

### PART III. *Promise*

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## Promising Forms: The Political Aesthetics of Infrastructure

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Infrastructures, as technical objects, take on form. Once something exists—say a road or an electric plant—we are not just in the domain of matter but of technological ensembles that are enformed as they are brought into material existence. In the study of infrastructures, form is both ubiquitously visible yet absent from analytic consideration. However, it is the interface through which humans engage with technologies and is part of the reciprocal interchange between humans and machines. Form is thus a *relation* between humans and technology as well as a thing in itself, the medium where infrastructure and user meet. There can be no technics without form, yet it is separate from those technics, participating in a paradigmatic chain of relations with previous forms, their aesthetic histories, and the epistemic worlds that come with them.

Form leads us to the question of political aesthetics—the way that aesthetics, broadly conceived, establishes a political force enabling and contesting various kinds of authority that circulate in the world. Political rationalities are fashioned, made palpable, and disseminated through concrete semiotic and aesthetic vehicles oriented to addressees. The literary theorist Sianne Ngai, for instance, argues that we exist “in a culture that hails us as aesthetic subjects nearly every minute of the day” (2012: 23). This aesthetic address is as much a part of an electricity switchbox, the tangle of cables strung across a street, or the sound of a generator, as it is an attribute of literature or art. It is certainly the case that infrastructures are material assemblages caught up in political formations whose power in society derives from their technical functions. But they also operate aesthetically, and their aesthetic address constitutes a form of political action that is linked to, but differs from, their material operations. And political aesthetics is one way that we can understand the promise of infrastructures.

Considering the promise of infrastructure allows us to explore the ways in which infrastructures compress within them different operations and allows

us to focus on nontechnical as well as technical dimensions of infrastructure. Elsewhere (Larkin 2013), I discussed this through the idea of the poetics of infrastructure, drawing on Roman Jakobson's famous parsing of the multiple functions embedded in speech acts. Infrastructures share this compound nature, the potential to operate in different ways and on multiple levels. At times it is their material operations that dominate, the ability to provide electric power, dispose of waste, or create a system for the movement of goods by containers. At other times, as Achille Mbembe and Janet Roitman (1995) have argued, the technical function of infrastructural projects (whether they operate or not) is subordinate to their role in creating a means to transfer public money into private hands. At still other points, governments, leaders, and parties fund infrastructural projects for their sign value, evidence of the ability of parties of the former left to modernize by entering into public-private partnerships, or of municipal authorities to show their commitment to a green, environmental future, or of states to develop society. In the first of these examples, it is the material nature of the infrastructure and its technical function that is paramount. In the second, materiality is a screen for the financial agreements that lie behind it and that transduce technical things into economic things (Mbembe 2001). The last example emphasizes the address of infrastructure. When infrastructure operates in each of these modes it draws together different sets of actors and generates distinctive sorts of political effects.

In this chapter I explore the relation between infrastructure and political aesthetics. I focus on the ways that infrastructures address people as well as move things, how they are composed of form as well as materials. Infrastructures participate in what Jacques Rancière (2006; 2009) refers to as *poiesis*, the act of bringing something into being in the world by creating a way of doing and making, and *aisthesis*, how it is those things produce modes of felt experience. These qualities define infrastructures just as much as art objects, for infrastructures are always fantastic as well as technical objects. They are made up of desire as much as concrete or steel and to separate off these dimensions is to miss out on the powerful ways they are consequential for our world.

Infrastructures, as Stephen Kern (1983) has argued, contribute to our sense of being in time, feeling cut off from the flow of history, attached to the past, isolated in the present, or rushing toward a future.<sup>1</sup> They address the people who use them, stimulating emotions of hope and pessimism, nostalgia and desire, frustration and anger that constitute promise (and its failure) as an emotive and political force (see Gupta; Harvey; and Schenkel, this volume). They express forms of rule and help constitute subjects in relation to that rule, draw-

ing on those measures of hope and pessimism to gain force. Aesthetics are also part of the ambient life that infrastructures give rise to—the tactile ways in which we hear, smell, feel as we move through the world. Political aesthetics refers to both these representational and experiential qualities. Instead of a split between the material and the discursive, or the nonhuman and human, political aesthetics sutures the material and the figural, showing how both are engaged in a constant reciprocal exchange. They make the distribution of rule visible as an aesthetic act. This is why infrastructures are often objects around which political debates coalesce. They are reflexive points where the present state and future possibilities of government and society are held up for public assessment. The promise of infrastructure refers to this political compact, and political aesthetics makes visible the governmental promise of infrastructure as a reflexive, politically charged thing.

### Materiality

The rising interest in infrastructure in the social sciences and humanities is part of the more general turn toward materiality (Latour 1993; Bennett 2010; Coole and Frost 2010). Materiality is often taken to be the ‘ground’ of an object, its most basic, originary condition before the object is caught up into higher levels of discursive meaning. Adrian Mackenzie (2002), for instance, splits the analysis of technology into “layers.” One layer is a higher order of meaning in which technology is treated as a historically situated discursive entity representing ideas such as progress or civilization. For Mackenzie, however, there is a second, more fundamental layer that “strongly resists reduction to discourses” (2002: 5).

At this level, technology, Mackenzie argues, is the precondition of thinking, representing, and making sense, not an epiphenomenon of it. There is a causal relation in which the technical is autonomous from and anterior to the discursive which it conditions. Thomas Lemke summarizes this position: “The material turn criticizes the idea of the natural world and technical artifacts as a mere resource or raw material for technological progress, economic production or social construction” (2015: 3). As Jane Bennett puts it, vibrant matter has a life force of its own and “is *not* the raw material for the creative activity of humans” (2010: xiii, emphasis in original). Infrastructures, in this sense, may be introduced as part of a socialist five-year plan, evidence for the superiority of private enterprise over government intervention, or revelatory of the power of Pentecostal churches to remake the temporal (and spiritual) world. But politics, economy, and religion, in this line of argument, represent socially organized

discursive realities separate from the primary material level. Conditioned by technics, they cannot themselves condition the technical.

One consequence of the new materialism is to counterpose the material to form, or at least to certain definitions of form. If the problem of Aristotelian hylomorphism was that Aristotle saw form as something imprinted upon matter, reducing matter to a passive receptacle without any agency, materialism has maintained this split while reversing its hierarchy, placing the material as primary.<sup>2</sup> This is why the material turn prefers “unformed” synonyms—matter, material, objects, things—which describe substances in their amorphous, “unformed,” elemental state. Infrastructures have an elective affinity with this conception as they are so frequently seen to be a primary technology upon which form is constructed. The infrastructure of a house, for instance, is its wires and pipes, sheet rock and steel, that delimit and make possible the “form” that is laid on top. There is a linear relation here. Infrastructure is primary; form, secondary.

