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– RECOMBINANT URBANIZATION: Agrarian–urban Landed Property and Uneven Development in India

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Abstract

This article develops the concept of recombinant urbanization to show how agrarian landed property and land-based caste/class relations shape the production of post-liberalization urban real estate markets in India. I focus on two interrelated but differentiated agrarian property regimes in western Maharashtra to argue that real estate development is building on prior uneven agrarian land markets, which were themselves sociotechnically produced by colonial and postcolonial development politics. Through an examination of the organizational form of sugar cooperatives, which mediated agrarian capitalism in an earlier era, I track how these primary agricultural cooperatives are now being reorganized into real estate companies, sometimes with former sugarcane growers as company shareholders. The same caste-based political and social capital that made sugar cooperatives possible in a capitalist agrarian society is now being leveraged by agrarian elites to ease their own and their constituents' entry into an urbanizing economy. The concept of recombinant urbanization opens new methodological entryways to analyze the entangled agrarian and urban question in predominantly agrarian and late liberalizing societies.

Introduction

In 2001, the newly liberalized Indian state[1] launched one of the most ambitious infrastructure development programs the country has ever seen: the building of economic corridors. Comparable in scale only to the massive railway building enterprise of colonial India, post-liberalization policymakers see the new economic corridors as necessary world-class infrastructure that will transform a lethargic, state-led agrarian society into a globally competitive urban economy. They see the new economic corridors as the spines along which special economic zones (SEZs), smart cities and other 'zones of variegated sovereignty' can be developed. Land reallocation from agricultural fields to economic corridors and their attendant new cities—to develop what I call the corridor regions—has erupted in volatile conflicts. These conflicts have been so widely publicized and politicized that some refer to the past ten years as the decade of land wars in India.

Journalistic accounts frame these land conflicts as exemplifying India's pressing challenge of 'how to divert scarce fertile farmland to industry in a country where more than half the people still live off the land' (Sengupta, 2008). Other photo-essays capture the land use changes in and around these corridor regions as a contrasting urban–rural narrative: that of rural women draped in colorful saris crossing a world-class economic corridor that could well be mistaken for a Western expressway; of saffron-clad religious travelers on elephants sharing the expressways with speeding cars. These narratives interpret the changes in liberalizing India as collisions between the two Indias: the modern, urban, Westernized India and the primitive, rural, superstitious India. In so doing, they recall the Rostowian modernization theories of developing countries as poor, superstitious and rural, and the policies needed for their 'takeoff' to rich, democratic and urban societies.

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1 Although economic reforms had started more than a decade earlier, the central government of India officially announced its economic liberalization policy in 1991.

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Yet, a look at some of the most contentious land conflicts of the past decade shows that these market-oriented corridor regions are not anachronistic to the agrarian countryside, but rather are building on the prior market linkages of agrarian capitalism. Some of the most volatile land conflicts took place not in regions that were bypassed by modernization, but in those that were at the epicenter of the agricultural modernization program of the Green Revolution. From the 1960s to the 1980s, the Indian government launched the Green Revolution program with the aim of modernizing agriculture and food production. The state's water-seed-fertilizer subsidy was captured by regional caste groups, and as scholars writing about the political economy of development during this period have shown (Balagopal, 1987; Rudolph and Rudolph, 1987; Patnaik, 1990; Brass, 1995), the Green Revolution had helped transform these peasant castes into one of the most formidable agrarian electoral constituencies by the 1980s. As incoming urban firms encounter these electorally powerful agrarian landed constituents, collisions between them erupt in conflict. The protests against the acquisition of fertile agricultural land for the Yamuna Expressway corridor region—the economic corridor connecting the cities of Delhi and Agra and the new townships along the corridor—delegitimized the then incumbent political party so badly that they were ousted from power in the subsequent state election (Mahaprashasta, 2010). Similarly, the proposed townships along the Bangalore–Mysore Infrastructure Corridor infringe on fertile sugarcane fields; these have been successfully halted by agrarian opposition. In both instances, the protests were spearheaded by the regional agrarian propertied classes belonging to the dominant castes of the Jats and the Vokkaligas, respectively (Vishnu, 2011; Pani, 2013).

I call these collisions and collusions between agrarian landed property and urban real estate 'recombinant urbanization'. I borrow this concept from David Stark (1996), who in the context of post-socialist transitions argues that communist property structures do not simply collapse during a transition; instead the 'persistence of routines and practices, organizational forms and social ties' becomes the basis for new institutions.[2] In this article, I focus on the agrarian countryside along India's first economic corridor, the Mumbai–Pune Expressway, and the reorganization of the sugar cooperatives in this region of western Maharashtra into real estate companies. Unexpectedly, the organizational form of the cooperatives, which are generally seen as 'alternatives to capitalism' (Whyte and Whyte, 1991) and as a strategy of resistance against the new 'neoliberal' forms of capitalism (DeFilippis, 2004; Sennett, 2012), is the vehicle that agrarian elites are using to leverage the gains of rentier capitalism. By embedding cooperatives within unequal caste/class relations, I show how the agrarian cooperatives were part of a regime of uneven agrarian land markets. The sugar cooperatives mediated the uneven flows of the Green Revolution's water-seed-fertilizer subsidies to certain regions and not to others, in the process transforming arid regions to surplus-producing ones, and reducing the bypassed regions into underdeveloped ones. These uneven agrarian land markets, which were produced by earlier colonial and postcolonial development programs, now shape the trajectories of contemporary market-oriented urbanization. I illustrate the effects of an agrarian past in the urban present by focusing on two real estate developments: Magarpatta City, located on irrigated, sugar-exporting fields, and Lavasa Lake City, located in the bypassed, underdeveloped region.

As Roy (2016) argues, today's urban question in India is at once also an agrarian question, where agrarian regimes of territory, land and property are implicated and inscribed in ongoing urban land use changes. This article adds another dimension to the entangled agrarian–urban question (Chari, 2004; Roy, 2016) by focusing on a legal

2 In his work on post-socialist Hungary, David Stark looks at the reorganization of business enterprises. He found that instead of a clean shift from state-owned enterprises to private firms, the economic reforms produced what he calls 'enterprise cross-ownership' that built on earlier state-socialist forms of property. Stark's work has influenced later work on landed property, with scholars analyzing China's town and village enterprises (TVEs) as a form of recombinant property.

form of agrarian property—the cooperative—and using both the making and remaking of the sugar cooperatives in western Maharashtra as a window into the conflict-ridden process of recombinant urbanization. The analytical focus on the 'recombinant' moves us beyond the concept of 'desakota'[3] to instead focus on the precise institutional mechanisms through which differentiated agrarian property regimes combine with liberalization reforms to produce new geographies of uneven development.

