors and institutions, such as the People’s Committees at the provincial, municipal, and district levels, that exercise local power under the authority of the central government in Hanoi and the ruling Communist Party. Among research participants, reference to *nhà nước* (the state, or, literally, house and water, to represent the spatiality of Vietnam as configured by an encounter between land and sea) fits closely with James Ferguson and Akhil Gupta’s model of the imagined, all-encompassing state that was made politically legitimate and socially efficacious “through particular imaginative and symbolic devices” (2002:981). My interlocutors largely conceived of the state in paternalistic terms: as caretaker and provider, obliged to act not out of compassionate beneficence alone but out of compulsory compensation for citizens’ wartime service. That such imaginaries were more of an ideal than an everyday reality is reflected in the dual signification of water, galvanizing residents to hold the state accountable to an ethics of provision and maintenance.

Shifting scholarly attention from megacities, this article focuses on Vinh, a smaller, “ordinary city” aspiring to modernity and development (Robinson 2006). Vinh, in the province of Nghệ An, is rarely included in discussions of Vietnamese urbanization, and yet it is the center of industrial production in north-central Vietnam.⁴ With a current population of less than half a million, Vinh holds the unfortunate status of having been one of the most heavily bombed and decimated cities during the U.S.-led air war in Vietnam. Subsequently, from 1974 to 1980, East Germany redesigned and rebuilt Vinh as a “socialist city” as part of a larger political project of the global Cold War that advocated the transfer of infrastructure technologies and transnational expertise for the purpose of socialist nation building (see also Hecht 2011).⁵ Foregrounding how the Cold War shaped urban infrastructure development in a poorer socialist country that was the beneficiary of international solidarity, I examine the aesthetic and ideological commitment to what I term a “technopolitics of visibility,” that is, the strategic use of technology as a visual tool to “constitute, embody or enact political goals” (Hecht 2009:15). This technopolitics of visibility sought to showcase urban networks of infrastructure as spectacular socialist achievements that stood as emblems of progress

and contemporaneity with the rest of the advanced socialist world.⁶ Drawing on the work of Maria Kaika and Erik Swynedouw, I approach urban infrastructure as the cultural-technical systems that appropriate human labor and material resources to transform “nature” metabolically and socially into “city” (2000:121). As I demonstrate, the public celebration of urbanized nature, marking the conversion of natural resources into a consumable commodity, allowed infrastructure as aesthetic and technical spectacle to become a biopolitical tool of the socialist state for managing and civilizing the urban population (Collier 2011:205).

In the immediate postwar years of reconstruction, water—as symbolic infrastructural matter—suggested an urban futurity of socialist modernity and transnational solidarity with ample state provision of essential goods. As water flowed, so too would the abundance of socialism flow to the masses. This vision of water as holding the potential for emancipation contrasted sharply with the racialized and class-based disparities of the infrastructure regime under French colonialism prior to the war and revolution. Socialist housing, in particular, represented the apex of this achievement, with an extensive system of GDR-engineered plumbing, drainage, piping, and water storage built to support a concentrated population of more than 8,000 state employees. Yet this utopic infrastructuralism proved difficult to sustain, resulting in critical shortages of resources, including electricity and water. The lack of a stable and sufficient water supply posed immense difficulties for new urban dwellers in their modern, five-story apartment blocks and also proved an obstacle to engineering hygienic, urban socialist citizens as envisioned by the state.

In what follows, I trace the ways that breakdown and decay of infrastructure both exposed and reinforced existing hierarchies in a society striving toward egalitarianism and compelled new relations of solidarity and sociability to take shape, even across such differentiations. Collective social practices centered on water—its flow, blockage, and exchange—in response to the failure of local government to provide an adequate supply to urban residents. These practices required constant innovation and reinvention of the system to restore moral order and combat inequality. My approach here is inspired by the provocation in recent scholarship to shift the locus of study from the production of urban infrastructure to its disrepair and maintenance (Anand 2012; Carse 2014; Chu 2014; Graham and Thrift 2007; Jackson 2014). Particularly in the Global South, it is “impossible to ignore that the very technosocial architectures of urban life are heavily dominated by, and constituted through, a giant system of repair and improvisation” (Graham and Thrift 2007:11). Out of order is thus seemingly the natural order of things in worlds where infrastructure disconnections rather than flows predominate. Yet as generative as this literature has been in shifting the analytical lens from how the world is produced to how it

is sustained (Jackson 2014:234), it has tended to overlook the pronounced ways that the technical and affective labor of improvisation and repair is corporeally grounded and gendered in practice. Water shortages in postwar Vinh, for example, led to a temporary suspension of the gendered division of household labor as men and women (including youth) mobilized collectively to secure water provisions in the face of technical failure. The example of the leak likewise illustrates how these collaborations continue to play a strong role in the postreform years of market socialism: Infrastructural breakdown and neglect has catalyzed a collective ethos of maintenance and care since the state ended its system of centralized distribution and transferred the onus of upkeep (of pipes, pumps, mains, tanks, and lines) to residents, who then deflected responsibility back at the state.

The in/visibility of infrastructure

The world dominated by its phantasmagorias—this, to make use of Baudelaire’s term, is “modernity.”

—Walter Benjamin, *The Arcades Project*

In their pioneering book on the technical infrastructures of urban societies, Steve Graham and Simon Marvin (2001) argue for attention to the elaborate ways that urban life is mediated by novel assemblages of network interconnections as well as by their failure and collapse. Graham and Marvin’s work is part of a growing body of literature on infrastructure and infrastructural politics under capitalism, resulting in the privatization of public works.⁷ Here, though, I shift the political-economic context to state socialism to examine the systemic building and maintenance of urban infrastructures as the material and ideological foundations for producing new social forms, values, and persons (Dalakoglou 2012; Humphrey 2005:39–40). My aim is to advance the larger project of a “critical urbanism of the contemporary networked metropolis” (Graham and Marvin 2001:9) by tracing the generative, rippling effects of a breakdown in the public water system constructed and celebrated as spectacular infrastructure in a rebuilt socialist city.