My problem with this split is that it makes it difficult to develop a conception of political aesthetics and form’s role in those aesthetics. When I use the term “form,” I am drawing on the literary theoretical sense of the imposition of conventional meaning through the formal arrangement of signs. It is about a set of properties a thing possesses—rhyme, rhythm, stress, and meter in poetry; chiaroscuro lighting and oblique angles in film noir; minimalist aesthetics and lack of iconic representation in abstract art and so on. And it is about the sensory effect of those properties on the readers and viewers who engage them.

While I have great sympathy for the emphasis on the essential technicity of the human body and human collectives, I do not see the need to split the technical and the symbolic, insisting on two distinct realms arranged in hierarchical and causal relation rather than as mutually structuring. It also risks fundamentally misrecognizing the range of ways in which infrastructures address, order, and constitute political relations splitting the study of technics from aesthetics and desire rather than seeing these as mutually constitutive. If objects are thought to possess a vital force operating at a level prior to or below consciousness they cannot be theorized in terms of desire, intention, ideology, need, emotion, fantasy, or form—as this would turn infrastructures into what Bennett dismisses as “thoroughly instrumentalized matter” (2010: ix). The promise of infrastructure, however, refers to a political rationality, made up of expectation, desire, temporal deferral, sacrifice, and frustration that takes us into the realm of discursive meaning.

My aim in this chapter is to explore the political aesthetics of infrastructure not through close ethnographic analysis but through a more general theoretical account, moving through a range of examples that draw out the implications

of this idea. It is intended to contribute to our understanding of infrastructure by arguing that materiality is simply one of multiple qualities that make up infrastructures, to remind us that technologies are always metaphors as well as technical objects. They bundle together series of things that can be analytically separated but in practice are often wrapped up together and hard to disentangle. The laying of railroads all over Indonesia, for instance, as Rudolf Mrázek (2002) argues, also meant laying down the technical language that went along with those railroads. A railroad was something to be spoken as well as ridden, and railroads came to constitute Indonesian life through language as well as through rolling stock. I will first discuss the introduction of the radio as a new media infrastructure within colonial Nigeria as an example of the reciprocal exchange between machines and ideas and the difficulty of actually separating these into mutually discrete layers. Thereafter I will engage more directly the political aesthetics of infrastructure as a key aspect of infrastructural life.

### Radio

In 1939, a letter was sent from the secretary of the Northern Provinces (SNP) of Nigeria to H. O. Lindsell, the Resident of Kano Province.<sup>3</sup> In it, the SNP states he has been directed by the chief commissioner of Nigeria on behalf of the postmaster-general to recommend that radio distribution services be established in Kano city and that to reach African listeners they should install public loudspeakers.<sup>4</sup> He then asked Lindsell if this could be achieved practically and whether the Resident would support such a scheme. The answer was no. One minuter to the SNP's letter pointed out that few Africans would be likely to subscribe, that such a scheme involved large startup costs the province could not afford, and that even if it could with the onset of war there was not the technical staff available to install and support it. The minuter argued it would frankly be cheaper to buy (tunable) radio sets for the few institutions where the intelligentsia gathered rather than build an entire distribution service, but even that could happen only "if they can be bought—at the moment they cannot."<sup>5</sup>

Consequently, the Resident wrote back to the SNP, dismissing the project. Two years later Kaduna (capital of the northern region and the seat of government) pressed Kano once more on the subject. Again the response was negative, and to bolster his opposition the Resident turned to the age-old trick of indirect rule, saying that "neither the Emir . . . nor the Sabon Gari Representative board . . . are in favour of the erection of Loud Speakers."<sup>6</sup>

There the matter lay until 1943 when J. H. Carrow replaced Lindsell as Resident of Kano and almost immediately began to reverse Lindsell's decision.

When Kaduna once again raised the idea of radio broadcasts, Carrow wrote, "I assured Mr Stephens of my strongest support in every way. . . I do *NOT* consider the opposition to public loudspeakers at key points to be found in previous comments in this file [i.e., by the previous Resident and officials] as in any way final. In my opinion such public loudspeakers will be essential if we are to get at the mass of the population who are illiterate. . . . Radio diffusion is to be installed in Kano immediately."<sup>7</sup> Carrow was opposed to older emirs and colonialists who made indirect rule into a shibboleth that precluded any change and promoted "ISOLATIONISM AND SHELTER FROM THE WORLD" (as he wrote in a later letter, shouting in capitals to indicate his depth of feeling on the subject).<sup>8</sup> Carrow ordered that his thoughts on the issue be distributed to all administrative officers "so that they can read my minute for guidance" and realize "the value [of radio] as a means of disseminating news to a public which cannot read."<sup>9</sup>

I want to pause and think about what is going on here both practically and conceptually as a way of introducing how we might think about issues of infrastructure and materiality. First, I would like to consider the structure of a colonial bureaucracy. When the SNP, acting on behalf of the chief commissioner of the Northern Region, at the direction of the postmaster-general, writes to ask the Resident of Kano a question, this is not just a recounting of a circulatory chain of communication but the recapitulation of a series of authorities designed to induce pressure. Its meta-comment is that many important men at the federal and provincial levels have already come to the decision that radio is an imperative for Nigeria, and while they know they have to ask the Resident his permission, this is not a neutral or disinterested question but a heavily weighted one designed to couch a directive as a question. The fact that they ask again a few years later, and then again a few years after that, indicates the matter is not settled and contributes to the pressure that was building over this issue. It therefore raises the structuring issue of why radio was deemed to be so important?

Second, Resident Lindsell's rejection of radio was driven by the practicalities of colonial rule in a developing society that presented a host of urgent needs, all during a time of war. Radio installation was only one among many infrastructural projects in a developing society. Lindsell faced demands to build more roads, promote agriculture, erect hospitals, improve the police force, promote industry, and broaden education. Given that his funds could cover barely a fraction of these needs, the demand for a commitment to radio necessarily meant a weakening of his obligations to other areas. Even if the funds were available to support radio, many technical personnel were away at war

and those remaining would have to be seconded from different departments. Raw materials were scarce, heavily rationed, reserved mainly for the war effort, and demanded by different departments. In the mind of Lindsell and the officers below him, radio was a luxury, far down in the list of priorities for Kano Province, and they felt that technical staff, raw materials, and capital should be directed elsewhere.