Landed property and the agrarian–urban question

The production of new real estate markets in liberalizing India recalls key arguments developed in the West on the role of landed property within processes of capitalist urbanization. An early influential formulation was Manuel Castells' 'The urban question: a Marxist approach' (1977), in which Castells argues that the spatial structure of cities and urban form is actively produced under historically specific conditions of capitalist development. The urban question soon became the land question, on how the institution of private property rights sorts and arbitrates land uses and users across space, and structures the form of Western cities (Scott, 1980; Harvey, 1982; Fogelsong, 2014). Of particular importance here is Neil Smith's concept of the rent gap and its connection to uneven development (Smith, 1996). Smith argued that in New York, Baltimore and other US cities that were witnessing a back-to-the-city movement in the 1970s, the earlier phase of capital flight from inner cities and the simultaneous suburbanization of capital were part of the same process of 'combined and uneven development'. The spatial shift and concentration of capital that produced the suburbs created a 'rent gap' in the inner cities, which Smith defines as the gap between actual capitalized ground rent and the potential ground rent, given what economists call 'highest and best use'. It is this rent gap, created by disinvestment during earlier phases of development, which provides new investment opportunities for capital during times of crisis. Space is central to Smith's analysis of the 'seesaw movement of capital' from developed to underdeveloped regions (*ibid*.: 88). Unlike neoclassical models, which assume a geographical tabula rasa, the rent gap theory focuses 'on the production of space through the investment of capital … [and] a ground rent surface that is itself the product of previous investments of capital in the built environment' (Smith, 1982: 147).[4]

If the urban question explored uneven geographical development in the form of urban ground rent, postcolonial contexts had their own analyses of uneven development in the form of the agrarian question. In these predominantly agrarian and late industrializing societies, the agrarian question centered on agrarian-industrial linkages, and on how agrarian surpluses in food, labor and savings could be transferred to kickstart industrial development. In India, the unique sequencing of development—of a predominantly peasant society gaining universal suffrage before industrialization—ruled out any coercive means of extracting agrarian surpluses for industrialization (Varshney, 1995). In fact, the presence of the peasant castes as the backbone both of anti-colonial nationalist struggles and of postcolonial political parties led to the rise, rather than the decline or the demise, of agrarian power in the decades between independence and liberalization (*ibid*.). A key development program during this period was the Green Revolution, aimed at modernizing food production through state water-seed-fertilizer subsidies in strategic regions within the country. If we map in broad brush strokes the agrarian land markets during the Green Revolution, such a map would show that the concentrated state subsidies produced an arc of surplus-producing regions that stretched

3 In the context of 1960s Indonesia, Terry McGee characterized the distinct pattern of urbanization in South-east Asia as 'desakota', a neologism that combines the Baha Indonesian term 'desa' (village) and 'kota' (city). McGee argued that the desakota model of urbanization was unique to South-east Asia, with its well-developed roads and canal infrastructure, a dense rural population engaged in smallholder cultivation, and an integrated 'transactive' urban–rural environment in terms of movements of people and commodities (see McGee, 1967).

4 For an instructive debate on whether the rent gap theory travels to postcolonial contexts, see Ghertner (2015) and Slater (2015).

from the north-west to the south-east of the county. Bypassed by the Green Revolution was a parallel arc of impoverished regions that became the sites of guerrilla conflict (Frankel, 1971). In short, the specific caste/class social relations not only gave rise to multiple non-Western trajectories of agrarian to industrial change across various country contexts (Bernstein, 1996; Byres, 1996), but also gave rise to a plurality of agrarian questions within the same country context (Lerche *et al*., 2013). The development of 'combined and uneven' agrarian regions meant that agrarian capitalism was linked to industrialization in regionally specific ways.

In this article, I bring together the emphasis on landed property within both agrarian and urban studies by asking what new geographies of 'combined and uneven development' are produced when formerly differentiated agrarian regions now encounter liberalization reforms that facilitate urban real estate. Specifically, what difference does the presence of agrarian propertied classes make in contemporary trajectories of urbanization? It is instructive here to return to earlier works on transitional societies that analyzed property institutions as embedded in social networks (Oi, 1992; Stark, 1996). In his analyses of the transformation from state-socialist property to capitalism in former communist countries, Stark draws attention to the new hybrid forms of property in Hungarian firms. As transitional societies try to adapt to changes in the global economy in a flexible way, prior social networks are not replaced but instead recombined as the 'basis for credible commitments and coordinated actions in the postsocialist period' (Stark, 1996: 995). Examples in these economic sociology analyses of property include the proliferation of firms such as mutual shareholding of Japanese *keiretsu*, family ties within South Korean *chaebols*, and Taiwanese *guanxi* or 'related enterprises' (*ibid*.: 1018). In these interlocking ownership structures, the organizational boundaries between public and private are blurred, giving rise to new enterprise forms that cannot be understood as either neoliberal or neostatist.

In a similar methodological orientation, this article analyzes the transformation in landed property in liberalizing India from a form of agrarian capitalism to a form of urban capitalism. I track how prior social relations in the form of caste networks, which made sugar cooperatives possible in an agrarian society, are now being leveraged by agrarian elites to stake new terms of inclusion for themselves and their caste constituents in a liberalizing and urbanizing context. The comparison of two agrarian regions highlights how sugar cooperatives were based on combined but uneven capitalist development: the surplus-producing sugarcane regions benefited from the biased routing of capital-intensive irrigation canals to certain strategic places and not to others; places where big dams had been built became flooded in the process and thus remained underdeveloped. Just as former agrarian capitalism produced an uneven geography of underdeveloped regions that supported agrarian accumulation in the surplus-producing sugarcane regions, these differentiated agrarian property regimes continue to shape contemporary trajectories of urban real estate.

The distributive politics of who captures the surpluses from the ongoing agrarian-to-urban land use changes depends on these prior agrarian geographies. In the two cases analyzed here,[5] the composition of shareholders in the real estate companies varies by agrarian region. In the Lavasa case, located in a former underdeveloped agrarian region,

5 The article draws on around thirty months of fieldwork conducted by the author, at intervals, between 2010 and 2015. Methodologically, the research is based on a comparative case method of selecting two cases within the same institutional context (in this case, western Maharashtra, so as to keep constant land regulations, which are a state subject), thus setting up a 'natural experiment' to understand how the same economic corridor produces varied distributional outcomes depending on the prior agrarian regime. The research included open-ended interviews with bureaucrats and the public authorities responsible for the governance of land, water and economic corridors, and with the institutional actors—occupants and owners of land, street-level bureaucrats, and activists—involved in the making of Magarpatta City and Lavasa Lake City. All interviews were conducted by the author in English or Hindi. The research also relies on various planning documents and land price data collected by the author from seven talukas—including Haveli and Mulshi—located along or near the Mumbai–Pune Expressway.

the main beneficiaries of the urban land rent are distant foreign investors. In contrast, in the former sugar-exporting Magarpatta case, agrarian landowners voluntarily assembled and converted their sugarcane fields into a real estate developments, with the farmers holding all the shares in the new real estate company. In short, recombinant urbanization is a method to foreground how agrarian property institutions are entrenched in social networks of caste. The agrarian social networks of trust and exclusion, which took shape under colonial and postcolonial development policies, gain durability in the form of sticky property institutions that then become the basis for post-liberalization processes of urbanization. The specific dynamics of recombinant urbanization vary across India's diverse agrarian regions, but what underlies the emergence of these new property institutions is the reconfiguration of caste/class-based forms of land control and social power in a liberalizing and urbanizing society.

The making of uneven agrarian land markets

Western Maharashtra is an illuminating case for excavating the processes of recombinant urbanization. Post-liberalization capital is largely clustered around western Maharashtra. Western Maharashtra is also home to one of the most powerful agrarian lobbies in the country, made up of the sugar elites. India is the second largest exporter of sugar in the world after Brazil, and more than 40% of India's sugarcane exports come from western Maharashtra. Western Maharashtra, however, was not always a surplus-producing region. In fact, at the turn of the twentieth century, it was an arid zone that was unfit for commercial agriculture. My opening claim that post-liberalization capital is clustering in former surplus-producing agrarian regions raises the earlier question of how these uneven agrarian land markets were produced in the first place. The emergence of western Maharashtra as the epicenter of production for a water-guzzling crop such as sugarcane is striking, given the dramatic transformation of the arid region at the turn of the twentieth century into a water-rich sugarcane exporting zone by the 1960s. This transformation owes its explanation to the uneven flows of state capital and irrigation canals that not only transformed an arid region into a surplus food-producing one, but also transformed local peasant castes into a formidable agrarian electoral constituency.

