

LORETTA IENG TAK LOU
Durham University

The art of unnoticing:

Risk perception and contrived ignorance in China

ABSTRACT

In China many petrochemical plants are adjacent to residential areas. Despite this, the people who live in these areas appear indifferent to the threat of toxic pollution and chemical explosions, even though they are aware of the danger. Building on historical and social studies of ignorance, I show how residents in a southern Chinese city live with the threat of petrochemicals by practicing what I call the “art of unnoticing,” a contrived form of ignorance that enables them to live with the reality of pollution and reclaim their agency in face of the unavoidable. In light of this, I reflect on the limit and complexity of the global environmental justice when willful ignorance is at work. The next step forward is to understand what it is that people are unnoticing, as well as what unnoticing can do to people’s lifeworlds. [*ignorance, toxicity, chemicals, risk perception, industrial pollution, fenceline communities, environmental justice, fatalism, China*]

As my driver Dong drove past the petrochemical plant in Huangpu District, in the southern Chinese city of Guangzhou, I tried to take a few photos of the industrial landscape.¹ “What are you shooting?” Dong asked. “I’m trying to take some photos of the petrochemical plants,” I responded. “The petrochemical plants? What’s special about them?” he asked casually. I know he was not being sarcastic. As someone who had lived in Huangpu all his life, Dong was genuinely curious about why an industrial district full of factories and wharves, connected to yet far from the glamorous new town of Guangzhou, would interest anyone.

“Well, don’t you think the petroleum structures are pretty striking? The refineries, the oil tankers, the chimneys. They’re right in front of you. You can’t not notice them, can you?” To my surprise, Dong said rather matter-of-factly, “I don’t notice them. They’re always here. They’ve been here before me.” Really? I thought to myself, perplexed. As I gazed at the red-and-white chimney outside the window (see Figure 1), Dong told me about the financial benefits and health risks of working for Sinopec, China’s major state-owned oil and gas company, which is now the world’s largest petrochemical conglomerate. He learned about these from his best friend from primary school, whose entire family worked for Sinopec.

The next afternoon, when I headed out for another day of fieldwork, I passed by a branch of the China Construction Bank, housed in a building undergoing renovation. Although I was standing far away, the smell of formaldehyde was so pungent that I felt a burning sensation in my eyes, nose, and tongue. I should have left immediately, but I was captivated by the scene of a renovation worker taking a nap on one of the dusty work tops. His shirt was covered with paint, and he wore no safety helmet, no face mask, and no protective clothing. He seemed unbothered by the formaldehyde smell (see Figure 2). Immediately, this scene brought me back to when my driver Dong said, “I don’t notice them.”

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Figure 1. The petrochemical landscape in Huangpu, Guangzhou, March 2018. (Loretta Ieng Tak Lou) [This figure appears in color in the online issue]

In recent years, the “chemical turn” in anthropology has introduced chemicals into our ethnographic imaginary (Shapiro and Kirksey 2017, 481). From the gas-leak disaster in Bhopal, India (Fortun 2001), to the chemical photography at Kodak Film in the United States (Feser, forthcoming), chemoethnography not only sheds light on the precarious conditions of “late industrialism” (Fortun 2012), in which “breakdown, trespass, seepage, degradation” have become part of the mundane (Ahmann and Kenner 2020, 416), but it also illuminates the kinds of life and dreams made possible under industrial capitalism (Ahmann and Kenner 2020, 416; Feser forthcoming; Shapiro and Kirksey 2017, 482). As chemosociality becomes a new focal point through which anthropologists analyze emergent social forms involving chemical exposures and chemical dependencies, it soon becomes clear that toxic exposure not only impairs bodies but also produces a “shifting sense of normality” (Shapiro and Kirksey 2017, 484).

Traditionally, chemoethnography focuses on the disasters of late industrialism. More recently, however, there have been calls for switching attention from things that are falling apart to things that continue to survive. Indeed, there has been a growing interest in “alterlives”—lives irreversibly altered by petrochemical world orders. Instead of focusing on the abnormality of late industrialism or doing damage-based research, Murphy (2017, 496) argues that one must look beyond the obvious damage in order to fully understand the less obvious chemical relations and

the “slow violence” (Nixon 2011) that toxicity brought. To this end, anthropologists, especially chemoethnographers, have been expanding their toolkits and acquiring new skills to study the alterlives of people in late industrialism (Murphy 2017; Shapiro and Kirksey 2017, 488).²

One technique that has received little attention is how ethnographers train their eyes to notice creative and life-affirming work despite the precariousness of life (Ahmann and Kenner 2020, 419). In her acclaimed book *The Mushroom at the End of the World*, Tsing (2015, 181) shows how anthropologists could achieve this by paying attention to the different world-making projects within the “blasted landscapes”—a skill she calls “the arts of noticing” (Tsing and Lassila 2017, 28). In tracing the ecological and commercial legacy of matsutake mushrooms, Tsing (2015, 160) argues that ruins and human-disturbed landscapes in late industrialism are ideal spaces for practicing the arts of noticing. Tsing is thus optimistic that ethnographers will discover stories not only of death and destruction but also of survival and flourishing.

When I brought this methodological tool with me to the field, I was astonished to discover that many Chinese people negotiated life in damaged environments by doing the opposite of what I did as an ethnographer. While I exercised the arts of noticing to uncover how people live with precarity, my interlocutors lived with precarity by means of “unnoticing.” For this, I concocted the art of unnoticing, a concept that refers to how people justify



Figure 2. A renovation worker takes a nap on a dusty work top in Guangzhou, March 2018. (Loretta Ieng Tak Lou) [This figure appears in color in the online issue]

living in certain environments and living with certain adversities. Unnoticing involves not only one's bodily "at-tunement" (Choy 2012; Larkin 2014, 1006; Shapiro 2015) to "chemospheres" (Shapiro 2015, 374), but also a contrived form of ignorance through which people's "self-survival is contingent on maintaining a selective understanding of their own efficiencies and liabilities" (McGoey 2012, 12). Although in Huangpu the art of unnoticing arose from the precarious environmental conditions of late industrialism, the notion of unnoticing, as I envision it, can also be used

to understand how contrived ignorance empowers people to reclaim part of their agency in a variety of contexts in the "risk society" (Beck 1992). In this sense, the ideas of noticing and unnoticing emanated from distinct ethnographic contexts and serve different purposes, but they intersect in real-life ethnographic practices, making them good concepts to think with, both within and beyond anthropology.