To build a networked infrastructure such as radio distribution involved prioritizing radio over a host of competing claims. Lindsell's refusal and the support of his junior officers in this refusal (as well as resistance from different Nigerian communities) give a sense of the intensity of this opposition and the entrenched situation that Carrow faced. To counter these claims, Carrow had to argue why radio should have priority over roads, increased electrification, water supply, or road building. This meant defining an argument that made radio installation a priority; advancing that logic in meetings, minutes, letters, and circulars; establishing its authority; and making it hold sway in a competitive environment where counterarguments were present. Carrow ordered his minute in support of radio be distributed to all administrative personnel because he realized that the junior officers underneath him likely did not support his position and that therefore he needed to instruct them in the new priorities they were to follow.

Carrow's actions were driven by a logic of governmental rationality, which provided the exterior conditions of existence for radio. Without it, no copper wire was imported, no poles erected, no personnel trained. The materiality of radio as a technological ensemble—its microphones and speakers, amplifiers, electric wires, and telephone poles—only came into being because of nonmaterial arguments that governed their existence, regulating (but not fully controlling) how that ensemble operated in the world. Once those systems were built, their operations could not be fully controlled by the political rationalities that went into their funding, but their evolution depended upon a constant reciprocal interaction between the technics of a system and the external conditions (forms of political rule, modes of capital, religious structures) from which technological systems emerge.

Carrow's support for radio can be encapsulated by the phrase "the promise of infrastructure." A promise can refer to a vow, or a commitment, but its other meaning refers to the coming to be of a future state of affairs, the idea we have that someone or something holds promise. Its referent is not to the here and now of things but to an uncertain future that infrastructure is to bring about and institutes a temporal deferral that refuses to deliver something in the present.<sup>10</sup> It involves both expectation and desire, frustration and absence. It calls

into being a future world that is at once planned for, administered, and organized, but also made up of a longing that is not always ordered by rationality. Infrastructures, in this sense, are promising technological ensembles. The very word “promise” implies that a technological system is the aftereffect of expectation; it cannot be theorized or understood outside of the political orders that predate it and bring it into existence.

To read the files concerning radio’s introduction into Nigeria is to be fully saturated by the promise of infrastructure. As I argue in my book *Signal and Noise* (Larkin 2008), radio in colonial Nigeria represented a particular mode of political rationality whose aim was to fundamentally reshape the everyday practices and sensibilities of colonial subjects.

Carrow saw the medium as one of the “modern aids to progress,” which, by circulating information and exposing what he saw as a backward people to alternate ways of life would have the cognitive effect of loosening them from traditional lifeworlds (what Carrow referred to as their “parochialism”) so that they could begin to imagine other ways of living. Radio connected Nigerians to broader worlds. Its promise was that it would promote a “progressive interest in affairs happening outside the community” and make people “more knowledgeable and curious of events further afield.”<sup>11</sup> For British colonialists like Carrow, it was a machine that operated upon people’s cognition, forging new social subjects, and they hoped to mold those subjects according to the priorities of colonial rule.

In his conception of media, Carrow stands in an august tradition of media theory that makes for odd bedfellows such as the Marxists Walter Benjamin and Siegfried Kracauer, the modernization theorist Daniel Lerner, and modern-day avatars as diverse as Arjun Appadurai and Friedrich Kittler. Each believes that the technicity of a medium has cognitive effects, that it structures perceptual abilities and transforms consciousness—or, as Friedrich Kittler has it, media “culturalize the natives” of any society (1987: 159). Carrow advocated radio while those around him (the Residents of Sokoto and Bornu, for instance) rejected its necessity. “There is always the tendency for Sokoto, Gwandu and Argungu to be parochial and wholly disinterested in matters outside their own area,” Carrow wrote to the SNP in 1944. “If this cannot be countered then the Sultan and the Emir of Gwandu cannot possibly . . . spur forward the peoples inhabiting their Emirate.”<sup>12</sup> The expectation was that radio could bring about forward-thinking people, unleash the forces of progress, and remake subjectivities—and with that open up the circulatory forces of liberal capitalism. Promise is not the posterior encoding of a material assemblage into discursive meaning, nor is it the anterior condition of possibility from which radio as a technical

system emerges. It is both. In Simondonian terms (1958), to look at promise is not to examine one state or the other but to examine the sets of relations between states, the ongoing dynamic exchange between different elements (an internal technical tendency and an external milieu of political rule). Radio is part of the sets of exchanges in which the technical system, the human, and forms of political rationality mutually constitute one another.

To insist on the importance of the political address of the medium, and the way it is caught up in a complex ecology of colonial rule and cultural and social formations, does not deny the autonomy of the material. In an earlier work (Larkin 2008), I pursued this question by raising two points. First infrastructures are not just technical but also conceptual objects governed by exterior political conditions that form the conditions of possibility for their emergence.<sup>13</sup> In colonial Nigeria before a radio program was listened to, before a road was driven upon or a tap opened, there was a confrontation between subject and technology whose stakes were contested—by colonial authorities, nationalist leaders, Islamic preachers—and which were bound up with forms of desire, anxiety, promise, and fear. At the same time, I argued that infrastructures are not just conceptual but technical objects whose material operations engender wholly new conditions of existence outside of the political imagination of those contesting them. The technical operation of radio was dramatically affected by the physical life it led in Nigeria where it interacted with white ants, humidity, and harmattan dust that often caused radio components to fail. These material operations were not under the control of human design but part of the unexpected contingencies of all that can happen to machines in reality. But that reality was also shaped by the predicates of Islamic law, the ambitions of colonial rule, shortages of raw material and personnel, and the theories of media that lay in the minds of modernizing colonial officers.

As a concept, promise is tied to the political aesthetics of infrastructural systems. These do not have just technical requirements—circulating radio waves, vehicles, people from one place to another—but transmit ideas at the same time. Those ideas address people, create subject positions—deeply attractive for some, repulsive for others—through which they operate to fashion sensibilities. Taking all of these into account allows us to expand our concept of infrastructure, to draw on the insights gained from the material turn but without rejecting the fact that infrastructures are also figures.<sup>14</sup> It is precisely because infrastructures are invested with promise and because that promise is reflexively foregrounded that—when they work or when they fail—they bring into visibility the operation of governmental rationality and offer that rationality up for political debate. To understand how this takes place, how the material

and the figural are brought together, it is useful to draw upon the technical device upon which political aesthetics rests. For the rest of this chapter, I am going to explore this concept in relation to infrastructure, particularly through the idea of form, as a means to aid how it is we “think infrastructurally” (Chu 2014: 353).