In 1930, Thorner (1996) identified 21 'ecological and agrarian regions' in South Asia, based on soil and rainfall conditions, agrarian relations and crop production. One of these regions is what he called the Maratha region, 'since this is the home of the Marathas and the whole areas is dominated by the Marathi language' (*ibid*.: 122, see also Figure 1). Thorner gives a detailed description of the agrarian conditions within the Maratha region of the Bombay Deccan, the hinterland of Bombay, which is made up of the districts of Poona (now Pune), Satara, Ahmadnagar, Solapur and Nashik: 'the annual rainfall varies between 16 and 25 inches. If regularly distributed and seasonable, this is enough for many of the dry crops raised here. But actually the rainfall is very irregular, unseasonable, and unequally distributed, leading to the frequent emergence of scarcity and famine conditions … In Bombay-Deccan, in the neighbourhood of Poona … the life of the people is a "gamble on rain"' (*ibid*.).

Thorner (*ibid*.) also describes how the introduction of irrigation canals changed the agrarian land markets in this arid region. Irrigation canals were first introduced in the region as a famine-protection measure in response to the 1875 riots and the 1876–77 famine. In an effort to pacify the agitated peasantry, the colonial state built the first major irrigation canal, the Mutha canal project, in 1879. Although the riots and the famines were both triggered by the absence of rains, they did not have the same effects on all peasant groups in the Bombay Deccan. The Deccan riots were a protest against debt, led by the Maratha peasant-cultivators, against the Marwari moneylenders. The famines, by contrast, took their highest toll on landless laborers, 'who had been deprived of entitlements during the privatization of village land as sorely indebted Maratha

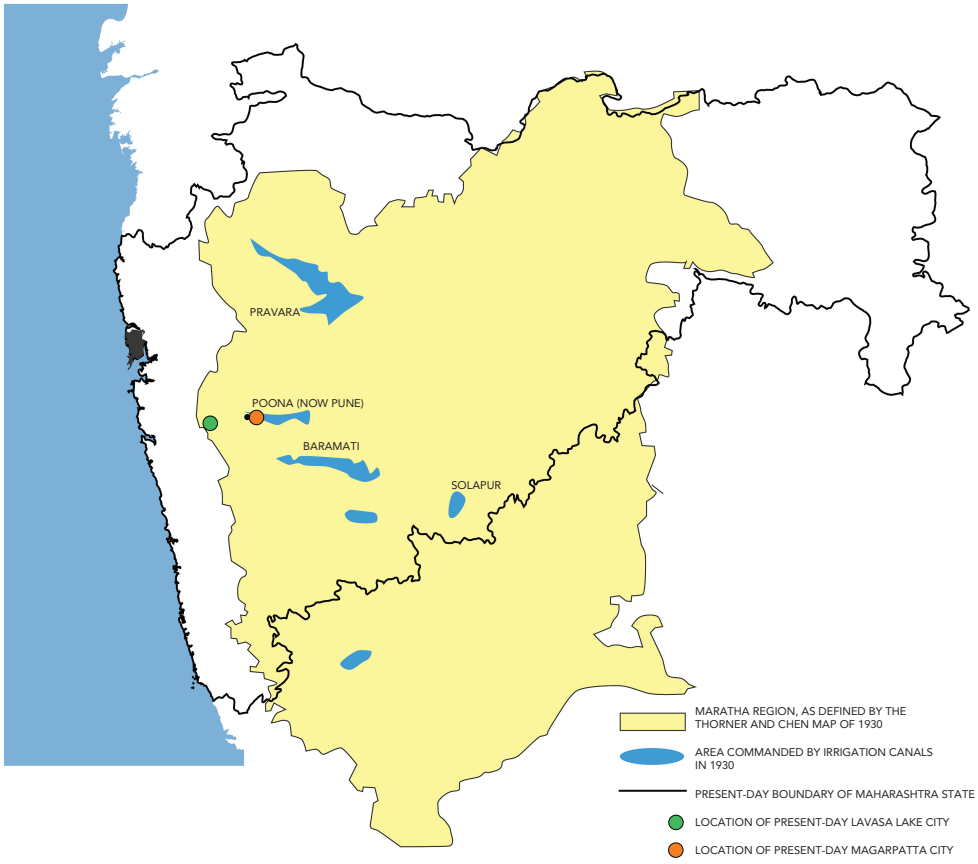


FIGURE 1 The Maratha region in the 1930s (*source*: map produced by the author, based on a map produced by Thorner, 1996)

farmers expanded their holdings' (Ludden, 1999: 200; see also Guha, 1985; Hardiman, 1992). These irrigation canals directly benefited the peasant-cultivators. Thorner notes that by 1930 'of the 260,000 acres of canal-irrigated land in Bombay, 230,000 acres or 88 percent [were] in the Deccan. Yet the canal-irrigated land can claim only less than two percent of the cultivated area of the Deccan' (Thorner, 1996: 122). Though he does not refer to it as such, the irrigation canals, cash crops and rural credit helped consolidate a form of 'peasant capitalism' (see Banaji, 2002). A new land market was created in what is now known as western Maharashtra, where peasants who had earlier relied on subsistence dry crops could now grow cash crops for the market. The irrigation canals led to the creation of a new agrarian land market: in 1917, an acre of dry millet or sorghum would fetch an income of around 12 rupees; the same canal-irrigated plot of sugarcane earned the cultivator an income of nearly 618 rupees (Attwood, 1985: 66).

If the irrigation canals selectively transformed certain arid lands into surplus-producing regions, where did these irrigation waters come from? Irrigation waters were sourced from what was then called the Mawala region and is now part of Mulshi taluka (the site of present-day Lavasa Lake City).[6] This region is located

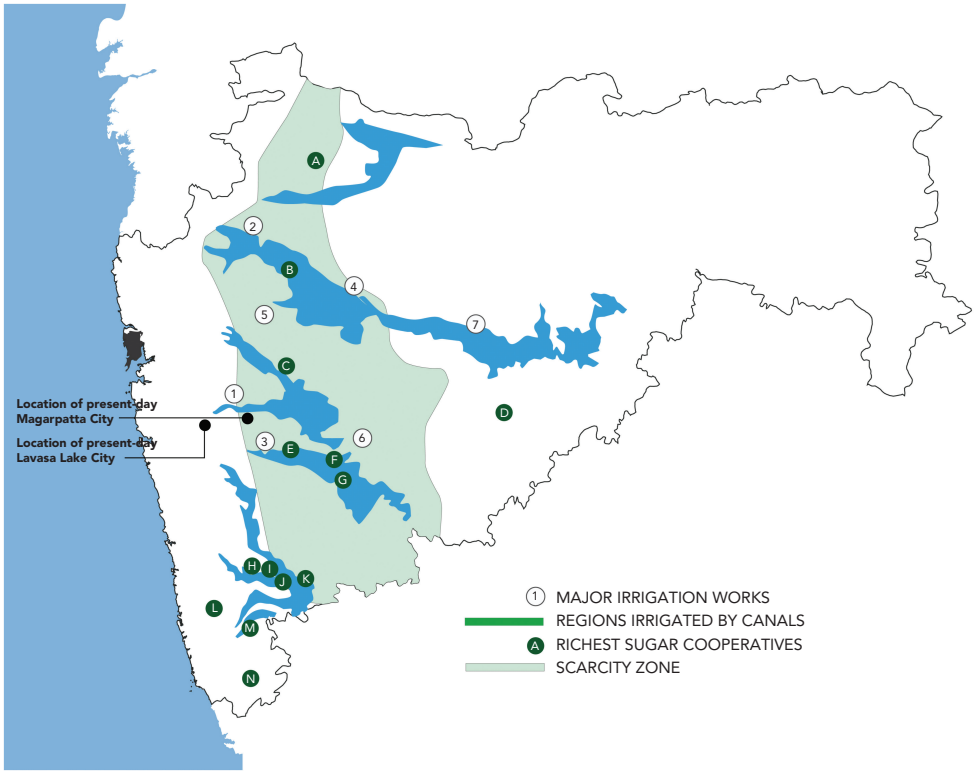
6 A taluka is a subnational administrative unit. The administrative structure is as follows: a cluster of local governments come under the jurisdiction of a taluka, a cluster of talukas make up a district, and a cluster of districts comprise the state government.

in the Sahyadri mountain range on the ecologically sensitive escarpment of the Western Ghats. The Western Ghats run along the western coast of the Indian peninsula and are the source of major rivers. It is for this reason that Mulshi taluka has one of the highest densities of big dams in India. The Mulshi dams feed into an extensive canal network that provides drinking water and electricity to cities, including Mumbai and Pune, and irrigation water to vast tracts of agricultural land in western Maharashtra. In contrast to the transformation of the Bombay Deccan lands into a form of peasant capitalism, the Mawala region was economically and ecologically ravaged by big dam construction. One of the biggest and oldest dams in the Mawala region is the Mulshi Dam, built in 1920–21 by the Tatas, who were indigenous industrial capitalists. Rajendra Vora has famously called the peasant protests against the dam construction the 'world's first anti-dam movement' (Vora, 2009). Although the water from the Mulshi Dam flowed towards Bombay to provide electricity for the industrial city, the transformation of the Mawala region is illustrative of the actively produced underdevelopment of this region.