Among those who study infrastructure disruption, there is a tendency to take as axiomatic the claim that when technical systems fail, the unseen hardware and absent materiality of cities suddenly become visible, exposed, and awkwardly present in our everyday lives.⁸ Such ideas can be traced back to the Heideggerian distinction between technologies as ready-to-hand (*Zuhanden*) and present-at-hand (*Vorhanden*), with the former—the invisible, taken-for-granted utility of an object—suddenly becoming extant, manifesting in our consciousness as the latter through episodes of interruption and breakdown (Heidegger 2008; Jackson 2014:230). And yet in poor urban neighborhoods, infrastructure is typically bared, on display, and subjected to manipulation as part of everyday routines

and relations: People illicitly tap into water lines or electric grids in makeshift and risky operations to access public utilities that are unavailable, inefficient, or costly. This is not to suggest that a condition of visibility intrinsically represents nonexistent or damaged infrastructure or vice versa—that displacement from sight implies performance as usual; in fact, I argue against these very presumptions. As Bruce Robbins (2007) proposes, smell may be a more reliable referent to the lack or disruption of infrastructure. Moreover, Soviet infrastructure, as Todorov's quote at the start of this article suggests, once extolled utilitarian form through a technopolitics of visibility that strove to convey the emancipatory powers of spectacular public works to an enchanted, viewing population. This intent was also seen in the intimate spaces of everyday lives, for instance, in the conspicuousness of Soviet pipes that revealed how "the norms of social modernity were hardwired into the very material structure and spatial layout" of socialist cities (Collier 2011:202–203). We can draw parallels here with the case of Vinh where infrastructure projects, such as the water and sanitation works that the GDR built in a period of high socialism after the war, embraced the modernist ideals of "techno-utopianism" (Scott 2007) through the spectacle of civil engineering and its potentially transformative role in creating a prosperous and egalitarian urban society.

Discrepancies in claims between "concealed" and "revealed" networks invite a deeper analysis of the histories of infrastructure regimes, one that takes into account the temporalities and spatialities of infrastructural worlds embedded in particular political economies and attendant incarnations of modernity. The spectacular infrastructure politics of socialist modernity is by no means historically unique. Beyond Soviet monumentalism, the era of early capitalism also produced hypervisible, awe-inspiring technological innovations that captivated a marveling public. Echoing the optimistic *Geist* of early socialism and its promises of a better life, 19th-century engineering feats also rallied the utopian and hopeful dreamworlds of modernity (Buck-Morss 2002). As Kaika and Swynedouw have observed of such dreams, "Dams, water towers, sewage systems and the like were celebrated as glorious icons, carefully designed, ornamented, and prominently located in the city, celebrating the modern promise of progress" (2000:121). For Benjamin, such icons, detached from the social meanings and relations of production that animated them, were but technical fetishes constituting a phantasmagoric world of modernity that embodied the empty fantasy of a better tomorrow. As hopeful dreams collapsed and skepticism toward techno-utopia's promise of universal progress mounted (with rampant techno-pessimism replacing rife idealism), the "urban dowry" of network infrastructure—those now rusting and decaying remains of failed modernization—began to move underground (Kaika and Swynedouw 2000:132). Concealing infrastructure

beyond our daily sensory perception (i.e., its deliberate invisibilization) thus emerged as a novel technical and aesthetic imperative of late capitalism that, in espousing ideologies of sanitization and deregulation, banished the unruliness of pipes, ducts, wires, and lines to the subterranean strata of the city.

Today in the former Soviet Union, as public-private partnerships in infrastructure sectors—what the World Bank refers to as PPPs—have replaced the massive public works projects of the socialist state, this very aesthetics of the absent and the unseen, and of smooth, uninterrupted surfaces, has become the new "clean" standard for landscapes. Andrew Barry (2013) outlines this process in his account of the construction of the thousand-mile, underground Baku-Tbilisi-Ceyhan (BTC) pipeline that supplanted the rusting ducts of the Soviet oil industry. As Barry shows, the decision to reveal or conceal infrastructure was shaped by a host of complex and interrelated factors, ranging from economic, geopolitical, and logistical concerns to technical, ecological, and ideological objectives. In the end, the lack of any trace of the pipeline on the landscape appeared indicative of minimal social and ecological impact—as though people's lives and the environment around them had not been disrupted and their land not lost to capital-intensive, resource driven economies. The invisibility of the BTC pipeline thus indexed an emerging postsocialist aesthetic of continuous flows of landscape lines in tandem with material flows of natural resources and profits. It likewise reflected a critical change to the governance of infrastructure rooted in a technopolitics of absence and amnesia: out of sight (the pipeline), out of mind (dispossession and displacement; see Barry 2009). This approach differed sharply from that of the socialist era, which promoted, and indeed highlighted, historical rupture and change—economic, technological, and ideological—by spectacularizing infrastructure and its emancipatory possibilities through unveiling, rather than masking, the human and nonhuman labor involved in its creation.⁹

One of my goals here is to unsettle the strands of Heideggerian thought that associate infrastructure visibility with a moment of breakdown and crisis in the system. Rather than think of exposed pipes, lines, and tanks as broken and contaminated matter out of place (perhaps better situated as an infrastructural logic of neoliberal modernity), I suggest that there is much to learn from the study of public works and utilities that are unambiguously left visible and even made to be performative in both public and private space. Brian Larkin (2008:36) has made a similar argument in his study of grand infrastructure projects in colonial Nigeria that, in radically transforming the landscape, invoked a sense of the "colonial sublime" through the spectacle of British imperial power and the formation of new political subjects. Transgressing the colonizer-colonized distinction, in the postwar period of socialist reconstruction

in Vinh,¹⁰ infrastructure visibility and performativity were likewise essential to new strategies of urban governance that strove to create new urban persons and to maintain the authority of socialist rule. The conspicuousness of infrastructure operated “as technologies for materialising state presence” in the most intimate spaces of everyday life (Harvey and Knox 2012:530). Yet such strategies to ensure the legitimacy of local government, particularly in the domain of municipal water systems, ultimately failed. In the early years, water infrastructure as spectacle seemed to offer the promises of socialist technological modernity underwritten by international solidarity, but cracks and fissures in the materiality of the system—in the pipes, drains, and sewers—exposed widening fractures in society that undermined the utopian vision of a revived and flourishing city.

