

2021 Hixon Fellowship Final Report

(In)formalities of Power in Beijing's Urban Villages

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Introduction

Urbanization in Beijing, like many megacities across Asia and Latin America, has pushed the city into the hinterlands, where villages are demolished and redeveloped into the urban center (Holston 2008, Roy 2011). The economic reform of 1978 reopened China's doors to foreign trade and diplomacy. Beijing and other major Chinese cities have been expanding into rural outskirts to accommodate a growing population of local, domestic, and foreign labor force, participating in a market economy under "socialism with Chinese characteristics". Private-public land buyouts in the form of cash and new apartment units are offered by the government to assist with redevelopment demolitions. In anticipation of demolitions, villagers build up the square footage of their property to negotiate better buyout deals with the government. These rooms were built with the intention of temporary means to an ends of capital accumulation.

However, a number of these villages continue to remain in their high-density demolition-anticipating forms, existing as "rural" residential areas enveloped by new urban infrastructure – thus constituting it as an "urban village" (*chengzhongcun*). Villager-landlords rent these cheap rooms to Beijing's floating population of domestic migrant workers. As part of the city's clean air goals, coal was banned in 2016, and urban villages have been integrated into centralized, state-owned energy infrastructure, through either coal-to-electricity or coal-to-gas programs. The city government also subsidizes residential electricity, so private households only need to pay forty cents instead of one Chinese yuan per kilowatt hour.

I conducted ethnographic research in one of these villages in northeastern Beijing to understand how villager and migrant residents in these precarious spaces navigate electrification as an everyday, mundane social experience (Dove and Kammen 2015:24,40, Chatti *et al.* 2017). Extended from a scientific artifact to a cultural prism, stoves and other vessels of energy

consumption can be reconstituted “not simply as a product but also as production, not simply as socially constituted by also as socially constituting” (Roseberry 1982:1026 cited in Mintz 1985:14). Energy’s significance in making sense of how we power the world - power as in energy, but also what Leslie White would extend to organization, behavior, culture as the *manifestation of energy* (1943:336) – rests not only in the material culture of how meaning is embedded in objects, but material-discursive practices of how energy technologies shape energy culture as well (Barad 2003, Lennon 2017).

Migrants who make up the majority of residents in urban villages are excluded from receiving subsidized electricity pricing due to their lack of household registration (*hukou*) in Beijing. Ethnographic accounts reveal migrant residents thereby access and use energy differently, participating in informal arrangements outside of the government’s stronghold on centralized energy services that reflect the precarious nature of their differentiated citizenship. Villager-landlords take advantage of their access to subsidized electricity and charge their migrant renters whatever they want, most often about the cost of non-subsidized electricity, and renters readily accept this upcharge. Those who have the ability to pay for electricity, do. Others participate in informal energy networks that minimize engagement with the central electricity grid. These nested networks of informality outside of formalized energy infrastructures resemble an ideologically complicit, materially resistant relationship with modern energy services. There is no discursive contestation of electrification or the landlord’s upcharge, yet residents materially participate in alternative practices, seemingly a case of James Scott’s weapons of the weak (1985).

Instead of seeing this as merely resistance however, this paper puts forth a relational analysis that considers how the city government depends on informal networks to produce and

reproduce the myths of high modernist urban development (Scott 1998). I argue that such a relational analysis reveals *informality as a condition of formality*, which then demands follow up questions: At what point might informality become a threat? What happens when the disorder of informality is exposed? I attend to these questions by considering revelatory moments of rupture in Beijing that make urban villages and their precarious conditions visible, suggesting that informality when concealed can in fact be a technology of governance. Finally, I offer that anecdotes and analyses of illegible informalities within national imaginations of energy homogeneity point to dimensions of heterogeneity as resistance, complicity, as well as agency.

Powering Beijing's Blue Sky

Jinzhan West Village was incorporated into Beijing's Chaoyang district in 1958 from its previous jurisdiction under Shunyi suburb. Since then, Chaoyang has grown in the postreform era to be the richest district in the city, giving the district government enormous political and economic power. This power manifests in its ability to implement, enforce, and reproduce policies and programs at its will. This is even more so the case when it comes to environmental services, as government has the capital, labor, and authority to directly transform and police material landscapes. Clean air policies have been at the forefront of the city's environmental efforts, successfully integrating surrounding townships into centralized, state-owned energy grids through coal bans (Pachauri 2019), retrofitting households with energy-efficient cooking and heating technologies (Zhang 2011), and subsidized electricity pricing for residential households.



Fig 1. Jinzhan West Village at the edge of Chaoyang and Shunyi districts

As part of the Ministry of Land and Resources' 2016 "Jing-Jin-Ji Partnership Development Plan" to create a "world-class cosmopolitan cluster with the capital as the nucleus" focused on regional economic growth and environmental repair in Beijing, Tianjin, and Hebei (CRE, 2016), coal was formally banned across Beijing.¹ Prior to this mandate, electricity was commonplace, but coal was still used in many urban villages for heat in the winters. Following the coal ban, the government-funded coal-to-gas or coal-to-electricity renovations in many of the urban villages over the city, providing new boilers or air conditioners and contracting mass installations out. Many of these projects were contracted to migrant businesses.