Before the building of the Mulshi Dam, the Mawala region, with its reliable and regular rainfall and black soil, was rich in food cultivation: 'Rice, hirda, and grass were the main commodities sent out from the Peta to the market for sales. Items like ghee, honey, jamuns, and mangoes were also taken to the Pune market except in the rainy season' (*ibid*.: 22). In 1921, the population of Mulshi Peta was 25,654. Around 75% of the land was cultivated by the owners themselves (called khatedars), around 62% of whom were Kunbis and Kunbi-Marathas (only 5% identified themselves as Marathas). In 1951, around thirty years after the completion of the dam, the region had been reduced to a 'miserable state': 'the Mulshi Peta which had boasted of mango groves, karvanda (a type of fruit) trellises, and fields of ambemohar high-quality rice was gone forever' (*ibid*.: 159). As late as 1983, the region had still not recovered from the damage that had resulted from the building of the dam. Journalist Subhan Vaidya described the region in 1983 as 'An Andaman in Pune District', referring to the colonial-era prisons of the Andaman Islands, where the British rulers exiled Indians (*ibid*.: 161).

The high cost of big dam construction continued with the building in 1976 of the Varasgaon Dam, located just south of the Mulshi Dam, also in present-day Mulshi taluka. Water from the Varasgaon Dam is made to flow to western Maharashtra to irrigate the sugarcane fields. Thus, ironically, the irrigation canals from Mulshi taluka took water kilometers far to water the arid lands in western Maharashtra, but in the process, the rain-rich fertile lands of the region were flooded, submerged and rendered waste. The role of hydraulic engineering in producing agrarian land rent in western Maharashtra is clear from the map in Figure 2, which shows the territorial synchrony between the drought-prone regions of the state, the location of major irrigation canals and the country's richest sugar cooperatives.

The irrigation canals, which were started as a famine-protection measure during the colonial era, continued to flow unevenly towards western Maharashtra even after independence, owing to the caste–region nexus of electoral politics. From colonial times, local caste-based peasant clusters—what Jairus Banaji would later call the 'middling agricultural castes' (see Banaji, 2002) and M.N. Srinivas the 'dominant castes' (see Srinivas, 1987)—had started accumulating capital within their villages. In the early twentieth century, these local peasant castes were at the forefront of two anti-colonial movements: one, the anti-colonial nationalist struggle against the external British colonizers, and the other, the anti-caste struggles against the internal Brahmin colonizers (Palshikar and Deshpande, 2015). Their part in the anti-colonial nationalist movement made these peasant castes the backbone of the nationalist struggle, and their legitimacy as leaders of the freedom struggle propelled them into post-independence electoral



1 Mutha Canal Project (1879) - Irrigates 45,000 hectares of land and provides drinking water to the city of Pune
2 Godavari Canal Project (1906 - 1916) - Irrigates 57,000 hectares in Ahmednagar and Nashik districts
3 Nira Canal Project (1906) - Irrigates 66,000 hectares in Pune and Solapur districts
4 Pravara River Canals (1910) - Irrigates 34,000 hectares in Ahmednagar district
5 Kukadi Project Canals (1964) - Irrigates 156,000 hectares in Pune, Solapur and Ahmednagar districts
6 Bhima Project Canals (1969 - 1980) - Irrigates 162,000 hectares in Pune and Solapur districts
7 Jayakwadi Project Canals (1965) - Irrigates 96,000 hectares in Marathwada district

A: JAWAHAR SHETKARI	B: V. VIKHE PATIL	C: PARNER	D: RENA	E: MALEGAON
F: NIRA BHIMA	G: PANDURANG	H: VISHWASRAO NAIKI	I: T. K. WARANA	J: SHARAD
K: H. K. AHIR	L: D. Y. PATIL	M: DUDHGANGA-VEDGANGA	N: AJARA SHETKARI	

FIGURE 2 Irrigation canals and the production of surplus-producing sugarcane regions (*sources*: map produced by the author, based on data from Government of Maharashtra, 1999; Central Water Commission, Government of India, 2009; Maharashtra State Co-operative Sugar Factories Federation, nd)

politics as prominent state-level legislators.[7] The anti-Brahmin movements enabled these caste groups to scale up their electoral politics beyond their previous narrow local areas of control into state-wide constituencies. In Maharashtra, the Marathas emerged as the dominant electoral constituency (Lele, 1981; Palshikar, 2011). In fact, it was the absence of a critical mass of Marathas in the Mawala/Mulshi region (Vora, 2009) that explains the impoverishment of that region from the early twentieth century.

Anti-colonial, anti-Brahmin struggles shaped the agrarian priorities of the postcolonial state. The first democratically elected political party, the Indian National

7 The caste system in India is made up of two related concepts: varna and jati. Varnas comprise the four hierarchies sanctioned by Hinduism—Brahmins, Kshatriyas, Vaishyas and Shudras; Dalits and Adivasis are excluded from the varna system. The social life of caste is experienced through jatis, endogamous caste groups. The jatis and varnas somewhat map onto each other: the Marathas and Kunbis are jati clusters; the Kunbis are clearly Shudras, but the Marathas sometimes claim a higher Kshatriya status.

Congress (also called the Congress Party, or simply Congress), introduced the first phase of land reforms that aimed at redistributing land from the zamindars (the non-cultivating propertied class) to the peasant-cultivators (Herring, 1983; Kohli, 1987).

The organization of agricultural production in the form of Primary Agricultural Cooperative Societies (PACS) also partly functioned as an enabling institution for the peasant castes. The peasants, who were the main beneficiaries of land reforms, relied on markets both for inputs and for the sale of their crops. The PACS were a form of state support that would provide credit, inputs and marketing services to individual peasants, thus safeguarding them from falling into the vicious cycle of indebtedness and possibly pauperization (Pandey, 1994). During this time, the Congress made another pragmatic move—that of retaining land and water as state-level subjects within India's federal structure, so as not to antagonize these agrarian constituents and to give them control over their land-based sources of power. It is worth noting here that some of the early Nehruvian bureaucrats—such as D.R. Gadgil, who was instrumental in setting up the first sugar cooperative at Pravaranagar (see the Pravara canals in Figure 2)—did envision these PACS as the route to a 'cooperative commonwealth' (Rath, 2002; Brahme, 2011). The PACS, however, soon became institutions of patronage for the Congress Party and for state-level legislators of agrarian origins (Baviskar, 1980; Attwood, 1992). During the Green Revolution, the PACS became the key vehicles through which credit and water-seed-fertilizer subsidies could be captured by region- and caste-specific peasant constituents. But the PACS were also a surplus-sharing institution, with agrarian elites sharing both the subsidies and the surpluses with their numerous PACS members; such rent-sharing mechanisms were crucial for electoral success.

