Infrastructure, Labor, and Government

A Study of Delhi Airport

A thesis submitted in fulfillment of the requirements for the award for the degree

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From

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Institute for Culture and Society

Western Sydney University

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Statement of Authentication

The work presented in this thesis is, to the best of my knowledge and belief, original except as acknowledged in the text. I hereby declare that I have not submitted this material, either in full or in part, for a degree at this or any other institution. Sections of chapter 2 have been previously published in Kumar, Mithilesh. 2017. “Law, Statistics, Public-Private Partnership and the Emergence of a New Subject.” In Accumulation in Post-Colonial Capitalism, edited by Iman Kumar Mitra, Ranabir Samaddar, and Samita Sen, 59-74. Singapore: Springer. Parts of chapter 2 have also been published in Kumar, Mithilesh. 2016. “Terra Firma of Sovereignty: Land Acquisition and Making of Migrant Labour.” In Cities, Rural Migrants and the Urban Poor-III: Migration and the Urban Question in Delhi, 74: 37-49. Policies and Practice. Kolkata: Mahanirban Calcutta Research Group.

(Signature)
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## Abbreviations

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<th>Description</th>
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<tbody>
<tr>
<td>AAI</td>
<td>Airport Authority of India</td>
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<tr>
<td>AERA</td>
<td>Airport Economic Regulatory Authority</td>
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<tr>
<td>AIEU</td>
<td>Air India Employees’ Union</td>
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<td>ATC</td>
<td>Air Traffic Control</td>
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<td>AGI</td>
<td>Attorney General of India</td>
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<td>BRI</td>
<td>Belt and Road Initiative</td>
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<tr>
<td>BCAS</td>
<td>Bureau of Civil Aviation Security</td>
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<td>CT</td>
<td>Census Town</td>
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<tr>
<td>CACLB</td>
<td>Central Advisory Contract Labor Board</td>
</tr>
<tr>
<td>CAG</td>
<td>Comptroller and Auditor General of India</td>
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<tr>
<td>CASUM-m</td>
<td>Collaborative for the Advancement of Studies in Urbanism through Mixed Media</td>
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<tr>
<td>CISF</td>
<td>Central Industrial Security Force</td>
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<tr>
<td>CITU</td>
<td>Centre of Indian Trade Unions</td>
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<tr>
<td>CLRAA</td>
<td>Contract Labor Regulation and Abolition Act, 1970</td>
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<tr>
<td>CNG</td>
<td>Compressed Natural Gas</td>
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<tr>
<td>DDA</td>
<td>Delhi Development Authority</td>
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<td>DIAL</td>
<td>Delhi International Airport Limited</td>
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<td>DMIC</td>
<td>Delhi Mumbai Industrial Corridor</td>
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<td>Abbreviation</td>
<td>Full Form</td>
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<tr>
<td>EGoM</td>
<td>Empowered Group of Ministers</td>
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<td>EPF</td>
<td>Employees’ Provident Fund</td>
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<td>ESI</td>
<td>Employees’ State Insurance</td>
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<tr>
<td>EU</td>
<td>European Union</td>
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<tr>
<td>GTA</td>
<td>Global Technical Advisor</td>
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<td>IDF</td>
<td>Israel Defense Forces</td>
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<tr>
<td>IMG</td>
<td>Inter-Ministerial Group</td>
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<tr>
<td>ISBT</td>
<td>Inter State Bus Terminal</td>
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<tr>
<td>JNU</td>
<td>Jawaharlal Nehru University</td>
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<tr>
<td>LD</td>
<td>Lease Deed</td>
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<tr>
<td>LG</td>
<td>Lieutenant-General</td>
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<td>MCD</td>
<td>Municipal Corporation of Delhi</td>
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<td>MPD-2021</td>
<td>Master Plan of Delhi-2021</td>
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<td>NCR</td>
<td>National Capital Region</td>
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<td>NCT</td>
<td>National Capital Territory</td>
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<td>NH</td>
<td>National Highway</td>
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<tr>
<td>OBCs</td>
<td>Other Backward Classes</td>
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<td>OMDA</td>
<td>Operation Management Development Agreement</td>
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<td>PPP</td>
<td>Public Private Partnership</td>
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<td>PUDR</td>
<td>People’s Union for Democratic Rights</td>
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<td>Abbreviation</td>
<td>Description</td>
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<td>--------------</td>
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<tr>
<td>PWD</td>
<td>Public Works Department,</td>
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<td>RTI</td>
<td>Right to Information Act</td>
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<tr>
<td>SA</td>
<td>Substitution Agreement</td>
</tr>
<tr>
<td>SAIL</td>
<td>Steel Authority of India Limited</td>
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<tr>
<td>SDAD</td>
<td>Sarvodaya Drivers Association of Delhi</td>
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<tr>
<td>SGI</td>
<td>Solicitor General of India</td>
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<tr>
<td>SGSA</td>
<td>State Government Support Agreement</td>
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<tr>
<td>SHA</td>
<td>Shareholders’ Agreement</td>
</tr>
<tr>
<td>SSA</td>
<td>State Support Agreement</td>
</tr>
<tr>
<td>T3</td>
<td>Terminal 3</td>
</tr>
<tr>
<td>UIDAI</td>
<td>Unique Identification Authority of India</td>
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Abstract

Delhi airport is an important infrastructural installation around which urban spaces and production sites are organized. This thesis studies labor, production sites, and urban spaces in the vicinity of Delhi airport at two levels. At one level, I study workers and labor processes within the terminal buildings. I also study labor in multiple sites that lie beyond the airport but exist in close relation to it both geographically as well as in terms of their production functions. These sites include a workshop located in the town of Kapashera on the border between Delhi and the state of Haryana, an urban village called Mehram Nagar that provides taxi services to the airport, and Nangal Dewat, a village displaced as a result of the airport’s expansion. My aim is to demonstrate how the production of goods and services in these sites is integral to the functioning of the airport. The thesis approaches Delhi airport as a central research object, through which it analyzes labor processes, informal settlements and urban villages, and modes of formal and informal governance. In this sense, I understand the airport as an infrastructural facility that produces relations between labor, capital, and government.

Conceptually, the thesis operates at the interface of infrastructure studies, political economy, and theories of government and political subjectivity. I ask how spatial and temporal relations between the workings of Delhi airport and production sites in surrounding areas give rise to different forms of labor. My empirical investigations show how the transformation of informal settlements and urban villages in the airport’s vicinity conditions their role as a source of labor supply for the airport and associated industries. I also demonstrate that this transformation produces political subjects with contentious relationships to government and airport authorities. Because the airport’s operations generate profound changes in production relations, the governance of proximate spaces and labor sites is central to its functioning. I study the governing authority of the airport, Delhi International Airport Limited (DIAL), in its relation...
to labor and urban spaces over which it exerts influence in matters such as eviction, the control of parking spaces and roads, and the fate of urban villages.

The findings of the thesis are based on a combination of archival research, interviews, and observations. Archival documents include colonial records, records from India’s planning period, and contemporary government documents in the public domain. Court judgments, newspaper reports, and press releases also form part of the archive. The workers that I study include employees of a workshop that makes baggage trolleys, women who clean the airport’s interiors, and taxi drivers who rely on airport passengers for their fares. I conducted interviews with these workers both individually and in group discussions to gain insights into their everyday experience, attitudes toward work, and subjective relations to the airport. These interviews make apparent the relationship between the airport and workers’ experiences of settlement and mobility. In studying the transformations produced by the airport and DIAL, I also draw on court cases and judgements to reveal the stories of workers displaced by the airport’s operations and expansion. This combined method makes the material workings of the airport, both inside and outside, visible through a critical reading of archival texts and experiences of labor.

I argue that Delhi airport is an infrastructural installation that has given rise to two distinct forms of labor based on heterogeneous relations of space and time: “logistical labor” and “labor of logistics.” I understand logistical labor as that labor over which the airport exercises direct control by governing the movement and productive activities of workers in space and time. This form of labor has to act in accordance with the spatial configuration of the airport. For example, labor within the terminal building has to be under direct and strict surveillance of the airport, and work is structured by myriad contractual relations between service providers and DIAL. Logistical labor has also to attune itself to the rhythm of the round the clock operations.
of the airport based on factors such as airline and cargo schedules. The women cleaners with whom I conduct interviews embody such labor. By contrast, labor of logistics holds extremely heterogeneous relations with the airport since it is diffused across multiple production sites that supply various goods and services to the airport. The movement and access to the airport for workers who perform this kind of labor are governed through spatial and temporal obstructions. Although labor of logistics depends on the airport, its relation to this facility is conditional and negotiated through a complex maze of borders and walls. Workers at the baggage trolley workshop I examine in chapter 3 conduct this type of labor. Taxi drivers, unlike cleaners and workshop workers, straddle both forms of labor. In so far as they are involved in a production process that comes under the airport’s temporal and spatial control, they perform logistical labor. But, as in the case of labor of logistics, their movement and access to the airport is limited.

The original contribution of this thesis is its conceptualization of the airport as a complex arrangement of social relations overdetermined by physical objects such as terminal buildings and cargo facilities. These social relations bring into relief the production and labor processes of those spaces that are within legal and technical definitions of the airport but are also the result of interactions between diffuse production sites, heterogeneous labor relations, and contentious claim-making. By developing the concepts of logistical labor and labor of logistics, the thesis contributes to the imagination of a possible political practice where workers produce new forms of social cooperation by organizing around infrastructural installations.
Introduction

Inaugurating Terminal 3 (T3) of the Indira Gandhi International Airport (Delhi airport from hereon) on 3 July 2010, the then Prime Minister of India, Manmohan Singh proclaimed that it “signalled the arrival of [a] new India, committed to join the ranks of modern, industrialised nations of the world” (Kumar, 2010). He also declared that the initiative “proves the success of the Public-Private Partnership model in execution of large infrastructure projects” and that the making of the terminal building was in “keeping with our ambition, our aspirations and our new found confidence in recent years.” The tone and the content of Singh’s speech is remarkably and unmistakably similar to the speech that Jawaharlal Nehru, the first Prime Minister of Independent India, delivered at the inauguration of the Bhakra-Nangal Dam on 8 July 1954. Bhakra-Nangal was India’s first big dam project and Nehru famously described it in this speech it as one of the “Temples of New India” (2000, 26: 130-143). Although the rhetoric of building a “new India” is similar in both speeches, it is clear that the path and direction of the development of this “new India” was widely divergent for these two men. Nehru hailed “plans…being made everyday, as we are anxious to build a new India as soon as possible, as speedily as possible” (131). Singh, in his speech, points to the new method of building a “new India” which is no longer based on “plans” but on the model of “public-private partnership.” Singh admitted, circuitously enough, that the days of planning have to give way to a new model of development where state capitalism is replaced by a commingling of state and private capital. The inaugurations of Delhi airport and Bhakra-Nangal Dam were exhortations to change the direction in which the nation-state of India was progressing. They signified the desire to break from the past and reorder and reorganize the nation-state on a new footing. Big infrastructure projects, then, are laden with symbolic and material meaning in the Indian context.
The opening of T3 was followed by the 2010 Commonwealth Games in Delhi, the preparation for which began in earnest in 2003 when India beat Canada in the hosting bid. The reorganization of urban spaces that marked the development of T3 and the games was accompanied by large scale evictions of informal settlements of migrant workers who had been living in the city for decades. There was also an influx of new migrant workers to build the necessary infrastructure, and a coordinated development of several transport infrastructures like the Delhi metro railway, flyovers, foot bridges, underpasses, and dedicated bus lanes. Several activists and scholars have studied this massive overhaul of the city, exploring interests ranging from the rampant abuse of workers’ rights to the new forms of mobility that the city’s inhabitants were embracing.

Delhi metro has been studied extensively from the aspect of political economy, its effect on rent and the real estate market, environmental impact, and the large scale displacement it occasioned (Randhawa 2012). Research by Rashmi Sadana (2010) describes the “sensory and spatial experience” (78) of Delhi metro and identifies it as a “modern disciplinary institution” (80) that lends itself to controlling the behavior of commuters. Sadana’s research also points to the considerable impact that the infrastructure of Delhi metro and its daily use has had on popular culture and development of urban identity and pride. To emphasize how research on Delhi metro has enriched our understanding of infrastructure and its impact on everyday life and gender relations, it is also important to mention the work of Shelly Tara (2011), which registers the change in gender relations and negotiation of power that resulted from the introduction of separate coaches for women. Similarly, the People’s Union for Democratic Rights (PUDR) published a report, In the Name of National Pride (2009) documenting the violation of workers’ rights during the preparation of the Commonwealth Games. All these studies point to the major impact that large scale infrastructure projects have had on the political economy, identity, and culture of Delhi. Despite their important contributions, these various
empirical and theoretical works about urban change in Delhi lack a sustained interrogation of how infrastructures like the airport and the metro rail generate new forms of government, labor, subjectivities, and production processes. The extant studies are more interested in the effects that infrastructures have in urban space and upon labor processes than in studying infrastructures as objects in continuous and dynamic relation with processes of government, labor, and urban space. This thesis poses the question of infrastructure and labor in a manner that takes account of the relationship between infrastructure, labor, and government in order to examine their cumulative effect on processes of production.

I decided to make Delhi airport the object of my research for several reasons. International airports such as that in Delhi are uniquely placed as sites of labor because of their status as transit spaces for international borders, which makes them highly securitized sites. Delhi airport encompasses a large area where several forms of productive activity are carried out simultaneously under heavy surveillance. On the “airside,” these activities encompass air traffic control as well as the making, managing, and commercialization of air routes, the regulation of flying zones, and so forth. On the “landside,” there are myriad activities like baggage handling, optimizing passenger experiences, cleaning and maintenance of the terminal buildings, catering, retail, cargo handling, and customs. My interest is in how these activities are coordinated in a manner that keeps the airport functioning round the clock and requires that a large number of workers performing various tasks are always deployed at the airport. The airport is an entity that is governed through a complex arrangement of authorities, both military and civil. There is a presence of the Indian Air Force, the security of the airport complex is in the hands of Central Industrial Security Force (CISF) which is a paramilitary organization, and, finally, there is Delhi International Airport Limited (DIAL) which has the management rights of the Delhi airport. These authorities are sometimes working in coordination and at other times are in variance, making the governance of airport a matter of constant contention and
negotiation. The stratagems of several authorities provide a ground to analyze how these contentions and negotiations along with a new vision of infrastructure and logistics necessitate the formation of new entities of government of which DIAL is an example. Also, changes taking place in Delhi (such as evictions, labor migration, and the restructuring of the labor market) intersect with the development of the airport. Delhi airport, hence, provided a feasible case study to understand wider transformations that were happening in terms of labor, modes of production, and the evolution of new forms of private and public governance. The airport made it possible to investigate questions of labor, political economy, and government at both the micro and the macro levels.

The primary research question I asked was: Does Delhi airport give rise to distinct production relations that transform its relationship with the city. In other words, I sought to understand if productive activities in the vicinity of the airport are arranged in accordance with the time and space organized by this same infrastructural installation? To this I added two sub-questions. If this is the case, what are the mechanisms of governance that are developed to realize this relationship between the airport and the city? And thirdly, who are the political subjects that are produced in the process and how are they governed? In this thesis, I use the word “govern” in its etymological sense derived from the Latin root *gubernare*, which means “to direct, rule, guide.” Government and governance then encompass direct and indirect and formal and informal methods adopted by private individuals or groups, public institutions and authorities that influence how people and commodities are managed, production is organized, and resistance is controlled or minimized. Delhi airport with its variegated relationship with several forms of labor that are attuned and organized according to its rhythm of work in time and space allows several actors of governance, formal and informal, to emerge. The most important of these actors is DIAL, a Public Private Partnership (PPP) entity that is responsible for the management of the airport. Apart from this legally corporate entity, there are myriad actors that
have emerged as a result of the transforming relationship between the airport and the city, including labor contractors, domestic workers, workers in small manufacturing units, and evictees from urban villages as a result of the expansion of the airport. Political subjects that are affected and refashioned by the emergence of Delhi airport as one of the principle entities that organizes the production of commodities and spaces in the city include workers and evictees as well as formal and informal groups such as labor contractors and political associations. By analyzing the making of these political subjects through acts of production and governance as well as in acts of resistance by workers, the thesis argues that Delhi airport is now central to the political economy and workers’ struggle in the city.

The practices of organization implicit in the infrastructural installation of the airport have created distinct forms of labor, which I identify as logistical labor and labor of logistics. This distinction results from the heterogeneous relationship of production sites to the time and space of the airport. There are production sites like T3, the terminal building, which is legally and administratively part of the airport complex. T3 provides a site for several economic activities such as retail, catering, and hospitality. These productive activities are conducted keeping in mind the airside operations of the airport (flight schedules, number of flights, etc.) as well as its landside functioning (the number of passengers, their profile, the city in which the airport is situated, and so on). In this sense, T3 is part of a wider temporal and spatial arrangement that seeks and allows for a ceaseless and continuous flow of commodities and people. Logistical labor is put to work within this space-time continuum. The women cleaners whom I study in chapter 4 perform this kind of labor. To foreshadow my argument in this chapter, these women cleaners, who live in a village called Rangpuri Pahari, have made a transition from being domestic workers to becoming logistical labor. I trace this transition to demonstrate how the airport is emerging as a site that subsumes other forms of labor. Further, I show, through the experiences of these women cleaners, the gendered nature of work and demonstrate how new
labor processes that have emerged in the airport function by obliterating all signs of the workers’ bodies.

By contrast, labor of logistics has a discontinuous relationship with the time and space of the airport. This form of labor contributes to keeping the airport functioning through the production of goods and services that are essential for its operations. The commodities that this labor produces in several discrete production sites diffused over areas around the airport are essential components of the airport and have to be produced or maintained in relation to the productive activities of the airport. This labor and its associated sites of production are governed by the airport through a complex set of walls and obstructions that give workers conditional access to the airport. Working to reinforce these walls and practices of restricted access are several informal actors of rule and governance such as landlords, workshop owners, and lumpen elements that seek to keep workers under control. In chapter 3, I study this process in detail in relation to a workshop in Kapashera, a town on the border of Haryana and Delhi, which produces baggage trolleys for airlines. Across the thesis, the sites that I study to show the array of practices that give workers conditional access to the airport are Rangpuri Pahari, an informal settlement from which women cleaners are recruited; Nangal Dewat, a village displaced as a result of the airport’s expansion; and Mehram Nagar, a village with substantial stakes in the running of taxi services at the airport.

Taxi drivers in Delhi work under a complex industrial structure that is composed of myriad players and ownership mechanisms, including app-based aggregators like Ola and Uber, radio taxi companies like Meru and Easycabs, and privately owned taxis. The taxi drivers in this complex industry straddle both logistical labor and labor of logistics. In so far as they are involved in a production process that comes under the airport’s temporal and spatial control, they perform logistical labor. But, as in the case of labor of logistics, their movement and access
to the airport is limited. The union of privately owned taxis I study in chapter 5 plays an important role in organizing space around the airport and perceives itself to perform logistical labor. However, the airport authorities want to have more control over this space and to govern drivers of these taxis as labor of logistics.

My study of Delhi airport is also situated historically. I trace the development of airports in India from colonial times through the period of state planning and into the contemporary era. By studying the development of air routes and building of airports in India and beyond, I provide a context in which to situate Delhi airport as an infrastructural installation embedded in processes of ruling and governing empire, nation-states, and capital. In these processes, I contend, it is possible to discern how empire redefines its relationship with disparate local powers; how the postcolonial nation-state uses airports and air routes for territorial connectivity and contiguity; and how capital and labor are restructured with respect to infrastructure in contemporary times. I thus demonstrate that airports are enmeshed in an intricate web of politics, economy, and security. As a result of this mesh of relationships, infrastructures lend themselves to being framed within the rhetoric of empire, nationalism, and development, as evident in the quotes from the two Prime Ministers given at the beginning of this introduction. Also, because airports are enmeshed in these complex relationships, any restructuring of their physical, economic, and political aspects throws up innovations in the ways in which infrastructure and its productive activities are governed. In the case of Delhi airport and its experiment with a PPP, this kind of innovation has implications for how state, capital, and government remold themselves. I argue that this new form of government is a distinct development and call it a “state-capital alloy.” The thesis contends that in this new art of government state and capital have amalgamated and are producing distinct political subjects that have different characteristics from right-bearing citizen workers. In some cases, such as that of the Dalit evictees discussed in chapter 4, these political subjects shift from having the
status of citizens based on collective property rights to become either individual property holders or individual evictees without any property rights or entitlements. In other cases, workers emerge as political subjects who are governed through the machinations of the political economy of infrastructure. The state-capital alloy, which can be identified with the institution of DIAL in case of Delhi airport, then becomes the entity through which political subjects are managed by formal and informal means. This alloy in turn requires constant refashioning vis-à-vis arms of the state such as the judiciary, legislature, and executive. By examining the intersections and conflicts between these processes, I provide a new approach to studying changes in the form of government at a time when infrastructure and logistical apparatuses are becoming central to the social relation of capital.

Conceptual Background

The intervention of this thesis in the study of infrastructure came about as a result of my involvement with a project known as Transit Labour: Circuits, Regions, Borders (Transit Labour 2017). Concepts used in this project that were essential to the initial formulation of the thesis were “transit labor” and logistics. Samita Sen conceptualizes transit labor in the following manner:

I would suggest that we see [transit labor] at the intersection of two major conceptual grids characterising the understanding of labour in the present: first, transitional forms of labour, which are inextricably related to transitions in mode of production, involving change in forms of labour arrangements, shifts in, creation or closures of labour markets, and in types and structures of labour deployment; and, second, transitory labour, which may be considered in chronological/empirical frame to denote changing and shifting patterns of employment or, in a more particularised sense, may address questions of labour mobility, both physical and structural. (2012, 4)
This conceptualization of transit labor accounts for both the temporal and spatial nature of labor’s transition in contemporary capitalism. It captures the transition from one mode of production (under the welfare state) to another based on new spaces of production and new labor processes as well as restructuring practices. The Transit Labour project studied this transition in relation to logistics. In elaborating their central concepts, the project researchers posit that “central to logistics is the question and scope of governance – both of labouring subjects and the treatment of objects or things” (Transit Labour 2017). The project’s study of Rajarhat New Town in Kolkata and container parks surrounding Port Botany in Sydney, Australia demonstrated the intricate relationship between logistical calculations, primitive accumulation, formal and informal labor, and new forms of governance exercised through zones and corridors that reset the relationship between state and capital. The Transit Labour project emphasized that logistics and the production and reproduction of transit labor provide one of the central ways in which contemporary capitalism is being reorganized. In this thesis, through the study of Delhi airport, I contribute to understanding the relationship between infrastructure, logistics, and labor in postcolonial urban environments that are central to the process of restructuring of contemporary capitalism.

This thesis builds on a body of literature that has given important insights into the study of infrastructure and logistics, beginning from the ground breaking intervention of Thomas Hughes on Large Technical Systems (LTS). Hughes’ Networks of Power (1983) began LTS studies. Some of his concepts, especially “reverse salients” (Joerges 1988, 13), defined as “technical or organizational anomalies resulting from uneven elaboration or evolution of a system” (13), are still relevant in understanding why new infrastructure projects can never completely get rid of old supply chains and practices. Although this thesis does not explicitly use the concept of “reverse salients,” it does show that the restructuring of infrastructure and logistical practices tries to either subsume older labor processes and urban spaces or to
substantially alter them according to a new logic. In the study of logistical labor and labor of logistics what I show is the connection between older forms of labor and work and how they are subsumed under the new condition. This connection may not produce “reverse salients” but the old forms definitely leave an imprint on how new forms of labor and work are organized and put to work. However, this process is never complete and leaves wide urban spaces and populations in an informal condition of work and living that actually becomes a characteristic of contemporary capitalism.

Following Hughes’ work, several studies based on the theme of LTS investigated railways, the evolution of the gas industry, telecommunications, water systems, etc. (Bijker et al. 1987, Mayntz and Hughes, 1988; Coutard 1999). The major preoccupations of this school of thought were the evolution of infrastructural artefacts themselves and negotiations between actors such as political parties, engineers, and technical experts in the making of such artefacts. The question of labor with respect to infrastructural artefacts was not on the agenda of these studies. In fact, it is remarkable that there is no study done in this paradigm in which the relation between labor unions (definitely a system) and the evolution of LTS was considered. This thesis, while approaching the airport as an infrastructural installation or artefact, is committed to the study of labor processes and politics not only insofar as they contribute to the functioning of the artefact but also in relation to the ways in which they determine how infrastructure and logistical processes evolve.

Stephen Graham and Simon Marvin’s Splintering Urbanism (2001) is another influential work that made the study of infrastructure central to investigations of urban processes under globalization. Graham and Marvin identify the “life and flux of cities and urban life” as “sociotechnical processes” (10) that are informed by “sociotechnical geometries of power” (11). While Graham and Marvin work with the basic tenets of LTS, they also seek to uncover
the inequity that is inherent in the making of infrastructure when the “construction of spaces of mobility and flow for some, however, always involves the construction of barriers for others” (11). The “bundling and unbundling of infrastructure” create a situation where users who are “least valued” are effectively bypassed of premium infrastructure networks (103). While Splintering Urbanism highlighted the issue of power and politics in the making of infrastructure in the era of globalization, even this important work kept the question of labor largely in abeyance. Splintering Urbanism does makes reference to the spatial division of labor (67), the gender dimensions of household mechanization (126), and the changing nature of labor markets (247), but it must be emphasized that these reflections are suggestive rather than analytical.

Additional works that have profoundly affected my thought are Eyal Weizman’s Hollow Land (2007) and the Forensic Architecture project led by Weizman (Forensic Architecture 2011). Hollow Land is a sobering reminder of how infrastructure and logistics can be used for occupying territory through seemingly innocuous acts such as the installation of a mobile phone tower (2). Studying the Israeli occupation of Palestinian territory, Weizman shows how once such a lone infrastructural installation is put in place, other more complex infrastructures like water, drains, and houses follow. He investigates how in times of occupation and war, infrastructure fragments space and, through a logic of its own design and spread, creates a “politics of separation” (10) and a “politics of verticality” (12). War, occupation, and their associated forms of resistance give rise to walls, barriers, bridges, and tunnels. This aspect of Weizman’s analysis informs the conceptualization of walls and borders that separate production sites from the airport that I pursue in chapter 4. The Forensic Architecture project draws attention to the fact that even rubbles of infrastructure can provide clues and establish the violation of international laws and human rights by an aggressive power. Weizman’s research shows why demolitions and evictions of urban settlements always leave a trail that cannot be obliterated by the construction of newer artefacts. There is always a history of people,
economy, and labor that can be retrieved. Furthermore, Weizman’s work has made me alert to the movement of labor in the production process, and also to the ways that workers use an array of infrastructures and logistical practices to subvert the power that is wielded over them. In other words, Weizman has helped me realize that no movement is politically innocent. Thus, chapters 3, 4, and 5, which study workers in a trolley workshop adjacent to the airport, women cleaners, and taxi drivers respectively, pay close attention to movements of labor. These chapters show how workers encounter a variety of forms of coercion, which aim, for instance, to keep them stationary or to tightly control their movements through invisible walls and relentless surveillance. The thesis demonstrates that the airport governs the accumulation process through this calibrated control of movement, and that labor resists by attempting to freely move through time and space.

In this way, the thesis reveals hidden processes of production as well as investigating labor relations and the relation of the airport to the city. Donald McNeill (2011) suggests that airports have an ambiguous relationship with the cities they serve and this thesis demonstrates that underlying these ambiguities is an array of governmental practices, labor processes, demographic changes, and complex relationships between infrastructural artefacts that constitute the city. In a sense, my approach sits closely with the research that Ravi Sundaram documents in *Pirate Modernity* (2010), which unearths a large scale production process that goes on in urban interstices where pirated software markets operate alongside other practices that escape the net of intellectual property rights. My research connects workshops, taxis, urban displacement, and movements of workers to the infrastructural and institutional operations of the airport to reveal a form of graded urban space that is carefully calibrated with formal and informal walls, borders, ownership patterns, and corporate practices that seek to maximize capital accumulation.
Brian Larkin provides a succinct definition of infrastructure when he writes: “Infrastructures are matter that move other matter. Their peculiar ontology lies in the facts that they are things and also the relation between things” (2013, 329). Larkin also claims that infrastructures are “built networks that facilitate the flow of goods, people, or ideas and allow for their exchange over space” (328). This thesis shows that along with exchange over space, infrastructure also allows an exchange over time and between different notions of time. This is especially so in the case of the workshop that I study in chapter 3, where I demonstrate how the time of the airport governs the time of the workshop.

In a work not yet available at the time of the fieldwork, Donald McNeill calls for a more expansive way of conceptualizing airports:

Airport development cannot be understood using a singular logic, or indeed by conceptualizing the airport as a singularity in itself. It may be better to speak of airport territories, a more expansive term that includes the following components: (1) an awkwardly scaled jurisdictional space, under the management of an airport authority, which operates within a complex web of state bodies, and could be variously governed by acts of parliament, regional or metropolitan governments, private equity groups, aviation authorities, competition watchdogs and local councils; (2) an aggregate of sub-divided spaces, each with their own sub-jurisdictional operational autonomy, from a terminal café to a maintenance hangar, and each with specific labour contracts; (3) a space of public mobility, bound up with a temporality of arrival, dwell-time and departure; (4) a topographical positioning, mapped within larger territorial spaces; (5) airspace, as in the corridors of approach and take-off that are required for the airport to function safely. (2017, 91-92)
McNeill’s non-singular “expansive term” is not exhausted by the sub-divided spaces he enumerates. For instance, the “terminal café” or the “maintenance hangar” are all “within” the airport. I try to demonstrate that the labor processes of airports are more expansive and complex than just those that happen within their boundaries. These labor processes go well beyond the problem of “specific labour contracts” and actually involve variegated modes of production that both sit within and emanate from the airport. This said, I study many of the “components” of “airport territories” mentioned by McNeill, always seeking to locate them in the specificity of colonial and postcolonial conditions that inform the development of airports and aviation in India. Moreover, I suggest that any list of definitely defined “airport territories” will be necessarily incomplete because this territory can never be fixed.

With its focus on labor and the array of production activities that constitute the infrastructure of Delhi airport and enable its functioning, this thesis also un masks the “enchantment of infrastructure” which is created on the “the promise of speed and connectivity; the promise of political freedom and the promise of economic prosperity” (Harvey and Knox 2012, 523). Penny Harvey and Hannah Knox argue that the failure of promises that create the enchantment of infrastructure leads to the diminishing of people’s faith in the ability of governments to deliver on their promises but also strengthens the desire for that enchantment among people (534). This thesis demonstrates that even when the material form of infrastructure is efficiently delivered, the “enchantment” and aesthetics of infrastructure are produced and kept functioning by hiding dust, grime, sweat, and violence on labor. The shiny terminal building of T3 at Delhi airport, for instance, contains these “disenchantments” and also produces and spreads them within the wider urban fabric. This thesis seeks to reveal these disenchantments and here lies the most important methodological challenge of my research: how to study the airport when it is inaccessible?
Studying the Airport: A Question of Method

The original objective of this thesis was to study the labor processes “inside” the airport, which meant engaging with those workers who work inside the terminal building and the airside of the airport. The workers I planned to study were cleaners, baggage handlers, electricians, and other technical workers. Once I began my fieldwork, in March 2013, by approaching DIAL, the entity responsible for running the airport, I realized that the process of getting access to the airport for my research was to be prolonged and ultimately futile. The experience though needs to be recounted as it gives an insight into what emerged as one of the more important questions of the research: what kind of organization is DIAL? I first contacted the public relations office of DIAL to set up a meeting, discuss my research project, and request access to the airport. I was asked to forward all the necessary documents. After a few days I was asked to meet an official from DIAL and give a presentation. On the appointed day I gave the presentation and had a fruitful discussion with the official who said he would forward my request to the managing director of DIAL and there should be no problem in getting the due clearance. This official also said that DIAL would require a document about my findings, a condition to which I gave my consent. It was after this that the ordeal began and for the next three months I became a regular fixture at the waiting lounge of the DIAL office located at Delhi airport. In the process of waiting, I realized that the question of accessing a research site that is governed by private capital or state entities is not only a political question but involves a process that itself reveals the complex web of power relations at stake.

The PUDR report on the Commonwealth Games details the layers of bureaucracy under which the physical site of the games was hidden to activists, researchers, and even the gaze of common public (2009, 16). Access to sites is also restricted through formal and informal actors that include labor contractors, police, and private security. In lieu of access, researchers are often
supplied with promotional materials resplendent with carefully crafted images, as Rashmi Sadana found out in the case of Delhi metro (2010, 80). In the case of Delhi airport, even the latter was not forthcoming. As the chances of accessing the terminal building for my research appeared to be receding, I tried other authorities who had a stake in the running of the airport. These included high officials of Central Industrial Security Force (CISF), the Ministry of Home Affairs, and the Ministry of Civil Aviation. Despite their efforts, after three months, I was still unable to convince DIAL to allow me access. I was finally told that I would not be given access to the airport and that my request had been declined. The denial itself did not come as a surprise but what surprised me was the imperviousness of DIAL. At this juncture, I began to become interested in the organizational and institutional structure of DIAL and its mandate to govern the airport. However, the methodological problem remained. How can one study the airport without getting access?

My thinking on how to overcome this methodological conundrum was influenced by an insight from Michel Foucault. In *The Birth of Biopolitics* (2008), Foucault exhorts his audience and now readers to eschew “universals” in favor of “concrete practices” when studying government:

> I would like to start with these concrete practices and, as it were, pass these universals through the grid of these practices … I start from the theoretical and methodological decision that consists in saying: Let's suppose that universals do not exist. And then I put the question to history and historians: How can you write history if you do not accept a priori the existence of things like the state, society, the sovereign, and subjects? It was the same question in the case of madness. My question was not: Does madness exist? My reasoning, my method, was not to examine whether history gives me or refers me to something like madness, and then to conclude, no, it does not, therefore madness
does not exist. This was not the argument, the method in fact. The method consisted in saying: Let's suppose that madness does not exist. If we suppose that it does not exist, then what can history make of these different events and practices which are apparently organized around something that is supposed to be madness? So what I would like to deploy here is exactly the opposite of historicism: not, then, questioning universals by using history as a critical method, but starting from the decision that universals do not exist, asking what kind of history we can do. (3)

In the same vein, I began with the question: what if we suppose that the airport does not exist? How then can we unearth those practices that go on to make the airport? Foucault was speaking of “ universals” like madness and related them to the discourse and practices around psychiatry and mental hospitals. In this sense, universals were linked to material practices and physical objects. Similarly, in the case of Delhi airport the discourse was about making infrastructure to upgrade the workings of capitalism and the desire of planners and administrators to claim Delhi as a world-class city. This paved the way for looking and studying the archives of several forms of discourse (newspaper reports, government documents, corporate reports, etc.) in order to locate the material practices that were envisaged in the making and governing of Delhi airport.

However, in the Foucauldian approach, which bases itself exclusively on archival material, the problem of access was not present. In my case, I also wanted to capture how material practices of labor were organized by the airport and needed some method to account for the everyday practice of labor. The method of unpacking the airport was then guided by the “research platform” approach developed within the aforementioned Transit Labour project. A methodological text that discusses this approach suggests that practices of “inter-referencing” between sites are essential for studies that aim to understand how global connections shape and interrupt local labor and production regimes:
It became clear that these links could not be fully apprehended within the confines of a single city or locality. Not only did the mobility of the project and the platform method oblige a consideration of patterns of inter-referencing between Shanghai, Kolkata and Sydney but we also had to account for how the labour regimes we were studying fitted within larger global patterns. This led us to a consideration of the workings of supply, production and assembly chains, and the social-technical systems of logistics that link them together. (Kanngeiser et al. 2014, 313)

In this thesis, I turn this method of “inter-referencing” inside out. By keeping the airport at the center of investigation and analysis, I examine an array of production sites, informal settlements, and urban villages that are integral to the operation of the airport, always tracing their relations back to this central infrastructure. In this way, I apply a kind of platform method within a single city, seeking to understand how the linkages and interfaces between the diffuse local sites I examine are structured by their respective relations back to the airport—relations that, more often than not, are mediated by a series of invisible walls and borders that provide differential access to and control the movement of goods and labor to and from the airport. This approach led me to study the sites I have mentioned above, to engage with existing archives (colonial and postcolonial), and collect multiple documents about Delhi airport available in the public domain (in the process of which another archive was formed materially and discursively). My research method thus developed as a result of unsuccessfully seeking access to Delhi airport from its authorities. In the end, this approach was productive in building new resources for the study of Delhi airport in ways that would perhaps not have been possible if access was available and I conducted ethnography with established methods.

The traditional form of archival material I used was the records of the Department of Civil Aviation, which are housed at the National Archives of India, New Delhi. These archives
contain government documents from the beginning of civil aviation in India in the period of the First World War through to the early 1970s. As the archivist informed me, documents produced after that had not been declassified or had not been sent to the archives. However, the material available on the development of air routes and airports in India both during the colonial and the postcolonial periods provided important insights on the nature of empire and nation building through air routes and airports. This archive became the main source of investigation and analysis in chapter 1. The archive was expanded when I could not gain access to the airport and DIAL became an object of study because an investigation of the making of this entity opened up the possibility of examining various court judgments relating to labor and displacement. In fact, in chapter 2, where DIAL is studied extensively, my primary source material was court judgments. Through these judgments it was possible to reconstruct struggles which were part of the making of Delhi airport but had been forgotten. This approach revealed the complex process of restructuring that went into the making of the airport as well as the planning of Delhi as a world class city. The court judgments became crucial also because it was virtually impossible to trace the workers and the displaced people involved in this process and record their voices. It was, thus, possible to construct a narrative of the making of Delhi airport and its workers.

While it is true that the terminal buildings of Delhi airport were out of bounds for research, there were still spaces that could be studied directly in the wider space of the airport, namely the taxi stands. Once I approached the taxi stand and its union to be involved in the research, a new dynamic in the functioning of the airport was revealed. This dynamic encompassed not only villages surrounding the airport but also migrant labor employed in the running of taxis, and the links went right up to radio taxis and app-based taxi aggregators such as Uber and Ola. I was able to conduct observations at the taxi stand run by the union and to understand the relationship between the village where the stand was located and the wider economy of the taxi
business. I had found a site that was part of the airport where I could conduct observations and interviews. Following the technique described by the research platform practitioners in the quote above, this made it possible to connect the various labor regimes at stake in the taxi industry with the airport and its functioning.

The government documents and the court judgments that dealt with the question of eviction for the expansion of the airport also revealed sites, illegal settlements and urban villages, which have come under the influence of the airport and have emerged as spaces that supply labor for its functioning. It was during a visit to one of these sites, Rangpuri Pahari, that I was able to locate the women cleaners who became the subject of chapter 4. This made possible a partial study of the labor and the working conditions inside the terminal building by conducting interviews and group discussions with the women cleaners. It also showed that despite the many efforts of DIAL to be impervious to researchers, the very logic of the airport’s making and functioning makes it a porous site. It was not fortuitous that I encountered these cleaners because, as shown in chapter 4, the logistical apparatus unleashed by the airport has restructured urban spaces in a manner that has decisively transformed the structure of the labor market. I proceeded to build an archive of government documents related to Rangpuri Pahari and its status as an informal settlement. The interviews I conducted with the women cleaners brought home how urban settlements like Rangpuri Pahari have evolved with the evolution of productive activities in the city. These interviews also allowed me to trace the transition of these workers from domestic workers to workers who perform logistical labor and how this transition has affected the urban spaces in which this labor force lives.

The manner in which I located the workshop studied in chapter 3 shows how it is possible, both academically and politically, to unearth links in supply chain of global capital that are otherwise hidden and might even be perceived as an entirely local affair. In 2012, Turkish Airlines
dismissed about 300 workers who were members of the Turkish Civil Aviation Union and were on a picket line at Istanbul’s Ataturk airport for more than 100 days. In May 2013, workers again went on strike and those who were dismissed in 2012 continued their struggle to be reinstated. At this time, a call for coordinated international solidarity was given in support of these workers. As part of this struggle, a massive campaign of leafleting was undertaken in Australia, Brazil, Canada, India, the Philippines, and Turkey. The idea was to distribute leaflets among passengers and workers at the airports where Turkish Airlines landed. It was a novel experiment as on one side of the pamphlet the demands of the workers of Turkish Airlines were highlighted, while on the other side the demands of local airline and airport workers were to be presented. While this campaign was being carried out in India, I met an activist whom I already knew and we discussed my work. During the conversation, I told her about the case of the trolley retrievers that I discuss in chapter 2. She pointed that there are workshops that repair and make trolleys and other equipment for the airport. This information led me to the workshop I study in chapter 4. Again, this was not mere chance because in our discussion we could identify that there was a link between the struggles at hand and the workers who became the focus of chapter 4. However, we lacked a theoretical tool to demonstrate the links between the workshop (which otherwise could be considered ancillary to the airport), the airport, and wider struggles of airline and airport workers. In that sense, the question taken up in chapter 4 relates both to the political economy of the airport and to the problems of organizing the collective action of workers. I was able to locate this workshop with the help of another activist who worked for an independent left organization. Because of the working conditions at the workshop and the limited access I had to other workers, the working life of one particular worker, who I call Wasim, became a central point of analysis. Wasim’s experience in navigating various sites of infrastructure throughout India, negotiating his relationship with
contractors, and relating to his fellow workers give an insight into the logistical practices that workers create for themselves.

Chapter Outline

Chapter 1 traces the historical evolution of the Delhi airport and its location from the colonial period to the present and shows how airports gradually moved from the periphery to the center of urban processes. It reveals the logistical imagination of empire and the impulse of the postcolonial nation-state of India to use air routes and airports to achieve the geographical and political unity of its sovereign territories. I also explore those aspects of contemporary government planning and urban political economy that seek to make airport infrastructure an integral part of urban production and consumption activities. The historical analysis of this chapter shows that the evolution of the airport, notions of imperial power, and postcolonial sovereignty, government, and labor are inextricably linked. Furthermore, the historical material used in the chapter demonstrates that airports are infrastructural facilities that have fulfilled historically determined roles in the development of capitalism and state in India.

Chapter 2 gives a detailed account of making of DIAL. The chapter argues that DIAL signals the emergence of a new form of governance which is an amalgamation of state and capital. I term this amalgamation the state-capital alloy and argue that it is an unstable alloy that functions through constant innovation in governance, economy, and control over labor. The chapter shows that the emergence of the state–capital alloy parallels changes to the legal and political subjectivity of workers. I claim that infrastructure, its creation and management, has allowed the state to reconfigure and redirect the question of politics and the political subject. This has resulted in profound changes that go beyond immediate concerns of infrastructure and encompasses newer ways of thinking about distribution, welfare, and citizenship.
Chapter 3 studies a workshop that makes baggage trolleys for airlines at Delhi airport and also for airports across India. Through the study of this workshop, I build a theory of “logistical capitalism” and the “real logistical subsumption of labor.” I argue that logistical capitalism is the stage of capitalism when processes of capitalist circulation undergo a metamorphosis to become a critical factor in organizing the conditions of production. In the process of defining the real logistical subsumption of labor in which infrastructural installations and logistical practices become crucial as the mode of subordination of labor processes to capital, the chapter reveals the visible and invisible walls and borders that the airport creates for labor and asks how disparate sites of production along the logistical apparatus that extends from the airport are used to control the movement of labor and maximize accumulation. I also make a distinction, in this chapter, between logistical labor and labor of logistics. The chapter traces the life history of a worker through his movement across several sites of infrastructure in India. In doing so, the chapter makes observations about the alternative logistical practices of migrant workers and traces the development of a mode of migration that is substantially different from migration based on kinship ties. I also explore the violence directed at labor of logistics, which is possible because logistical practices based on walls and borders have created conditions under which such violence can emerge.

Chapter 4 undertakes a detailed study of women cleaners at the airport. Identifying these workers as logistical labor, I show how infrastructure and logistical practices have brought domestic work and workers under their sway. I also explore the changed nature of the labor market in the cleaning industry. The women cleaners I study in this chapter are mostly domestic workers who live in an informal settlement called Rangpuri Pahari. The chapter demonstrates how certain informal urban spaces like Rangpuri Pahari emerge as sites of labor supply for the airport. My study thus foregrounds how the labor market is being restructured as a result of the logistical apparatus of the airport. The workers’ testimonies reveal the gendered nature of the
work inside the airport. Through their experience, I examine the problem of access to the airport, the changing nature of their living conditions, and the fragmented and strict labor regime at the airport, which has several layers of control extending from the contracting company to DIAL. The chapter shows that cleaning work at the airport demands these workers to obliterate their physical presence through signs assigned by their contractors in the name of “grooming.” Interactions with fellow workers and passengers are severely controlled and monitored. I call this kind of work “unembodied labor,” since the workers’ bodies are so overwhelmed with outer signs that they deny any presence of the individual self. The interviews with the cleaners also show their discomfort with this regime and the manner in which they challenge it. Furthermore, the chapter recounts collective action by these workers against the labor regime at the airport, the forms of association taking shape as a result of this action, and the ways in which workers manipulate the time and space of the airport to their own advantage. Finally, I contextualize these struggles with respect to others in which the workers participate, namely struggles to safeguard their settlement in Rangpuri Pahari and experiences of collective bargaining they had as domestic workers.

Chapter 5 studies the structure of the taxi industry and its dependence upon the airport. It describes in detail the dynamics between an urban village called Mehram Nagar, which hosts a taxi stand run by an owners’ union, and the airport. It examines everyday struggles between the airport authorities, who want to control the labor flow of the taxi industry, and taxi owners and drivers who seek to evade this control. The chapter traces innovations in taxi industry that have decentralized the functioning of taxicabs and their relation to the intense labor struggles that have beset the industry. I demonstrate that one of the reasons why airports have become crucial for taxi drivers is innovation in the ownership structure of taxis that make it possible for taxi companies to hold captive drivers’ labor-power in form of security deposits. The chapter identifies taxi drivers, who are mostly migrants, as a labor force in the process of
building workers’ struggles that use the space of the airport both strategically and tactically. I conclude that the restructuring of the taxi industry and the airport in Delhi occurred simultaneously and it is possible to demonstrate a definite relationship between these two processes of restructuring. As a result of these changes and the manner in which different forms of control are brought to bear on taxi drivers, it is possible to see them as labor that straddles both forms of labor: logistical labor and labor of logistics.

Through investigations in these various sites of work, settlement, archives, and struggles, the thesis demonstrates that the airport does not merely produce territories that are exclusive and self-contained or are exceptions in the manner of special zones. This infrastructural facility is in many ways a strong black box that can be accessed only through official permission, identity cards or boarding passes. But the logistical apparatuses, both formal and informal, it creates extend well beyond its immediate territories. They change the way urban processes function, the construction of other infrastructures like flyovers and footbridges, and the aesthetics of the city. More importantly, infrastructure and logistical practices transform urban spaces and labor relations according to their own spatial and temporal logic of producing goods and services.
Chapter 1

A Historical Account of Location of Airports in India

And suddenly there came a sound from heaven as of a rushing mighty wind, and it filled all the house where they were sitting.

(Acts 2:2, King James Version)

I grew up in a small town of what is today the state of Jharkhand. The place I lived was known as Khunti and in the 1990s it was a small town that acted as a center for numerous smaller industrial settlements that was created for the expansion of hydroelectric and thermal power projects in the region. Jharkhand, then part of Bihar, was and remains a region rich in mineral and water resources. Ranchi, which is now the capital of Jharkhand, was the biggest city of the region. During festivals it was a ritual of our family to take a trip to Ranchi, which was about 40 kilometers from Khunti. The landmark that made us realize that we were close to Ranchi was the small airport known as Birsa Munda airport named after a tribal freedom fighter. The airport was surrounded by walls which would have hardly been more than five feet with barbed wire above and surrounded by tall grass. The airport on the fringes of a city, big and small, was a regular feature of the urban landscape in India. This was in marked contrast to the railway stations or bus terminals in a city that were invariably at the center of the city. In that sense, air travel never became part of our memories or part of popular consciousness in a way that railways had for most people in India.

