

This PDF includes a chapter from the following book:

# **Installing Automobility**

## **Emerging Politics of Mobility and Streets in Indian Cities**

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## 7 Displacing Automobility

We began chapter 3 by discussing the contestation surrounding the case of the construction of the steel flyover, a 7-kilometer elevated structure that was planned to provide a seamless connection for vehicles between central and north Bengaluru. It is particularly instructive to revisit the campaign against the steel flyover because it offers important insight into the struggle to displace the constellation of automobility in the city. Doing so allows us to locate a cosmopolitan “politics of hope” (Coutard and Guy 2007) that will shift the constellation to concede more space to underprivileged uses of road space even as it whittles down the overwhelming preponderance of imaginaries of an unjust and privileged automobility that currently circulates in Bengaluru.

Despite the vitality of the protests against the steel flyover, the perception that the organizations and leaders spearheading the protest spoke in a middle-class voice was quite prevalent. Leaders of Citizens for Bengaluru (CfB) belonged to the educated middle class and were predominantly professionals. Furthermore, group leaders had little history in community organization or in popular mobilization. The mobilization for the protest effort itself was conducted predominantly in English on social media and in broadcast media. In addition, given the history of middle-class activism in urban governance in Bengaluru (chapters 2 and 4 offer insight into their operation), it was expected that the campaign against the steel flyover would be yet another instance of a middle-class assertion on public space. Indeed, in the initial days, groups such as the Bengaluru Bus Commuter Forum that had struggled for more pro-poor and inclusive urban claims, explicitly distanced themselves from the campaign and its leaders in CfB whose interests were seen as selective and steeped in self-interest (Nagaranjan 2017). However, by January 2017, the citizen campaign against the steel flyover had become successful in attracting a wider cross-class coalition of supporters.

Campaigners against the flyover increasingly gave their voice to wider urban mobility questions in the city. They explicitly championed the cause of developing an affordable commuter rail system for the city, which would benefit not just the middle class but also other members of the traveling public. Yet another venture that went beyond the predominant middle-class orientation was the launch of a common campaign, in alliance with the Bengaluru Bus Commuter Forum, to initiate a rollback of bus fares and introduce more buses in the city. Given the perceived middle-class orientation of CfB, the launch of a common campaign that would potentially benefit poorer sections was, I believe, a key moment in citizen mobilization against the politics of automobility in the city. It indicated a real prospect for forging cross-class social alliances that could effectively mobilize against automobility. In a city as polarized as Bengaluru, this was a landmark achievement. Possibly recognizing that the campaign was poised to grow, in early March 2017, the government abandoned the steel flyover project and decided not to proceed with constructing it.<sup>1</sup> The decision of the government not to construct the steel flyover is, to my mind, a landmark instance of mobilization to displace the grip that automobility has come to exercise on the city. This instance of protest against the ordering of mobility marks an instance of a “politics of hope” that can transform the constellation into what Chatterjee refers to as a “less malevolent hybrid” (Chatterjee 2004).<sup>2</sup>

The case of the campaign against the steel flyover is illustrative of a growing dissatisfaction among Bengaluru residents about how mobility and streets are organized in the city. The installation of the constellation of automobility in the city has made streets increasingly captive to automotive modes of travel. In previous chapters, I delineated the contours of Bengaluru’s constellation of automobility. In this final chapter, I address the question “So, what can we learn from the incumbent constellation of automobility in Bengaluru?”

In the next section, I first summarize key points about the nature of automobility in the city. Based on the summary, I then focus on the contribution the empirical material in the book will make to scholarship, especially by locating the importance of the Bengaluru case described in this book for studies in mobility and urban environment. In other words, I explore why the Bengaluru case is significant for our efforts to conceive of equitable and sustainable urban places. In the final section, I conclude the book with a call to displace automobility around the world by reordering the mobility regime, re-landscaping the city and its infrastructures, and reclaiming streets as spaces of diverse inhabitation. I argue that it is through conjoined

efforts on these three fronts that we can develop an alternate constellation of mobility that will prize cities from the grip of automobility.