The promise of progress: Spectacular infrastructure

In the study of urban infrastructure, the promise of progress through engagement with new technological systems has long been connected to an everyday politics of hope and aspiration. Celebrated in film, featured in the press, and inaugurated through state pageantry, infrastructure as spectacle works to mediate relations between citizens and government through allusions to large-scale public works as enabling and generative. For example, the recently opened Nhật Tân cable-stayed bridge in Hanoi that connects to a new six-lane highway leading to the airport and new international terminal—all inaugurated in a state ceremony on January 4, 2015—appeared on the front page of newspapers around the capital city in colorful images that captured its impressive, monumental design. Supplemental text lauded the potential of the bridge (and highway) to bring economic development to farming communities across the river and to increase the volume of goods and number of visitors that could be transported more quickly to the city, showing how grand forms of spectacular *post*socialist infrastructure, funded by new aid partners (most often overseas development assistance, or ODA, from Japan), aspire to expand, rather than eliminate, a market economy.¹¹

The idea that the development of infrastructure can result in the transformation and betterment of daily life frequently generates a sublime enchantment with large-scale infrastructure projects (Harvey and Knox 2012),¹² even as such moments of hopeful effervescence may turn quickly to dispiriting disappointment. Roads, in particular, are enchanted sites of modernity suggesting the possibility of both mobility and interconnectivity (Dalakoglou 2010; Harvey 2010; see also Mrázek 2002 on colonial roads). Power plants have their own unique history as works of grand spectacle. In Soviet electrification programs in Mongolia, “electric light was metonymic for development and enlightenment” as the darker days of the past were

metaphorically and literally left behind (Sneath 2009:86; see also Larkin 2008 on colonial electrification). Enchantment with lights, roads, and—in the following Vietnamese case—water, all captured the imaginative possibilities generated by spectacular infrastructure technologies that promised a brighter, cleaner, healthier, modern, and prosperous urban future.

Like the Soviet program in Mongolia, socialist modernization projects in Vietnam were facilitated by “traveling technologies” embedded in networks of technical knowledge, labor, media, and material goods (see von Schnitzler 2013 on South Africa). At the request of the central government in Hanoi, East German planners embarked on the redesign of Vinh through the global transfer of modernist planning and engineering technologies.¹³ The most spectacular and labor-intensive infrastructure project carried out over the course of seven years was the construction of the social housing complex where I conducted my fieldwork. Referred to as Quang Trung after an 18th-century emperor and general, the 30-hectare site housed thousands of migrant workers and civil servants with priority status.¹⁴ Toward the end of the project, the chief waterworks engineer responsible for Quang Trung’s water supply and sanitation system received permission to build a water fountain in an adjacent park, one of several green leisure spaces in the complex. While most of the engineer’s tasks had centered on utilitarian works such as sewage plants, pumping stations, and storage facilities, this aesthetic work was meant to publicly mark and celebrate the rebuilt metropolis and return to urban modernity as a solidarity gift bestowed on the city by a fraternal (and, one can argue, paternalist) socialist country. In the East German press, the engineer recalled the ritual moment when the fountain was switched on and GDR water technology became a spectacular performance that elicited awe from the crowd of viewers gathered for the inauguration ceremony (Figure 1): “The excitement of the people, and especially the children, as the fountain lights illuminated the darkness and 36 water sprays between 3 and 16 meters high came to life, was the most rewarding moment of my assignment in Vietnam” (Stöhr 1981). Water and power—emblems of modernity—had thus been ceremoniously restored to the city, though provisionally at best.

In an instant—with the flip of a switch—the fountain’s activation marked an end to the collaborative reconstruction of infrastructure, with the impending departure of the East German team. It also signaled transition to a new phase of urban life that promised progress, well-being, and self-sufficiency, given that experts saw their assistance as horizontal and enabling, unlike capitalist development projects carried out by the West, which they viewed as cultivating more vertical relations of dependence. The aesthetic and technical ingenuity of water-based architecture, Matthew Gandy (2002:32) has

Figure 1. The city's central fountain in front of Quang Trung housing block C7 and C8, Vinh City, Vietnam, circa 1981. Courtesy of Hồ Xuân Thành.

argued, has been a historically recurring motif of urban abundance and prosperity. In Vinh, the fountain emerged as a symbol of both urban recovery and the new modern lifestyle that international socialism had secured in the aftermath of war. Media images often used the fountain as a backdrop, showcasing the city's advance toward prosperity and its embrace of scientific socialism to facilitate rapid architectural and technical renewal. Local residents, especially youth, flocked to the site in their best attire to have their picture taken in front of the plumes of water, fashioning themselves as modern urban citizens (Figure 2).

Just across the way from the fountain, residents in the apartment blocks, especially the migrant workers, were exposed to new ideologies and practices of hygienic urbanism with water and plumbing technologies available in the privacy of their individual homes. East German planners had designed each unit to include a private water closet with ceramic squat toilet (imported from the GDR) and a separate, adjacent washroom with a fresh water supply line. Private indoor plumbing was a new convenience for most of the residents, who had previously lived in the countryside or in collective facilities managed by their work units.¹⁵ For economic and utilitarian reasons, the bulky wastewater system connecting the apartments (and the water closet with the washroom) was not encased in the wall but remained in plain sight, serving as a reminder of the modern benefits that residents enjoyed with socialist development (Figure 3). And yet the hydraulic infrastructure did not merely play a functional role here; it was not

Figure 2. Youth posing in front of the fountain, Vinh City, Vietnam, circa 1981. Courtesy of Hồ Xuân Thành.

simply a rational, pragmatic, and technical solution to the scientific management of urban planning. Rather, the water infrastructure's material spectacle was also ideologically performative insofar as it was visual evidence of the march toward modernity and the making of an egalitarian, technologically driven society with hygienic urban persons who were skilled in the modern ways of living. Through the flow of water and wastewater into and out of the home, modern dwellings "became subject to a new moral

Figure 3. Wastewater pipes in Block C2 of Quang Trung housing, Vinh City, Vietnam, 2011. Photo by C. Schwenkel.

geography of social behavior” based on the privatization of domestic practices (Gandy 2004:366–367) that contrasted with previous forms of collective living. The model of urban reconstruction applied to postwar Vinh thus became as much about making civilized socialist workers out of rural migrants as about regenerating a technical infrastructure with which to operate and regulate the city. Through the projected design of a modern and democratic system of public waterworks (everyone could enjoy the fountain, and each family could have indoor plumbing), spectacular infrastructure had the potential to create and collectively celebrate a technologically advanced, enlightened society inhabited by contemporary socialist men and women.