Anthropologists are good at taking notice. Not only that, they are acutely aware of the ways sociocultural and environmental factors influence how people pay attention

and what they pay attention to. As Ingold (2011) points out, attention is developed not only through instruction, observation, and imitation but also through embodied experience and practical activity in one's environment (see also Mazzarella 2009). Similarly, when people "fail" to notice something, we need to know that it does not necessarily result from distraction or absentmindedness. Like paying attention, ignoring things—including what people ignore and how they ignore them—is also socially and environmentally mediated (Larkin 2014, 1006; Zerubavel 2008, 2011). People may vary in how they perceive risk from pollution, and that variation is not uncommon when the pollution in question is barely perceptible. But there is a difference between not noticing something as intangible as fine particulate matter and not noticing the smell of formaldehyde or the sight of petro-infrastructure, both of which assail human senses. With time, people may become oblivious to scents if their olfaction has been numbed by prolonged exposure, and after decades of operations the petrochemical facilities may blend into the town's landscape. But such obliviousness is by no means natural. Just "like learning to become sensitive to environmental change, becoming unaffected too requires work" (Shapiro 2015, 374). Western observers long misconstrued Chinese people's apparent apathy to pollution as the result of factual ignorance or docile acceptance. While Lora-Wainwright's (2021) research has convincingly refuted these claims, her studies do not explicitly address contrived ignorance and its impact on people's attitudes toward environmental pollution. Her work does, however, illuminate the "small steps individuals and families take in order to minimize the physical, psychological, and social effects of pollution" (35), such as wearing masks or moving children and pregnant women away to safer sites. Still, her focus is on people's resigned actions. In contrast, my investigation centers on people's deliberate inactions. By foregrounding the idea of unnoticing, I aim to shift scholars' attention from restrained doing to assertive nondoing while explicating the powerful forces of contrived ignorance that can thwart change before it gains traction.

The conception of unnoticing is deeply rooted in the historical and social studies of ignorance. Until recently, "there has been a marked absence of theoretical attention to the value and practical uses of ignorance in economic and social life" (McGoey 2012, 3). The concept of agnotology, coined by the linguist Iain Boal and later redefined by the historians Robert Proctor and Londa Schiebinger, paves the way for studying the "historicity and artifactuality" of ignorance (Proctor and Schiebinger 2008, 34). As a discipline, anthropology has always prided itself on defending indigenous epistemologies and local practices. We tend to see our interlocutors as the experts in the field, and we are there to document what they know rather than what they don't know. An unintended consequence of this, however, is that it can make ignorance seem like an unlikely ethnographic

object (Mair, Kelly, and High 2012, 22). But as Proctor and Schiebinger make clear, no theory of knowledge is complete until the complex phenomenon of ignorance is taken as seriously as the epistemologies of other subjects, such as science and religion. This is because ignorance is not only "a vehicle to reveal the proper workings of knowledge"; it is also "a location for understanding the workings of power" (Proctor and Schiebinger 2008, 146). Indeed, both anthropologists and sociologists have demonstrated that, under certain circumstances, ignorance is neither the absence nor the inverse of knowledge. Rather, it is a concerted effort, one that is produced and sustained by people in positions of power, as well as those subject to it, as a way to cope, deceive others, avoid conflicts, preserve peaceful relationships, and maintain the status quo (Babidge 2018; Benson and Kirsch 2010; Bovensiepen and Pelkmans 2020; McGoey 2012; Proctor and Schiebinger 2008). Therefore, to understand the sociocultural production of ignorance, "one would have to investigate not gaps in knowledge—which is where most existing studies of ignorance have concentrated their efforts—but rather the production, out of the infinite sea of things that people happen not to know, of culturally recognized . . . modes of ignorance" (Mair, Kelly, and High 2012, 16).

Although the deliberate effort to ignore something is usually what characterizes the art of unnoticing, contrived ignorance comes in many varieties. As Bovensiepen and Pelkmans (2020, 3) point out, contrived ignorance must be understood as a spectrum instead of a typology, with deliberation on the one end and internalization on the other (2). In acknowledging that both "conscious and unconscious forms of ignorance" (2) are at play in the context of petrochemical risk perception, I develop the notion of unnoticing to capture not only the "more calculated and strategic forms of ignorance" (2) but also the tension between it and its more "naturalised and embodied" forms (3). In other words, I seek to illuminate moments when people decide they ought to ignore something, but I do not want to disregard the dynamics of and shifting between noticing, habitual not noticing, and unnoticing. For example, although the vignettes above indicate that both the renovation worker and the driver had normalized the (petro)chemosphere as part of their natural environments, most people in these communities were acutely aware of what was going on. Whenever a stench struck residents in these neighborhoods, they almost immediately resumed talking about petrochemical pollution. This suggests that they were not completely desensitized.³ In many instances people initially denied that there was any pollution but later conceded that their judgment was probably inaccurate. They were conscious that their own perceptions might be biased because their bodies had become "too used to living with pollution"; this is sound evidence that "strategic deployments of ignorance are nested within more habitual forms of willful blindness" (Bovensiepen and Pelkmans 2020, 8–9).

What follows are stories of how people learned to ignore the threat of toxic pollution and chemical explosions even though they were aware of the danger. After introducing Huangpu's petrochemical community, I demonstrate how my interlocutors have lived in such an environment by deploying three strategies of unnoticing: (1) practicing "slow observation," (2) assenting to "fate," and (3) engaging in "complicity."

Identifying "fenceline communities"

Not only are petrochemicals highly toxic, but they can also cause explosions and fires, threatening adjacent communities. In 2015 the chemical explosions in the Chinese city of Tianjin killed 173 people and injured 798. The blasts were so large that both the China Earthquake Administration (CEA) and the United States Geological Survey registered the explosions as seismic events, the first explosion at a magnitude of 2.3 and the second at 2.9 (BBC News 2015). The shockwaves, which were felt many kilometers away, destroyed huge areas of Tianjin. Since these massive explosions, several small blasts have occurred across China, although they did not make national and international headlines. In fact it was not until another chemical plant exploded in March 2019 that the country's petrochemicals industry came under the spotlight again. The most recent explosions, killing 78 people and injuring 617, occurred at a chemical plant in Jiangsu Province. This time the CEA reported that the explosion was equivalent to a magnitude 2.2 tremor (BBC News 2019). Over 3,000 people were evacuated after the accident, and the chemical plant was flattened.

Other industrial accidents, such as oil spills and chemical leaks, have also had devastating impacts on the environment and local communities. In November 2018 a leak of chemicals known as C9 aromatics took place in a coastal village of Fujian Province; it sent 52 inhabitants to the hospital and ruined 152 fish farms, depriving many villagers of their only means of livelihood. Although no one was killed, the leak devastated the local economy (Hao 2019).