### **Installing Automobility in Bengaluru**

Automobiles and associated modes of inhabiting and moving are deeply embedded in the cities of Europe and North America, but what is significant in the present moment is their rapidly growing presence in megacities of the global South. Large, urban agglomerations in India such as Bengaluru are not exceptions to this phenomenon. Scenes of streets choked with vehicles, especially private automobiles, are now a daily occurrence in Bengaluru. I have argued in this book that the rise of the automobile presence on Bengaluru's roads is a symptom, not a driver, of the installation of the constellation of automobility in the city. Beginning with Featherstone, Thrift, and Urry's (2004) pioneering volume that established it as a key topic for theory and research, automobility enjoins a wide-ranging examination of the car and its location within the cultural and ideological matrix of contemporary Western lives. In order to recognize the ramifications of automobility in Bengaluru, we have to look beyond automobile growth on its streets and investigate how decisions to intervene in urban mobility have resulted in imprinting automobiles profoundly on the spatial, political, and technological landscape of the city. Attending to this is vital because it directs us to the political constituent of automobility.

In this book, automobility is understood to have been installed in Bengaluru as a technopolitical constellation. Drawing on both Hecht's (2009) notion of technopolitics and Gandy's (2011) conception of constellation, a technopolitical constellation is understood here as a complex, multidimensional sociomaterial entity situated in a historical context and whose material designs have come to embody specific political goals. Thus, automobility cannot be explained solely through political or technological and material dimensions but is instead an amalgamation of the technological and political. As a constellation possessing such an amalgamated existence and immersed within a sociohistorical context, automobility in Bengaluru requires analytical unraveling that allows us to understand the different strands that have contributed to its installation. This process of teasing apart the threads that weave together automobility is an important task for two reasons. First, it is only through teasing apart these strands that it is possible to appreciate how automobility has become rooted within Bengaluru. The second, and related, reason is that the interweaving of its

multiple dimensions signals the extraordinary persistence that automobility has acquired in Bengaluru. By enrolling an assortment of social, technological, and artifactual entities that together enact particular attitudinal, behavioral, and political responses, automobility has lodged itself deep within Bengaluru. In chapters 2 to 6, I embarked on the task of describing different dimensions of the city's automobility constellation.

Relying on a *longue durée* historical imagination in chapter 2, I piece together the twists and turns in the evolution of a discourse on congestion in Bengaluru over the past two hundred years enunciated through a unique entourage of actors, and their chosen interventions have left behind residues that remain encrusted in the city's landscape and continue to shape the contemporary construction of automobility. Between 1799 and 1881, congestion in the city was interpreted as a product of the disorderliness that pervaded the indigenous arrangements of managing urban space in the precolonial settlement, or *peté*. The creation of a rival urban pole in the cantonment and the municipalization of urban administration materialized in distinct offices were interventions that sought to address disorderly congestion in this city. This period signals a profound start to a long history of decontextualized instrumental approaches to intervene and control congestion.

From 1881 to 1949, the discourse could be characterized as one of unhealthy congestion. This discourse was a composite created from a technoscience development regime in the colonial kingdom of Mysore, a portrayal of native modes of urban management in planning, water supply, and sanitation as inferior and unhealthy and the reliance on new forms of scientific interventions in urban space that nevertheless complied with the norms associated with prevailing social hierarchies and inequalities. One of the residues from this period is a lasting predilection in statecraft toward technological instruments over any political or social means.

In the next period, from 1949 to 1991, congestion came to signify the absence of formal scientific planning to address urban growth. The consensus among the governing elites of this period was that unplanned efforts would result in an urban space suffused with congestion not just throughout the city but also at the level of individual sites and locations. Specific techniques and mechanisms of planning were deployed to rectify the congestion caused by unplanned growth with a view to promoting a dispersed, and therefore wholesome, settlement pattern. New actors such as a planning bureaucracy led by a statutory parastatal organization composed of technically qualified experts were instituted to plan for urban decongestion. The combination of a professionally qualified bureaucracy and technical strategies of planning was expected to eliminate congestion

in Bengaluru. Instead, it has engendered a well-oiled and pervasive system of illegality in the use of land and the construction of buildings.

