

# REPRODUCTIVE ROOFTOPS

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**IT WAS A BRIGHT** winter morning in my grandparent's bungalow in southwestern Ontario, Canada; the cold stuck to the glass of the windows. I was looking at photographs of the gated two-storey mansion that had been erected on our ancestral property in rural Punjab, while my *dadi ji* [paternal grandmother] distractedly walked in and out of the living room with *pakorās*, *chai*, *besan* [gram sweets], and her one-a-day energy balls. In the late 2000s, my *baba* [grandfather] and his brothers had contributed large sums of money to build an extended family home in Paddi Khalsa, the small village where he was born and raised in the Jalandhar district of central Punjab. The handful of documentary photographs that my *dadi ji* kept on file captured the new build in its early days. Typically stored away in a small white envelope in her filing cabinet alongside her registration documents, tax returns, and mortgage information, these photographs were far from the family portraits that she had placed on her bookshelf or tucked away into albums. My *dadi ji* had cared for these photographs as if they were addenda to the property deed itself, official documents proving our hereditary right to that plot of land and house sitting near the Grand Trunk (GT) Road in central Punjab.

Nestled between the Beas and Sutlej rivers, the Jalandhar area is named for its geographical location: *jal*, meaning “water,” and *andhar*, meaning “inside.” Due to its proximity to the melting Himalayas, it is one of the most fertile regions of Punjab. Archaeological evidence tells us that the region was first settled by the Harappan peoples during the third millennium BCE after aridification in the southwest led them to move upward along the Indus River basin in search of heavier monsoon rains.<sup>1</sup> Agrarian life has continued in the sparsely wooded, continuous flat plains of Jalandhar into the present day, even as successive waves of imperial rulers took hold of the region and introduced their own vernacular systems of social hierarchy, property rights, and revenue collection.<sup>2</sup> The settlement of Paddi Khalsa likely first appeared in the mid-eighteenth century, when emerging Sikh chiefs in the region wrested control of the Jalandhar region away from the Mughal administration.<sup>3</sup> After conquering central Punjab, the Sikh leadership redistributed the double-cropped fields of wheat and maize around Jalandhar among their subordinate adherents (largely from the Jat Sikh community), until each soldier had taken his share of land. That is likely how my warring ancestors laid claim to a tract of agriculturally rich land in central Punjab and pursued the idyllic promises of sedentary farming in Paddi Khalsa, a new settlement named for its commitment to the Khalsa form of Sikhism.

When the British took control of the region following the Second Anglo–Sikh War (1848–49), colonial ethnographers devised racial theories that imagined the Jats as a martial race, biologically ideal for agrarian and military labour yet intellectually incapable of its strategic organization.<sup>4</sup> In exchange for their cooperation in the colonial agricultural and military schemes to settle western Punjab and consolidate imperial rule in India, the British Raj upheld and legally sanctified the land claims of the Jat Sikh

peasantry of central Punjab. As drought and famine decimated India in the late nineteenth century, Jat agriculturalists started mortgaging and selling off their land.<sup>5</sup> Concerned with the political instability that would result from waning agrarian power in the region, the British introduced the Punjab Alienation of Land Act, 1900 to further lock society into place. The new system of classification divided the Punjabi people along an agricultural axis of caste, preventing “traditional agricultural tribes” (Jats, Rajputs, etc.) from alienating their land or mortgaging it for extended periods to “traditional non-agricultural tribes” (Chamars, Chuhras/Bhangis, Dalits, etc.). This laid the foundation for an emergent agricultural, land-owning tribe of Jat Sikhs to culturally tie themselves to the soil and lands of central Punjab while solidifying economic and political power across the region during the twentieth century, including in the village of Paddi Khalsa.