### Political Aesthetics and Form

As a conceptual term, form is diverse, with deep philosophical, literary, and epistemological references and mutually exclusive meanings. It is both a noun in that it refers to concrete things and a verb in that it denotes the ordering and forming of things (referring back to its older meaning of the mold upon which wood or metal is shaped). As Caroline Levine (2015) argues, “Form can mean immaterial ideas, as in Plato, or material shape, as in Aristotle. It can indicate essence, but it can also mean superficial trappings . . . mere forms” (2). Form can be abstract or highly particular, “cast as historical, emerging out of particular cultural and historical circumstances or . . . ahistorical, transcending the specificities of history” (2). For some, form is the human process of arranging patterns while for others it is an emergent property of the natural world that operates outside of human intervention (Kohn 2013).

At its broadest level, then, form is a matter of ordering. It is about the structuring and patterning of experience, imposing order on the world, and, at this level, refers to a wide range of artistic and social phenomena. Form forms things. It operates upon people and makes them into particular sorts of subjects. It does so through various operations. Form is representational in that it addresses people, distributing particular sorts of political rationalities whereby, for instance, the state can seek to impose its sense of the world and citizens accept or contest that ordering. These are historically constituted, complex projects of political sovereignty that, in order to be effective, have to be communicated as effects of rule. Forms also create phenomenal experience. They are part of the interface bringing technology and user into productive engagement. Brandon Hookway (2014) argues that an interface, which seems to be a technological object, is more properly a way of engaging with technology. It comprises the bottleneck through which all human relations with technology must pass. Because of this, form is a concrete thing that must be used: picked up, held, walked upon, sat on, turned, or pulled. It provides physical experiences and creates a sensory, tactile environment that translates political rationalities into ambient experience.<sup>15</sup>

For some anthropologists, form is dominated by its association with art and literature and seemingly irrelevant for a mass of other phenomena. Posters, cathedrals, sonnets, and sculpture have form, according to this thinking, while traffic lights, pipes, prepaid phone cards, roads, and cables do not. For some, a turn to form is a turn toward the surfaces of objects, from which ideological, political, or cultural processes can be “read” and which stand in contradistinction to the material reality that stands underneath and conditions those forces. This binary is often blurred in practice and I am precisely interested in the formal qualities of everyday infrastructures and their role in producing a political aesthetics. This is not a split between the material and the representational, as form is as concrete a thing as pipes and sewers. This argument goes back to the Russian formalist rejection of symbolic analysis and “speculative aesthetics” in favor of tangible, observable technical devices. As Boris Eichenbaum characterized it in a 1926 review essay, form is not “the outer covering but something concrete and dynamic, substantive in itself” (2004: 9). Literature, Eichenbaum flatly stated, is “a specific series of facts” (12).<sup>16</sup> The second major argument that the formalists developed is that these concrete devices are arranged in order to create sensible effects on people, what Victor Shklovsky termed the “means of creating the strongest possible expression” (1965: 8). This is a mode of poesis, the use of form to bring something into presence, and aisthesis, the felt experience of that thing. For Shklovsky, form induced a sensorial effect. Its function was to “remove objects from the automaticity of perception,” bringing them to visibility so that their sensuous qualities were reflexively experienced rather than fading into the background (13).

What we can take from these ideas is that form has a concrete thingness that is in complex reciprocal interaction with the material properties from which infrastructures are made. Second, these forms impose sensory conditions of experience. While wholly uninterested in the political conditions from which literature derives, Russian formalists were centrally concerned with *effect*, the sensorial experiences that forms provoke. Precisely because infrastructures are caught up in relations of the state to its citizens, form translates modes of rule into concrete visible structures, making them affectively real and emotionally available.<sup>17</sup> Form induces cognitive and affective dispositions—an argument that Ngai sees as constitutive in forming the political experiences of subjects. It is similar to what Raymond Williams referred to as structures of feeling—the particular quality of social experience that is produced by dynamics of historical change, or, as Williams has it, “meanings and values as they are actively lived and felt” (1977: 132).

One can argue that the question of the political aesthetics of infrastructure is intimately related to the vexed issue of the visibility or invisibility of infrastructures. It has often been argued—almost typically argued—that infrastructures comprise the invisible, taken-for-granted substrate that allows our world to operate (Star 1999; Graham and Marvin 2001). The critical examination of infrastructure, in this light, is to perform an act of “infrastructural inversion” (Bowker and Star 2000; Peters 2015) by bringing what is background into the foreground. In many instances this is clearly correct and a powerful intervention. But infrastructures are not normatively invisible and then brought into visibility by some sort of exceptional act. Visibility and invisibility are not ontological properties of infrastructures; instead, visibility or invisibility are made to happen as part of technical, political, and representational processes. This is why the distinction between spectacular infrastructures and mundane ones should not be figured as an opposition but as representing different styles of visibility. When technical systems are removed from public discussion and become the preserve of experts, for instance, this can be seen as a *practice* of occulting, just as the demand for greater transparency around infrastructural projects is part of the work of visibilization. In her study of the introduction of water meters to South African townships, for instance, Antina von Schnitzler (2016) argues that precisely because apartheid was a project organized through infrastructural segregation, antiapartheid activists tended to take infrastructures as the foci around which protest could be organized. To move away from this protest, von Schnitzler argues, postapartheid governments introduced new technological devices such as prepaid water meters as an explicit means to turn what had become a political relation into a neutral, technical one (something she terms the logic of administration). What von Schnitzler shows, here, are active attempts to invisibilize infrastructures just as the mass protests that occurred around them can be seen as a refusal of that occulting. Visibility or its opposite is not an inherent quality of infrastructures but practices whereby politics is struggled over.

Infrastructures represent and are represented in their built forms; the protests that congeal around them; the sets of numbers, graphs, and tables by which they are administered; the budgets that undergird them. These depend on various material and formal devices, each of which invokes specific modes of address, draws together specific sets of actors, involves differing uses of secrecy and transparency, and constitutes the political in distinct ways. Conceived of in this way, the concept of political aesthetics I lay out shares a great deal with Rancière’s definition of the politics of aesthetics. While Rancière is primarily concerned with works of art and largely uninterested in popular forms, let

alone infrastructural systems, his understanding of the role of aesthetics in the constitution of political subjects offers an important way into thinking about the significance of infrastructures.