The PACS took the specific form of sugar cooperatives in western Maharashtra, and the sugar cooperatives became so tightly intertwined with electoral politics that many believed that 'you cannot understand our sugar coops without understanding our politics, nor can you understand our politics without understanding our sugar coops' (Baviskar, 1985: 93). However, the PACS as mediating institutions of agrarian electoral politics varied by state. A series of comparative studies have asked the question why the same commodity cooperatives are structured differently in different states and why the same state has differently structured cooperatives for different commodities (Pandey and Mishra, 1993; Patel, 1987). My aim here is only to illustrate in some detail the working of a specific PACS—the sugar cooperative—in a specific state, namely Maharashtra. In other Green Revolution regions, the landed Jats, Vanniyars, Gounders, Kammas, Kapus, Lingayats and Vokkaligas in the states of Uttar Pradesh, Tamil Nadu, Andhra Pradesh and Karnataka articulated their interests through specific agrarian institutions that were embedded in their particular rural power structures. But in many of these states, the PACS became key organizational vehicles through which peasant castes consolidated power during the Green Revolution period to emerge as formidable electoral constituencies.

Agrarian property in urban real estate

If the irrigation canals sociotechnically produced a geography of uneven agrarian capitalism (see also Gidwani, 2008; Amrith, 2018), the infrastructural choices of a post-liberalization era are producing new uneven geographies. Within western Maharashtra, the state government is promoting the economically prosperous Mumbai–Pune–Nashik region as the 'Golden Triangle' for economic growth (see Figure 3). The region is a dense concentration of new economic corridors, international ports and airports, and SEZs. There is a clear locational bias in the clustering of the new market-oriented developments: with the exception of Nagpur, they are concentrated in western Maharashtra. Chakravorty (2003) tracked the locational decisions of private capital in the post-reform era, finding that post-reform private capital does not flow equally to all places within the national boundary. Instead, private capital clusters in certain regions: 'the two most important determinants of success or failure for private investment, that is,

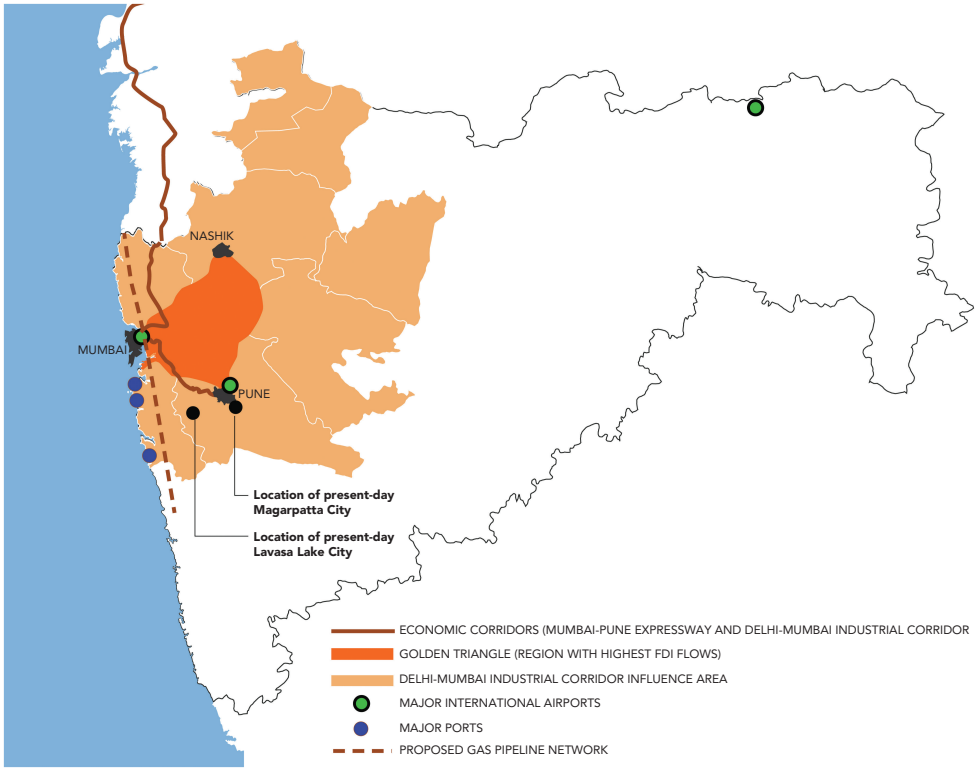


FIGURE 3 Clustering of post-liberalization infrastructural development in western Maharashtra (map produced by the author, location of 'marquee infrastructure projects' based on MIDC, 2015)

whether or not a district receives any new private-sector investment, are the existence of any investment in the pre-reform era and the existence of new private investment in the neighboring districts in the post-reform era' (*ibid*.: 377). This finding corroborates a conventional tenet of economic geography: that private-sector investments favor regions with prior market linkages. The location of SEZs in post-liberalization India shows a similar locational bias, with most of the 154 SEZs established after 2009 by the SEZ Act clustered in fewer than twenty districts that already achieved strong economic growth prior to liberalization (Mukhopadhyay and Pradhan, 2009). In contrast, any urban development in regions bypassed by the Green Revolution, such as northern Karnataka and eastern Maharashtra, required the direct role of the state as developer.[8]

Locational decisions of post-reform private capital are driven by prior differentiations in agrarian land use and land markets. Developers, firms and

8 In the state of Karnataka, the concentration of post-liberalization capital around the southern cities of Bengaluru and Mysuru, between which lies the former Green Revolution area of Mandya, has led to agitations demanding a separate statehood for northern Karnataka. In an effort to politically mediate uneven development, the state government has promised that a second capital city will be built in Belagavi, northern Karnataka. Note here the direct role of the state in attempting to relocate capital to bypassed regions, but with little success. Plans to catalyze economic development in northern Karnataka have been ongoing for the past decade, but little has actually been implemented. Similarly, in the state of Maharashtra, Nagpur has been selected as the location for the proposed Multi-modal International Cargo Hub and Airport (MIHAN). This locational decision is linked to Nitin Gadkari, the current member of parliament for this constituency. Nagpur is the headquarters of a Hindutva right-wing organization, the Rashtriya Swayamsevak Sangh (RSS). Current Bharatiya Janata Party (BJP) politicians, including Gadkari and Prime Minister Narendra Modi, have close ties with the RSS. Until 2014, when Gadkari became the first non-Congress member of the Legislative Assembly (MLA) to be elected, the Nagpur constituency had been a stronghold of the Congress. The location of the new logistics hub is probably an effort by Gadkari to bring investment into this politically important region.

investors are concentrating in regions that have prior market linkages or that are proximate to regions with prior market linkages. These regions include former Green Revolution regions. The broader geography of the locational intersections of post-reform urbanization and state-subsidized Green Revolution are the topic of another article. Here, I want to demonstrate how prior agrarian property regimes lead to varied pathways of urbanization.

I compare two of the new urban real estate developments in the Mumbai–Pune corridor region, Magarpatta City (*cf*. Sami, 2013)[9] and Lavasa Lake City (*cf*. Parikh, 2015). Magarpatta City is located on formerly arid lands that were transformed by irrigation waters into sugarcane exporting zones. Lavasa Lake City is located on the forested lands that bore the costs of big dam construction; here, fertile land was rendered waste in the process.