From 1991, the characterization of the discourse of congestion has shifted once again to one marked by congestion in infrastructure flows coursing through the city. Coinciding with the rise of Bengaluru as a node for technology enterprises, this shift has brought a new cast of actors, including special-purpose vehicles and public-private partnerships that seek to manage the process of developing infrastructures to streamline flow blockages. The rush for seamless infrastructure conduits in an age of global connectivity has deposited yet another layer of residues. Designs for seamless infrastructures are indexed against norms and aesthetics increasingly dictated by middle-class preferences, as well as an enormous desire to mobilize land for private accumulation. This historical denouement allows me to posit two aspects that are vital to the story of automobility in Bengaluru. First, instrumentality in addressing congestion in different time periods in Bengaluru's history appears as an almost default option. It makes its appearance through reliance on technologies, techniques, and technical institutions to achieve objectives of sociospatial change. One consequence of the instrumental approach has been the germination of residues as unintended products that continue to exert a powerful influence on the urban experience in Bengaluru. Second, the current narrative of traffic congestion in Bengaluru has similarly been narrowly interpreted as one arising directly from the recent but enormous growth in automobiles. Such a narrow interpretation is not unique to Bengaluru. Cities in the Western Hemisphere in the early to mid-twentieth century similarly demonstrated an instrumental approach to traffic congestion. But such an overtly instrumental approach is not without political ramifications. Indeed, instrumental approaches have become the conduit to weave political objectives into seemingly technical means to reduce congestion. Since 1991, political valences of approaches to address congestion in Bengaluru have been increasingly shaped by a middle-class articulation of norms and aesthetics for urban space and a state machinery that enables private accumulation in the pursuit of economic growth.

Chapters 3, 4, and 5 reveal the particular modes through which political valences have been inserted into Bengaluru's automobility constellation. Recent interventions for smoothing automobile flows in the city, I argue in chapter 3, assemble a power-filled structure that orders how people move around the city. It is helpful to identify the structure as a technopolitical regime because it spotlights how technological infrastructures and artifacts of mobility are enrolled to realize purposes that are profoundly political in their outcome. I demonstrate how discourses of infrastructure inadequacy

and vehicular congestion have wrought a regime of congestion that unambiguously articulates a politics of takeover of the streets for the sole purpose of motorization. Through the efforts of the regime, streets are refashioned as conduits that facilitate the smooth transit of motor vehicles while marginalizing other uses. Thus, nonmotorized forms of moving and inhabiting streets associated with vending, walking, and cycling are increasingly being erased altogether from some streets and relegated to the margins of others. But recasting city streets as arteries for motorization has been accompanied in recent years by making the experience of moving around the city inequitable. The growing inequality in urban mobility in Bengaluru is illustrated in the case of public transit. The prevalence of greater automotive congestion on roads has become the motivation for the introduction and rapid spread of air-conditioned bus services and park-and-ride facilities that target the automobile-owning middle class. At the same time, less mobile and poorer urban groups, such as women, daily wage earners, and students, have had to contend with less affordable and more crowded bus services. This inhospitable environment in buses has led many more to abandon public transit in favor of private vehicles, contributing further to the vehicular congestion on the streets. This self-perpetuating dynamic has locked in the regime of congestion in the city streets.

Bengaluru's congestion is compounded by the powerful salience that road infrastructures have acquired in the city's landscape to shape the experience of urban commuters. In chapter 4, I argue that through their enduring presence, road infrastructures on the city landscape have activated particular circuits of actors, inscribed certain technopolitical sensibilities, and reinforced particular practices and experiences of motorization in the city. By proposing the visual analytical concept of infrastructurescape, I suggest that the recent uptake in motorization has been accompanied by the design of an infrastructurescape of privilege in Bengaluru studded with humongous overhead tollways and flyovers, elite partnership efforts such as ABIDe, road redesign and traffic management efforts that to some extent have been contested by grassroots infrastructurescapes composed of citizen groups, people's manifestos, protests, and localized neighborhood efforts to refashion cityscapes. Paying attention to the infrastructure landscape, we can attend to how actors, organizations, artifacts, technologies, and plans come together to enunciate a particular visual dimension to urban change. More important, this understanding demonstrates that landscapes are not inert backdrops but are instead laden with power and purpose. Chapter 4 reveals how the prevalent embedding of privileged normative orientations and the organizing motivations associated with the infrastructures

of mobility in Bengaluru incorporate purposes that are often far removed from moving people sustainably or equitably. Instead, as we have seen, political elites see in big-ticket infrastructure the opportunity to gain popular legitimacy to advance their personal political interests. Or corporate elites propose exemplars such as the Tender SURE road redesign as models for new and world-class practices and designs. Together, these have attenuated landscapes of more inclusive mobility and inhabitation.