Despite the colonial infrastructure supporting Jat Sikh hegemony in Punjab, the economic viability of agriculture in the Jalandhar district was further called into question as the already small family holdings were parcelled along multiplying lines of patrilineal descent. Inheriting shrinking plots of land, the progeny of Jat Sikh landowning families left agricultural life to seek fortunes elsewhere during the early twentieth century. As these migrants settled into military, agricultural, or industrial life abroad, familial remittances started flowing back to the Jalandhar district to supplement the variable income of agrarian life, leading to an uneven accumulation of monies in the hands of the Jat Sikhs living there. The influx of capital was used to pay off mortgages, secure lower interest rates, buy adjacent land, and build *pucca* brick houses, upholding the fantasy of an abundant yeoman way of life in central Punjab.<sup>6</sup> The monies that my *baba* remitted after leaving India in the early 1960s were used like this to help with mortgage payments, as well as to pay for food, clothing, household items, wedding ceremonies, and other necessities. Those remittances continued until his final visit to India in 1974, when he sponsored the last of his siblings and parents to come and work in the textile industries of southwestern Ontario. It wasn't until the 2000s that my grandfather sent monies back again, when his brothers proposed building the new two-storey house on the family property.



Soomal house, village of Paddi Khalsa.

Photos courtesy of Soomal family



Falcon (*baaz*) on top of water tank, village of Paddi Khalsa, 2014.

As I took the two photographs out of the envelope and placed them on the marbled coffee table, my *dadi ji* returned to her filing cabinet. It was hard to get a clear picture of what the front elevation of the house looked like; each photograph narrowed into disparate architectural details of the new build. I noticed that the house was a bit of an outlier, lacking the ostentatious character of the two-storey mansions that had started appearing across the Punjabi countryside in the 1970s. Its simplified white Corinthian columns, sand-coloured marble tiled floors, wood-encased windows and doors, and black and gold art deco colour scheme evoke a more subdued vision of wealth than its neighbours. In the early 1990s, architectural historian Gautam Bhatia described the emergence of this modern vernacular architectural style as Punjabi Baroque.<sup>7</sup> The new builds were typically an extravagant and fanciful mix of the Bavarian castles, French châteaux, Italian villas, and American antebellum plantation houses that Punjabi people were encountering in popular films, television shows, and magazines as the epitome of wealth and power. The ongoing flow of remittances through the late twentieth century—paired with the financial bubble of the Green Revolution (the short-lived benefits of new agricultural technologies in India), the endless supply of cheap labour

made available by the durability of caste inequality, and the liberalization of the Indian economy in the 1990s—all propelled the nouveau riche Jat Sikhs to build these vernacular McMansions on their small plots of land, consecrating themselves as the kings of rural Punjab by the turn of the twenty-first century.

Despite brazenly imitating the gated estates of the landed gentry who once ruled Western Europe and its colonies, these mimetic structures often lack the architectural foundations of the originals. Like many other modernist buildings erected in post-independence India, our two-storey bungalow is made not of traditional *pucca* brick, classical stone, or timber, but primarily out of concrete and steel.<sup>8</sup> After reinforced concrete was developed at the turn of the twentieth century, it was adopted in the late 1920s as the key building block for modern architecture in Western Europe.<sup>9</sup> After the partition of Punjab in 1947, Le Corbusier fashioned the buildings in the planned capital of Chandigarh with reinforced concrete, materializing a postcolonial vision of modernity that has underlined the rapid urban development of agrarian Punjab over the past fifty years.<sup>10</sup> The demand for reinforced concrete has led to the further development of carbon-intensive industrial steelworks, along with the unabated and unsustainable dredging of sand from the riverbeds of Punjab. While the provincial government has started regulating sand-mining practices and heavy metal pollution from the steel industry, the new standards are rarely and unevenly enforced.<sup>11</sup> And even though some vernacular architects in India are recommending local and less-processed building alternatives, such as timber, clay, and other soils, reinforced concrete remains the building material of choice across contemporary eastern Punjab.<sup>12</sup>

Towering walls and steel gates often surround the small-holding farms of central Punjab. The securitization of domestic life at the familial level is a long-standing phenomenon in the subcontinent; the persistence of this practice reveals the material insecurities underlying life in rural Punjab, where memories of partition and civil war—paired with ongoing corruption and crime—have led some residents to further securitize private property by not only building gated walls but hiring personal security who carry military-grade weapons. This sense of uneasiness about the permanence of settlement and life undergirds the McMansion builds of rural Punjab.