Magarpatta City is located in the irrigated tracts of the Hadapsar area in Haveli taluka. The 600-acre high-income enclave consists of apartments, row houses, bungalows, food courts, information technology (IT) complexes and schools. The Hadapsar area has had a thriving sugar cooperative since the 1970s owing to the representation of Hadapsar in the state legislature by the powerful Maratha-Congress sugar elite, Annasaheb Magar. Annasaheb's nephew, Satish Magar, played a key role in convincing the small and marginal Maratha-Kunbi sugarcane growers in the Hadapsar area to pool their landed assets into a new real estate company, in which only sugarcane growers who gave up their land for the development are included as shareholders. In the early 1980s, the central government had started inching towards liberalization and urbanization. In an agrarian society, the land laws ensured that agricultural land was retained for food production. The land ceiling acts, for instance, prohibited agrarian and urban landowners from legally assembling land beyond a certain threshold. These land ceiling acts in effect prevented private real estate megaprojects from being formed. With the enactment of liberalization and urbanization reforms, small agricultural landowners started selling individual pieces of land, bit by bit, to developers. If landowners had to pool their lands and convert them to urban land use, they would first have to collectively organize themselves and then apply for exemption from land laws that prevented urban land consolidation. The Urban Land Ceiling and Regulation Act (ULCRA), for example, mandates that privately owned urban land beyond a certain acreage threshold should be redistributed for housing the urban poor. The state justified ULCRA as a necessary protective measure to safeguard marginal landowners against speculative developers; besides its distributive intent, ULCRA also ensured that public agencies, which were exempt from ULCRA regulations, had monopoly control over land redevelopment and associated profits.

The leadership of Satish Magar enabled the Hadapsar sugarcane growers to overcome the problems of both collective action and land laws. Instead of farmers selling their fragmented plots of land individually to developers, Magar experimented with an innovative real estate idea of convincing small and marginal sugarcane growers in Hadapsar to voluntarily pool their agricultural land, convert the assembled land into an urban township, and set up a real estate company 100% owned by these sugarcane farmers. The sugarcane growers would hold pro rata shares in the company, in proportion to the acreage of land given up for the township. To ensure that the real estate company remains under the control of erstwhile sugarcane farmers, the real estate shares are non-alienable: they cannot be publicly traded and can only be bequeathed to future generations. This lack of an exit option exposed agrarian landowners to the

9 Neha Sami (2013) characterizes the integrated township as an ad hoc set of coalitions that arise whenever mayors and city governments lack the authority to control urban development; individuals who can successfully build coalitions in these fragmented institutional landscapes step in and become power brokers. I agree with Sami's insightful analysis (*ibid*.) on the relative powerlessness of city governments in such cases and the fragmented nature of the political power involved. But I depart from her characterization of ad hoc politics and argue instead that experiments such as Magarpatta City represent a wider trend of agrarian elites adjusting their politics and economics to the rewards and risks of a newly liberalizing economy.

volatilities of an emergent real estate market: if land laws are not changed in their favor, they will have given up their surplus-producing lands for a risky real estate venture. Here, Satish Magar relied heavily on agrarian relations of trust cultivated through belonging to a sugar cooperative. In repeated interviews with the Maratha-Kunbi sugarcane growers-turned-shareholders, they spoke of putting their trust entirely in the Magars, whose family they saw as noblesse oblige—as patrons who had a history of ensuring the economic wellbeing of the area.

If the sugar elites earlier controlled the agrarian countryside through the sugar cooperatives, they are now leveraging the same forms of political and social capital for the new real estate developments. Satish Magar is open about the support he received from the state government in the early 1990s. The ruling political party in Maharashtra was then the Nationalist Congress Party (NCP), whose founder, Sharad Pawar, also has an agrarian sugarcane background. It was during NCP rule that Satish Magar was granted exemption from ULCRA regulations. This legal privilege has now been institutionalized into a new law, the Integrated Township Policy, of which the chief architect is none other than Satish Magar himself. The Township Act mandates that any urban development larger than 100 acres can apply to become an integrated township. The benefits of being a township include exemptions from otherwise restrictive agricultural land laws. It is this enabling piece of legislation that allows Satish Magar to replicate the Magarpatta success in other sugar cooperative regions. In a liberalizing economy, land is the new sugar. Just as the sugar cooperatives enabled the Maratha elites to retain material and political control over the agrarian countryside while simultaneously using the cooperatives to share just enough of the surplus to keep their poorer constituents appeased, these agrarian caste/class hierarchies are reproduced in the new township.

Although both Magarpatta City and Lavasa Lake City are post-liberalization real estate developments, their promoters, shareholders and distributive politics are a study in contrasts, reflecting prior variations in the arrangements of agrarian landed property. In the surplus-producing agrarian regions, the sugar cooperatives were the conduits for funneling input subsidies to certain places and for channeling the marketable surpluses out of these places to reach wider markets. The convergence of inputs, credit and trading networks around these cooperative nodes helped produce agrarian surpluses that were then invested in rural industrial clusters. These agrarian regions often resembled an industrial district, made up of a local concentration of firms embedded or involved in interdependent production processes, in which the clustering lowers costs and the labor process is flexible (Schmitz and Nadvi, 1999). Some of these former Green Revolution regions have developed into globally competitive industrial districts (Harriss-White and Janakarajan, 1997; Chari, 2004). In contrast, bypassed regions such as Mulshi taluka were deprived of these dense market linkages developed largely owing to state subsidies. The building of new economic corridors and other logistics networks is not enough to attract industrial firms and other productive capital to a region. Regions such as Mulshi formed second-order peripheries that supported an accumulating core of sugar-exporting zones. Left out of surplus production, and bereft of prior market linkages, the Mulshi region is now the site of speculative real estate development.

The idea for Lavasa Lake City was conceived by Ajit Gulabchand, CEO of prominent Mumbai-based firm Hindustan Construction Company (HCC). Gulabchand markets Lavasa Lake City as a bold response to the demands of accelerated market-oriented urbanization (Kalbag, 2012). Spanning 25,000 acres, the lake city is of an ambitious scale, covering approximately one fifth the land area of the Municipal Corporation of Greater Mumbai. The building of the new Mumbai–Pune Expressway created new speculative demand for the Mulshi forest lands; connectivity to its surrounding region had been severed by the earlier dam-induced flooding of its basic

roads. With the building of the economic corridor, travel times between the forest lands and the nearby cities of Mumbai and Pune has been reduced dramatically. To raise capital for the new city, Lavasa Corporation Limited (LCL), the promoter company, and a subsidiary of HCC, is tapping into India's newly liberalized equity markets. The company's initial public offering (IPO) emphasizes the project's locational advantages, and its proximity to the Delhi–Mumbai Industrial Corridor and other new economic corridors.[10]

These locational advantages are necessary but insufficient conditions to draw industrial capital to this region. It is telling that even the SEZs, which are criticized by activists and critical scholars as real estate developments masquerading as industrial ones, are clustered only in former Green Revolution regions. The Mulshi region does not have a single SEZ. Also, land uses for Lavasa Lake City reflect the speculative nature of the development. Unlike Magarpatta City, Lavasa Lake City has not been able to attract a single IT firm. Although these IT complexes are also criticized for not being as labor-intensive as manufacturing, they still require some prior market linkages from which new firms can take off. Lavasa Lake City's land uses include brands that are legible to distant investors: the Steve Redgrave Rowing Academy, retail brands such as Café Coffee Day and Charosa Wineries, and university brands such as the École Hôtelière de Lausanne (Oxford University had intended to set up a satellite campus at Lavasa, but pulled out of the deal following protests over fraudulent land transactions). The presence of a world-class university in an enclave that lacks primary schools for its residents is indicative of Lavasa Lake City's target market: distant investors for whom real estate is but one asset in their portfolios.

The flooding of speculative capital into Lavasa Lake City has been met with resistance, both on the streets and in the courtrooms. The company has a number of pending litigations, including five public interest litigations, 62 civil proceedings, five criminal proceedings, 46 revenue proceedings, two arbitration proceedings, six letters from Gram Panchayats (rural local governments), and eight notices from statutory and regulatory authorities.[11] Mulshi residents have charged the company with fraudulent land transactions, and some of these residents are at the forefront of an oppositional movement spearheaded by the social movement known as the National Alliance for People's Movement (NAPM). Mulshi residents and the NAPM are at the forefront of a struggle against speculative development, but this latest iteration of exclusion goes back as far as early-twentieth-century dispossession as a result of big dam building. Magarpatta City is often held up as a case of 'inclusive capitalism' (Knowledge@Wharton, 2008). But to view it as a single case disconnected from a wider geography of uneven agrarian land markets means to obscure the immiseration of the dammed regions that made certain nodes, such as Haveli taluka, the sites of earlier agrarian, and now urban, land surplus.