Chapter 5 articulated yet another facet of Bengaluru's incipient constellation of automobility: how belonging on and inhabiting streets is shaped to facilitate the occupation of the city by automobiles. In this chapter, I characterize these modes of belonging as automotive citizenship and show that this form of enfranchising of the automotive public is crafted on the streets of Bengaluru through the accumulation of a range of claims exerted by road and infrastructure designs and practices of driving. Thus, when mega-infrastructure projects such as the Nayandahalli interchange in southwestern Bengaluru was constructed, much of the designer's attention was lavished on the needs of automobiles zipping through the interchange. The needs of pedestrians, pushcart vendors, and bicyclists, however, have been utterly neglected. Similarly, social media allow traffic enforcement actors and the automotive public to collectively articulate a connotation of roads as spaces reserved primarily for uncongested automobile travel. Through this sociomaterial ensemble, automotive citizenship is understood as a durable phenomenon constituted through the performance of navigating and traversing urban space in the city.

Despite the deep political valences that are imbued within the constellation of automobility in Bengaluru, it would be a misreading to characterize it as an obdurate, totalizing force that will flatten the city unchallenged. Chapter 6 portrays instead the continuous, ongoing, and dynamic challenge that grinds down the achievements of the enterprise of automobility. The ongoing contestation of automobility arises from diverse historically rooted congestions. These congestions whittle away at engineers' and designers' conception of a smooth, seamless automobility that allows motorized travelers to zip from any given point in the city to anywhere else with minimal disruption. The case of the Vrishabhavathi River elevated road illustrates the diverse contestations that were sparked when the construction of the road was initiated to ensure signal-free automotive travel at an important road junction in the city. The contestations slow down, and on occasion, disrupt, efforts for seamless automobile flows. In response to these diverse sociomaterial contestations, engineers and designers have to inject considerable energy and time to ensure that the enterprise of automobility is

conserved. What emerges instead is a shabby and untidy process that might still ensure that automobile flows are smoothed, but only after an expenditure of time and energy.

### Implications

Automobility in Bengaluru has acquired an extraordinary degree of persistence on account of its situatedness in the city's history, society, and politics. So what can we learn from the emplacement of automobility in Bengaluru? I believe that the significance of Bengaluru stems from surmising two implications: one related to our understanding of automobility and another to the challenges facing equitable and sustainable cities.

First, a key implication that springs from this work is how the twists and trials of Bengaluru's case advance our understanding of automobility. As recent research has revealed, automobility is a sociotechnical condition inseparable from our contemporary modern existence. It is marked by an intense entanglement of the automobile in several facets of our contemporary lives: behavior and emotions, national identity, popular culture, work, travel, and even constitutional liberalism. These are just a few of the domains where the automobile leaves its footprint (see the special issue in 2004 of *Theory, Culture and Society* and in 2006 of *Sociological Review* for a detailed exposition). As a consequence, researchers have characterized automobility as a system (Urry 2004) or a regime (Böhm et al. 2006)—a powerful structuring force. It is the power embedded within automobility that has released a multifarious hydra-like entity that continues to exert an imprint on our lives. However, given the predominance in this literature of the Western Euro-American experience, automobility has been conceptualized as a preexisting phenomenon that continues to shape the lives of many. But the question of how the hydra-headed and power-infused phenomenon of automobility has come to be constituted and established has not been answered fully.