### Rancière

Rancière does not see aesthetics as a domain that is opposed to politics but as the means through which the political is constituted and operates. Politics, for Rancière, is not about the struggle for power but is “the configuration of a specific space, the framing of a particular sphere of experience, of objects posited as common and as pertaining to a common decision, of subjects recognized as capable of designating these objects and putting forward arguments about them” (2009: 24). Politics takes place when those who occupy fixed positions outside a certain order decide to intervene within that order. It is the apportioning that determines who can participate in a system: “This distribution and redistribution of places and identities, this reapportioning of spaces and times, of the visible and invisible, and of noise and speech is what I call the distribution of the sensible” (2009: 24–25). His aim is to expose the categorizations that assign objects to a specific place and define who has the ability to speak about them. What links aesthetics and politics, for him, is that both participate in constituting these categorizations, and both share an ability to bring into being worlds and to interrupt the distribution of those worlds. Aesthetics, he argues, is the system of “*a priori* forms determining what presents itself to sense experience. It is a delimitation of spaces and times, of the visible and invisible, of speech and noise, that simultaneously determines the place and stakes of politics as a form of experience” (2006: 13).

If art shares with politics the power to constitute new collective worlds, Rancière argues that this occurs through processes of poesis and aisthesis. These are the domains that are, for me, of the most interest for the study of infrastructures. Poesis, in this context, refers to the process of doing and making, the techniques whereby a broad range of things are brought into sensible existence. Aisthesis is the sensory apprehension of those things and the world they create. “Aesthetic acts,” Rancière argues, are “configurations of experience that create new modes of sense perception and induce novel forms of political subjectivity” (2006: 10). For Rancière, the politics of aesthetics is the role that art plays in making visible the distribution of sensible order and offering a critical alternative to it. He is at great pains to distinguish this from the staging of mass spectacle in fascism that Benjamin saw as crucial to the aesthetics of politics. Instead, Rancière is interested in the aestheticization of common experience,

the distribution of order between subjects and the world, and the ways those subjects dissent from that distribution. He sees art's political role as opening up spaces for transformation and disruption, creating new collective spaces from which the consensual order can be challenged by posing alternatives.

My interest, by contrast, is in the aesthetic operation of everyday infrastructures, how it is that anonymous infrastructural phenomena—switches, pipes, cables, roads, sewers, bridges, railways, servers—operate on the level of form as well as technics. Their political significance lies in these formal operations as well as in their functions. Rancière does not examine how common objects have aesthetic force, instead adopting a relatively familiar depiction of the artist as critical outsider, proffering alternatives to the social order. One of the great ironies of Rancière's work is that while he makes a theoretical argument for breaking down the distribution that separates art from ordinary life, the vast majority of the references he draws upon to do so come from high literature and art. For instance, in *Aesthetics and Its Discontents* (2009) he cites a passage from Stendhal's *The Life of Henry Brulard* (1958) in which Stendhal recalls the sounds of his youth—the church bells in the evening, the sound of servant girls using a water pump, the playing of a flute by the apprentice—that brought an awakening appreciation of music into his life. This passage is significant for Rancière because it conflates a world of artistic achievement (the flute) with the machinic sounds of the pump, placing both onto the same aesthetic plane. “Far from demonstrating the independence of aesthetic attitudes with respect to artworks,” Rancière argues, “Stendhal testifies to an aesthetic regime in which the distinction between those things that belong to art and those that belong to everyday life is blurred” (2009: 5). However, this richly suggestive sentence opens a perspective that Rancière never follows except at the most general level. He does not extend his analysis of aesthetics into the infrastructural realm (the reference, after all, is to Stendhal, not to water pumps). I wish to bend Rancière in order to see infrastructures as sharing with works of art the similar role of producing sensory experience and through that experience constituting political life. Thought of in this way, infrastructures are formal expressions of experience, vehicles whereby that experience is made palpably real to people, and it is because of this that they are so often the places where public controversy about the shape, nature, and direction of historical change becomes publicly available and debated.

We can compare Rancière, for instance, to the far richer discussion of water pumps in Mandana Limbert's *In the Time of Oil* (2010). Limbert examines infrastructural development that came to Oman after the advent of oil money. One aspect of this was the revolutionary state's provision of piped water, which

entered directly into the home and replaced the use of communal wells and of timed irrigation. For Limbert, the well stands for past time; it is a ruin in Benjamin's (1999) sense, distilling a social order and mode of production that can no longer be supported and which has been replaced by motor pumps. Oman, she tells us, "falls squarely between naturalized assumptions that development, in the form of piped water, mechanical pumps, and sprinklers, is necessary for the fulfillment of necessary statehood and notions that older forms of water distribution are emblems of Oman's past values and knowledge" (2010: 117). Water supply, as she describes it, becomes a meta-reflexive sign of the loss of a past lifeway and the anxious possibility of the future, and it is so emotively powerful that one farmer asks her to measure his well and take pictures of it so it can be re-created in a museum. She describes another farmer who tape-recorded the sound of his well so that, unlike Stendhal, he can listen to the sounds of his youth in a world where those sounds have been replaced by the hum of electric motors.

Infrastructures are tied to the political conditions that govern their existence and the emotional entailments generated by those conditions. As public goods, they represent a relation between a state and its citizenry, and they are embedded in what Laura Bear (2015) terms the *res publica*, an idea of care for the world that is as ethical as it is political. States are expected to provide a certain level of care for their citizens, what Achille Mbembe (2001) refers to as the production of public happiness. When the state does not seem to be living up to its agreements, when infrastructures fail or are not completed, the intensity of response and anger is driven by the affective politics that result from those ethical obligations. Akhil Gupta (this volume) describes this as "the biopolitical project of creating citizens who share the goal of inhabiting a modern future." Infrastructures never just supply electricity, water, or gas. They implicate the very definition of the community, its possible futures, and its relation to the state. When Rancière argues that the distribution of the sensible "defines what is visible or not in a public space" (2006: 12), part of what it is making visible and holding up for public discussion is the nature of these ethical obligations around which infrastructure is turned into politics and politics into a structure of feeling. And while Rancière is right to see aesthetics as a specific form of sensory apprehension, he does not explore how this is used by the state to distribute forms of political rationality and to create ambient environments in which that rationality is experienced. It is because they are so strongly associated with forms of political order and their dissolution (or refiguring) that aesthetic objects have the capacity to become metapragmatic objects, signs of themselves, deployed in particular circulatory regimes

to establish sets of effects that dramatize political conditions and make them subject to public debate.