When I was looking for a problem for a research project leading to this thesis, the newly renovated Delhi airport and the accompanying Commonwealth Games in 2010 were already being heralded as a proof that Delhi, indeed, had emerged as a world-class city. The airport had also emerged as an infrastructural installation central to the organization and functioning of the
city. The question of an airport’s location, however, was still a pertinent one and an understanding of an airport’s rising importance for the city had to account for its location. The first question I asked as I embarked on the research was: why the airport was located on the fringes of the city? Was it simply because airports were peripheral to the imagination and economy of the city and its dwellers or were there reasons of political economy for such locations? The location of an airport and its relation with the city is critical in the manner in which the former effects the larger political economy of the city. In all subsequent chapters, I will show that the restructuring processes of Delhi airport has profoundly affected the production and labor processes of the urban spaces in its vicinity and the larger city space in general. The operations of Delhi airport have brought several urban villages, small manufacturing units, and workers under its sway and are now decisive in how these myriad spaces and workers are governed. Hence, it is important to situate Delhi airport in its historical context.

The archives of the Ministry of Civil Aviation from the colonial period to the postcolonial times revealed a fascinating story of military calculations, rise of real estate markets, and border making, which went into the making of the airports. This chapter is a study of the making of airports in India. It provides context for my examination of the evolution of Delhi airport, which saw its relative importance increase in the plan period before it became the hub for the national carrier, Air India, after the opening of Terminal 3 (T3) in 2010. In the colonial period, Mumbai (then Bombay) airport was the most important airport in the country. I analyze this transition and its effect in chapter 5. This opening chapter is divided into three parts. The first part deals with the colonial period, which was dominated by the making of air routes. The second part deals with the postcolonial period up to the 1970s, when securing the territory of the nation-state was the most important objective in the minds of policy makers. The third part discusses the changes in the period after liberalization in the early 1990s.
In tracing the historical evolution of the location of the airport from the colonial period to the present, it is also possible to trace how airports gradually moved from the geographical and sensorial fringes to the center of urban geography and contemporary human experience. This research allowed me to ask that question and in the process reveal the logistical imagination of the British empire which used air routes and airports to connect several important cities. As a result of the making of airports and air routes some cities emerged as hubs of connectivity for the empire. The postcolonial nation-state also used air routes and airports in order to attain the geographical and political unity of its sovereign territory. Currently, contemporary government planning and urban political economy seek to make airport infrastructure an integral experience in the production and consumption activities of a city.

The object of this research is Delhi airport but while going through the Files of the Department of Civil Aviation at the National Archives of India, New Delhi, I was surprised at the paucity of historical material on the making of the Delhi airport. This paucity of material was understandable because Delhi was an administrative capital, instead of a commercial or industrial center, of the empire as well as the postcolonial nation-state. Karachi (now in Pakistan) and Mumbai (earlier Bombay), and Kolkata (earlier Calcutta) were more important commercially and the latter was the capital of the empire until 1911 when it was announced that the capital was to shift to Delhi. It was not until 1931 that New Delhi was inaugurated as the capital of British India. In that sense, Delhi airport did not gain prominence until quite late in the period of British colonial rule. Even during the postcolonial period, the hub of Air India, the national carrier, was at Mumbai, until the opening of Terminal 3 at Delhi airport. Thus, Delhi airport gained a decisive advantage only with the opening of Terminal 3 and the Commonwealth Games in 2010. However, tracing the history of the location of airports and development of air routes in India gives us a fair idea of the political economy and issues of
territorial integrity and sovereignty that were driven by the logistical imagination of the colonial and the postcolonial state.

The sites of investigation in this thesis are primarily on the landside of the airport.\(^1\) However, it is equally important to emphasize the importance of the airside. There are several components to the airside of which Air Traffic Control (ATC) and meteorological services are two of the most important. However, the history of the evolution and development of air routes provides a fascinating detail of how airports have evolved and how at one point of time air routes were more important in the policy imaginary of states. The shift in importance from the airside to the landside in terms of policy and planning marks a new beginning in aviation.

With the open sky policy pursued by most countries, air routes and their development are now more in the realm of the airline industry, with companies making deals that make cities dependent on each other.\(^2\) One such example is the Jet-Etihad deal which made Mumbai and Abu Dhabi twin cities when it comes to aviation and related infrastructures. This deal will be described in chapter 5. However, as will be shown later in this chapter some of the most important airports around the world, including the Delhi airport evolved in the period when air routes already decided the importance of airports. In this period both air routes and airports were meant to achieve political ends of the state more than those of economic interests. This led to the enmeshing of military-strategy visions with civilian-economic rationale, making the economy of aviation inherently securitized and open to intense surveillance at both micro and macro levels. Ian J. Kerr (2006) has provided a detailed analysis of the military and civilian functions that Indian railways continue to serve. Marx himself made several observations on

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\(^1\) Airports are divided into landside and airside. Landside includes areas such as check-in, parking lots, public transport railway stations and access roads. Airside includes all areas accessible to aircraft, including runways, taxiways and apron/ramps.

\(^2\) The open sky policy is an international policy concept that calls for the liberalization of the rules and regulations of the international aviation industry in order to create a free-market environment for the airline industry.
the effect of railways on India and Indian society in his articles in the *New York Daily Tribune* (2006). These were, however, in the realm of the “internal” politics and economics of the empire. What makes the airport unique is that it was also the aerial border of the state. The evolution of air routes became complex as the space of the firm earth had to be constantly negotiated with the emerging sovereignty of the air.

Most Indian airports in their initial phases were little more than a strip of land with a few buildings and even fewer personnel manning the entire installation. Route navigators were typically air force officers and adventurers. The colonial government’s preoccupation with the formation of air routes was due to multiple factors. One of the most important factors was that although colonial authorities ruled directly over the bulk of the subcontinent they were also in a political alliance with several “princely states” that ruled over estates dispersed all across the subcontinent. ³ This posed a problem of territorial continuity. The predominance of strategic interests over commercial and civilian interests was also a factor. However, elements within the tentative beginning of air power played a crucial role in the transformation of aviation from the most potent form of military power to one of the most key civilian, industrial, and commercial enterprises of contemporary capitalism. This chapter traces that evolution.

**The Colonial Period: Reconfiguring the Sovereign Space of the Colonial State**

The immediate problem that the colonial government had to face in the wake of the decision to develop civil aviation in India was the “sovereignty of the air” (Department of Civil Aviation 1920, File number 1-3). The princely states were distributed all over the Indian subcontinent. This geographical arrangement posed no problem until civil aviation started to take root in India. The search for aerodromes began in earnest in the 1920s and there were some princely

³ Princely states during colonial rule were not directly governed by the British authorities and had nominal sovereignty. At the time of independence there were more than 500 such princely states of varying size and significance. Most of them were integrated into India through various instruments of accession. For details see *India’s Princely States* (2007).
states that were reluctant to provide a passage of flight above their territory as they wanted to
preserve their autonomy over territory and in some cases harbored an ambition of having their
own aviation service. The colonial government was flexible enough to bring aerodromes in the
administered areas within the princely states under their control, but without passage for
aircraft such arrangements were meaningless. The arrangement for flying aircraft over the
princely states was discussed in great detail by the Air Board in 1919-20 and when the issue
“concerning the sovereignty of the air over Indian States and the effect upon them of aviation”
was raised, it was affirmed that “for the purposes of the Air Convention, India is a separate
state and that India—includes all these Indian State territories” (Department of Civil Aviation
1920, File number 1-3). This required making extensive jurisdical and administrative
changes on the ground so that the territory became contiguous for the proposed air routes. This
was necessitated because the Air Board felt that “it will be necessary to have a number of
intermediate aerodromes in Indian State Territories. These will all be of the nature of
emergency landing grounds and (it will not) be necessary to ask for jurisdiction over them, but
we should have facilities for taking them up and for keeping them in order and administering
the personnel who serve on them” (Department of Civil Aviation 1920, File number 1-3). This
was a governmental solution for a problem of deciding control over territories between the
empire and the princely states and it evolved in a manner that reinforced the power that the
former exercised on the latter. The colonial state decided to have aerodromes only in the
administered areas where the princely states had “already ceded jurisdiction” (Department of
Civil Aviation 1920, File number 1-3). The more interesting aspect of this solution was the
way in which the colonial government came up with an understanding of territorial spaces and

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4 The Air Board was set up in 1919 to facilitate the development of civil aviation in India. It was discontinued in 1926 after
the appointment of the Director of Civil Aviation in India.
their contiguity. Even while trying to develop “trunk routes” in the air, the colonial government stuck to the rail route as their reference. In 1920, the Air Board found that:

The states affected by the routes as at present laid down are only those:

(1) along the Railway between Karachi and Delhi via Barmer and Phulera; and

(2) along the route between Karachi and Surat. (Department of Civil Aviation 1920, File number 1-3)

In the initial stage of civil aviation, the sky was measured and traced by reference to infrastructures on the firm earth. At this moment the *nomos* of the earth was not substantially affected by the advent of air power but it was becoming apparent that a new order and method of partitioning territories in the air was essential. According to Carl Schmitt, it is only after the Second World War that such power becomes decisive. Schmitt deals extensively with the advent of air war in his classic work *The Nomos of the Earth* (2006). He recognizes the change brought about by the opening of the sky as a domain of war. He understands air power to be totally autonomous from land and sea, cautioning that “concepts…inclined to make air war analogous partly to land war and partly to sea war in international law, are flawed in principle and useless in practice” (319). In the 1920s when air routes were being developed in India, it was still the period in which according to Schmitt there was a balance between land and sea and the total autonomy of air was still a matter lying in the future. Air routes that were developed during the period followed either land or sea routes because these were the only recognized legal and geographical theatres of war. Schmitt was concerned with the possible changes in the meaning of war, combatants, and civilians with the advent of air power. He observed that air power is “not a war of booty, but purely a war of destruction” (317), suggesting that the distinction between “legally recognized enemy, the *Justus hostis*, as distinguished from the criminal and the brute; and the just cause, the *justa causa*” (320), is
subject to revision in the developing new *nomos* of the earth in which air power predominates over land and sea. Even to Indian observers, the disruption of social and political relations brought out by the advent of civil aviation was a cause for concern. Rabindranath Tagore argued that alienation and the fragmentation of the senses were inherent to air travel. He identified alienation as a reason that allowed air power to cause indiscriminate devastation in war. The most powerful point of his critique was that it becomes impossible in air war to differentiate between the killer and the killed, combatant and innocent civilians:

> As it rises higher and higher, it reduces the play of our senses to that of one alone-of sight- and that is not left in its fullness. All the signs for which we believe the earth to be obviously and variously real, are gradually wiped out, resolving its three-dimensional picture into lines of one dimension only. Thus deprived of its substantiality its hold on our mind and heart is loosened. And it is borne in me how terrible such aloofness can become, once it is found expedient to rain destruction on the vagueness below. Who is the slayer, who the slain? Who is kin, who is stranger? (2003, 23)

The relationship between the princely states and the colonial government had involved after a series of war and negotiations which defined and redefined their relationship in terms of friends in alliance. Development of air routes and airports meant that these terms had to be negotiated afresh and was often a cause of friction which necessitated the colonial authority to exercise its imperial power over the princely states bringing out the clear hierarchy of the relationship. The problem in the initial phase of aviation was to carve out territories in the sky that would realign the border on the firm earth making the former contiguous even if there was a different form of partitioning of sovereignty in the latter. In the process, the power of colonial government over princely states was reaffirmed.
This question of the sovereignty of air between the colonial government and the princely states recurred at several times. In the 1920s the problem of sovereignty of air between the two parties was solved on the basis of the International Convention on Air or the Warsaw Convention of 1929. It was the interpretation of the convention that allowed the colonial government to come up with a very firm assertion of its sovereign power over its own territory as well as those of the princely states. In fact, the records of the Air Board show that princely states were now called protectorates, denying them any sovereignty over air. This move solved the problem of the contradiction between the firm land and sovereign air by disentangling the two rather than making one the reference point in order to mark the other.

The beginning of civil aviation, immediately after the First World War, extended governance to not only land but also air, redrawing and expanding the territories over which the governance of the colonial regime had to be exercised. The question of “sovereignty of the air” forced the colonial state to reassert its dominance over its colony. In no uncertain terms it made clear that ultimate control over land and air lay with the empire. However, the new element of the air troubled the colonial government as it required the latter to come up with new legal instruments to accommodate and redefine their relationship with the princely states. The force of the assertion of their right over their possessions, both on earth and sky, can be understood from the following observation, which was made during discussion with the rulers of the princely states:

The convention should contain no kind of implication that Great Britain had not full and absolute sovereignty and jurisdiction over the air above the territories of Indian States … A perusal of the convention in its final form as presented to Parliament, shows that India is deemed for the purposes of the present convention, to be a State having complete and exclusive sovereignty in the air space above its territories and territorial
waters, while Protectorates are for the purposes of the convention, deemed to form part of the protecting states both as regards their territory and as regards their nationals. The States must therefore accept the doctrine (which is not covered by anything in their Treaties or Engagements) that the government of India will retain in their own hands the control of the air above Indian States, as well as above British territory, in the same manner as they retain control of the foreign relations of all the states. (Department of Civil Aviation 1920, File number 1-3, emphasis added)

The problem of the sovereignty of the air kept coming up vis-à-vis the princely states and in 1937 the British Government of India in the case of the princely state of Kashmir made it absolutely clear that the princely states have no claim of sovereignty of air over their ground territory. The state of Kashmir wanted to have prohibition on flying over a substantial part of Kashmir that included forts, military camps, all palaces, residential buildings of the ruler, camps occupied by the ruler, and places of worship of all religions. The colonial government made it clear that the state of Kashmir could not have a zone where flights were prohibited. It was a demonstration of the new nomos where the apportioning of the firm earth was beginning to be dependent on sovereign air. It was an attempt to achieve a definite balance between air, land, and sea. This would later be reinforced in the postcolonial era and finally take a new turn in the contemporary stage of the postcolonial nation-state. The empire solved the question in the following way:

The policy of the Government of India is to resist steadfastly any attempt to demand declarations of prohibited areas, except for very special reasons. A precedent once established would merely pave the way for further demands for the declaration of prohibited areas until practically the whole of India would be plastered with prohibited zones or special areas to be avoided. It should be pointed out to them that without
previous consultation with and the approval of the Government of India and until the prohibited areas have been notified by the Government of India to all Contracting States under Article 3 of the International Convention for the regulation of aerial navigation, any notice of prohibition issued by an Indian State is of no effect. (Department of Civil Aviation 1937, File number V (16))

This is an interesting observation if one keeps in mind the problem of unification of the princely states immediately after independence. Soon after Independence, the new postcolonial government was faced with the formidable task of integrating the nominally independent princely states into the new nation-state. The enormity of the task can be gauged from the fact that the new government had to take military action against the State of Hyderabad, which declared its own independence from both India and Pakistan. There was the case too of Kashmir which was annexed in the midst of a war with Pakistan. The cases were replete where the princely states first asserted their independence and were coerced into signing the Instrument of Accession. Hyderabad, Kashmir, and Manipur are the major examples of such coercion. Hyderabad’s case was instructive for the postcolonial Indian state because unlike Kashmir or Manipur it did not share any international border. If it was possible for Hyderabad to declare its independence and exist like an enclave disrupting the territorial continuity of the Indian nation-state then regions like the Andaman Islands and Lakshadweep, which were not part of the Indian mainland, and the North East, which was a frontier region, could very well claim an independent status, which they were demanding in any case. For a new nation-state that had emerged from the experience of partition and whose territorial integrity was not always a decided outcome, such discontinuities in territory were unacceptable. It would not be an exaggeration to state that air routes provided a new vision to the Indian state for the integration of territories through the logistics of air routes and the infrastructure of airports as a result of the new relation between the firm earth and the sovereignty of air. As a result of air routes and
the subsequent development of airports, it was possible to flatten the natural borders demarcated by hills, forests, and rivers. This was particularly evident in the case of North Eastern states of India. This was also evident in the way in which civil aviation was used by the postcolonial state to expand its territorial and administrative reach over new occupations such as the Andaman and Nicobar Islands, which were accessible by air only through Myanmar, thus making India dependent on a foreign state to access its own territory. With the new logistical vision provided by air routes and airports it was now possible for the postcolonial state to lay claim over what it saw as its own territory independently of the logistical apparatuses of the colonial system.

These logistical arrangements provided the postcolonial state an opportunity to re-imagine its territories just as they did for the colonial government, only in a much more comprehensive way. Airports and air routes made it possible for the postcolonial Indian state to materially integrate territories over which it laid claim and these territories could be policed through airports and air routes. In 1966, India deployed air strafing against its own citizens in Mizoram, when this North Eastern state was demanding its own independence. This idea of using air power for policing purposes was a continuity of the policy recommended by the colonial state. The vision of the colonial state to use aviation, air routes, and aerodromes to both quell internal disturbance and consolidate their territory was fulfilled by the postcolonial state. The use of civil aviation and the logistical apparatus built around it as a means for quelling internal disturbances had already been developed during the colonial era. The British Government of India used air power in suppressing civil disturbances and clarified that this was for policing purposes and not under military but civil authorities:

    Landing grounds required to enable aeroplanes to be sent to certain localities where the possibility of internal trouble may be apprehended by civil authorities should not
become a charge on military funds. If the civil authorities wish for assistance from the air, the responsibility of providing grounds for machine to land on in emergency, and for maintaining such grounds in a fit state for landing, should be theirs. For this reason it is not proposed to provide any military landing grounds east of Cawnpore. (Department of Civil Aviation 1921, File number 48)

It was made clear that these landing grounds would be aerodromes used for civil aviation. It was on this basis that the proposal for providing military landing grounds was dropped because a civilian landing ground already existed and for some time it was planned to have a civil aerodrome in Kanpur.

The case of a postcolonial nation-state using air power against its own legal citizens was unprecedented and would prove controversial when the Indian Air Force air bombed Mizoram in 1966. This is the only instance in which the post-independent Indian government has used air power against citizens inside its own territory. It might also be one of the few cases when a state has used air power on its citizens without it being declared as a civil war. It was the very careful delineation that the colonial government made between the use of civil air power and military air power that made this action of the postcolonial Indian state possible. This distinction made it possible to keep the insurgency of Mizo people within the realm of policing and not as a civil war and this has been the case with all the insurgent movements in India. The state views it as a police rather than as a military matter, hence the conflict does not legally fall under laws of war. This contingent nature of the use of air power to suppress internal rebellion has continued in the contemporary era. The idea of using air power for tackling the Maoist insurgency in India has been taken up in earnest since 2009. Helicopters are being used for transporting troops and for purposes of evacuation but not for offensive purposes. Strategic thinkers raised their voices stridently to use air power for offensive purposes against the
Maoists (Agarwal 2012, 57). Maoists, on the other hand, for long have been demanding that their insurgency be recognized as a civil war and asking the Indian state to follow the Geneva Convention in the conflict. As a result of the demand of strategic thinkers to use air power to contain insurgency and Maoist’s demand to recognize insurgency as a civil war, it appears that the idea to use air power for offensive operations has been kept at abeyance because the conditions of internal war have changed and the difference between civilian and soldier have become unstable. It would appear that the blurring of the distinction between “kin” and “stranger” as pointed out by Tagore in the quote given above continued and the distinction between citizen and enemy has also been blurred. It can be then said that because of the changing legal mechanisms under the new *nomos* the distinction between civil war, insurgency, and war has come under increasing legal pressure.

In this thesis, I study the formation of new political subjects with respect to Delhi airport. I show in the later chapters how workers in a workshop making trolleys, women cleaners at the airport, and taxi drivers are brought under the control of Delhi airport. These workers as a result of their relationship with the airport acquire distinct characteristics in terms of how they perform labor and how they are governed. The evolution of Delhi airport is also the story of the emergence new political subjects. In the above discussion on the use of air power to quell internal disturbance, I examine another dimension of the emergence of political subjects with respect to the larger evolution of aviation that has complicated the understanding of citizens, enemies, soldiers, and civilians. This is not to claim that these subjects are directly related but I want to foreshadow how aviation and the development of airports and air routes in the colonial and postcolonial periods have posed the problem of governing workers and controlling insurgents. I will now continue with the narrative of the building of aerodromes and charting of air routes that redefined the territorial imagination and representation of the empire and the nation.
The anxiety that resulted with the advent of civil aviation is quite understandable as it started immediately after the First World War. It is perhaps because of its origins that civil aviation never could extricate itself from its military beginnings. Or alternatively and more plausibly, the state considers every advance in communications and transport (infrastructure and logistics) as an apparatus that could be mobilized for war or suppressing internal rebellion. In the case of logistics, capital and war are inextricable, as I will show now by discussing how the rise of civil aviation made questions of profitability important in the case of air mail services and real estate markets controlled by military. In the first report of the civil aviation advisory board the military nature of civil aviation was made amply clear. The commercial viability of civil aviation (the Imperial Air Mail Service to India), initially, was under doubt and there was substantial opposition to the idea of expansion of the service. However, it was developed on the grounds that:

(a) it helps the development of commercial aviation; and

(b) it has a strategic value, since the air route which it entails enables the air reserve of the Empire to come to India’s assistance in case of necessity.

If the suggested Air Mail Service to India were instituted, it would, no doubt, in time provide in this country a potential reserve of pilots and machines, which might be of value in the event of war. (Department of Civil Aviation 1923, Proceedings numbers 1-11)

When the British Government of India finally came up with a policy for civil aviation in 1927, it made it clear that civil aviation would be supplementary to the fortification of the empire. The policy document was of the view that:
The existence of civil aviation services is one of the main foundations of air power … these proposals which will encourage civil aviation and at the same time retain for India a considerable share in aviation development, are bound to have the effect of increasing India’s capacity for defence and offence. (Department of Civil Aviation 1927, File number A.V. 115)

The observation that civil aviation was to be the foundation for air power also meant a close nexus between the logistical apparatuses pertaining to civilian, commercial, and military needs. This nexus further meant that a peculiar political economy developed around this complex logistical arrangement. The foundation for this political economy of imperial logistics was land and a real estate market that was solely created by the logistical processes of military, civilian and commercial needs. The military logistical facilities that the Royal Air Force built around military aviation were spread across the Indian subcontinent but they were in the nature of emergency landing sites and largely temporary. Except for a few places that included Delhi, they did not have a permanent air force station. Even the routes that the Royal Air Force had created for itself were quite limited. Civil aviation provided the military with a chance to build permanent aerodromes across the subcontinent as well as open multiple routes that connected the subcontinent with the entire globe giving them unmatched mobility. It comes as no surprise then that most of the permanent aerodromes were built on military land. It was of great help that the military owned vast swathes of land and was willing to make a profit out of it, thus also creating the possibility of a speculative real estate market. The search for emergency landing grounds in the British Administrative Areas in the princely states discussed above had already enriched the military cantonments. As most of the Administered Areas in the princely states belonged to army cantonments that owned vast stretches of land, the nexus between civilian and military aviation logistics had transformed this land into valuable real estate.
The location of aerodromes and subsequently airports was a calculation based on the political economy of the real estate market largely created by the military and strategic calculations of air routes and war. The importance of strategic calculations for the development of air routes and airports cannot be emphasized enough. Civil aviation in India started during a tough period in economic terms. The Indian Retrenchment Committee drastically reduced the budget allocation and a member of the Air Board, while commenting on the yearly report that they were bound to publish, complained that it was waste of paper because there was nothing to report in terms of the development of civil aviation. For the period of 1922, the Air Board had recommended Rs. 875,740 and for the period of 1923 it was Rs. 825,000 towards development of civil aviation, which the Retrenchment Committee then cut down to Rs. 24,000 for 1924 and subsequently to Rs. 16,500 for 1925, covering only administrative costs (Department of Civil Aviation 1924, File number 1).\(^5\)

This was not the first time that the future of civil aviation looked largely unpromising in India. There serious doubts over the plans of expansion of civil aviation as several members of the Air Board were not:

- Particularly sanguine about the immediate development of civil aviation in India…
- (not) very hopeful about the prospects of an internal aerial mail service anywhere in India…
- The Chairman of the Bombay Chamber of Commerce (is) doubtful whether business man in India think that aviation is likely to be of much use to commerce in near future…
- the Air Board should confine its activities to preparing one air route only in India. The air route would be the min truck line for journeys across India, namely,

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\(^5\) The Indian currency during the British colonial period in India was denominated as “Rs.” instead of “INR.” I use the former denomination in the case of colonial and postcolonial records when that denomination was used. I use INR in the remainder of cases.
Karachi, Delhi, Allahabad, Calcutta, Rangoon. Possibly, from Allahabad a branch route should go off to Bombay. (Department of Civil Aviation 1920, File number 72)

However, within three years of this recommendation to the Air Board, the “First Report on Imperial Air Mail Service” came out with ambitious plans for the development of routes from London to India based on the development of civil aviation (Department of Civil Aviation 1923, File number 1-11). A survey was done across the Syrian Desert and a reconnaissance from Jordan to Baghdad was sent to come up with the most feasible route. This plan was a vision of creating a comprehensive logistical apparatus. The plan identified three routes to connect Europe with India, “via Cairo, via Constantinople, or via Alexandretta” (Department of Civil Aviation 1923, Proceedings Numbers 1-11). This involved a new arrangement within imperial powers and a new “discovery” of routes. An example of this was the proposed route via Alexandretta which according to the report “will come into prominence if the French proposed service from Paris via Italy and Greece to Alexandretta … the British route from there would link up … either at Adana or Aintab” (Department of Civil Aviation 1923, Proceedings Numbers 1-11). The imperial report gives this route as a proposal to connect Europe with the Middle East: “Constantinople-Eskisher-Konia-Adana-Aintab-Urfa-Mardin-Mosul-Tekrit-Samara-Baghdad” which was closely related to the route “Cairo-Ramleh-Amman-Ramadi-Baghdad.” This plan was a comprehensive occupation of air space by the empire, connecting directly otherwise disconnected spaces and in the meanwhile changing the relationship between land and air.

It was from 1926 that civil aviation began to take root properly in India. The routes which were identified as the most viable were “Calcutta-Akyab-Rangoon” and “Calcutta-Chittagong-Akyab-Gwa-Rangoon” (Department of Civil Aviation 1926, File number AV 20 [2]). These routes were identified with precise calculation that included the arrival of the mail train to
Calcutta from Delhi and a network of rail facilities, including the proximity of the proposed airport with Kamayut Railway Station and Gyogon Railway Station (Department of Civil Aviation 1926, File number-AV. 20 [2]). As usual when the routes were finally conceived the problem arose of finding sites for building aerodromes and emergency landings. The aerial routes were to follow the rail or sea route as far as possible. When the places where the aerodromes and emergency landings were to be constructed were identified, the problem of land acquisition needed to be solved. As it happened, the military had surplus land on which these aerodromes and emergency landings could be built. It led to an extensive correspondence between the Department of Industries and Labour of which civil aviation was a part and military authorities. This correspondence was at times full of friction. In the case of Calcutta, Dum Dum, which was used for military purposes, was acquired by civil authorities to prepare the civil aerodrome. For the Calcutta-Rangoon route it was planned to have a seaplane service for which a site in Dakshineswar was earmarked, again on military land. The corresponding site in Rangoon was Mingaladon. The reasons for choosing this site show how aerodromes, their assets and links to the city were imagined. It was connected with the railway and metalled roads with Rangoon but more importantly there was:

A tendency for Rangoon to extend rapidly in that direction. Should it be decided later on to transfer the aerodrome from Mingaladon to Dawbon, the money spent in reclaiming the former would not be wasted, as Mingaladon aerodrome could be sold as building sites. (Department of Civil Aviation 1926, File number-AV. 20 [2])

This kind of logic based on real estate speculation fueled the building of aerodromes across India. Transactions involving large amounts of money became frequent between the civil aviation department and the military, which often led to friction as will be evident in a case mentioned below. Early planners-cum-bureaucrats recognized that aerodromes were meant not
only for the arrival and departure of airplanes but also as sites for other economic activities. When an airship mooring mast was being built in Rangoon, it was quite clearly mentioned that there should be surplus acquisition of land so that the surplus land can be used for cultivation and building recreational facilities. The land acquired for the purposes of commercial activities was to the tune of 100 acres and additionally a network of water supply and railway communication was found essential for the operation of the aerodrome (Department of Civil Aviation 1926, File number-AV. 20 [2]).

These developments were accompanied by the emergence of the economic and commercial division of airport operations between aeronautical and non-aeronautical services. Non-aeronautical services would eventually emerge as the chief economic model for the maximization of profit at the airport. This meant that there was now a clear division between the militarily strategic aspect of the airport and the civilian and commercial aspect. This division did not mean, however, a rupture between the two aspects. The significance of the difference between aeronautical and non-aeronautical services would come into play further down the line and I will study its importance in the next chapter. Here, I concentrate on the emergence of this division and the way in which non-aeronautical services moved toward the city with increasing stakes in real estate and the logistics of the city. The economic logic behind aerodromes acquiring more non-aeronautical land was based on the expectation that through these services the building of assets would be covered because aerodromes “will be mainly expended on land in the neighborhood of large cities. These lands will be a valuable asset…of increasing value as years go on” (Department of Civil Aviation 1926, File number-AV. 20 [2]).

This scramble for assets was intense enough for the British Government of India to ask for the acquisition of the Karachi airship base which was under the control of the British Government (Department of Civil Aviation 1926, File number AV.-115 [1]). The military authorities of the
empire now acquired the status of the biggest real estate agents. This status was acquired through a careful calculation of air routes, land, and geopolitics. An exasperated bureaucrat makes the observation that for the three acquisitions on the Calcutta-Rangoon route (Monkey Point, Dakshineswar, and Dum Dum) the civil authorities had to pay a huge sum of money to the military authorities. He further makes a veiled suggestion that the military might be indulging in illegal land grabbing when he makes the point that the army had no compunction whatever in occupying land belonging to civil departments (Department of Civil Aviation 1926, File number AV.-115 [1]). It is also quite instructive to note how the sites for aerodromes were imagined and how the army became the biggest land owner. It was the prevalent idea that civil aerodromes with no connecting links to railways, roads, cantonments, and the nearest RAF squadron that were stationed in the cantonment were not feasible for development. The landing grounds of the RAF were in the cantonment but when the cantonment shifted the land with its existing infrastructure remained as property of the military. This infrastructure became an attractive option for the development of civil aviation. This pattern of development became one of the reasons civil aviation reached the southern parts of India much later. For example, when the RAF squadron at Kanpur was to be moved to Peshawar, Ambala became the new airbase for the RAF and Jhansi the southernmost air ground (Department of Civil Aviation 1921, File number 48). In the absence of similar movements of the army and the RAF and availability of landing grounds, Southern India had to wait longer for the development of civil aviation. The movement of military was relatively less frequent in Southern India. This retarded the developing nexus between military, real estate, and civil aviation on the same scale as was evident in the northern part of India. One of the prime reasons for more airports in North India for civilian use than in the South in this period was the slow development of the nexus mentioned above.
The location of aerodromes was also dependent on other calculations based on the speed and timing of railways especially in regards to the movement of mails. For example, in Calcutta the timing of flights was based on the schedule of the trains that carried the mail. The flight schedule was made in accordance with the time at which the train reached Calcutta and the time taken to transport the mail from the railway station to the aerodrome (Department of Civil Aviation 1926, File number-AV-20 [2]). It can be said with a great degree of certainty that the location of the airport at the fringes of the city was not incidental and the choice of site was not random. It was based on speculative calculation of real estate and the already existing infrastructure installations and logistical apparatus.

The internal routes chosen for development were based on this land-sky calculation and the routes that were identified included, apart from Calcutta-Rangoon as mentioned above, Karachi-Bombay and Bombay-Calcutta (Department of Civil Aviation 1926, File number-AV-20 [2]). It now became possible to draw straight lines across the globe and between cities. Some cities, as a result of these planned air routes, were in a position to emerge as hubs as those straight lines had to converge at some point before creating more such lines. It can be said that some cities by default became more suited to become hubs in the future because of this international maneuvering of drawing straight lines based on air routes. New routes within the subcontinent were conceived and there was an attempt to link the whole of India beginning from the West and connecting to the East. The Karachi-Delhi route was added to those mentioned above and through aerodromes at Nasirabad, Jhansi, Allahabad and Gaya there was an attempt to link Karachi to Calcutta and further to Rangoon (Department of Civil Aviation 1928, File number AV-10). The other routes were geared towards this main route. The Karachi-Delhi route was developed because it was seen to be beneficial for the Calcutta-Rangoon route (Department of Civil Aviation 1928, File number AV.-10).
When new routes were being conceived, some cities became reference points. The planners of the empire saw Karachi as the gateway to the Indian subcontinent from the West and Bombay as the link to Southern India. Calcutta was to be developed as the gateway to South East Asia. Air routes were to now link almost the whole empire, which would not be dependent for its penetrability either on sea or land. The route to Australia was planned thus: London-Brindisi-Baghdad-Karachi-Delhi-Calcutta-Rangoon-Singapore-Darwin-Brisbane-Sydney-Melbourne-Adelaide (Department of Civil Aviation 1928, File number AV.-10). It was a great design. In hindsight, we can identify a number of hubs which have emerged and are operational along this route currently which should always remind us of the colonial logic of these routes. There definitely is still an element of logic of colonial geopolitics in the ways in which logistical hubs are conceived and created.

The geopolitical calculations that went into the development of the air routes and hence the emergence of some cities as logistical hubs is evident in the case of the Karachi-Bombay and Karachi-Delhi routes. The development of these routes was “very largely dependent on the ability of the British Government to establish a regular service between Egypt and Karachi” but the problem was that it was “very unlikely that Persia will agree to the service being run … via the Persian Gulf ports” (Department of Civil Aviation 1928, File number AV.-10). There was also the additional problem of the “unsettled conditions in Arabia and Mesopotamia” (Department of Civil Aviation 1926, File number AV 115 [1]). Logistical developments now required a different geopolitics in order to move forward. There was no question of developing internally without trying to influence what was happening internationally.

The development of civil aviation routes, aerodromes, and the new rearrangement of borders affected the relationship between colonial states and also informed the resistance to colonialism. The international colonial borders, freedom of occupation, and spheres of
influence had to be reimagined as land and sea were being rearranged if not superseded by air. In the early years of aviation, unclear conventions meant different states under the British Empire encroached on colonial borders for building infrastructure and logistical apparatuses. This created a lot of confusion, hesitancy, and reassertion of territorial boundaries. It became a matter of consternation for the British Government of India when the Australian government decided to build an aerodrome in Rangoon and Singapore. It was the period in which the British Government of India was reclaiming its territories which were under jeopardy with the advent of a new logistical practice triggered by civil aviation:

> It is not understood why the Australian Government should take steps to provide aerodrome at Rangoon. It is for the Government of India to do this. Whether any fee should be levied on the Australian Government on the Australian Government for the use of the aerodrome in British India, including Burma, is one for the decision of the Air Board…It would not be permissible for the Australian Government to make any independent arrangement at that place without consulting the Government of India. As regards arrangement at Singapore, the Government of India is not concerned. (Department of Commerce [Civil Aviation] 1920, File number 13)

The new logistical preparations also created a problem of representation. The developing air routes needed a suitable method for preparing the route map. The accepted method of drawing the map for air routes according to the international convention was the Mercator projection method. In the Mercator projection, the size of objects is changed as the latitude increases from the equator to the poles in ascending order. This was different from the Survey of India maps. The choice of this method was deliberate and informed by imperial logic:

> This is unquestionably one of the most renowned and familiar of all map projections, and one which is widely used for world maps, sometimes when it is not even really
suitable. It has been claimed that the ‘popularity’ of Mercator’s Projection in Britain is largely due to the fact that the ‘British Empire’ looks so much larger in proportion to the rest of the world. (Department of Civil Aviation 1920, File number 120)

Mercator’s projection is used more for navigational purposes and in the context of civil aviation in India it was to be supplemented by the Survey of India maps which did not show “prohibited area, lines of equal magnetic variation, etc.” (Department of Civil Aviation 1920, File number 120). It was an exercise which according to the civil aviation authorities attempted to “redraw the whole of India” (Department of Civil Aviation 1920, File number 120). This was not an exercise that altogether replaced the existing cartographic imagination of the empire but an exercise that gave the empire an alternative cartographic vision that combined land and air.

There was a certain degree of tentativeness shown by the authority which was not only due to the cost of preparing these maps, which was formidable, but also the fact that it required constant alterations as aviation developed. It was a distinct way of looking at the nation through the optics of logistics and this created not only an alternative representation of the nation but was also a continuous process.

The development of civil aviation and the problem of creating proper logistical provisions for it also brought into relief the mechanisms of colonial governance and the contradictions between the British Government of India and the British Government. Of course, these differences were not so sharp to pose any serious problems but it did show differences in the opinion, between the metropolitan government and the colonial government, as to how the colony was to be governed. It also gave the nationalists a way to question the colonial policies with regard to issues of logistics and sovereignty. In a discussion for making the policy on the development of civil aviation in India, the Indian members did not mince words on what they saw in the policy to be against the interest of India. In 1927 the British Government had signed
a contract with Imperial Airways Limited without consulting the British Government of India. The Indian members in the Standing Advisory Committee raised pointed questions on the nature of the contract. N. M. Joshi sarcastically asked the British officers:

If it was within the competence of the Air Ministry to make a contract of this kind—
For example, would it be possible for the Air Ministry to make a similar contract relating to transport facilities from England to France without the consent of the French Government … Would it be possible for aeroplanes to land in France without the permission of the French Government. (Department of Civil Aviation 1927, File number A.V. 115)

This matter was raised primarily as a question resulting from the ethics of commercial activity and the signing of contracts. However, this question was also a result of the issue of rights of the Indian nation which was under colonial rule. The interesting aspect of the whole argument was that it understood international borders and the right to cross or not cross them as based on the ability of aviation to supersede land. It was an acute understanding at the basis of which lay both the commercial and military-strategic value of logistics. The British member had to take recourse to the International Convention and assert that the convention has changed the meaning of sovereignty radically even for European states. He claimed that “the International Air Convention prevented those countries which were parties to the convention from placing restrictions on free landing for commercial purpose” and “that it would be perfectly legal for them” to land their aircraft without the consent of the French government (Department of Civil Aviation 1927, File number A.V. 115). This was a sleight of hand by the British member whose logic was based on the separation of commercial and military, and aeronautical and non-aeronautical services in civil aviation, which were discussed above. The Indian member though was pointing to the impossibility of separating the two in the practice of the colonial
government. The postcolonial government realized this impossibility and used it to fortify and penetrate into its national territory, the story of which is related in the next section. In the next chapter, I discuss the significance of the division between aeronautical and non-aeronautical services in the restructuring process of Delhi airport. In the next section, I relate how aeronautical services were predominant in the vision of the postcolonial government to connect various parts of India, giving it a territorial contiguity through air routes and airports. It is important to relate this story to illustrate the historical context in which Delhi airport has emerged in contemporary times as an important infrastructural installation with a definite production process where non-aeronautical services have become predominant. It is also through the extension of non-aeronautical services that Delhi airport and the authorities managing the airport have come to define production processes in the larger urban space which I study in subsequent chapters.

The Plan Period: Securing the Postcolonial Economy, Politics, and Territory through Logistical Apparatuses

The immediate challenge for international civil aviation in the aftermath of Second World War and impending decolonization was to make laws and conventions that reflected the new political realities of the world. The spaces of sovereignty and concepts of the border would also change as a result. There would be need for zones and passages to overcome terrestrial and aquatic limits. The International Civil Aviation Conference, 1944 was given the task of coming up with laws of the air that would be acceptable both to the erstwhile empire, decolonizing nation-states, and rising imperial powers. The Chicago Convention is still the basic and binding law that is applied both in the case of commercial flights as well as in the situation of war. The challenge for postcolonial India, on the other hand, was to secure and connect the territories inherited from the British empire and those that it annexed in the process of decolonizing. The
commercial and the strategic aspect of civil aviation, thus continued, even in the postcolonial era with the difference that air secured the land and in some cases through the developing air routes also delineated borders. The first part of this section deals with the Chicago Convention. The second part investigates the development of civil aviation and air routes in postcolonial India.

The International Civil Aviation Conference, staged in Chicago in 1944, was a congregation of delegates from 52 countries. Apart from the United States of America, United Kingdom, and France, the countries that were represented in the conference consisted almost entirely of the countries of Latin America, Asia, Africa and Eastern and Central Europe who were at that point of time in history under varying degrees of imperial control, direct or otherwise, and at the beginning of processes of decolonization (Department of Civil Aviation 1945, File number 27-V [20]/45). The delegates had the mandate of ending “anarchy in air” and to also provide the basis of international cooperation for lasting peace after the end of the war (Department of Civil Aviation 1945, File number 27-V [20]/45]. Here, I am concerned with the historical narrative of the convention which had to take into consideration the complexities of war and decolonization and, thus, was preoccupied by defining the sovereignty of air but was circumscribed by the concepts of sovereignty and borders as applicable terrestrially.

In a letter to President Franklin Roosevelt the head of the US delegation Adolf Berle identified the fault lines of the convention:

The invitation was sent to all the governments of the world with the exception of enemy and former enemy governments, and the Government of Argentina. All of the governments accepted this invitation with the exception of Saudi Arabia. Among the governments accepting was the Government of the Soviet Union … the Soviet Union decided to accept despite the fact that the neutrals were included as well as belligerents,
no doubt in recognition of the fact that certain neutrals, notably Sweden and Portugal, held a geographic position requiring their action if world aviation lines were to be opened. Subsequently, the Soviet Union withdrew its acceptance on the ground that Spain, Portugal, and Switzerland were included in the conference. (Office of the Historian 1944)

The US delegate put the change of approach from the old empire of the UK to the new one succinctly when he made the point that Great Britain “approached the problem primarily from the point of view of order in the air. We …approached it from the point of view of freedom of the air” (Department of Civil Aviation 1945, File number 27-V [20]/45). It was the clash of these two approaches and the dominance of the US position of the “freedom of air” that was decisive in the outcome of the convention. The basis of this debate was commercial and avoidance of rate wars. The British wanted a “50-50 division of the traffic between the United States and Great Britain in respect of the Atlantic Ocean” (Department of Civil Aviation 1945, File number 27-V [20]/45). An alternative was proposed by the UK according to which:

Each country on establishing an international route should be allowed to run planes having capacity sufficient to take care of one half the traffic embarked in the country of origin, destined for the country to which the route was to go. Thereafter, when these planes ran “full” (which in operators (sic.) language means running at an average of 65% payload), the number of planes or air-carrying capacity running between the points might be increased. The right of increase became known as the “escalator clause.” (Department of Civil Aviation 1945, File number 27-V [20]/45)

The US opposed this proposal and said that:

The British plan was one of limitation…ours was a plan by which each country, having established its transport lines, might increase capacity as rapidly as its planes filled
up…the British view, urging the necessity of protecting small nations from competition…the United States view which was for the freedom of air, with competition, and without cartel or other similar agreements, and without limitations except for the proposed arrangement against rate wars, and the “full plane” clause. (Department of Civil Aviation 1945, File number 27-V [20]/45)

It was a sign of the shift of imperial power when fifteen countries protested against the British position saying that the proposal meant “strangulation and, far from protecting them, it virtually excluded from the air” (Department of Civil Aviation 1945, File number 27-V [20]/45). In the end, Britain had to accept all the changes proposed by the US which also included “five freedoms of air” that were as follows:

(1) Freedom of innocent transit;

(2) Freedom of technical stop;

(3) Freedom to take traffic from the homeland out to other countries;

(4) Freedom to take traffic from other countries back to the homeland—and possibly, to a limited extent,

(5) Freedom to pick up and discharge traffic between points en route. (Department of Civil Aviation 1945, File number 27-V [20]/45)

The US delegation noticed this shift from “order” to “freedom” as a movement away from the protectionist desire of the UK to a situation where each nation-state was “free” to develop its civilian-commercial capacity in aviation according to the needs and ability to capture the market. The US delegation saw this creation of free market operation in the air as a historical shift:
The debate was in fact a modern version of the old controversy when Grotius argued for the freedom of the seas, and Selden argued for the closed seas; a debate which went on in the 17th century until it was finally settled by the British adopting the freedom of the seas … It is not too much to say that we entered the Conference in the law and atmosphere of the 17th century; and we came out with a fair prospect of obtaining 20th century conditions. (Department of Civil Aviation 1945, File number 27-V [20]/45)

The “20th century conditions” were obtained in the background of the emergence of postcolonial nation-states that redrew borders on the global scale and, at least in principle, each nation-state was free to compete with others for a share in the international aviation market. It allowed, principally, for nation-states to form commercial alliances in civil aviation on equal terms and invest in entities that were formed as a result of such alliances. An example of such alliance was between India and Sri Lanka which will be discussed below.

India eventually did become a part of the Interim Council of the Convention. Membership was through ballot, which made for political maneuvering. There was a fair amount of disagreement in the formation of the council. For example, the American republics wanted seven out of the 21 seats on the Council (Department of Civil Aviation 1945, File number 27-V [20]/45). On the contrary the UK wanted more representation for Europe and insisted on the inclusion of India (Department of Civil Aviation 1945, File number 27-V [20]/45). The conference was aware that India was important because of “her geographical position, her population of 400 million people, the facilities offered by her to international routes, all make it not only just, but also a matter of common interest…that a representative of India should take his place in…council” (Department of Civil Aviation 1945, File number 27-V [20]/45). It can also be conjectured that this importance gained by India for international routes was because of the almost 30 years of building air routes by the empire that saw military and commerce in air as
India was represented by Sir Gurunath Bewoor, who was the Resident Director of Tata Sons in Delhi, which owned Air India. The Norwegian Ambassador who made the above intervention offered to give up his seat in the council to accommodate India for the sake of “international cooperation and goodwill” (Department of Civil Aviation 1945, File number 27-V [20]/45). The delegate from Cuba decided to give up his seat at the council, to which the Norwegian Ambassador acquiesced “in the interest of equitable distribution” among the continents and “for that reason and that reason alone” (Department of Civil Aviation 1945, File number 27-V [20]/45). As part of the British empire, India still had to play a peripheral role based on the interest of the UK, however, soon enough India did not hesitate to override the freedoms of air to pursue its own vision of international politics based on the principle of non-alignment as we will see later. However, it is important to bring to the fore the development of the commercial aspects of civil aviation because it captures the nuanced debate about the path the Indian economy was to embark on.