Towering over the traditional single-storey courtyard dwellings made of brick and mud, these luxury estate homes now dominate the landscape of rural Punjab. Since 2014, Rajesh Vora has been tracking across the hinterlands of Punjab to document one of the more idiosyncratic architectural features of the vernacular McMansions: the larger-than-life sculptures affixed to their rooftops. Ranging from militaristic monuments of army tanks, warrior falcons, and musclemen to domestic and recreational artifacts such as soccer balls, pressure cookers, and compact cars, the rooftop sculptures speak to the personal stories, desires, and anxieties of the families that have commissioned them.

When the sculptures first emerged in the late 1970s, they were manufactured to surround and hide water tanks that engineers placed on rural rooftops to improve household water supply through increased hydrostatic pressure. Starting in the early 1970s, the central government began providing grants for states to implement rural water supply and sanitation programs.<sup>13</sup> As water and sewage piping was laid down across the villages of Jalandhar district, residents started installing water storage tanks on the rooftops of their newly built homes and commissioning sculptures to surround them. Now often installed independently from the water tanks, these idiosyncratic sculptures have emerged as a favoured regional genre of retrofitted architectural decoration, permanently altering the skylines of rural Punjab.

Driving along the GT Road, Vora was astonished as he saw the numerous sculptures covering the roofs of the nearby village of Paddi Khalsa. For Vora, the village quickly turned into a “gold mine” that would supply a considerable number of photographs for his documentary project. After capturing the roofscape of the village on camera, Vora went door to door, asking residents for the stories behind the sculptures standing atop their houses. He learned that rooftops are not only protective architectural elements designed to provide shelter from inclement weather but cultural spaces of everyday domestic life in rural Punjab. Punjabi cinema is replete with rooftop scenes depicting elderly women fastening clothing to washing lines, extended families sitting on casually arranged *manjaas* [traditional Indian woven beds], and love-struck couples gazing up at the moon.

When I got a chance to look through Vora’s photographs of my ancestral hometown, I was struck by the lotus flower statue in the centre of the village. The lotus is the ultimate symbol of creation and divine fertility in the Indian subcontinent. In Vedic thought, the lotus flower is the generative organ of the maternal procreative water that not only gives birth to



Lotus on top of water tank, village of Paddi Khalsa, 2014.



Horse on top of water tank, village of Paddi Khalsa, 2014.



Lions on top of water tank, village of Paddi Khalsa, 2015.



Farmer and wife, village of Bara Pind, 2015.

the gods but produces the phenomenal world entirely. During his travels, Vora found and documented several other lotus-shaped water tanks atop the mansions of rural Punjab. In a way, these blooming lotuses symbolically transfigure the rooftops of Punjab into maternal reproductive organs for the familial households that they enwomb.

This vision of the rooftop as a site for reproductive speculation and manifestation is rooted in local calculative practices. Some families use the rooftop to predict whether newly married brides will bear boys or girls. Young children are asked if there is a *kaavan* [large masculine crow] or a *chidi* [small feminine sparrow] sitting on the rooftop. If they see a crow, then the house will be blessed with a son, but if the child looks upon a sparrow, then the family will be cursed with a daughter. Under this allegorical tradition, wildlife creatures are transformed into technologies of reproductive speculation as they visit the rooftops of Punjab, indicating the sex of the baby on the way and the corollary economic privileges or struggles awaiting its family. The eugenic world of sex prediction—and in some cases sex selection—in Punjab is not only the provenance of the biologically inscribed body but extends outward to the architectural domain.