Figure 7.1 is a photograph by the Magnum photographer Bruno Barbey of a new highway in Lagos, Nigeria. Barbey's image depicts a road that promises free, uncluttered movement, a way to assuage the desire and fantasy of mobility. As Armand Mattelart (1996) has argued, this coding of circulation derives from the Enlightenment logic that humans should not live in fixed states but that both individuals and societies should be open to change and mutability, and that progress is brought through the free circulation of goods, ideas, and people (the exact episteme mobilized by Carrow to justify funding a radio network). A variant of these ideas came to be formalized as modernization theory but its logic extends far back into Enlightenment liberal thought, perdures through colonial rule, and extends past the era of decolonization. Both colonial and nationalist governments were intensely modernist, fully adopting the logic that it is through infrastructures of circulation that development and modern subjectivity can be achieved. This is why roads became for both colonial and nationalist governments and their peoples the defining object through which development could be pursued.<sup>18</sup> Roads are both the technical means to bring about development and signs of that desire for development. They create both a physical space that people must traverse and a mode of address by which those people are interpellated.

We can see some of the origins of the ideological charge encapsulated in Joyce Cary's classic novel of district administration, *Mister Johnson* (1939). Set in northern Nigeria, *Mister Johnson* tells the story of a clerk, Johnson, brought in at a low level to the bureaucratic system of colonial rule from where he sees his European superiors embark on a series of development projects. The book follows two stories: Johnson's inability to manage his money, and the embezzling for which he will ultimately be caught, the aspect for which the book is most famous (and most criticized for repeating the cliché of corrupt Africans). The other story, however, is far stranger and follows Rudbeck, Johnson's superior, an assistant district officer in the northern Nigerian town of Fada, who is obsessed with road building. Rudbeck, Cary tells us, is a man with a "passion for roads" who has "caught the belief that to build a road, any road, is the noblest work a man can do" ([1939] 1989: 46).

Cary depicts Rudbeck alternately as faithfully trying to discharge his responsibility as a colonial officer to bring development to the region, and as somewhat unhinged and fetishistic in this ambition. When he writes that Rudbeck wishes to "build a road, any road," it suggests an unrestrained desire for civilization without regard to practical purpose. Moreover, Rudbeck is not alone in



FIGURE 7.1 An empty motorway in Lagos, 1979. © Bruno Barbey/Magnum Photos.

this belief because he “caught it” as if it were a contagion, from his own superior, Sturdee, and now seeks to reproduce these ambitions to the extent that he has slightly lost touch with reason.<sup>19</sup> It mimics Carrow’s faith in the modernizing effect of the radio that takes place without regard to the content it relays. The technical specificity of the road (which areas it connects, how it moves people) seems less relevant than its promise as a moral and civilizational tool.

Cary himself was a colonial officer, based in the north of Nigeria, who caught his own enthusiasm for road building from his superiors (the character Rudbeck is a loosely fictionalized version of Cary). Cary saw in roads, and communication more generally, the civilizational promise of liberalism. “The first need in Africa has always been communications,” Cary wrote, in a collection of political essays: “Trade, order, peace, the intercourse which comes from trade and which is the very beginning of civilization and the education of people all start from the free and safe harbor, the open river and the cleared road” (cited in Moody 1967: 146). In a letter to his wife while road building in Nigeria as a district officer, Cary gave a more emotional sense of how this civilizational promise was felt: “I am starting a new grand trunk road. . . . I cannot explain the pleasure of seeing a road which one has planned and surveyed in actual being” (cited in Moody 1967: 146). Cary describes how the road vivifies a particular form of political order but the way he describes its power often seems to stray from the rational to the fantastic. In *Mister Johnson* this extends so far that the road becomes a literal fetish as Cary depicts it taking on animate form and talking to Rudbeck or, depending on how you read it, shows Rudbeck losing touch with reality and hearing voices coming from the road. “I’m smashing up the old Fada,” the road tells Rudbeck. “I shall change everything and everybody in it. I am abolishing the old ways, the old ideas, the old law; I am bringing wealth and opportunity for good as well as vice, new powers to men and therefore new conflicts. I am the revolution. . . . I am your idea. You made me” ([1939] 1989: 168, 169). “I am your idea. You made me” encapsulates not just the ways that the aesthetic address of the road comes to overwhelm rational technics, but it neatly vivifies the reciprocal exchange between idea and material thing.

The belief in the power of infrastructural development was, if anything, an even greater part of nationalist struggle than of colonial rule. This was especially the case in Nigeria after the oil boom of the 1970s, which ushered in what Michael Watts (1992) has referred to as a frenzy of infrastructural building. Federal and local states sought to invest in infrastructural ventures as a means of developing society and as a political technique of displaying state power through what Fernando Coronil described as the “theater of modernization . . .

dazzling modernization projects that engendered collective fantasies of progress” (1997: 239).<sup>20</sup> Barbey’s book on Nigeria mostly concentrates on cultural and religious rituals, traditional architectures and dress, but he juxtaposes this “tradition” with images depicting oil platforms and roads—icons of 1970s modernization. The road appeared to Barbey as an object to be photographed precisely because it stored and represented the promise of infrastructure making that promise—as a mode of political rationality—emotionally real.

It is this political rationality with its admixture of technical rationality and fantastic excess that is engineered into the Lagosian highway that Barbey depicts, and it forms part of its aesthetic effect. The formal qualities of the road—its blackness and hardness, the swooping clover leaves and graceful curves—generate an address that calls forth specific subjective capacities and emotional experiences and provides a way of relating those experiences to broader social arrangements.

Barbey’s road can be contrasted to another, perhaps more familiar, depiction of contemporary Lagos (figure 7.2) and the crowded congestion that has come to mark urban Nigerian life. The road conditions in this second image draw their political charge from the betrayal of the promise that was offered in the first. The collapse that followed the oil boom revealed it to have been a period of excessiveness and irrationality and infrastructures became icons of that irrationality—massive state projects that hemorrhaged state funds but which were often incomplete, poorly constructed, and subject to constant breakdown. Barbey’s road stands as an infrastructural promise of modern development because it is tied to structural shifts in Nigerian economy and society. From the perspective of the present, these earlier ambitions are revealed to be a desire for a futurity that was as fragile as it was intense. The betrayal of that promise becomes the grounds for debating what that political promise was and what caused its failure. Every traffic jam, every pothole, every incomplete road becomes a means by which the state is brought to public attention. It sets in motion an everyday hermeneutics about why infrastructures fail—corruption, incompetence, ethnic favoritism, or any of the other litany of reasons commonly advanced to explain a contradiction that people feel keenly. Political aesthetics captures these dimensions. It refers to the representational work of form in distributing political rationality but also to how that rationality is sensed through the ambient environment and the felt experiences that roads generate. Those who use the road are subject to the ordering of those ideas through the physical experience of engaging its space.