The issue of Air India International and its pattern of ownership came in the wake of a serious debate on nationalization of industries (Department of Civil Aviation 1947, File number 2-A/28-47). In a letter to the Secretary to the Government of India, J. R. D. Tata, then chairman of Tata Group, one of the most important industrial houses in India, presented the case for a public-private partnership, the first experiment of its kind which was different from either the issuing of a license or nationalization (Department of Civil Aviation 1947, File number 2-A/28-47). Tata analyzed threadbare the three alternatives and came up with the superior advantages of a public-private ownership model. The scheme became even more audacious when Tata proposed that the Sri Lankan government (then the government of Ceylon) should be offered a participation in the capital and allowed to invest in the enterprise. This was to be an exclusively Asian international venture. Tata was all for strict government control and went as far to suggest that the government hold a majority of the share capital, 45 percent or 49 percent.
of the capital with an option to take over extra six percent or two percent as the need arose. In the words of Tata, the Indian economy should evolve on the principle of “controlled competition” (Department of Civil Aviation 1947, File number 2-A/28-47). Although, Tata mentioned that subsidies were to cover only losses and not profits, there was ample suggestion that instead of profit maximization the dynamics of the arrangement would lead to subsidy maximization. The entire scheme was heralded as a unique experiment and Tata hoped that the economic development of India would follow this formula. The scheme was indeed put into action but Air India was nationalized soon after in 1953. The idea had to wait almost fifty years to become plausible and reincarnate in what is now known as public private partnership. There were several attempts during the plan period to allow private capital in civil aviation. One such experiment was the proposal of starting helicopter air-taxies between airports and city centers in the case of Kolkata and Mumbai (Department of Civil Aviation 1963, File number 20-A/1-63). Once the proposal was mooted there was a rush of applications both from companies and individuals with rather dubious credentials. The idea was that private firms would be allowed to operate the service and provided subsidies for at least ten years before there was an attempt to nationalize the air-taxi service. This proposal failed to take off but it generated enough interest that the Indian Airline Corporation (as Air India was known then) became part of the consultative process. Thus, it is clear that within the planned economy of the postcolonial Indian state and nationalization of civil aviation there were experiments to collaborate with private capital.

Another aspect of the plan period of the Indian state was its concern for fortifying its territory as well as international relations. Two cases are instructive in this regard. Firstly, India declined to provide the Israeli airline the facilities for technical landings at Bombay airport on the grounds that such a move would not go down well with the “international commitments” of India and the “Muslim countries of the Middle-East” (Department of Civil Aviation 1962, File
number 8-A/48-62). Second, there was a refusal of landing and passage facilities for apartheid South Africa following the UN resolution. An interesting development was the closing of the sales office of Air India in Durban because the in-charge of the office was a local Englishman. This was done after China had riled up India for abandoning “a firm anti-colonial and anti-imperial stand” (Department of Civil Aviation 1963, File number 8-A/13-63). India even refused the proposal of the Ceylon Government to have an air service to Rangoon via Madras on the ground that Australian National Airways owned up to 49 percent of Air Ceylon (Department of Civil Aviation 1950, File number 8-A/10-50).

The most definitive use of air routes by India as means of fortifying its territory is the way routes were conceived and developed both nationally as well as beyond the country’s immediate borders. One of the most interesting aspects of aviation in this era was the formation of zones (much like those today on the ground). A foreign aircraft was to fly in a narrow corridor while making a passage through Indian territory. In fact, Pakistan once complained about India harassing a Pakistani aircraft flying in the corridor thus violating the principles of these zones (Department of Civil Aviation 1960, File number 4-A/15-60). A more important reason for developing air routes was to ensure that every region of the country was connected. India made serious efforts to overcome its dependence on Burma in the Calcutta-Port Blair route which was a result of the colonial charting of the routes as well as the difficulties in navigating new air routes due to adverse topography. Although the service ran at huge losses the logic for continuing it was found in the question of the “national integration” of the country (Department of Civil Aviation 1961, File number 2-A/7-61).

The primary impulse of civil aviation in the plan period was on securitizing and connecting the territory of the nation-state. However, what was also evident during this period was that civil aviation was relatively more open to experiments in some sort of collaboration between state
and private capital. In his letter J.R.D. Tata had mentioned that an airport must be seen as a hotel (Department of Civil Aviation 1947, File number 2-A/28-47). What he meant was that civil aviation tended towards the hospitality industry and as such the management of the industry should be left in the hands of private capital even when the majority shareholder remains the state. Although, his vision of private and state capital collaboration did not materialize, airports in India during the plan period did in some ways acquired characteristics of a hotel that were not necessarily linked to the dynamics of production and consumption of the cities where they were located. It was more a functional and inert space than a dynamic one which was intrinsically linked to the city and at the same time acting on it. This was about to change in the era of liberalization when airports began to be conceived as logistical hubs that, in large measure, were to decide other infrastructures and productive activities of the city. This will become evident in further analysis in the following chapters where a detailed account is given of flyovers that are dedicated to the airport, rise of townships as a result of development of airports, and spaces of production which are linked to the production process of the airport. However, before a large scale transformation of urban space could be engendered through massive infrastructure installations, it was necessary to remove those governmental mechanisms that were perceived as obstructions for the development of civil aviation. The new vision was geared towards efficiency, profit, and making airports into symbols of regenerated world-class cities. How this vision was formed and materialized by the government is related in the next section.

**Bringing Airports from the Fringe to the Center of Urban Space and Economy**

Despite Tata’s insistence of some sort of alliance between the government and private capital for development of civil aviation in post-independent India, the government of India nationalized the airline industry on May 28, 1953 by passing the Air Corporations Act. The
impulse of connectivity between regions through the lens of security was too strong in the Indian state and overrode immediate economic advantages. It was seen to be more important to connect disparate regions through a network of airports, civil aviation routes, and regular flights than concentrating on the economic viability of such routes and the airports. This led to the monopolization of air services in India in the hands of the government. These arrangements changed only when an open sky policy was announced by the Indian government in 1990, initially for a period of three years and then permanently in 1992. The new policy allowed private airline operators to fly on certain routes within India. On March 1, 1994, the Air Corporation Act was repealed, ending the monopoly of the national carrier Air India. This period saw a rush of several private airlines with little success as most of them closed down within a few years of beginning operations. In 1995, the Airport Authority of India (AAI) was formed and assigned the task of developing and renovating the airports in India. The Committee on a Road Map for the Civil Aviation Sector came out with its reports in 2003 and 2004 which suggested the government of India to come up with a comprehensive and cohesive policy for the development of airport infrastructure in India. With this committee, which emphasized private capital led development of airport infrastructure, the new era for airports in India dawned.

It is clear from the committee report that the new direction of the development of the airport would be based on capitalist calculation where profit maximization is the driving force. Even the issues of security and connectivity would be governed through market dynamics. The report makes the observation that the monopoly in aviation and infrastructure had helped “small airports in remote areas also to maintain standards at a minimum acceptable level” but the “centralised decision-making process killed local initiatives and accountability” (The Committee on a Road Map for the Civil Aviation Sector 2004, Part II, 22). The committee wanted that “airports compete among themselves on the strength of performance standards and
each airport tries to maximize revenue from all possible sources” (22). The committee provided a dataset to illustrate the sorry state of affairs with regard to airport infrastructure. It pointed out that “India has over 400 airports out of which Airport Authority of India (AAI) manages 94 airports and 28 civil enclaves in military stations” (The Committee on a Road Map for the Civil Aviation Sector 2003, 38). To emphasize the concentration of power in the hands of AAI, the committee also pointed out that out of more than 400 airports only 62 were in use, that over 40 percent of the passenger traffic was concentrated in two international airports at Delhi and Mumbai, and that only 10 airports were profitable (38). The committee report also gave recommendations to make profitable “smaller uneconomical airports” through private investment (48). It agreed that these airports which were “typically loss-making and serve social obligations of providing nation-wide connectivity, rather than profitable investment opportunities” (48). It suggested that to “improve the efficiency of operations at selected essential but commercially unviable airports, the government can award them to the private sector using minimum subsidy bidding” (48-49). Clearly, the vision of new airport development made capital and security organic in their relationship. This was different from the colonial vision of commerce and security where the emphasis was on the latter and commerce was a matter more of speculation on real estate rather than a continuous process of capital accumulation.

When the domestic airport policy was rolled out by the government of India, it tried to infuse economic feasibility in loss making but strategically important airports by a combination of financial inducement and compulsory regulations on private airlines. According to this regulation, a minimum number of flights were to be operated compulsorily on the strategically important routes on the basis of the number of flights they were operating on premium air routes. In the “Domestic Airport Policy” released by the Ministry of Civil Aviation such airports were classified as “category-II” which includes “North Eastern region, Jammu &
Scheduled operators on the lucrative category-I routes were required to allot 10 percent of the capacity to be deployed on category-II routes. The capacity is calculated by the number of flights taken and passengers carried. Thus, for example, an airline does 10 flights on a Category I route with each flight carrying x number of passengers as its maximum capacity it makes a total capacity of 10x passengers. Therefore, on Category II routes the airline has to make number of flights that would be equivalent to 10 percent of 10x passengers, which is x passengers. This should also be seen as an attempt to not only to achieve connectivity but also an integrated market for flights and routes.

The conception of air routes underwent change too in this new vision of development of airports. While in the colonial period air routes were part of a logistical chain that was meant to serve the empire and in pre-liberalization postcolonial India the securitization of the border and internal territory of the nation-state was uppermost in the minds of planners, contemporary calculation based on capital means that air space has to be freed from the straitjacket of the security paradigm. The Committee on a Road Map for the Civil Aviation Sector urged the government to follow the model of the United States “wherein the entire space is permanently made available for civil aviation and segments of air space are reserved for defence (sic.) on request” (The Committee on a Road Map for the Civil Aviation Sector 2004, Part II, 23). This meant that there was an attempt to bring those routes that were dedicated to defense purposes into the realm of civil aviation making commercial exploitation of air space the prime objective of government policy. The colonial assumption that civil aviation could be used for strengthening the security was transformed and, in the contemporary capital-driven vision of airport infrastructure, the security aspect of aviation became open to capital accumulation.
At the same time when the committee was suggesting the expansion of air routes and capacity of air to accommodate larger traffic and increased productivity, it also made suggestions to gear the infrastructure of the airport in a manner that integrated urban planning, airports, and increased air traffic in one development paradigm. The committee, whose terms of reference were to provide suggestions on ways and means to develop civil aviation in India, went beyond its brief and took account of unplanned urban development and its effect on airports, especially, in the case of Mumbai where it noted that:

Encroachment of vast areas of airport land right under the nose of local airport management also points to the absence of accountability. It is strange that nearly one lakh (100,000) squatters have come to occupy prime land at Mumbai airport in an organised manner and yet not even one person has been held accountable or punished for allowing this to happen. (The Committee on a Road Map for the Civil Aviation Sector 2004, Part II, 22)

The comprehensiveness in the approach meant that civil aviation and development of airports was envisioned by the committee in a manner that would allow airports to be integrated with larger urban planning and processes. The airport was to become a center of urban planning rather than lying on its fringes where it was possible for the marginalized and the poor to seek shelter. In fact, it was possible for the poor to squat on the airport land because as mentioned at the beginning of the chapter, airports were located on the fringes and municipal authorities could be lax in enforcing laws against illegal settlements.

As a further emphasis of the fact that airports and aviation were now seen as central to the plan of the Indian state to develop its logistical capacity, the government drafted comprehensive “Policy Guidelines on Air Freight Station” (Ministry of Civil Aviation 2014). These guidelines were promulgated in 2014 and laid down ambitious plans for making Air Freight Stations
(AFS) in India that would be off-airport common user facilities and could act as a counterpart of Inland Cargo Depots (ICD) for maritime cargo. The policy is firm in its view that:

This initiative of AFS will create an enabling environment for promoting International Air Cargo operations by reaching out to hinterland regions of the country besides de-congesting the congested Air Cargo terminals in some gateway International Airports that face high dwell-time. (Ministry of Civil Aviation 2014, 1)

This should be seen as part of the larger state-led development of infrastructure capacities such as building a network of ports, highways, railways, and inland waterways.

This narrative of air routes and the making of airports and their surrounds is necessary to ascertain and demonstrate with historical material that airports are infrastructure facilities that have fulfilled historically determined roles in the development of capitalism and state in India. This chapter has used archival records to build a narrative of development of airports and air routes in India. The figure of the worker is missing in all these records. There is seldom a reference to workers and the kinds of labor that go into the functioning of the airport. It is curious that in the historical records pertaining to the grand vision of building airports and making air routes the question of labor is absent. However, the figure of the worker emerges forcefully in court judgments, where we can see how workers made claims on airport authorities. These judgements remind us that airports were also spaces where goods and services were produced. I will use these documents extensively in the next chapter to locate airports as sites of production and workers’ struggle. In this chapter, I have sought to establish the historical context in which airports were envisioned as fulfilling both military and commercial objectives, which have given them the distinctive characteristics of heavily securitized sites of production. The securitized nature of airports is instrumental in how labor is governed, as I shall show in subsequent chapters.
The narrative also reveals the ways in which airports develop, sustain, and affect their relationship with the larger city. In the subsequent chapters, I will show the inextricable link between Delhi airport and the city, bringing out the symbiotic relationship between the two. I will also show how Delhi airport has transformed the labor and production processes of those areas of the city where the former’s influence is more pronounced. Delhi airport through its heterogeneous spatial and temporal relationship with urban settlements has created a veritable mesh of actors, landlords, labor contractors, workers, etc. that go into the making of the production processes of the airport. This chapter has provided a historical trajectory that shows civil aviation in general and airports in particular have been governed in a specific way owing to the nature of airports as infrastructural installations enmeshed in military and industrial objectives of state and capital. The technologies that govern the movement of commodities, labor, and consumers at the airport thus require different forms of innovation. These innovations range from the corporate form of ownership of airports, productive activities that are allowed inside the airport, other activities that are essential to the functioning of the airport but takes place simultaneously on different locations, the reorganization of spaces and settlements around the airport, and so on. Thus, it is possible to connect a taxi driver from Bihar, a migrant worker at an obscure workshop, Dalits who have been evicted from their land, and domestic workers who transition to industrial workers since they form part of the same logistical process. At the same time, it is possible to study innovations in governmental mechanisms in relation to these political subjects. The next chapter explores such innovation in governmental mechanisms in relation to the restructuring of the airport and its consequences for labor. I will also show how the expansion of Delhi airport leads to evictions and displacements in the area around the airport, in the process of which new political subjects emerge.
Chapter 2

Three Transformations in the Process of Restructuring Infrastructure and the Emergence of New Political Subjects

As for the question of “the system of government,” this is a matter of how political power is organized, the form in which one social class or another chooses to arrange its apparatus of political power to oppose its enemies and protect itself. There is no state which does not have an appropriate apparatus of political power to represent it.

Mao Tse-Tung (1975)

The Indira Gandhi International Airport, Delhi, was the first instance in India when large-scale infrastructure expansion and construction was undertaken under the PPP model. This model, which is an amalgamation of state entities and private capital, was made operational after a prolonged and contentious process. The PPP model sought to reconcile settled administrative conventions and mutually contradictory laws on aspects of jurisdiction and operational matters of Delhi airport in a manner that resulted in enough legal ambiguity to roll out the ambitious project of restructuring and expansion of the airport. In this chapter I relate the circumstances of this process in which several branches of government contradict and negotiate with each other in the making of DIAL, the entity responsible for running Delhi airport and expanding it in ways, which the latter perceives to be profitable and efficient. The making of DIAL signals the emergence of a new mode of governance which is unusual in that it is an amalgamation of state and capital, an alloy which has its own unique properties distinct from its constituent elements. This new entity comprised of state and capital is an unstable alloy both in its inception and operation. The alloy comes into being as a result of contentious negotiations between several government entities and private capital. These negotiations and the
equilibrium between state and capital are contingent in the sense that the state-capital alloy has to constantly legitimize itself juridically and in the process of governing. This instability is also productive because this state-capital alloy has to constantly innovate in terms of governance and economy, and in its ability to control the movement and productive activities of labor. The experiments in the making of DIAL, or the new state–capital alloy, and operationalizing it have meant that the legal and political subject of the worker has had to undergo a radical change as well.

This chapter gives a detailed account of how DIAL was created and, in the process, teases out the theoretical and political implications of the state–capital alloy, especially with regard to the making of a new political subject. Second, it analyzes how workers and work are reorganized immediately after the operationalization of DIAL when the nature of relationship between workers and DIAL becomes a central juridical and political problem. I will show that once DIAL takes over the management of Delhi airport, it raises anew the problem of the “appropriate government” on which workers can make their political and economic claims. The chapter charts out the complex legal processes through which the older categories of workers were laid off so that new regimes of labor, more suitable for the purposes of the alloy, could be put to work. Third, the chapter will trace how governance by DIAL creates new political subjects. This state–capital alloy devised by the government is marked by dispossession, eviction, and the loss of livelihood. The alloy also redefines the relationship between caste, state, and property. I will provide the case of eviction to bring out these changes.

In this chapter I study trolley retrievers who were affected as a result of making of DIAL and are as such the political subjects who were unmade in the process. I also study in this chapter people who were evicted from Nangal Dewat village as a result of the expansion of the airport and the rehabilitation process that accompanied the eviction. This eviction of the village resulted in redefining the subject position in relation to private property leading to a difficult
transition from owners of collective property to the necessity of defining and proving oneself to be an individual property owner failing which they lose their property rights both as individuals and as part of the collective. These two are the main protagonists in the chapter. In subsequent chapters, I will study workshop employees, women cleaners, and taxi drivers who are each linked to the production processes of the airport and governed through a complex mechanism of formal and informal actors engendered as a result of DIAL and its machinations. First, though, I distinguish the state-capital alloy from other amalgamations of state and capital that have appeared in the past.

This state-capital alloy is distinct from earlier amalgamations of the early modern period in history that, for example, Philip Stern has studied in his work *The Company-State* (2011). Stern studies the practices of East India Company in India from its inception to the Battle of Plassey in 1757 when the Company defeated the Nawab of Bengal and established territorial rights over Bengal. His contention is that the Company in its early practices was “a body politic on its own terms” (6) and that the early modern world was “filled with a variety of corporate bodies politic and hyphenated, hybrid, overlapping, and composite forms of sovereignty” (1). The Company, as a corporation, was not only a “government over its own employees” but “claimed jurisdiction over English trade and traffic in Asia” (1) and in the process collected taxes, provided protection, inflicted punishment, regulated economic, religious, and civic life, conducted diplomacy, waged wars, and made claims to jurisdiction over land and sea (1-6). In the enterprise of empire, such corporate bodies politic were in both “alliance and tension with the national state and its claims to coherent and central power” (6). In fact, Stern goes on to demonstrate that:

The history of modern state formation was a history of one form of corporation, the nation-state, triumphing over its rivals, both within and without its borders, from the
East India Company to pirates, mercenaries, composite monarchies, municipal corporations, monasteries, even the church. (213)

Importantly, Stern traces the fall of the East India Company through “evolving definitions of public and private, and the growing consensus that the economy were ‘fields of intervention’ for the polity rather than sites of government in their own right” (213).

The state-capital alloy in the contemporary era, of which public-private partnership is one form, is paradigmatically different from the corporate bodies politic that Stern analyzes through his study of East India Company. The two entities are different in terms of both their historical situatedness as well as their internal political and economic dynamics. The corporate body politic of the chartered company emerged in the early modern period when capitalism and empire were in their early stages of formation and when nation-state had not emerged as the decisive form of political control and organization. The state-capital alloy, such as DIAL, emerged after a long period of decolonization when the consensus among the postcolonial elite centered on the process of nation building through planned state capitalism and the welfare state. The alloy was necessitated in the process of the restructuring of social and economic relationships after the period of liberalization undertaken in India in the 1990s.

The state-capital alloy that I study in this chapter does not signal a mere return of the corporate body politic in contemporary era. In the case of DIAL, it has to operate within the confines of the territorial nation-state even though it might comprise of elements that are multinational or even transnational entities. There is a distinct political impulse that motivates the creation of such a state-capital alloy. The desire of the state is to emerge as a regulatory entity shedding its earlier form of command and control state. In order to do so, the state needs not only to renegotiate the terms of engagement with private capital but also to refashion its relationship with its political subjects: the citizens. The state-capital alloy performs this dual function. In
the case of corporate body politic like that of East India Company, the power over subjects was obtained through conquest, both territorial and political. In the case of the contemporary state-capital alloy, at least in the case of DIAL, the borders of the nation-state have not been violated or threatened (not at this stage, in any case). Certainly, the territory of the city has been transformed and refashioned by the development of the Delhi airport under DIAL, but there is no evidence yet that DIAL through its management and governance of the Delhi airport has been able to create an enclave of territorial power for itself that is exclusive of the territorial power of the Indian nation-state. Instead, what the making of DIAL has achieved is the creation of a mechanism where it is possible to appropriate land, evict people, restructure the labor market, refashion labor processes and geographies, and govern them with a high degree of autonomy. In later chapters when I study a workshop, women cleaners, and taxi drivers who are implicated in the production processes of Delhi airport, I will argue that the logistical apparatus of the airport creates a heterogeneous relationship with different kinds of labor based on definite spatial and temporal relationships. DIAL in managing the airport and its logistical apparatus has created an array of discrete yet related spaces of production and governance, which make the airport different from a zone or an enclave. Instead, I will demonstrate that Delhi airport creates a mesh of relationships between urban spaces, workers, labor contractors, and several other political and economic actors.

In the analysis of this state-capital alloy, I find myself close to the concept of “sovereign machine of governmentality” that Sandro Mezzadra and Brett Neilson formulate in the following manner:

It is important to stress that the sovereignty we are talking about is at the same time immanent to governmentality—because it tends to be subjected to its rationality and transcendent to its devices—because it retains its autonomy, otherwise it would not
possible for it to act as a supplement of governmentality. It is this paradoxical and “monstrous” apparatus that we call the *sovereign machine of governmentality*. (2013, 203-4; emphasis original)

Mezzadra and Neilson add that “among the most important actors that now produce sovereign effects” are “capitalist actors” (203). To bring out the distinctiveness of DIAL from capitalist actors who produce sovereign effects, I employ the concept of state-capital alloy instead of conceptualizing this entity as an illustrative example of the “sovereign machine of governmentality.” DIAL, as the history of its evolution will reveal below, is not simply or purely a private “capitalist actor” in the same way that it is not akin to the corporate body politic of a chartered company. Also, unlike a chartered company that could not hold out against the evolving duality of public and private and had to cede its governmental function to the rising power of the nation-state, the alloy by its nature is compatible with the friction between public and private, state and capital, citizens and subjects. Frictions do not cease to exist but these frictions are played out according to the flexible rules of the game already decided upon. I provide instances of these frictions in the making of DIAL and the manner in which the rules were codified in a contentious negotiation between several government and private actors. This is especially true in the case of formation of consortia that bid for the management of Delhi airport, interventions by bureaucrats, and legal experts who were instrumental in deciding how much autonomy the new state-capital alloy will have in running the airport and governing people in the area under its control.

The most crucial aspect of the state-capital alloy that makes it distinct from the early modern corporate body politic, the colonial government, or the sovereign machine of governmentality is the kind of political subjects it produces and the manner in which they are governed. In order to capture the production and governance of these political subjects it is necessary to go beyond
the analytical framework of exclusion and inclusion or rights-bearing citizens. In this thesis, several such political subjects are studied that are enmeshed in this complex relationship of DIAL, airport, and work. But first I will analyze the making of DIAL in the next section.

First Transformation: The Turbulent History of DIAL

In this section, I will analyze the making of DIAL as a state-capital alloy and point out the reasons for the unstable nature of this alloy. I will also show that the unstable nature of this alloy leads to the necessity of constantly innovating its mode of operation in relation to the subjects it produces and governs as well as other forms of power especially juridical. Since the Indira Gandhi International Airport was the first venture under the PPP model, it provides a unique opportunity to explore the transition of the state from a command and control position to the regulatory situation it wanted to achieve. In my analysis of the various tussles, disagreements, and compromises between private and public actors, I dissect the process of formation of DIAL and show how the transition to a regulatory state was achieved. The analysis demonstrates how different state authorities negotiate with each other as well as how some authorities are created in order to streamline the process in which the state decides to act as a capitalist. Finally, the analysis will show how the Planning Commission, which was the symbol of the state in the welfare regime, intervenes and slowly disappears with the emergence of the state-capital alloy. ¹

The route to the adoption of PPP as a model for the development of Delhi airport and subsequently Mumbai airport was an uneven one. In fact, it was not even a preferred model of development. According to the report of the Comptroller and Auditor General of India (CAG),

¹ The Planning Commission was established in 1950. Its main function was to prepare the Five Year Plans and lay down the direction of economic development. It was dismantled in 2014 and in its place NITI Aayog was established.
“in January 2000 the cabinet approved the restructuring of airports through the long term leasing route” (2012, v). It was only in September 2003 that the cabinet approved the restructuring of Delhi and Mumbai airports through the joint venture mode. The CAG report observes:

In pursuance of this decision, after selection of the JV partner, AAI (Airport Authority of India) incorporated a subsidiary company viz. M/S Delhi International Airport Pvt. Ltd (DIAL), and subsequently sold 74% of the shares of DIAL to the JV consortium. On 4 April 2006, in the capacity of the state promoter, AAI signed an Operation Management Development Agreement (OMDA) with DIAL. The AAI handed over IGI airport, Delhi to DIAL on ‘as is where is’ basis and granted DIAL the exclusive right to undertake functions of operations, maintenance, development, design, construction, modernization, finance and management of the Airport. On 26 April 2006 Government of India signed another agreement with DIAL viz State Support Agreement (SSA). The agreement laid down conditions and nature of support to be provided by Government of India, along with the mutual responsibilities and obligations between Government and DIAL. (v)

A further complication occurred with the establishment of an independent Airport Economic Regulatory Authority (AERA). When the Operation Management Development Agreement (OMDA) and State Support Agreement (SSA) were being contemplated, there was no independent regulator in place. The AERA Act was passed in December 2008 and came into force on January 1, 2009. The CAG report noted conflicts between the provisions in OMDA and SSA on the one hand and the AERA Act on the other, “which will have long term repercussions on the Regulator’s role on tariff fixation in Delhi and Mumbai airports” (vi). The conflict is related to the definitions of aeronautical and non-aeronautical services. The CAG
report gives the example of “Ground Handling Service,” which according to OMDA is a non-aeronautical service while it is an aeronautical service according to the AERA Act. AERA notes that services like ground handling and cargo handling are less capital intensive and more profitable. The CAG observes that “treatment of services such as Ground handling, Cargo handling or parking as non-aeronautical services in OMDA provided undue financial advantage to DIAL, as in terms of SSA, the Targeted Revenue for the purpose of tariff fixation takes into account only 30 per cent of the revenue generated from non-aeronautical services” (vii). The contradictory definitions of aeronautical and non-aeronautical services pointed out by the CAG report seems to indicate that OMDA is *mala fide* against the provisions of the AERA Act. However, read another way, it would appear that OMDA sought to modify the AERA Act by way of interpretation rather than clash with it. OMDA, which is also a legal document, sought to recast the definitions of aeronautical and non-aeronautical services, and therefore a legal space was opened to negotiate between the two legal instruments of the state. The question that confronted OMDA was not to override or pervert the provisions of the AERA Act but to suitably incorporate it in the new definitions, which also meant more profits accruing to DIAL. The Ministry of Civil Aviation finally issued a directive in 2012 that cargo and ground handling services were to be considered non-aeronautical services.

The CAG report was used in the Indian Parliament by the Opposition as damning evidence of corruption in the making of DIAL but it was onerous to legally prove that anything illegal was afoot in the process. The inability to clearly demarcate between what is legal and illegal or legitimate and corrupt activities by state and private actors in the making of the state-capital alloy can be seen as an instance of what Keller Easterling has termed *extrastatecraft*—“a portmanteau describing the often undisclosed activities outside of, in addition to, and sometimes even in partnership with statecraft” (2016, 15). However, the “extrastatecraft” underlying the making of DIAL and governing Delhi airport was not creating a zone free from
the usual practices of statecraft and influence of the state. Instead, the problem confronting the state was how to design and create hierarchical temporal and spatial practices so that capital accumulation could be maximized with suitable and “extra” concessions without ceding the power of the state to re-caliber the edifice of DIAL in the future if such a need is felt. In fact, Delhi airport in this sense is created as a space where DIAL has a high degree of autonomy to govern the airport’s functioning and regulate the movement of goods and people within its influence instead of creating a free zone. Extending the analogy, it can be said that the state–capital alloy is a mechanism of autonomous government rather than a “state-free” zone of management.

The difference between aeronautical and non-aeronautical services, apart from the juridical problem of the distribution of revenue, significantly impacts the constitution of the labor force and production processes at an airport. It is much easier to informalize the labor process and labor force in non-aeronautical services than it is in aeronautical services. This is so because once an economic activity is classified as an aeronautical service it becomes much more restrictive as the work comes under heavy security and surveillance technology with stringent laws governing it, allowing little space for informal interactions. This is clear if one notes that aeronautical services include (a) navigation, surveillance, and supportive communication, (b) landing, housing, and parking of aircraft, and (c) supplying fuel to aircraft, among other sensitive and critical activities. Furthermore, work such as ground handling and cargo handling, which are part of non-aeronautical services, have had a long relationship with the villages surrounding Delhi airport. This has resulted in a peculiar economic geography of this part of Delhi with some villages specializing in providing specific services to the airport over the years. For example, the village of Nangal Dewat, which was displaced as part of the airport expansion, was a major supplier of labor for ground and cargo handling at Delhi airport before DIAL came into existence. The process of eviction and the resulting livelihood problem are
discussed later in this chapter. Similarly, Mehram Nagar, which is close to the domestic terminal of the airport, specialized in supplying labor for the movement of cargo at the airport and providing taxi services. The changing economic relationship between Mehram Nagar, Delhi airport as it evolved, and the taxi industry will be the subject of investigation in chapter 5. Non-aeronautical services in some ways expand the operation of the airport outside its boundaries. Through its economic activities, the airport thus becomes embedded in the larger urban economic process, bringing labor processes and labor forces into its fold and governing them through unequal and heterogeneous relationships in terms of the time and space of the airport. This results in a unique structure of labor activity in and around the airport, which is discussed at greater length in chapters 4 and 5. An important point here is that the autonomy of government sought by the state–capital alloy profoundly alters modes of capital accumulation and labor processes. This is achieved not by creating free zones but rather by introducing a hierarchy of autonomous spaces for the production of goods and services, calibrated through temporal and spatial relationships with an infrastructural installment and its accompanying logistical practices. In subsequent chapters where I study a workshop, women cleaners, and taxi drivers I will show how these heterogeneous relations of time and space with the airport create distinct forms of labor and labor processes and also effect the manner in which spaces in the vicinity of the airport are governed.

Before coming back to the issue of OMDA, PPP, and the discussion it generated, it is necessary to examine other experiences in PPP, both in India and internationally, so that I can tease out the continuities in the formation of DIAL as well as its specificities. In her study on the initial development of PPP in India, Amrita Datta notes that they “have been emerging out of an unstructured process almost as a trial and error” (2009, 74). The ambiguity in the legal definition of PPP has not escaped scholars and they find this lack of proper definition to be part of the legal tradition. In the case of the European Union (EU) Christina Tvarno has pointed out
that if a legal definition was set up “it would open itself up to a long list of projects that would not be covered by this definition and the EC public procurement rules” (2010, 219). This should not be seen as an attempt to escape or preclude law and jurisprudence but to make the legal processes contingent, to open a space of and for perpetual conflict and negotiation; it is a call for constant legal and political innovations. Tvarno also points to two kinds of PPP: “PPPs of a purely contractual nature and PPPs of an institutional nature, in which the public and private parties establish a joint public limited company” (219). It is crucial to discuss PPPs of an institutional nature—which is what DIAL is—as this provides important insights about the transformation of state and capital.

Scholars are almost unanimous in suggesting that the PPP model is used to bring the logic and discipline of the market into the functioning of public bodies. Roger Wettenhall suggests that “public-private mixing has existed since the beginnings of organized government” (2010, 17). It “retreated as nation states became stronger in the 1700s and 1800s…but it has flourished again…as the evolution of governance systems has required…they share significant power and influence with market institutions and civil society” (17). He sees the evolution of PPP as an admission by the state that it no longer has the monopoly of governance. Tracing the intellectual history of PPP, Tony Bovaird cites several works and interpretations of the model. In one interpretation PPP is seen as “a mode of governance through which the state attempts to restructure itself and, indirectly, class relations, by transforming the social relations of service and infrastructure provision and subordinating them to the discipline of the market” (2010, 53). Yet others, according to Bovaird, see PPP as a method of coordinating the forces of capitalist development. Matthew Flinders (2010) makes the similar argument that the logic of PPPs is based on accepting the supremacy of market relationships and focusing on efficiency and output as the primary indicators of performance. Flinders, however, makes the more vital point
that the logic of PPPs leads to the possibility of interpreting and modeling the public as consumers or customers in a political marketplace rather than as citizens.

The refrain in all these studies is that PPPs are combinations of state and capital in various measures but that state and capital retain their respective characteristics while competing or collaborating with each other in a marketplace or a similarly simulated place in the case of monopolies. The point I wish to reiterate is that while it is true that PPP is one of the modes in which the state restructures itself vis-à-vis capital and labor, this does not automatically mean that the state enters into competition with capital and has to cede its function to the latter. Consequently, it is also not a corollary of PPP that capital acquires the nature of the state. What can be said of the current transformation is that instead of competing, collaborating, or facilitating with each other, state and capital are in the process of fusing together in a manner that allows them to encompass the processes of accumulation and government in one distinct legal form. This is not an assemblage of distinct categories or simply a network but an altogether different entity which produces new economic and political processes – an entity I call the state–capital alloy. It is evident that the legal ambiguities which came up during the bidding process for Delhi and Mumbai airports were also an attempt to give form to the state–capital alloy. The joint venture that finally emerged as DIAL is at once a profit-making company and a tool of government. These two aspects form one distinct whole and are not discrete. However, one must not lose sight of the contentious processes that underlined such a development and which indicates the unstable structure of this composition. In these initial fault lines lay the geography of Delhi airport as it exists now and continuously develops.

The bidding process for Delhi and Mumbai airports was a controversial one that exposed the limits of the rule of experts. It also allowed the Planning Commission to reinvent and reinforce itself momentarily in the new regime that was being forged. Two studies by the Planning
Commission, conducted by Prateek Kuhad (2010) and Divya Chawla (2010), provide details of the entire bidding process. To oversee and monitor the bidding and award process, an Empowered Group of Ministers (EGoM) was constituted. An Inter-Ministerial Group (IMG) of officers was set up as well to assist the EGoM. ABN Amro was appointed as the financial consultant and transaction advisor and expression of interest was invited on February 17, 2004. However, in May 2004 there was a change in the central government and the EGoM was reconstituted. Air Plan, Australia, was appointed the Global Technical Advisor (GTA) and Amarchand & Mangaldas & Suresh A. Shroff & Company (AMSS) was appointed as the legal consultant. The bid documents, including the Lease Deed (LD), the Shareholders’ Agreement (SHA), the State Support Agreement (SSA), the State Government Support Agreement (SGSA), the Substitution Agreement (SA), and the proposed Operation, Management and Development Agreement (OMDA) were issued to the bidders.

A dissenting voice from the Planning Commission on the provisions of OMDA regarding real estate development at the Delhi airport would halt the bidding process, send it to the courts, and irreversibly change the nature of the airport city envisaged for Delhi. OMDA contained provisions that allowed the use of 230 acres and 190 acres of land at the Delhi and Mumbai airports respectively for commercial purposes such as shopping malls, office complexes, commercial plazas, IT parks, etc. The representative of the Planning Commission maintained that the law did not allow airport land to be used for commercial purposes unconnected to airports. The issue was referred first to the Solicitor General of India (SGI) whose opinion was thought to be not free from ambiguity as the Planning Commission and the Ministry of Civil Aviation differed in their interpretations of the SGI’s opinion. The issue was then referred to the Attorney General of India (AGI) who agreed with the objection of the Planning Commission; the EGoM endorsed the advice of the AGI.
The ambiguity was a result of the provisions of Schedule 19 of the draft OMDA on which the SGI had given his advice, which was interpreted differently by the Planning Commission and the Ministry of Civil Aviation. The Planning Commission interpreted the advice to mean that commercial activities independent of the airport would have to be excluded while the Ministry of Civil Aviation took it to mean that commercial exploitation of unutilized and under-utilized land for generating revenues in the best commercial interests of AAI was permissible. Schedule 19 was then “intentionally omitted” from OMDA. The bid for Delhi airport finally went to the consortium composed of GMR, AAI, Fraport and Malaysia Airport Holdings Berhad. This tussle over the legal nuances of OMDA decisively changed the way in which Aerocity, the new hub for hotels, conference halls, convention centers, etc., finally developed. It must also be added here that the proposed Aerocity, although part of the Delhi airport master plan, was opposed by the Bureau of Civil Aviation Security (BCAS), the Delhi Police, and other security agencies on grounds of security. Initially, the stand taken by the AGI and Planning Commission meant that the non-aeronautical commercial service became fragmented and did not appear commercially very attractive to the developers interested in developing the land into a self-contained airport city. For example, according to Schedule 6 of OMDA the business center and the conference centers were to be part of the terminal complex and the hotel and motels were not. It required years of political maneuvering at the legislative, executive, and bureaucratic levels to get the desired outcome. Even after this prolonged process only 45 acres were allotted for the hospitality and commercial district of the Delhi airport. The new joint venture of Tata Sons and Singapore Airlines called Vistara made Delhi airport its hub in 2015. It is likely that another complex set of negotiations within the state–capital alloy—over exploitation of the available land for real estate and its incorporation into the ambit of the alloy—will occur, possibly when the control period of DIAL over Delhi airport ends in 2019.
As demonstrated above in the discussion of the conflict between OMDA, the AERA Act, and the CAG report, an unstructured process was most desirable in the making of DIAL because such a process created enough ambiguity for the state–capital alloy to lodge itself in the process of accumulation and governance. The new art of government involved the construction of legal ambiguity, conflict, and an ever malleable definition the state–capital alloy. In nearly one and a half decades of the evolution of PPPs as one form of the state–capital alloy it remains the most favorable route for infrastructure development in India. This is due to the fact that the alloy is intrinsically unstable and requires constant innovation but is also inherently capable of modifying itself and incorporating in itself the twin goals of capital accumulation and government. It is a measure of the success of this model that the erstwhile Planning Commission has now been disbanded in the favor of NITI Aayog, a body which now has only an advisory capacity instead of the power of allocation of funds that was held by the Planning Commission. The formation of NITI Aayog has changed the rules of contention between several state and private actors that was evident in the making of the OMDA for the creation of DIAL. As a policy think tank, NITI Aayog is a body that recommends rather than prescribes as was the case with the Planning Commission. It will be interesting to investigate the manner in which NITI Aayog is affecting recent large-scale infrastructure projects such as development of ports where the emphasis is still on some combination of state and private actors. I now investigate the repercussions of DIAL on the workers that come under its ambit.

Second Transformation: The Problem of “Appropriate Government” for Workers

The repercussions of the new state–capital alloy for labor at the Indira Gandhi International Airport were first visible in the case related to trolley retriever workers. I rely on court judgments to analyze the circumstances in which trolley retrievers, who were working for the Delhi airport before DIAL took over the management, were fired and not absorbed by the new
management. I had to use this source to trace the workers because it was not possible for me to trace them otherwise and conduct interviews with them as several years had passed since they were fired. Through close reading of the judgments passed by several courts I try to give a sense of the material conditions under which these workers operated. In doing so, I retrieve the struggle that the workers conducted both against their erstwhile employers and DIAL. I show how their struggle made the courts confront the question of what constitutes perennial work essential to the functioning of the airport and what could be considered peripheral and casual. Herein lies the analytical value of mining the archive to foreground the restructuring of labor which was initiated by the arrival of DIAL.

There is a background to the restructuring of labor at the Delhi airport which needs to be recounted and which gives an indication that there was a definite shift in the governance of labor after the liberalization of the Indian economy in the early 1990s. With the advent of liberalization, there were already issues of re-forming the labor market in sync with the new vision of economic development. The first landmark judgment from the Supreme Court of India relating to the problem of restructuring of labor came in what is popularly known as the SAIL (Steel Authority of India Limited) case. The case related to the absorption of contract labor in SAIL, which was a landmark judgment for cases relating to labor rights in India because it quashed the 1976 notification of the central government that prohibited the use of contract labor for jobs like cleaning or guarding buildings by state-owned companies. The issue had come up because around 350 contract laborers who worked at SAIL’s stockyards demanded absorption with the “principal employer.” The court in its judgment said that on abolition of the contract system the workers had no right to be absorbed automatically. Significantly, the judgment also made the point that it was the industrial adjudicator that would

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2 The Steel Authority of India Limited (SAIL) is a state-owned steel company. The case is Steel Authority of India Ltd. vs. National Union Water Front, August 30, 2001.
decide if a contract was genuine or a camouflage to deprive the workers of the benefits they were entitled to. Another interesting aspect of the case was the debate around who was the “appropriate government” in the dispute according to the terms of the Contract Labor (Regulation and Abolition) Act, 1970 (CLRAA): the central government or the state government. Since SAIL was a state-owned company the question of “appropriate government” was not as complicated as it would be with DIAL, a PPP. This particular fact would have important repercussions for how labor, contract, and labor rights would come to be defined, as I argue below.

Workers employed as trolley retrievers at Delhi airport were under a contracting company called TDI International Private Limited (hereafter TDI). They were employed in 1992. The contract of the company expired in 2003 and a new contractor, Sindhu Holdings, was awarded the contract. The workers had already approached the Central Advisory Contract Labor Board (CACLB) in 1999 for absorption as regular employees. The CACLB, in their order, declined to abolish the contract labor system at Delhi airport and the Government of India passed an order to that effect in 2002. The workers then approached the High Court. It is interesting that the workers did not approach the court as a union but as individual litigants. Although I do not have a direct testimony of workers involved in the case, I can surmise that the union was formed in the course of the court case when the workers felt the need to unionize to protect their interests. As contract workers it would have been difficult to form a union recognized by the employers which is evident in contemporary workers’ struggles. Also, I will show in chapter 3, the violence inflicted by the employers that is explicit and implicit in the unionization of workers who work under informal conditions. The case in question was Raj Kumar and Others vs. Union of India and Others, the judgment on which was passed on November 5, 2003, by the Delhi High Court.
It is noteworthy that in this particular judgment the number of workers was said to be 127 (115 trolley retriever and 12 supervisors). In the judgment of 2006 (Indira Gandhi Airport TDI vs. Union of India and Others on November 28, 2006) of the High Court, which we will come to later, the number of workers was given as “around 136.” This was when the workers filed the writ petition as a union. Later, during the hearing in the Supreme Court the number of workers was finalized and fixed at 136. The discrepancy in the number of workers points to the difficulty, almost impossibility, of enumerating workers under the contract system. The lacuna is inherent in the way CLRAA—which is the source of identifying the number of contract workers employed in an establishment—has been formulated, with the onus of providing information on workers lying with the contractor. In fact, as the Supreme Court judgment notes, CLRAA “does not create any machinery or forum for the adjudication of any dispute arising between the contract labor and the principal employer of the contractor.” What the Supreme Court judgment fails to mention is that there is no machinery or procedure for the adjudication of disputes between a contractor and the workers. Their relationship within this law remains undefined and out of the purview of any legal mechanism. This is the space which creates informality in the relationship between a worker and a contractor and is a source of power of the latter over the former. There are only two legal actors and subjects—the principal employer and the contractor—while the workers remain undefined or inadequately defined. The impulse and the desire of the state to accurately fix the number of its subjects can be traced back to examples such as this.

To continue with the story of the first writ petition: it was filed against the 1999 order of the CACLB and the 2002 order of the Government of India declining to abolish the contract labor system at Delhi Airport. The 2003 Delhi High Court judgment notes that the reason provided by the CACLB for the decision is that trolley retrieval is not “essential or incidental” to the operation of the AAI. The most interesting aspect of the CACLB decision is how it comes up
with what is “essential or incidental.” The CACLB makes a comparison of trolley retrieval with the passenger baggage conveyor system. The board considers the latter an operation that is perennial, one to which passengers cannot be denied access, but more importantly one that is “within the security zone.” Thus the workers have to submit to a definite regime of security to be identified as a worker. In a sense, what the CACLB was saying is that securitized work is “essential” work. It is the calibrated nature of security that defines work and hence the worker. This also meant that workers at an airport could be classified as different from workers at establishments like standard factories and that security issues are inherent in the nature of the work to be performed at an airport. In subsequent chapters where the issue of new forms of labor is investigated, it will become clear that the security component of the work has now been redesigned and recalibrated by a complex system of informalization of production and graded levels of security at the airport. What is important to note here is that such thinking on work and security was not evident in the thinking of the judicial mind at this stage of development of Delhi airport. At any rate, the Government of India endorsed the decision of the CACLB without giving any specific reason, the judgment noted. The court quashed the order of the CACLB and the Government of India and directed the former to reconsider its decision. In 2004, the central government issued a notification abolishing the contract labor system.

The AAI approached the High Court against this order. The court in 2005 directed the AAI to appear before a High Powered Committee that was to consider the grievance of the parties and pass an appropriate order recommending whether the AAI was permitted to challenge the notification or not. The committee noted that the restructuring of Delhi airport was under active consideration of the Government of India. Interestingly, in the case *Indira Gandhi Airport TDI vs. Union of India and Others*, DIAL responded in court that it was “neither a State nor the instrumentality of State and was not amenable to writ jurisdiction. The constitution of joint venture would show that the government shares in the joint venture were only 26% and rest of
the shares were held by either Indian Companies or foreign companies.” Clearly, DIAL was trying to make the case that it was a corporate body autonomous of the legal regime that governed state-owned enterprises. This was what led to the question of the “appropriate government.” According to DIAL, by virtue of being a corporate body it was free of any labor laws which were incumbent on it as a workplace. The 2006 judgment noted that CLRAA was equally applicable to all kinds of “undertakings, establishments/industries whether in the public, private or public/private ownership or management.” It should also be noted that the workers’ union had claimed the contract was a sham. However, the court decided that the workers’ claim about the contract did not hold and dismissed the petition of the union on the grounds that the airport had been privatized and a new notification would have to be issued by the “appropriate government.” The High Court in its decision did not make a difference between a corporate body that comes into being through outright privatization and one that emerges through the mode of PPP. There is no law that the High Court could have adduced to differentiate between the two and it had to rely on interpretations mainly emanating from the SAIL judgment. However, the higher division of the court tackled this question and finally the Supreme Court made observations specifying that PPP is not merely a form of privatization.

A higher bench of the High Court in the Indira Gandhi Airport TDI vs. Union of India and Others on December 18, 2009, came up with a twofold formulation of the question: first, whether the central government was indeed the “appropriate government” for DIAL and second, whether the workers engaged by the contractors of DIAL could be said to be contract laborers. Clearly, in this formulation the question of the nature of DIAL (PPP) and the question of labor were not separate issues. The nature of DIAL would substantially define or should define the nature of “contract labor.” The central government submitted to the court that DIAL was operating under its authority. The court observed that the authority of DIAL was “not merely by the OMDA but by statute” and that OMDA makes an express reference to the AAI
Act; it is the latter through which the functions and powers of DIAL can be traced. Thus, in the last analysis, DIAL or a PPP does come under the jurisdiction and control of the legal state. Hence the “appropriate government” is the Government of India. DIAL contended that it was “not a mere contractor or agent of AAI” and that it was carrying on “its own industry in its own establishment.” The court observed that the establishment “is that of the AAI which has been leased out to the DIAL.” This has implications for the airport as the legal object. As the court observed, a PPP through OMDA “not only transfers the powers and functions but also the corresponding statutory obligations of the AAI.”

The 2006 judgment had rejected DIAL’s contention with regard to trolley retrievers, observing that if “every time a fresh agreement is entered into, the entire process of getting a notification issued by the appropriate government in relation to the same work … would defeat the rights of the workmen which are meant to be protected by the CLRAA.” This was so precisely because PPP is as much a transfer of obligations as it is of power. It ensures that the state-capital alloy is, in fact, a fusion and not simply a conditional alliance between state as one capitalist and private capital as another, which are then free to operate distinctively when in operation as a PPP. As long as a given form of state-capital alloy is in operation it has to function as a composite unit.