Histories of infrastructural lack

To understand postwar enchantment with infrastructure and the significance of the fountain as it came to life that night in Vinh, it is important to have a general overview of the history of urban public works in Vietnam. In the colonial era, the domain of urban infrastructure was marked by the highly uneven distribution and accessibility of resources, in accordance with racialized practices of infrastructure exclusion; with some exceptions, public works were largely provided for and enjoyed by those who were not Vietnamese. As Antina von Schnitzler observes, such infrastructure practices in colonial settings served to deny full citizenship rights to indigenous populations through entrenched processes of resource extraction and a “biopolitics closely bound up with the project of colonial domination” (2008:908–909). The racialization of infrastructure could also be read on the colonial landscape in Vinh. Provincial officials estimated that as few as 25 percent of the households in the urban center pre-1945 (before the First Indochina War) had electric power, a figure that included an elite population of foreign administrators and merchants (predominantly French, Chinese, and Indian).¹⁶

As in the Dutch Indies, pipelines, in particular, were among the “cornerstones of colonial power” in Vietnam (Mrázek 2002:56). In Hanoi, for example, French science and rationality were applied to solve the problems of urban dirt and disorder by bringing modern indoor plumbing and sewer systems to the French quarter only, demonstrating how “the logic of Hanoi’s urban apartheid dictated that whites and non-whites would not share modernization equally” (Vann 2003:193).¹⁷ Such discriminatory planning was subject to remediation after independence in 1954, when postcolonial urban policy, influenced by the Soviet Union, sought to modernize and democratize urban infrastructure by closing the infrastructure gap and extending public services to the masses—initiatives that were disrupted with the onset of U.S. aerial bombing a decade later.

During the war with the United States, protracted bombing from 1964 to 1973 devastated most of northern Vietnam’s industry and infrastructure, including that in the city of Vinh. As an important transportation hub and center of industry, Vinh became the target of frequent air attacks. The United States carried out more than 4,700 strikes on the city, dropping an estimated 250,555 tons of explosives (Phạm and Bùi 2003:217). Throughout this time, the city was evacuated. Production facilities and government agencies were decentralized and dispersed to the countryside, with residents relocated to forests or remote villages without electric power, adequate potable water, or a stable supply of food—in short, places lacking in infrastructure to support the evacuees. This “deliberate demodernization” of the city by targeting its urban technical networks (Graham 2005) left the postcolonial landscape in ruins, destroying 141 enterprises, 13 schools, 4 hospitals, and 8,663 houses and buildings (District People’s Committee 2007:89). Transportation and communication systems rebuilt over the previous decade were likewise decimated, including roads, railways, bridges, and Soviet-built power, water, and sewer systems.

It was against this historical background of absent infrastructure—from unequal access under French colonialism to its deliberate destruction by U.S. imperialism—that socialist reconstruction of the flattened city took place, bringing Vietnam out of the “Stone Age” and into the contemporary socialist world.¹⁸ New electric and water lines, roads, streetlights, factories, schools, colleges, day cares, markets, parks, and high-rise social housing (a new architectural form for the city) touted modern lifestyles and state-of-the-art engineering to workers and their families. Amenities were to be practical to allow for the conveniences of urban modernity. Water pumped into the household, for example, would reduce the domestic burden for washing and cooking, now to be done in one’s private kitchen. With the expansion of public services and the concentration of large numbers of people in social housing came a sharp increase in the need for reliable water and wastewater

Figure 4. Laying a water supply line from the central water plant to Quang Trung housing, Vinh City, Vietnam, 1975. Courtesy of the Nghệ An Provincial Museum.

operations. Engineers were thus charged with the critical task of building anew an expansive public water system that included efficient treatment plants, water storage facilities, and pumping stations (to meet new pressure demands: water needed to make its way up to the fifth floor), as well as reliable water and sewer mains. Teams of workers laid over 14 kilometers of piping—7,884 meters to supply water and 6,608 meters for wastewater removal (Hội Hữu Nghị 2011:54)—and built nine water storage tanks across Quang Trung with a total storage capacity of 520 cubic meters, enough for an average of approximately 65 liters per resident daily (Figure 4).¹⁹

As in the case of the Soviet Union, a technopolitics of visibility would showcase to the masses the modern, technological progress of new public works and infrastructure development that also signaled the city's integration into the community of advanced socialist nations. From East German technicians and engineers working on-site—a sign of international expertise and global interconnectedness—to the presence of foreign technical objects strewn across construction sites, including imported machines, beams, pipes, tubing, and clamps, water affirmed both the city's international orientation and liberation from the devastation of war. As water flushed through exposed pipes, residents would be able to see and hear material betterment through

the spectacle of German engineering. The utilitarian design notwithstanding (e.g., the latrine as the open end of a sewer line²⁰), the iron pipes and ceramic squat toilets offered amenities previously unavailable to the poor. Making infrastructure visible, if not spectacular, thus served to remind urban dwellers that their new modern cityscape (and its collective benefits) was the product of a long historical struggle and a recent communist victory: in other words, that the paternalistic state was making good on its contractual obligations. Yet, this utopian ideal of universal access began to break down as the networks of urban infrastructure failed to function.

Breakdown: On the unrealized dream of egalitarian infrastructure

Without electricity, people can still live. But life without water is extremely difficult. One can survive a dark night by lighting an oil lamp. But not to have water is an endless grueling hardship.

—Architect and former resident of Quang Trung, Vinh City

In the immediate postwar years of reconstruction, the visibility of water technologies symbolized the promise of the socialist state to provide adequate and dependable public services to urban citizens. High-rise social housing also embodied the hope of recovery and development insofar as it transferred workers out of collective living conditions and into private family units. Although foreign in design, the apartments were flaunted as ideal, modern, and desirable, with “high technical and aesthetic qualities” and “convenient amenities” for workers and their families (P.V. 1978:4). Ideally, water supply in the home would improve the lives of workers, especially women, by reducing domestic labor and allowing families to enjoy more leisure time together in the parks and playgrounds built around the complex. Yet this was not to be the case, and the performance of water quickly came to an end after residents moved in and taps in the apartments ran dry. Once the GDR technicians left, the fountain was also shut down to conserve limited resources. At issue was not water scarcity—engineers made certain that storage facilities would provide for the basic needs of each household—but the technology of water flow and distribution itself. There was only enough pressure to move water up two flights of stairs. Nikhil Anand's (2011:543) work on hydraulic pressure has shown how both material and social relations enable access to water. Likewise, in Vinh, in the absence of vital pressure technologies (there were no electric pumps, but even if there had been, power shortages were common), access to water enabled, and indeed required, new material practices that depended on the strengthening of urban solidarities. But it also revealed certain rifts in the system, as units on the lower floors that

had more regular access to water were typically allocated to higher-ranking public servants and officials.²¹ This imbalance not only undermined the ideal of an egalitarian distribution of infrastructure but also exposed in the intimate spheres of everyday life the impact of prevailing forms of stratification that were widespread in socialist systems (Berdahl 1999:111).²²