Once speculative sites for handling the uncertain future, the reproductive rooftops of rural Punjab now openly enunciate the dreams of technological modernity, Khalsa rule, and idyllic agrarian life incubating within its wombs. On the rooftops of Paddi Khalsa, there is a warrior falcon about to take flight, a muscular bodybuilder performing an overhead press, a white horse saddled for war, a pair of twin lions standing guard shoulder to shoulder, and the revolutionary Bhagat Singh himself wearing the colours of the Sikh Khalsa as he holds up an Indian flag. These are the ideal progeny of rural Punjabi society. These moulds are the product of overlapping histories and idealistic political projects rooted in masculine, militaristic agrarian power, flagrantly displayed in this rooftop scene that depicts a rather colonial vision of the martial Jat Sikh man with his menagerie of warrior animals. It is these Lions of Punjab who, sometimes with rifles in hand, continue to exercise control over the means of (re)production in rural Punjabi society, from the wombs of its daughters to the hands of its landless labourers.

Placed alongside the antagonist Lions of Punjab, many of the other sculptural works appear more benign. It feels much harder to indict the statues of Indian-branded tractors, commercial airliners, sewing machines, pressure cookers, and small motor vehicles that



dot the houses of rural Punjab in equal proportion. Production of these consumer items of technological modernity ramped up in India during the post-war period, improving domestic life by reducing the time required for cooking and transportation. Unfolding alongside the mechanization of agriculture, these technological changes laid the foundations for an expanded economy of leisure in the agrarian countryside. How could one play recreational sports if they were busy working the fields? The statues of soccer players, bodybuilders, and tug-of-war games reveal the places where younger generations of Jat Sikh men in rural Punjab are spending their newly available leisure time. While the playful worlds of Punjabi masculinity flourish on the rooftops of rural Punjab, the feminine is largely absent and only appears in the constricting form of the dutiful wife bound into traditional agrarian life.

A handful of the everyday monuments are one of a kind. There is a golden kangaroo wearing red boxing gloves; a miniature Statue of Liberty; a fluffy white bunny. These anomalies in the manufactured world of rooftop sculptures provide unlikely visions for the future of rural Punjabi life. They remind us of the complex, uncontainable, and open-ended possibilities incubating within and beyond its securitized Jat Sikh households.

There is no sculpture atop our house in Paddi Khalsa. The reasons are manifold: partly the logistical difficulties in building consensus among all the family members with a stake in the house, and partly the lack of interest that my late grandfather had in retrofitting the newly built house. When I asked my *dadi ji* whether she would like to commission a rooftop statue that holds an alternative vision for Punjabi life, she started sternly lecturing me on my spending habits. “You and your father are always spending my money,” she said temperamentally. “We are not going to have anything left when you are done.” For my *dadi ji*, there are better ways to spend money than on architectural decoration.

The monies that my *dadi ji* does send back to Paddi Khalsa take the form of annual donations to upkeep a small shrine known colloquially in our family as the *juggah*, or “the place.” In the early 1970s, my grandparents sent remittances to build a big concrete canopy to encase the shrine, outfitting it with a large dome roof and a finial made of solid gold. They infused the sacred shrine to Guru Nanak with concrete modernity to expand its lifespan, hoping that it would continue to serve as a quiet place of reflection for future generations.

Weightlifter on top of water tank, village of Paddi Khalsa, 2015.

Freedom fighter Bhagat Singh on top of water tank, village of Paddi Khalsa, 2019.

A young man on top of water tank aiming his rifle, village of Kandola Kalan, 2015.

Surrounded by securitized private bungalows that are topped by warrior animals, the *juggah* holds onto an open-doors architectural vision for the Punjab that is premised on inviting *gharibi lokh* [the poor, the estranged, the homeless] inside rather than turning them away. Unlike the architectural photographs of the two-storey house that my *dadi ji* has neatly filed away as addenda to the property deed, our photograph of the *juggah*, taken shortly after it was architecturally retrofitted in the 1970s, is prominently displayed on my *dadi ji*'s bedroom dresser. It is an architectural photograph of a religious kind; one that I grew up bowing my head toward. Imbued with the sacredness and open-ended visions of its architectural object, the *juggah* photograph might function as a sort of alternative philosophical guide to architectural practice, urging us to build an open world without religious borders, vernacular McMansions, or securitized gates.