The precise nature of PPP and the mechanism of this new form of power were materially conceptualized in the judgment delivered by the Supreme Court in the case of Delhi International Airport Limited vs. Union of India and Others on September 15, 2011. The court observed that “DIAL only has incomplete control” over the airport and that only a “portion” of AAI’s work had been leased to it (emphasis added). The Supreme Court judgment also defined the nature of the work of trolley retrieving. The question was if the trolley retrieval services performed by DIAL were done for the “transport by air of persons, mail or any other thing.”
The Supreme Court observed that “trolleys at airports relate to air transportation—just as they relate to a single or a series of flights.” This meant that the laws are not restricted in their application only to “pilots, stewardesses and others engaged in the actual, physical transport of people and objects.” The judgment said that the workers were liable to be regularized as regular employees by DIAL but since that would not be possible in the current circumstances DIAL was to pay INR 500,000 as compensation to each worker of TDI within three months of the judgment, failing which DIAL would have to incur interest of 12 per cent per month.

The interesting observation made by the court was regarding the nature of PPP. The final judgment made it clear that a PPP would not be equivalent to privatization and complete autonomy of private capital even if it was the majority stakeholder. The Supreme Court’s definition of a PPP as “incomplete” and portioned is slightly misleading and needs to be read against the grain. In the judgment DIAL is seen as a single entity with AAI as one of the constituents. It is this organic embedding of the state entity (AAI) that gives up its discrete identity which is what makes the PPP unique and an alloy of state and capital. It is this fusion which allows the central government to be the “appropriate government.” An independent AAI, in my view, would have led to a different outcome. It would have created distinct spaces of authorities and the workers’ petitions would have been directed at AAI while DIAL would have functioned as a totally distinct unit that would have completely escaped the legal net. Thus the state-capital alloy is positioned as an autonomous entity that constantly negotiates, counters, and sometimes overrides the separate interests of the state and capital. In the next section, the study of eviction and demolition of a village highlights the profound changes that are wrought by the functioning of a state-capital alloy on notions of caste and citizenship.
Third Transformation: Land Acquisition, Caste, and Problems of Granting Individual Property Rights

Until 2007, Nangal Dewat was a village that was situated inside the boundaries of Delhi airport adjacent to Hotel Centaur. This village is one of several villages that surround Delhi airport, chief amongst them Mahipalpur, Palam, Najafgarh, Mehram Nagar, and Kapashera. The expansion of Delhi airport and the emergence of Dwarka as a township have decisively changed the nature of these villages.\footnote{Dwarka is a township in South West Delhi close to the Indira Gandhi International Airport. This township was developed for cooperative housing societies and according to the latest census is the fastest growing region of Delhi. The Delhi Development Authority (DDA) is now planning to develop a “smart sub-city” project in Dwarka. The second diplomatic enclave is also being developed here and the Airport Express line now connects it with the airport.} Mahipalpur is now a long stretch of neon-lit glitzy hotels and warehouses; Mehram Nagar is economically dependent on the Delhi airport, providing transport services; and other villages like Rangpuri Pahari have emerged as major sources of labor supply to the airport. Mehram Nagar and Rangpuri Pahari will be studied in detail in chapters 3 and 5 respectively. The tale of Nangal Dewat, unlike that of Mahipalpur or Mehram Nagar, is one of demolition to the extent that the village has been completely displaced and the “original” site now exists only in the memory of its erstwhile inhabitants. However, the graves of some village ancestors were still standing during my fieldwork in 2013. The village, by the time, had already been displaced for six years and was relocated near Rangpuri Pahari on land owned by AAI. This relocated village was also called Nangal Dewat to preserve the memory of the lost village—a privilege not every displaced village can claim. Within this tale of displacement and rehabilitation lies a complex struggle for rights and notions of citizenship that gives an insight into the changing nature of the relationship that the state wants to establish with its subjects.

In her book *Citizenship and its Discontents*, Niraja Jayal has pointed out that the postcolonial Indian state provided “group-differentiated citizenship” where it was possible that the
“relationship of the citizen to the state” was “mediated by community” (2013, 200). This relationship between the state and its citizens was not in consonance with the “liberal, homogenizing, difference-blind accounts of citizenship” based on the individual (201). There is a distinct process of transformation in the citizen-state relationship that is underway. Infrastructure and technology has allowed the state to deploy methods of government which enable it to triangulate the individual in a manner that strips away the markers and mediation of community. This has been achieved through various measures, the important ones for this chapter being digitalization of land records in a bid to correspond the property with the owners.

The mediation through community between the state and the citizen is now being replaced, to an extent, by repositioning the citizen as an individually identifiable “beneficiary.” The other, more decisive, reason why the state can now undergo this transformation is the establishment of the state–capital alloy as an entity of government; this has made it possible for variegated forms of governance with multiple desired outcomes. In the case of Nangal Dewat, the process of land acquisition which was not executed for almost 50 years was accelerated once DIAL was formed; it gave impetus to the process of eviction through judicial measures and left the question of rehabilitation of evictees with purely state institutions such as the AAI, the municipal corporation, etc. The history of acquisition of Nangal Dewat is also the history of creating new political subjects through dispossession, by making them mobile. That history is recounted here.

The Delhi High Court’s judgment in the case of the Union of India vs. Ramkishan, which was delivered on February 23, 1979, provides a detailed history of the process of land acquisition in Nangal Dewat. The village was acquired in its entirety by issuing a notification under the Land Acquisition Act, 1894, on December 3, 1971. However, the court pointed out this was not the first case of land acquisition in Nangal Dewat; land had been acquired before for the purpose of development of the Delhi airport a total of four times. The first such acquisition, of
6 bighas, took place on May 27, 1961. The compensation awarded in this case was INR 3,000 per bigha. The second acquisition was on September 26, 1964, when 1,674 bighas were acquired and the compensation was pegged at INR 5,350 per bigha. This amount was challenged in court by people who lost their land but the court affirmed the sum in its judgment. The third acquisition occurred on February 12, 1965; 150 bighas of land were acquired and the compensation given was INR 5,350 per bigha. On the fourth acquisition, on December 6, 1966, 255 bighas of land were acquired and the compensation was given at the rate of INR 6,600 per bigha. This was challenged too but again dismissed by the court. In the final acquisition in 1971, about 5,881 bighas of land were acquired and the entire village was appropriated. This time the compensation was based on the classification of land type. The land was divided into four categories: blocks A, B, C, and D. The basis of this classification was favorable location from the main roads running around the village. Thus, Block A was the land that abutted the main Delhi–Gurgaon road and a road in the village. Block B comprised land along the road inside the village leading to a neighbouring village called Bijwasan. Block D consisted of land known as “bhatta” land, that is, land used for brick kilns. The remaining land was classified under Block C. The compensation announced was INR 6,600 per bigha, INR 6,000 per bigha, INR 5,500 per bigha, and INR 1,800 per bigha for blocks A, B, C, and D respectively. Later, the distinction between blocks B and C was removed and a uniform rate of INR 10,000 per bigha was awarded.

It is evident that land acquisition in Nangal Dewat was a continuous process and at each instance compensation was awarded to people who were affected by the acquisition even though providing compensation was not the state’s obligation under the existing law of land acquisition. This aspect of the law would change in subsequent years when compensation was

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4 Bigha is a local unit of measurement. 1 acre is equivalent to about 4 bighas.
not given to people in other villages affected by land acquisition. However, the issue of compensation did become important in the case of Nangal Dewat as is evident from the affected people going to court in order to get better compensation. Nangal Dewat was acquired in its entirety in 1971 after a committee under the chairmanship of J.R.D. Tata was constituted to consider the feasibility of setting up international airport authorities at Delhi, Mumbai, and Kolkata. The Tata Committee was constituted in 1967; the confidential report submitted in 1969 led to the passing of the International Airport Authority Act, 1971. It was soon after the passing of this law that the whole of Nangal Dewat was acquired. As soon as the notification for the acquisition of Nangal Dewat was issued a series of litigations was filed in several courts demanding better rehabilitation schemes for the evictees. The pending litigations delayed the actual eviction for over 30 years. Once the actualization of eviction and rehabilitation occurred in 2007, authorities overlooking the compensation process, DDA and AAI, realized that the Dalits (the so-called lowest castes in the Hindu social formation, defined as Scheduled Castes in law) of the village posed a problem. Unlike the upper-caste landowners of the village who had property rights on an individual basis, the Dalits were rehabilitated in 1958 under the process of land reforms where the landless were given land to build houses. Land rights were given to the Dalits on the basis of community, not on an individual title. The first hurdle was thus to ascertain the proper subject of the rehabilitation scheme. Here, it should be said that it was the displaced Dalits who raised the demand for individual titles on the rehabilitated land. It was a legal claim on the state by its subjects whose desire was to break away from the collective social citizenship the state had granted them. Before we examine the details of that process, to put the entire acquisition process in context, it is important to recount other instances of land acquisition for the expansion of Delhi airport around Nangal Dewat.

Mahipalpur, now a thriving hospitality area and a site of numerous warehouses that neighbors Nangal Dewat, was once a site for several industrial units, especially for the ceramic industry.
In 1965, land measuring about 6,241 bighas was acquired for “public purposes.” In *Ravi Khullar and Another vs. Union of India and Others*, for which the Supreme Court of India delivered judgement on March 30, 2007, mention is made of two other land acquisitions in the village. The second acquisition occurred in 1966 when about 4,759 bighas were acquired and the third in 1968 when about 1,459 bighas were acquired. In these notifications for land acquisition it was mentioned that the land was being acquired for “public purposes” and not specifically for the expansion of Delhi airport. This was made a point of litigation by those factory owners who lost land in the acquisition process and demanded compensation. In 1981, the Delhi Development Authority (DDA) had changed the land use of this area from “Green Belt and Agriculture Cultivable Land” to “Circulation Airport” to clear the way for the land to be utilized for the development of the airport. DDA added the condition that airport authorities should prepare a proposal for the rehabilitation and resettlement of the evictees. The Supreme Court in its 2007 judgment made two important points. One, “public purposes” including expansion of the airport and land use as shown in the master plan of Delhi could be altered suitably for the development of the airport. Second, awarding of compensation was not binding on the authorities and was to be taken up on a case-to-case basis; industries cannot claim compensation on the basis that residential land acquired in another village (Nangal Dewat) was compensated. The issue of compensation was also raised in the case of acquisition in another village called Nangal Dairy. In the case of *Murari Lal and Others vs. The Chairman, Airport Authority of India*, for which the Delhi High Court delivered judgement on September 7, 2007, it was mentioned that in 1965 land was acquired in Nangal Dairy. A DDA letter spoke of a proposal to resettle the evictees and a survey was carried out in that regard. The survey mentioned that the area had 485 jhuggis (slum dwellings) and 102 other structures out of which 46 were shops and 56 were purely residences. The plan was to settle the evictees near Palam village but this was raised only by DDA and not in the notification of the land acquisition. The
court made the point that the evictees, despite the DDA letter, cannot claim a statutory or legal right of rehabilitation even though in the case of another village compensation might have been given.

There is a need to account for the arbitrariness of the allocation of compensation in the case of land acquisition. The law itself and the interpretation by the courts make it clear that the state is not obliged to offer compensation to the evictees. Thus the issue of compensation becomes a matter of political struggle and claim making upon the state. In Nangal Dewat, the evictees were successful in staking that claim, which was not the case with the industrial units of Mahipalpur and the residents of Nangal Dairy. However, it should also be borne in mind that in the case of Nangal Dairy the residents were mainly urban poor and the settlement was more a *jhuggi* colony than a village; admittedly the claim making by these residents did not resonate with the authorities and the court in the same manner as did Nangal Dewat, a village consisting largely of influential caste groups integral to the political economy of the Delhi airport.\(^5\) I was informed about this aspect—caste composition and its influence—by Anil Lohia, a member of the Scheduled Caste Welfare Society, the organization continuing the struggle of Dalit evictees who have not been rehabilitated. Before giving the details of that interview it is important to provide the context of the case of rehabilitation for the residents of Nangal Dewat and the position of Dalits in this contentious process.

I have mentioned earlier that Dalits were settled in Nangal Dewat in 1958; they were given land for residence but not for agriculture or other economic activities. The land was provided to the community as a whole. The verdict on the case Shri Prabhat and Others vs. the Union of India and Others, which was delivered on August 30, 2013, mentions four caste groups that

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5. The 2010 Delhi Urban Shelter Improvement Board Act defines *jhuggi* as temporary or permanent structure that is built for residential purposes, whose location does not conform to the land use of the Delhi Master Plan, and is not duly authorized by the local authority.
were given land: Makbuja Jullahan, Makbuja Chamaran, Makbuja Kumaharan, and Makbuja Ahle. The problem with the rehabilitation scheme arose when the court in 2001 said that alternative plots for rehabilitation should be allotted to communities as a group and not individuals and that it would be for the group to decide how much land each individual gets. It was against this that the Harijan and Backward Jan Kalyan Samiti, a non-governmental organization, filed a review petition and requested the court to allocate land to individuals and not to groups. By this time the survey was done and a figure for alternative land near Rangpuri Pahari was formulated. The plots that were to be provided according to the terms of compensation were as follows:

<table>
<thead>
<tr>
<th>S. NO</th>
<th>AREA OCCUPIED BY THE VILLAGERS (SQ MTRS)</th>
<th>AREA PROPOSED TO BE ALLOCATED BY AAI (SQ MTRS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>0–32</td>
<td>26</td>
</tr>
<tr>
<td>2.</td>
<td>33–48</td>
<td>40</td>
</tr>
<tr>
<td>3.</td>
<td>49–80</td>
<td>64</td>
</tr>
<tr>
<td>4.</td>
<td>81–100</td>
<td>90</td>
</tr>
<tr>
<td>5.</td>
<td>101–140</td>
<td>100</td>
</tr>
<tr>
<td>6.</td>
<td>141–180</td>
<td>160</td>
</tr>
<tr>
<td>7.</td>
<td>181–250</td>
<td>200</td>
</tr>
</tbody>
</table>
In the case of upper-caste villagers, the land title was not difficult to ascertain because the records were maintained on the basis of the name of the head of the family. In the case of Dalits the problem for the court was to create a legal personality of the individual owner of a plot of land where none existed before. The court ascertained that in 1958 there were 122 names that received land under various communities. It first settled that this would be the maximum number of allotments of land. Another condition was that either the original person or the legal heir should be in possession of the land when compensation was announced. Merely the fact that land had been allotted in 1958 was not a sufficient condition for compensation. This was ostensibly to prevent people who had moved or sold their land to claim compensation. It was also made mandatory that claimants should be in possession only of community land and no other land inside the village. The documents to prove occupation of land included electricity bills and others provided by the municipal authorities.

What is evident in this exercise of the Delhi High Court is an attempt to extract the individual legal personality of rehabilitation by making it static. The documentary proofs that were to be mustered for compensation were supposed to prove that the legal subject has not moved or has not been in motion. This legal mechanism, though perhaps sound in terms of the logic of law,
hardly had any resemblance to the everyday reality of how land ownerships had changed within the village itself. In the course of 50 years, land had been exchanged between the villagers for the sake of convenience, added to or partially sold. This particular case appeared to have opened the fault lines of legal wisdom, which can only conceive of political subjects as stationary. This conception of a stationary subject of rehabilitation was severely limited. This search of the stationary subject imposed by the judicial mind led to a situation where dispossession for some was inevitable. The process created a dispossessed subject that is destined to be mobile, arguably making mobility a permanent condition for this new subject. With such a strict burden of proof of ownership falling on the Dalit landowners, 59 out of 122 people could not prove they were the rightful landholders and thus eligible for rehabilitation. The organization continued to fight the case on behalf of these dispossessed evictees by submitting memorandums to the Delhi government and its bureaucracy after losing the legal battle. By their own admission it is highly unlikely these people will ever be rehabilitated. This is the historical and legal context in which the Dalits dispossessed in Nangal Dewat, initially looked at by a benevolent state as a “community,” decided to stake claims as individual citizens and were evicted from property rights as a result of such claims. However, there is also an urgent need to highlight the caste prejudices and struggles that underlie such claim-making by oppressed groups and how skewed social relations affect relations of political economy.

I came to know of the case of Nangal Dewat when I began research on women cleaners at the airport who lived in Rangpuri Pahari. Rangpuri Pahari is an illegal settlement always under the threat of demolition. The details of this settlement are provided in chapter 5 but it should be mentioned here that residents of Rangpuri Pahari have been struggling valiantly against this threat and they have been successful in forming alliances with other rights’ groups in the city. Their main demand is to make the settlement legal and allow it to expand into nearby areas. One of these places happens to be the area where the evictees of Nangal Dewat are settled: the
new Nangal Dewat. This has emerged as a serious issue of controversy and some activists in Rangpuri Pahari believe that the government has short-changed them while rewarding the residents of Nangal Dewat. It was in this context that I was asked to contact an activist of Rangpuri Pahari who was helping the residents in their legal battle. The names of these respondents are withheld for the sake of privacy and the reasons will be clear soon. It was the most bruising conversation of the entire fieldwork lasting almost nine months. The conversation with the activist was over telephone on January 6, 2014, at 13.27 hours Indian Standard Time. It lasted 11 minutes 24 seconds and it was the only one I had with that particular activist. I must also clarify that my own political leanings and understanding of the situation both in Rangpuri Pahari and of the Dalits of Nangal Dewat made me sympathetic to both struggles and I did not see any contradiction between their respective demands even though there were reservations among the respondents. I was not directly involved in the struggles in any capacity but I believed there was an urgent need for the two struggles to form an alliance. It is, perhaps, because of this subjective position that I was totally shocked by the dialogue.

The conversation started with the legal issue surrounding Rangpuri Pahari and the claim of its residents. The response of the activist was quite insightful; it demonstrated that it was the infrastructure of the airport and flyovers that has become decisive in urban planning in Delhi and is at the heart of the struggle over housing in large areas of Delhi. Here, the activist mentioned the DDA signboards saying “land for future use” placed on vast stretches of land around where the new Nangal Dewat was coming up. The activist also made the telling point that the people who sought the rehabilitation of the Dalits of Nangal Dewat wanted to settle them in land that had already been earmarked for use. The activist was adamant that this land was meant for the residents of Rangpuri Pahari. At this moment that I put forward the question about the rightful claim of rehabilitation of the Dalits of Nangal Dewat. This particular remark of mine drew vehement opposition and the conversation was almost terminated. The activist
then made the point that the legal entitlement of the Dalits of Nangal Dewat was “tenuous.” When I mentioned the missives of the Dalit organization to the Lieutenant-General (LG) of Delhi, the intense caste hatred of the activist came to the fore. He claimed that the allocation of alternative plots of land to 63 Dalit families was the result of a “bheekh” (alms) by the LG and that it had no legal sanction. The force and the language used were strong: the activist went so far as to say that the Dalits who were demanding alternative plots of land and rehabilitation were “buggers.” In all this, the activist made some sharp observations about the political economy of new Nangal Dewat and Rangpuri Pahari, and connected them with the development and expansion of Delhi airport. On the question of Rangpuri Pahari, the activist said that its proximity with Delhi airport and the proposed Dwarka Bypass had made it an attractive and lucrative real estate option. This was the reason why the government did not want to legalize Rangpuri Pahari and was threatening to demolish it. This was also the reason why “land for future use” was not allotted to the residents of Rangpuri Pahari and it was unfair that the Dalits of Nangal Dewat were being settled there when they had no strong legal claim. The sharpest observation made by the activist was that the rehabilitation of the Dalits of Nangal Dewat was an instance of monetization of land assets and the struggle of Dalits was not about rehabilitation per se but about claiming bigger plots of land. It is not my intention to critically analyze the caste prejudices of an otherwise “radical” activist but it is important to indicate how such prejudices prevented this activist from understanding the complexities of political economy and its socially fractious nature. It was quite true that monetization of land assets was in operation but what the activist failed to see was how this monetization was reinforcing caste relations in the new urban setting, or how some groups were being allowed, even encouraged, to claim assets while others were being dispossessed and forcefully transformed into mobile subjects.
This process became clear when I interviewed Anil Lohia of the Scheduled Caste Welfare Society of which he was a founder member, having registered the organization in April 2013. Anil Lohia was one of the 63 people who were found to be eligible for rehabilitation under the classification the courts had decided on. At the time of the interview, he had just completed the construction of a house on the allotted land and was living with his mother, a brother, and a sister. It was a modest house and quite in contrast to the two- and three-storied buildings constructed by the upper-caste beneficiaries of the rehabilitation scheme. The interview with Lohia revealed that most of the upper-caste beneficiaries had sold their land to private builders and allowed them to build flats, some of which the beneficiaries had retained. They lived in one flat while renting out others and the builders sold the rest of the flats to buyers. This had turned out to be a lucrative deal for the upper-caste beneficiaries and demonstrated the accuracy of analysis of the activist who made the point about monetization of land assets. However, the upper-caste beneficiaries were taking advantage of such monetization and not the Dalits.

I conducted three rounds of interviews with Lohia and his brother who assisted him in running the organization. According to Lohia, the ratio of upper-caste to lower-caste population was 70:30. The upper-caste residents were engaged in economic activities like providing taxi services at Delhi airport and providing warehouse spaces. The Dalits worked as cleaners or porters at the airport, and some of them owned general stores and tea shops that served the workers near the airport. It was evident that the economic activities in Nangal Dewat, like those in Mehram Nagar and Mahipalpur, were connected to Delhi airport and there was a clear distinction in terms of work, class, and caste identity of the workers. Although Lohia said there was no evidence of caste conflict turning violent in Nangal Dewat, the residents wanted their own caste group as neighbors. This was one of the reasons Dalits had exchanged land with upper castes: to have continuity of residence with their own community. This process, according to Lohia, was quite common and the resultant settlement became clustered around
caste identities. This is not a unique case for Delhi as Veronique Dupont (2004) has convincingly demonstrated the city’s segregated settlement pattern. Dupont compares different regions within Delhi to show how some areas have emerged as spaces predominated by lower castes; the case of Nangal demonstrates that what is true for the entire city is also true within a given village. It is not amiss to claim that the operation of Delhi airport is marked by and implicated within caste and class relations. In chapter 4 where I study women cleaners, I will demonstrate that work in Delhi airport continues to be implicated in this same matrix of caste and class, although in a modified form, and show how infrastructure and logistical practices have shaped and are being shaped by social relations of caste as well as class.

The most important part of the interviews with Lohia for the purpose of this analysis was his understanding of the monetization of land assets in the wake of the rehabilitation scheme for Nangal Dewat. I have already mentioned one of the forms in which land assets were being monetized by the upper-caste beneficiaries through their nexus with private developers and builders. Lohia put forward another aspect: that upper-caste beneficiaries were also buying the small land allotments that the Dalits of Nangal Dewat had received as part of their rehabilitation package. The upper-caste beneficiaries were using the money obtained from builders to buy and construct on the land of the Dalits, using these plots for their own residential purposes. Thus it is evident that not only were a substantial number of Dalits evicted from Nangal Dewat without rehabilitation but also those who were rehabilitated were now being pushed out from the locality as a result of newly cash-rich upper-caste beneficiaries. The Rangpuri Pahari activist was correct in the analysis of monetization of land assets but could not, or did not wish to see that it was the upper castes who were using their social and economic power to substantially change the demography of the area. The proximity of the rehabilitated Nangal Dewat to the airport, metro rail, and the Dwarka bypass had indeed made it an attractive real estate option, as Lohia agreed. As an infrastructural installation, Delhi airport is leading these
changes in demography. Lohia said that once Dalits are pushed out of the rehabilitated village they buy houses in cheaper localities, which have a majority of lower-caste residents, as Dupont has already shown. Hence, her thesis of segregation of urban spaces is strengthened by this case, and Delhi airport is implicated in this process of social and geographical segregation.

I have now given a detailed account of the three transformations that were brought about by the restructuring of Delhi airport. The next section analyzes the theoretical implications of these transformations and the emergence of new political subjects.

**Regulatory Government and New Political Subjects**

In a consultation paper of the Planning Commission (2006) that seeks to come up with a framework for the regulation of infrastructure, an attempt is made to define the nature of the state. It is a reflexive exercise. It is evident that the Planning Commission was aware of the transition in the characteristics of the state as a result of the changes in the economy. The document makes a clear distinction between the “command and control mode of governance” which was based on state ownership and a “new mode of regulatory governance” based on public–private partnerships and private sector participation (1). The rupture between the two is not easily achieved and the document readily admits that this “transformation … remains an inadequately understood process” (1). The document makes the point that the earlier command and control mode of exercising state power was a direct result of state ownership. The need for regulation through an independent regulatory mechanism is because the state is not the sole owner of big infrastructure developments like ports, airports, highways, etc. The document defines regulation as “an effort by the state to address social risk, market failure or equity concerns through rule-based direction of social and individual action” (1–2). This is an interesting formulation as the emphasis is on “rules” and not necessarily “laws.” The document states that competing laws as a result of “[p]olitical constraints and ministerial preferences over
time” (5) led to the proliferation of conflicting institutions and mechanisms without “co-
ordination or cross fertilization of ideas” (2). A “robust regulatory philosophy based on a
framework with adequate capacity is a necessary, though not sufficient, condition for
accelerated and sustainable growth of infrastructure” (5) and there is need for an “overarching
regulatory philosophy” (6).

The transition toward a “regulatory state” was necessary because capital had to be made an
integral part of the state apparatus in instances were ownership had become hybrid. It was
desirable that mutual conflicts gave way to “inter-institutional bargaining” (7). The conflict
between various state apparatuses that was evident in the making of DIAL is an example of
what the document wishes was a thing of the past. As I have argued above, when DIAL was
formed a new entity of governance took over and successfully went about the business of
evicting workers and landowners. In the case of Nangal Dewat, the actual possession of land
for the expansion of the airport was achieved only once DIAL was formed despite a prior and
lengthy litigation process spanning almost 50 years. This was realized because with the
formation of DIAL it became possible for the courts to direct that it was AAI’s responsibility
to rehabilitate the evictees while DIAL took over the responsibility of expanding and
developing the airport. This judicial outcome was enabled because the state–capital alloy had
emerged as a distinct entity, allowing for separation as well as conjunction of roles with that of
purely state apparatuses.

As indicated earlier in this chapter, my contention in examining these cases of eviction and
restructuring is that infrastructure, its creation and management, has allowed the state to
reconfigure and redirect the question of politics and the political subject. Rananbir Samaddar
in Emergence of the Political Subject (2010) brings out the problem of the state and the political
subject in the postcolonial condition. Samaddar demonstrates that since the anti-colonial
struggle was against the colonial state the problem of classical political philosophy of a state-centric political subject never weighed heavily on those struggles (xxv). The state as “the crux of politics and political philosophy” was displaced “when politics came to be associated not so much with state or rule, but with war” (xxvi). Samaddar’s most important insight, in my opinion, is that the question of the political subject can be located in practices of political struggle rather than in a “state-centric” view. I think this can be extended to another proposition: because of the political struggles that subjects make and by which they are thereby made, pure state apparatuses lose their primacy in the arena of politics. It is in this moment that the state–capital alloy emerges and makes an intervention.

In a discussion of contemporary state transformations, Mezzadra and Neilson point out that increasingly “the repressive work of states, which is classically considered part of their core business, is outsourced to private interests or pursued through the perverse logic of the public-private partnership” (2014, emphasis added). In the case of DIAL, the perversity of this logic lies in the fact, among other things, that while previously the state wanted to stabilize a population and its movements, governance through Delhi airport needs to keep the subject in a continuously mobile state. In the two cases of workers and the evictees, I have demonstrated that the emphasis was to extract political subjects from their permanent conditions of work, shelter, or livelihood. Conditions were created such that the mobility of these political subjects was governed by the interests of capital accumulation and monetization of land assets, which depend on the dynamics and contingencies of market forces. In this chapter, I have sought to understand the mechanism of governmentality that is immanent in DIAL in the process of creating its desired political subject. My interest is to understand and capture both the ontological as well as the physical location of the political subjects who have been evicted from their land, livelihood, and labor. If DIAL, a PPP, is a state-capital alloy and is a new and unique form of governmental power, it should be able to restructure and refashion earlier forms of
political subjectivity but also go beyond this revisionary role by creating political subjects unique to itself. In this sense, the state-capital alloy has to signify both continuity and discontinuity in the art of government. Foucault, at the end of *The Birth of Biopolitics*, brings the overlapping and contending forms of governmentality to the fore:

You can see that in the modern world, in the world we have known since the nineteenth century, a series of governmental rationalities overlap, lean on each other, challenge each other, and struggle with each other: art of government according to truth, art of government according to the rationality of the sovereign state, and art of government according to the rationality of economic agents, and more generally, according to the rationality of the governed themselves. And it is all these different arts of government, all these different types of ways of calculating, rationalizing, and regulating the art of government which, overlapping each other, broadly speaking constitute the object of political debate from the nineteenth century. What is politics, in the end, if not both the interplay of these different arts of government with their different reference points and the debate to which these different arts of government give rise? It seems to me that it is here that politics is born. (313)

The state-capital alloy functions in relation to other existing and emerging forms of governmentality; its primary task is to create subjects according to its own rationality. The political subjects created by the state-capital alloy, I contend, are both constantly mobile and singular. They are political subjects that are continuously on the move as a result of eviction, as we have seen earlier in this chapter, and they have to be continuously on the move due to the production process governed by the airport, as we shall see in subsequent chapters. The problem for these political subjects is compounded because they have to make and stake claims on the state-capital alloy, which is an amorphous and legally and politically elusive entity.
The common aspect in the case of the trolley retrievers and the Dalit evictees of Nangal Dewat was the inability of the authorities, both executive and judicial, to account for them. In the case of trolley retrievers, different courts at different stages of the case came up with different numbers of the total workers affected by retrenchment. The higher courts fixed the number of workers arbitrarily as the case progressed. By fixing the numbers arbitrarily, the courts granted them a contingent grouping but still in the final judgment the courts granted compensation to the workers individually and not as a collective. In the case of Dalit evictees, the challenge for the authorities was to individualize, make singular, and accountable each of the persons involved. In this case, the older form of governmental intervention based on community was found redundant, as the community members themselves wanted individual compensation. It was the formation of DIAL, which had forced these outcomes after years of stagnated legal battles with the involvement of state actors as party to the legal process. The process was hastened both in the case of trolley retrievers as well as the evictees because the judicial mind was able to locate the break between past and present forms of governmental logic. Why should this be of significance in the understanding of the new art of government of the state-capital alloy? In the three transformations described above, I have shown the contentious processes through which the new regime that I call the state-capital alloy was created, restructuring the management of Delhi airport and generating new methods of governing workers. Implicit in these transformations was an attempt to make the transition from command and control state to a “regulatory state.”

The document that outlines the need for a “regulatory state” mentioned above envisions governmentality as regulating “social risk.” To control this risk is at the heart of the desire to regulate “social and individual action.” Framed in this manner, the problem is to identify the subjects of “social risk” and to govern them. Infrastructure provides a means to both identify and govern the political subjects that are in relation to the former. Delhi airport, as I will show
in subsequent chapters, bring under its control and refashions heterogeneous political subjects through its economic and political functions. The contemporary art of governmentality finds the solution to the heterogeneity of the problem of the subject of economy and rights in the state-capital alloy. DIAL, a state-capital alloy, shows one of the possible ways how state apparatuses and private capital can fuse together to induce an outcome which facilitates the solution of economic and political problems by using other forms of power such as juridical power.

The art of government through the state-capital alloy of DIAL creates subjects who are continuously in movement. The “settled” nature of the trolley retrievers and the Dalit evictees were disrupted by DIAL and they were forced to be mobile. The Dalit evictees were first settled based on community but they had to move out as individual subjects; some of them were rehabilitated while others were not. In the process, though, the cooperation and communitarian relationship were sundered by the new art of government. I will show in subsequent chapters through the study of workshop, cleaners, and taxi drivers that the movement of labor and its control by DIAL through the functions of the airport is a necessary condition of production of goods and services and the process of accumulation. Thus, this thesis emphasizes the element of mobility in the production and governing of political subjects.

It has to be clarified that the possibility of a mobile subject was already present in the existing legal mechanism of the control and command economy. For example, in both the Contract Labour (Regulation and Abolition) Act, 1970, and Industrial Disputes Act, 1947, the definition of the “workman” is superseded by the “contractor.” There is a displacement, in fact the negation, of the subject: the workman. The legally binding parties are the “principal employer” and the “contractor” while the workman becomes a numerical abstraction submitted as an account. Similarly, in the Interstate Migration Workmen Act, 1979, the “inter-state migrant
workman” comes into being only when recruited through a contractor but in his case he should be recruited in one state and employed in an establishment in another. Again, the legally bound parties are the contractor and the principal employer. In all these laws the nature of the contract between the “contractor” and the “workman” is never defined. It becomes a matter of industrial dispute to be adjudicated. The workman as a legal subject does not come into being until the moment of crisis that is to be resolved through juridical pronouncements. In the cases of the trolley retrievers and Dalit evictees of Nangal Dewat, I have shown that a lack of unaccounted for individual subjects is not what the new art of governmentality desires.

A similar desire for individual numbers and data is evident in the process of digitalization of land records. A report of the Centre for Public Policy Research has this remark about land stuck in litigation:

If land that has been locked in litigation by the government for over 30 years is systematically evaluated and released into the free market, post allocating land out of this total, to engage in housing development activity undertaken by the State itself on a welfare-cum-profit motive, it could perhaps aid in combating the present housing crisis in our country. (Jayaram 2010, 3)

The report gives the figure of the area locked under litigation, viz. 1,150,728 acres which is 0.14 percent of the total land area of India (3). It then makes a strong pitch for the digitization of land records, arguing that this would help conclusively identify land ownership as well as prevent further litigation. Amita Baviskar has convincingly shown how it is planning that creates in its “interstices” the liminal spaces of unplanned settlements on land (2003, 91). These liminal spaces are a site of constant negotiation between political subjects and the government—a space of politics in which everyday coercion, violence, and accommodation is played out. To free this space and bring it into the fold of formal power through a process of
digitization of land records and identification of legal owners necessarily involves violence, displacement, and variegated processes of rehabilitation, as evident in the case of Nangal Dewat. A study by the Collaborative for the Advancement of Studies in Urbanism through Mixed Media (CASUM-m) emphasizes this point, mentioning that “in the process of developing computerized formats, tenure forms have been homogenized to exclude those used/occupied by marginal farms” (2007, 33). This is besides the loss marginal farmers have to suffer in terms of accessing the welfare measures of the state. The new impulse of infrastructure building will necessarily create a large band of displaced and roving population. The question is how this population will be governed when there is a governmental insistence on individual subjects, property titles, etc. This new form of power, I contend, attempts to coalesce disciplinary power and power over population through various forms of technologies around logistical apparatuses.

It is important here to recall Foucault’s lecture titled “The Mesh of Power.” Foucault makes the point that “society is an archipelago of different powers” (Foucault 2012) which is “is in reality the juxtaposition, the link, the coordination and also the hierarchy of different powers that nevertheless remain in their specificity.” These myriad forms of power contend and overlap with each other to define “regions of power.” In The Birth of Biopolitics, Foucault makes the point that the “state is nothing else but the mobile effect of a regime of multiple governmentalities” (2008, 77). In this formulation, the state comes across as an aggregation of different forms of power; as an effect and an affect. While cautioning against “Rousseaufication” of Marx in “The Mesh of Power,” Foucault suggests not to analyze power by privileging the state apparatus as this only leads to conceiving of power as a juridical fact. My suggestion is also not to privilege state apparatus a priori but rather to examine the possibilities that open up when the juridical power of state apparatuses, such as AAI, fuses with other forms of power to form a state-capital alloy like DIAL. How does this move influence
the “regions of power” that are made of other different forms of power? In the same lecture, Foucault defines disciplinary power in the following way:

Discipline is basically the mechanism of power by which we come to exert control in the social body right down to the finest elements, by which we succeed in grabbing hold of the social atoms themselves, which is to say individuals. Techniques for the individualization of power. How to monitor [surveiller] someone, how to control his conduct, his behavior, his aptitudes, how to intensify his performance, multiply his capacities, how to put him in a place where he will be most useful: this is what I mean by discipline… I will name the individualizing technology of power, a technology that basically targets individuals right down to their bodies, their behaviors; it is *grosso modo* a kind of political anatomy, an anatomo-politics, an anatomy that targets individuals to the point of anatomizing them. (2012)

Disciplinary power then depends on isolating the individual body. It is an individualizing power. Contrast disciplinary power with that of power over population. The “technologies that do not target individuals as such, but which, on the contrary, target the population.” This is a power distinct from the individualizing power:

Population does not simply mean a large group of humans, but living beings traversed, ordered and governed [régis] by biological processes and laws. A population has a birthrate and a death rate; a population has a generational curve [*une courbe d’âge*], a life table [*une pyramide d’âge*]. (2012)

This population was, Foucault reminds us, enumerated through a “whole series of observational techniques, including statistics.” Thus, the techniques of organizing disciplinary power and power over population differed substantially. Disciplinary power was predicated on organizing space; factory, school, military, etc. In contrast, to wield power over population,
“the great administrative, economic, and political organs, are given the duty of regulating the population.” Foucault sees them as “two great revolutions in the technology of power: the discovery of discipline and the discovery of regulation, the improvement of anatomo-politics and the improvement of bio-politics.” Is it then possible to say that in the exercise of power by the state-capital alloy “anatomo-politics” and “bio-politics” have fused together as well?

In this thesis, I argue that in the process of remaking of Delhi airport political subjects are governed through the logic of infrastructure and logistical practices. The airport has arranged production process in a manner that creates visible and invisible borders and walls, which workers have to negotiate with constantly as is evident in the case of workshop workers. Delhi airport also brings into the fold of capitalist production hitherto laboring subjects that escaped its net in the case of cleaners. And it creates technologies, such as app-based or call center controlled taxi services which constantly control the movement of workers who drive those taxis. This is a regime of walls, of borders, and of technological apparatus. I argue in this chapter that DIAL through the logistical functioning of the Delhi airport exercises at once “anatomo-politics” and “bio-politics” simultaneously. In this sense, the state-capital alloy is a repository of both forms of power. This regime governs laboring subjects by keeping them either continuously in movement or at rest in order to strip them off their subjectivities to the point that there are times where the distinction between labor and means of production is actually obliterated. I will show an instance of the latter process in chapter 4 where I study women cleaners at the airport. The new technology of power is directed towards creating a subject without subjectivity. However, this thesis will also show those nascent and emerging forms of subjectivities of this new laboring subject that emerge from the struggle with these new technologies of power both in the sphere of production as well as distribution. The laboring subjects that this thesis studies in the subsequent chapters are the taxi drivers, workers at a
workshop making trolleys for the airport, and women cleaners who clean the terminal buildings of the airport.
Chapter 3

Logistical Capitalism and the Real Logistical Subsumption of Labor

General, your tank is a powerful vehicle
It smashes down forests and crushes a hundred men.
But it has one defect:
It needs a driver.

General, man is very useful.
He can fly and he can kill.
But he has one defect:
He can think.

Bertolt Brecht (2017)

Capitalism undergoes structural changes when it rearranges and reconfigures the functioning of its basic elements: accumulation of surplus-value, labor-power as commodity, primitive accumulation, and even periodic recessions. These changes, then, go on to redefine how capitalism operates under new material conditions. The time of Marx, for example, was the period of industrial capitalism with colonialism as the mainstay and background in which capitalism operated. Writing in 1917, Lenin (1970) identified his own times as the stage of finance capital. Lenin understood imperialism as the political stage of capitalism characterized by monopoly, imperialist wars, and revolutions in mostly underdeveloped capitalist countries, such as Russia and the colonies. At a much more modest scale, this chapter aims to study one of the ways in which capital operates in contemporary times by looking at the spatial and temporal interactions between the airport and informal production units that keep the former
running. A study of Delhi airport and a workshop that makes trolleys for airlines is a limited and partial study of the phenomenon that I call logistical capitalism. I define logistical capitalism as the stage of capitalism when processes of capitalist circulation undergo a metamorphosis to become a critical factor in organizing the conditions of production. A study of the airport and the workshop together provides a glimpse into the intricacies of the ways in which logistics governs production and labor. This chapter also gives insight into the changing nature of labor, migration, and work. Finally, in providing descriptions of labor, logistics, and production, the chapter discusses how labor devises forms of political resistance against the rule of logistical capitalism.

**Walls and Borders of Infrastructure**

Mohammed Wasim (name changed) is 55 years old. He has worked at the workshop of a company named Airport Solutions (name changed) since 2002. This company manufactures trolleys that carry baggage to and from aircraft. The workshop is located in Kapashera at the Delhi–Gurgaon border about 7 kilometers south of Delhi airport. The workshop has a rectangular yard of approximately 200 square feet where the finished trolleys as well as those that are to be painted and repaired are kept. The workshop itself is a single room slightly smaller than the yard, with a few machines installed. The more important pieces of equipment in the workshop are welding machines, a lathe (locally known as khadad), drill machines, gas cutters, and grinders. As inventory, the workshop has tires, steel rolls, etc. depending on the order received. At no point of time is there inventory that is not to be used immediately in the fulfillment of an order.

The owner of Airport Solutions was an employee in an international engineering company. He set up his own workshop after the company ceased operation and left India, recruiting some workers from the company for his workshop. Over the years some of those workers left but the
foreman, who used to work in the same company as the owner, stayed. At the peak of production, the workshop made trolleys for Indigo airlines, MDLR, and Spicejet. At the time of the fieldwork, most orders for baggage trolleys came from Spicejet as other airlines had started to opt for other workshops. This workshop also used to make ladders and repair escalators at the airport but has stopped this work for quite some time and now specializes in the making of baggage trolleys. They had to give up the work of escalator repair as strong security measures were adopted at the airport, making the movement of workshop workers into the airport increasingly difficult. These security measures were put in place as a result of several bomb blasts across India during 2010–11.

According to Wasim, the trolleys are supplied to all the airports of India. At the time of the fieldwork, the trolleys being produced were meant for the airports of Srinagar in Jammu and Kashmir, Jaipur in Rajasthan, Lucknow in Uttar Pradesh, and New Delhi. To give a sense of the scale of operations, Wasim informed me that 40 trolleys were to be sent to Kolkata and 70 to Delhi airport. When orders were placed there was no limit to the workday and it was normal to work for 18–20 hours a day. The foreman boasted they could make as many as 20 trolleys in a month if required (normally they made six to eight trolleys a month). Wasim described the process by which trolleys are moved to Delhi airport and to several airports outside Delhi spread all across the country. The trolleys that have to be transported outside Delhi are constructed in such a way that they can be disassembled at the time of moving and put in a truck; they are reassembled at the designated airport by workers there. The repair of these trolleys in case of breakdown is not the responsibility of this workshop. Wasim said there would be similar workshops near those airports too: “Jahan airport hoga wahan aisa karkhana bhi hoga” (Wherever there is an airport there will be a workshop like this). In Delhi, trolleys are towed by a tractor and taken to the airport. The workshop workers are not allowed inside the airport, so they either call the airline ground staff who moves the trolleys with their own
tractors or are asked by the ground staff to leave them at Gate 1 of Terminal 1D. This restriction on access to the airport for the workers of the workshop is relaxed when they are called to repair broken-down trolleys. This is cost effective since moving the trolleys back to the workshop would entail considerable expenses for airline companies.

This nondescript workshop is an essential component of airport and airline operations across India. Yet the nature of the relationship between the workers of the workshop and the airport is decidedly different from that of workers who work inside the airport. This fundamental difference in the relationship of the two types of workers to the airport can be demonstrated using the case of women cleaners inside the airport, whom I study in the next chapter. The production processes at the airport and the workshop are not continuous in time and space. They do, however, intersect and it is at this intersection that the forms of labor that emanate from infrastructure and logistical practices become apparent. I have identified two forms of labor that I call logistical labor and labor of logistics. First, there are those who work “inside” the airport, including workers such as air traffic controllers (ATCs), cleaners, baggage handlers, trolley retrievers, technicians, etc. This category also includes workers who do not work “inside” the airport but are linked in time and space to it through logistical arrangements that allow movement between the two infrastructural sites. An example of such workers are those who work at the check-in counters at the metro station near New Delhi railway station from where a dedicated metro rail service runs to the airport. Check-in to an airline at the metro station and to the airport happen simultaneously, following the same software protocols. I took this service a total of three times during the fieldwork. The check-in facility was available for Air India, the state-owned airline. I was told at the counter that it is possible to check in six hours prior to the flight and there is a dedicated baggage handling system that ensures that checked-in baggage reaches the airport in time. The check-in counter is opposite the ticket counter of the metro railway inside the metro station complex. There is a neatly divided
boundary between the regular metro service and the airport service. The area that comes under
the purview of the check-in facility replicates the security measures at the airport. In fact, when
one enters this area, it means effectively entering the airport as the protocols of the airport apply
both to passengers and workers. An illustration of this is the security check the cleaners have
to pass through. Their authorization passes are checked by the security personnel of the Central
Industrial Security Force (CISF), a paramilitary organization of the Government of India.
Hence, one of the characteristics of logistical labor is that its relation to infrastructural
installations and logistical practices is continuous and simultaneous in terms of time and space.
Furthermore, logistical labor sets the limit to the physical occupation of infrastructure. For
example, it is the labor at the check-in counter of the metro station that delineates one of the
borders of Delhi airport. If there was no check-in counter at the metro station near the railway
station, then the airport would have ended at the metro station at the airport and not spilled over
and extended to the center of the city.

In the case of the workshop, this relationship is discontinuous and disrupted. It is not connected
to the airport in the same way as the metro station check-in counter, although the workshop is
far closer to the airport. The production at the workshop does not happen in accordance with
airport schedules, and the workers are not circumscribed by the protocols, security procedures,
disciplining technologies, and negotiations of time and space that apply to processes of
production that pertains at the airport. I seek to demonstrate that the relationship between the
workshop and the airport is a result of this discontinuity, and disruption is a necessary part of
the logistical apparatus of the airport. I will attempt the theorization of logistical labor and labor
of logistics in terms of borders and walls respectively.

The metaphors of walls and borders are significant in understanding the relationship between
the workshop and the airport. It is important to make a conceptual distinction between them
and in this chapter I follow the definition of the border given by David Newman where he differentiates between the processes through which movements of goods and people are controlled:

[The] management of the border regime…is of greater importance today. This both reflects, and determines, the nature of trans-boundary interaction, ranging from closed and sealed borders to permeable and porous borders enabling freedom of movement from one category to another. Many state boundaries are increasingly open to movement of goods, people, capital, information, as well as environmental spillovers and externalities. The formalities through which borders are controlled and administered enable movement to take place, while at the informal level cooperation grows up between the residents on each side of the border line. Where States (or groups) desire to maintain closed borders, the management procedures are more rigid and barrier oriented. (2003, 18)

I use this definition by Newman although it relates primarily to “state boundaries” (but also groups). The reason I use this definition is because both the formal and informal relations that are results of the border are brought into focus. This definition also preserves the complexity of borders as it incorporates the permeable as well as the rigid nature of borders and the ability of the governing authorities to operate on various scales of permeability and rigidity. I have made the point in introduction to the thesis as well as chapter 2 that the space of the airport is governed with a high degree of autonomy by DIAL. Newman’s definition provides enough scope to incorporate the nature of the autonomous space of the airport governed by DIAL, which gives rise to delineable borders. Borders, in this chapter, thus, mean those spatial points where airport authorities provide a conditional entry into spaces of airport that are otherwise closed to workers. It requires various instruments of identification and approvals by those who
put them under surveillance. The workers have to have security clearances, which include background checks and verification by the police and passes that allow them entry; they also need to go through regular frisking each time they enter or exit in the course of their work.

When I refer to walls in this chapter, it stands for the physical wall that prevents the movement of workers into certain spaces: the wall that stops the workers from entering the airport, the wall of the workshop that prevents them from interacting with workers of other such workshops in the vicinity, the wall that separates the living quarters of Wasim and other workers in Kapashera from the textile workshop that operates in the basement of that building, and the wall that stops an ethnographer from entering inside the workshop. Violation of these walls leads to violence as a means of control of both goods and people. These walls isolate and concentrate violence on workers.