Realizing the danger of having petrochemical facilities so close to residential areas, local governments across China have relocated "fenceline" communities away from petrochemical zones (He et al. 2018). But what counts as a "fenceline community" varies. Originating in the United States, the term refers to the neighborhoods near a facility that emits noise, toxic pollution, or hazardous waste (Burke 1999, 63). Since these neighborhoods are disproportionately made up of Black, Indigenous, and other ethnically marked populations (Allen 2003; Bullard and Wright 2009; Davies 2018; Wiebe 2016), the existence of fenceline communities is closely related to inequalities based on race, ethnicity, and income in the US. In China, however, fenceline communities consist mainly of peas-

ants, rural-to-urban migrant workers (*nongmin gong*), and people "employed in industries such as mining, metallurgy, construction, nonferrous metal, and chemical industries" (Mah and Wang 2017, 268). China's fenceline communities are thus primarily characterized by their occupational distinctions, regional differences, and rural-urban disparities.

In the case of petrochemical pollution, however, many residents do not think being close to facilities is the only thing that determines who is affected. As I was repeatedly told by residents who lived near the petrochemical plant, it is wind direction that determines who is the most affected.⁴ Because of this, complaints about petrochemical pollution in Guangzhou do not necessarily come from those who live nearest to the petro-infrastructure. Such complaints are more often voiced by middle-class homeowners living farther away from the facilities. These residents, given their higher economic position and social status, are more likely to be offended by the pollution and less hesitant to object to it.

In this vein, the concept of fenceline community needs to be understood in terms of not only physical proximity but also the moral geography of that proximity—how risks are perceived, whether actions are taken, and by whom. For this reason, I divided my time during fieldwork between the peri-urban villages adjacent to the petrochemical facilities in Huangpu, Guangzhou, and the urban residential communities five to eight kilometers from the facilities. I selected these residential communities based on accounts I heard about petrochemical pollution in the area.

I carried out fieldwork during the spring and autumn of 2018, but I had been to Guangzhou on various occasions before this project, so my understanding of the city extends beyond this period. In addition to participant observation, I conducted open-ended, unstructured interviews in either Mandarin or my native language, Cantonese, with nearly 50 residents of these areas. My interlocutors consisted of villagers, urban residents, current and former petrochemical employees, real estate agents, taxi drivers, a director of an environmental nongovernmental organization (ENGO), and a local government officer. None except the ENGO director had participated in environmental activism. This is a unique cross section of the population for environment research, given that most studies of environmental politics in urban China focus on members of ENGOs (Johnson 2013, 357). To supplement my fieldwork, I also drew on online sources, since the internet has become an increasingly valuable research tool in China, as elsewhere. In particular, I took notes on people's opinions about the petrochemical industry and petrochemical incidents expressed on Chinese social media platforms (WeChat, Weibo, Zhihu, and Baidu), which proved very useful in documenting real-time developments of an incident and observing the unfolding of a complaint (Huang and Yip 2012). Social media platforms have opened up new avenues for people

to discuss sensitive topics “anonymously” in authoritarian China, although it is questionable whether true anonymity exists in a country where the state runs a pervasive system of digital surveillance.

Noticing and living with petrochemical pollution

The closest communities to the Guangzhou petrochemical plant are three villages that lie between the plant's petrochemical area and its refinery area. The three villages—the Old Village, the New Village, and Happy Valley—existed long before the government acquired their land to build the facilities in 1973. The south side of the New Village is within 800 meters of the industrial complex, separated from it by only a thin wall leading to the ethylene plant in the north. The northwestern side of the Old Village is adjacent to the ethylene plant, while its southern side is directly opposite Happy Valley. To the south of Happy Valley is Guangzhou Petrochemical Company, which is bordered by the ethylene plant to the northwest. At the time of my fieldwork, there were about 300 households and 1,000 people living in these three villages, with a mix of indigenous villagers and migrant workers.

Although there is no history of major chemical accidents in Guangzhou, the local government has set out plans to demolish these three villages and relocate their residents. According to an official statement published by the People's Government of Guangdong Province, the decision was jointly made by the inspection teams of the State Council of the People's Republic of China and the Ministry of Ecology and Environment in response to the central government's call for strengthening the health and safety standards of petrochemical production in the aftermath of the deadly chemical explosions in Tianjin in 2015 (He et al. 2018, 825). After nearly two years of preparation, the relocation process officially began in March 2017. A year later, 80 percent of the villagers were said to have signed the Relocation and Resettlement Agreement. Those who remained in the villages, I was told, were just waiting for the keys to their new apartments in urban Huangpu.

Even though the petrochemical plant was close to people's homes, those who lived nearest to it were not the most outspoken critics of the company or the pollution it produced. The villagers and migrant workers living there were more likely than others to downplay the severity of petrochemical pollution, suggesting that “exposure to environmental risks does not necessarily translate into heightened risk perception” (Tilt 2006 123–24). While they acknowledged that noxious fumes sometimes came from the plant, many said they were so used to the smell that they hardly noticed it anymore. For example, I heard people in the Old Village make comments such as “Yes, the ethylene plant stinks! You have to close all the windows when you smell it,” and “Of course there is pollution! This kind of toxicity

is slow acting. It may take many years for any health problem to manifest.” But when I asked the same people if they were excited to be relocated to the new resettlement housing in urban Huangpu, their responses were often ambivalent: “It's not about what I want or what I don't want. We move when the government wants us to move.”

In Happy Valley, where living conditions were better than those of the Old Village and where there was a stronger sense of community, people were more likely to reject the government's compensation offer and deny the severity of pollution. As a villager in Happy Valley said, “I've been living here since 2015. I like living here. Our village is clean and the rent is not as expensive as other places. Now that the government wants us to leave. I don't know where I can go!” When I asked villagers if they were bothered by the smell from the petrochemical plant, the typical answer was “Of course we are! But we're used to it. You won't notice it once you're used to it. You notice it only because you're new to the village.”

Even in the New Village, where the living conditions were much worse than those of Happy Valley, people also tended to downplay the threat of petrochemical pollution. Especially for migrant workers, convenience and economic benefits outweighed the potential risk of living near a petrochemical facility. Consider this conversation I had with two migrant workers in the New Village:

“Is there any pollution here?” I asked.

“Of course,” said the man who worked in a shoe factory near the village. “We live next to a petrochemical plant! What would you expect?”

“So why are you still living here?” I already knew the answer but asked nonetheless.

“The rent is cheap, and it's close to my work,” he said. “I'm only paying 280 RMB a month [US\$40] for a one-bedroom apartment, compared to 400 to 500 RMB a month [US\$57–71] near the market.”

“Yeah,” the worker next to him interjected. “This isn't a bad place. It's affordable, quiet, and safe.”