Upkeep and maintenance was another critical issue. A tremendous amount of labor and resources had been committed to the seven-year project of reconstruction. And yet the provincial government did not have the financial means to maintain or expand new technical systems after GDR material support ended. For example, streetlights burned out or there was not sufficient power to keep them running; the fountain also soon fell into disrepair. The dreamworld of modernist planning ultimately depended on other critical infrastructure and systems of maintenance that could not be guaranteed in the aftermath of war. Instead, the experience of infrastructure so fundamental to hope in a prosperous postwar futurity remained a mere potentiality (von Schnitzler 2008:904), leading to growing disenchantment with the facade of urban infrastructure that was technologically nonperforming. The words of one elderly woman who received a unit through the state pharmaceutical company in 1980 captured this disenchantment: "I didn't want to stay here. I applied for a piece of land [a decade later], but was denied. There were problems with water, and fees for everything."²³ I thought I would stay temporarily, but I haven't had the opportunity to leave." Rather than a sign of progress and prosperity, then, the visibility of infrastructure spoke to a state of enduring hardship and "backwardness" (*lạc hậu*), and to the failure of the provincial government to deliver the public services necessary for future betterment.

The water shortage on the apartment blocks' upper floors created immense difficulties for the newly settled residents. Technologies such as indoor plumbing, intended to eliminate laborious tasks in the home, paradoxically, rendered many daily acts even more cumbersome. Likewise, the attempt to privatize hygienic practices—including bathing and laundering—by bringing them into the domain of the home (to the washroom) resulted in public or communal practices that planners had sought to prevent. Men and children, for example, continued to bathe outdoors, as they had in shared housing where plumbing had been largely unavailable, and women continued to wash clothes jointly. Many residents felt an initial excitement at being offered a self-contained apartment with modern conveniences: "It was upscale, hygienic, and civilized living!" one woman exclaimed. Gradually, though, that sentiment gave way to a more critical reassessment of the socialist urban project: "Ideal living, with no water or electricity? A symbol of socialism? Not at all!" said one man, a retired journalist.

In the face of such breakdown, the residents themselves became the pillar of infrastructure (Simone 2004), in ways that both reinforced and suspended the gendered division of domestic labor. Women, in particular, remembered the exhausting nightly routine (after a full day at work and an evening of chores) as a battle with time: When would water flow, and for how long? Typically, at some point between 11:00 p.m. and 2:00 a.m., the water would be turned on, but the flow was not long or strong enough for it to reach the upper floors. Residents would then descend quickly and walk to the nearest public spout to collect water to bring home. Each person could carry 30 liters: two buckets attached to the ends of a yoke balanced across one shoulder to distribute the load. "It was so arduous!" one woman, a retired factory worker, recalled of the early years in Quang Trung before UNICEF came and built wells on-site. "When the water would start to run, we had to wake up and walk several blocks to the pump where we would get in line and wait. Sometimes we had to go back and forth several times in one night!" Because families would have to haul water (*gánh nước*) as many as ten times a day to fill the cement cisterns in the washroom, the gendered division of labor that associated women with water (hauling, washing, cleaning, etc.) was provisionally abandoned. "Everyone in the family had to help," the woman pointed out. One male resident remembered his evening task: "Yes, it was burdensome. For years, we had to bring water upstairs in the middle of the night." But, he reasoned, the family apartments were still more comfortable than the thatched, collective housing where he had lived before. Residents also reflected on the deep sense of solidarity that formed around the communal experience of hardship. Another man recalled, "It was hard work to haul water every day, but fun as well. People were always on the stairs conversing with one another at that time." Water scarcity thus engendered new forms of sociability among neighbors from different work units, making water a focal point, not of the privatized family, but of public activity once again.

The frustration that residents felt—not only those without water but also those with water availability who struggled to help their neighbors—intensified over time. The year 1986 saw the introduction of economic reforms (*Đổi mới*) that would put an end to centralized distribution, including housing allocation and free public services such as health care and education. That same year, the official city newspaper published an anonymous poem, "Gửi nhà máy nước Vinh" (To the water company of Vinh), in which the author declared that Quang Trung residents had waited long enough for their right to a regular supply of clean water. Applying political pressure through public chastisement, the poet berated apathetic authorities who "sit on clouds" and do nothing to alleviate the problem:

You pump the water so carelessly
 It hasn't even ascended before it starts to go down!
 How miserable for the people who live on the upper floors
 They wait and wait at night until their eyes turn red with anxiety ...
 Their bodies dry and thirsty
 Come and see for yourself. [*Báo Nghệ An* 1986:3]

Although the critic blamed vain and indifferent provincial authorities for the dry taps, municipal officials and Quang Trung residents understood accountability for water shortages and infrastructure breakdown as something far more complex. Views about responsibility for maintenance and disrepair revealed other measures of social differentiation that structured social life in the complex according to the residents' *trình độ văn hóa* (level of culture, or cultural capital), which reinforced distinctions between workers and civil servants. Cadres who embraced the civilizing project of socialist modernity and fashioned themselves as civilized urban subjects saw themselves as more refined and educated than the postwar rural migrants to the city whose inurbane practices were in need of reform.²⁴ Elsewhere I have argued that local officials and urban planners (both Vietnamese and East German) considered the cultural and economic activities of Quang Trung tenants to be too rural for a modern, industrial city—for example, the practice of raising livestock in the apartments (Schwenkel 2013:272). And yet the extent of such worker–cadre distinctions was often exaggerated: Cadres too had rural backgrounds, and they too turned to raising livestock to survive the subsidy era. Nonetheless, in a moral order of culpability that typically identifies marginalized populations as incapable of living in modern dwellings (Lea and Pholeros 2010), workers, more than cadres, were held responsible for the rapid decay of the buildings—transforming the spectacle of infrastructure from the possibility of a modern future to a state of enduring abjection (Larkin 2013:333).