This, despite the fact that much of the recent historical research on the dawn of the automobile age in Western contexts describes eloquently how the varied political, fiscal, technological, regulatory, and cultural components have woven together the fabric of automobility. Christopher W. Wells's *Car Country: An Environmental History*, for instance, does a remarkable job in excavating how, over the first half of the twentieth century, through the collective operation of shifting priorities in government investment, technological breakthroughs in road design, and planning for car-centered landscapes, the United States has been molded into the eponymous Car

Country, thereby establishing the automobile at the center of public life. Although Wells portrays this profound transformation in exquisite detail, the work is notably thin on theorization on how automobility has come to be established in the United States. In the absence of conceptualization, the sheer volume of Wells's empirical material paints a powerful picture, but it offers few guides for painting similar pictures in other locations. Thus, while the book's readers become aware that manufacturing a car-centric society has multiple components, with few conceptual guides, they are unable to capitalize on their recently acquired awareness to analyze, let alone intervene, in an incipient automobility elsewhere.

Clearly there is a yawning gap in the literature. On the one hand, the historical literature illustrates a detailed picture of the installation of automobility in the West, which is notably atheoretical, while on the other hand, contemporary studies of automobility in the West are conceptually rigorous but have not focused on the processes of installation and instead regard automobility as a preexisting condition. The case of Bengaluru elaborated in this work fits squarely within this gap. This work seeks to illustrate a detailed picture of how automobility has become installed in Bengaluru, but it does so by adopting a conceptual vocabulary to index the processes involved. While the picture elaborates how involuted the processes of automobilization are, the conceptual vocabulary offers analytical pathways for interpreting the material. Through these pathways, one can attempt to grasp similar processes underway in other places (Western and non-Western). For example, the concept of automotive citizenship (introduced in chapter 5) is a powerful device for grasping processes of enfranchisement of automobiles that are proliferating on streets around the world. This work offers six analytical concepts that are, I believe, critical for understanding the installation and entrenchment of automobility: automobility as anthropocenic fluid; automobility as a technopolitical constellation; the regime of congestion; the infrastructurescape; automotive citizenship; and affordances and congestions in automobility. This analytical vocabulary provides concepts to assess the nature of automobility constituted in the context of choice and to assess the politics of streets and mobilities in locations around the world. The portability of the conceptual vocabulary is a major contribution of this work.

Second, how can the particularities of Bengaluru's predicament offer a guiding light for cities around the world as they aspire to break free from the clutch of automobility and move toward a more sustainable and equitable pathway? In a world that increasingly recognizes the pernicious environmental and social consequences of widespread autocentricity, recent

scholarship has attempted to understand the stability of automobility's enterprise. Scholars reason that by understanding the sources of automobility's stability, we could suggest pathways that will lead us away from our current situation of an all-encompassing lock-in. Scholars of sustainability transitions who understand automobility as a sociotechnical regime have proposed one way to do this. While the concept of a sociotechnical regime is complex, it can be quickly defined as an entrenched structural element encompassing a range of actors (industrial firms, regulators, policy-makers, users), established practices (of, say, planners and engineers), cultural norms, and discourses. Given its multidimensionality, sociotechnical regimes could be conceived as an interlinkage or alignment that binds together several constitutive regimes, such as a policy regime, a sociocultural regime, or a technological regime (Geels and Kemp 2012). Following this logic, automobility as a sociotechnical regime is characterized by a diversity of constituent regimes. The sources for the persistence of automobility can then be located within these component regimes: the sociocultural regime (Sheller 2012), the policy regime (Dudley and Chatterjee 2012), or the automobile industry regime (P. Wells, Nieuwenhuis, and Orsato 2012). Such a strategy emphasizes the translocality of automobility. The constituent regimes of automobility operate regardless of location. For instance, a policy regime is usually tied to political jurisdictions, and therefore all places within the political boundary are said to subscribe to this policy regime. In like fashion, a sociocultural regime operates through the norms and values prevalent within a community that could once again be spread over multiple places in a country.