Compared to people living in the villages, middle-class homeowners in Huangpu seemed to notice petrochemical pollution more, even though they lived farther away from the complex. Yet their complaints never escalated into mass protests. This contradicts the expectation among some observers that China's growing urban middle class might foster a stronger civil society or even expedite the country's democratization, as suggested in previous research on NIMBYism and the public protest against para-xylene in the city of Xiamen (Ansfield 2013; Gu 2016; Lee and Ho 2014). But research in the last decade indicates that this is not happening (Ansfield 2013; Gu 2016; Johnson 2013; Lee and Ho 2014; Lora-Wainwright 2021; A. Zhang 2014). Since President Xi Jinping came into power in 2012, collective resistance has dwindled. The increasingly repressive laws and policies have left Chinese civil society with little breathing

space. In Huangpu most of the environmental complaints either took place privately or were confined to online discussions.

In March 2018, I witnessed a suspected case of petrochemical pollution. It started when urban residents in a few middle-class gated communities (*xiaoqu*) in Huangpu were awakened by a nauseating stench in the early hours of a Wednesday. “It smells like asphalt to me. Are they paving the road?” asked a resident in a homeowner chat group on WeChat. Another resident responded, “There must be some unscrupulous enterprises secretly releasing pollutants [*toupai*] at night!” More residents jumped into the discussion: “It’s probably coming from the plastic factory!” “Petrochemicals, the power plant, and trucks are the three cancers of Huangpu.”

The next day, residents affected by the smell filed a complaint with their property management offices. Initially, it was suspected that the odor came from either the roadwork nearby or the Guangzhou petrochemical plant three kilometers away. Yet the police found nothing anomalous at the plant. After nearly two weeks of investigation, the Huangpu Bureau of Environmental Protection concluded that the odor had originated from a small and poorly regulated petrochemical company in the town of Machong, 15 kilometers away.

At first, this news made residents sympathetic to the Guangzhou petrochemical company: “I feel sorry for them! Every time there is a smell, people blame them.” Another one typed, “I don’t think it was the petrochemical plant. I live near the plant, and I didn’t smell a thing that night.” But the discussion was soon taken over by more skeptical residents. “Are you kidding me? It’s hard to believe that the odor came from Machong. That’s 15 kilometers from here!” Others commented sarcastically, “I admire the officials’ imagination!” “Well, wherever the heck the leader [*lingdao*] said it is! Of course, it wouldn’t be the state-owned enterprise’s problem!”

To find out more, I visited a few gated communities and spoke with people about what happened that night. They displayed three reactions. Some denied there was ever any petrochemical pollution and said they were happy living where they were; some even praised the air quality of their gated communities. I could not tell if these people really did not notice anything or if they “unnoticed” what they had noticed without telling me the whole story. The second reaction was one of ambivalence. Although people showing this reaction admitted there was pollution in the area, they were uncertain of its sources: it might have been pollution along the roadside or pollution from one of the factories. They might have engaged in the art of unnoticing, but because they were uncertain, they did not have much to say to me. That is why I focused on the third reaction. This involved people acknowledging that they were affected by petrochemical and other industrial pollution, especially in

certain kinds of weather (e.g., rain or northern winds), but they thought the situation was tolerable and were willing to live with it—that is, to unnotice it. Such a response paralleled the villagers’ reactions described above. Underpinning this was the consensus that the petrochemical company had improved pollution control in recent years. According to Mrs. Ren, a retired petrochemical technician and longtime resident of Huangpu, the company often used to covertly release pollutants at night, but such practices were abandoned long ago. “The Chinese government is taking environmental protection very seriously these days,” she said. “Nowadays, if your factory does not meet the environmental standards, the government will either shut it down or charge a heavy fine.”

In Huangpu District, petrochemical pollution is visible but unseen, felt yet ignored. When the villagers and urban residents said they didn’t notice it, they meant that they had noticed, but they chose to unnotice it. The irony, it seems, is that the farther away they lived from the petrochemical site, the more they noticed the petrochemical industry. This moral geography of proximity (Smith 2000) explains not only people’s apparent indifference to the health risks of chemical exposure but also their bewilderment at the ethnographer’s enthusiasm for the “chemical sublime” (Shapiro 2015), which to them was more like the chemical mundane. As for me, I did not have to live with the effects of the petrochemical industry every day, and this gave me the privilege to notice things that were supposed to go unnoticed. It is against this background that I write the next section: If petrochemical pollution is meant to be tolerated, how do people justify it through the art of unnoticing?

The art of unnoticing

Slow observation

In China public perceptions of pollution are often marked by uncertainty and ambiguity (Lora-Wainwright 2013a, 2013b). There is little reliable environmental monitoring data (Tilt 2013b, 1152), and most data related to air and water quality are aggregated at the county level (or above), making it difficult for both scholars and the general public to “assess pollution exposures at the community and individual levels” (1150). As a result, many Chinese people, especially those with the least resources in the country, have resorted to using their own bodies to assess the severity of pollution (1152). Their bodies have become the most readily available environmental monitors. This has led many residents of the villages I visited to regard longevity as evidence that petrochemical pollution is not as harmful as some people claim. As Granny Ma said,

I’ve lived next to the petrochemical plant for three decades already. What’s the point of worrying now?

Many people in our village live till their 90s. My mother-in-law died at age 89. My father-in-law died at 92. There is even a nursing home nearby called the Village of Longevity!

The good health and long lives of the elderly were considered powerful testimonies to the innocuous nature of the chemical mundane in these three villages. The Chinese villagers deduced this by practicing what Davies (2018) calls “slow observation” in Cancer Alley, one of the most environmentally contaminated regions in the United States. But unlike people living in Cancer Alley, who used “slow observation” as a “barometer” (Davies 2018, 1537) for perceiving the “slow violence” (Nixon 2011) of “sustained environmental brutality” (Davies 2018, 1537), the villagers in Huangpu did not attribute the changing environment to toxic contamination. Rather, they used “slow observation” to convince themselves that people and crops were strong enough to survive the pollution in this area. It was a sign of resilience. Although many villagers have given up farming for factory jobs since the petrochemical plant began operation in 1973,⁵ they continued to grow fruits and vegetables in their backyards for their own consumption. “Aren’t you afraid of pollution from the petrochemical plant?” I asked Uncle Qin, a 90-year-old who had been living in the New Village since before the petrochemical company arrived. “There is no need to make a big deal of it!” he replied. “The pollution is not as bad as people said.”⁶

Without an obvious health crisis, the villagers rarely attributed their mild symptoms, such as coughing or runny nose, to petrochemical pollution. It is difficult enough for epidemiologists to establish links between specific illnesses and exposure to petrochemicals, so from the layperson’s perspective, such links make sense only when they resonate with their moral parameters and everyday experience (Lora-Wainwright 2010, 79). For example, homegrown food, they said, was “safer” than food bought from the market, since it might be laced with ineradicable amounts of pesticides.⁷ For the villagers, pesticides seemed more dangerous than petrochemical pollution. When a villager proudly showed me her homegrown lychee tree, I asked, “Don’t you worry about petrochemical pollution on your fruits and vegetables?” Her first reaction was to laugh. “Lychees have skin!” she said. “You just have to wash them and peel the skin off. If humans can survive petrochemical pollution, the plants will be all right!”