Likewise, when it came to the nonperformativity of the water system, migrant workers who were new to the city and to modern urban housing were also the targets of blame. In an anonymous 1985 editorial published in the city newspaper and signed by “Administrator,” the author investigated the cause of water disruption in Quang Trung and its effects on the population: namely, that hauling water up several flights of stairs in the middle of the night had a strong impact on workers' health and productivity. Questioning the infuriating lack of water in the apartments that persisted despite a sanitation infrastructure in place to service each unit, the writer uncovered a host of technical issues, such as cracks and leaks in the pipes, that contributed to deficiencies in pressure. While holding the Division of Housing responsible for not maintaining the system and attending to routine repairs, however, the author also faulted residents

and their misuse of infrastructure as the source of breaks and low pressure: “Many people on the upper floors of the housing blocks have no sense (*không có ý thức*) how to use and care for the water supply system; some turn the faucet on, but do not shut it off completely, reducing the pressure for others” (Người quản lý 1985: 3–4).²⁵ Such laments against the urban poor are not confined to Vietnam. “The unhygienic and undisciplined indigenous tenant who needs further tutelage in the arts of living in a house” is often the convenient culprit for disrepair (Lea and Pholeros 2010:197).

Charges of disruptions in the wastewater system also were leveled against residents thought to possess lower levels of cultural capital, even though modern conveniences such as private indoor plumbing were a novelty for most. One engineer who lived in block C6 until 1992 saw a fundamental conflict between urban and rural practices of dwelling that led to disorder and breakdown in Quang Trung:

There was a water disposal system in place, but it was always backed up. [CS: Why?] Because of lack of use [from little water] and wrong use. People threw all kinds of things into the drain: paper, fabric, bamboo, and food. These were people from the countryside who didn't know how to live in the city. So they continued to live like they did in their village, and they would clog the system. It was especially bad for the people on the first floor who had to put up with the waste and awful smells.²⁶

In an ironic twist, wastewater pipes—observable and protruding in each home, a profane, everyday reminder of a new urban order—inadvertently became a technology for undermining the project of a civilized modernity by exposing the aberrations and inequalities of infrastructure. Here, waste became an unethical object (cf. Hawkins 2005) that evoked moral anxieties about the failures of an urbanization still tainted by the rural. Residents without water on the upper floors, mostly workers and lower-level public servants who queued nightly at a public tap, had their own ideas about modern amenities and the proper disposal of solid waste. Yet, by dumping trash down the open drains (in accordance with municipal directives to rid the home of waste), residents clogged the pipes, causing overflow on the lower floors inhabited by higher-ranked tenants who had access to water in their homes. This outcome was not intentional; such acts were not an expression of outright protest of living conditions or persistent stratification. In general, cadres on lower floors were sympathetic to the plight of their neighbors, and many made efforts to share water over two decades of shortage. The differentiations between the floors also began to blur as apartments were traded and tenants moved around to other blocks (or out of the complex), especially after reforms. Nonetheless, as the performative

role of the sewer pipes changed beyond their intended use and meaning, waste became an ethical matter of infrastructure and a point of state intervention.²⁷

Overflow: Contested liabilities of maintenance

By the mid-1990s, almost 20 years after the first tenants had moved in, most apartments had regular access to water.²⁸ And yet, by the time I started fieldwork in the housing complex in 2010, a new chain of complications associated with the public water system had emerged. The issue was no longer a shortage of water as experienced in the postwar years but, rather, its surplus. Today, water does not just flow—it often overflows. Leaks, drips, and flooding are part of everyday life and have been for many years, contributing to (and reflecting) the buildings' rapid decay. This situation has generated dangerous and unhealthful living conditions across the complex. Sections of the corridor have eroded from long-term water damage, exposing rusted steel rods (hence, the need for supporting braces). Large plaster pieces from apartment ceilings in several of the blocks have been known to break off and injure occupants. The press regularly covers such occurrences, exposing the Division of Housing's lack of action. Despite such conditions (or perhaps because of them), tenants have been hesitant to self-repair (*trì làm*) in ways that would preserve the structural and infrastructural integrity of the buildings. Although residents have long engaged in improvisational practices to maintain a livable environment within their individual units (Schwenkel 2014:168–170), they have begrudgingly paid mandatory fees for upkeep and repairs of common space. “Why should we have to pay for this?” a man in B5 asked about a communal electric bill and upgrade to the lights in the stairwell. “We didn’t have to pay anything like this before when [East] Germany built these homes.”

More than material forms and networks of technology, infrastructures, as Susan Leigh Star (1999:381) has observed, are learned arrangements that constitute membership in particular communities of practice. I too had to learn the erratic flow and temporal idiosyncrasies of the water system, as well as cultural expectations about the routine use of water, to find a balance between having too much water—overflowing the tank, running down the walls and across the floor—or none at all. I also had to be trained for proper, not excessive, use. Thus, my water consumption was scrutinized by the landlord, who wondered why my monthly bill of 55,000 Vietnam đồng (US\$2.75) vastly exceeded hers (30,000 Vietnam đồng, or US\$1.50). And yet I was not the only one struggling with an excess of water. Almost every apartment battled with water—potable water, wastewater, or rainwater—in some way through blockages, leaks, cracks, and holes. For instance, one Saturday morning I visited a neighbor in another block and found him outside tending to his plants. As we walked into his flat, I noticed a large poster he had hung on the wall across from the bath-

room door. He explained that it was covering damage from mold, which I could see spreading slowly beyond the picture, from a leaky water tank in the upstairs apartment. “It’s been dripping a long time and I’ve talked with the neighbors several times already, but they refuse to fix it,” he said with some irritation. Not unlike my experience in my own apartment, this man and his neighbor could not agree on a clear line of responsibility for the necessary repair, nor would there be an agreement on liability for associated damages—did it extend to the man’s walls, for instance? This lack of clarity had much to do with the ambiguous ownership history of the apartments: built by the GDR, gifted to the city, allocated to state employees, managed by municipal authorities, and then, most recently, privatized, turning tenants into bona fide owners. Who then is liable for years of infrastructure neglect resulting in routine breakdowns, dilapidated systems, and the material deterioration of the buildings?