¹ Within the National Development and Reform Commission, the Ministry of Land and Resources was dissolved into a newly formed Ministry of Natural Resources in March of 2018, along with the State Bureau of Surveying and Mapping and State Oceanic Administration.

These new energy regulations have been enforced through surveillance and reporting. Chaoyang district's website releases a "Law Enforcement Scene" blog each week, with visual representations of policing in action, inspecting and writing up violations for all sorts of environmental activity from waste sorting, construction, and to, of course, electricity use. These blog photos starkly portray inspectors in bright blue uniforms, interacting with people or things (trash cans, gas cylinders, etc.), invoking a sense of embeddedness and visibility of these surveilling forces. Other forms of surveillance include statistical reports of violations, confiscations, and arrests around illegal environmental activity, chance inspections (where the results always show complete compliance), and periodic reminders to encourage citizen reporting, posting stories that praise those who reported illegal activity to authorities as model citizens.

Despite these disciplinary instruments, enclaves of informality survive. Jinzhan's migrant residents are cooking and heating through illegal and/or informal means. They rent rooms - the same rooms that were built in anticipation of demolition - from villager landlords who have shifted "from cultivating crops [gengtian] to cultivating real estate [gengwu]" (Siu 2007:331) as a new rentier class. The housing structures in urban villages themselves are provisional and improvised, much like the migrant workers themselves. Talks of demolition continue to swing in and out of public discourse, adding housing insecurity to the temporary quality of their material realities. In addition to class, the rural and migrant layers of their identity are materially enclosed in an urban village and symbolically surveilled/dispossessed through the Chinese *hukou* household registration system, rendering their well-being nearly invisible in Beijing.

The hukou system requires all Chinese citizens to be registered under an urban or rural registration, but nuance arises from what looks to be a simple "binary division and branding"

(Foucault 1977:199) between urban and rural when considering the massive flows of labor from rural to urban areas. There are formal policies aimed at shaping disciplinary boundaries around law, citizenship, property. Then there are informal channels that people and power flow through: villagers becoming urbanites and landlords, rural migrants moving to the city for temporary work and renting rooms in village enclaves from these villager landlords, the urban elite reacting to these population changes, so on and so forth. Villager landlords with collectivist land rights are declining to transfer their rural household registration to an urban one (Smith 2016). On one hand, it is because they know their land is worth more than their citizenship. On the other hand, the disciplinary power of household registrations has transcended its material circumstances to occupy a discursive hierarchy of citizenship despite recent reform efforts to allow for more rural-urban mobility.

As Siu points out, “The enclaves are not a feature of the past but part of China’s postreform modernity when ordinary villagers attached to an entrenched socialist order are forced to come to terms with market insecurities and fragments of their own historical baggage.” (Siu 2007:345) *Hukou* has become a biopolitical tool of ordering through exclusion to reproduce circumstances of precarity beyond its “technical” function. It is symbolic of the feudal history embedded in China’s modern social structure – where you’re from and where you’ll return – as a cultural citizenship rather than merely a political one (Ong 1996). Domestic migrant workers support the construction and maintenance of a global capital city, making up the informal wage-labor economy of work such as construction, security, and domestic labor. Migrant workers do not have labor rights, their children cannot attend public school, and their personhood exists in a constant state of uncertainty in “China’s Urban Postmodern” (Siu 2012).

It is no mistake that the majority of these “law enforcement scenes” are taking place in village spaces in peri-urban Beijing rather than the urban center. Urban villages represent spaces of precarity where urban-rural, center-periphery citizenships are negotiated, yet there is something paradoxically strange about the concurrent scrutiny of migrant *spaces* and erasure of migrant *lives*. Why are migrant bodies so easily erased yet the spaces they occupy so tightly surveilled? I attend to these contradictions by examining the informal energy networks and processes that remain in this highly surveilled landscape, reframing what is seen and what is not through ethnographic perspectives and geopolitical conditions. In the context of this paper, I refer to informality as modes and practices outside of what is legally sanctioned by and from the standpoint of the state.

Informality

To assist with the coal-to-electricity transition, the government subsidizes electricity so that households only need to pay a third of the standard electricity cost. With the subsidized “residential use electricity”, electricity costs go down from “commercial pricing” of 1.1 yuan/kWh to 40 cents/kWh.² This makes electricity much more affordable for residents, easing the transition from decentralized coal burning to centralized electricity heating. However, migrant residents without Beijing household registration do not have formal access to subsidized electricity pricing.