Recombinant urbanization

In conclusion, how does recombinant urbanization offer new methodological openings into India's ongoing agrarian–urban land use changes and property transformations?

This article draws attention to the property form of agrarian–urban shareholding companies. The real estate company in Magarpatta that has as its shareholders erstwhile sugarcane growers cursorily resembles the shareholding cooperatives of China. But identifying these seemingly similar organizational forms of landed property does not mean to 'search for direct counterparts' (Stark, 1996: 1018) across these predominantly agrarian societies that are now liberalizing their economies. It is not enough in these

10 Lavasa Lake City's Draft Red Herring Prospectus (30 June 2014), Mumbai.
11 *Ibid*., 27–28

cases to merely analyze these real estate markets as a mix of agrarian and urban property regimes. Instead, historicizing these new property institutions in their specific agrarian pasts reveals how land-based power hierarchies are reproduced or disrupted in the process of urban-oriented land use change.

These agrarian-urban land transformations are undergirded by the persistence of caste networks. India's entangled agrarian–urban land markets point to a distinct variety of capitalism that cannot be understood as either plan or market, but in the words of Stark, as 'clans for markets' (*ibid.*). The new real estate companies are embedded in existing social networks that not only grant them legitimacy but also provide security amid uncertain transitions. In the making of Magarpatta City, the owners of marginal sugarcane fields faced grave risks in exchanging their only plot of land for an abstract share in a company. But their membership in a socially constructed dominant caste was crucial in transforming uncertainty into calculable risks (Marris, 2003; see also Levien, 2015). It was their trust in an agrarian elite, whom they knew had the political networks to influence the changing regulatory regime in land, that helped to secure their expectations of future returns from their land. It is a matter of debate whether to view these caste-based agrarian propertied classes as elites or subalterns (Jaffrelot, 2003; Chari, 2004; Gidwani, 2008), but what is clear is that membership of a dominant caste provides a safety net for navigating the uncertainties of institutional change. Since agrarian dominant castes are protagonists in the making of contemporary real estate markets, we have to ask how this constituency was formed in the first place. In India, one of the critical junctures in agrarian dominant-caste formation was the early post-independence phase of land reforms, which distributed land-based power from the non-cultivating propertied class of the zamindars to the then peasant castes. The timing of agrarian land reform in countries as varied as post-independence India, Maoist China (Amin, 1983) and post-apartheid South Africa (Hart, 2002) is only one of many key differences that gave rise to distinct agrarian classes. This then shapes future pathways of recombinant urbanization in regionally specific ways.

Both cases analyzed here are real estate developments. India's post-liberalization urbanization is fueled by real estate, but this pathway of rentier capitalism is produced by the decision of the Indian state to turn to the price system as an arbiter of land conflicts. The Mulshi region is a destination for purely speculative capital, and this is unlikely to change in the absence of active state-directed initiatives of balanced economic growth. In contrast, in Haveli and other former Green Revolution regions, prior agrarian market linkages have prepared these regions for other economic possibilities, including labor-intensive manufacturing. But the option of manufacturing cannot be pursued because agricultural land is controlled by agrarian landed fractions of capital who are inclined towards maximizing their land rents. In order to retain legitimacy among this electorally vital agrarian constituency, Maharashtra's land regulations were reformed to enable the sugar elites to enter the real estate market. The turn to the price system takes different forms in other regions. In the case of urbanization along the Yamuna Expressway, the acquisition of agricultural land belonging to the dominant-caste Jats provoked such a backlash that the state marked up the compensation price to multiple times the prevalent market price. The high price of land acquisition forced the state to abandon its plans of manufacturing industries and affordable housing and to prioritize luxury apartments instead. These agrarian regions—Haveli, and the Yamuna Expressway—were nodes of agrarian surplus production during the Green Revolution period. The Indian state's turn to land price as the primary mode of appeasing aggrieved agrarian landed constituents precludes other forms of property arrangements that could spur labor-intensive manufacturing or even the protection of some of these lands as commons.

In articulating these processes of recombinant urbanization, I do not want to suggest that the ongoing trajectories of urbanization are an uncontested reproduction of prior agrarian land-based forms of power. Social movements such as the NAPM,

for instance, have become involved in the land struggles in Mulshi and other regions to organize non-propertied agrarian constituents and enable them to stake a claim to these lands. Progressive bureaucrats-turned-activists have also played a key role in giving landless constituents a voice in land-acquisition processes.[12] Instead, what these case studies aim to emphasize is how the sequencing and organizational choices of agrarian development politics shape trajectories of urbanization and the horizons of political possibility at a later stage. A water-guzzling cash crop such as sugarcane is generally organized as plantations in other parts of the world (Mintz, 1986; Wolford, 2010); thus, the setting up of sugar cooperatives in western Maharashtra was unique. The specific property form of sugar cooperatives, embedded as they were in regional caste/class social relations, took shape under contingent circumstances. These included the decision to grant universal suffrage when the newly independent country was still a predominantly agrarian society and the administrative choice of designating land as a state subject, thus giving state legislators of agrarian origins control over land reforms and land use changes. It is because of these political-economic choices that agrarian dominant-caste landowners are now key protagonists in the making of urban real estate markets in liberalizing India. To grasp, and even change, contemporary trajectories of urbanization requires methodological frameworks that can escape the silos of both agrarian studies and urban studies, and that are capable of excavating the precise ways in which prior and new property institutions collide, collude and recombine during critical moments of agrarian–urban transformation. The method of recombinant urbanization is one such effort in this direction.

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References

Amin, S. (1983) *The future of Maoism*. Monthly Review Press, New York, NY.

Amrith, S. (2018) *Unruly waters: how rains, rivers, coasts, and seas have shaped Asia's history*. Basic Books, New York.

Attwood, D. (1985) Peasants versus capitalists in the Indian sugar industry: the impact of the irrigation frontier. *The Journal of Asian Studies* 45.1, 59–80.

Attwood, D. (1992) *Raising cane: the political economy of sugar in western India*. Westview Press, Boulder, CO.

Balagopal, K. (1987) An ideology for the provincial propertied class. *Economic and Political Weekly* 22.50 12 December.

Banaji, J. (2002) The metamorphoses of agrarian capitalism. *Journal of Agrarian Change* 2.1, 96–119.

Baviskar, B.S. (1980) *The politics of development: sugar politics in rural Maharashtra*. Oxford University Press, Delhi.

Baviskar, B.S. (1985) *Milk and sugar: a comparative analysis of cooperative politics*. IDS Publications, Brighton.

Bernstein, H. (1996) Agrarian questions then and now. *Journal of Peasant Studies* 24.1/2, 22–59.

Brahme, S. (2011) *The Indian economy: problems and prospects, selected writings of D.R. Gadgil*. Oxford University Press, New Delhi.

Brass, T. (1995) *New farmers' movements in India*. Frank Cass, Ilford.

Byres, T. (1996) Capitalism *from above and capitalism from below: an essay in comparative political economy*. Macmillan, Basingstoke.

Castells, M. (1977) *The urban question: a Marxist approach*. MIT Press, Cambridge, MA.

Castells, M. (1989) *The informational city*. Blackwell, Oxford.

Central Water Commission, Government of India (2009) National registry of large dams. New Delhi.

Chakravorty, S. (2003) Capital source and the location of industrial investment: a tale of divergence from post-reform India. *Journal of International Development* 15.3, 365–83.