Scholars have argued that disputes over infrastructure, rather than simply create rifts between people, generate possibilities for new social and political collectivities to emerge around the deployment, upkeep, and breakdown of technical systems. Similarly, the refusal to fix the toilet or the water tank in my field site was more than a mere dispute over liability between neighbors. Although they expressed frustrations, tenants did not assign total blame to the owners of the objects that caused the leaks. Rather, their facade of collective ambivalence hinged on the refusal to shift the locus of liability from the state to the individual (a refusal that my act of payment then violated). In a moral order that saw infrastructure as the domain of state care, the source of the leak became secondary to its destructive result: water seeping through already crumbling floors and walls, placing the issue of repair squarely in the hands of managing authorities. Such expectations stemmed from an ethos of reciprocity found among older tenants who held the state accountable for provisions and maintenance, men and women who believed they were owed infrastructure in exchange for their labor and military service. “I helped build this country,” complained one disgruntled man, echoing a frequent lament heard across the complex.

Conclusion: Moral orders of broken waterscapes

Recent scholarship has noted how infrastructural interruptions in neoliberal economies have emerged as occasions to galvanize new political subjectivities and make new claims to belonging, especially for marginalized populations (see, especially, Anand 2011). Conversely, in the case of Vinh, Quang Trung residents were not underprivileged citizens adversely affected by uneven geographies of capitalism; they were the targeted beneficiaries of socialist infrastructure (right division of word) and its public services.²⁹ And yet, the examples presented here—from the poem written to the water company to tenants’ refusal to pay for

repairs—reveal claims to certain rights and protections that citizens articulated in the aftermath of the collapse of infrastructure: namely, the right to provision, proper operation, and supervision of the system of public waterworks. Plumbing and its dysfunction—the failure to perform practically (water distribution) and ideologically (state legitimacy in bringing the fruits of socialist modernity to the masses)—became a key technology in mobilizing social collectivities and mutual acts of care in the face of persistent, though unevenly experienced, adversity. The shared physical and affective labor that went into securing an adequate, daily supply of water also came to shape a collective ethos and ethics of care around infrastructure practices (see Jackson 2014:233). This labor of care included the redistribution of critical resources within the housing units, such as leaving water in the corridor to share with others so as to mitigate the glaring inefficiencies and inequities of socialist urbanization. Moreover, I have argued that there was an important gendered dimension to this moral order that remains largely unaddressed in the literature on the politics of maintenance and repair: The everyday struggle for water required the collaborative efforts of both men and women, temporarily suspending the gendered division of labor around infrastructure and the expectation that women should secure critical resources, while men—like the plumber—repair and restore technical systems.

The water system's breakdown also revealed the failure of European ideas of modernity to achieve a state of recovery and contemporaneity in Vinh on par with the rest of the socialist world. The malfunction of indoor plumbing, designed to bring the "good life" to workers by moving the domains of domestic work and hygiene into private homes, forced residents back outdoors to reengage in communal water practices.³⁰ This turn of events undermined the emphasis in urban planning, spearheaded by the GDR, on the family as the locus of modernization, which dovetailed with the shift in Vietnamese party policy from a collective to a family economy (*kinh tế gia đình*).³¹ And yet the lack of water obliged women to carry out their household work in communal spaces (as they had in collective housing)—a form of sociality many preferred—rather than alone in their homes. Older women frequently recalled with a hint of wistfulness the conviviality of such arrangements. Today, some neighbors continue outdoor practices of cooking or washing, despite having more reliable water and power supplies in their homes (Figure 5). Other women continue to gather water from the public well to supplement their household reserves and reduce monthly utility expenditures. These simple tasks become small political acts that defy the shift of liability for the use and upkeep of infrastructure from local government to retired state employees. Here, the emancipatory potential of maintenance and repair lies not with improvisation and innovation (Graham and Thrift 2007:2) but with evasion and circumvention.

Figure 5. Women washing clothes together outside Block C6, Vinh City, Vietnam, 2011. Photo by C. Schwenkel.

Today the original inhabitants of Quang Trung, many of whom proudly display on flaking walls their distinguished service awards for their role in the war, remember these histories of sociability with a note of nostalgic desire for the moral values of the postwar years. They lament what they feel to be a decline in social cohesion as the loss of a communal ethics in the housing complex and, more broadly, what many see as the moral degradation (*xuống cấp đạo đức*) of society since the end of the subsidy period, an observation also noted in other parts of Vietnam (see, e.g., Leshkovich 2014). My landlord, who grew up on the second floor of building C2, described the collapse of the moral order that had formed around broken waterscapes through her own family's experience of providing for neighbors: "We helped and took care of one another then—unlike today." Nostalgia for cooperation and an ethics of care that proved vital to coping with water shortages invoked a past that was largely devoid of inequity between neighbors, even as those overlooked hierarchies of the socialist era pale in comparison to the widening gaps in wealth and opportunity today that have allowed some families to buy property elsewhere and relocate. And yet, for those tenants who remain in their crumbling, mildewed apartments tinkering with leaky systems, spectacular infrastructure, with its visual technopolitics that promised a better world, is now an abject sign of future uncertainty with the looming prospect of demolition. This condition of uncertainty and economic precarity is perhaps best represented in the fountain across the way, which still stands—and, in fact, was recently renovated—and yet remains dry: an apt symbol of the facade of urban modernity that could not be maintained without plumes of cascading water to hold the fantasy in place.

Notes

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1. Fieldwork for this article took place in Vinh City in 2006, 2009, 2010–11, and 2012. In addition to living in the East German-built housing complex for nine months, I conducted archival research in the newly accessible collections at the Provincial People's Committee in Vinh as well as at national archives in Hanoi and Berlin. Interviews with East German technicians who worked in Vinh on postwar reconstruction took place in Germany in 2006, 2008, 2011, and 2012.

2. According to municipal authorities, of the remaining 19 housing blocks in the complex, three had degraded to below 40 percent of their original structural capacity. Fear of collapse was a common anxiety expressed by residents in these buildings.

3. In the words of the managing official responsible for the housing complex, demand for repairs is high and funds are low. The Division of Housing receives just 700 million Vietnam *đồng* (approximately US\$35,000) every two years for maintenance and repair. “That is not a lot for 19 buildings,” he explained. “With this money, we cannot carry out major repairs, only small jobs such as whitewashing the exterior (*quét vôi*).” Interview, Vinh City, March 8, 2011.