² Commercial pricing refers to what non-residential use such as businesses pay. Residential use pricing is cheaper due to a government subsidy. The two tiers of pricing are differentiated by the household registration system.



Fig 2. Charging stations by apartment entrances where residents can prepay for electricity.

From here emerges an informal negotiation of energy between non-resident migrants and their resident landlords. Landlords can essentially charge residents whatever they want for electricity, and they do, turning a profit between what they pay for subsidized electricity and what they charge migrant residents - oftentimes more or less equivalent to unsubsidized commercial pricing. So why is this village-wide practice of electricity upcharge not contested? One of my interlocutors reasons:

On this point, they more or less have to charge a bit extra, this is because... why... well, anyways, we basically pay...how much is it? A yuan or something? I think 1.5 yuan. Every landlord is different. Anyways, they make the rent a bit cheaper, so they make a little extra from the electricity. I guess because they don't have much else either, other than rent, they don't have other income. Except for the house, no money, no land.

Other migrant residents echoed the acceptance of an informal energy market, where landlords essentially act as middlemen, brokering electricity between their government-subsidized pricing and the lack of rights of migrants. There is no standard price, I heard anything from 1 yuan-1.5 yuan, roughly but not always equal to the standard commercial pricing of 1.1 yuan/kWh. The one consistent sentiment from everyone I spoke to was the acceptance and rationalization of such a practice from the landlord's perspective.

As evident in the quote above, there are sometimes hints of hesitancy to begin with; perhaps the renters themselves are trying to make sense of why they do not contest this phenomenon. It is not necessarily a question they have thought about or are concerned with, but they were always able to construct a rationale in the shoes of their landlords, growing in confidence of that rationale as they spoke about it. The main arguments I heard from migrant renters follow two through lines: that the rent is cheap in return and that it's the same everywhere. I also spoke to a landlord who echoed similar arguments:

As long as they don't leave, there's money to be made. If someone wants to leave, maybe they'll stay for a few days, a month, then just leave, and we have to find someone else. There are many renters, all coming here. I charge about 700 yuan, cheap! The thing to remember is that, as long as it's cheap, your rooms won't be empty. If you charge 1300, 1500, folks don't want to rent your room, they'll go rent the 700 one. This way your room isn't empty. Otherwise, your room will be empty for half a year, isn't an empty room equal to an empty wallet?

There is something similar in the reasons given by renters and landlords: cheap rent and other housing availabilities, yet the position is drastically different. The landlords do not cite needing the extra income as a reason for making a profit between subsidized and unsubsidized electricity pricing. It is more obvious, yet also more ambiguous, in situating it as a “natural” thing to do without contestation, but also without reason. This dynamic also emphasizes the affordability of something fixed - rent. It is both materially and symbolically significant that electricity, in its precarious forms as flow rather than infrastructure, is accepted in a precarious state of informality. Despite the cumulatively higher costs, shelter as something with identical intervals of payment each month - demands more permanence in its stability, yet energy, in its intangible flows, offers a flexible space to negotiate a kind of informal agency between villagers and migrants outside of state control, who despite being landlord and tenant, share empathies in their ruralness (Jeong 2011). To a certain degree, renters feel they can control how much they spend on electricity by controlling how much electricity they use. There are alternatives to electricity while there are little alternatives to shelter.³

Due to the makeshift nature of these rooms for rent, many of them were remodeled without a formal kitchen. The “kitchen” consists of a counter with an overhead fan and an electric outlet. The expectation is for residents to use portable induction stoves that plug into electric outlets, transforming the historical significance of the kitchen as a site of worship and domestic order (Wolf 1978, Freedman 1979, Bray 1997). Most residents, migrant renters and villager landlords alike, are fuel stacking, a common practice in households transitioning between fuel types on the energy ladder, using both electric induction stoves and LPG gas stoves. Gas has been banned in the village for private household use due to safety concerns

³ For housing alternatives emerging in Shanghai, see Ling (2020).

around improper installations, resulting in gas poisoning or worse, fires. Only restaurants and businesses are permitted to use gas for cooking, and these institutions are subject to routine inspections from the government (some appear on the "Law Enforcement Scene" blog).

Residents access LPG gas cylinders through a network of underground delivery services. The attitude towards navigating the illegality of such a network is general unconcern, "we use it, we can use it. It's no problem, no one cares. You just get a small cylinder, put it in your home, no one is watching. You just make a call and they deliver it." These delivery networks are well-attuned to the geopolitical landscape of these villages - when it's safe to make a delivery and when it's not - and accessed through word of mouth.



Fig 3. Kitchen appliances used in one resident's home.
The portable stove on the right connects to an LPG cylinder.

From these instances of energy access and use on the ground, outside of the purview of a smooth energy transition narrated by the government, we see what seemingly resembles an ideologically complicit, yet materially resistant relationship with formal regulations around energy use. There is no contestation of formal energy services yet there is material participation

in informal energy services. Vice versa, if the regulatory surveillance of the government were to consider illegality as weapons of the weak (Scott 1985, Zhang 2001), why do they allow these informal networks to survive?