Chari, S. (2004) *Fraternal capital: peasant-workers, self-made men, and globalization in provincial India*. Stanford University Press, Stanford, CA.

DeFilippis, J. (2004) *Unmaking Goliath: community control in the face of global capital*. Routledge, New York, NY.

Fogelsong, R. (2014) *Planning the capitalist city: the colonial era to the 1920s*. Princeton University Press, Princeton, NJ.

Frankel, F. (1971) *India's Green Revolution: economic gains and political costs*. Oxford University Press, Bombay.

Ghertner, A. (2015) Why gentrification theory fails in 'much of the world'. *City* 19.4, 552–63.

Gidwani, V. (2008) *Capital, interrupted: agrarian development and the politics of work in India*. University of Minnesota Press, Minneapolis, MN.

Government of Maharashtra (1999) Maharashtra Water and Irrigation Commission report (Chitale report). Mumbai.

Guha, S. (1985) *The agrarian economy of the Bombay Deccan, 1818–1941*. Oxford University Press, Delhi.

Hardiman, D. (1992) *Peasant resistance in India 1858–1914*. Oxford University Press, New Delhi.

Harriss-White, B. and S. Janakarajan (1997) From Green Revolution to rural industrial revolution in South India. *Economic and Political Weekly* 32.25, 1469–77.

12 See, for instance, the pro-poor and pro-landless clauses in the amended 2013 eminent domain law, which are a result of the Congress Party creating a national advisory committee with public-spirited bureaucrats-turned-activists such as Harsh Mander and Aruna Roy in the legal drafting of the amended law (The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act No. 30 of 2013, *The Gazette of India*, Ministry of Law and Justice, Legislative Department, 27 September 2013).

Hart, G. (2002) *Disabling globalization: places of power in post-apartheid South Africa*. University of California Press, Berkeley and Los Angeles, CA.
Harvey, D. (1982) *The limits to capital*. Basil Blackwell, Oxford.
Herring, R. (1983) *Land to the tiller: the political economy of agrarian reform in South Asia*. Yale University Press, New Haven, CT.
Jaffrelot, C. (2003) *India's silent revolution: the rise of the lower castes in North India*. Orient Blackswan, New Delhi.
Kalbag, C. (2012) We create entrepreneurship against odds: HCC chief Ajit Gulabchand. *Business Today* 19 August.
Knowledge@Wharton (2008) The poor as stakeholders: can 'inclusive capitalism' thrive in India? 27 November [WWW document]. URL http://knowledge.wharton.upenn.edu/india/article.cfm?articleid=4336 (accessed 12 February 2012).
Kohli, A. (1987) *The state and poverty in India: the politics of reform*. Cambridge University Press, New York, NY.
Lele, J. (1981) *Elite pluralism and class rule: political development in Maharashtra, India*. University of Toronto Press, Toronto.
Lerche, J., A. Shah and B. Harriss-White (2013) Introduction. Agrarian questions and left politics in India. *Journal of Agrarian Change* 13.3, 337–50.
Levien, M. (2015) Social capital as obstacle to development: brokering land, norms, and trust in rural India. *World Development* 74(C), 77–92.
Ludden, D. (1999) *An agrarian history of South Asia*. Cambridge University Press, Cambridge.
Mahaprashasta, A.A. (2010) Striking unity. *Frontline* August/September.
Maharashtra State Co-operative Sugar Factories Federation (nd) [WWW document]. URL www.mahasugarfed.org/aboutus.htm (accessed 16 February 2011).
Maharashtra Water Resources Regulatory Authority, Government of Maharashtra (nd) Major and medium irrigation projects in Maharashtra. Mumbai.
Marris, P. (2003) *The politics of uncertainty: attachment in private and public life*. Routledge, New York, NY.
McGee, T. (1967) *The Southeast Asian city: a social geography of the primate cities of Southeast Asia*. G. Bell and Sons, London.
MIDC (Maharashtra Industrial Development Corporation) (2015) Magnetic Maharashtra. Brochures, MIDC, Mumbai.
Mintz, S. (1986) *Sweetness and power: the place of sugar in modern history*. Penguin Random House, New York, NY.
Mukhopadhyay, P. and K.C. Pradhan (2009) Location of SEZs and policy benefits: what does the data say? Occasional Paper No. 18, Center for Policy Research, New Delhi.
Oi, J. (1992) Fiscal reform and the economic foundations of local state corporatism in China. *World Politics* 45.1, 99–126.
Palshikar, S. (2011) Limits of dominant caste politics. *Seminar* 620 (April), 47–50.
Palshikar, S. and R. Deshpande (2015) Political economy of a dominant caste. In R. Nagaraj and S. Motiram (eds.), *Political economy of contemporary India*, Cambridge University Press, New Delhi.
Pandey, V. (1994) Agrarian transformation and co-operatives: continuity and change. *Economic and Political Weekly* 29.15, 863–69.
Pandey, V. and D. Mishra (1993) Design and operation of political processes in rural cooperatives. *Economic and Political Weekly* 28.26, 1353–56.
Pani, N. (2013) Globalization, group autonomy, and political space: negotiating globalized interests in an Indian city. Working paper, Bengaluru.
Parikh, A. (2015) The private city: planning, property, and protest in the making of Lavasa New Town, India. PhD dissertation, Department of International Development, London School of Economics and Political Science, London.
Patel, S. (1987) Cooperative dairying and rural development: a case study of Amul. In D. Attwood and B.S. Baviskar (eds.), *Cooperatives and rural development*, Oxford University Press, New Delhi.
Patnaik, U. (ed.) (1990) *Agrarian relations and accumulation: the 'mode of production' debate in India*. Oxford University Press, Bombay.
Rath, N. (2002) D.R. Gadgil on cooperative commonwealth. *Economic and Political Weekly* 37.14, 1323–29.
Roy, A. (2016) What is urban about critical urban theory? *Urban Geography* 37.6, 810–23.
Rudolph, L. and S. Rudolph (1987) *In pursuit of Lakshmi: the political economy of the Indian state*. University of Chicago Press, Chicago, IL.
Sami, N. (2013) From farming to development: urban coalitions in Pune, India. *International Journal of Urban and Regional Research* 37.1, 151–64.
Schmitz, H. and K. Nadvi (1999) Clustering and industrialization: introduction. *World Development* 27.9, 1503–14.
Scott, A.J. (1980) *The urban land nexus and the state*. Pion, London.
Sengupta, S. (2008) Farms and factories fight over land in India. *The New York Times* 17 September.
Sennett, R. (2012) *Together: the rituals, pleasures and politics of cooperation*. Yale University Press, New Haven, CT.
Slater, T. (2015) Planetary rent gaps. *Antipode* 49.S1, 114–37.
Smith, N. (1982) Gentrification and uneven development. *Economic Geography* 58.2, 139–55.
Smith, N. (1996) *The new urban frontier: gentrification and the revanchist city*. Routledge, London.
Srinivas, M.N. (1987) *The dominant caste and other essays*. Oxford University Press, New Delhi.
Stark, D. (1996) Recombinant property in East European capitalism. *Journal of American Sociology* 101.4, 993–1027.
Thorner, D. (ed.) (1996) *Ecological and agrarian regions of South Asia circa 1930*. Oxford University Press, Karachi.
Varshney, A. (1995) *Democracy, development and the countryside*. Cambridge University Press, Cambridge.
Vishnu, U. (2011) Two sides of an expressway. *The Indian Express* 15 May.
Vora, R. (2009) *The world's first anti-dam movement: the Mulshi Satyagraha, 1920–1924*. Permanent Black, Ranikhet.
Wolford, W. (2010) *This land is ours now: social mobilization and the meanings of land in Brazil*. Duke University Press, Durham, NC, and London.
Whyte, W.F. and K. King Whyte (1991) *Making Mondragón: the growth and dynamics of the worker cooperative complex*. ILR Press, Ithaca, NY.