As a technique of unnoticing, slow observation may seem like an oxymoron. But as my examples show, the villagers’ dismissal of petrochemical pollution resulted not from failing to notice but, paradoxically, from the culmination of years of slow observation. They had developed a keen awareness of their environment and devised explanations to decide whether it was safe enough to remain in the village.

Assenting to “fate”

Fatalism is a recurring theme in many studies of toxic pollution around the world (Jovanović 2016; Lora-Wainwright 2021; Mah and Wong 2017; Singer 2011; Tilt 2006, 2013a). Among the villagers and the urban residents in Huangpu, fate (*ming*) played a central role in how they understood their circumstances, in particular why they ended up living in a petrochemical community. Whenever I asked my interlocutors if they were worried about pollution from the plant, they often responded with this Cantonese idiom: “How much you can eat, how many clothes you have, and how long you live are all predestined [*zing ding ge*].” Other times they would say, “There’s no point in worrying. No one in China can escape pollution!”

Although this sounds fatalistic, their frustrations should not be interpreted as a simple expression of fatalism, by which I mean the attitude of accepting the inevitable with a feeling of powerlessness. I have two reasons for emphasizing this. First, fatalism and inevitability were different for Huangpu residents. To accept that pollution is part of living in China today was considered not only a realistic but also a stoic response to a grim yet unavoidable circumstance. Second, the Chinese idea of fate (*ming*) must be understood with the notion of capability (*nengli* or *benshi*; Harrell 1987; Steinmüller 2013, 120–22). As Harrell (1987) argues, it is a widespread misconception in the West that Chinese culture is largely fatalistic. For the Chinese, *ming* can be altered with an individual’s “hard work, thrift, frugality, [and] moderate risk taking,” and with one’s “ability to cooperate with and manipulate others” (Harrell 1987, 99). Before judging someone’s fate, people say, one must assess the person’s capability (*nengli* or *benshi*); the same holds true when judging oneself. In other words, fate explains people’s success or failure only when they have exhausted all other efforts (Harrell 1987, 99).

This is indeed how some people in Huangpu understood their personal circumstances. While they accepted that environmental pollution is a national burden shared by everyone in the country, the inequality of that burden—that is, why one person ends up living in a district that bears more of the petrochemical risks and lacks the *benshi* to flee—was considered a matter of personal fate. To an extent, this way of thinking reflects the postsocialist milieu in China, in which “people’s understandings of environmental health risks, and their tactics for coping with these risks,” have been largely “individualized” since the country’s market reforms began in the early 1980s (Tilt 2013a, 299). Not only are people left to cope with pollution as individuals rather than as a community forged by environmental injustices, but they are also made to feel inadequate because they cannot escape their predicament. Consequently, it makes more sense for these people to accept their fate (*ming*) than to dwell on larger structural issues—social,

economic, and political—that are beyond their control. In assenting to fate, they learn to unnotice the collective frustration over years of environmental injustices.

This was the case with 65-year-old Lee Popo. After living for decades next to the plant's former workers' dormitory (some of which are now privatized and sold on the market), she had come to terms with living in this rundown neighborhood, with its petrochemical pollution. "Well, that's life," she said. "There's nothing I can do about it. Move elsewhere? I'm not capable [mei benshi]. If you're capable, you can move to Canada and enjoy all the fresh air you want." On another occasion, I asked a former employee where I could find more people to interview for my project. To my surprise, she advised me to seek out the "incapable" people (mei benshi de) living in the petrochemical dormitory. By "incapable," she meant the retired workers at the bottom of the ladder of the state-owned enterprise. These workers did not earn enough during their tenure at the petrochemical company to relocate to another district after their retirement. "If you're capable, you can move onto something better," she said. "You will leave. Those who are still in the dorm are either incapable or lazy. They surrender to their fate."

At first glance, those who were "left behind" may appear to have accepted their fate. But this is only part of the story. For the so-called incapable and less capable residents in Huangpu, fate was determined not so much by what choices were available to them as by how they thought about why certain choices were or were not available to them. By accepting that life is full of compromises, the "incapable" could transcend the narratives of incapability that fixated on their limitations, allowing them to focus instead on what they had chosen among their limited options.⁸ The rationale was epitomized in my conversation with Mr. Chan, a retired petrochemical employee who was stuck in the former petrochemical dormitory owing to his own "incapability":

MR. CHAN. Back in the day, we joined the petrochemical company because the benefits were good. At a minimum, there were gas supplies, not to mention job security, health care, child education, and pensions. If both the husband and the wife worked for the state-owned enterprise, they would get a two-bedroom apartment in the dormitory. We stay here because the location is convenient for work. This isn't a bad place to live. Yes, sometimes there is chemical smell, but nothing is perfect in this world.

LORETTA. After the state-owned enterprise housing was privatized, people were given the option to purchase the apartments and sell them if they had full property rights. Why didn't you do that?⁹

MR. CHAN. You think everybody has the capability [benshi] to sell their apartment and buy a new one else-

where? Life is not as simple as that. The thing is, the living environment of the dormitory is all right. I've been living here for more than 20 years now. My son and my grandson were born here. We're all very used to living in this community. For me, it's nice to be able to chat with other retired petrochemical employees in the courtyard, playing cards and chess. If I move to another district, I'll have nobody to talk to! Life is like that. You gain some, you lose some [yau dak yau sat].

Although Mr. Chan also adopted the discourse of incapability to make sense of why he remained in the former dormitory, he did not relinquish his agency. In fact, giving in to the forces of life "was actually liberating and resulted in a new sort of agency" (Lupke 2005, ix). When Mr. Chan accepted his limitation and rationalized why he could not "have it all," he learned to unnotice petrochemical pollution and live his life "within the bounds that fate has already set out" for him (Harrell 1987, 101). Assenting to fate does not mean accepting the inevitable with reluctance and pessimism. It is not a sign of powerlessness but, rather, an art of noticing the trade-off and unnoticing the uncontrollable. By acknowledging *ming*, the "incapable" regain power and agency by giving up the desire to strive and control.