Material resistance alone no longer serves as a sufficient explanation when informality is reframed in relation with, rather than in opposition to, formal energy services. High modernist urban planning emphasizes the geometric measuring, mapping, and standardization of legible spaces and people as a tool of state simplification (Scott 1998). Beijing's electrification plan fits conveniently into this model, a visible network of transmission lines feeding power from a centralized source, yet landlord-migrant negotiations of electricity costs and networks of underground gas cylinder deliveries actively, albeit partly, resist the central grid's ability to render the village legible.

On a logistical level, there are the speculative limits of infrastructure, an insight that was shared with me by a migrant renter interlocutor who suggested the formal electricity grid needs informal gas cylinders to ensure that the grid does not collapse, thus maintaining the government's ordered performance of formality:

You know, it is like this in the village. One eye open, one eye closed. You have to think this way: if the whole village used induction stoves, the wires would burn. Do you understand? What kind of disaster would that be? Induction stoves use a lot of electricity, there are so many households here, thousands, they can't take it all. So, they open one eye, close one eye. If there's really an inspection, just hide the gas cylinder or something, cover it up. This is all we can do. In the village, the grid can't support this many people, right?

Just as Beijing needs migrant labor to build the city, my interlocutor points to an uncontested performance of city-wide electrification that reveals to me *informality as a condition of formality* as long as it does not threaten the government's performance of environmental compliance. Regardless of fact or fiction, this idea of an infrastructural limit points to a belief in the government's feigned ignorance to the migrant population in these spaces, allowing migrants to engage in informal energy services while resolving the government of any responsibility towards migrant renters' living conditions (cf Anand 2017:182-184).

When coal-to-electricity and coal-to-gas programs are reframed as clean air policy rather than clean energy policy, the metrics of success shift. Success stories of transition from coal to gas and electricity are marked by the numerous news articles focused on the numerical reduction in particulate matter (PM) in these neighborhoods. This is an attempt to create an environmental subject whereby "local residents come to think about and define their actions, positively or negatively, in relation to the environment. Variations in subject positions are closely tied to practices and involvement in new regimes of monitoring, enforcement, and regulation." (Agrawal 2005:17) At the same time, it is an erasure of alternative claims of time, knowledge, and labor for one that aligns with the project of modernity. Like the campaign to eradicate malaria in Timothy Mitchell's *Rule of Experts*, the campaign to move from coal to electricity was one in which scientific knowledge and technical expertise represent a discursive form of power that creates both problem and solution (2002:51). Whether it be visual indications of a blue sky or percentage decreases in particulate matter, informal energy networks that do not threaten the visual performance of clean air are suddenly not as significant in their noncompliance, given their continued concealment.

Scott acknowledges how “formal order, to be more explicit, is always and to some considerable degree parasitic on informal processes, which the formal scheme does not recognize, without which it could not exist, and which it alone cannot create or maintain.” (1998:310). I take this relationship one step further by contending that informal processes are conditions of high modernist urban development in Beijing. The task at hand then, is to attend to the mechanisms of this informality, particularly why it so often involves the interplay of rural migrants in urban villages as key actors and sites.

Illegibility

I have suggested so far how networks of informal energy services are not solely effects of urban-rural inequalities nor an exercise of resistance, instead a condition of formality (or at least, the performance of formality). Operating through a mechanism of concealed informality and performed formality, the violence of the uneven power relations that mediate their co-existence reveals itself when disorder is exposed. I offer two such revelatory events that took place in two of Beijing's urban villages twenty years apart, the 1995 demolition of *Zhejiang* Village and the 2017 fire of *Xinjian* Village.

Most famously, *Zhejiang* Village was perhaps the largest community of migrants, mostly merchants and entrepreneurs hailing from its namesake, Zhejiang province in southern China, in the 1980s and 90s after Deng's economic reform. The Village was started by the first generation of migrant workers, at first just a few families from Zhejiang. It slowly expanded organically through new migrants arriving because they knew someone (who knew someone...) who worked in Beijing and lived in *Zhejiang* Village. Prior to the government's forced demolition in 1995,

the migrant enclave located just a few miles from the city center housed nearly 100,000 residents (Zhang 2001:14). The informal networks in Zhejiang Village began to function with self-sufficiency, forming internal factions with local bosses and social norms disconnected from the rest of the city. Instead, these networks were connected to supply chains and kin relations to townships in Zhejiang – the isolated caricature of a lone migrant worker is replaced by flows of capital, labor, goods, and thus power, between rural manufacturers and urban brokers in Beijing. Although government statements cited crime and disorder as reasons for the mass demolition, ethnographies conducted by anthropologists at the time reveal an “incompatibility” between Zhejiang Village’s powerful informal networks and Beijing’s intended top-down regime (Zhang 2001, Biao 2005). The demolition was narrated as a “clean up”, displacing thousands of migrant residents overnight.