Because of its elaborate apparatus of security and surveillance, an airport can easily create an illusion of a rigid dichotomy between the “outside” and the “inside.” This is also true for the processes of production for and of the airport. It is this principle that is at work in the division of the airport into an “airside” and a “landside.” What is obscured in this dichotomy is the complex relationship between “airside” and “landside” and the integrated processes of service production at the airport. There are fundamental issues of capital, labor, space, and time to be explored through these metaphors of “airside” and “landside.” Ranabir Samaddar brings out the problems of the government that uses walls as an apparatus to control the movement of people (2012). In that process of control, the wall, rigid and oppressive as it is, always fails to grasp elusive elements that it is supposed to stall: the workers. Samaddar points out: “this elusive element originates from the twin process of subjectification that the wall as an apparatus unleashes (subjection and subjectivation)—in the process bringing to light the appearance of the ungovernable” (11).
This conceptualization of wall and the ungovernable subjects it produces is important to understand the workers at the Kapashera workshop. These workers are barely visible in the production processes of Delhi airport and appear peripheral to logistical calculations involving the airport. On the surface, their relation with the airport and its workers is, at best, accidental and disjunctive. However, as Samaddar points out, a wall produces the “appearance” of the ungovernable subjects. I extend this argument and suggest that airport creates an appearance of non-governability as opposed to ungovernability with respect to the workshop workers.

As I will show subsequently, this appearance of non-governability opens up the space for the violence that is inflicted on the workers as a result of their involvement in a production process that is substantially dependent on the airport. Even the economic relation of wages to the immediate employer is predicated on violence, as the wages paid are considerably lower than the minimum wages fixed by the government. This is possible only through constant threat and intermittent execution of violence. The workers are too few in number to organize themselves legally into a union and the workshop operates in a semi-legal way. The owner of the workshop does not document the workers employed, which makes them vulnerable, unaccounted for, and outside the network of the government’s welfare programs. It is no exaggeration to say that the workers in the workshop are stripped of their rights to be recognized legally and make claims as legal subjects and instead are subjects ruled by formal and informal violence.

The workers at this workshop are ruled through violence, which is predicated on the relationship between the airport and the workshop and the manner in which Delhi airport creates the condition for such violence to be executed. This trolley workshop in Kapashera is emplaced within the aggregation composed of warehouses, labor contractors, landlords, and semi-legal workplaces. These discrete sites and actors are aggregated, precisely, on the basis of their asymmetrical and heterogeneous relationship with Delhi airport. Each of these sites and actors act on each other as a result of their relationship with Delhi airport. As a matter of
illustration, the owner of the workshop where Wasim works has a contract of supplying trolleys for Delhi airport. It is in the interest of the landlord that workshop continues to operate so that his rent is ensured. Also, in this case, the landlord supplies building material and machinery to a construction company at the airport for the development of Aerocity.¹ Thus, there is a both direct and indirect interest of the landlord linked to Delhi airport by way of construction activities and the workshop respectively. Each site and actor in this aggregation needs to be governed in a manner that allows the functioning of Delhi airport and its production process to continue according to the temporal and spatial logic of the airport. How does the airport authority, then, organize government over the production processes of these discrete sites and actors and bring them under the sway of the temporal and spatial logic of the logistical process of Delhi airport? I contend in this chapter that the government of these sites is organized asymmetrically through an intricate deployment and manipulation of walls. It is possible to discern several walls within which the workshop is located and has to operate and I will study them throughout this chapter. These walls organize the production process in a manner that makes the workers produce for the airport but remain separate from it. This is an aspect of logistical capitalism that separates and controls the flow of the workers and also reveals that the labor of logistics is a necessary condition for the production of services at the airport that keep logistical processes in motion.

Samaddar makes the point that walls in the past were used for purposes of defense, to keep the enemy behind the gates. This made it imperative to breach the wall to conquer what was “inside.” It was the “inside” that fortified itself against the dangers of the “outside.” This equation has changed, as Samaddar says, in contemporary times when the wall has become a

¹ The Delhi Aerocity project spread over 45 acres was proposed by the GMR Group-led Delhi International Airport Limited (DIAL) in 2006 as part of the modernization plan of the Indira Gandhi International Airport. The plan included setting up of 12 hotels with a capacity of around 4,000 plus rooms in both luxury and budget categories. In 2007, DIAL leased out the 45 acres of land for development of the hospitality cluster to various leading national and international hotel brands.
means for strategies of offense and for war against the outsider (14). Such war aims to annex the outsider and this is one of the tasks infrastructure performs. This annexation does not mean that Delhi airport has circumscribed production units such as the workshop in order to make it part of the “inside” of the airport. However, the wall that circumscribes Delhi airport has transformed the relationship between the “inside” and the “outside” in such a manner that the “inside” does not “exclude” the “outside” but appropriates it. As a strategy of wall making the airport has facilitated the creation of a series of walls as an offensive strategy. There are several such walls between the airport and the workshop. The first and strongest wall is that of the terminal building which is beyond accessibility, evident in the way trolleys are transported (described above). The second wall is the one that separates the larger area of the Aerocity from Kapashera. The third wall is the factory wall. With each wall, control over workers becomes more intense until it reaches their bodies. These walls embody the relationship of power between the airport and the workshop. It is possible to infer from this analysis that the multiple walls that circumscribe Delhi airport produce a condition of organization, surveillance, and rule by force that spills beyond its immediate physical and geographical location. It is also possible to trace the entire ecology of walls by following the commodity, which in this case is a humble baggage trolley.

Eyal Weizman conceptualizes the war strategy of the Israel Defense Forces (IDF) as “un-walling the wall” which allows for transparency from one side while there is complete opaqueness from the other side.

The un-walling of the wall invariably becomes the undoing of the law. The military practice of ‘walking through walls’—on the scale of the house or the city—links the physical properties of construction with this syntax of architectural, social and political orders. New technologies developed to allow soldiers to see living organisms through
walls, and to facilitate their ability to walk and fire weapons through them, thus address not only the materiality of the wall, but also its very concept. With the wall no longer physically or conceptually solid or legally impenetrable, the functional spatial syntax that it created collapses. (2007, 210)

The wall, then, is malleable, manipulable, and flexible. There can be variants of walls that are constructed by infrastructure and “un-walling the wall” can comfortably coexist with reinforcement of the wall. The series of walls that organizes production at the workshop in relation to Delhi airport is a means through which the fortification of the infrastructural installation of the airport is achieved. On the other hand, it also allows for a certain amount of controlled movement of workers for definite labor processes. Alessandro Petti claims that “the wall functions as a membrane that lets certain flows pass and blocks others,” that transforms entire territories into a “frontier zone” (quoted in Mezzadra and Neilson 2013, 8). In this analysis of the relationship between the airport and the workshop, I want to make the point that the walls of Delhi airport and the workshop are like a membrane that allows for certain flows of commodity and labor through the respective sites. However, instead of creating a “frontier zone,” the walls of airport and workshop create a space akin to a catchment area which allows only conditional and restricted movement and flow of workers on the basis of temporal and spatial necessities in the functioning of Delhi airport.

I contend in this chapter that the arrangement of walls according to the airport’s spatial and temporal logic for organizing and governing production processes and workers contributes to the real logistical subsumption of labor. In the next two chapters on women cleaners and taxi drivers, I will provide other instances in which the real logistical subsumption of labor is manifest. Marx defined real subsumption as “the transformation of production by the conscious use of the sciences, mechanics…for specific ends…and similarly, through the enormous
increase of scale corresponding to such developments” (1990, 1024). He differentiates between real and formal subsumption in the following manner:

The general features of the formal subsumption remain, viz. then direct subordination of the labour process to capital, irrespective of the state of its technological development. But on this foundation there now arises a technologically and otherwise specific mode of production—capitalist production—which transforms the nature of the labour process and its actual conditions. Only when that happens do we witness the real subsumption of labour under capital. (1034, emphasis added)

In formal subsumption, capitalism brings under its fold existing labor processes without making any radical penetration and changes into how workers act on the means of production. Formal subsumption is concerned with maximizing profits by using existing technology more intensively by either deploying more workers or making workers work for a longer period of time. Real subsumption, on the other hand, means that capitalism now not only controls the means of production but with the aid of innovations in technology, structures and utilizes means of production in a manner that more surplus-value is generated with relation to labor time employed. Technology is used to revolutionize the productivity of labor, which is a decisive element for real subsumption of labor. In real logistical subsumption not only time but space too becomes an element with respect to which surplus-value is generated at a progressively increasing rate. Real logistical subsumption not only concerns itself with productivity on the basis of time but also in the manner in which productivity is enhanced through the configuring of space. Delhi airport controls the production of the workshop both through spatial and temporal maneuvering, as I demonstrate below. I argue that real logistical subsumption under logistical capitalism makes walls and borders of infrastructural installations pivotal in organizing the production process. In this chapter, I am concerned with the ways in which
walls of Delhi airport are used to organize the production process, accumulate surplus-value, and govern the workers. In the subsequent chapter on cleaners, I show how a different mode of configuring time and space is at work in transforming domestic workers into logistical labor. In the final chapter, where I study taxi drivers, I demonstrate the existence of a complex relation with the time and space of Delhi airport and argue that this has elements both of logistical labor and labor of logistics.

The worker in the workshop is under a double encirclement of the workshop and the airport. The double wall that traps the worker also produces two sites of accumulation for logistical capitalism. The first is the workshop itself, but another site is also the airport where the worker has to perform unpaid work every time he has to repair a trolley or other machinery made at the workshop. If a worker goes to repair trolleys or machinery, the workshop owner does not pay overtime wages (as should be done). This also means that he is really a worker for both the workshop and the airport but his existence as a worker for the airport is in discontinuous relationship with the time of the production process at the airport. Even while inside the airport to make repairs, the workshop worker remains detached from the temporal arrangement that governs workers inside the airport like the women cleaners. Even spatially, when the workshop worker is inside the airport his movement is so severely restricted that there is no continuity with other production spaces at the airport. It is this phenomenon that makes the worker of the workshop perform labor of logistics and not logistical labor which is continuous both in time and space.

The production process of the workshop and that of the airport need not coincide and be continuous as the temporal relationship is contingent while the spatial relationship is walled. The implication of this arrangement is that the power relations are simultaneously local and aggregated. The worker is exploited within the walls of the factory as well as within the walls
of the airport, but it also means that between the two sets of walls, the worker faces the full force of the two units. This in-between site is the site of violence, as we will see in detail in the section on resistance by workers.

There is one more point that needs to be made about the workshop and its relation to the airport to understand the implications of the walls and borders of infrastructure. Sergio Bologna in an interview remarks that to understand logistics in its specificity, it is necessary to make a distinction between industrial logistics and circulation logistics:

[L]ogistics can never be understood from outside the warehouse, only by coming inside and looking at the techniques employed, the equipment and the organization of work does one understand if we find ourselves faced with something that belongs to the new economy, in the real sense of the term, or that resembles the sweatshops of Bangladesh. (Bologna 2014)

He also makes the point that industrial logistics “provides support in the choice of production planning, marketing, and location of production facilities; it provides support in the selection of suppliers, and sometimes gets to have its say in the design of the product.” About circulation logistics, he says that it is “divided into high-end circulation and low-level circulation, which consists essentially in bringing goods to stores according to logic and parameters set by the owner of the goods or the manufacturer.” These are useful observations for my purposes of understanding the operational mechanisms of the workshop. Extending Bologna’s categories, it can be said that even industrial logistics can be divided into high-end production and low-level production. In this way, there are several permutations and combinations of “high-end” and “low-end” that are possible. It is also quite possible through these distinctions to claim that there is no water-tight separation between industrial and circulation logistics, that they are not mutually exclusive. Also, if one views the warehouse as an infrastructural installation within a
complex logistical apparatus, it becomes difficult to study logistics without going “outside” of the warehouse. And in this sense, the “sweatshops of Bangladesh” are as much a part of the “new economy” in the real sense of the term. The working conditions in the sweatshops of Bangladesh resemble the conditions in the workshop but the similarities don’t end there. The sweatshop and the workshop belie the clean distinction that Bologna makes between the “new economy” of warehouses and that of the sweatshops. They are both part of an intricate system of logistical apparatuses where the distinctions between high-end production, low end production, and circulation are blurred.

The workshop, on its own, belongs to the category of low-end production and low-end circulation. This is because of the nature of the production methods as well as the circulation networks that act on the workshop. The warehousing component comes from the fact that the workshop indeed acts as a warehouse for the trolleys to be distributed to various airports spread across India. However, it is also possible to see the workshop as belonging to high-end production and logistical circulation arrangements. If we study the workshop from the perspective of the airport, it is not an exaggeration to claim that production is arranged in the workshop according to specifics laid down by the airlines and the ground-handling mechanisms at the airport. Wasim informed me that the trolleys need to be manufactured on the basis of the specifications laid down by airline companies. They cannot be longer or shorter or deeper than specified. Also, the circulation of these trolleys at airports other than Delhi is conducted by big transport companies, thus implicating the workshop in the corporate forms of high-end circulation networks. Borrowing from Bologna, what we have here, then, are complexities of logistical operation both from the production and circulation angles. In the case of the workshop, production takes place within the walls of the factory, but circulation has a dual form of movement. The first involves passing of the manufactured trolley through the “membrane” of the factory wall to the impenetrable wall of the airport. On rare occasions that
the airport allows the workshop worker inside its wall for some repair work it is under heavy surveillance and supervision, which makes the movement of the worker highly restricted to designated areas only. This could be seen as low-end circulation through the highly restrictive and securitized wall of the airport complex. The second is the movement where a high-end circulation network in the form of the corporate goods carrier to transport the trolleys outside Delhi has free and unrestricted access to the factory because it is in a position to exercise economic and coercive power. The wall of the workshop does not restrict the movement of the corporate goods carrier designated by the airport authorities and the airlines. Instead, the circulation activities deployed by the airport can navigate through the wall of the workshop in a manner that preserves the discontinuous relationship between the airport and the workshop by preventing all movement from the workshop. The process through which the discontinuous temporal and spatial relation between the airport and the workshop is created and maintained involves a distinct exercise of power.

In “The Mesh of Power,” Foucault emphasizes the need to study power locally:

  Powers, this means forms of domination, forms of subjugation that function locally, for example in the workshop, in the army, on a slave plantation or where there are subservient relations. These are all local and regional forms of power, which have their own mode of functioning, their own procedure and technique. All these forms of power are heterogeneous. We may not, therefore, speak of power if we wish to construct an analysis of power, but we must speak of powers and attempt to localize them in their historic and geographic specificity.

  A society is not a unitary body, in which one and only one power is exercised. Society is in reality the juxtaposition, the link, the coordination and also the hierarchy of
different powers that nevertheless remain in their specificity…Society is an archipelago of different powers. (Foucault 2012)

This description of the mechanism of power by Foucault leads us to an understanding of powers as they function under real logistical subsumption. Powers are still heterogeneous and they act locally but the specificities of hitherto autonomous spaces like the workshop are informed by the logic of production processes of the airport. The local and regional powers in the case of Delhi airport no longer operate under autonomous conditions but are exercised through variegated and controlled movements of goods and people. There is a situation where specificities of distinct and autonomous production spaces like that of the workshop are now both linked and controlled by the production processes of the airport. The archipelagoes of powers are being designed, located, and exercised in the form of a maze where capital moves over a circuitous path created by walls of infrastructure and accumulates at every site of production. The result is that production units like the trolley workshop become crucial for the accumulation of capital with respect to Delhi airport and its myriad economic and political functions. What I propose to explore now is how to study the movement of labor in this maze and whether it is possible for capital to completely govern this movement through its logistical design.

Footloose Labor, Accumulation of Skills, and Emerging Logistics of Labor

I met Wasim when I was looking for a point of entry into the airport after being denied permission to access the airport by the DIAL authorities. I was told about this workshop by a labor activist engaged in organizing informal labor in Gurgaon in general and Kapashera in particular. As part of the larger workers’ movement, this activist was also involved in various struggles in the automobile sector of Gurgaon. As an activist, he never saw production units like the workshop as merely ancillary. In my conversation with him, he insisted that units like
these are essential for contemporary capital. That was my cue for thinking about the intricacies of the relationship between the workshop and the airport, which led me to think in terms of walls and borders of infrastructure.

My first encounter with the “wall” occurred when I entered the workshop to speak with the owner. I wanted to obtain his permission to observe the work performed in the workshop and speak with the workers. I was not allowed to talk to workers at the workshop by the foreman as well as the owner of the company. They were very hostile and warned me not to enter the premises of the workshop after they saw me sitting inside the workshop at 6 a.m. when some of the workers arrived. This continued over a period of a week when the foreman finally threatened me with physical harm. Even before this threat the workers were very reluctant to talk to me inside the workshop, which I later came to know was because of a brutal attack on them by the goons of the landlord on whose land the workshop was located. It was at this point that Wasim agreed to talk to me at the request of the political activist. We decided to have the series of interviews in the evening after his work was over. It is a testimony to the fear that workers feel at their workplace that Wasim never met me at the gate of the workshop but a considerable distance away, where we would not be seen together. We also never met on consecutive days because Wasim felt people in his living quarters might get suspicious. When I asked if he could persuade some of his fellow workers to talk to me, he politely refused. As compensation, though, he said he would answer all the questions I might put to him. Thus the narrative that follows was born of circumstances that were fraught with fear but also laced with trust and comradeship, and it is one reason there is little doubt about the “authenticity” of the account Wasim provides of his working life. As a conscious decision, I did not ask any questions about his family life back in his village because, notwithstanding the trust Wasim had given me, that might have made him defensive as it would have appeared I wanted to trace his family members. Once he remarked that his son had also migrated for work and when I
asked where and what job, Wasim simply changed the subject. I understood the limits of our interaction, and the whole conversation was confined to Wasim’s experience as a worker and his realization of being part of what I call the labor of logistics.

Wasim’s industrial working life began at the age of 23 in 1982. He was born in a village in Saran district, Bihar. His family was a marginal peasant household with a very small plot of land which they supplemented through a form of land tenure known as *jarpeski*. In *jarpeski* the land is leased for a stated period of time against the payment of cash. This is different from sharecropping and basically a relationship of capitalist rent recognized by law without any feudal dependence on the landlord. Wasim studied until his matriculation, which was no mean achievement at that time. In fact, it was clear from Wasim’s narrative that his family, though not prosperous, did invest in the education of the male child and had a network of relatives through which they could put their children in the job market. As the family grew, Wasim left his village and went to Kolkata (then Calcutta) with the help of his maternal uncle and got a job in a leather factory partially owned by his uncle. The factory made leather gloves and jackets for export and his work consisted of packing and checking the goods. At one point of time, he earned INR 1,000–1,200 per month for this work, which was a substantial amount of money at the time. Since his job also involved office and paperwork, it was seen as quite prestigious by family members back home. The factory started winding down its operations in the face of loss of orders and finally closed down in 1994. Wasim observes that for him this marked the beginning of “*bhaari kaam*” (heavy work), which involved ships, mines, and now airlines. He proudly states that he is one of the few workers in the world who has worked for land, water as well as air. It is hard not to agree with him.

When he left the leather factory, Wasim decided to move away from his kinship network and work for a contractor, mainly to look for better opportunities as well as the opportunity to work
outside Kolkata. Due to the traditional migration of labor from Bihar to Kolkata since the
nineteenth century, there is a strong kinship network in labor migration, which is at work even
now although at a substantially low level. At this point in time, he met Farookh, who worked
at Garden Reach Shipbuilding and Engineers Limited at Kolkata port. Farookh lived in
Kidderpore, a neighborhood in proximity to the port where migrant workers, mainly Muslims,
from Bihar and Uttar Pradesh lived. Farookh told Wasim the Visakhapatnam shipbuilding yard
in Andhra Pradesh was hiring, and that he should come with him as the wages and working
conditions were good. Farookh had already earned the status of a mistri (skilled worker) after
a long stint as a helper and apprentice. He employed Wasim as his helper. Wasim now says
this was Farookh’s first jobber recruitment and that the latter would go on to become a labor
contractor of some importance in the shipbuilding sector, providing labor to almost all ports of
India and even abroad before finding himself back again with Wasim at the Kapashera
workshop. This was the time when major restructuring in the shipping and port industry was
underway in India with the beginning of liberalization. For example, in Kolkata port there was
large-scale retrenchment of labour and the process of merging the Dock Labour Board with
Kolkata Port Trust began. The merger did not happen before 2010, but it points to the complex
process involved in restructuring logistical industries and hence the labor market. This post-
liberalization restructuring is one of the fundamental reasons for the emergence of the labor of
logistics. It was during these turbulent times that Wasim began his own journey as a footloose
laborer of logistics.2

Wasim started work at the Visakhapatnam shipbuilding yard as Farookh’s helper and took up
the craft of welding. He was paid INR 1,300 per month for an eight-hour working day. This

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2 Jan Breman studies informal labor and migration in the context of rural Gujarat, India, and comes up with the concept of
“footloose labour” that signifies the massive influx of labor from rural areas to the town and cities. Breman also rejects the
strict division between informal and formal labor. For a detailed analysis, see (Breman 1996).
amount was after Farookh deducted his cut as his *mistrī*. The practice of *dihadi* (daily wages) was not prevalent in the shipyard. If they were asked to do overtime, they were paid double the wages. They also got a weekly holiday on Sunday. By all accounts, Wasim had no complaints about this work except that his status as a helper restricted his social interactions to other helpers, keeping *mistrīs* or other skilled workers out of his social circle. This had not been the case in the leather factory, since most of the workers there—skilled, unskilled, or managerial—were kinsmen from surrounding villages. It is quite clear that Wasim’s attempt to break away from kinship ties in his occupation was quite successful and these ties were replaced firmly by hierarchy based on skill level and wages. Wasim left his job at the Visakhapatnam shipbuilding yard after a year and moved to the iron ore mining fields of Bailadilla in Madhya Pradesh (now in Chhattisgarh). The company he worked for was NVH Koya. He worked on a 5 kilometer conveyor belt that linked the mine with the nearby railway lines. He recollects that the iron ore was meant for a Japanese company and was moved from Madhya Pradesh on a train to Visakhapatnam from where it was shipped to Japan. Wasim was always acutely aware that his work and the production processes to which it contributed were part of a larger logistical process which worked on a global scale. When asked if it was just a coincidence that his jobs were all connected to Visakhapatnam port, he said that any time his contract expired and had to look for a job he always came back to the port where he would get an indication of opportunities at production sites linked to the port. This was evident when he left Bailadilla and moved to Tirunelveli in Tamil Nadu to join a workshop that made goods made of steel. He had worked there for only 17 days when he received the information that there was an opening in Visakhapatnam shipbuilding yard. He started working at the yard and continued for one year. He then moved to Gajuwaka, a few kilometres away from Visakhapatnam, to work in a steel plant. The steel plant, he said, exported steel to various countries through the port. However, he could work there only for about two or three months as production slowed down and work
became scarce. He then went back to Kolkata to work in another leather factory for a year. He was now a skilled worker and the job of checking and packing was no longer attractive to him both in terms of job satisfaction and wages. He was getting INR 1,700 per month, which was only marginally higher than what he had earned when he first started.

What is evident in Wasim’s journey from Kolkata to several states in South India and back to Kolkata is the crucial role played by Visakhapatnam port in not only finding work for Wasim but also in controlling his movement. The production units where Wasim went to work, the iron ore field, the steel workshop had the same relationship with the port as the trolley workshop has with the airport. It is true that mining fields and steel production on a medium scale is more capital intensive than the workshop, but it is also true that these production units enabled the port to organize accumulation in the same way as Delhi airport does with the workshop, and it creates a similar maze of walls of infrastructure, of circulation and production, as described above. Wasim moved to Delhi in 1998 and started working at a private car garage where he was responsible for fixing the new models of Maruti Suzuki cars that had started to flood the Indian market after liberalization. He worked there until 2002. He believes it was a good move to leave that job and join the workshop as a sealing drive in Delhi began in 2006. The demolition and sealing drive in Delhi was against commercial activities in residential areas, which were supposed to be polluting and dangerous to the residents of the area. Thousands of workers and small traders were ruined by this sealing drive. In 2002, Wasim finally started working at the workshop that makes trolleys for airlines at Delhi airport. During the time of the fieldwork, he was earning INR 7,000 per month, having started on INR 2,400 per month in 2002, which is less than the minimum wage. The foreman earns INR 8,500 per

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3 Sealing drive in 2006 was a campaign by the Municipal Corporation of Delhi (MCD) to close (hence the term “seal”) number of illegal commercial establishments in Delhi, India which were running in residential areas without authorization.
month, the worker on the lathe machine earns INR 7,000 per month. Farookh, with whom Wasim started logistical work, now also works in this workshop, and because of his experience as a skilled worker earns INR 8,500 per month. As he doubles as a security guard for the workshop, Farookh earns another INR 4,000 per month.

There are important theoretical observations about work, labor processes, and their transformation in the stage of logistical capitalism that can be made based on Wasim’s working life. Harry Braverman discusses “degradation of work” in his study of labor processes in the 1970s (1998). He makes the point that scientific management of the corporates has led to a split between brain and hand in a manner that the craftsmanship of the worker has suffered, leading to the degradation of labor and dissatisfaction with work:

> With the development of the capitalist mode of production, the very concept of skill becomes degraded along with the degradation of labour and the yardstick by which it is measured shrinks to such a point that today the worker is considered to possess a “skill” if his or her job requires a few days’ or weeks’ training… (We may compare this with the traditional craft apprenticeship, which rarely lasted less than four years and which was not uncommonly seven years long). (444)

Braverman’s formulation is important to understand the labor processes and the structure of production relations in contemporary times. Braverman’s thesis of degradation of work was devised in the context of the Fordist method of production in the US, and he could discern the changes that were then underway. His object of study became the factory and the office. In India, there was a combination of scientific management and bureaucracy which was restricted to state-owned factories and enterprises. A large part of the workforce was in the unorganized sector. Although mainly in agriculture, this unorganized workforce was also quite substantial in urban areas where small to medium scale factories used to function in dedicated industrial
areas. Delhi still has a number of such industrial areas, such as Wazirpur, and also the small factories that were operating in residential areas that were sealed and demolished in 2006 but were relocated in Bawana on the outskirts of Delhi. Interestingly, the last militant struggle by unorganized workers occurred in 1988 in the form of a seven-day strike in these industrial areas.

Due to the presence of an overwhelming majority of unorganized workers, the question of skill needs to be posed differently. Contrary to Braverman’s assertion about the degradation of work which is specific to the rigidity of factory walls under Fordist production, the interstices of walls and borders of infrastructure, which have now become the site of unorganized labor, become sites for the acquisition of “skill dexterity.” The footloose labor of logistics, which is not legally contracted with the employer or the state, is an element always in motion and migration. This makes workers who perform labor of logistics political subjects that are easier to govern through violence or the threat of violence as they are the least protected in terms of legal rights. The wall then becomes an instrument of violence, in the sense that the walls of infrastructure allow violence to be concentrated instead of dispersed. This will be evident when I describe the violence against the workshop workers in the section on resistance by the workers.

Wasim asserts that migrating from one production job to another added to his experience and skills to an extent that he could work in the workshop as well as in the Maruti factory that produces cars, the Honda factory that produces motorcycles, or the Ricoh factory that produces parts for automobile factories. This is not the kind of “skill” acquisition that Braverman refers to but is surely the kind of skill that is generated in the new structure of production relations characterized by the struggle of labor with logistical capitalism. It is true that the walls of infrastructure largely govern the movement of labor, but it is also true that labor sometimes
moves in unpredictable ways. An example in the case of Wasim is his own exercise of subjectivity in choosing the spaces where he sells his labor-power. In his movement from Kolkata to Visakhapatnam and back he followed the logistical apparatus around the port, but he also exited for reasons that were not informed by economic considerations but by consideration of the nature of his jobs. He came back to Visakhapatnam from Tirunelveli not because the wages were higher, but because he was not satisfied with the work he was doing at the latter. Clearly, a worker can exercise a degree of autonomy from the regime of the walls of infrastructure. It is this struggle of movement of labor that allows for “skill dexterity” in the case of the labor of logistics. What is evident in the discussion on migration and the evolution of the labor market to break away from kinship networks and skill acquisitions is that the labor of logistics constantly struggles with conditions of production marked by walls and borders where it has to confront formal and informal violence, surveillance, and oppressive and hazardous work conditions. However, this is only one part of the story. The other part is how labor resists this march of walls and borders and tries to escape its discipline and protocols.

**Methods of the “Social War” on Logistics**

When the workshop began its operation, it employed 12 workers not including the foreman. The workers, including Wasim, decided to form a union. Wasim could not recall the exact year when they decided to form the union but said it was around five or six years before the time of the fieldwork in 2013, which would mean it would have been around 2007–08. These workers realized that they fulfilled all the legal requirements to form a union. Every worker, except the foreman, agreed to form the union and get it registered. They decided that their immediate demands would be weekly holidays, a wage rise, the implementation of laws regarding

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4 The legal aspects of forming a union in India are governed by the Trade Unions (Amendment) Act, 2001. According to Section 9A of the Act, the minimum number of workers required to register a union is seven.
Employees’ Provident Fund (EPF) and health cover under Employees’ State Insurance (ESI), leave, and proper toilets at the workplace. When the owner of the workshop was told by the foreman about the workers’ plan to unionize, he immediately went to the landlord on whose land the workshop was located. The landlord is involved in the construction industry and has three dumpers which he lets out to building sites. One of his dumpers is used by a construction company working at the Aerocity next to the airport. On hearing about the workers’ plan to form a union, the landlord resorted to overwhelming physical violence: he sent eight of his goons to the workshop where they severely beat up the workers. The landlord asked the workshop owner to remove all the workers with immediate effect. Wasim was the only one out of the 12 who remained at the workshop after the attack. Those who were perceived as leaders of the group were summarily removed. The workers at the workshop can no longer form a registered union according to the stipulations of the labor laws because they do not have a sufficient number of workers to form a union. This story of the workers’ political act of forming a union and its ruthless suppression by the owner and the landlord indicate the problems of organizing workers in the unorganized sector, who form the majority of the workforce in India. This problem is even more acute in the case of unorganized workers who also perform labor of logistics within the catchment area created by a series of walls created by the logistical apparatus around an infrastructural installation such as Delhi airport. Walls, thus created, concentrate overwhelming violence upon workers.

The aspect of time and space in the production process of the workshop is controlled locally at the intersection of the interests of the factory owner and the landlord. This control, in the final analysis, is exercised by violence. This use of violence is to ensure that labor at the workshop does not flow through the membranes of both the wall of the workshop and that of the airport, which will mean a breach. A breach will mean that the workers can make a claim on the airport (or the airline to be precise) in the same way that trolley retrievers discussed in chapter 2 made
the claim which forced the juridical power to define the question of the “appropriate government.” This means that workers will relegate the owner of the workshop to an intermediary instead of an independent owner of means of production, which will destabilize the organization of production and circulation. Thus, it is not in the interest of either the airport or the workshop that the production times at the two places coincide. Much less desirable is the spatial violation that brings the airport in direct confrontation with the workers of the workshop. Hence workers who perform labor of logistics have to be contained within the factory walls, and that is done in case of Kapashera by the nexus of the landlords and factory owners operating there. It is a precarious balance that logistical capitalism has to maintain. Although walls laid out in accordance to the temporal and spatial configuration of Delhi airport act as a catchment for appropriating surplus-value from workers, those same walls are also threatened by workers’ collective action. In the last instance, it is through overwhelming violence whose effectiveness is ensured by walls that the precarious balance is achieved—at least for now.

The terrain of struggle for the labor of logistics is not restricted to the factory. Between the walls of the airport and the wall of the workshop lies a vast space that is a space of production activities and also of reproduction of labor. Some of these spaces of production activities are again directly linked to the airport and are spread over entire urban villages, as I will show in chapter 5 in the case of taxi services at Delhi airport. Other spaces of economic activity provide cheap labor for the airport, as is the case with women cleaners, these spaces function to create a condition of informality, as I will demonstrate in the next chapter. However, the spaces in which these production activities are interspersed are also the spaces where the workers live. Between the airport and several small workshops and factories that make up the landscape of Kapashera are also living quarters of the workers. Kapashera is flanked, on one side, by factories, a hub for goods carrying trucks, and huge buildings from where banks, financial
institutions, software companies, and call centers operate 24 hours a day seven days a week. On the other side is land that has now been converted into big farmhouses that are let out for events ranging from marriage ceremonies to rave parties. These pieces of land and farmhouses belong to big landlords of Kapashera. On one patch of land, a landlord still cultivates vegetables but this is an exception in the face of large-scale monetization of land that has converted it into real estate. In between these walls—of airports, factories, and real estate—is the space of reproduction of labor. This space is a site of intense struggle between labor and capital because the walls try to expand and encroach on the space of reproduction of labor. This is evident, especially, in the case of expansion of real estate and the setting up of new workshops in Kapashera that produce textiles and small parts like screws, nuts, bolts, etc. The result is that rents have become so high that a worker and his family can barely survive on the wages they receive. This has necessitated that women also take up work. In the building in which Wasim lived, where the interviews were conducted, most women had the job of stitching through a contractor. I did not find evidence of children being put to work in the form of family labor. However, evidence points to the fact that Kapshera is becoming a space where the distinction between spaces of work and spaces of labor reproduction is being obliterated. Capital has now penetrated the household of workers changing them into production units. Some more detail is necessary to illustrate the point.

The landlords of Kapashera have converted their houses into four or five storied buildings with about 10–15 single rooms on each floor, all to let out to migrant workers. The building where Wasim lived is representative of the conditions of housing in the locality. The rooms are about 6 feet by 8 feet with no kitchen, and the tenants share toilet and bathroom facilities. The rooms are rented by workers with families as well as those who are unmarried or have their families back in the village. It is interesting to examine the everyday strategy of the workers to minimize the depreciation in real wages because of rent, especially those who are unmarried or have their
families back home. In order to save on rent, six people rent a room where two sets of three workers each have different shifts of work. Normally, they have 10- or 12-hour shifts, hence one set of workers sleeps while another is working. The room in which Wasim lives is minimally furnished, with only a few bed rolls, a small television, a kerosene stove, an earthen pot to store water, a rack of clothes, and a few utensils. Wasim jokingly told me, “You will find the bed warm whenever you come in the room.” As the flow of labor increased in subsequent years, landlords who let out rooms to workers converted their basements into workshops for textile and garment manufacturing or warehousing. These workshops are mostly owned by the landlords and only in some cases are run by an agent who employs his own workers. The landlords now extract rent from the tenants as well as the surplus-value from their workshops.

It is evident that the landlords of Kapashera have transformed themselves into capitalists to a very large extent. This is a phenomenon that is being increasingly witnessed in the urbanization process of Delhi, where there has been a rapid increase in the number of “urban villages.” This has happened in the context of a transformation where a kulak type economy and society, with deeply entrenched patriarchal and caste values, found itself subsumed in the global logistical apparatus. The traditional relation of power based on landownership and clan-based ties has transmuted to one based on capitalist accumulation and control—physical, economic, and political—of labor. It is this transformation that allows the landlords-cum-capitalists to inflict violence on workers, as was evident in the attack on Wasim and his fellow workers when they decided to form a union. This is the reason why these “urban villages” have emerged as the last mile of labor governance, where it is possible to isolate workers between the factory walls and

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5 Delhi Development Authority (DDA) defines “urban villages” thus: “rural settlements already changed and merged into urban areas with changed characteristics in terms of pucca houses, pucca roads, availability of infrastructure etc. Such changed villages called [sic] urban villages while the others remained the rural villages.” Pucca means construction done with concrete, stones, mortar, and other permanent material instead of mud, clay, and other organic materials.
also manipulate the movement of the workers between the factory walls and the walls of infrastructure. The capitalists can both squeeze the workers, immobilizing the worker (as was the case when the workshop workers were violently attacked) and allow conditional flow that makes the workers labor in two spaces without being paid inside the airport. Violence and extraction of surplus-value act simultaneously on the workers. This leads to the question of possible forms of resistance that are either emerging or show a tendency to emerge in the near future.

Alberto Toscano, borrowing from the manifesto *The Coming Insurrection* by The Invisible Committee, claims that “contemporary struggles against capital have shifted from the point of production to those of circulation, circulation, transport and consumption” (2011). At one point in the text of *The Coming Insurrection*, it is claimed that “to block circulation is to block production as well” (2009, 125). Toscano, however, problematizes this assertion by questioning the “unity” of the circulation of “finance, logistics or consumption.” Toscano also admits that “the point of production classically conceived have (sic.) long been on the wane” and that he is doubtful of “the mapping of current struggles onto ‘circulation.’” Circulation in the case of the workshop and its relationship with the airport is both temporal and spatial, as is the case of production processes. Toscano is correct in asking if it is possible to “declare the abstract logic of circulation to be spatial if its financial facet depends so much on temporal arbitrage.” Thinking through walls makes us see the relationship between production, circulation, and reproduction of labor as neither mutually exclusive nor similar but as a complex series of everyday negotiations, violence, and resistance. This has been evident in the case of violence inflicted on workers trying to form a union. In subsequent chapters, I will demonstrate instances of daily struggles over informal settlements in Rangpuri Pahari, from where cleaners are recruited for the airport, and resistance to the spatial and temporal practices
of airport on the part of both women cleaners and taxi drivers. The terrain of logistics, in this schema, lends itself to riots, strikes, and collective claim-making.

Scholars of counter-logistics put forward the idea of blockading as a strategy to overcome the logistical stranglehold of capitalism. Jasper Bernes gives a very clear exposition of logistics and the art of war:

To manage a supply chain means to render it transparent. The flows of commodities in which we locate our blockaders are doubled by flows of information, by a signifying chain that superintends the commodity chain, sometimes without human intervention at all. Alongside the predictive models of finance … logistics likewise manages the complex flows of the commodity system through structures of representation. We might imagine, then, a logistics against logistics, a counter-logistics which employs the conceptual and technical equipment of the industry in order to identify and exploit bottlenecks, to give our blockaders a sense of where they stand within the flows of capital … counter-logistics might be a proletarian art of war to match capital’s own ars belli. (2013)

This strategy of blockade and choking the bottlenecks of logistics comes from a certain understanding of logistics, which comprehends it relationally in terms of chains or networks. Such a comprehension of logistics is useful, as is evident from the manifesto referred to by Toscano and the concept of counter-logistics suggested by Bernes. However, there is also something to be gained from comprehending logistics in the manner we have discussed in this chapter: as a maze-like terrain organized along walls. Seen this way, blockades or sabotage are just tactics, a contingent response to the contingent nature of logistics itself. Some researchers have already reminded us that “Striking against infrastructure requires not just sabotage but constitutive acts of organization” (Logistical Worlds 2016.). Susan Leigh Star makes an
important observation that infrastructure “becomes visible upon breakdown” (1999, 382). This breakdown can be achieved by both the labor of logistics and logistical labor, and in a radically organized phase it is possible to achieve a breakdown with a coordinated effort of the two forms of labor. This possibility of creating a breakdown is what Bernes alludes to when he speaks of identifying and exploiting the bottlenecks. However, exploiting bottlenecks and using sabotage is based on the principle of stasis in the sense that the desire is to grind the logistical apparatus to a halt and make it immobile at a particular instant. It does not take into account the ability of the logistical apparatus to modify itself in the face of act of sabotage and or the use of bottlenecks for strategic labor actions by workers. At this stage, it is debatable if struggles by labor of logistics are showing the tendency of exploiting bottlenecks and using sabotage as method of collective action or bargain. However, it is heartening to see that workers performing logistical labor are using the spatial and temporal logic of the production process at the airport to achieve a breakdown with a collective and coordinated effort. In the next chapter on women cleaners, I show how these workers use round the clock operation of the airport to disrupt the production process. They are also showing growing awareness of the manner in which the logistical apparatuses of the airport constitute them as laboring subjects. This makes workers flexible in tactics of struggle, particularly when they tailor their actions to the spatial and temporal logic of infrastructural installations and logistical apparatuses. I will be providing the details of a strike by women cleaners at the airport in the next chapter as an evidence of such an effort.

The resurgence of radical and militant working-class movements in India in contemporary times has occurred in the organized sector, especially the automobile industry. The heroic struggles of the Honda and Maruti workers instantly come to mind. The demands raised by

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6 Workers of Honda Scooter and Motorcycle India (HSMI), Gurgaon, Haryana, India, were brutally assaulted by the police in 2005 when they were protesting against dismissal/suspension of their co-workers. Maruti Suzuki India Limited, previously known as Maruti Udyog Limited, started with the government as a major shareholder and Suzuki as a partner. Maruti was
These movements include the right to form an autonomous union, better working conditions, wages, and security of work. It is still not clear why the same kind of militant and radical movement among the unorganized workers who form more than 90 percent of the total workforce is so slow in emerging. It is only very recently that we have seen unorganized workers mobilizing around workers’ demands and effectively challenging the state. This happened, most notably, in the case of garment workers in Bengaluru. It is now commonplace information that workers in the organized sector, such as automobile, chemical, steel, and other industries, are mostly on contract and a very minuscule number find permanent employment. These contradictions between contract and permanent workers are a regular feature in working-class movements in India at present. Radical left organizations working among unorganized workers realize the logistical nature of the production process and the need to organize these workers on a framework entirely different from traditional unions. One of the strategies they have evolved is to base the union work not exclusively at the site of production but also on the site of reproduction of labor—i.e. the settlements where workers live. New forms of struggle have emerged in Delhi, where the political activities of mobilization and strikes tend to be concentrated in the neighborhood and only subsequently taken over to the workplace. These struggles have shown an acute understanding of securing the space of social reproduction of labor from the encroachment of the walls of the global logistical apparatus and supply chain as the first step in its battle with capital.

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7 Garment workers of Bengaluru protested against the proposal of the central government of India regarding employees’ provident fund. According to this proposal, workers could withdraw their fund only when they attained the age of 58.
8 The contradictions between the permanent and contract workers were very evident in the Maruti struggle of 2012. The demands of the latter were relegated to the end of the charter of demands. The charter of demands did mention turning contract workers into permanent ones, but activists on the ground said that was not pursued with the required commitment. However, the reports are contradictory as there are different versions from different left groups involved in the struggle.
Walls as the constituent principle of logistics bring to the forefront the aspects of segregation, violence, and war as the prime movers of the logistical apparatus. In this sense, logistics is primarily about the ability of capitalism to create these walls of latent brutal power as a method of circulating goods and people. The concept of wall emphasizes logistics as a project of partition of spaces, and like all projects of partition it is violence that organizes spaces of production, circulation, and walling. Furthermore, walls are expansionary. They expand by annexing empty spaces and creating a series of walls, which also modifies the spaces between them. It is these walls and the movement of labor within and against these walls that produces the terrain of social war between labor and capital.
Chapter 4

Domesticizing the Airport: The Transformation of Domestic Workers into Logistical Labor

And yet I am distressed at my relevance
Unhappy with the poison
Because I want better than what I possess
To clean the world you need a scavenger
I fail to become that scavenger
Yet, someone screams daily from the inside
That no work is low
If the man is pure
And yet I cannot bear myself to take that way.

Gajanan Madhav Muktibodh (2016, translation from Hindi mine)

The structural changes wrought by the real logistical subsumption of labor bring about profound transformations in the labor market. I have defined real logistical subsumption of labor in chapter 3 as the tendency of logistical capitalism wherein processes of capitalist circulation become a critical condition for the organization of production in which an infrastructural installation and its corresponding logistical practices produce two different forms of labor: labor of logistics and logistical labor, which are discontinuous and continuous, respectively, in time and space in their relationship with that infrastructural installation and its logistical practices. In real logistical subsumption time as well as space becomes an element through which surplus-value is generated at an increasing rate. I make the distinction between
logistical labor and labor of logistics in relation to one infrastructural installation, Delhi airport. However, it is quite possible that certain workers are under the regime of several forms of infrastructure and logistical practices. In the next chapter on taxi drivers, I will demonstrate how these workers actually straddle both forms of labor with regard to the airport, analyzing how some of the workers are simultaneously under the regime of the logistical practices of app-based taxi aggregators and radio-taxi companies. This then presents a complex picture where multiple infrastructural installations and their logistical practices create an array of logistical labor, labor of logistics, and forms of labor that are under multiple infrastructure regime and have to straddle both forms of labor.

I want to reiterate that logistical labor and labor of logistics are manifestations of real logistical subsumption. The processes through which real logistical subsumption establishes its control over production and circulation reorganizes urban spaces, the structure of the labor market, and labor migration, creating in its wake repositories of the reserve army of labor that pivot on infrastructural installations and logistical practices. Real logistical subsumption transforms work by bringing into its fold and under its control forms of work hitherto considered peripheral to the capitalist relationship of production. In this chapter, I study the women cleaners at Delhi airport and their transformation from domestic workers into logistical labor. I also examine how their location in the urban space, which itself undergoes a transformation at different stages of capitalist development, plays a crucial role in this transformation and how infrastructure and logistical practices govern their labor as well as social relations in terms of gender and caste.

This chapter is divided into four sections. In the first section, I situate the domestic workers in the urban settlement they live in, which is known as Rangpuri Pahari. I provide a history of this settlement and show how it has emerged gradually in relation to productive activities of Delhi
and also show how its informal status in terms of administrative regulation has made it evolve into a source of labor supply first for domestic work and then for Delhi airport. In the second section, I analyze the transition of domestic workers into logistical labor. In the third section, I analyze the production process in which women cleaners are implicated inside the terminal building and which makes them logistical labor. In this section, I also give an account of how these workers resist the logistical apparatus of the airport. In the final section, I bring out the gendered nature of the work of cleaners and its specificity. I conclude the section and the chapter with the example of solid waste workers whose work at the airport is an instance of exception to the kind of work that women cleaners perform but which is nevertheless a consequence of the real logistical subsumption of labor.

In the last chapter, I traced how the labor of logistics, which is also a result of the real logistical subsumption of labor, is controlled through a carefully calibrated mechanism of logistical practices. The difference between the story of Wasim and the account of women cleaners I discuss in this chapter is that the latter have to perform their labor in the terminal building. Unlike in the case of Wasim, who works in the workshop in Kapashera, the women cleaners are directly under the spatial and temporal regime of the airport. The labor of the women cleaners is not controlled by erecting walls but by controlling and restricting their movements through clearly delineated borders. These workers cannot cross these borders and associate with their fellow workers. Later in this chapter, I give a detailed account of how these borders are constructed and made operational in the terminal building. First, I briefly recount the story of Wasim: he was a worker who migrated from a village in Bihar through his kinship network and, following a trail of logistical installations, especially ports, he then broke away from his kinship network and became embedded in the logistical industry as a welder. He finally ended up in a workshop manufacturing trolleys for airlines at Delhi airport. I also showed how working in the workshop implicates Wasim in a network of power that is controlled by the
airport through layers of boundaries and borders but that his labor never becomes continuous in time and space with respect to the airport. Rather, it is perpetually fragmented and made anew.