A community of complicity

The idea that life is a series of trade-offs was embraced not only by the so-called incapable class but also by middle-class people who, as homeowners, were deemed capable. Since the 1990s homeownership has become the new Chinese dream. The country's real estate boom has spurred rapid growth in Guangzhou, just as it has in other Chinese metropolises. These days, people can hardly walk down the streets of Guangzhou without being accosted by a real estate agent. As L. Zhang (2010, 1) observes,

A new revolution in homeownership and living is sweeping through the booming Chinese metropolises. This time the main actors on the social stage are not peasants, migrants, or working-class proletarians but middle-class professionals and entrepreneurs in search of their private paradise.

Given that real estate was the hottest topic in town, I spoke with homeowners and real estate agents who lived and worked in Huangpu. Unsurprisingly, all the real estate agents downplayed the impact of petrochemical pollution in the area. I was especially struck when two agents tried to impress me with a top-floor apartment that had, in their words, "a panoramic view of the city," which turned out to be a panoramic view of Huangpu's industrial landscape (see Figure 3). The agents were bemused by my lukewarm response, echoing my driver's puzzlement at my fixation on the petrochemical landscape. People in this district had learned to normalize the invidious effects of the petrochemical industry. They did so to justify not



Figure 3. A panoramic view of Huangpu's industrial landscape, as shown by real estate agents touting a top-floor apartment, November 2018. (Loretta Ieng Tak Lou) [This figure appears in color in the online issue]

only living there but also buying there. For both the real estate agents and the homeowners in Huangpu, it seemed reasonable to accept the trade-off between affordable homes and what they considered minor pollution. Not only that, the tacit understanding among homeowners in this district was that some pollution should be expected. Complaining about occasional or “minor” pollution was considered greedy, selfish, and ungrateful, especially for those who were new to the area. Their rationale was that the petrochemical plant had been there long before the new homes were built, and the industry had been contributing to the national and local economies since the 1970s. As the Chinese saying goes, it is immoral to “pull away the plank after using it as a bridge” (*guo qiao chou ban*). This was a point made repeatedly to me by long-term residents, who felt that “latecomers” had no right to complain. Pollution, they argued, should be regarded as an integral part of owning a home in this district. The Western concept of environmental justice did not enter into the mainstream narratives.

For those with a stake in the real estate market, pollution has become the emperor's new clothes. But their contrived ignorance is not impregnable. As I found out, people took offense when I asked them why they chose to live in a petrochemical district. To sensitive ears, my question was wrongly taken as a moral judgment of their inability to leave for a better environment. It reminded them of the efforts they put into ignoring what they have noticed, as well as the prices they paid for being homeowners in an industrial district. I had touched a nerve about the “cultural intimacy” of Huangpu, that is, “the recognition of those aspects of an officially shared identity that are considered a source of external embarrassment but that nevertheless provide insiders with their assurance of common sociality” (Herzfeld 2016, 7). I realized this when I spoke to Auntie Wang, who lived comfortably in a middle-class apartment complex five kilometers away from the petrochemical plant. When I asked Auntie Wang if she was concerned about the health ramifications of petrochemical pollution, she was infuriated:

So what? You get used to it. Petrochemical pollution affects the whole of Huangpu, not just this apartment complex. It's not like we live right next to the petrochemical plant. When you smell it, just close the window. It's as simple as that. If you're so worried, leave the city and be a hermit in the mountain. I am 70 years old. You think I would care about this kind of thing? Like it or not, people are still buying and renting here.¹⁰

Despite the bitterness, the perceived benefits of homeownership still outweighed the inconvenience of what most people in Huangpu dismissed as “occasional” chemical smells. In the villages too, thanks to the real estate boom of the last two decades, many residents could leave the factories and make a living by renting out their spare rooms or second homes to migrants who came to work for the petrochemical plant or nearby factories. In urban Huangpu, the “material comfort and social distinction” (L. Zhang 2010, 1) associated with homeownership were even more pronounced. After I visited the apartments in several gated communities, it became clear to me why some people would call them “private paradises” (*geren de tiantang*): as L. Zhang (2010, 2) explains, these homes and residential compounds were by no means extraordinary by American standards, but “in local people's eyes they were spacious, luxurious, and modern.”

One of those so-called private paradises in urban Huangpu was Park Manor, a gated apartment complex built around small hills and lush woods. One of its major selling points was that it gave people an opportunity to “own a piece of nature”—a marketing tagline printed on its property flyer. Although the apartments were encircled by many heavy and light industrial plants, the aesthetics of the natural environment within the gated community were decent enough for people to temporarily unnotice certain things. The apartment courtyard resembled an Asian botanical garden, imbued with exotic scents of tropical trees and flowers. Living there, one could momentarily escape the nauseous air pollution on the main road. As one homeowner reasoned,

There are so many factories in Huangpu. There is really no way for us to find out which one is covertly releasing pollutants into the environment. For ordinary people like us, the interior, the floorplan, and the environment of the residential community are more important. As long as we're not living next to the petrochemical plant, we should be fine.

In such an intensively industrialized area, it was difficult for people to pinpoint the sources of pollution. Indeed, there was no consensus that the petrochemical industry was the main or the worst polluter in Huangpu. The city is home to many industrial plants, including a Toyota

factory and several logistics companies. Thus, homeowners in these gated communities accepted that pollution was simply part of living in Huangpu. Residents made no demands for a nontoxic life and organized no NIMBY movements, as did people in other parts of China (Gu 2016; Lee and Ho 2014; A. Zhang 2014). After all, the petrochemical industry was there before their backyards were built in the first place. Buying a home in a city like Guangzhou is likely to be one of the greatest financial transactions a Chinese urban dweller will ever make. As a result, homeownership is the most direct way that many people become stakeholders in a community. It makes little sense for them to complain after having made the financial and emotional investments of their lifetime. What was at stake instead was the prestige of homeownership, the market value of their homes, and the immediate environments of their “private paradises.” These shared sentiments form what Steinmüller (2010) calls a “community of complicity.” By focusing on their own gated communities, homeowners in Huangpu were complicit in unnoticing pollution in the commons. In this sense, homeownership, like fate, served as “a prop of the status quo” because it helped “everyone in the midst of such a struggle”—it was “a comfort to those who lost, and an admonition to others who keep trying” (Harrell 1987, 107).