In comparing Zhejiang Village with Jinzhan West Village, informal networks as potential threat to the city government are distinct in a few ways. First, the unifying force of residents from the same village (*laoxiang*) building migrant communities in Beijing no longer holds true. Demolition of inner-city urban villages and rising housing prices have pushed migrants to limited options in the outskirts of the city, resulting in migrant enclaves composed of more diverse residents from different parts of the country. There is still a certain camaraderie in the shared identity of migrant wage laborers, but folks admitted that there’s still a deeper sense of connection among *laoxiangs*, “How do I put this... *laoxiang* and *laoxiang* will always be closer. After knowing other [non-*laoxiang*] after a while, we’ll still be cordial, respectful, greet each other when we’re getting off work, walking by each other, that kind of thing.”

Second, the continued pushing out of migrants to peri-urban areas have created a new form of urban village with stronger cultural, historical, and legal associations with rurality that

constitutes a peri-urban area around large cities where urban and rural forms of land use navigate their coexistence or what Liu et al. call a “peri-urban mosaic” (2020). They will never be urban in the way inter-city urban villages of the 80s and 90s approached.

Third, Beijing's concentration and tightening of state power over the last two decades have resulted in new political landscapes for urban villages and migrants. More stringent regulations around unlicensed informal businesses in the village ensure that most migrants are anchored to wage labor. These new migrant enclaves in peri-urban Beijing do not have the entrepreneurial political economy, social networks, and informal soft powers held by migrants of urban villages 30 years ago (Biao 2005[2000 in Mandarin], and Jeong 2000, Zhang 2001).

There are also features of Beijing's migrant spaces that have stayed the same: the precarity, enclosures, discrimination, and displacement, pointing to another feature that has held constant: the immense amount of, if not increased, power held by the city government. They still hold the power to demolish these villages at any point. The fact that certain villages haven't been demolished nor have informal energy networks been disbanded points back to concealed informality in performing formality. Many of the issues with Zhejiang Village cited by the Beijing government in 1995, “overcrowding, unhygienic conditions, having children without government permission (in violation of the law of family planning) and unlicensed businesses. But the biggest problem... illegal constructions, the residential compounds being built by the migrants” (Biao 2005:156) continue to be true in the urban villages twenty years later. It is only when disorder is exposed that it becomes a threat, revealing the co-dependent nature of informal and formal energy infrastructure in producing a modern and ordered Beijing.

This is exactly what happened in November of 2017 when a deadly fire, caused by faulty electric wiring for heating, broke out in Xinjian Village in the south side of Beijing, 17 of the 19

victims were migrants. The government declared a state of exception, cut off all utilities, evicted all migrant residents and demolished all high-density residential buildings in the village within a week. A city-wide campaign to clean up urban villages at risk for similar fire disasters was launched shortly thereafter. The 40-day campaign prompted an uproar of public speculation, called a targeted ploy to speed up eviction of migrants across the city as the fire allowed the government to skip the bureaucracy of surveys, negotiations, and relocations as part of the demolition buyout process in the name of public safety.

While it's certainly true that the fire provided the city government with an opportunity to expand state control, the fire and subsequent survival of informal energy networks made visible two conditions of life in Beijing: First, the invisible precarity of migrant living: insufficient heat for winter, unstable infrastructure, overcrowded apartments that threaten life itself and second, the government's supposed ignorance of the existence of these precarious spaces. By targeting safety concerns, the campaign drew attention away from oversights in heating infrastructure to an issue of overcrowding. The fire and the subsequent evictions become consequences of irresponsible villager landlords and migrant renters rather than the government's failure to anticipate heating demands the first winter after a city-wide coal ban aimed at reducing air pollution. Clean air continues to hold a priority over heating, especially when it only affects second-class migrant citizens who have little rights. The fire revealed an "unfinished business of modernization" (Hewitt 1995:113) in Beijing dependent on the labor of informal and illegible people and the spaces they occupy, inextricably linked, and mediated by everyday encounters with energy infrastructure.

When the demolition of Zhejiang Village and fire of Xinjian Village are read as threats of informality made legible, eviction campaigns conceal alternative intentions of threatened state

power through the longstanding party practice of political complicity. Rural bodies are mobilized as numerical subjects of demographic organization and ordering.⁴ Another way to interpret this complicity would be the idea of state involution, the process of “generations having internalized the institutional and ideological power of the state, their purposeful actions ironically reproduc[ing] such intrusive power in their everyday pursuits.” (Siu 2016:20). State involution illustrates an example of how governmentality is practiced in a disciplinary state.