In this book, I have adopted a different tack by seeking to inquire instead into the installation and operation of automobility that is intensely localized and situated. This allows us to examine empirically the constitution of automobility as a force for change within a specific localized setting. I make the claim that the localized flowering of automobility is a product of incredible power and agency rooted in the specific urban histories of society and politics. Thus, automobility is not understood here as a metaregime constituted from multiple interlocked regimes but is instead a political force—a constellation—that manifests the historically rooted operation of power and purpose. In such a construction, power and politics become central to the organization of automobility. In chapter 3, the assembling of the regime of congestion in Bengaluru has created a power-filled dynamic whose politics maximizes the occupation of streets in the city by automobiles while at the same time marginalizing the mobility needs of the urban poor and women. Similarly in chapter 5, we noticed that the interplay of

power and politics reinforces the belonging of the automotive public on city streets while at the same time alienating nonmotorized society from these very streets. Through a combination of the power embedded within infrastructure projects, street designs, and social media to shape on-street behavior and the power of the practices of the automobilized urban society to create community on social media or appropriate sidewalks for cars, the politics of automotive citizenship is articulated daily. It is by means of these everyday acts of alienation that automobility as a power-filled constellation is established in Bengaluru. Such a localized characterization is not only profoundly distinct from the predominantly functionalist account extended by sustainable transitions, it also opens the pathway to dislocate automobility. If automobility is mobilized around a powerful political constellation, dislocating it would require mobilizing alternative (more sustainable and equitable) political constellations of multiple coexisting mobility systems in Bengaluru and elsewhere.<sup>3</sup> This is a valuable lesson that the case of Bengaluru offers for other cities struggling with automobility constellations. Addressing and dislocating automobility requires a technopolitical strategy. The next section expands on this vitally important implication.

### **Mobilizing an Alternative Constellation**

If automobility is understood as a political constellation that deploys its politics on the streets of the city where it is emplaced, then displacing it will require emplacing an alternative politics of mobility in the city. A key move required to displace automobility would be to mobilize alternative constellations of mobility. Such constellations would not only promote new modes of travel in the city but would also recalibrate the relations between mobility and street infrastructures that act as conduits for channeling urban travel. Within the scope of an alternative mobility, such relations would be rooted in a social and political context that privileges the mobility needs of the nonmotorized. In this book, based on the analytical concepts of the regime of congestion, the infrastructurescape, and automotive citizenship, I demonstrate that automobility located in the city is constituted through three moments: the self-perpetuating ordering of mobility, the fashioning of an automotive landscape of privilege, and the enfranchising of automobiles on the streets. Displacing automobility would consequently require at least three corresponding moments that mobilize alternative constellations: reordering the mobility regime to empower nonautomotive modes of travel, re-landscaping the city and its infrastructures to reinforce value commitments of inclusive mobility, and reclaiming streets as spaces for diverse inhabitation.

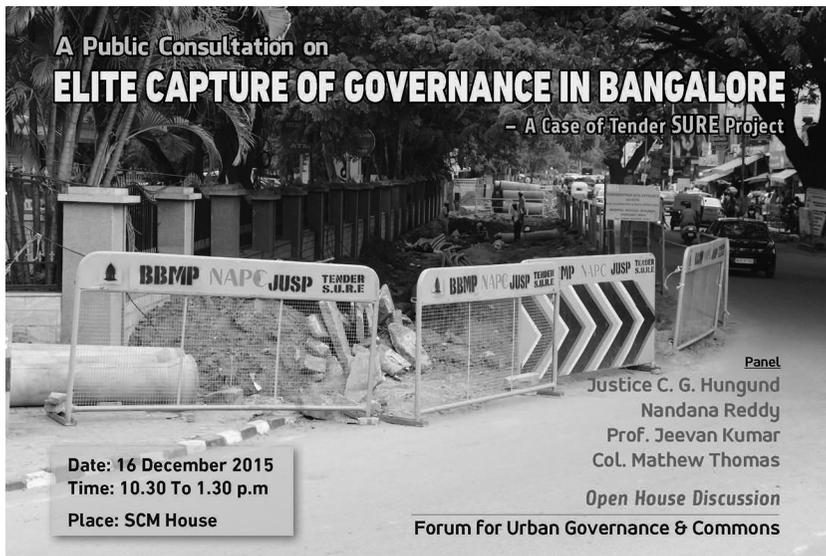
Reordering the mobility regime is easier said than done given the pervasiveness of a self-perpetuating lock-in in the current ordering of mobility in cities around the world. As we saw in Bengaluru, a locked-in regime of congestion forces more and more people to abandon public transport in favor of automotive modes, thereby reinforcing its predominance. Reordering mobility would require constituting an alternative regime of mobility. Technopolitical regimes, we were reminded in chapter 3, arise through the enrolling of technology to achieve political ends in society. Alternative regimes of mobility would thus require assembling a cast of technological artifacts, infrastructures, discourses, plans, and social actors to promote explicitly political goals. Such a cast of entities would subscribe to an inclusive orientation that shelters the mobility needs of those who are marginal within the current calculus: urban poor, street vendors, women, and cyclists.<sup>4</sup>