4. Decision 239/2005/QĐ-TTg of the central government, signed by the prime minister on September 30, 2005, affirmed the city's goal to become the “economic and political center of the north central region (*trung tâm kinh tế, văn hóa vùng Bắc Trung Bộ*).” On September 5, 2008, Vinh's status was elevated to a Grade 1 city as per Decision 1210/QĐ-TTg. There are currently only five Grade 1 cities in the country (they do not include the “special status” cities of Hanoi and Ho Chi Minh City).

5. In planning documents, East German planners typically referred to the reconstruction of Vinh as the building of a socialist city (*sozialistische Stadt*).

6. Contemporaneity, Giorgio Agamben (2009:41) has argued, marks an individuated relationship with disjunctive time. Yet, unlike Agamben's contemporaries, the ideal socialist contemporary positioned him- or herself to face a bright future (“forward-looking”) instead of a foreboding past. In both senses, though, to be contemporary implied a “return to the present where we have never been” (Agamben 2009:51–52).

7. For an overview of anthropological literature on infrastructure as technical, aesthetic, and poetic, see Larkin 2013.

8. One exception here is Brian Larkin, who argues that in colonial and postcolonial states where “infrastructures command a powerful presence,” breakdown serves to enhance their visibility, thus revealing “governments' failed promises to their people as spectators that haunt contemporary collapse” (2008:245).

9. Dimitris Dalakoglou (2010:571) has observed that much of the labor involved in constructing large-scale Albanian public works

projects was forced or voluntary. Vinh's postwar recovery also relied on obligatory “socialist labor” (*lao động xã hội chủ nghĩa*) as service to the state, especially from youth brigades who provided supplementary labor to repair and expand urban infrastructure, including filling in bomb craters and digging a man-made lake in the central park. The press commonly photographed and documented such collective efforts. On the mobilization of collective labor (both conscripted and voluntary) for postcolonial infrastructure projects in the Democratic Republic of (North) Vietnam in the 1950s, see MacLean 2007.

10. This 1974–80 period of reconstruction (*xây dựng lại*) differs from the 1954–64 decade of postcolonial, socialist city building, referred to as renovation (*khôi phục*) (Schwenkel 2015).

11. See, for example, the front page of the newspaper *Lao Động* (Labor) from January 5, 2015, with the headline “New Look of the City.”

12. Thus, my taxi driver, on the way to the airport, showed me a video he had shot while driving across the bridge on the day it opened.

13. For an analysis of the “open hand” design of Vinh City based on planning principles put forth by the International Congresses of Modern Architecture (CIAM), see Schwenkel 2015. The central government in Hanoi requested “fraternal” assistance with the reconstruction of seven urban areas in northern Vietnam.

14. Each housing block was allocated to several state factories or government agencies, which in turn allocated the individual apartments to employees according to a point system that assigned a numerical value for participation in the revolution (*hoạt động cách mạng*), excellent labor performance (*lao động xuất sắc*), size of family, and need for housing. Those with the highest number of points were considered priority (*ưu tiên*) and allocated an apartment according to supply. Those with fewer points remained in collective factory housing.

15. Most had also evacuated during the air war and lived for several years in the mountainous regions in makeshift conditions.

16. File 575, Tài liệu về xây dựng nhà máy điện Vinh, năm 1954, Nghệ An Provincial Archives. Bricks were another infrastructure technology used largely by the elite, while poorer families lived in thatch or wooden structures (Schwenkel 2013).

17. Similarly, in the Dutch Indies, sewer systems came to define the colony as both “clean” and “dirty” along sharply demarcated lines between Dutch-European and local *kampong* living quarters (Mrázek 2002:57).

18. Here I am referring to an East German architect's description of Vinh in 1974 as “bombed back into the Stone Age,” echoing the well-known wartime threat by U.S. General Curtis LeMay against the Democratic Republic of Vietnam. Interview, Berlin, September 9, 2011.

19. In Area A, one cement tank was built with a capacity of 104 cubic meters, and in Areas B and C, four tanks were built per area to hold a total of 208 cubic meters for each area.

20. As Milan Kundera also noted of Soviet-era plumbing in *The Unbearable Lightness of Being* (see Robbins 2007:29).

21. Residents faced other problems, though—such as unfiltered water that was murky and “red as crab” with tadpoles sometimes swimming in it (*Báo Nghệ An* 1986:3).

22. High-ranking cadres or public servants were allocated apartments on the second floor (most desired), while midlevel employees typically received apartments on the first floor (and sometimes the third). Units on the third through fifth floors were allocated to regular workers and civil servants. Note that during the subsidy period (1975–86), goods were also distributed in accordance with a rank system that privileged higher officials.

23. Here the speaker alludes to the small amounts tenants paid monthly for rent and utilities. This money was supposed to go toward maintenance of the buildings—another reason residents refused to invest their own funds in repair.

24. The press likewise served as a “civility tracker” of sorts. For example, in the article “Xây dựng nếp sống mới ở tiểu khu Quang Trung” (Building a new lifestyle in Quang Trung), residents in building B4 were praised for their model (*mẫu*) behavior in taking out the garbage and for increasing the number of party members, suggesting a correlation between self-cultivation and party membership. Scandalous behavior (*bê bối*), such as market profiteering, was also reported (Tù An 1981:4).

25. International organizations involved in projects to upgrade Quang Trung (advocating its demolition and reconstruction) have also faulted residents for the buildings’ rapid decay, in addition to bad urban policy and substandard East German engineering (Schwenkel 2012:454–455).

26. Interview, Vinh City, February 26, 2011.

27. Even as late as December 1997, the Municipal People’s Committee reported that the majority of urban residents still did not have a sense of proper solid waste practices to maintain a civilized living environment (Ủy Ban 1997:31).

28. With the dissolution of East Germany, GDR loans were converted to new aid programs by the reunified German state, which set about refurbishing the broken system.

29. This is not to argue that socialist urban geographies were just—my discussion in this article clearly shows otherwise—but that other operations of power beyond capitalism shaped them.

30. Such efforts to civilize urban life by privatizing daily practices resonate with observations on internalization in contemporary Vietnamese society, which continues to adhere to discourses of urban civilization (Harms 2009).

31. According to Lisa Drummond (2000:2385), this shift served to increase the burden of domestic labor (rather than reduce it through private amenities, as the GDR envisioned), especially for women workers who took over the role of caregivers from the state as the family unit assumed increasing importance in society.

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