Upon learning I was researching coal-to-electricity clean air policies in China, one of my interlocutors, a Sichuan native that has worked and lived in Beijing for the past 20 years, eagerly shared she had asked her college-educated daughter Xiao to write something up for me:

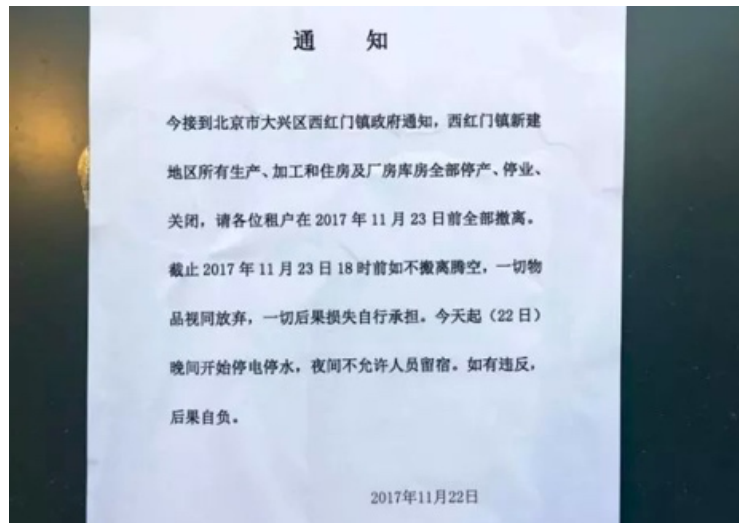
In the past, using coal for cooking and heating would lead to indoor air pollution. Gas poisoning from the charcoal used to heat the house was a common occurrence in the winter. It pollutes the environment and harms the human respiratory tract. With the development of the country, we have gradually replaced coal with electricity; every household in urban and rural areas is connected to electricity. The electricity is very bright, very safe, eliminates the possibility of carbon monoxide poisoning, doesn't affect people's health, and most importantly, it is environmentally friendly and clean. In the past, some trains and tractors used coal – black plumes everywhere, extremely polluting to the environment... for example, smart coal-to-electricity boilers have temperature settings and can be used instantly. In the past, coal-burning furnaces required someone to constantly maintain the hearth: adding coal, disposing of cinder, in fear of the furnace going out or causing safety hazards. Now that every household has electricity, everything

⁴ See Siu (1989) and Greenhalgh (2005) for examples of victims as complicit agents in agrarian change in Guangdong and China's 1983 sterilization campaign, respectively.

is convenient. When we lived in the countryside, there were many poor people and transportation was inconvenient. Forget about electricity, some places could not even afford to use coal... Now our life is starting to get better, all kinds of smart appliances are slowly being used, thanks to the national policies and assistance.

State involution conceals electrification as apolitical convenience from the standpoint of mundane, everyday practices of life, yet the introduction of new energy technologies connected to global flows of innovation and capital is anything but mundane. Scott describes electricity's centralizing force to "produce a visible network of transmission lines emanating from a central power station from which the flow of power was generated, distributed, and controlled." (1998:166) I add that electrification in Beijing requires legible landscapes to properly calculate energy demand and supply, thus the expansion of electrical services into rural areas can make previously illegible spaces accessible to the government.

Energy access and use in illegible spaces, such as Beijing's urban villages, look very different from state-sponsored electrification in rural China. While Xiao expressed gratitude for the convenience of state-sponsored electricity in rural Sichuan, this is a stark contrast with the austere cutting off from electricity and water experienced by migrant residents after the *Xinjian* fire. Notices such as the one below were plastered by building entrances:



NOTICE

Received township government notice today mandates all production, manufacturing, residential, and storage buildings stop production, operation, and close. We request every renter vacate by November 23, 2017. If you are not vacated by 6 pm, you relinquish rights to all your belongings, bearing all consequences and losses. Starting today (22nd), electricity and water will be cut at night, no overnight personnel are allowed. You are responsible for the consequences of disobedience.

- November 22, 2017

The forced evictions and exclusion from electricity and water incited widespread outrage in both domestic and global civil discourse (Pils 2020). The US-funded think tank “Radio Free Asia” released a series of videos online. One of them was called “Beijing Low-end Population: We are also Chinese, why treat us this way?” with footage of migrant residents in the process of vacating villages. Following international media attention on the government’s poor treatment of low-end populations (*diduan renkou*), referring to rural migrant populations in urban cities, the government issued a couple of changes in the usage of “low-end population” terminology. Past usage in official government documents were erased and mentions of the term were censored online. The Beijing city government responded to civil discourse suggesting that the 40-day campaign following the *Xinjian* fire was a special operation to drive out “low-end populations” with a statement condemning such rumors as politically motivated:

“In our country, every citizen’s political position and rights to life are equal. There is no high-low, noble-cheap differentiations, everyone should receive respect and protection.