Rethinking environmental justice by noticing the unnoticed

The “elephant in the room” usually refers to silences, denials, conspiracies, or open secrets (Zerubavel 2008). In this article, I approach the elephant in the room with a more neutral neologism: the art of unnoticing, by which I mean a contrived form of ignorance that people employ to justify living in certain environments and living with certain adversities. Instead of focusing on the darker sides of unnoticing, which tend to see ignorance as the absence of knowledge and therefore reduce it to a purely negative phenomenon bearing no value of its own (Mair, Kelly, and High 2012, 4), I use the art of unnoticing to shed light on techniques that enable people who live near a petrochemical plant to live with the reality of pollution and reclaim their agency in face of the inevitable. One novelty of this article is that it moves away from the mainstream narrative in which agency entails overt action. In contrast, I illuminate the significance of deliberate inaction and assertive nondoing in the making of agency.

This article identifies three common arts of unnoticing that are particular but by no means unique to my field sites in China. The first one is practicing slow observation. In commenting on how human and the crops have survived despite decades of petrochemical pollution, residents of fenceline communities convinced themselves through

long-term observations that it is not fatal to live next to the petrochemical plant. The second strategy is assenting to fate. When people realized that pollution is inevitable, they learned to adjust their expectations according to their “capability” (benshi). For Huangpu residents, accepting fate was not the same as fatalism. Quite the contrary: such acceptance enabled them to create a narrative that allowed them to shift their attention from what was inevitable to what they had gained despite the inevitable. The final strategy of unnoticing is engaging in complicity, which enables the “capable” villagers and middle-class homeowners to accept the trade-off between affordable homes and supposedly minor pollution. As Jovanović (2016, 496) poignantly remarks regarding her research participants in Serbia, “It was not that people only adapted to risks while accepting them as inevitable. The risk was also seen as something that could be calculated and bargained with in relation to hopes for stable futures.” For homeowners in the villages and gated communities of Huangpu, the comfort and security of homeownership outweighed the nuisance of pollution—a mentality that was further reinforced by slow observation. Together, Huangpu’s residents bargained with risk and formed a community of complicity, in which techniques of unnoticing were woven into the fabric of the district’s cultural intimacy.

What I have dubbed “the art of unnoticing” is by no means a phenomenon found only among Chinese people or people living with environmental pollution. For example, in *Negative Exposures: Knowing What Not to Know in Contemporary China*, Hillenbrand (2020) investigates how Chinese people have learned to keep quiet in order to heal and to protect themselves from past traumas, such as the Nanjing Massacre, the Cultural Revolution, and the Tiananmen Square protests. The result of this collective effort to ignore gives rise to what Lim (2015) calls “the People’s Republic of Amnesia.” As Hillenbrand (2020, xix) notes, “The forces of censorship cannot adequately explain why parts of China’s modern history are missing from public discourse.” It is, rather, people’s collective decision to forget (Lim 2015) that “keeps the past in a state of restless quiescence” (Hillenbrand 2020, xix). In this light, future research could examine other mechanisms and strategies of unnoticing, as well as the specific histories from which contrived ignorance arises, both in and beyond China.

The concept of unnoticing also has significant implications for future research on environmental justice. On the last night of fieldwork, I had a long chat with Ah Wen, my key interlocutor in Guangzhou. During our conversation, Ah Wen told me she had never heard of the phrase *huanjing gongyi*, the Chinese translation of “environmental justice.” Before that, I already knew that this concept had yet to “become popular within environmental policy or civil society” in China (Mah and Wang 2017, 264). Of course, this

does not mean that people in China lack a sense of justice. The key question is not why the concept of environmental justice is not more prevalent in China, but how to approach environmental justice when there are tensions between local understandings of fairness and deservingness, on the one hand, and the globalized framing of the environmental justice movement (Walker 2012), on the other. When the global environmental justice movement focuses on tackling the unequal social and geographic distribution of environmental burdens, what do we do when people deliberately unnotice the inequality that affects them just so they can carry on with their lives, and with such sophisticated justifications? In Huangpu, the symbolic violence (Bourdieu 1991) and the accumulated injuries (Mah and Wang 2019) of toxic pollution highlight the inadequacy of focusing only on the normative discourses of justice. It forces us to rethink what kind of environmental justice movement is possible for those who feel they don’t deserve to live in a better environment. Earlier ethnographic studies of environmental injustice in China have shifted our attention from collective activism (Ho and Edmonds 2008; Jing 2003; Stern 2011; van Rooij 2010) to individual endeavors, and from there, to a sense of fatalism and resignation (Lora-Wainwright 2021). What seems to be missing, though, is a nuanced analysis of the process through which symbolic violence, complicity, and fatalistic thinking are developed, justified, and sustained, and what this means for environmental justice. I hope this article has indicated a new path in this direction.

Finally, as an ethnographic practice, taking unnoticing seriously entails a complementary art of noticing (Tsing 2015), one that pays attention to more than what captivates ethnographers. After all, “the point of ethnography is to learn how to think about a situation together with one’s informants,” and research categories should develop with the research and not before it (Tsing 2015, ix). I went into the field with questions about environmental justice and left the field in contemplation of fate and complicity. I have never managed to unnotice the ghastly refinery in Huangpu the way my driver did, but I have since learned to notice things that people unnotice in their lifeworlds.

Notes

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1. All personal names have been changed to protect the identity of my interlocutors.

2. These toolkits include chemical sensors, mapping devices, and other "generative design practices and civic technoscience initiatives" (Shapiro and Kirksey 2017, 486), all of which seek to unravel the emerging chemosociality.

3. As Singer (2011, 158) notes in his study of the Chemical Corridor in southern Louisiana, people are certain that their living environment is full of toxic chemicals, yet "they usually avoid thinking about these issues too much unless they are prompted by specific events . . . like an oil spill or a chemical plant explosion." Instead, "they go on with their lives" and hope that by going to church and praying regularly, "things will be okay or even improve" (158).

4. This is not unique to China. As Jovanović (2016, 489) observes in her study of a copper-processing town in eastern Serbia, "The amount of pollution that descended usually depended on the wind and other meteorological conditions."

5. Before that, the villagers used to cultivate a great variety of fruits and crops for trade, such as lychees, plums, Chinese black olives, oranges, and pineapples. In fact, their pineapples were so famous that during the 1950s, a station was set up to acquire pineapples for export to the Soviet Union.

6. Similar attitudes have been documented in Singer's (2011, 156) study in Louisiana's Chemical Corridor.

7. This practice is not unique to China. By engaging in "risky food practices," people produce new social facts about environmental risks (Davies and Polese 2015; Petryna 2013).

8. This way of thinking was made possible because the understanding of fate is often a post hoc rationalization (Harrell 1987, 101; Steinmüller 2013, 120).

9. Since the late 1990s the Chinese government has implemented a series of reform measures to cut costs and increase the efficiency of state-owned enterprises (Wang, Wang, and Bramley 2005).