The popular struggle against the steel flyover offers some important insights into reordering the mobility regime and thereby displacing automobility in the city. One insight is the possibility of fashioning a cross-class social alliance between urban poor groups and the middle classes to counter growing automobilization and the attendant marginalization of the mobility needs of the poorer sections. A second insight is the possibility of developing more sustainable and equitable intraurban mobility solutions, such as affordable buses and commuter trains as alternatives to expensive mega-transportation projects such as the Metro or overhead expressways. A final insight is the radical discourse of ending the reliance on megaprojects that beats at the heart of the struggle against the steel flyover. The three insights offered by the struggle, when brought together, could become the embryo for incipient regimes that will counter the reigning regime of congestion in Bengaluru. The question is, How does one initiate regime shift with the embryonic becoming the incumbent not just in Bengaluru but also in cities elsewhere? I believe that power lies at the crux of a regime shift. Regimes are power-infused entities with the sources of power dispersed throughout. Shifting regimes requires mobilizations that will infuse power into the embryonic regime. Grassroots mobilization is key for this to happen. Wide rainbow coalitions that span class, education, culture, and gender and mobilize a range of people to push governments for change, or influence media and public opinion, or shift the culture of mobility, can, I believe, engender regime change.

Infrastructurescapes in Bengaluru have specific normative orientations, organizational principles, and technological sensibilities. Together, these endow the visual landscape of the city with enormous power and purpose to shape the travel behavior of city residents. In diagnosing the three infrastructurescapes in the city, I proposed that the grassroots infrastructurescape

appeared limited by the predominantly ideational element in its technological sensibility. As a result, the governmental and corporate infrastructurescapes have been able not only to marshal their purpose more effectively but also to be perceived as intervening to effect change in the city. In the absence of a purposeful technological dimension, interventions are predominantly educational, which seek to enhance awareness. Figure 7.1 is an example of a civil society intervention that attempts to counter the prevalence of the privileged corporate infrastructurescape by publicizing the costs associated with such elite involvement.

Yet another strategy that has received far less attention is the effort that seeks to secure urban spaces from intrusion. In chapter 4, I indicated an instance of residents inserting hand-cut stone bollards into the ground to block off particular street sections to through traffic in their neighborhoods (see figure 4.14). Such actions create spaces that are sheltered from through traffic that might have otherwise changed the rhythms of neighborhood living. Unfortunately, such acts of sheltering have been largely isolated in Bengaluru and have not spread to numerous areas (both rich and poor) as part of a plan to redesignate larger sections of the city as scapes of inclusivity and conviviality. In that context, when we call for relandscaping cities



**Figure 7.1**

Invitation to a public consultation on Tender SURE (source: Forum for Urban Governance and Commons, Kshithij Urs, and Eshwarappa Madiwali).

and infrastructures to install alternative constellations of mobility, I am thinking of how scapes of inclusivity and conviviality can be sheltered and expanded. This would not only require articulating the composition of convivial scapes in terms of infrastructures, artifacts, and social groups but also shaping the perceptions of viewers to conform to the value commitments underlying such scapes. The key question would be how such spaces can be gradually expanded even as they are shielded from being overrun by other more privileged scapes with their elite-centric political commitments. Hard infrastructures such as hand-cut stone bollards are particularly effective in controlling how people can enter and exit sheltered scapes. Designing and conceiving such hard infrastructures in collaboration with scape actors could be a solution to fostering more such spaces. But hard infrastructures are not adequate if the value commitments behind such actions remain underspecified. What is needed is a clear articulation of the value commitments of inclusivity within such protected spaces. Will such spaces facilitate access for children, the aged, women, and street vendors and other pedestrian-scale activities? And how will scape actors intervene to ensure that access is sheltered from intrusions? An explicit articulation of value commitments will enable the grassroots infrastructurescape to compete on an equal footing with the more privileged scapes.