The separation of populations by “high-end” and “low-end” is clearly a targeted insult to pollute the characters of so-called “low-end” population.” (ce.cn, 2017)

The government's critique of the “low-end population” rhetoric simultaneously attempts to erase history and homogenize citizenship, both characteristics of high modernist governance when “emergency conditions foster the seizure of emergency powers” (Scott 1998:5). It implicitly assumes a quality of low-end as “polluted” by attempting to reject this linkage. I propose that both international and government discourse inadvertently aid the concealment of high modernist technologies of governance that predated the *Xinjian* fire. By drawing attention to the violence of the campaign rather than the fire, the protestors in their liberalized critiques and the government in its bureaucratic defense mute the violence of the conditions that engendered the fire and campaign in the first place, nesting the structural nuances of Beijing's urban villages as spaces of erasure into a dichotomy of East vs. West politics. Furthermore, the *Xinjian* fire itself is a failure of high modernist governance in Beijing, revealing the underlying social conditions and prompting the government to revert to traditional disciplinary tools of governance such as the biopolitical measures of forced evictions and cutting off utilities. The focus on the visible violence in the aftermath ahistoricizes the social conditions that engendered the disaster. Instead, the *Xinjian* fire historicized as a revelatory event of illegible spaces and bodies made legible also suitably makes illegible timelines legible, animating the slow violence inflicted upon rural migrants in urban villages to perform ordered formality.

In the urban villages that remained after the major sweeps campaign, the city banned any non-commercial use of gas stoves, electric blankets, and the like, reproducing the same social conditions of precarity during the winters that ultimately led to the *Xinjian* fire. Despite the bans,

migrant residents continue to use informal/illegal forms of energy for heating and cooking, as evident in Jinzhan West Village. Instead of the authoritarian surveillance technologies that have come to represent Chinese governance, high modernism also operates as a discursive tool to conceal Beijing's disordered spaces indispensable to state-building.

Exclusion as surveillance is seen in Michael R. Dove's analysis of Turgo's erasure from official government maps due to the threat of volcanic eruptions, producing "...the paradoxical and vulnerable individual who exists in law only as an exile from it, the erasure of Turgo was intended not to increase the vulnerability of its people to state violence, but rather to render their vulnerability to natural hazard less threatening to the state." (2021:85) In what Dove calls a non-Western panopticon, the decision and ability to exclude is a deliberate calculation in which inscribed erasure in fact conceals the observer in a way that absolves accountability.

In China, this deliberate "surveilled erasure" is continuously evident in the remaining urban villages despite the government's best efforts to *perform* legibility. I return to the contradiction of invisible migrant bodies and the monitored migrant spaces in Beijing's urban villages. These concurrent contradictions are not coincidences. As with the ostensible paradox of Turgo's erasure from government maps, the precarious position of migrant workers "increases both the docility and the utility of the individuals in [the panopticon]. It arranges power, but not for power itself" (Carpenter 2020). Considering the value of migrant labor in the building of a modern China, the invisibility of migrant citizenship appears quite convenient to the "nation's dream of achieving wealth and power", reflecting Aihwa Ong's sentiment that "exception can also be a positive decision to include selected populations and spaces as targets of calculative choices and value-orientation associated with neoliberal reform." (Ong 2006:5) Precarity in

Beijing's urban villages give the city government a flexibility to alienate migrant bodies from migrant labor, but what are the possibilities for migrants to also utilize this flexibility?

Agency

Beijing's migrant workers make up an irreplaceable sector of the labor force producing and reproducing new energy modernities. Many of the female migrants are employed as domestic workers in the villas, where they cook and clean with appliances vastly different from what they use at home. Male migrants work in construction, many as electricians. The technical expertise of these migrant electricians in forging the material connection between the central energy grid and household end use once again contrasts with their everyday domestic experience in a "backwards" urban village. What does it mean for migrant workers who are overtly marginalized from discourses of modernity and processes of social mobility to hold the labor-power and knowledge-power to produce commodities of energy power?

In a series of interviews conducted with migrant workers in Shanghai, one interviewee working as a security guard at a university shared how long he planned to work in the city: "It is temporary. Once I make some money... I've already started working later [than other peers], I can't just live off my family. I'll make some money first, then think about what comes after. This job is okay, but I can't do it for a lifetime." (Fang et al. 2018:97) This sentiment of the temporary nature of migrant work is echoed by many other interviewees in this series, reflecting a construction of time that follows an aspiration of modernity through the accumulation of capital. This discursive power of time is embedded in the fundamental belief that economic mobility is a means to other aspirations in life, which migrant workers pursue through the participation in wage labor.