Barbey’s photograph depicts the highway that connects mainland Lagos to the islands that host the markets and elite business and residential areas of the



FIGURE 7.2 Congestion in Lagos. Photo by the author.

cities. Congestion on highways and roads is so bad that Lagosians time their entry and exit from work to avoid the notorious “go-slows” that can snarl traffic for hours. The regularity of congestion has turned roads—at certain times of the day—into spaces of sedentarization rather than movement (Amiel Bize [2017], writing about Nairobi, refers to this as “jam-time”).<sup>21</sup> Go-slows are both things in the world and events that create the platforms for other actions to happen. They give rise to new modes of planning and new forms of behavior. Ordinary workers wake early to travel, then stay late and eat near work to avoid the postwork rush hour. One wife I knew drove from her home on the Lagos mainland against the flow of traffic to eat dinner with her husband near his work so that they could spend time together while the traffic dissipated rather than having to eat apart. These are ephemeral ways in which the realities of infrastructural life impress themselves upon quotidian existence. They indicate both the possibility of circulation, its foreclosure, and the ability to overcome that foreclosure by finding a way around it or waiting it out.

Go-slows have become as much a ubiquitous symbol of contemporary Lagos as the Eiffel Tower is for Paris or the Statue of Liberty is for New York, commented on by all visitors, and a daily topic of concern for Lagosians. They have created a contested fulcrum around which the state of urban life and of the condition of society is debated, everyday allegories about the state of things. Though quite what the jams mean is contested. On the one hand are those who see the jams as the iconic example of the disintegration of the state, part of an apocalyptic depiction of Lagos and Nigerian urbanism.<sup>22</sup> On the other hand are those who view transport infrastructure and its failures as constitutive of a creative informal economy: “thriving with entrepreneurial activity” (Koolhaas et al. 2000: 674). Lagos has become, perhaps, the most discussed, photographed, reviled, and celebrated city in Africa, a condensed signifier for the state of African urbanism and its uncertain futures.<sup>23</sup>

Barbey’s empty road in figure 7.1 or the congested one I photographed in figure 7.2 are not neutral depictions of phenomena in the world but metapragmatic signs about order, time, futurity, chaos, backwardness, and the modern.<sup>24</sup> These ideas are the conditions of possibility for the emergence of the road, just as the physical life that the road leads reshapes what those ideas are and how they gain political force. There is a constant, dynamic interaction between the two out of which both evolved. The fact that Barbey chose a newly constructed road to photograph (one of several in his book) and I chose a congested one is because they present themselves as sensible to us, already overburdened with political freight. They appear as objects “to-be-photographed” precisely because both of us recognized the address of the road and its relation to sensible

politics. This is, of course, the ordering mechanism that the distribution of the sensible enacts. It captures me just as I capture it in my camera.

Aesthetic form is one of the technical means by which promise as a political technique is enacted. Form generates a mode of address that induces affective and cognitive dispositions, distributing political rationalities (its representative function). It also constitutes physical environments whereby those rationalities are experienced as lived practice. Itself the outcome of ordering, form orders those subject to it. And all of these various operations take place in an encounter that fuses the material with the human, that does not push beyond the human but reveals how the encoding of social relations is a central part of the material operation of infrastructures.

### Conclusion

Naveeda Khan, writing about the development of the Lahore-Islamabad motorway, “the first “American-style motorway ever built in the Indian sub-continent” (2006: 87), sees promise as constitutive to its existence. Khan tells us that for Pakistanis the motorway promised economic development and cultural integration (94), the ability to revolutionize communication (88, 102), “a tightly networked exchange system between the state and the travelers” (102), and, not least, “speedy and safe travel” (100). She also charts how the actuality of the motorway delivered on some of these promises, but abjectly failed on others: “As a communicative technology its [the road’s] promise hovered over its actuality. It was saturated by the state’s presence even as the state went into partial eclipse with the failure of its circuitry” (105).

Khan highlights here the fact that infrastructures operate at different levels at the same time. She parses a technical object—a road—examining it in terms of form. It is an *American*-style motorway, counterposed to other sorts of motorways potentially available to Pakistanis and starkly differentiated from the older trunk roads built by the British in the nineteenth century. Khan sees the desire for the motorway as part of the distinct preference amongst Pakistani elites for things American. No doubt this preference is dialogically related to a move away from aspiring to things British, which might both be a nationalist sentiment and a recognition of the particular authority of the American hegemon. In any case, “American-style” places the motorway into a relationship of form with other American-style things—from fast food restaurants to strip malls—none of which participate in the materiality of roadness. But the promise of Americanness released by the ambition of the road is part of its structural nature, as immanent to it as concrete pylons.

For some materialists, to argue that infrastructures “represent” forms of capital, or congeal social relations and social labor, is an error because it makes objects into the passive receptacles of human categorization: “white screen[s] onto which society projects its cinema” as Latour phrased it (1993: 53). In this regard, new materialism is opposed to older forms of historical materialism. “Things lie,” Henri Lefebvre argued, and as commodities they do so in order to conceal the social labor that goes into their formation. “The unmasking of things to reveal social relationships is one of Marx’s great achievements” (1991: 83), he argued decisively. It is precisely this unmasking that science studies and new materialism finds so troubling because it threatens to recenter the human subject as the sole locus of agency. It assumes matter’s plasticity or passivity and reinforces the idea that, as Diana Coole and Samantha Frost argue, “matter is inert stuff awaiting cultural imprint” (2010: 26).

As is clear by now, I reject this separation of the material from the discursive and from form. To recalibrate Latour, this is a purification that insists on a split between the human and the material, something he warned against. But while Latour (1993) insists on the material agency of objects, dismissing the idea they were simply shapeless receptacles of social categories, my emphasis is the reverse. Objects are not simply material assemblages wholly autonomous from aesthetic fields and the political rationalities that accompany them. Instead, there is an energetic exchange between the two whereby external environment and technology interact, each shaping the other. As the example of the introduction of radio to Nigeria suggests, analytically insisting upon the medium as a material assemblage operating at a prediscursive, affective level is an impossible analytic act that can be achieved only by purifying radio of the deep epistemologies of colonial rule, cognitive mutability, and theories of media influence that are its conditions of possibility. It remains important to recognize that technology has a material excess that cannot be fully reduced to the sets of ideas that administer it, but that does not mean that those ideas are absent from it at the level of organizing its material presence.

