

Digital State, Analog Parts: A Leaky Database in Lahore

Introduction

Lahore is an ancient city. Lahore is a megacity. Though I can think of nothing more cliché to say about an Asian city than describing it as a “land of contrasts,” I do find the tension between Lahore’s history and present to be a productive one to think with when it comes to the city’s land records. In this paper, I consider a state-led, World Bank-inspired effort to digitize Lahore’s land revenue system. During ethnographic fieldwork conducted in what is generally called “old city” Lahore, I had the chance to speak with local *patwaris*, real estate brokers, and residents. What I learned was that despite tens of millions of dollars, years of effort, and an assortment of global experts, land in the old city has stubbornly refused its invitation to the 21st century, instead clinging to Lahore’s tumultuous, convoluted, and still very present past. Why has the state’s project failed? How does the ancient city continue to haunt the megacity? What might all of this have to do with the peculiar qualities of land itself?

SLIDE Land Records, Digitization, and the World Bank

Today, the area once known as Lahore par excellence and the center of the Mughal Empire has come to be called the old city. In contrast to the housing schemes ballooning the city’s ever-expanding perimeter, the old city is characterized by substandard construction materials, narrow and crumbling roads, and decaying infrastructure. One particularly important way the distinction between the old city and the rest of Lahore has borne out is the management of land records. While newer settlements produce clean titles overseen by the Lahore Development Authority or individual developers, the old city remains tethered to the land revenue system established by the Mughals, or the *patwar* circle. *Patwaris* are traditional land

revenue officials who produce and maintain records pertaining to land ownership in a given area.

In order for land to be bought and sold, *patwaris* have to issue sellers a *fard*, or an official land record copy reflecting the rights of ownership in land. Much of a *patwari's* labor consists of establishing property rights for a given plot, which includes poring over centuries-old documents, tracing kinship lineages, and consulting with family, friends, and neighbors. In the old city, *patwaris* are equally known for their local expertise and their susceptibility to error, corruption, and bribes.

It was the double-edged reputation of *patwaris* that led the World Bank to launch the Land Records Management and Information Systems project, or LRMIS, in 2007. LRMIS was a 10-year, \$115 million effort to digitize rural land records across Pakistan's Punjab province. While land records in rural Punjab primarily pertain to agricultural plots, like old city Lahore they are controlled by *patwaris*. LRMIS discourse recalled economist Hernando de Soto's description of land in the Global South as dead capital whose awakening depended upon the establishment of modern property rights. At the heart of LRMIS was the belief that empowerment in rural Punjab hinged upon making land liquid, or an asset that could be quickly bought and sold. For the World Bank, whatever historical, social, or spiritual relationships to land that existed were worse than unimportant—they were hinderances. Land was an asset to be leveraged for future profit. Rural Punjabis were stockbrokers who simply hadn't yet been given access to the market.

The LRMIS project focused first and foremost on the elimination of *patwaris*. For the World Bank, *patwaris* played a traditional, but ultimately obstructive human role. World Bank reports are quite hostile to *patwaris*, describing them as “predatory middlemen” and, most damningly, accusing them of “reducing the liquidity of family assets composed mostly or wholly

of land.” In the eyes of the World Bank, liquidity would naturally follow from the replacement of the *patwari* with a digital system, as the value of long-held but inaccessible local assets would finally be unlocked.

Under the decade-long LRMIS project, 10 million pages of records were scanned and 144 computerized service hubs called Arazi Record Centers were opened throughout Punjab. The World Bank hails LRMIS as a resounding success. Its website champions the project as an example to developing countries in Africa, Latin America, and South Asia and Southeast Asia, and in 2017 the organization held an international conference in Bangkok, Thailand where government officials and development experts gathered to learn from the LRMIS model.

And yet, the World Bank admits that it was unable to completely eliminate the role of *patwaris*. As one article explains:

The software and the IT system, however, were unable to resolve the land records conundrum on their own unless a sustained and a clear social strategy to include and promote the participation of the ancestral Patwari system within the new and sophisticated computerized system was set in place. The incentives to foster the involvement and participation of the Patwaris to clean and update the records was and remains crucial. They continue to play a key role within the overall governance of the land records system, but in a regularized form with checks and balances.

In this stunning admission, World Bank officials reveal that even with the establish of a new digital database, patwaris continue to play a fundamental role in the land revenue process. In other words, the institution’s sweeping efforts to modernize Punjab’s land records system remained dependent upon the very source of local knowledge that they were intended to replace.

SLIDE New Systems, Old Habits

Though the World Bank project concluded at the end of 2016, the Government of Punjab formed the Punjab Land Records Authority, or PLRA, the following year in order to extend

digitization to old city Lahore. However, like LRMIS, the process of implementing PLRA was not as straight-forward as it seemed. Through conversations with *patwaris* in the old city, I learned more about the so-called “land records conundrum” that plagued digitization efforts in Punjab.