The third call for displacing automobility will ride on our ability to reclaim streets as spaces of diverse inhabitations. In chapter 5, we witnessed the unfolding of automotive citizenship from a range of sociomaterial interventions and practices on the streets of Bengaluru. Through these efforts, automobiles and drivers have enforced their claim of belonging on the streets. In order to displace automobility, it would be essential to counter the claim that streets primarily exist to serve the needs of automobiles and their drivers. Instead, we seek to redesignate streets as spaces that are put to a diversity of uses not limited to mobility alone but also involving socialization, exchange, shelter, providing green urban canopies for nonhumans, and so on. In their critique of the thrust in planning toward complete streets, Zavestoski and Agyeman (2015) call for “seeing streets not as fixed but constantly evolving physical, social, and symbolic spaces of creativity and contestation” (11–12). It is by enabling fluidity in use and perception that streets acquire an adaptable significance that promotes inclusion and serves social justice objectives of securing the rights of all residents, irrespective of social category, to streets and ultimately to the city. But how could one claim such a right to the streets and the city? In answering this question, it is important to remember that citizenship is understood as a sociomaterial performance that is exercised and wrested through a variety

of acts ranging from the spontaneous and quotidian to the planned and deliberated. The central objective of acts of citizenship would be to orchestrate taking back the road from the clutch of automobility.

In chapter 5, I mentioned the group Hasiru Usiru's initiative Come Cross the Road. This is one planned data-driven effort that tried to gather information to understand the range of challenges that pedestrians face while navigating Bengaluru's roads. This venture made several recommendations to the government, which urges it to not only incorporate pedestrian views within transport policies but also to address the issue of pedestrian participation in the policymaking process. Similarly, as the Come Cross the Road report acknowledges, a progressive judicial reading of the law that links the right to walk on the street with justiciable human rights to livelihood, to the environment or to life, could bolster its cause in the policy discourse on transportation and street planning. The effectiveness of policy and judicial interventions cannot be underestimated. Such efforts do indeed carry the potential to unseal the policy discourse for marginalized voices of pedestrians and other nonmotorized claimants, thereby promoting greater participation. However, such deliberate acts also spur the need for more spontaneous mobilizations that take back the streets from automobiles and transform street-side practices. Here, such mobilizations can follow feminist and queer groups who have been pioneers in reclaiming spaces for the subjugated. Spontaneous mobilizations such as Reclaim the Night or Take Back the Night have spread across several cities in the world and offer a repertoire of bold acts that not only transgress socially constructed spatial exclusions but also promote behavioral change in wider society. But it is not only through political mobilization that streets can be reclaimed; it is by recognizing that the material, infrastructural, and technological participation in furthering a politics of belonging requires a strategy to enroll the materiality of roads, designs, infrastructures, and social media to push the political agenda of the right to streets.

Three calls could contribute to dislocating and displacing the political constellation of automobility that has installed itself as a succubus in many cities around the world. These calls herald a transformational shift in the location of streets and mobilities in cities. In considering these calls, the critical point is to acknowledge their technopolitical nature that enrolls technologies and artifacts to further political goals to transform urban streets and mobilities. In this understanding, transformational change away from automobility is not achieved through technological change that is divorced from political objectives; it requires making manifest the right to streets and mobilities to historically disenfranchised communities within

technological and infrastructure designs. Agyeman (2013), in his manifesto for introducing just sustainabilities, proposes that achieving this goal requires an unequivocal attention to recognizing the rights of the other and making privilege visible. According to him, acknowledging the privilege underlying dominant narratives of shaping place requires giving space to counternarratives that arise from excluded cultures and groups. Thus, in order to introduce just sustainabilities in streets and mobilities in the case of Bengaluru, it is essential to make visible the privileged scapes, technologies, and infrastructures of political, social, and corporate elites underlying the constellation of automobility and at the same time to forefront alternative scapes, technologies, and infrastructures of mobility arising from urban subaltern groups: street vendors, pedestrians, daily wage laborers, working women, the aged, and the urban poor.