Towards the end of one of my conversations with a migrant who's been in Beijing since 1997, we started talking about life back home. I asked him if he missed home and if he had plans to go back. He shared that he wanted to work for maybe five, six more years – until the youngest of his three kids finishes college – and then that'll be about time to return home. I asked him if he thought he'd eventually settle back home or in Beijing. "We have to go back home after we get old, right?" I wasn't sure what the answer implied here: if he had to return to where his hukou was tied or where his heart was tied. After working in Beijing for almost 25 years, he's been able to save up enough to put his kids through college, build a new house in his *laojia* (hometown) and buy an apartment in the township capital. In another case, I asked someone how he heats his "home" during the winter. Instead of referencing what he uses in Beijing as I expected, he jumped to talking about what they use in his *laojia*. Despite the decades of living in Beijing, it is not home. Despite the discriminatory living conditions, the ability to participate in informal means of energy services leads to a "deterritorialised approach to homemaking by investing as little as possible in their present urban residences in order to build village houses or purchase apartments in their registered home places for future retirement." (Ling 2020:15) Embodied in the labor and time spent in Beijing is the agency of aspiration towards home that migrant residents hold, representing geographically particular longings across China.

On the spectacle of the world city, urban anthropologist Ulf Hannerz writes "everybody is not merely an observer, but a participant observer, and the prominent features of the spectacle may depend on one's perspective." (1996: 133) The logics of formal energy politics in Beijing can cross-reference perspectives of national, district, and village level governance to piece together how informal energy networks survive in relation to centralized electrification, state surveillance, and urban organization. Only migrant and villager perspectives, however, reveal

energy's everyday lives in urban villages, which draw me into this story of informal energy politics. Their perspectives represent the heterogeneity that continues to thrive despite the performance of homogenous order at the state level.

Despite the homogenizing power of state performance, the *métis* in local knowledges that emerge from everyday practices produce a heterogeneous rhythm of life in Beijing's urban villages. Behind the uniformity of coal-to-gas or coal-to-electricity retrofits in each village, residents within each village are heating and cooking with different fuels and appliances that vary from household to household. James Holston writes that "residents read every day change in their neighborhoods – each new setting of tile, appliance, sofa, and second story, each new health clinic, school, paved road, and sewage line – as installments in this narrative of the transformation of subaltern life." (2008:156) Scott writes that "*métis* is the ability and experience necessary to influence the outcome – to improve the odds – in a particular instance... the general formula of state simplification can't supply local knowledge." (1998:318) Even though villager landlords are up charging residents for electricity, the amount varies from landlord to landlord while the government's residential subsidy is standardized across the city. Some landlords install boilers for central heating. Others provide dual-function air conditioners. Whether they are participating in informal means of energy services to save money, make their food taste better, or out of habit, there is agency in these everyday actions.

Situated within historical trajectories of demographic spatial organization, differentiated layers of governance, and environmental means of state and subject making, domination is not singular, nor is resistance (Sivaramakrishnan 2005). Informal energy networks in Beijing's urban villages are thus technologies of governance as much as they also represent the agency of

migrant residents that do not singularly comply or resist but reclaim difference in a way that unsettles linear histories and static relations.

Conclusion

In conclusion, my research aimed to show how informal and formal networks of household energy in Beijing interact relationally rather than dichotomously. I suggest that the state implicitly relies on the illegibility of informality for modern state-building, but illegibility is a double-edged sword of state power. Before *Xinjian* Village went up in flames, there was the warning of smoke. Smoke conceals, but it can also produce spaces of caution, weakness, and thus negotiation when illegible moments reveal themselves. I suggest that we pay more attention to these revelatory moments, not as exceptions to the rule, but rules of exception that conceal heterogenous spaces and bodies performing the homogenous illusions of social order.⁵

More than two years into the COVID-19 pandemic, China continues to be closed off to the world, limiting the possibilities of ethnographic fieldwork for anthropologists interested in reading resistance in these illegible spaces. In early April, Beijing began setting up partial lockdown and surveillance zones following increasing variant cases and Shanghai's mass lockdowns. At the time of writing (April 28, 2022), the number of lockdown zones has increased from 65 to 240 sites within the last day alone. Jinzhan West Village was one of the first neighborhoods to be designed as a lockdown zone in early April given the high concentration of migrant residents in the service industry, concentrating a dense population of mobile bodies moving between Jinzhan and their places of employment all over the city. While lack of access

⁵ I expand upon the Xinjian fire as revelatory of the slow violence of migrant labor and air pollution in Chapter 3 of my thesis, *Cleaning Out and Up as Population and Pollution Control in Beijing*

to subsidized electricity is vastly accepted by migrant residents, the mandatory lockdown restricting anyone in *Jinzhan* from leaving the contained zone has not been taken well. Residents are angry, actively protesting the draconian actions to come out of China's "zero tolerance" COVID-19 policies. *Jinzhan* was temporarily lowered from a lockdown zone to a surveillance zone on April 11th, released as a surveillance zone on April 18th, yet I just got word from an interlocutor that the village has been closed off as a lockdown zone once again. These recent events around COVID-19's rearrangement of spatial relations point to what immobilities migrant residents are willing to tolerate and what they are not. The inability to leave means the inability to work, revealing further considerations for the role of labor in mediating informal and formal infrastructures of urban citizenship in Beijing.

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