The case of the women cleaners I interviewed during the period of fieldwork is different. They used to work as domestic help in the nearby middle-class neighborhood of Vasant Kunj in South Delhi. These workers lived in an irregular settlement called Rangpuri Pahari not recognized by the municipal authorities of Delhi. Their location at Rangpuri Pahari is a crucial element in their transformation from domestic helpers to cleaners as it not only reveals the story of the restructuring of the labor market and the transformation to logistical labor as opposed to the labor of logistics, but also throws light on the relationship between the evolution of urban spaces, labor, and infrastructure. I argue in this chapter that women cleaners form a part of logistical labor and trace their evolution as such. To understand the transformation to logistical labor we need to first analyze the labor of the women when they were domestic helpers and their relative stability in traversing the spaces of work. It must be said here that when domestic workers are brought under the logistical regime of Delhi airport for performing what could be conceived as the same kind of work that they used to perform earlier at someone’s home, to produce nearly the same use-value (cleaning of floors), it is not a simple transposition in terms of space. In that case, what is at stake would be mere formal logistical subsumption. Instead, the workers are brought under the spatial and temporal rule of the logistical apparatus of the airport where their surplus-value is appropriated under very definite conditions of labor process. This is at the heart of these workers performing logistical labor under real logistical subsumption. In this chapter, I will study and analyze these conditions of the labor process.
As Guillermín Alostomente suggests, domestic labor is place specific (2015), so it becomes important to closely study the place where these workers live. As such, the story of Rangpuri Pahari becomes crucial in understanding the transformation of labor through a period of more than 50 years. This place is a palimpsest of the structuring and restructuring of the labor market and labor processes of the city. I will demonstrate that the relationship between Rangpuri Pahari, Vasant Kunj, the maids, and the cleaners has been transformed as a result of the expansion and economy of Delhi airport. I will also show that there are forms of labor that are inextricably linked to the airport and, more significantly, the airport has changed the economic, labor, social, and power relations within Rangpuri Pahari. In the case of Wasim, I identified a production process based on creating walls that was and remains a necessary condition for the existence of infrastructural installations and logistical practices. Moreover, there was a complex relationship and process of exclusion and inclusion as a result of myriad wall-making exercises of the airport, which define production, circulation, and socioeconomic relationships.

In this chapter, I will study another facet of logistical capitalism through the lens of gender, work, and the space of the airport and the home. To invoke a landmark work of literature by Rabindranath Tagore, this chapter studies the restructuring of *Home and the World* (2005) wrought by infrastructural installations and logistical practices. My initial task, however, is to establish that infrastructural facilities and logistical practices transform the spatial character of the city, creating avenues for the reserved army of labor by restructuring forms of work, such as that of the maids of Vasant Kunj, and putting their capacities at the service of logistical capitalism. The space in question in this case is Rangpuri Pahari, where our workers embody the life of logistical labor.
The Changing Landscape of Capital at Rangpuri Pahari

My study of Rangpuri Pahari focuses on an irregular settlement at a slight distance from the resettlement area of Nangal Dewat. Nangal Dewat was also a village within the area of Delhi airport. This village was acquired for the expansion of the airport and after a prolonged legal battle with the government the villagers were evicted. Some of those villagers were resettled in the recently developed residential areas of Vasant Kunj. This village was completely dependent economically on the Delhi airport. The affluent section of Nangal Dewat used to operate transport and warehouses for the airport while the poor worked as porters. Once they were evicted the economic relationship with the airport was ruptured. I related and analyzed the story of the eviction of Nangal Dewat in detail in chapter 2. The village was uprooted in the process of restructuring and Rangpuri Pahari, which had previously not been dependent at all on Delhi airport, became interlinked with the latter. Rangpuri Pahari transformed into a site for providing labor to the airport and serving as a recruiting site for numerous labor contractors who have emerged as a result of the expansion of Delhi airport.

Rangpuri Pahari borders Mahipalpur on the west and Vasant Kunj in the east and is about 4–6 km (driving distance) from the airport depending upon the route taken. This settlement began as a site for stone quarrying. It has an interesting history and provides a glimpse of the expansion of the city. Rangpuri Pahari has transformed from an unregulated place of stone extraction and criminal activities to a site that is a source for the supply of logistical labor. This place is now implicated in several legal cases with the local government and eviction is an ever-present threat. However, because of its newfound importance as a source of labor supply for the airport it has also gained some political clout mainly through the involvement of local leaders and labor contractors. The rising importance of Rangpuri Pahari as a result of the infrastructure and logistical practices of Delhi airport has also prompted governmental
interventions which have led to an intersection of several interests: the government, labor contractors, labor, planners, and urban politics. The settlement is now enmeshed within these intersecting interests. These arrangements have opened up space for the intervention of the executive part of the government whose constant desire is to regulate and securitize urban space as thoroughly as possible. In the case of Rangpuri Pahari, the executive intervenes by threatening the inhabitants with eviction owing to the illegal status of the settlement according to government regulations and rules.

My objective in this chapter is to analyze the connections and networks that have emerged involving three major elements: women cleaners, the airport, and Rangpuri Pahari. The first step is to understand the changing economic nature of Rangpuri Pahari, its place in the city, and its current status as a necessary entity and condition for the operation of Delhi airport.

As mentioned above, Rangpuri Pahari is currently an irregular settlement and hence the threat of eviction and demolition is always present. The settlement lies on Mehrauli-Gurgaon Road and if one approaches it from Mehrauli towards the airport it lies on the left of the road. The settlement is at a fair distance away from Mehrauli-Gurgaon Road and one has to get off the road and go down a slope to reach Rangpuri Pahari. The area itself has all the marks of an irregular urban settlement with open drainage and sewers, badly maintained lanes, and a relative absence of other municipal services like garbage collection, regular water supply, etc. Approaching the settlement one has to cross a big playground like field which is used for social occasions, like marriages, religious festivals, etc., by the people of this settlement. Upon entering the settlement, it is obvious that the living standards of the people here are more varied than the general squalor would suggest. Small two-storied houses line both sides of the road. Some have cars and motorcycles parked in front that suggests a comfortable lower-middle class existence. However, these houses are not very high and give a sense of claustrophobic existence.
and are extremely congested. The roads are narrow, barely wide enough for a small car to negotiate. There are shops and groceries run by the people of this settlement that caters to the need of its inhabitants. Most houses are permanent structures and the owners keep tenants as a source of additional income. However, this kind of settlement is at present closer to the main Mehrauli-Gurgaon Road, but as one keeps walking further away from the road the settlement become noticeably poorer with semi-permanent structures being the major type of accommodation. These are newer settlements in Rangpuri Pahari. The illegal status of Rangpuri Pahari has led to several confrontations between the local government and the inhabitants of the settlement. The result is that there are militant peoples’ associations that fight these onslaughts by the government; these associations use tactics ranging from filing petitions under the Right to Information Act (RTI) to picketing. These various forms of claim-making have evolved over a period of time through struggles and the residents now possess a range of methods within their political repertoire. Rangpuri Pahari’s checkered history was related to me by one such RTI activist, Samay Singh, who works closely with a well-known urban planner from Delhi, Gita Dewan Verma.

The story of Rangpuri Pahari starts in the 1950s when most of Dhaula Kuan and Moti Bagh (now sites of residential quarters for government employees and the South Campus of University of Delhi, among other important government offices and religious places) were thriving sites for stone mining. Most of the workers who were employed in these mines were migrant workers from neighboring Haryana and Rajasthan. Around 1980, the mining of stones stopped at the site and moved to Nangloi on the western end of the city. According to Samay Singh, most workers moved to Nangloi but those who did not ventured instead on to Rangpuri Pahari where a company was still mining stone: “Company ka naam toh yaad nahi hai par wo kisi Ahuja sahib ka tha” (I do not exactly remember the name of the company, but it belonged to one Mr. Ahuja). Singh goes on to say that the land the workers finally settled on was rocky.
land on the ridge which was leased to the stone mining company. They first settled at the mining site itself and then expanded their living area when the lease of the company expired after a year. However, the workers continued to live on the site even after the closure of the mine. When the workers claimed the land for themselves it, technically, came under the Gram Panchayat (the local elected body of the village). However, in 1982—and Samay Singh gives the date of June 22—the land was transferred from the Gram Panchayat to the Municipal Corporation of Delhi (MCD). The land came under the Mahipalpur Ward of Najafgarh Zone of the MCD, which is now known as the South Delhi Municipal Corporation. In fact, in the MCD elections of 2012, four candidates were from Rangpuri Pahari and one from the upcoming Nangal Dewat where the evictees from the original village were settled. Although the candidates from Rangpuri Pahari and Nangal Dewat did not win, one of the candidates from Rangpuri Pahari was the runner-up. This information is important as it is an evidence that Rangpuri Pahari has acquired a stake in urban politics as a result of its status as an important place for labor recruitment and labor contractors because of its relation with Delhi airport. Nangal Dewat, which was evacuated and demolished for the expansion of the airport, is also important because of its status as a resettled middle class urban neighbourhood, displacing its earlier existence as a village. This is an important example of how legal and illegal settlements operate as a result of infrastructure and logistical practices and how these sites stake a claim on politics when they were earlier just passive participants. Delhi airport in this sense has fundamentally changed local politics and introduced new political groups and agents.

To locate Rangpuri Pahari, one must negotiate an extremely complicated legal labyrinth often with conflicting, overlapping, and undefined authorities. The contestation of space is conducted, in the case of Rangpuri Pahari, both legally and politically. The physical confrontation between the government and the inhabitants and the forms of claim-making by
the latter largely revolves around the legal status of Rangpuri Pahari. The legal borders and boundary claimed by the inhabitants do not coincide. The law itself, at least the rules and regulations that define urban spaces, is hardly precise and often contradictory. First, Rangpuri Pahari is a Census Town (CT) according to the 2011 Census. However, previously it was classified as Rural Village in the “Draft Zonal Development Plan of Zone J (2008)”. The details of “Zone J” are provided later in this chapter. A Census Town officially defined by the Census authorities is that which has (a) a population in excess of 5,000; (b) 75% of male working population engaged in non-agricultural activities; and (c) a population density of at least 400 residents per sq km (2011). In the Master Plan of Delhi-2021 (MPD-2021), Rangpuri Pahari is a Rural Village and there is no proposal to amend the status to that of Urban Village, although it is a Census Town. This distinction is important because an Urban Village is legally recognized as part of the city’s urban functions, although as DDA claims in its document Development of Urban Villages in Delhi: “In Delhi, most of the urban villages engulfed within urban areas have become slum pockets” (1986, 4). Legally, then, Rangpuri Pahari does not perform urban functions and remains outside the city while still performing a very important function for the city: supplying workers, many of whom are now migrants. According to the 1991 Census, the population of Rangpuri Pahari was 3,250. In the next Census of 2001, the population increased six times to 19,297. This is the largest increase in the population of Rural Villages in the Zone J category. When my fieldwork was conducted in June 2013, Samay Singh and all the women workers I interviewed said that more migrant workers had started to live in Rangpuri Pahari as rents were low compared with other places. Interestingly, many of the workers who have been living there since the settlement began have become property owners renting out their houses to migrant workers. This has led to the expansion of the village, which means that it now crosses into the borders of other villages. There are more brick and cement homes, and most are now becoming two-story structures to accommodate the influx of tenants.
There are also some signs of lower-middle class prosperity, with some households owning motorcycles and some people also owning cars. The dynamism Rangpuri Pahari has acquired is because of its ill-defined legal geography combined with having become a place for cheap labor for the airport.

It is fruitful to consider Partha Chatterjee’s study of a slum of Kolkata in his *The Politics of the Governed* (2004) in examining the development of Rangpuri Pahari. Chatterjee studies the slum alongside the railway track as a place that is like a “frontier settlement” (54). The men in the slum are mostly daily wage earners working in construction while women mainly work as domestic help in the neighboring middle class houses (58). The similarities and differences with Rangpuri Pahari are remarkable. Rangpuri Pahari indeed was, to begin with, a “frontier settlement” established by workers. However, it was a frontier for capital as well in the expanding urban economy. Unlike the slum, Rangpuri Pahari was both a site for capital accumulation and the reproduction of labor. Thus Rangpuri Pahari was initially populated with unorganized workers while in the case of the slum the residents were refugees from East Pakistan after Partition and migrants from southern Bengal (57). The slum was wholly illegal and there was no ambiguity on that score while in the case of Rangpuri Pahari the question of legality is not so easily settled. This is why a study of Zone J becomes important in order to understand Rangpuri Pahari, the residents, and their transformation into different forms of labor over the evolution of this otherwise nondescript place.

A point about politics needs to be underlined in the light of Chatterjee’s work. In the case of the slum the politics takes the form of collective action which is paralegal and throws up leaders who are nothing like the leaders of civil society or electoral politics. Chatterjee points out that in the case of slum dwellers, “These claims are irreducibly political. They could only be made on a political terrain, where rules may be bent or stretched, and not on the terrain of established
law or administrative procedure” (60). This is the crux of what Chatterjee calls “political society” in opposition to the civil society. However, in Rangpuri Pahari we witness both forms of claim-making and collective action, paralegal as well as legal. It is a place where governmentality meets juridical power as well as that of the executive. In the case of Rangpuri Pahari it is difficult to make a neat distinction between political society and civil society because here politics is a complex amalgamation of informal negotiations with governmental authorities like the police and those who provide municipal services (like sanitation and health), as well as legal methods (by appealing to the courts, administration, and ministries). Having become essential for the supply of labor for the infrastructure and logistical practices of Delhi airport, Rangpuri Pahari has acquired a position that enables it to use the techniques of both political society and civil society while being qualitatively different from both. The existence of Rangpuri Pahari is still precarious with the constant threat of eviction looming over it, much like the slum of Chatterjee’s study, but a network of labor and the structure of labor supply has meant that its residents can resort to legal measures. What helps them in their struggle is also the way Delhi has been planned in different zones.

The National Capital Territory of Delhi is divided into 15 planning zones/divisions according to MPD-2021 (2007, 4). Eight zones (A to H) are in the Urban Area and six zones (J to P) are in the Urban Extension/Rural Area. Zone O is designated for the river Yamuna/Yamuna Front. In South Delhi, Zone J is bound by the Mehrauli–Badarpur road to the north, National Highway (NH) 8 in the west, and the National Capital Territory (NCT) in the south and east. This puts Rangpuri Pahari in the middle of Zone J. Now, the objectives of Zone J are to improve the connectivity of existing urban areas and give accessibility to “Urban Extensions,” the integration of “Urban Extensions” with “Urban Areas,” and the preservation of ecology and historical monuments. The problem is that the land use assigned to the area had to be changed in the Master Plan. According to MPD-2021, Rangpuri Pahari has a land area just short of 30
acres (290). The original land use was denominated as “Agricultural and Water Body (Rural),” which was changed to “Government Land (use undetermined) for defence purpose” (290). This change meant that the land was vested in the government now and since it was slotted for defense purposes construction would become possible in the area; thus the eviction of the residents of Rangpuri Pahari became imminent. However, both the change in the land use and delineation of boundaries of Rangpuri Pahari give it a unique legal position. The initial land use meant that residents were given and possessed records of ownership of lands. This is mentioned in the two documents khasra and khatauni.1 These are also the most important documents when the residents lay their claims in court. The land use change is one of the factors that have created confusion. The borders of Rangpuri Pahari are also marked by the very physical presence of the airport and its authorities. On the east is land that belongs to the Airport Authority of India (AAI), on the west is the “Agricultural and Water Body (Rural)” and regional park, on the north the Mehrauli–Mahipalpur Road and the Sultan Garhi Tomb, and on the south the Nangal Dewat Evictees Scheme for those who were displaced as a result of the expansion of the airport (which I described briefly above). Delhi airport is at the center of defining this space in terms of formation and governance.

The draft zonal plan makes it very clear that National Highway 8 (NH 8) forms the peripheral arterial of this administrative zone. Without going into technical details, the plan suggests that because of the expansion and modernization plan of Delhi airport and the establishment of the metro link the inter-change points for integrating multimodal traffic and the transportation system first have to be developed. This means that Rangpuri Pahari must remain in this liminal situation between the legal and the illegal, which will allow the government to change the plan

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1 A khasra is a legal agricultural document that specifies land and crop details. A khatauni is the register of all persons cultivating or otherwise occupying land in a village as prescribed in the Delhi Land Revenue Rules. It is a document prepared as part of record-of-right in every estate. It contains entries regarding ownership, cultivation, and various rights in land. It is revised every four years.
and the existence of the place according to the needs of the infrastructure and logistical practices of the airport, which includes plans for further expansion and modernization of the airport. One of the more ambitious plans in the Draft Zonal Development Plan for Zone J (South Delhi-II) is to develop the area over which passenger carriers will fly; the idea is to provide a pleasant aesthetic experience for the passengers: “Area around Airport is going through major change over. The Dwarka Sub City on the Western Side of Airport offers an enhanced visual experience from Air. Similar ideas may be kept in mind while developing areas in the vicinity of Airport by revitalizing surrounding natural and built environment” (2008, 12). Thus the plan is not only concerned with logistical arrangements on the ground but also seeks to create a network of urban aesthetics and built environments for the visual pleasures and atmospheric sensations of air travelers. The plan does not reveal precisely how it is going to achieve this task, but if such a transformation does come about a new study will have to be done to critically understand the changed nature of urban space, infrastructure, and logistics. I have already shown in chapter 1 that air routes have a definite logic of capital, politics, and state building and that the location of an airport has as much to do with air routes as the availability of land. According to this plan, there is a theoretical possibility that air routes can be changed, albeit for a short range, according to the location of the airport and the infrastructure of the city. However, this possibility is in the realm of speculation and one has to wait to see if this proposal by the DDA is implemented.

A study by the School of Planning and Architecture, New Delhi, shows that the area under Zone J, especially Rangpuri Pahari, is not clearly delineated on the ground. A line has been drawn across the map of Delhi that does not correspond to the land use or commercial activities around Rangpuri Pahari (Panel Discussion- Local Area Plan and Housing Provision 2016). This administrative and executive ambiguity in spaces propels the development of real estate, spaces of consumption, movement of goods and people, and, in fact, the entire urban space.
The ambiguous status of Rangpuri Pahari opens up the possibility to escape otherwise strict regulations for the expansion of real estate. The dissonance between the arbitrary yet legal demarcation of land use by authorities and the practices on the ground makes it difficult to ascertain the exact measurement and location of land that allows small builders in the area to construct houses without any clearance or without following legal norms. It is because of this that, in my opinion, the construction of multistoried houses has taken place on land whose legal status is still contentious and the subject of several political actions by the residents. Several studies of cities like Delhi, Hyderabad, Mumbai, and Vijayawada have shown that irregular urban spaces such as Rangpuri Pahari influence the real estate market. In Hyderabad, the speculation over land is directly linked to big business (Ramachandraiah 2009; Ananth 2014; Ananth 2015). In the case of Mumbai, the location of slums decides to a large extent where infrastructure such as metro rail can be erected (Gandhi et al. 2014). In Delhi, the several classifications of urban spaces into urban villages, rural villages, and those city spaces that come under the supervision of several administrative authorities have allowed these spaces to transform themselves into sites of consumption taking advantage of the ambiguous rules governing the status of the land (Pati 2016). Sushmita Pati has discussed this phenomenon, especially in the case of Hauz Khas Village and Shahpur Jat, two villages in South Delhi which are now vibrant sites of production and consumption under the direct influence of global capital. Shahpur Jat is a site for large-scale production of garments for export, especially by migrant labor from Bengal, and for outlets of budding fashion designers of Delhi. Hauz Khas Village is now a place of several bars, restaurants, and recreational spots quite popular with Delhi’s expatriate community. Both these villages are located in strategic areas in terms of real estate and the lack of clarity in law paved the way for the establishment of these shops, factories, and eateries. By the time the lawmakers realized it, fully-fledged places for global capital were already functional. These are yet more examples of the restructuring of villages,
labor markets, and labor caused because of multiple factors that include, in this case, production of commodities for the global market, legal ambiguity about the place, and the presence of cheap labor, both migrant and local. Both Hauz Khas Village and Shahpur Jat are firmly embedded in the supply chain of global capitalism with their own unique logistical practices.

Gita Dewan Verma (2015) has meticulously recounted the development of Vasant Kunj, a mostly upper middle- to high-income housing, at the expense of Rangpuri Pahari. This development occurred in the mid-1980s, violating the prescribed limits of urbanization and pushing into the inviolable green areas near Rangpuri Pahari. The Vasant Kunj area was to be developed for middle- and high-income groups as well as the low-income group but this provision was violated on a large scale when even the houses made for the low-income group were captured by real estate agents or influential people in the government. Now, these low-income houses are priced in the same manner as other higher grade housings. After 1990, Verma sees a definite change in DDA. What was known as the “slum problem” became “definitely delinked from low-income housing supply by DDA.” Thus, a skewed real estate market was created in Vasant Kunj under the supervision of DDA as “low income flats were developed and disposed of in ways certain to attract upper-income groups.” This skewed market ensured a constant supply of domestic labor, minimally skilled technicians, and construction labor for Vasant Kunj. The women cleaners were part of this labor market as domestic workers. Thus the location of Rangpuri Pahari and its legally ambiguous position within Zone J of Delhi’s planning scheme to a large extent decided the composition of labor in this site.

Changes in planning with the evolution from the pre-liberalized to the neoliberal era worked simultaneously to put the labor force of Rangpuri in a precarious situation both economically and spatially. This precariousness is accentuated by the fact that Rangpuri Pahari’s legal status
makes it permanently vulnerable to the danger of demolition by the municipal authorities. One has to consider that this threat is not only economic and driven by the logic of urban planning but is also a marked instance of keeping labor docile and servile by controlling its movement on the basis of capital’s demand for labor. The last instance of demolition was in 2015. However, the constant threat to homes and livelihoods has made the inhabitants of Rangpuri Pahari evolve forms of struggle that encompass a combination of legal and confrontational means. This process has also given rise to new forms of political association among the residents of Rangpuri Pahari. There are now associations of activists for legal battles, students and parents, and also a citizens’ association.

There is a conscious effort to connect struggles that lay claim to urban spaces. Some prominent associations of Rangpuri Pahari are Samudayik Vikas Samiti, Dalit Mazdur Vikas Sabha, Shankar Camp Vikas Samiti, and Vidyarthi-Abhiebhavak Manch. These associations collectively use legal battles to implement the Master Plan, making Rangpuri Pahari a regular and legal settlement. In this legal battle they are helped by similar associations of neighboring Mahipalpur village. A good example of these new forms of struggle (and the formation of related social and political alliances) was witnessed during the attempted demolition in 2000. The protest against this demolition brought together an association of students and parents active in the government school and a hawkers’ union operational in the area. It has to be emphasized that the domestic workers were also working in the same locality. I have been unable to ascertain definitively if there was some social or political interaction between the hawkers and domestic workers. However, the possibility cannot be ruled out, because in Vasant Kunj several forms of labor that interact in the ordinary course of the day have acted together politically. Cleaning workers are employed by the Residents’ Welfare Associations to work in the housing societies and some of them come from nearby villages. There is a definite possibility that strong new alliances will emerge in the struggle against both capital and its
political apparatuses. Thus, infrastructure and logistical practices not only affect the politics and labor of Rangpuri Pahari but are an important strand in the mesh of power that the struggle of labor and capital is weaving in urban spaces. The next section gives an account of how the labor of subjects engaged in domestic work takes on the form of logistical labor as a result of expansion of Delhi airport.

**Crossing the Threshold of the Domestic**

During my conversation with Samay Singh about the kind of workers living in Rangpuri Pahari, he spoke of the women cleaners at the airport and the emergence of small labor contractors who supply workers to Delhi airport for various kinds of work. These contractors are mostly from Rangpuri Pahari and nearby villages like Mahipalpur. One of Samay Singh’s relatives who worked in the airport as a cleaner became my first respondent. It turned out that her daughter was getting married, and she was busy preparing for the ceremony. This was a stroke of luck as it brought me into contact with her fellow workers who were helping in the wedding preparations. The circumstances were also crucial as a wedding is akin to a carnival where the everyday rules of patriarchal dominance are slackened somewhat, allowing for uninterrupted and frank conversation without the presence of supervising men within the family. This situation enabled responses that otherwise might not have been forthcoming as they were sometimes of an intimate nature.

Interviews were conducted with five women aged between 20 and 45 years. Among these workers, the youngest of them, Rajni (name changed), was 22 and had been recruited only six months earlier by a contractor who supplied workers for cleaning jobs at the airport. The oldest was 42 years old and was simply called Bhabhiji (Hindi for elder sister-in-law). It was her daughter who was getting married. Bhabhiji had been working at the airport since the opening of Terminal 3 in 2010. We always met in the morning either when they returned from their
shift at the airport or when they were going for their shift. In between shifts, they had to perform
the chores of the house. Thus apart from earning wages to run the household, these women
workers also had to work for the reproduction of their own labor-power as well as that of the
men, and dependents in the house. Bhabhiji, for example, had to work for her husband, his
brother, his mother, and their two daughters. This domestic labor was performed after twelve
hours of shift duty at the airport. Bhabhiji explained that sometimes due to changes in the
timings of the shift, overtime, or visiting relatives, she had to work for up to 18 hours a day
(counting work at both the airport and home). During the first interview I had with Bhabhiji,
she made a remarkable statement. I asked her whether she considered working for home as
work or part of her responsibility as a wife, mother, sister-in-law, and daughter-in-law. It was
perhaps a leading question, but her answer gave a deep insight into the subjectivity of women
workers and their acute understanding of political economy. She said: “I used to work at houses
in Vasant Kunj and also at some professors’ houses at Jawaharlal Nehru University (JNU) and
I did the same work that I do for my home. I used to cook, clean, do the dishes, and in some
cases even wash clothes. Who pays me here in my house?” Bhabhiji understood instinctively
that the relationship she shared with her employer was a wage relation. She was enmeshed in
both wage work for alienated reproductive labor not done for oneself and unpaid work she
performed at her home. This understanding of wage relations and work was developed even
more sharply at the airport where she observed the direct conflict between labor and capital.
During the interview, she mentioned that in the three years she had been working at the airport
she had never been promoted. She was of the opinion that she should have been promoted to
the level of a supervisor. The only advantage she had at the time of our interaction was that she
had to work only at T3, which is more automated than Terminal 1C and Terminal 1D (where
more manual cleaning is required). Furthermore, it is easier to navigate T3 because vehicles
especially made for cleaners are available. At the time of the interview, Bhabhiji said that such
vehicles were not used in Terminal 1C and 1D. This was certainly true for Terminal 1C, which is the domestic arrival terminal through which I used to pass and also where I spent considerable time waiting during the period of the research.

I met my other respondents after this interview with Bhabhiji: Rajni, Sharda, Saraswati, and Lakshmi (names changed). All these women, except Rajni, used to work as domestic workers in Vasant Kunj. It was Bhabhiji who recommended Rajni to the contractor who recruited cleaners for the airport. Rajni was Bhabhiji’s neighbor, and the latter recommended her at the insistence of Rajni’s parents. Rajni and her parents were content with the work as, apparently, she could not hope to do better as she had studied only until Class 8 and also she would soon be married, hopefully, to “a suitable boy.” Sharda, Saraswati, and Lakshmi knew each other and were part of the circuit of domestic workers. At one point of time during the discussion, Sharda said that when they were operating “on their own” as domestic workers, it was easier to look after each other. What she meant was that this looking after each other’s interests and spontaneously forming a group to bargain for wages or holidays did have elements of collective action, and this was before the domestic workers started to unionize in earnest. For example, she said that the wages were almost uniform when they were working as domestic workers. They would tell new workers about the wages they should demand from the prospective employers. Because old workers would introduce new workers to the employers and stand as guarantors it was possible to keep wages stable and uniform. All of these interactions were verbal and without a signed contract, but the workers had a decisive role in bargaining for wages, and they could choose not to work if wages were too low.

Speaking strictly in Marxian terms, the labor of the domestic help who worked in Vasant Kunj was not productive but unproductive labor, as the former is exchanged with capital and the latter with revenue (Marx 2010, 31:15). As domestic helpers, these workers operated
autonomously to the capital chain of the domestic work industry that is organized through a complex web of sub-contracting and migration. The relationship of these workers with their employer was made on an individual basis, without any mediation or intervention of contractors, and the money they received was for producing use-value for their employers. However, Cecilia Beatriz Escobar Meléndez claims that reproductive labor is neither productive nor unproductive labor (2013, 135). In the same vein, she points out that reproductive labor participates neither in the production nor circulation process (135). Hence it performs outside the “orbits of production and circulation of capital” (136). In my understanding, this is a radical rereading and interpretation of Marx since in his own words the “critical differentiation between productive and unproductive labor explains the basis of all bourgeois political economy” (2010, 31:12). Marx makes the distinction between productive and unproductive labor in the following manner:

To the extent that capital conquers the whole of production, and therefore the home and petty form of industry—in short, industry intended for self-consumption, not producing commodities—disappears, it is clear that the unproductive laborers, those whose services are directly exchanged against revenue, will for the most part be performing only personal services, and only an inconsiderable part of them (like cooks, seamstresses, jobbing tailors and so on) will produce material use values. That they produce no commodities follows from the nature of the case. For the commodity as such is never an immediate object of consumption, but a bearer of exchange value. Consequently only a quite insignificant part of these unproductive laborers can play a direct part in material production once the capitalist mode of production has developed. They participate in it only through the exchange of their services against revenue. (2010, 31:15)
What Marx is saying, then, is that as capitalism takes hold of labor processes it also continuously creates a distinction between productive and unproductive labor. There are spaces of work, like domestic work performed by maids, which are not a relation of exchange between labor and capital but labor and revenue. However, what I am claiming in this thesis is that as logistical capitalism is taking hold over labor processes, it is bringing under its fold even those spaces Marx designated for exchange between labor and revenue. The transformation of domestic workers of Vasant Kunj into logistical labor is one such process where logistical capitalism is displacing domestic workers and bringing them under the spatial and temporal logistical practices of Delhi airport. This is one side of the transformation. Testimonies of domestic workers will later reveal that domestic work now has been transformed as well and is now controlled through an elaborate supply network of migrant laborers brought from different parts of India. In this sense, domestic work and workers are now implicated in an elaborate logistical arrangement interspersed with labor contractors, corporate service providers, and the relationship is now between labor and capital and not labor and revenue. The transformation of domestic workers into logistical labor and the transformation of domestic work itself through labor migration channeled by contractors and service providers are a consequence of real logistical subsumption. In this way, real logistical subsumption changes the structure of work with an increase in productivity that is different in nature from what Marx anticipated. In volume one of *Capital*, Marx suggests that “the extraordinary increase in the productivity of large scale industry, accompanied as it is by both a more intensive and a more extensive exploitation of labor-power in all other spheres of production, permits a larger and larger part of the working class to be employed unproductively” (1990, 574). Marx, in fact, shows that unproductive labor outnumbers the productive labor employed in England. What real logistical subsumption achieves is the transformation of the relationship between labor and
revenue into labor and capital. In this transformation of the relationship between labor, revenue, and capital hitherto use-values are commoditized.

The transformation from unproductive domestic work to that of logistical labor also means that there is a transformation in the processes of production of subjectivities. It is important to register how these domestic workers who now work as cleaners at the airport think about their transformation. From the testimonies of these workers it would appear that they have a different understanding of their work from Marx’s schema of productive and unproductive labor. In Marx’s schema, domestic work would be a relationship between labor and revenue and hence unproductive, but the women domestic workers perceive it as a direct relationship with the accumulation of surplus value, hence, productive. For these workers, domestic work was wage relationship and the fundamental contradiction and confrontation was between labor and money capital and not a form of revenue.

When Bhabhiji perceives the relationship between a maid and her employer in comparison with unpaid reproductive work at her home she identifies the former in terms of wage work, which is one aspect of working as a domestic maid. As she later says, the arrangement between the employer and the domestic maid was individual and personal. Domestic work in this context where a worker is working as an individual without a semblance of relation of cooperation with other workers and for a single employee, whose only interest is the use-value that the worker produces (cleaning, washing dishes, etc.), reinforces the fact that the element of relationship between labor and revenue is at work and, strictly speaking, this labor cannot be said to have taken a social form. However, as Sharda pointed out earlier, there was also a sense of collectivity. The workers realized that they were doing same kind of work in the neighborhood. The word that Bhabhiji used to emphasize the element of collectivity was _ekta_, which is Hindi for unity through which they demanded and ensured fair wages. The subjectivity of these
domestic workers who are now cleaners at Delhi airport suggests that when they were working in Vasant Kunj, they were in a liminal space between capital and wage, production and accumulation of surplus value, and non-capitalist and capitalist social relationships with their employers. This liminality of economic and social relations meant that a restricted form of collective action was possible. Reproductive labor for domestic maids has two elements: one, the unpaid reproductive labor in their own home and second, reproductive labor they perform for revenue but which is manifest to them as a money wage.

The domestic workers had a better grasp of this relation when they took into account the intensity of work involved and the productivity expected of their labor. Bhabhiji, for example, often compared her work as a domestic helper with that her job as a cleaner at the airport, and she could not always make up her mind which was more intense and which had a higher rate of exploitation. She said that as a part-time domestic worker, she could earn more but that meant working in multiple houses, sometimes as many as five to six houses, twice a day. The work involved dusting and sweeping the floor of the entire house, cooking, and in some cases, washing clothes. All of these jobs had to be performed manually. As an illustration of the intensity of the labor involved, we have to consider the dimension of the employer’s house. A 2 BHK (Bedroom, Hall, Kitchen) apartment usually has a floor area of 1,100 sq. ft., a 3 BHK is 1,750 sq. ft., and a 4 BHK is 2000 sq. ft. Bhabhiji worked at two 2 BHKs, three 3 BHKs, and one 4 BHK. It meant that in one day she had to manually clean the floor of an area amounting to approximately a staggering 15,450 sq. ft. Bhabhiji said she was unable to keep up the work with advancing age and had to stop being a part-time domestic helper. She also explained that because of the intensity of this work, she now has constant pain in her lower back and knees. She did this work for almost 10 years. Furthermore, in four of these six houses, she was not allowed to use the washing machine on the grounds that she would misuse it and cause it to malfunction. This, actually, is quite a frequent complaint by employers. This desire of the
employers to keep all the work manual can be seen as an attempt to maximize productivity of labor through increasing the necessary length of the working day and hence producing absolute surplus value for the employer. It is immaterial to the worker if that absolute surplus value is accumulated by the employer or not. Thus, despite the presence of an accumulation-like situation, the relationship between the maid and her employer is still a relation with revenue at the level of political economy, but in terms of politics it replicates the confrontation between labor and capital. This consciousness and solidarity, to a large extent, informs the embryonic struggles at the airport.

The changes wrought in the labor market due to the establishment of several infrastructure installations in Delhi (such as the metro rail, airport, new railway stations, and even shopping malls) have not been lost on the domestic workers. Bhabhiji locates this change in the new form of recruitment processes for Delhi airport. She remarked on the change from a labor market based on kinship and personal relationships to one of impersonal recruitments by contractors as well as the introduction of a rigidly hierarchical nature of work under high supervision and surveillance. She said: “Ab toh koi personal cheez rahni nahi. Ab toh naya sab system hai contractaron ka gharon ke kaam mein bhi” (There is nothing like relationship anymore. Now it is a new system of contractors even for domestic work). She also pointed to the change in domestic work and the wages and conditions associated with it. She observed that there was a definite depression in wages and tougher work conditions as a result of the contractual nature of work and a large influx of migrant workers especially from Jharkhand. This was one of the reasons she quit the market, as the quantum of work was nowhere near compensated by the existing low wages. Bhabhiji is right in speaking of an influx of a large number of women from Jharkhand into the domestic worker market. In some cases, these women live with their employers, making them even more vulnerable. These women are hired by labor contractors who go around villages in Jharkhand looking for women who are willing
(and in some cases unwilling) to go to cities and work as domestic help. This entire network restructures the industry of alienated reproductive labor and brings it under the fold of global capital. An important study on domestic workers by the NGO Jagori strikingly reveals the exploitation of women domestic workers from Jharkhand (2010).

With the opening of Delhi airport’s T3 in 2010, Bhabhiji noticed the changes in the labor market caused by the advent of infrastructure and logistical practices as well as how the transition from being a domestic worker to logistical labor was prompted by the changed nature and market for domestic help. Around that time, she was approached by a distant relative from Mahipalpur with a job offer at the airport, as a cleaner. He had formed an agency with a partner only a few years ago but had made rapid strides and was employing a large number of workers. He recruited workers through the system of subcontracting in the case of migrant workers and used old kinship networks for recruiting from within Delhi, as was the case with Bhabhiji. As far as she was concerned, there was no doubt that the cleaning job at the airport was wage work and not an act of benevolence by kin. The way she rationalized it was remarkable and informed by an extensive experience of working for wages. She said that the contractors would not come to her or others like her only because they are kin. They are aware that domestic workers have considerable experience of working in homes and that experience is helpful in this job, which is part of housekeeping at the airport. After Bhabhiji began working for this agency, it started to recruit more women from Rangpuri Pahari. The other advantage of hiring women for housekeeping jobs is that the mandatory police verification and verification of documents are faster and more convenient than in the case of male workers. Recruitment of domestic workers for housekeeping jobs at the airport is perceived as cost effective because the necessary training is supposed to be already acquired by these workers due to their experience as domestic workers. As the responsibility of providing training for housekeeping jobs falls on the contractors, they want to minimize these costs. When Bhabhiji was recruited by the contractor,
she was given training for just five days, during which she was mainly taught to handle chemicals used for cleaning glass and metals.

It was during this training that Bhabhiji realized the scale of operation of this agency, which employed 600–650 workers who worked mostly at several Delhi metro stations and the airport. Clearly, this agency specialized in supplying workers to infrastructure installations. She also came to know that most workers were from nearby villages like Rangpuri Pahari, Mahipalpur, Kishangarh, and Masoodpur. Clearly, Delhi airport and the metro railway had decisively changed the labor market, with the composition of labor changing such as to best serve these infrastructure installations. This is certainly true for women workers. Male workers also work as cleaners but one can assume that they have more opportunities to find diverse jobs, unlike women who tend to work in the same infrastructure installations for a much longer period of time. For example, Mahipalpur, Kishangarh, and Masoodpur are also places where warehouses (and other infrastructure installations where workers are predominantly male)—which serve the airport—have emerged in large numbers.

**Logistical Labor and New Repertoires of Resistance**

The domestic workers have made a decisive transition toward becoming logistical labor. As a result, they come under the direct control of the logistical regime of Delhi airport. I use the term regime in the sense developed by Charles Tilly, who defines political actors and regimes thus:

*Major political actors*, then, include all such organizations and agents plus other connected clusters of persons having recognized names and recurrent interchanges with the government…A *regime* means repeated, strong interactions among major political actors including a government…we single out the more salient patterns of interaction among all these actors: not only the army, the government, and political parties, but
also labor unions, indigenous groups, shantytown activists, media organizations, pro-government and antigovernment militias, churches, associations, and organized segments of business. When interactions between a pair of actors recur in similar forms, we begin to speak of a relation between the actors. We then describe a regime in terms of prevailing relations among political actors, including the government. (2006, 19)

It should be emphasized that “major political actors” force themselves on to the stage of contentious politics by laying claims on the plane of the “regime.” Tilly’s “clusters of persons” become political agents during the process of struggles with the regime, which forces the clearing of space for negotiations and confrontations with other political actors, including the government and employers. In this section, I examine how women cleaners as logistical labor emerge as a “major political actor” challenging the regime and constantly building repertoires of struggle.

I trace the interaction between political actors, regimes, and repertoires by studying the space of the terminal which is also the means of production for the women cleaners. The most notable aspect of this space is that what appears as continuous space to others (non-workers at the airport) appears as a fragmented, almost disintegrated, space of work to the workers. The workers are aware that the terminal is a proliferation of borders much in the same way the labor of logistics is aware of the walls of infrastructure and logistical practices. Bhabhiji described the space of the terminal in these terms, saying that the entire terminal building was divided into several parts with each part contracted to a different company. Therefore, if one company has the contract for cleaning the floor, another company would be responsible for cleaning the glass panes, although the two jobs are in continuity in terms of physical space. The geography of labor is radically different from the continuous space of consumption, and this has a profound influence on the way workers interact with each other and their respective employers
and, finally, with the airport authorities. These fragmentations of space also inculcate in the workers the consciousness of rigid hierarchies and sharp class divisions, which are at play within the myriad forms of work processes relentlessly and simultaneously continuing in the airport. These workers work in close proximity but they are not allowed to interact with each other. The policy of GMR is, quite clearly, to prevent any kind of association between the workers. There are very clear borders, and they are meant to control labor and the movements of workers. This is obvious in the way bordered spaces inside the terminal and continuous tracking in time are used to navigate the workers. Bhabhiji said that work at the airport is non-stop. The supervisor who has the checklist of chores to be performed by the workers comes every one hour to inspect. The one-hour rule has been made by GMR. It ensures that the workers continue working. If there is no work at their allotted space (which rarely occurs), the supervisor allot them work in another part of the terminal or even another terminal where the company might have the contract. The difference between cleaners and workshop workers is clear from this practice. Cleaners are put to work in accordance with the round the clock operation of the airport and in accordance with the ways in which space has been configured inside the terminal building. When a worker is engaged in the production process, she is neither allowed to cross her designated space of work inside the terminal nor is she allowed to pause and break away from the relentless temporal continuity which is enforced inside the terminal.

Another fact that reinforces the argument about control through spatial and temporal parameters at the terminal is that the workers are not allowed to sit or rest at any point of time or in any place in the building. In fact, there is no space for the workers to rest inside the terminal. When I tell Bhabhiji I had observed workers sitting around together, even listening to music together on their cell phone, the response that comes is based on both minute observation and the strong gender and political instincts through which she perceived the operation of hierarchy in work in terms of roles and expertise expected from a woman worker.
She says those workers are not cleaners but technicians, and they are invariably men. She makes the point that one would never observe women cleaners congregating in the same manner. It was from this observation that I gathered there are few women who do technical jobs at the terminal. Similarly, there are more women cleaners than men, but it is not heavily skewed. However, with her instinctive understanding of the politics of gendered work, Bhabhiji says it is mostly men who operate the cleaning machine with only few women similarly trained by the contractors. Women mostly occupy the position of a helper (assistant) to the man who operates the machine.

In the previous chapter, I made the distinction between the labor of logistics and logistical labor based on their relationship with the time and space of an airport. I made the point that the characteristic of logistical labor is that its relation to infrastructure installations and logistical practices is continuous and simultaneous in terms of time and space. Logistical labor, in other words, is immanent to the logistical circuits of capital accumulation. In the case of the women cleaners of Delhi airport, this characteristic is pushed to its maximum operational capacity. The women cleaners are circumscribed by fragmented space, and they are controlled by the manipulation of both time and space. The intensity of work can be calculated by the number of working hours per square feet and it will be seen that compared to manual cleaning work in houses as a maid, the productivity of the individual worker increases at the airport because of the number of working hours and mechanization. The worker’s relationship with capital as a cleaner at the airport is one directly between labor and capital, involving also a network of relationships between DIAL and the labor contractor. The labor of cleaning an airport is not a part of alienated reproductive labor but labor that produces a commodity: the aesthetic affect at the airport. Hence, in Marxian terms, the work indeed becomes productive labor because a commodity, aesthetic affect, is produced. This commodity production adds to the value of the airport. Furthermore, airports increase their profitability not only by emerging as hubs for
airlines but also by attaining higher ranks in several ranking systems, which make them a desired airport. The competition between airports to emerge as a hub and rank high is immense and is decisive for the amount of profit made. The parameters for the rankings, both national and international, give a very high weightage to cleanliness, and it is implicit in most other parameters. Thus the commodity of aesthetic affect that the work of cleanliness produces is fundamental for an airport.

It is within this production process that the women cleaners develop repertoires of struggle. According to Tilly, “Repertoires vary from place to place, time to time, and pair to pair. But on the whole, when people make collective claims they innovate within limits set by the repertoire already established for their place, time, and pair” (35). Repertoires are, then, informed by struggles that have already been carried out. We have seen that the erstwhile domestic workers developed a repertoire which included a struggle for wages and an attempt to organize themselves along with other workers. In October 2012, this repertoire was used again by the women cleaners in a way that almost created a major breakdown in the functioning of the airport. When the contract period of the agency was completed and a new agency got the contract, the women cleaners acted collectively such that they brought the terminal almost to a standstill for a few hours. The tacit understanding between the airport authorities and workers was that they would continue working at the airport under the new contractor. The new agency was from Bengaluru, which meant that even a tenuous kinship relationship between some workers and the contractor was absent. Therefore, every worker expected that major changes would occur in the relationship between workers, contractors and airport authorities. The older contractor paid INR 5,200 for an eight-hour shift. The new agency increased the length of working hour from eight hours to 12 hours, which meant that instead of a total of three shifts, there were only two shifts. This was done without a commensurate increase in the wages. Since
the number of shifts was brought down to two, it implied the new company had a plan to retrench a number of workers.

Just before midnight on October 30, 2012, when the new agency was to take over, the workers staged a strike. For these workers this was the first experience of organizing a strike, and it was done spontaneously, without any preparation. Once they came to know about the new terms of work, they conferred with each other and decided to go on strike, and if necessary not to leave the terminal. This created a chaotic situation at the airport, especially because no one was sure which contractor was the employer of the workers at midnight, as technically the new agency was to take over just after midnight. In a remarkable use of time as a tool, the workers struck at the very condition of the production process at the airport as well as that of logistical labor. The continuity of space and time was broken and time was blocked. It also affected the fragmented space of the floor of the terminal across various companies and contractors as other workers stood in silent solidarity by stopping work for a few minutes (in a situation when workers were even not allowed to talk to those of a different company). With workers steadfast on their demand for higher wages and no retrenchment, the contractors were left in an awkward situation with one trying to put the responsibility of negotiation on the other. At this point, a woman worker said they would only negotiate with GMR officials as they were working at the airport which was controlled by them. Emboldened, the workers pressed on with their demand of negotiating with GMR. Finally, an official from GMR arrived to negotiate with the workers. As part of the work at the airport was paralyzed, the GMR executive directed the new agency to increase the wages to INR 10,500 for a twelve-hour shift.

Bhabhiji said proudly, “We had a strike for a couple of hours, and the whole place became chaotic. If we strike even for a few days, there will be an earthquake at the airport.” When asked why she thought this was the case she gave a reply whose full flavor is apparent only in
Hindi: “Kyunki airport mein sara din din hai” (It’s always day in the airport), which means that at no point of time does work stop at the airport; if work stops even for just a few hours the whole system will collapse. Three years later, in 2015, there was a strike by cleaning workers (among other workers) at airports all over India. This collective action, which was led by the Centre of Indian Trade Unions (CITU), attached to the Communist Party of India (Marxist), paralyzed the functioning of all the major airports from Kolkata to Delhi to Mumbai, until the union office bearers and the Airport Authority of India (AAI) arrived at a settlement.

It was the struggle initiated by the cleaners at Delhi airport that, in its spontaneity and class organization, showed the way to future struggles. This strike was autonomous and unmediated by trade unions, and went beyond classic union and wildcat strikes. While the strike opened up new possibilities of associations among workers, it also has to be said that this spontaneous collective action was based on immediate economic demands and was not political or part of a larger collective. In that sense, the urgent task of the cleaners at the airport is to form a larger political collective. The women cleaners face all the problems that unorganized and informal workers confront across industries. Wages are never paid on time and if the workers are late even by five minutes, part of the wage is deducted. Similarly, these workers do not have any Employees’ State Insurance (ESI), which is the health and social security insurance scheme provided by the government, nor are they covered under the Employees’ Provident Fund (EPF). For women workers there is no maternity leave, and they have to quit the job for the duration of delivery and postnatal care; the contracting agency promises to take the worker back once postnatal care is over. Bhabhiji confirmed that in one such instance she knew of the contracting agency fulfilled its promise. The intuitive solidarity amongst the workers at the airport is demonstrated by their use of the daan peti (charity box) to compensate for their lack of medical benefits from the employers. If a worker has an accident or suffers a major illness and cannot work for a long time, fellow workers contribute to help their comrade. Bhabhiji said that in one
incident when a fellow worker had dengue fever and could not come to work for a month, the rest of the workers not only contributed money but someone always filled in for her so that she was not fired and replaced by someone new. Without exception, every worker contributed to the daan peti. This is the kind of action which holds out hope for an effective and autonomous political collective among the workers. But that lies in the future, and will also depend in large measure on how Delhi airport evolves its logistical practices.