One of the most exciting sides of new materialism is its emphasis on emergence and the becoming of matter rather than its fixed ontology (Barad 2007; Coole and Frost 2010). I see the dynamics of encounter as formed through the constant evolution of objects in relation to discrete environments, environments that are at once physical, political, and social and that take in legal and religious domains as well as the internal, technical logic of machines. This is not a restatement of human exceptionalism or a denial of the autonomy of the material. I recognize that there is an excess to the material that cannot be fully contained by discursive regimes but I also see form and aesthetics as part

of the material as well as the discursive world. At times, as Eduardo Kohn has elegantly shown, form can be nonhuman, produced in naturally occurring situations as a “constraint upon possibility” (2013: 157). But the human operations of form are equally important and an integral part of the political aesthetics that are a constitutive part of our world. Form and aesthetics are ecological as well as representational, involved in creating concrete environments as well as addressing subjects. The relationship between the material and the figural—particularly in the case of infrastructures—is reciprocal and entangled rather than causal and successive. Matter and form are present at the self-same time, mutually shaping each other. Technical objects cannot exist without both, and both are essential to an understanding of political aesthetics.

#### NOTES

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- 1 This argument is amplified in the introduction to this volume and in the chapters by Appel, Harvey, and Gupta.
- 2 For a critique of Aristotle see Simondon 1958, Mackenzie 2002.
- 3 The SNP was the highest official in the Northern Region of Nigeria (NR), one of the three semiautonomous regions that made up the Nigerian state. Nigerian National Archives, Kaduna (NNAK)/Kano Prov/4364/Radio Distribution Services.
- 4 Radio Diffusion was the wired relay of radio broadcasts to individual subscribers. Operating somewhat similarly to cable television today, it did not depend on a broadcast but instead wired the signal directly to receiving sets that could not be tuned to other stations. This allowed the British to control which stations Nigerians could listen to. See Larkin (2008).
- 5 Minute, GRJ, 27/9/39; Letter from SNP to Kano Resident, NNAK/Kano Prov/4364/Radio Distribution Services.
- 6 Kano was a centuries-old city ringed by a mud wall. The onset of colonialism brought with it southern Christian migrants who lived outside of the traditional city in a new area called the Sabon Gari. The Resident is thus emphasizing that all stripes of native opinion were against the introduction of loudspeakers and a radio distribution service. During a certain period of British rule in the north, evoking the dissent of the local population was enough to prevent any administrative effort. NNAK/Kano Prov/4364/Radio Distribution Services.

- 7 NNAK/Kano Prov/4364/Radio Distribution Services, Note, Resident Carrow 29/6/43.
- 8 Rhodes House Mss.Afr.s.1489, Papers of J. H. Carrow.
- 9 NNAK/Kano Prov/4364/Radio Distribution Services, Note, Resident Carrow 29/6/43.
- 10 See also the introduction and also Harvey, this volume.
- 11 NNAK/Kano Prov. 4364/s.13, Circular, D. B. Wright for Ag. Civil Secretary, Kaduna to Resident Kano, 28/8/52.
- 12 NNAK/MIA/765 Radio Diffusion Service, NR.
- 13 Here I drew on Foucault's argument in *The Archaeology of Knowledge* (1972).
- 14 Schwenkel, this volume, offers a rich example of this process in her discussion of the smokestack as icon in socialist Vietnam.
- 15 Siegfried Giedion ([1928] 1995) provides an example of this when he writes about the new experience of space produced by the rise of iron technology, the first building material produced by an industrial process rather than nature. Iron's capacity to bear weight allowed for the use of thin pillars, producing a heretofore "unknown transparency, a suspended relation to other objects . . . [a] sensation of being enveloped by a floating airspace while walking through tall structures" (102). It promoted "freedom of circulation, clear layout, and . . . [permitted] the best utilization of light" (117). Nineteenth-century railway stations, festival halls, or department stores were not just visual expressions of transformations in capital, but, for Giedion, they created a phenomenal experience of moving in space and perceiving light. This experience was both an expression of the age and also a means by which that meaning was physically impressed upon people. Airspace was a physical, ambient experience that for Giedion both emerged out of, and could stand for, structural shifts in society. It was both concrete thing and metaphor.
- 16 Eichenbaum referred to this as the principle of palpableness. See also Jakobson's discussion of the palpability of the sign in his famous definition of poetics (1985).
- 17 Penny Harvey and Hannah Knox argue that "even the most unlikely infrastructural projects are able to sustain an ongoing emotional charge" (2015: 28).
- 18 See Harvey and Knox (2016) for an example of the link between modernization and roads in Peru. Dimitri Dalakoglou (2017) argues elegantly that the Albanian state used roads to surface the country with the ambitions of socialism—but he, Harvey, and Knox are all well aware of the fraught outcomes of these ambitions.
- 19 As I note in my book *Signal and Noise* (2008), this slippage between rational achievement and fetishistic irrationality over infrastructure development marks the film *Bridge on the River Kwai*.
- 20 See also Apter (2005), Watts (1992).
- 21 In an extended discussion of jam-space and jam-time, Bize argues that they are a "rhetorical vehicle through which the vicissitudes of Kenyan society and urban life are discussed so people not only spend time *in* jams they spend time talking *about* them" (2017: 60, emphasis in original). Caroline Melly (2017) explores this beautifully in her discussion of the *embouteillage* (bottleneck) in Dakar. She argues that embouteillage is such a ubiquitous feature of traffic jams that it has become a way—a metaphor as well as an actual thing—that Dakarais refer to all ventures in life that are subject to frustration and blockage.

- 22 Robert Kaplan's *The Coming Anarchy* (2000) and George Packer's *New Yorker* (2006) article on the mega city are classic statements of the apocalyptic perspective on Lagos. For a more recent iteration of this position, see the article on Lagos roads, Jeffrey Hammer, "The World's Worst Traffic Jam," *Atlantic*, July/August 2012.
- 23 Matthew Gandy makes this point in his article, "Learning from Lagos," when he recounts the many exhibitions—*Century City* (2001) at the Tate Modern, the Documenta 11 (2001) in Kassel, and *Africas: Art and the City* (2002) in Barcelona—that have made Lagos a particularly dense site of discussion for contemporary urban life.
- 24 See also the introduction to this volume.

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