Similar to LRMIS, under PLRA land documents in the old city had been scanned and made available at newly built Arazi Record Centers. However, the system was encumbered by the countless number of discrepancies that exist in *patwari* records. To be sure, *patwaris* are meticulous record keepers. *Patwari* offices are nothing if not well-organized, their walls lined with shelves displaying neatly arranged record books that often date to the 18th century. Moreover, contrary to the World Bank’s description of *patwaris* as rogue bureaucrats peddling a private collection of land records, the *patwar* system functions through a rigorous network of checks and balances. A *patwar* circle is only the inner-most sphere of a multi-tiered bureaucratic structure. *Patwaris* are supervised by *qanoongos*, which report to *tehsildars*, who themselves bridge cities with district and provincial levels of governance. In the instance of property transfer, *patwari* records are checked against the district land registry and the transaction must be approved by the *qanoongo*. According to *patwaris*, the multiple layers of bureaucratic oversight reduce the liquidity of land but also make individual manipulation of records difficult if not impossible.

Nevertheless, history has not been kind to land records in the old city. First, though the *patwari* profession is an age-old one, landownership has changed dramatically from the Mughal through the colonial and postcolonial eras. Under British rule, rights in land transformed from a share in the agricultural produce of state-owned land to individual ownership of landed plots. Proprietorship brought land into the realm of inheritance law, which itself has changed according

to customary, colonial, and religious interpretations. Thus, establishing the rightful ownership of land involves not just studying kinship lineages and documents but also contextualizing them within Lahore's intricate legal landscape. Second, the old city was particularly impacted by Pakistan's partition from India, which witnessed the displacement of 13 million people across the subcontinent. As a major city located just beyond the newly created border, Lahore alone received approximately one million refugees, nearly doubling the city's population. Many refugees were resettled in abandoned homes in the old city on the basis of property previously owned in India. In order to receive a land title, however, refugees had to authenticate their stated assets, which a significant number failed to do. Even so, these properties continued to be inherited, subdivided, and sold over multiple generations, processes that remained undocumented in *patwari* records. When residents seek to legally transfer such properties, it can be an arduous task for *patwaris*, requiring days or even weeks of research.

In this context, the idea that *patwaris* could be replaced by a computer sounds all but absurd. Indeed, *patwaris* in the old city understood perfectly well why they still had their jobs. In order to transition to a digital database, PLRA had to establish a blank slate for land records in the old city, or what the organization referred to as "zero zero." Achieving zero zero meant scanning only the most recent records and not the archives of earlier ownership and transfer, much less the other sources *patwaris* typically rely on such as kinship charts, field maps, and logs of previous errors. When Arazi Record Centers emerged in and around the area, it quickly became apparent that the database was critically flawed. Residents seeking a digital copy of their *fard* were not recognized by the system and told to go to the *patwari* to verify their ownership rights. For their part, *patwaris* continued to do the work that they have always done, sifting through records and cross-checking information with other residents. I asked one *patwari* why

PLRA could not simply scan the remaining documents and fill the gaps in the records themselves. He replied:

Brother! This system won't work until a *patwari* sits with the computer. I have been here doing this work for 25 years. The revenue system is full of complexities and even we still have to get help from our seniors. How will these new people do this work? It's very difficult. It's all practical work. And those kids who have a degree in computer science and work there, in my opinion, they won't be able to figure it out. They won't be able to understand the problems. They don't have the experience.

As a result of their initial failure to establish zero zero, PLRA has ordered *patwaris* to resolve all existing discrepancies in the current records, a process that they insist can be completed within months but that *patwaris* claim will take a minimum of four to five years. Meanwhile, *patwaris* continue to play a fundamental role in the old city's land revenue system with the new digital database almost entirely dependent upon their labor. For now at least, land in the old city appears to be as tethered as ever to the manual work of bureaucracy. In considering the qualities of land itself, perhaps this should come as no surprise. As objects that are both immovable and imbued with an immense amount of cultural value, intergenerational plots of land in the area are deeply imbricated with local knowledge. That is to say, land in old city Lahore is both physically and socially embedded in relations that exceed digital representation.

SLIDE The Horizon of E-Governance

Though digitization was intended to increase the liquidity of land, at present the process appears to have had the opposite effect. Rather than replacing *patwaris*, digitization has added yet another layer to the already tortuous process of buying and selling land in old city Lahore. When I asked a local real estate broker what had changed since the transition to the digital

database, he responded that whereas previously he only had to pay a bribe to the *patwari*, now he has to also pay one to the *computer wallah*, or computer guy.

Many blame the failure of PLRA and LRMIS on their surrender to colonial-era bureaucracy. In this view, the *patwari* system is simply too deeply entrenched and influential to ever be replaced. Criticizing the Government of Punjab's efforts, one journalist insists that "the *patwaris* and bosses are so powerful that they have practically defeated the PLRA system." But there is another explanation for why the state has been unable to remove lower-level bureaucrats who, after all, are government employees. *Patwaris* have managed land records in old city Lahore for more than a century. Though documents are crucial to *patwari* praxis, their knowledge cannot be reduced to paper records. This has less to do with *patwaris* than the nature of land in the old city. Old city Lahore is composed of plots of land that are crisscrossed by Pakistan's tumultuous past. Meanwhile, the same parcels hold together relations between family members, neighbors, and residents and the state. A *patwari's* job consists not only of recording land sales but also mediating their historical and cultural vicissitudes. The failure to produce an orderly technical system for land records lies not so much with government corruption but rather digitization's inability to capture the social and material qualities of land. In an era where neoliberal discourses of transparency have become ubiquitous, the horizon of e-governance has been exposed.