The workers have problems reaching the airport because there is no direct service to the airport from Rangpuri Pahari and taking a taxi or auto is too expensive. There are three buses that go near the airport. The workers take one of these buses to the stop closest to the airport and then take a taxi (the radio taxis I study in chapter 5). These radio taxis transform themselves into shared or car pool vehicles if they are going empty toward the airport and accommodate six passengers (four in the back and two in the front); they drop the workers just by the stop where they can take a free airport bus to the terminal building. Each radio taxi trip costs INR 10 per worker, which is quite cheap. It works for both the driver and the workers because most workers at the airport follow the same strategy to commute. Moreover, this arrangement provides an opportunity to two sets of workers that are dependent on the airport—drivers and cleaners—to create a potential political space for solidarity and collective action through their daily interaction and communication. Thus in the case of women cleaners, we are witnessing a developing repertoire for collective action, which is a combination of strikes as well as instituting care and welfare for workers in the absence of any provision from the government and the employers. These repertoires are proof that these women cleaners have emerged as “major political actors” who have autonomy from traditional unions as well as traditional sources of power but are still in line for making a radical collective claim on DIAL and the government.
“Solid Flesh Would Melt”: Body, Caste, and Gender at Work

A vital aspect to keep in mind about the labor process of the women cleaners is that not only do they have to perform the task of cleaning the floors, toilets, glass panes, etc. to achieve the required cleanliness or gloss and thus produce the desired aesthetic affect for the consumer, they also have to manifest certain signs and codes while performing their labor. In fact, these signs and codes are also materials for production and affective commodities. In this section, I examine this process and its implications for the subjectivity of the women cleaners. The description of their work shows that physical performance of work is merely a small part of the entire process. The subjectivity of the workers is predicated on the more crucial aspects of signs, codes, and the aesthetic affect, which is the commodity to be produced incessantly.

When asked about the problems she faced when she first began to work at the airport, Bhabhiji said one was the dress they had to wear to work. This was confirmed by Sharda, Saraswati, and Lakshmi, who were around the same age as Bhabhiji. When probed about this, they answered that they had to wear pants and shirts, which they were unaccustomed to wearing. Initially, this garb made them uncomfortable and conscious about their bodies. Also, they could not wear their uniform at home or on the way to work because the villagers, especially the elders, would object; these women were of a certain age and supposed to symbolize traditional values, and such a uniform went against that conception of tradition. It was the first time that these women, other than Rajni, had worn a shirt and a pair of pants. They still wish the contractor would give them a uniform of salwar kameez. I found this conversation interesting and asked them why there should be a uniform in the first place. For example, the sweepers and cleaners of MCD

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2 Contractors are now providing *salwar kameez* as a uniform for women cleaners at airport. Whether the contractor for whom Bhabhiji works provides them or not cannot be ascertained but one can definitely notice women workers in that uniform. It is quite possible that this was also a result of negotiation between the workers and the contractors.
do not always wear their uniform while working. Similarly, in a neighborhood like Vasant Kunj where private contractors handle the cleaning in some sectors, the cleaners do not always wear a uniform even though it is compulsory and wear *salwar kameez* (a traditional Indian dress comprising of a baggy trouser and long shirt) instead. The answer this time came from Rajni, and again it is difficult to convey the nuances of the original Hindi: “*Jagah ke hisab se kapda hona chahiye. Airport mein hum logon ko ramna padta hai*” (Clothes should be according to the place. At the airport, we have to immerse ourselves). “Immerse” captures only one aspect of the word *ramna*; the other is surrender and has a religious connotation signifying uncompromising and unquestioning faith. In analyzing this conversation and particularly this word used by Rajni, I understood the peculiar form of labor that is deployed by these women cleaners.

We continued this line of conversation, and I asked my respondents what else the company insisted on in terms of their appearance, apart from the dress code. Bhabhiji told me that during the training period, they were given classes on “*goorming*” (her pronunciation of “grooming”). She said that part of being well groomed meant they were not allowed to untie their hair at any point during the shift. They were to use light makeup at all times and not apply vermilion in the parting of the hair—a religious requirement for married Hindu women—in a very obvious manner; it was preferable to put a light mark on the upper forehead that could be hidden by hair. They were instructed not to put too much kohl in their eyes, nor use red lipstick or too much perfume. Men had to have short hair and nails, be always shaven, and wear ironed clothes. It was quite clear that a certain kind of affect was to be produced through these techniques of body care and representation, and here the word “*goorming*” becomes pertinent in its error. The word that the women use for making themselves up and generally taking care of the body, especially on an occasion like a wedding (which was the case when this group interaction happened), is *shringar*. This word denotes a very careful act of representing the self.
through the body. The body in the case of “goorming” does not represent the self anymore; it is, in fact, a denial of the self. “Goorming” (rather than grooming), then, is the correct usage as it registers the distorted relationship with the body.

I asked the women what was the purpose of this “goorming” exercise: how did it have any bearing on their work when they were not allowed to interact with the passengers? For instance, if a passenger approaches them with a question, the cleaners are supposed to direct the passenger to the inquiry desk, keeping their interactions with passengers to the minimum. It was Bhabhiji again who answered this question. She said they were told, “Aane waale logon ko pata lage ki khush hain” (People who enter the airport should know you all are happy). Rajni made another observation that gave me a sharp insight into the nature of the work of women cleaners. She explained that she was once told by her supervisor to use makeup to reduce the dark rings under her eyes ("daag ko halka kar lo"). This remark convinced me that within the larger aspect of logistical labor there is an additional dimension as a result of gendered nature of their work that needs to be isolated and theorized to bring into relief the specificities of this kind of logistical labor.

What is clear from the above conversation is that there is a definite politics of representation of the body at play. The women cleaners are in a paradoxical situation where the commodity they produce has to be accentuated, even as the labor process to produce that commodity (aesthetic affect) has to be obscured or made invisible. This contradiction between the commodity and the labor process is resolved by changing the bodies of the cleaners into signs; this is achieved by various practices on the body, one of which is uniformity of appearance—uniformity both with the commodity they produce where they have to become part of the aesthetic affect, and uniformity with the physical entity of the airport so that they blend in and do not stand out as a sign that is different from the airport, or more accurately, the terminal
building. This is qualitatively different from invisibilization of labor. The attempt is to preserve the signs of the body, to remove the corporeality of the body by overwhelming it with the imposition of signs. The sign is the function of the airport while the body is a ghostly presence that needs to carry the sign. While at work or in movement or navigating the space of the terminal a worker has to act like an ideal sign. The body is immaterial in the double sense of the word. The body will not be allowed to expend its labor-power if the sign is not at play in the desired manner. We can only call this kind of labor “unembodied labor.” Labor is embodied in the commodity but in the production process the desire of capital is to negate that body which is the carrier of labor-power. Grooming is an attempt to negate the bodily presence of the worker. The worker has to expend labor-power in producing an aesthetic affect but in the process, the desired sign of the body has to be reproduced simultaneously. If this is not achieved there will be a gap between the two (body and sign/temporal or spatial), the aesthetic affect will not be generated, and the circuit of commodity production will break.

We can thus specify the difference between caring labor or affective labor and “unembodied labor.” Both produce immaterial goods or affective goods but in the former, the body of the worker is at the center of production, especially in old age care, maternal care, etc. Without the sensory interaction of the bodies of the worker and the consumer, the desired commodity will not be produced. In the case of “unembodied labor,” the commodity is produced without interaction with other bodies. In fact, the body is incidental to the production of the desired commodity. The body has to reproduce signs of a ghostly body. The body of the worker is stripped of its corporeal qualities and is reduced to a play of signs.

The idea of “unembodied labor” needs to be explained, in the process differentiating it from concepts such as “immaterial labor,” “affective labor,” and “emotional labor.” These terms are not interchangeable, and they signify definite and differentiated productive activities that
require a certain set of methods to produce the desired commodities. Arlie Hochschild defines “emotional labor” in the following terms:

This labor requires one to induce or suppress feeling in order to sustain the outward countenance that produces the proper state of mind in others—in this case, the sense of being cared for in a convivial and safe place. This kind of labor calls for a coordination of mind and feeling, and it sometimes draws on a source of self that we honor as deep and integral to our individuality. (1983, 7)

The cleaners are required to produce this sense of conviviality in the passengers by managing their emotions. However, unlike the workers that Hochschild studies, they are steadfastly required not to engage with the consumer of that emotional labor as far as possible. In case of Hochschild’s workers, interaction with the consumer of labor was an essential component of production and there was no way that interaction could be avoided, otherwise the production of that service would never take place. In the case of the cleaners the mode of alignment of emotions for the production of services is reversed. Management of emotions for cleaners is predicated on the effort on their part to preclude the possibility of exercising such emotions by negating their presence as a laboring body. The conditions of work for “emotional labor” in Hochschild’s study are qualitatively different from the exercise of emotions that the cleaners are supposed to perform. “Emotional labor” is an accidental component of the cleaners’ primary form of labor and in the deployment of such labor the effort is always to dissociate the emotional from the bodily.

Michael Hardt defines “immaterial labor” thus: “Since the production of services results in no material and durable good, we might define the labor in this production as immaterial labor—that is, labor that produces an immaterial good” (1999, 94). Does this assist in analyzing the labor of women cleaners? It is “immaterial labor” according to the definition above, but as
Hardt points out, there are different forms of “immaterial labor” producing different kinds of commodities. Hardt identifies three types of “immaterial labor”:

The first is involved in an industrial production that has been informationalized and has incorporated communication technologies in a way that transforms the industrial production itself…The second is the immaterial labor of analytical and symbolic tasks, which itself breaks down into creative and intelligent manipulation, on one hand, and routine symbolic tasks, on the other. Finally, a third type of immaterial labor involves the production and manipulation of affects and requires (virtual or actual) human contact and proximity. (97-98)

The cleaners at the airport belong to the third type of “immaterial labor” that is involved in the production and manipulation of aesthetic affect but with a crucial difference. Their “unembodied labor” is predicated on obliterating every possible “human contact and proximity” with the consumer of their labor. Another form of the third type of “immaterial labor” that Hardt points to is “affective labor.” His definition of “affective labor” requires close reading:

[Affective labor] is better understood by beginning from what feminist analyses of “women’s work” have called “labor in the bodily mode.” Caring labor is certainly immersed in the corporeal, the somatic but the affects it produces are nonetheless material. What affective labor produces are social networks, forms of community, biopower.

The “unembodied labor” of cleaners as a type of “immaterial labor” can be contrasted with that of “affective labor;” in fact, cleaning work can be seen as an inversion of “affective labor” as formulated by Hardt. It is an inversion in the sense that the labor has to be performed by a virtual obliteration of the corporeal self through a combination of signs and also that the
commodity produced (aesthetic affect) is a commodity that is not individually but collectively consumed by the passengers. Also, “unembodied labor” is set to work and production is organized and governed in a manner that any form of social network or community is sought to be precluded both among the workers and between workers and passengers.

In conclusion, I will briefly analyze a variant of “unembodied labor” which finally reveals the discontent of both logistical capitalism and logistical labor. This form of labor is predicated not on obliterating the body through signs during the act of production but is based on physical exclusion and segregation. This labor is that of solid-waste workers, also known as conservancy workers in some places like Mumbai, who are without exception from the so-called “untouchable” castes. In this case, the outward signs are stripped from these workers who all belong to the Valmiki caste whose traditional job is to collect solid waste. It is just their bodies that are required. Bhabhiji observed that almost all castes now perform cleaning jobs where once it was only done by the lower castes (not necessarily untouchables). She remarked that middle and upper castes, both male and female, work as cleaners. However, she pointed out that only male workers collect solid waste and that there is a very clear division between them and other workers. They are not allowed to have interaction with the women cleaners and by all accounts, an inviolable border is drawn between the two groups. The assertion of the erasure of the body of “unembodied labor” becomes useful to understand the phenomenon where all castes are able to become cleaners but not conservancy workers. The fact that the body is erased in the process of production removes, in that instance, the question of religious notions of the state of being pure or impure; these notions are displaced from the identification of occupation with body that is the basis of the caste system. In the case of solid-waste workers, it is important to remember Sundar Sarukkai’s brilliant analysis: “In the case of the untouchable, if the skin is what is defiled, if touch is defiled, then the impurity is not just in the body but it is the body itself” (2012, 172). This body then becomes one with the production process. It has to carry
filth because, as Sarukkai says, the body itself is filth. Thus, it is not surprising that this labor is an exception at the airport. The contract for a conservancy worker extends for as long as 24 years. This is primarily to ensure availability of labor. Furthermore, they have a working day of 12 hours, then get a break of 24 hours before the process begins anew. It is quite clearly hazardous work. A telling aspect in the case of solid-waste workers is that they come from Palwal in Haryana, which is around 90 km from Delhi and takes about one and a half hours to reach by an intercity train. It is, thus, quite ironic that I mentioned proximity as one of the important aspects of infrastructure and logistical practices. In the case of conservancy workers, they have been brought in proximity in terms of work but the geographical and cultural distance that remains in their social relationships has, in fact, been accentuated and reinforced. The intricate web of spaces, labor, and capital deliberately excludes the conservancy worker who is neither logistical labor nor the labor of logistics, as he is outside of both the time and space of infrastructure. This labor is an exception. In this sense, at least, infrastructural installations and logistical practices have subsumed labor: exceptional and normal; logistical labor, and labor of logistics, and this is what I mean by real subsumption of labor under logistical capitalism.
Chapter 5

The Simultaneous Restructuring of Delhi Airport and the Taxi Industry

CHARLIE T Shit yes. Night woulda been dead if I hadn’t grabbed an outatowner at
Kennedy. Took him roun the horn and got a five dollar tip to boot.

DOUGH-BOY Least I’m no airport rat. I work the whole town.

Taxi Driver (1976)

As I have shown in previous chapters, airport infrastructure affects the production process and
labor relations both within the recognized boundaries of the airport as well as in urban spaces
in its vicinity. The airport’s logistical practices are articulated through complex temporal and
spatial arrangements, giving rise to distinct forms of labour that I have conceptualized as labor
of logistics and logistical labor. In chapters 3 and 4, I studied these forms of labor in relation
to Delhi airport and brought out intricate relationships between informal manufacturing units,
informal settlements, and production processes. However, Delhi airport exists together with
and operates simultaneously in relation to other infrastructural installations that include roads,
flyovers, the Delhi Metro rail, and other transport systems operating in Delhi. As a result of
these interactions, there have evolved production processes and labor relations in which
workers have constantly to move through and within several infrastructural installations and
logistical practices. One such sphere of production is Delhi’s taxi service. There are several
taxi services operating in Delhi. Each has different regimes of ownership and production
processes. During my fieldwork in 2013, Delhi’s taxi services could be divided into those run
by individual owners through associations and unions, radio taxis operating through call
centers, and, very recently, those run through app-based taxi aggregators. Investigating these different forms of ownership and operational patterns required an analysis of the relationship between the airport and other infrastructures, revealing how urban planners tried to build a system of infrastructure that ensured a smooth movement to and from the airport. Thus, a series of flyovers were constructed to make the movement of goods and people to the airport as rapid as possible. Transport infrastructures were created and functioned on temporal and spatial rhythms of the airport. At the same time, taxi services and the workers employed in them demonstrated how Delhi airport acts both as their means of production as well as a form of power that governs their movement and productive activities.

The objective of this chapter is to explore the structure of the taxi industry in Delhi and how this makes taxi drivers dependent on the airport as well as to examine the constant struggle between the desire of the airport authorities to control the labor flow and that of taxi drivers to evade this control. I demonstrate that the rapid changes that are occurring in the taxi industry are creating a situation where taxi drivers are becoming increasingly dependent on Delhi airport in order to ensure a constant production of their service, and by extension to ensure their livelihood. It emerges from this discussion that the constant evolution in the structure of the taxi industry is embedded in the process of making taxi drivers perform their work in a more intensive manner under an increasingly stringent mechanism of surveillance and control over their movement. The structuring and restructuring of taxi industry in Delhi can also be linked to the taxi workers’ struggle in the industry. For example, the advent of the radio taxi decisively broke the hold of the taxi associations which were primarily reliant on taxi stands near big hotels, embassies, airports, railway stations, important markets, etc. The _kaali-peeli_ (black and yellow) taxis and private taxis were now subordinate and this was the beginning of the contention over space at Delhi airport. What we have now is an unevenly structured industry. The corollary is that labor (taxi drivers) in this industry is implicated in myriad ownership and
labor regimes. The chapter also demonstrates how the variegated structure of ownership in the taxi industry produces, as a result of easy entry, friction between several layers of owners and labor. There are several possible politics of confrontation and alliance. The new model of app-based taxi aggregators, which has again decentralized the functioning of taxicabs and changed the operation of capital, labor, and space has added a new dimension to the struggles in the taxi industry. This chapter also gives a brief account of how this latest development has changed the functioning of the space of the airport and the movement of goods and people. It is important here to give an account of the issues that led me to investigate the case of taxi drivers as it also relates the emergence of Delhi airport as a new hub for Air India, the national carrier. This account also gives an indication of issues of concern related to the shift of Air India’s hub from Mumbai to Delhi.

The records of the Department of Civil Aviation (now the Ministry of Civil Aviation) of the Government of India from the early decades of the twentieth century up until the 1970s establish that the two airports which emerged as hubs were Mumbai (earlier Bombay) and Kolkata (earlier Calcutta). This was a result of complex military, business, and political exercises described in detail in chapter 1. During the colonial period, Kolkata became a hub for traffic to South East Asia and Australia while Mumbai served the same function for traffic to Europe. In the postcolonial period up to the liberalization of the economy in the early 1990s, Mumbai airport emerged as the primary airport as a result of the city’s status as the commercial capital of India and the fact that it was a hub for Air India. With the opening of Terminal 3 at Delhi airport in 2010, the Air India hub was moved to Delhi.

Initially, I wanted my research to address the making of Delhi airport, especially Terminal 3 (T3), and the role of several administrative and governmental mechanisms that were at play once it was decided that the Air India hub was to be shifted from Mumbai. In order to
understand the administrative issues involved in the transition and the reaction of labor at Mumbai airport, I undertook a field visit at Mumbai airport. When my fieldwork began in Mumbai, it became clear that the issue of the shifting of the hub from Mumbai to Delhi also encompassed the questions of re-forming the city, the displacement of old labor struggles, and the emergence of new forms of labor.

My fieldwork began in July 2013 at the office of the Air India Employees’ Union (AIEU) located at Santacruz, Mumbai. This is one of the oldest unions in India for aviation workers employed as permanent workers in Air India. The office is spacious, and has a huge photograph of the late J.R.D. Tata, former chairman of the Tata group that owned Air India before its nationalization and an aviator himself. During conversations with the staff, I realized that the union now represents the interests of officers working for Air India rather than the entire range of workers. In the three meetings I had with the union’s office bearers, they told me that the shift of Air India’s operation to Delhi was the result of a restructuring process that was directly related to labor struggles in Mumbai, especially the textile mill strike of 1982, which led capital to flee Mumbai.¹ They saw other factors, such as the opening of T3 at Delhi airport and the Commonwealth Games, as important but not decisive in the shifting of the hub. It must be pointed out that during this period the new terminal of Mumbai airport was still being constructed and the proposed deal between the UAE’s Etihad Airways and India’s Jet Airways, which would improve Mumbai airport’s status, was still under negotiation.² The status of Mumbai as a crucial aviation hub of the country, thus, was still under considerable threat.

¹ The Mumbai (then Bombay) textile strike was called on January 18, 1982, and was led by Dutta Samant. It was a strike around militant economic demands for a bonus and increase in wages. This strike finally led to the demise of the already strained textile industry of Mumbai.

² On November 20, 2013, Jet Airways (India) Limited and Etihad Airways concluded a US$ 379 million investment by Etihad to acquire a 24% stake in Jet. In addition to the equity investment, Etihad also agreed to infuse US$ 150 million into JetPrivilege, Jet’s frequent flyer program, to be managed by its subsidiary, Jet Privilege Private Limited, and also provide or arrange for a loan of US$ 150 million to Jet. Etihad also purchased three slots owned by Jet at London’s Heathrow airport for USD 70 million. This deal made Mumbai the hub for Jet Airways, considerably lifting the prospects of both the airlines and the airport after Air India shifted to Delhi airport.
One of the union officials pointed out that it was a question not only of Delhi emerging as the new aviation hub at the expense of Mumbai but also of the direction in which the hubs were being developed in India. He observed that when Mumbai was an aviation hub it was self-sufficient to the point that it had its own workshop to service the Air India aircraft, which was then a rarity for any national carrier in the world. However, a distinct move toward a situation where some airports in the world (such as those in Malaysia and Singapore) specialize in the servicing of the aircrafts has become discernible, while Mumbai which had the facility was now looking at a future as merely a transit point for airlines. The union official remarked that India’s aircraft were now being serviced in Malaysia and Singapore and for all the importance of Delhi as the emerging hub, it did not have a workshop. The workshop at Mumbai was then non-functional which meant loss of jobs as well as loss of potential revenue. Significantly, the official did not see the shift of the hub or closure of the workshop in isolation but was firm about his understanding that the whole process was informed by labor struggles in the city, the changing structure of the aviation industry as a result of globalization, and the changing geography of the city. It was this official who told me that a flyover leading to the airport had to be redesigned because of a militant struggle against eviction by slum dwellers who lived around the airport. This was the same “encroachment” that the Committee on a Road Map for the Civil Aviation Sector had pointed out in its report, which I mention in chapter 1. The flyover, finally, had to be constructed around the slum. When I asked him how this changed design of the flyover would affect the functioning of the airport, he advised me to meet the union of airport workers at the domestic terminal for details of the daily functioning of the airport.

The meeting with the union official at Mumbai airport was revealing in that it pointed to the emerging issue of clashes between several forms of taxi services, which was directly related to the changing infrastructure occurring around the airport. According to him, the two most
important issues for the union were how to protect the Maharashtrian workers at the airport and how to resolve the issues between local taxi operators working on government licenses and radio taxi operators such as Meru, Easycab, and others. He observed that in July 2009, there were incidents of violence between drivers of the radio taxi company Meru and drivers of pre-paid cabs. One of the issues at the heart of the conflict was access to the airport terminal. The pre-paid taxis alleged that the radio taxis had a better lane to pick up the passengers while the former had to wait in the last lane. The union head said that the issue of access to the airport terminal was still contentious. At the second meeting, the union head asserted that the standoff between the two types of taxi drivers had worsened because of the chaos caused by the airport authorities failing to check the flow of taxis at the terminal building. This was before the new Terminal 2 of Mumbai airport had started functioning, which was in 2014. The domestic flights were operating from Terminal 1, where my fieldwork was conducted. When asked about the Etihad–Jet deal, the union official said that when the new terminal opens the taxi conflict would be accentuated because some taxi operators and drivers, especially those on pre-paid services, would be reluctant to move away from their current location. These connections drawn between the making of the airport, the labor discontent among various taxi workers, and the new modes of governing of the airport made me realize that the space of the airport and access to it is directly related to the question of labor and livelihood of the taxi drivers who work for various companies under different control regimes.

The interviews with these two unions led me to investigate the taxi industry and the drivers who work in it by approaching the airport as a means of production. For the union at the airport, the issue of taxi services and taxi drivers were related to the larger function of the airport and its management. This led me to form the hypothesis that the space of airports is used as a means of production by taxi drivers. Also, conflicts which are inherent in the complex structure of individual taxi owners, radio taxi companies, and drivers are accentuated in the process of the
functioning of infrastructural installation and logistical practices of the airport. The example of Mumbai is important because it shows the contentions involving spaces between several actors before the restructuring of the airport and the city. The struggle among taxi drivers in Mumbai suggested to me that they are inextricably linked to the production processes of the airport and in its distinctive way make up part of the airport’s labor force. Taxi drivers made claims on how the space of the airport is regulated by those who manage it. Also, the taxi industry and taxi drivers are directly affected by the restructuring or remaking of the airport. In the light of my experience in Mumbai, I undertook the study of the taxi industry and its relationship with Delhi airport to understand the complex relationships between the city, infrastructure, and labor, and the ways in which they are governed.

**Layout of Infrastructure at the Airport and its Relation to the City**

To understand the operation of the taxicabs at Delhi airport and embeddedness of the drivers in a network of infrastructure and capital, it is important to study taxicabs at the airport with respect to other means of transport that serve the airport. It is in this network that taxis compete, supplement, and negotiate with other transport infrastructure and services.

The jewel in the crown of Delhi airport in terms of ground transportation is the rapid transport system called the Airport Express. This metro service originates at the New Delhi railway station and connects to the airport’s T3. It also provides a check-in facility for some airlines at the railway station. The service closes at 11.30 p.m. which means passengers arriving by late-night flights cannot avail themselves of it. The bus service to the airport starts from Kashmere Gate Inter State Bus Terminal (ISBT), Anand Vihar ISBT, and Indira Puram, NOIDA. These buses drop the passengers to the staging area located opposite the Centaur Hotel from where passengers are taken on a shuttle bus operated by DIAL. These shuttle buses have a frequency of 15 minutes. The three-wheelers or autos are also allowed only into this staging area. This is
done to prevent congestion at the airport terminals and regulate the movement of vehicles in the lanes where there is a great emphasis on constant motion by minimizing the stopping time for vehicles. In the case of autos, an additional reason is that because of their affordable rates and popularity there is a possibility of a large number of them moving in the lanes, which because of their build, design, and maneuverability can cause what the airport authorities deem “chaos.” In any case, autos in Delhi have indeed a reputation for reckless driving. However, my understanding is that they are kept out of the terminal because of the notion that they will impede the flow, which was not borne out by the experiences, in any substantial degree, at Terminal 1 (where autos are allowed, or at least they were during the period of the fieldwork). The buses don’t function after midnight so arriving passengers can use this service only until midnight, or they can use the shuttle from the terminal to the staging area to take an auto. At the time of fieldwork there was no pre-paid counter for autos at the staging area which meant that the passengers had to bargain hard over the fare as no driver is willing to go by the meter. This space, which is the transit point between the city and the airport is, therefore, not covered by the regulations of public transport. It is a space for informal negotiations. In some senses, this particular space is where the power of DIAL becomes liminal; beyond that space a new system of power takes over.

This is the space of the Aerocity—a vast area comprising hotels, which at the time of the fieldwork were still being constructed, an effort employing thousands of migrant workers. In one of the buildings under construction almost all the workers were from Bengal, hired on contract and living inside the site which was fenced. These under-construction spaces and the labor at work in them were the discontents of the airport; hence they were carefully segregated and watched. Because of its labor composition, the space of the Aerocity was not yet a part of the airport. The staging area thus in some senses becomes a symbolic border between the airport and the Aerocity; this is ironic because the latter was supposed to be an integral part of the
airport but this can only occur once the construction is over and the construction workers are gone. The construction labor at the Aerocity is carefully and consciously kept detached from the entire logistical process of the airport. The point of giving this brief account of the Aerocity and the staging area is to demonstrate the borders or frontier areas which are created as a result of the spatial expansion of capital and where different economic actors including labor engage in informal interactions and often illegal transactions. These autonomous spaces of labor and informal economic activities, then, define a liminal space where the authority of the airport is still not rigorous enough as a result of ongoing construction of infrastructure.

The manner in which the network of ground transportation of Delhi airport has been designed is quite clear. There is an attempt to connect all the major modes of transportation, including state road transport and rail, to Delhi airport. This is most clear in the case of the metro station at the New Delhi railway station. Another example is the chain of flyovers that have been built to serve the airport. For example, the Dhaula Kuan flyover, which is located in South Delhi near Delhi University, South Campus and Delhi Cantonment, merges traffic coming from all directions of the city. This flyover is now connected directly to that of Dwarka, a satellite town near the airport, which leads to the airport. Also, the Dwarka flyover is part of a series of flyovers built along the Outer Ring road which encircles the city. This series of flyovers culminates in the Dwarka flyover, which also connects Gurgaon both to the airport and Delhi, thereby forming a network of roadways that connect each part of the city to the airport as well as the larger National Capital Region (NCR). Thus there is a web of roads and flyovers built around the airport, which gives a definite character to the city.

This elaborate system of infrastructure built to serve the airport, the complex network of movement of traffic, the availability of several agencies of public transport, and the varied timing of operation of each form of transport mean that taxis have to compete with other modes
of transport for the large part of the day. It is only at night that they are ensured of a near exclusive sway over ground transportation at the airport. It should also be mentioned here that Delhi airport currently has two passenger terminals, T3 for international flights and T1 for domestic flights. The terminals are connected by shuttle buses. A study by Jose Castillo-Manzano (2010) has indicated that in the era of low cost airlines, ground transportation systems have to be planned differently as ground transportation choices made by the passengers have changed as well. This also explains the increasing competition between taxis and autos at the domestic terminal of Delhi airport. In the domestic terminal, the access of passengers to autos and vice versa is much easier. Thus, clearly, the space of the airport is a contentious space for taxis, buses, autos, and passengers traveling in their own cars. Competition between several forms of transport makes the space of Delhi airport contentious and this competition, to a large degree, is the result of the structure of the transport industry, within which I am focusing on taxicabs.

**Airport, Taxis, and a Village: Conjoined Fates**

Before the taxi industry underwent restructuring, with radio taxi companies entering the market followed by app-based aggregator services, it was the black and yellow taxi (known as the *kaali-peeli* taxi because of its color that ostensibly signified it was an owner-driven car running under government license and fare rules) that was ubiquitous. These taxis serviced the city and were not allowed to run beyond its borders. These cabs were located at “stands” where they were parked, usually near places like the railway station, airport, shopping centers, hotels, etc. In the case of Delhi airport, the taxi stand, the airport, and the village of Mehram Nagar, which is adjacent to the airport, were in a symbiotic relationship. With the restructuring in the airport and the taxi industry, the village itself changed drastically. This section of the chapter analyzes
the changes faced by the *kaali-peeli* taxi operators, their struggle to claim the space of the airport, and how they are still significant in the functioning of the airport.

The fieldwork for this part of my study was done in Mehram Nagar near Delhi airport’s T1, which is the domestic terminal. The site of the fieldwork was the taxi stand and office of the union of taxi operators at T1. It is important to comprehend the importance of Mehram Nagar in order to understand the taxi union specifically and the airport economy generally. Geeta Gupta reported in *The Indian Express* (an English language daily) that the land records of Mehram Nagar suggest that the village is built on land belonging to the National Security Guard; the Delhi Cantonment Board oversees the administration of the area (Gupta 2010). The village is known as a cantonment village and is located in the district of South West Delhi. Being in an army-controlled area the residents have to carry out their negotiations at the intersection of military and civil authorities. The close proximity to the airport means that the economic life of the village depends on the former; the major economic activity of the village is serving the airport. A large number of the residents of Mehram Nagar own taxis and either drive themselves or, in the case of more prosperous owners who own several taxis, lease them out to individual drivers usually on the basis of a fixed payment per day or a lease model (which will be explained later)—a new phenomenon amongst them. Most of the drivers working for these owners are migrant workers from Uttar Pradesh and Bihar. The lane immediately accessible from the Delhi Airport Taxi Union (Mehram Nagar) is full of mini trucks, three-wheeler carriages, and privately owned cabs which carry goods and people to and from the airport.

The fieldwork at the Delhi Airport Taxi Union was done over a period of one month in November 2013. It must be mentioned here that at the time of fieldwork this was a union of the owners of the cars to safeguard their interests. The drivers working for these owners were
not a part of this union and did not have a union of their own for making collective bargains based on their independent and autonomous demands. A driver from Bihar told me that forming of unions amongst the drivers was actively discouraged with threats of dismissal. The airport taxi union office and the taxi stand are on the same stretch of road just outside T1. All the taxis are parked and controlled from here. There is a big shed with a television and a PA system to inform the drivers whose turn it is to take the taxi to the stand near the terminal. An office bearer at the union told me that most taxis at this stand were owned by people from adjacent Mehram Nagar and that 900–1,000 taxis were part of the union.

The union at T1 is around 30–40 years old. However, the union lost its recognition by the labor authorities and had to register itself again about 15 years ago. This was because of an auditing problem; the union was unable to perform the mandatory audit as prescribed by the law. Conversations with the union office bearers revealed that the taxi stand and the union office had changed their location at least twice. The union office bearers were clear in their assertion that they considered the current union office and taxi stand near T1 an integral part of the airport, spatially as well as commercially. The road on which the taxi stand and the union office are located belongs to the Public Works Department (PWD), and thus they do not have to pay any rent. There is nothing legal about this occupation of the space by the union office and taxi stand; it is based on an unwritten understanding between DIAL, PWD, and the union, and has not yet been sacrificed to the rhetoric of encroachment of government property. As a result, the method of work in this space is flexible. However, the flexibility of the use of this space does not mean that it is not guarded with ferocity or there is no division or hierarchy here. The union zealously guards its right to the space of the airport and makes sure that the interests of the owners are in no way compromised by new entrants who are either not from Mehram Nagar or do not have proper permission from the union. The union is aware of its precarious location because of the claims of the Delhi Cantonment Board and the PWD. All these factors make the
taxi owners follow a strict plan of movement that is more efficient than any plan DIAL has come up with. In fact, as I will describe later, after a failed attempt at organizing the terminal space for taxis, DIAL has left this aspect to the union.

The need and desire of the union to control space is obvious, as is illustrated by the case Delhi Airport Taxi Union vs. Sanjay Bhardwaj. The judgment in this case was an attempt by the courts to curtail the power of the union of T1 over the space of the airport. Sanjay Bhardwaj, a vehicle owner, wanted to ply his car as a taxicab from T1, which was controlled by the Delhi Airport Taxi Union. The union said that Bhardwaj was free to ply in the general lane of the terminal but could not do so in the lane meant for the black and yellow cabs. Bhardwaj went to court over this matter. The union declined to give Bhardwaj membership of the union, as he was not from Mehram Nagar; the logic was that the taxi owners and drivers of Mehram Nagar have been serving the airport for a long time and thus they had the first right to run taxi service at T1. As mentioned earlier, most owners were indeed from Mehram Nagar. A new entrant was no small matter for the union as the economy of Mehram Nagar was dependent on the airport and, obviously, the union wanted to protect the interests of the village. The Delhi District Court gave its judgment on the case on October 3, 2013. It made some harsh observations against the union, going so far as to say that the union “cannot be permitted to monopolise the taxi services at the airport” and that it was “not a statutory body [but] merely a union of the taxi operators at airport.” This judgment acquires significance because it brings into relief the structure of power in the case of taxicabs at the airport. The court made it clear that the regulation of the booth, where the passenger gets the slip for travel after paying the required fixed fare, is in the hands of the Delhi Police and not the taxi union. Also, the Delhi Police do not have powers to deny a taxi driver access to the pre-paid taxi lane whether it is part of the union or not. The judgment also made the observation that it is not necessary for an individual driver armed with the statutory requirements to take DIAL’s permission to run a taxi. This means that the only
requirement for providing a taxicab service is that the driver should have proper statutory
documents on him and he is free of any encumbrance from any authority operating at the
airport. This judgment made the union potentially redundant; the clear intention of the courts
was to break the “monopoly” of the union over the space of the airport.

However, the court seemed unaware of the complexity of the operation of taxicabs at the
airport, the manner in which they have to negotiate the airport space on a daily basis. It did not
take into account the question of parking and other charges that a taxi driver has to bear.
Parking, as we will see, is a huge issue at T1. Also, the union is not only an association of
taxicab operators but a body, which through its practice of regulating the movement of taxis
keeps order and ensures the smooth flow of traffic at the terminal. It does this with a system of
its own design, which will be discussed later. What one has to understand is that traffic
movement or its obstruction is also part of the production process in that it affects the
turnaround time of a taxicab and how much revenue it can generate. In that sense, maintaining
a constant flow of traffic is one of the stages of production of the taxicab service.

In the course of the court case, the union made the point that if an individual taxi owner/driver
is allowed to operate without the consent of the union it would create a chaotic situation at the
terminal. This was not simply a reason given to preserve their control of the space and labor
and to keep out competition but also had to do with the “production” of the taxi service at the
airport. It is an ingenious system. As mentioned earlier, the taxi stand is on the road connecting
T1 with the Airport Road. On one side of the taxi stand is Mehram Nagar, and on the other an
empty lot that belongs to the defense authorities. It is a narrow stretch and actually has been
set up, as one of the union officials remarked, on one lane encroached from a double-lane road.
On this stretch of road, black and yellow cabs park in—what would appear to the uninitiated—a
haphazard manner or at best a semblance of a queue. However, underlying this disorder is a
very tightly controlled mechanism: the “chaos” is actually five lines of taxicabs, with the queues made according to a list.

The list is prepared on an A4 size register. The register has five columns for each queue. The sequence is according to the registration number of the taxicab. Each taxi that comes into the taxi stand has to report to the union office and is then allotted a space in one of the five queues. The office bearer who prepares the list is called the “listman.” There is another “listman” who is present at the lane designated for the black and yellow taxicabs at the terminal. So, the list that is made at the taxi stand is passed to the “listman” at the terminal through a taxi driver who has to move from the stand to the terminal. The frequency of such an exchange of lists depends on the frequency of the incoming taxis at the taxi stand and the traffic of passengers at the terminal. The five queues at the stand transmute to three queues at the airport, with a given taxicab in a queue at the union-controlled taxi stand taking its place, as per the list, in the queue at the terminal. The position of a taxi in the terminal queue is relayed to the driver either verbally by the “listman” or announced through the PA system at the resting place for the drivers adjacent to the union office.

The efficiency of this system is especially evident during the period when flights are irregular which happens frequently in the winters, when Delhi often experiences dense fog. Flights are sometimes delayed indefinitely during this period, throwing the entire operation of the airport into disarray. The system devised by the taxi operators’ union ensures that the chaotic scenes inside the terminal, when several flights that have been delayed all arrive within minutes of each other, is not replicated outside in the taxi lanes. The union office bearer recounted that DIAL had experimented with the creation of a database of black and yellow cabs and providing identification/authentication cards for the drivers, to ensure orderly flow of traffic. However, the problem was that if the system developed a snag or the cards did not work for some reason,
it resulted in chaos and at times a total standstill in the taxi lane. This happened especially during the winters. DIAL was sensible enough to do away with the system and allow the taxi operators to function their own way.

As mentioned, when the taxi operators’ union made the point that unchecked entry of taxis would create chaos, it was not simply because they wanted to become a monopoly or secure their economic interests. The taxi union checks the entry of any union-unauthorized vehicle. The space of the airport is their most crucial means of production followed by their taxicab. The collective management of the space of the airport ensures that each taxi driver gets the maximum benefit. In that sense, the operation of the taxi services at the airport is an example of collective production where labor works collectively on the means of production, the space of the airport. Thus, even though the taxicabs are either owned or driven individually, without collective labor in the space of the airport, production would be uncertain, which would not be in the interests of the owners of black and yellow taxis and certainly not in the interests of drivers who want to maximize their earnings in order to pay the lease and earn a decent income. Therefore, the taxi union and the drivers can justly claim that they are an integral part of the airport economy and crucial to its functioning. This is a form of autonomous politics of producers. That this autonomy is highly valued by these producers is evident from an incident related to me by the office bearer of the union of taxi operators at T1. DIAL had proposed that 125 black and yellow cabs be shifted from T3 to T1. But because of the union’s efficiency, more than 200 cab drivers opted to move to T1. The union official made it clear that an informal arrangement with the authorities is what works best for the airport as well as the taxi union and drivers. He said that during the regime of the Airport Authority of India (AAI), before DIAL took over the operation of the airport, the process of negotiation was better as it involved a certain degree of knowledge, proximity, and informality between the parties involved. The arrangement was not necessarily recorded or documented but this informal way was more
efficient. The complaint now is that DIAL simply imposes conditions on the union and does not allow it to put its point of view forward; also, although the authorities insist on getting written assurances from the union, they in turn offer only verbal assurances to the latter. It is this desire for an “informal arrangement” or autonomy in operation and organization that is at the heart of the struggle of the taxi drivers and owners operating in Delhi airport. In the face of a new bid by the government to regulate every aspect of the operation of the airport and the city, labor tries to operate on its own terms. The demand for an increase in fares and struggles with other kinds of taxi services should be seen as resulting from the desire for that autonomy.

In chapter 4, I conceptualize logistical labor, the characteristic of which is that its relation to infrastructure installations and logistical practices is continuous and simultaneous in terms of time and space. The *kaali-peeli* taxi drivers of the union also have a direct relation to the temporal and spatial configurations of the airport. Their work is dependent on the arrival and departure of flights at the airport and depends on the space of the airport to produce their services. However, there are several ways in which the taxi drivers are different from the women cleaners. The most important difference is the autonomy of the production of taxi services at the airport. The operation of *kaali-peeli* taxis is managed and controlled by the union to the extent that even DIAL have tacitly allowed them to use their own methods as shown above. But this also means that the control of DIAL over these taxis is not as comprehensive as is their control over cleaners who work “within” the space of the terminal building under constant surveillance of contractors and officials. Even the movement of taxi drivers and the cabs are not completely under DIAL’s control. In fact, the desire of DIAL to control the movement of *kaali-peeli* taxi drivers through formal regulation is the desire to control these workers in the manner of logistical labor (as in the case of the women cleaners). As I have already explained, DIAL even tried to do this through the creation of a database and issuing of identification/authentication cards but had to give up the plan that would bring the drivers and
their movement under their control. This must be seen as the desire of DIAL to have a complete
dominance over the space of the airport and the tussle between DIAL and the union as a
struggle over the means of production (space) that is owned by the airport authorities but over
which workers exercise a degree of relative autonomy. Therefore, although the \textit{kaali-peeli} taxi
drivers depend temporally and spatially on the airport they still retain their autonomy unlike
women cleaners from DIAL and operations of the airport. This has largely to do with the fact
that \textit{kaali-peeli} taxi service is organized by a union which still has some power over how
production is organized. But it is also to do with the very nature of the functioning of the airport
where services essential to its functioning have to be produced by independent producers. Thus,
the practice of walling as in the case of workshop I examine in chapter 3, which gives rise to
labor of logistics, is not successful to the same degree in the case of taxi drivers. DIAL would
like to be in a situation where it could give conditional access to \textit{kaali-peeli} taxi drivers on its
own terms just as it does in the case of the workshop workers. This is one of the reasons why
DIAL stonewalls the demands of the union and attempts to curb the power of the union and
make it pliable. The inability of DIAL to completely rein over \textit{kaali-peeli} taxi drivers is a result
of the fact that these workers have elements of both logistical labor as well as labor of logistics
and DIAL finds it difficult to govern them as either. In so far as taxi drivers are logistical labor
dependent on the airport’s temporal and spatial strategies, they still retain autonomy over the
means of production in the production process through the union. As labor of logistics, they
fairly control the space of the taxi stand and their strategies as independent producers make the
walling technique of DIAL applied on workshop not very effective. The struggle and demand
of these taxi drivers can also be understood similarly in terms of their desire to retain both the
characteristics of logistical labor and labor of logistics. However, not all kinds of taxi services
have the same kind of autonomy and the emergence of radio taxis and app-based aggregator
cars have created a situation where the autonomy of taxi drivers and unions is constantly
threatened. In some ways, the *kaali-peeli* taxis are being driven out of competition. The next section examines this phenomenon.

**Restructuring, Deregulation, and New Labor in the Taxi Industry**

A unique aspect of the taxi industry is widespread recognition that it needs to be regulated because it serves a public good. In fact, the taxicab industry is one of the most heavily regulated industries in the world. The process of deregulation in this industry has varied according to the specific conditions of the market. However, there are certain common experiences and issues that are replicated in diverse scenarios and those similarities are almost all to do with labor. There has been a fair amount of work done in economics to study the effects of deregulation on the taxi industry. Tamer Cetin and Kadir Yasin Eryigit have studied the deregulation of the taxicab market in New York (2013) and in Istanbul (2010). In the case of New York, they find that the price of the medallions and their strict distribution means that medallions are a source of monopoly rent for their owners, who would not want the market to be deregulated (2013, 170). The most interesting finding is that if the number of taxis in New York decreases by 1 percent, the rent increases by 0.45 percent (176). In a study done in France, Maya Bacache-Beauvallent and Lionel Janin (2012) show that the deregulation of the market in France, basically involving increasing the number of licenses, has had two contradictory effects. The increased supply of taxis has led to reduction in demand for individual drivers but it has also meant a higher aggregate demand because of shorter waiting time for customers. Profits are dependent on the relative magnitude of these two variables (57). The problem with this model of deregulation is that it ends up putting several licenses in a single hand (58), which means that the profits stay the same or even increase for the owners of the licenses but the drivers make the same earnings. The study of the Swedish market by Zoran Slavnic (2011) has produced some highly interesting results. The opening up of the market, which means the
abolition of entry barriers, allowed taxi operators to put more taxis on the roads and even decide the rates (237). When profits began to fall in the market, the free entry meant that longer working hours became the norm; it also encouraged the entry of an increased number of drivers, who were mostly immigrants, because driving taxis is a common job in times of high unemployment (238).

In the case of Delhi, the taxi market is relatively free in the sense that there are no restrictions to the number of licenses that can be given by the transport department of the government of Delhi. Anyone with a car with valid documents and the required commercial license can own and drive a taxi. Similarly, for drivers who drive another owner’s car, the only restriction, if they are migrants, is that they have to appear for a commercial license test in Delhi. Hence, not only is the structure of the market in Delhi different but, as a result, even the composition of the workers. The flow of the workers into the taxi industry in Delhi was for long managed informally by associations and unions, like the one in Mehram Nagar. It was difficult for new owners or drivers to start on their own without attaching themselves to a union- or association-controlled taxi stand. In this way, the labor market was controlled by associations and they ensured that drivers who drove an owner’s car did not form a union of their own as the relationship with the association was direct and personal.

With the entry of radio taxi companies, the structure of the labor market began to change decisively. After an initial experiment with cars owned by a company and driven by drivers on wages, the model was abandoned and replaced by one where the drivers paid a lease amount every day with earnings over and above this payment being their income. This was similar to the original *kaali-peeli* taxi system in Delhi. However, this meant that these new drivers came under the control of the companies and hence a division arose between two kinds of drivers who were actually similar. At the same time, differences between the companies and other taxi
operators began to emerge. Labor struggles in the current phase of the taxi industry occur within this intricate relationship, which has been complicated further by app-based taxi aggregators. It can be said that the app-based taxi aggregators have brought together several forms (in terms of ownership) of taxis. Thus, a single taxi can work as an independent taxi based on the fare meter decided by the Delhi government or work under Ola or Uber or any other app-based taxi aggregator service on the basis of its fare mechanism. This information has been collated from interviews with taxi drivers at the taxi stand at Mehram Nagar, taxi drivers of radio taxi companies, and drivers of Ola cars.

The taxicab industry in Delhi is now unevenly structured. Consequently, labor in this industry is implicated in myriad ownership and labor regimes. The variegated structure of ownership in the taxi industry, as a result of easy entry, produces tension between the many layers of owners and labor. There are several possible politics of confrontation and alliance. First, there is the conflict between individual owners and companies; second, between individual owners and their drivers; third, between companies and their drivers; and fourth and more crucially, between the drivers of companies and the drivers of individual owners. Thus it can be seen that a complex political and economic condition exists in the structure of taxicab industry; and a major role is played in this structure by Delhi airport, which increases the complexities in manifold ways.