This photo, displayed in the Soomal house in Cambridge, Ontario, Canada, depicts the shrine in Paddi Khalsa.

Photo courtesy of Soomal family

## NOTES

- 1 For further details on the migration of the Harappan peoples, see Liviu Giosan, Peter D. Clift, Mark G. Macklin, Dorian Q. Fuller, Stefan Constantinescu, Julie A. Durcan, Thomas Stevens, et al., "Fluvial Landscapes of the Harappan Civilization," *Proceedings of the National Academy of Sciences* 109, no. 26 (2012): E1688–E1694; and Liviu Giosan, William D. Orsi, Marco Coolen, Cornelia Wuchter, Ann G. Dunlea, Kaustubh Thirumalai, Samuel E. Munoz, et al., "Neoglacial Climate Anomalies and the Harappan Metamorphosis," *Climate of the Past* 14, no. 11 (2018): 1669–86.
- 2 For more on the history of settlement following the Harappan era and into the Mughal period, see David Ludden, *An Agrarian History of South Asia* (Cambridge: Cambridge University Press, 2011). For later periods, see David Gilmartin, *Blood and Water: The Indus River Basin in Modern History* (Oakland: University of California Press, 2015); and Neeladri Bhattacharya, *The Great Agrarian Conquest: The Colonial Reshaping of a Rural World* (Albany: State University of New York Press, 2019).
- 3 For a history of this world-in-transition, read Chetan Singh, *Region and Empire: Punjab in the Seventeenth Century* (Delhi: Oxford University Press, 1991); and Indu Banga, *Agrarian System of the Sikh: Late Eighteenth and Early Nineteenth Century* (New Delhi: Manohar, 1978).
- 4 For more on the martial race theory in Punjab, see Heather Streets, *Martial Races: The Military, Race and Masculinity in British Imperial Culture, 1857–1914* (Manchester, UK: Manchester University Press, 2004).
- 5 Pervaiz Nazir, "Origins of Debt, Mortgage and Alienation of Land in Early Modern Punjab," *Journal of Peasant Studies* 27, no. 3 (2000): 55–91.
- 6 For details on the uneven accumulation of capital in the region during the early twentieth century, see Mridula Mukherjee, *Colonializing Agriculture: The Myth of Punjab Exceptionalism* (New Delhi: SAGE, 2005).
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- 8 For more on the emergence of the bungalow in twentieth-century Punjab, see Madhavi Desai, Miki Desai, and Jon Lang, *The Bungalow in Twentieth-Century India: The Cultural Expression of Changing Ways of Life and Aspirations in the Domestic Architecture of Colonial and Post-colonial Society* (Farnham, UK: Ashgate, 2016).
- 9 Adrian Forty, *Concrete and Culture: A Material History* (London: Reaktion Books, 2013).
- 10 Vikramaditya Prakash, *Chandigarh's Le Corbusier: The Struggle for Modernity in Postcolonial India* (Seattle: University of Washington Press, 2002).
- 11 Shreekanth Gupta, Shalini Saksena, and Omer F. Baris, "Environmental Enforcement and Compliance in Developing Countries: Evidence from India," *World Development* 117 (2019): 313–27.
- 12 Ciara Nugent, "Western Architecture Is Making India's Heatwaves Worse," *Time*, May 16, 2022.
- 13 Shamsher Samra, Julia Crowley, and Mary C. Smith Fawzi, "The Right to Water in Rural Punjab: Assessing Equitable Access to Water through the Punjab Rural Water Supply and Sanitation Project," *Health and Human Rights* 13, no. 2 (2011): 36–49.