It is crucial to grasp the structure of the taxicab industry as it operates in Delhi and in which labor is embedded. There are seven main classes of taxicab services operating in Delhi: local taxis with contract carriage permits, tourist taxis with all India tourist permits, radio taxis with contract carriage permits, economy radio taxis with contract carriage permits, rent cabs with all-India tourist permits, deluxe tourist taxis with all-India tourist permits, and light passenger cabs with all-India tourist permits. The contract carriage permit allows a taxi to ferry passengers
only within NCR. All-India tourist permits are used mainly by tourist taxis as well as some vehicles owned by high-end hotels. The total number of these permit holders in Delhi, according to the latest “list of taxi permit holders in Delhi” administered by the city’s transport department, is 50,255 (Delhi Transport 2015). This data is from the period when Ola and Uber taxi aggregator services were in the initial stages of their operation. In 2015, after an incident of rape allegedly committed by an Uber driver, the Delhi government found out that the majority of taxis attached to Uber and Ola were running without the mandatory license. This depressed the data of taxis running on the road and was clearly encouraging an informal market for taxicabs through app-based taxi aggregators. Now, even the government fixed-fare taxis have attached their vehicles to Ola or Uber and the tension between the app-based taxis and the fixed-fare ones has escalated sharply.

The taxis and the auto unions have always shown discontent with the rates the government fixes for them and have gone on strike on several occasions due to this issue. However, the time period between fare increases has never been uniform. In the case of Ola or Uber, the drivers get more run out of their taxis but their issue is the “cut” these companies extract on every trip. An Ola driver demonstrated to me the method by which the fare charged is divided between the driver and the company. He showed me the total fare I had to pay which flashed on the screen after the trip was over and then the amount of money he had made during the trip. The company had taken a cut, as commission, of more than 20 percent of the fare. The uneven fare structure and the depressed government rates mean that for taxis run on pre-paid or fixed fares, the airport becomes the most important point for picking up passengers. In fact, the Ola taxi driver I spoke to said that even Ola and Uber charge more when picking up passengers at the airport. However, the advantage that the fixed-fare taxis have is their dedicated taxi stand at the airport controlled by the Delhi Police, which is not available to the drivers of the app-based taxi aggregators. Thus different forms of ownership, licenses, and fare
structures make taxicabs depend on the airport in different ways; for fixed-fare taxis the airport is one of the few places, followed by the railway stations, where there is certainty of income.

At this stage, a brief outline of the ownership model in app-based aggregators like Ola and Uber is useful to explain the specificity of this template in the case of Delhi. This digital platform-based work is now being referred to as crowdwork (Prassl and Risak 2016, 625). The crowdwork or gig economy is based on the assumption that the digital platform is accessed by individual producers. However, in Delhi a new form of ownership pattern has emerged in the taxi industry that uses crowdwork digital platforms, where an individual owns several cars and hires drivers to run those cabs. These drivers then come under the dual regime of the owners and the platform. They are hired on wages which might vary from monthly wages to daily wages. They have to earn not only enough to cover daily running costs, but also the interest on the loan of the vehicle, and other costs that would be incurred by the owner if he was driving the car himself. In such a scenario, the driver/worker is not directly contracted to the digital platform but to the owner, making his situation even more precarious. A large number of taxis under crowdsourcing are operated in this way. There is no legal mechanism to protect these workers since they are not the contracting parties. The struggle against crowdsourcing companies to increase the owners’ share of the profits is led by the car owners and any increase is barely reflected in the wages the drivers earn. The crowdsourcing model was not the main area of investigation during the initial period of fieldwork in 2013, as it was still emerging. However, some of the implications of this model will be discussed in the section on resistance by the cab drivers.

My main focus here is the taxicabs with contract carriage permits. Contract carriage permits allow the permit holder to ply their taxi within NCR. All black and yellow taxis are contract carriages, as are the radio taxis. The total number of contract carriage permits, according to the
data from the transport department of the government of Delhi for 2014-15 (Delhi Transport 2015), is 14,108. The break-up, which is important for our study, is as follows. The total number of local taxis is 6,613; the total number of taxicab permits of Mega Cabs, a radio taxicab operator, is 736, while that of Meru, another radio taxi operator, is 1,265 with another 178 licensed under V-Link Taxis Private Limited which is the parent company. Carzonrent, which owns EasyCabs, has 1,374 taxicabs, 478 of which are rent cabs and 896 radio taxis. After the City Taxi Scheme came into force in 2015, it became mandatory for individuals operating economy radio taxis to comply with the scheme. They also had the freedom to attach themselves to the “group category” (meaning a corporate taxicab operator). The City Taxi Scheme of 2015 does not cover the black and yellow local taxis. Also, the conditions for the group license make it clear that radio taxicabs will outnumber local taxis. According to the scheme, the induction schedule for taxis in the group category is:

i) 50 taxis within one month of grant of license.

ii) 100 taxis within three months of grant of license.

iii) 200 taxis within six months of grant of license, failing which a hefty fine (INR 25,000 per month) is to be paid for an additional six months; thereafter, the transport department will be free to revoke the license and the license holder will forfeit the bank guarantee of INR 1,500,000.

iv) Maximum number of vehicles per licensee is fixed at 2,500 vehicles. (Government of NCT of Delhi, City Taxi Scheme, 2015)

Essentially, the scheme encourages informal labor in the taxicab industry. In the case of black and yellow taxis, the labor works under an owner who is part of the union. In the case of members of an association providing luxury tourist vehicles, they can run their taxi from Delhi...
to anywhere in the country under a permit known as the All-India Tourist Permit. A vehicle with this permit cannot ply within NCR, from one point to another. Wages are the norm in such an arrangement, which has now been largely replaced by the lease model. An old taxi owner-driver, a member of the union, told me that wages were a good arrangement and that it was easier to deal with government authorities compared to DIAL. Nothing in the scheme suggests a plan for the kind of labor structure that will be generated in the industry and how their interests will be protected; it is silent on these issues. With the increase in the number of fleets, the drivers working will have little say in decision-making and the working conditions will not be conducive to the formation of a union. It must be said, though, that in Mumbai several unions have been formed and older unions of taxis have been revived. Drivers of fixed-fare and radio taxis have come together to oppose app-based aggregators. However, one of the most noticeable features of the taxi industry is its increasing informality. In the case of radio taxis, the relationship between the employers and the drivers is largely informal; and with the *kaali-peeli* taxis now following the lease model the informality is intensifying. The model of app-based aggregators has ensured that informality has now been structured and normalized in the industry, with several levels of intermediaries at work.

The corporate radio taxi service, which includes Meru, Mega Cabs, and Easy Cabs, is part of the global capital network. As mentioned earlier, the fieldwork was conducted in 2013 when the aggregator taxi services like Uber and Ola were in a nascent stage in Delhi. The discussion, thus, will revolve around the business structure of the three radio taxi services mentioned above. However, it will be shown subsequently that the aggregator model of taxi services is as much a result of the clash between capital and labor as it is of financial and business innovations. In fact, most business innovations, at least in the taxicab industry, are a result of the tussle between the bosses and the workers. When Meru started out in 2006 the business model was one of ownership by the company of the taxicabs, which were then leased by the
drivers on a daily payment of INR 1,100 (which was subsequently raised to INR 1,300 just before labor unrest brewed). In any case, in return for the subscription charges, the drivers were assured of at least 25 assignments per day by the company. Expenses such as fuel, which is Compressed Natural Gas (CNG), parking charges, etc. were to be paid by the drivers. This left a very small amount in the hands of the drivers, which was the main reason for the unrest. Other taxicab companies, namely Mega Cabs and Easy Cabs, had the same lease-based model. Subsequently, labor unrest erupted both in Mumbai and Delhi, 2010 being the year when the industrial action became quite militant. The main demand of the drivers was an increase in the fare because of the increase in the price of CNG. When an official of Meru suspended a driver for alleged irresponsible behavior, the strike became even more militant. When the auto unions in Mumbai joined the strike, around 80,000 vehicles went off the road. In Delhi in 2010, it was Meru drivers working for wages who went on strike and protested in front of the company’s office. Their main complaint was that the company was not fulfilling its commitment on promised wages and that the pressure on drivers to make up for the loss of wages was hazardous, having resulted in one driver dying while working. The drivers were entitled to a daily wage of INR 2,000–2,500 but received only INR 1,000–1,500 in hand.

According to a study conducted by Neelam Pathania on the taxi industry in Delhi, Easycabs followed a model with the following characteristics:

1. The cab drivers have to pay a security deposit of around INR 20,000 to the company.

2. They are supposed to pay a daily rent to the company of approximately INR 1,100 per day for the cab and whatever they earn beyond this belongs to them.

3. They have to pay for CNG out of their pockets and the maintenance of the vehicle is paid by the cab company.
4. If the cab drivers want to avail of leave for a day or so, they are still liable to submit the fee of INR 1,100 to the cab company and the same applies on weekends too. If they take a day off, the cab is assigned to somebody else on that particular day, and on returning they are reassigned a cab that might or might not be the same one (2012, 9–10).

The combination of security deposit and daily rent is a disciplinary measure to keep a driver working, thereby increasing the productivity of each driver and extracting maximum profit. The security deposit becomes an effective tool for disciplining, as a driver could forfeit it to the company in case of repeated complaints or the driver’s recalcitrance.

The taxi aggregator model emerged in the taxicab market after a period of sustained strikes. This model further informalized and decentralized the structure, leading to a dispersal of workers. It can be said that the taxi drivers’ strike only hastened the adoption of the aggregator model to informalize the industry to a greater extent by leaving fewer opportunities for collective action. There is no data available but the driver who talked about the commission extracted by the company also observed that a class of owners was now emerging who had several cars and who had attached their cars to Ola. They themselves drive but for their other cars they hire drivers on a daily basis without keeping them as regular workers. The crowdsource model has, then, made the response of the owners even more flexible at the cost of the worker. An example will illustrate the precarious nature of the driver and the work involved. An owner of a car who has attached it to Ola can momentarily stop working for Ola and pick up a passenger from Delhi to take him to Agra. As there are still no clear guidelines for the regulation of app-based taxi aggregators, such situations do arise. This is not the case with kaali-peeli taxis, which can only run inside the city. In fact, one of the demands by the owners of kaali-peeli taxis against Ola cabs is to establish regulations regarding their areas of
operation. The Ola driver, in the given example, has now to drive the passenger from Delhi to Agra as he works under the owner. There are no legal avenues or rights by which the worker can gain access to overtime and wages. The intensity of work is higher than is the case with drivers of radio taxi companies, as per my interviews with both sets of drivers.

At the time of the fieldwork, 50 percent of cars under Meru were “owned” by the drivers. Meru also facilitated bank loans for the drivers to buy the cars. According to a news report in *Business Standard* (Balakrishnan 2014), the company acted as the mediator between the bank and the driver. The owner/driver of the car had to give 15 percent of his earnings to the company. The radio taxi company was in the process of innovating the model of “owner-driven” cars (which became the model for Ola) when the mode of “attachment” with the parent company underwent a change. In fact, there was no principal employer in any shape or form. It was as though this form of capital had become disembodied and ghostly, appropriating value without ownership of the means of production. In the case of radio taxis, the owner/worker was at once under the control of finance capital through debt and was implicated in the banking finance structure, which had its own regime of extracting interest. By the time he became the real “owner” of the means of production, i.e. his taxi, it had depreciated to an extent as to become unusable at worst and highly expensive to be operating at best.

The hybrid model (aggregator + lease) emerged as the new template for radio taxi services. The City Taxi Scheme, described earlier, cleared the legal hurdles for capital to innovate. Mega Cabs and Easy Cabs began to follow the same path for expansion. Apart from the emergence of innovative new business models, what is very interesting is the way the worker has evolved during the same period from being a wage earner to a liminal position of a worker-owner subject who is brought under the control of the strategies of control by the taxi companies and the financial grip of loan-providing banks. The intersection of the interests of the taxi
companies and banks control how much the worker can produce and how the earned money is channeled and appropriated by finance respectively. The taxi company, for example, decides the number of trips a taxi driver gets, which dictates how much he can earn. While the pressure of keeping up with the interest rate charged by the bank on the loan for the taxi means that a taxi driver is forced to work longer and in a more intensive manner. When taxi companies start manipulating the amount of work that a taxi driver gets, the latter has to fall back on the airport to earn both his wages as well as the interest owed to the bank. In the app-based taxi aggregator model, both the ownership of the means of production and the expenditure of labor-power to produce value are outsourced. In a sense, app-based taxi aggregators extract rent for providing the logistical service of taxicabs.

For the radio taxicab drivers, the intensity of work and the regime of discipline, compared to black and yellow (kaali-peeli) taxi drivers, are stronger. The profile of the radio taxi drivers is also different from the kaali-peeli drivers. While, as we saw earlier, most of the kaali-peeli taxi owners are from Mehram Nagar, in the case of radio taxi drivers the profile is more diverse. Many are migrants from neighboring states like Haryana and Rajasthan as well as from far-off states like Bihar and Uttar Pradesh. This is obviously due to the structure of the business model of corporate taxi companies where a small amount of savings and some legal documents, such as a commercial driver’s license, are all that are required for a driver to lease out a car and start working.

The deposit paid by the drivers to the company cannot be regarded as capital invested by the worker. It is here that the rhetoric of the radio taxi companies about drivers being partners and entrepreneurs falls flat and the intricacies of the wage relation are revealed. The drivers do not take a lease on taxicab by putting in their savings to accumulate but to produce services and earn wages. This has elements of outsourcing disguised as self-ownership. One can even say
that workers in this structure of capital and labor work at “piece-rates” and they are under the
disciplinary regime of the company. It can be further said that in the current structure of the
radio taxi industry, the security deposit for leasing out the taxicab serves the same function as
the wage cut middlemen take when they recruit workers on behalf of a company.

One of the most interesting characteristics of the workforce in the taxicab industry, black and
yellow cabs as well as radio taxicabs, is its longevity. The interviews I conducted with both
kinds of drivers show that workers tend to work over a long period in this industry. The reason
for the longevity, though, is slightly different in the case of radio taxis in Delhi. It is true that
driving taxis is a more secure job than most others in an increasingly unstable job market.
However, a more important reason is the structure of the radio taxi industry.

The driver with the least amount of experience amongst those interviewed had an experience
of four years at Meru. He observed that even those who have migrated from outside Delhi do
not usually leave the taxicab industry after a short period of work, though they might have
entered this industry after working in a range of jobs across industries. The reasons, it seems,
are mainly two: economic and the background of the workers themselves. The economic reason
has already been mentioned above. The security deposit required by the company ensures that
the drivers do not leave abruptly. It is a large enough sum that the driver has to realize through
his labor by working long hours and for a long time. If the taxicab has been obtained through
a financial scheme that allows the driver to own the vehicle after a substantial period of time,
it becomes even more difficult for him to leave the company and the industry. It is also one of
the reasons that this money paid up front by the worker (or in the form of interest) should not
be seen as capital but as labor-power in a monetized form; labor-power’s representation in the
value form of money ensures a constant supply of it. This part of labor-power with the capitalist
should not be seen as “dead” labor-power or that which has already been expended in the
process of production and in the process of valorization. In fact, this is living labor-power, always active but at the same time always the capitalist’s captive.

This point needs to be considered closely. In Marxist political economy, labor-power is a commodity and a worker has to enter the market to sell it to the capitalist. The capitalist buys the labor-power for the period of time of production and is not concerned with the time the worker is not engaged in production. However, the case of the taxi drivers is somewhat unique. The driver has to keep on producing that labor-power which is always held captive by the capitalist in a monetary form, including that period for which the capitalist hires him on a daily basis. Here is how Marx analyses wages in his *Wage Labour and Capital*: “Wages, therefore, are not a share of the worker in the commodities produced by himself. Wages are that part of already existing commodities with which the capitalist buys a certain amount of productive labour-power” (2010, 9: 202).

It seems what has changed in the regime of capital over labor in the radio taxicab industry is the relation of wages with produced and already existing commodities. It is possible to infer from the above analysis that although “wages are that part of already existing commodities with which the capitalist buys a certain amount of productive labour-power” still, they are also now “a share of the worker in the commodities produced by himself.” The share of the worker in the commodities produced, that is the security deposit held by the company, is used by the capitalist to raise the intensity of work of radio taxicab drivers. It is this incessant necessity to keep on producing and monetizing the labor-power held captive by the companies that the radio taxicab drivers have to constantly use the space of the airport as a means of production that gives these drivers the best chance to produce their service. However, unlike their *kaali-peeli* counterparts, the radio taxicab drivers do not have the same autonomy over their means of production where they can stake claim over the space of the airport. Instead of a union
organizing production to a very large extent, the companies decide how much work is available to the radio taxicab drivers. It is ironic that radio taxicab drivers have better access to the airport and get city jobs through their call centers but still find themselves in a disadvantaged position regarding work intensity and are often at loggerheads with their kaali-peeli counterparts with no practical possibility of solidarity. The disadvantaged position of radio taxicab drivers despite better position than kaali-peeli taxi drivers at the airport is because the former do not have any power over running their service unlike the latter. Instead, the radio taxicab drivers are constituted differently from their kaali-peeli counterparts in terms of logistical labor and labor of logistics in relation to the airport. To extend this analysis, we need to first acquaint ourselves with the working lives of radio taxicab drivers which the following section on their testimonies provides.

Testimonies of Radio Taxi Drivers and Analysis

There were five sessions of group interviews and discussions spread over a period of one month. Each session was of one hour and was conducted at the residence I occupied during my fieldwork in Delhi because it was easier for the drivers to come there early in the morning on their way home after finishing their work. They did not agree to have the sessions recorded in audio or video and requested anonymity.

The discussions during these sessions revolved mainly around the structure of the industry, nature and hazards of work, and collective action. It was during these discussions that the respondents kept referring to the airport as a site where radio taxicab drivers like them went to get passengers once their company’s call center refused to give them more assignments. The following narrative has been collated from individual responses. Unless a response of an individual gives either a unique perspective or contradicts other narratives or is a unique work-related experience, there is no attempt at individualizing the responses. The objective is to show
the similarity of the collective experiences and then highlight where the experiences of an individual differ significantly.

Respondent 1, a driver with Meru, said he was 40 years old and had been in this industry and with the company for four years. Originally from Rohtak, Haryana, he was born and grew up in Delhi as his father had a government job in Delhi. He was married with two children and stayed with his father. He made it clear that this arrangement—living with his father—provided him with a financial cushion in case of monetary strains. His father drew a monthly pension from the government. Respondent 2 was a former soldier who served as an army jawan (non-commissioned officer) in the Garhwal Rifles regiment. He was 43 years old and was with Mega Cabs. Respondent 3, who was from Bihar, was 32 years old and had received education until the Intermediate level (12th year in school). He was working for Meru but had been sacked. He belonged to the category of Other Backward Classes (OBCs), a governmental category of castes that have been traditionally backward educationally and economically and who are beneficiaries of affirmative action. He had agricultural land of 3 acres back in his village.

The radio taxicab industry began with a classical wage relationship since when Mega Cabs started drivers were hired on a salary basis. The salary was fixed at INR 10,000 per month with increments every year. The workday was fixed at 12 hours. Fuel, maintenance, and other vehicle-related issues were the responsibility of the company. In the beginning there were 40 such workers on the payroll of the company. At the time of these interviews, the number of drivers on wages was reduced to two. While Meru at that time had no drivers on their payroll. When there was a fixed wage system in the radio taxi system it seems that the taxi drivers did not have the dependence on the airport to earn their wages. They had to take up the assignments that were provided by the call center company. It was only with the emergence of the contract system, or the buying of cars by drivers with the help of bank loans, and when cost of
maintaining the cars fell on the taxi drivers that the dependence on the airport became significant. There was a definite relationship between the restructuring of the radio taxicab industry and airport becoming an important means of production for these taxi drivers.

At the time of the interviews, the contractual system was the norm and each company had its own specific forms of contract with the drivers. However, there were more similarities than differences between the various radio taxicab companies. They had the same stipulations for the drivers. Any driver who was willing to drive the taxicab of any company needed to have a commercial license and a badge handed out by Delhi government’s department of transport. Once the license and the badge had been obtained, the driver presented himself at the office of the radio taxicab company. The taxicab company took a deposit of INR 50,000 and provided a cab to the driver. The drivers were then put through a training process at the training facility of the company. It was a one-week training program for which they had to pay INR 1,500. They were given training on the use of GPS, and how to operate the system inbuilt in the taxicab directly connected to the system at the call center. They were also given training on routes, etiquettes, and handling difficult passengers.

This testimony reveals the level of exploitation of the drivers by the companies as well as the power the companies had over their drivers. In the official version of the companies, according to the respondents, the drivers can exit the company any time, return the cab, and get the security deposit reimbursed. However, companies refuse to give back the security deposit on the grounds that the particular driver has had a series of complaints against him by the customers. In such a scenario the drivers have few modes of redress. In fact, the need for a grievance mechanism to be instituted by the government came up as a constant demand of the drivers during the interaction. In cases in which complaints have been lodged, the driver is forced to continue working for the company for fear of loss of the security deposit. Thus, as a
continuation of the point made in the discussion about labor-power above, the security deposit is the labor-power, the commodity, which has been seized by the capitalist but has not been paid for by him to the worker. This also ensures a continuous, almost assured, supply of pliant labor. A sum of INR 1,450 has to be paid per day by the driver; whatever he makes over and above this he keeps as his earnings. The company no longer guarantees a minimum amount of work; it depends on the number of calls for service the call center receives. Also, this sum has to be paid daily irrespective of whether the driver works or not. Thus in the case of sickness or any other eventuality when the driver cannot go to work he is bound to pay the daily sum to the company. Also, it is the driver who bears the fuel expenses. In city conditions, 8 kilograms of CNG is the norm for 200 kilometers. The price of CNG depends on global prices and is prone to fluctuations. This was especially the case when these sessions were conducted in December 2013–January 2014. The following figures give an indication of the fluctuations in price:

<table>
<thead>
<tr>
<th>Month</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 4, 2013</td>
<td>INR 39.9/kg</td>
</tr>
<tr>
<td>June 25, 2013</td>
<td>INR 41.9/kg</td>
</tr>
<tr>
<td>September 5, 2013</td>
<td>INR 45.6/kg</td>
</tr>
<tr>
<td>December 27, 2013</td>
<td>INR 50.1/kg</td>
</tr>
</tbody>
</table>

When these sessions were conducted, a common refrain was how difficult it was for the driver to earn anything after paying the daily lease amount and buying the fuel. A quick calculation gives the following picture for January 2014. As mentioned above, when Meru began their
operation in 2006 the company promised each driver 25 assignments per day. During the session this particular figure brought forth chuckles or disdain and an assertion that the drivers considered themselves lucky if they could get even 10 long-distance assignments in a 15-hour shift. Let us assume that on average a driver gets 15 assignments per day. At the rate of INR 1,450 lease money each assignment should recover INR 72.5. We will round it off to 73. Now, with the above fuel prices, each kilometer is likely to cost INR 2.5. We will round it off to 3. The distance between Delhi airport’s T3 to Connaught Place (center of the city) is 22 km. The cab fare rate during the time of fieldwork was INR 20 per km. If the taxi started from the airport the driver had to pay INR 150 as charges for airport facilities. One should factor in this element: if the driver took a passenger from the airport to the city he had to come back without a passenger most of the time. Thus he was burning fuel without getting compensated for it. For convenience, we exclude the distance the driver has to cover between assignments for which the fuel cost is not recovered. According to the calculation, for the distance covered the fare generated is INR 440, while the cost incurred for it is INR 355. The net income for the trip is INR 85. The time taken to cover the distance in normal traffic is 30 minutes. Thus a ride from the airport to the city center and back will take about an hour. Here we are not taking into account the scenario where the driver finds a passenger through hailing (which is extremely rare) or gets another duty assigned from the call center. In this case, he has no option but to return to the airport or wait for a long time in the city to get another assignment, which creates myriad problems such as those of parking in the city and time wasted without work. It is now clear that the respondents’ complaint about getting few assignments has more than a grain of truth. For 15 assignments in a day, the net income is INR 1,275, which in the best possible conditions can occur only after a 15-hour workday. It is no wonder that the sessions revealed that the drivers preferred a few long-distance assignments over several short distance ones, which seems to be the nature of most assignments provided by the company’s call center.
The role of the call center of the company is a crucial one not only in providing assignments but also in disciplining the drivers through economic coercion and control as well as regulating their movements. Each taxicab is fitted with a GPS and a fare meter. It is easy for the call center to control both the taxi’s location and movement as well as the earnings of the driver. It emerged from the sessions that once the call center comes to the conclusion that a particular driver has earned a gross income of INR 3,000 it stops giving him further assignments. In case that driver calls the call center for allocation of duty he is told to wait. Although the respondents opined that this is because the company does not want them to earn more, it is also clear that this is a way to ensure the intensity of work is kept at a very high level so that the drivers put in more hours. Thus the time between two assignments, which otherwise would have been considered leisure or rest or—in the words of the respondents—“time waste,” is actually work. And in this case, work that is not only unpaid but also does not create any “use-value.” This is an interesting inversion of what Marx characterized as use-value:

A thing can be a use-value, without having value. This is the case whenever its utility to man is not due to labour. Such are air, virgin soil, natural meadows, &c. A thing can be useful, and the product of human labour, without being a commodity. Whoever directly satisfies his wants with the produce of his own labour, creates, indeed, use-values, but not commodities. In order to produce the latter, he must not only produce use-values, but use-values for others, social use-values. (1990, 131)

In the case of the taxicab drivers, they are creating value without producing use-value, a tangible commodity or service. How can this anomaly be explained? How can it be demonstrated that value is being produced without any ostensible performance of work and expenditure of labor-power? It is here that the labor-power being held captive by the capitalist becomes crucial and provides a solution to what seems an intractable problem of political
economy. It is the captive labour-power that is at work during these “leisure” hours of no work and constantly reproduces itself by ensuring that the worker turns up the next day to drive the taxi. What is held captive by the capitalist, then, is both the abstract as well as concrete labor which is continuously monetized in the process of producing the taxi service, even at rest and in times of no “work.”

To ensure the drivers do not escape this intricate deployment of economic coercion and networks of discipline the tracking technology becomes crucial. The possibility of dodging the GPS, which locates their position for the call center, is next to impossible as it can be shut down only by the company command center. Thus, if the driver indeed carries a passenger without the knowledge of the trackers, they will always know the movement of the driver. In any case, if a passenger is carried outside an assigned duty, the company knows the extent of earning through the fare meter which cannot be tampered or shut down. Drivers are not keen to enter into an informal negotiation with passengers who are not duly assigned or pay by the fare meter. This practice of carrying passengers on a negotiated rate and not according to the fare meter is quite common in black and yellow cabs and autos. However, this is not a viable method for radio taxicab drivers as they are always in a weak position with respect to the passenger who can refuse to pay, call the police, or complain to the company about the driver, in which case the latter loses the cab as well as the deposit.

The combined effect of work controlled by the company’s call center, intense surveillance, and the security deposit captured by the taxicab companies is that taxi drivers are forced to continuously use the space of Delhi airport as a means of production. The flow of people at the airport provides better opportunities to the drivers to keep working and ensure that the taxis are put in production so that the drivers can earn their wages as well as keep up with the demanding interest of the banks. The structure of radio taxicab industry makes the drivers dependent on
the airport, and this means that they come under the spatial and temporal regime of the latter. Therefore, taxi drivers are simultaneously controlled by their companies which restrict their movement and ability to work, and also by the airport, which gives them a better position vis-à-vis \textit{kaali-peeli} drivers in a manner that makes these two sets of workers confront each other for space as well as passengers.

The logic of capital and multiple logistical practices of both taxi companies and airports are not lost on the drivers. The starting point of duty for a driver is the home. Once he logs into the system of the taxicab the driver asks for an assignment from the call center. If there is one on offer, the call center informs the driver about it and the driver can either accept or deny the duty. The acceptance or rejection of the assignment depends on the distance the taxicab has to cover for the passenger. If it is a short journey the driver usually rejects it. If the driver is not assigned any duty or declines an assignment, he goes to the airport’s T3 and waits his turn in the queue to carry passengers.

There are two points which are of importance in understanding how radio taxicab drivers are constituted in terms of logistical labor and labor of logistics. From the above testimonies, it is apparent that the radio taxicab drivers are operating under the dual logistical regime of the airport and the radio taxicab companies. The companies control the movement of taxicab drivers through their call centers while the airport in providing a better access to the airport for these taxis is able to integrate them in a much more effective way than the \textit{kaali-peeli} drivers. In this way the airport and the call center simultaneously regulate the movement of the taxicab drivers. There is a check on the free movement of taxicabs within the city and strict control over number of assignments by the call centers that make the taxi drivers dependent on the airport, which they have to access in such a way that their movement is controlled by the airport in an orderly fashion. The control of the airport is not shared with the autonomous union as in
the case of kaali-peeli taxis and the production process of the radio taxicabs is also not as autonomous. The discontinuity in terms of time and space of the airport is achieved as a result of this dual regime. In this sense, radio taxicab drivers form labor of logistics. However, once inside the airport at the terminal the radio taxis come directly under the spatial and temporal production processes of the airport as they are now dependent on flight schedules and the maneuverability of the taxis are severely restricted in the space allotted to them by DIAL. This is unlike the case of kaali-peeli taxis who retain their autonomy to a fair degree over the space of the airport. Also, in the case of kaali-peeli taxis the drivers refuse (although they are not legally allowed to do so) to carry a passenger if the ride is not profitable for the driver which is not the case with radio taxicab drivers. Thus, in the case of kaali-peeli taxi drivers, the element of a higher degree of autonomy as labor of logistics compensates and resists the coercion implicit in the airport’s governance of logistical labor. In case of radio taxicab drivers, the elements of logistical labor and labor of logistics and the way they are governed seriously restrict their movement both within the city as well as the airport. Taxi drivers have to subject themselves to the spatial and temporal arrangement of the airport when they are at the parking space of the terminal designated for them. However, unlike the kaali-peeli drivers they are not part of a union and do not have any say in the operation. The radio taxicab drivers are also not in a position to operate autonomously as in the case mentioned of the driver who approached the court to get permission for running his own taxi without approval of the union. The tussle between kaali-peeli taxi drivers and radio taxicab drivers surfaces because DIAL can use its spatial control over the latter to manipulate their movement in a manner that disadvantages the kaali-peeli drivers. The layout of the parking spaces where the lane closer to the terminal building is meant for radio taxis make these taxis the easier choice for passengers. The means of production (space) is thus manipulated by airport authorities to offset the autonomy of kaali-peeli taxis and the union. This is the primary reason why the latter demands better access to the
airport and perceives radio taxicabs to be better placed. Thus, radio taxicab drivers become implicated in the maneuver of DIAL where the latter uses its control over the space of the airport to direct the movement of taxis. Radio taxicab drivers who are directly controlled by call centers navigate the city on the basis of assignments provided to them. Therefore, the radio taxicab drivers are placed within two sets of logistical practices—those of the airport and those of the company’s call centers. Their movement is governed in this matrix where in order to maximize their wages and keep up with the loan interest, a situation of dependence to the airport is created. It is this matrix which makes the taxi drivers perform both logistical labor as well as labor of logistics.

Now that we have explored in some detail the various modes of exploitation of capital over labor in the radio taxicab industry, there is one more mode that needs to be described before we analyze the impact of this regime on the life of labor and the resulting collective action by labor. The sessions brought out the fault lines of the rhetoric of drivers being entrepreneurs. It is no doubt true that a driver can own a vehicle through financing schemes of the taxicab companies. The drivers make a down payment of INR 80,000 and the company provides them a car. However, the interest charged by the company through the daily earnings of the driver without any reference to the prevailing interest rate in the market is crippling for the drivers. One of the respondents said that it was possible for the drivers to own the taxi in four years but even if one was successful in paying off the loan in those four years, the vehicle becomes an expensive possession because of overuse during the period. This is a highly exploitative mechanism of earning interest as well as a share in the “produce” of the taxi driver.

The impact of these models on the drivers is immense. During the sessions it emerged that there had been at least one case of suicide by a driver who could not keep up with the daily amount to be deposited to the company. He had operated his taxi under the ownership scheme.
It was also mentioned that in order to maximize earnings the drivers work for longer hours, sometimes stretching to 18 hours a day. Fatigue becomes a daily part of the drivers’ life and is the most common reason for accidents, which are becoming increasingly frequent in the case of radio taxicabs. There is no available data of road accidents on the basis of type of service providing vehicles. Thus we have to depend on qualitative data but there is broad agreement on the fact that one of the main reasons for accidents involving radio taxis is drivers’ exhaustion. The problem of long work hours is compounded during heavy fog in winter as delayed and cancelled flights make the flow of passengers erratic, resulting in longer waiting times in the queue. The most severe impact of the structure of the radio taxicab industry is on migrant drivers who have to save for remittances. In the course of the interviews, it emerged that most of the drivers are migrants, with the majority being from Bihar. They are the ones putting in the longest hours driving taxis to save enough to send money back home. They also want to minimize the cost of living in order to send back more money, and the vehicle itself presents a tempting way of reducing such costs. At the time of the fieldwork, the radio taxi companies allowed the drivers to keep the vehicle with themselves. One of the respondents slept in the vehicle and hid his belongings, including a portable stove and a few utensils, in the trunk. One day he was caught by a company executive while cooking by the roadside inside the Aerocity. The company confiscated his car and blacklisted him so that he could not drive for other radio taxi companies. He then took to driving an auto on the basis of a lease agreement.

One has to remember that these testimonies were collected in 2013 and the landscape of the taxi industry, workers, and their struggles has since undergone major changes. In fact, the past five years have witnessed the most rapid developments in the taxi industry and the drivers’ struggle.
There is a long history of labor unrest in the relatively short period of the existence of radio taxi companies. In the interview sessions, it emerged that there have been several strikes in the radio taxi industry, especially in the case of Meru. The first big strike was in 2010, involving Meru drivers; it was sustained, with ebbs and flows, for 10 days. The immediate trigger for the strike was the death of a driver due to a heart attack which was attributed to the stress caused by increased subscription rates by the company. The demands of the strikers revolved around better wages, medical cover, and leave. The company management called the police and confiscated cabs from some of the drivers. The drivers’ demands were standard demands of workers but the fact that they raised them and also formed a union in an industry where economic cooperation is negligible makes these demands significant, moving beyond simply economic ones into the realm of the political. The strike asked for recognition of drivers as workers as opposed to “entrepreneurs.” This active dissociation from the imposed identity of an entrepreneur to that of a worker and the attempt to form a collective comprised of workers were political moves. The drivers were also aware that they work in an industry which has a presence in all the big cities of India and that the same issues plague other drivers in other big cities. The respondents knew of and closely followed the strikes of 2012 and 2013 by Meru drivers in Mumbai. They could also discern the strategies the management used to break off the workers’ action. Some of these strategies were firing drivers who were leading the collective action, threatening to blacklist the drivers, which renders them unemployable within the industry, and pressurizing migrant drivers.

At the time of writing of this chapter (February 2017), Ola and Uber drivers in Delhi conducted a 13-day strike; the strike spread to other cities, notably Bengaluru. A new union of drivers emerged, which called itself the Sarvodaya Drivers Association of Delhi (SDAD). The strike was resolved after a negotiation between the union, the companies, and the government of Delhi. The taxi companies did not commit to fulfilling the demands of the drivers but what was
clear from the strike was that this new workforce could coordinate strikes all over the country wherever crowdsourced work is operating and bring a city to a standstill. The workers were successful in making the companies agree to their demand of not levying a fine of INR 500 in case of declining an assignment, as well as promise to increase the fare and allocate incentives. This strike can be seen as a sharpening of the struggle between the drivers, the owners, and the crowdsourcing digital platforms.

Another dimension of struggle in the taxi industry is added by the *kaali-peeli* taxi and the autorickshaw drivers. The latter, especially, see Ola and Uber as inimical to their interests because of flexible pricing. In fact, in January 2017, before the strike by the drivers of Ola and Uber, the autorickshaw unions all over the city went on a strike against these companies. The strike actions even turned violent at some places. Because of constant restructuring, crowdsourcing, difficulties in regulatory mechanisms, and labor struggles, the taxi industry is a long way from achieving equilibrium.

The restructuring of the taxi industry and the airport in Delhi has created a situation where their respective logistical regimes have made it possible to control the production process and movement of labor more effectively than was possible previously in the case of independent taxi operators. The taxi industry has undergone rapid changes from a location-specific existence (Mehram Nagar) to crowdsourced digital platforms where location is ever mobile. The dependence of taxis on airports has also mutated as a result. The airport, as infrastructure that is embedded in the intricate web of governmental technologies and configurations of capital, provides physical space as a means of production. This aspect of the airport as a means of production for the taxi industry, with its widely differing modes of ownership, has rendered the operation of the airport space ever more complex. It has meant that Delhi airport has had to change its deployment of space in terms of parking areas, movement of taxis, and general
traffic. It has also meant that taxi drivers are constituted such that elements of both logistical labor and labor of logistics are present in their working patterns.
Conclusion

When I started this research project on Delhi airport in 2012, Terminal 3 (T3) was already in the second year of its operation. The Commonwealth Games 2010, with its controversies and corruption charges against bureaucrats and politicians, had taken over the public discourse and rattled the incumbent central government. It was during this period that the work on Delhi Mumbai Industrial Corridor (DMIC) was taken up in earnest. This industrial corridor was designed to cover six states of India and envisaged the “establishment of several new cities, 24 industrial nodes, three ports, six airports and a 1,500 km high-speed rail and road line” (Khosla and Soni 2012, 15). The corridor passes through Gurgaon and Manesar in Haryana, which was witness to a continuing radical labor struggle in Suzuki that had turned violent. There were reports of a manager allegedly killed by the workers. Infrastructure installations like the airport, corridors, and special economic zones during the entire period of this research were reshaping the geographical and political conditions under which commodity production was carried out in India. Throughout this thesis, I have sought to capture how Delhi airport is organizing the production of goods and services, transforming urban spaces in its vicinity, and controlling the movement of labor. The idea was to demonstrate the specificity of the airport and the manner in which commodities are produced and the movement of labor governed.

At the time of writing this conclusion in mid-June 2017, news came through that Afghanistan and India have inaugurated the first air corridor that bypasses Pakistan. The idea behind the air corridor was not only to facilitate the exchange of commodities (mainly dry fruits and plants) but also to build logistics in a manner that is in sync with the geopolitical interests of two nation-states vis-à-vis another (Pakistan) with which they have less than cordial relations. A similar instance of competitive geopolitics underscored by logistical imagination was witnessed during the Belt and Road Initiative (BRI) Summit in May 2017 where India did not...
participate because of issues relating to claims over sovereign territory in Jammu and Kashmir. BRI is a geostrategic initiative by China to connect Eurasian countries and to coordinate transcontinental manufacturing and circulation. In an alternative vision of infrastructure building and logistical connectivity, India and Japan presented a vision document of an Asia Africa Sea Corridor that is envisaged to bypass the grand Chinese vision of BRI. Similarly, India and Iran decided to develop Chabahar Port at the same time China and Pakistan were doing the same with Gwadar Port in Pakistan. This new vision of logistics and infrastructure has some resonance with the colonial imagination of the empire when developing air routes. There was an impulse to create new ways of connecting several cities in the empire through air routes, which gave rise to questions of sovereignty and territorial continuity of nation-states. I have related this history in chapter 1. In the recent logistical imagination there are new methods through which cities are being connected, giving rise to similar problems of sovereignty, borders, and economy. The key difference is that land, air, and sea are thought about and planned in coordination with each other. Issues regarding the sovereignty of nation-states and sanctity of national borders have not been sacrificed but are in fact central to the imagination of these new developments in logistics and infrastructure. In the case of BRI and the proposed Asia Africa Sea Corridor, the terms of engagement with the idea of sovereign-nation states is being cast in a manner where the problem to be resolved is how to exercise sovereign power where logistical apparatuses are to be controlled and managed by several sovereign bodies. How does the finding of this thesis throw light on some of these recent developments?

I will briefly summarize the main findings of the thesis. Chapter 1 of this thesis demonstrates that airports and air routes immediately after the war were informed by both military and commercial concerns of the empire. It raised issues of territorial sovereignty and led to a realignment of borders with various entities of government with that of the empire. It also led to a distinct arrangement of economy where new real estate markets emerged as a result of
military-commercial nature of airports and air routes while some cities like Singapore, Karachi, and Kolkata emerged as logistical hubs for air travel. The recent BRI and Asia Africa Sea Corridor proposed by a different conglomeration of nation-states are now in the process of realigning national territories where newer mechanisms of border making and border crossing are to be expected. This thesis can build on its analysis of air routes and airports to study these new forms of territories, borders, and hubs that are set to emerge in the new geopolitical conditions informed by logistical practices.

This grand and competitive logistical imagination of groups of sovereign nation-states will not only create mass eviction, displacement, loss of livelihood, and labor migration but it will also create those two distinct yet dependent forms of labor conceptualized in this thesis: logistical labor and labor of logistics. How will these two forms of labor translate in a context where logistical apparatuses have to function at the intersection of transnational arrangement of economies and sovereign desires of nation-states? The walls and the borders, both visible and invisible, will not only multiply but will have to negotiate the contested borders of nation-state remerging as a result of new logistical practices such as BRI and Asia Africa Sea Corridor. The movement of labor and process of accumulation within these walls and borders will be more restricted and more violent than anything which Wasim and his co-workers (chapter 3) had to face at the hands of the goons of the landlord. These walls and borders, it is easy to imagine, will be secured by national armies, corporate security providers, and, most importantly, informal figures of violence that will quite likely be created in the wake of such logistical development.

In chapter 2, I made the point about the issue of “appropriate government,” which becomes important as questions of ownership, governance, and organization of production process becomes more complex in relation to infrastructural installations and logistical practices. The
question of “appropriate government” will become more complex when issues of transnational logistical development poses the problem of sovereignty vis-à-vis nation-states. Attracting global capital with lucrative investment opportunities is the easier part of such logistical imagination and, in any case, at this stage, these corridors and belts are driven by states. The more difficult part of governing such a logistical apparatus will be creating an entity that will be malleable enough to incorporate the impulses of both the nation-states and private capital (national and global). The Public Private Partnership model, which has been identified as a state-capital alloy in this thesis, is just one of the models. However, as these projects roll out and evolve it will be necessary to keep an eye on the development of institutions. Would these logistical apparatuses be governed through “local” models such as PPP or would they be governed through a more “transnational” entity or a combination of both in a graded manner? This question could guide aspects of research into these grand logistical apparatuses. The analysis of new entities of governance both at the local and at the transnational level is important to understand how capital and state are reconfiguring themselves post-crisis.

The originality of this research lies in its conceptualization of two forms of labor in relation to the airport as an infrastructural installation: logistical labor and labor of logistics. I relate these forms of labor to the temporal and spatial practices of the airport both as a site of production as well as government that reveals the complex relation between production units dispersed in geographical space, myriad economic activities and work, informal settlements of migrant workers, and changing structures of the labor market. The logistical form of the airport is conceived in this thesis as a complex defined by modes of production and social relationships along with being a physical infrastructure located in a definite space. The distinction between the two types of labor also points to the inherent though heterogeneous relationship between them, which also opens up the possibility of envisaging a political organization where labor
builds political solidarities and associations. This aspect of my research is one of the most important contributions of the thesis as it allows envisioning of a wider organization of labor.

This thesis has grappled with general questions of restructuring of capital, accumulation, and state formation. Further, it has investigated how infrastructure and logistical practices are providing new examples of governing labor and political subjects at a micro level. In its study of the workshop, terminal building through cleaners, informal settlements, and scramble for parking spaces, this thesis demonstrates that spaces of power work on the body of the worker both discretely within the bounded space of the airport terminal as well as in unison with other spaces such as workshops and even the larger urban space. Hence, power relations are reorganized and coordinated on multiple scales of time, space, and laboring bodies. This simultaneous and coordinated nature of macro and micro forms of power provide the basis for much of the findings in this thesis.

This study of Delhi airport brings out the restructuring process of the airport. The study then links these restructuring processes to the transformation of urban spaces and labor processes in a manner that foregrounds the importance of infrastructural installation and logistical practices. I show the airport to be an installation that produces and governs social relations. In this conclusion, I place this study in the larger context of major logistical practices that are being conceived and put in operation at the global level. The idea is to make the point that the study of Delhi airport and the manner in which it governs and produces political subjects has resonance with the larger context of logistical apparatus making and is embedded in that making. Questions of citizenship, labor, and government when posed through the study of logistical apparatus have allowed me to conceptualize logistical labor and labor of logistics, study how workers perform these kinds of labor, and resist the logistical apparatus of Delhi airport and DIAL. In the process, I have tried to show that new forms of resistance by logistical
labor and labor of logistics are emerging and they are engaging and challenging the temporal and spatial regime of the logistical apparatus of the airport.

Finally, an analysis of infrastructure led capitalist and geopolitical developments can lead to an analysis of imperialism. In the 100th anniversary year of Bolshevik Revolution and the publication of Lenin’s *Imperialism* (1970), infrastructure and logistical practices point to political questions that needs to be addressed. The Leninist theory of the “weak links” has had its moment but I think in the light of this research on logistics it can be said that apart from looking at “links” maybe it is time we also trained our observations and analysis towards looking for borders and walls that logistical apparatuses produce. It is within these walls and borders that workers performing logistical labor and labor of logistics are produced. These workers are challenging the regime of logistics currently in a manner which has still to produce an alliance between the two forms of labor as a result of these walls and borders. However, in this thesis I have shown that workers performing logistical labor and labor of logistics are, in fact, part of the same process of real logistical subsumption. I want to suggest in these concluding lines that instead of breaking of the weak link in a strong chain it is quite possible we are looking at a possibility of insurrection within, between, and across logistical spaces dotted with magnificent airports, nodal ports, highways, warehouses, nondescript workshops, and informal labor settlements.
References


*Delhi International Airport Limited vs. Union of India and Others.* 2011. Supreme Court of India.


———. 1920. *Question of the Preparation of Aeronautical Maps.* File Number 120.

———. 1921. *Division of Responsibility between the Civil and Military Authorities in Respect of the Provision of Landing Grounds in India.* File Number 48.


1928. Proposed Development of Internal Air Route in India. File Number AV. 10.


1947. Cabinet Approval to the Operation of an Indian Air Service to United Kingdom on the System of Joint Government-Company Enterprise-Government of India Holding 49% of the Share Capital, and Air India Being the Technical Managers and Chief

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Booking Agents in India. Government to Issue a 10 Years License to Air India International and to Make up Initial Losses by Subsidies to Be Repaid out of Subsequent Profits. File Number 2-A/28-47.

———. 1950. Ceylon Government’s Proposal to Amend the India-Ceylon Air Agreement so as to Enable Air Ceylon to Operate an Air Service to Rangoon and Beyond via Madras-Not Accepted. Decision Not to Object to 49% of the Shares of Air Ceylon Being Owned by Australian National Airways and Air Ceylon Operating through India with Australian Aircraft and Personnel. File Number 8-A/10-50.


*In the Name of National Pride (Blatant Violation of Workers' Rights at the Commonwealth Games Construction Site)*. 2009. Delhi: Peoples Union for Democratic Rights.


Murari Lal and Others vs. The Chairman, Airport Authority of India. 2007. High Court of Delhi.


Office of the Historian. 1944. The Chairman of the American Delegation to the International Civil Aviation Conference (Berle) to President Roosevelt. The Chairman of the American Delegation to the International Civil Aviation Conference (Berle) to
President Roosevelt. 800.796/12–744.

https://history.state.gov/historicaldocuments/frus1944v02/d515.


Raj Kumar and others vs. Union of India and Others. 2003. High Court of Delhi.


Ravi Khullar and Another vs. Union of India and Others. 2007. Supreme Court of India.


———.2010. *Emergence of the Political Subject.* New Delhi: SAGE.


*Union of India vs Ramkishan*. 1979. High Court of Delhi.