10. Private property likewise takes precedence in a pollution-stricken community in Ontario, Canada, as Pitkanen's (2017) study makes clear.

References

Ahmann, Chloe, and Alison Kenner. 2020. "Breathing Late Industrialism." *Engaging Science, Technology, and Society* 6: 416–38. <https://doi.org/10.17351/ests2020.673>.

Allen, Barbara L. 2003. *Uneasy Alchemy: Citizens and Experts in Louisiana's Chemical Corridor Disputes*. Cambridge, MA: MIT Press.

Ansfield, Jonathan. 2013. "Alchemy of a Protest: The Case of Xiamen PX." In *China and the Environment: The Green Revolution*, edited by Sam Geall, 136–202. London: Zed Books.

Babidge, Sally. 2018. "Sustaining Ignorance: The Uncertainties of Groundwater and Its Extraction in the Salar de Atacama, Northern Chile." *Journal of the Royal Anthropological Institute* 25 (1): 83–102. <https://doi.org/10.1111/1467-9655.12965>.

BBC News. 2015. "China Explosions: Tianjin Blasts 'on Seismic Scale.'" August 13, 2015. <https://www.bbc.co.uk/news/world-asia-china-33901206>.

BBC News. 2019. "China Chemical Plant Explosion Kills Six in Yancheng." March 21, 2019. <https://www.bbc.co.uk/news/world-asia-china-47650986>.

Beck, Ulrich. 1992. *Risk Society: Towards a New Modernity*. London: Sage.

Benson, Peter, and Stuart Kirsch. 2010. "Capitalism and the Politics of Resignation." *Current Anthropology* 51 (4): 459–86. <https://doi.org/10.1086/653091>.

Bourdieu, Pierre. 1991. *Language and Symbolic Power*. Edited by John B. Thompson. Translated by Gino Raymond and Matthew Adamson. Cambridge: Polity Press.

Bovensiepen, Judith, and Mathijs Pelkmans. 2020. "Dynamics of Wilful Blindness: An Introduction." *Critique of Anthropology* 40 (4): 387–402. <https://doi.org/10.1177/0308275x20959432>.

Bullard, Robert D., and Beverly Wright. 2009. *Race, Place, and Environmental Justice after Hurricane Katrina: Struggles to Reclaim, Rebuild, and Revitalize New Orleans and the Gulf Coast*. Boulder, CO: Westview.

Burke, Edmund M. 1999. *Corporate Community Relations: The Principle of the Neighbor of Choice*. Westport, CT: Greenwood Group.

Choy, Timothy. 2012. *Ecologies of Comparison: An Ethnography of Endangerment in Hong Kong*. Durham, NC: Duke University Press.

Davies, Thom. 2018. "Toxic Space and Time: Slow Violence, Necropolitics, and Petrochemical Pollution." *Annals of the American Association of Geographers* 108 (6): 1537–53. <https://doi.org/10.1080/24694452.2018.1470924>.

Davies, Thom, and Abel Polese. 2015. "Informality and Survival in Ukraine's Nuclear Landscape: Living with the Risks of Chernobyl." *Journal of Eurasian Studies* 6 (1): 34–45. <https://doi.org/10.1016/j.euras.2014.09.002>.

Feser, Alison. Forthcoming. "After Analog: On Photochemical Life in the Imaging Capital of the World." PhD diss., University of Chicago.

Fortun, Kim. 2001. *Advocacy after Bhopal: Environmentalism, Disaster, New Global Orders*. Chicago: University of Chicago Press.

Fortun, Kim. 2012. "Ethnography in Late Industrialism." *Cultural Anthropology* 27 (3): 446–64. <https://doi.org/10.1111/j.1548-1360.2012.01153.x>.

Gu, Hongyan. 2016. "Nimbyism in China: Issues and Prospects of Public Participation in Facility Siting." *Land Use Policy* 52 (March): 527–34.

Hao, Feng. 2019. "Fujian Fishing Village Hit by Chemical Leak." *China Dialogue Ocean*, January 4, 2019. <https://chinadiialogueocean.net/en/pollution/5897-chemical-leak-xiaocuo-china/>.

Harrell, Stevan. 1987. "The Concept of Fate in Chinese Folk Ideology." *Modern China* 13 (1): 90–109. <https://www.jstor.org/stable/189148>.

He, Guizhen, Chunci Chen, Lei Zhang, and Yonglong Lu. 2018. "Public Perception and Attitude towards Chemical Industry Park in Dalian, Bohai Rim." *Environmental Pollution* 235:825–35. <https://doi.org/10.1016/j.envpol.2017.12.105>.

Herzfeld, Michael. 2016. *Cultural Intimacy: Social Poetics and the Real Life of States, Societies, and Institutions*. 3rd ed. New York: Routledge.

Hillenbrand, Margaret. 2020. *Negative Exposures: Knowing What Not to Know in Contemporary China*. Durham, NC: Duke University Press.

Ho, Peter, and Richard L. Edmonds. 2008. *China's Embedded Activism: Opportunities and Constraints of a Social Movement*. London: Routledge.

Huang, Ronggui, and Ngai-ming Yip. 2012. "Internet and Activism in Urban China: A Case Study of Protests in Xiamen and Panyu."

- Journal of Comparative Asian Development* 11 (2): 201–23. <https://doi.org/10.1080/15339114.2012.720125>.
- Ingold, Tim. 2011. *The Perception of the Environment: Essays on Livelihood, Dwelling and Skill*. London: Routledge.
- Jing, Jun. 2003. "Environmental Protests in Rural China." In *Chinese Society: Change, Conflict and Resistance*, edited by Elizabeth J. Perry and Mark Selden, 205–22. London: Routledge.
- Johnson, Thomas. 2013. "The Health Factor in Anti-Waste Incinerator Campaigns in Beijing and Guangzhou." *China Quarterly* 214 (June): 356–75. <https://doi.org/10.1017/S0305741013000660>.
- Jovanović, Deana. 2016. "Prosperous Pollutants: Bargaining with Risks and Forging Hopes in an Industrial Town in Eastern Serbia." *Ethnos* 83 (3): 489–504. <https://doi.org/10.1080/00141844.2016.1169205>.
- Larkin, Brian. 2014. "Techniques of Inattention: The Mediality of Loudspeakers in Nigeria." *Anthropological Quarterly* 87 (4): 989–1015. <https://www.jstor.org/stable/43652737>.
- Lee, Kingsyhon, and Ming-sho Ho. 2014. "The Maoming Anti-PX Protest of 2014: An Environmental Movement in Contemporary China." *China Perspectives* 3:33–39. <https://doi.org/10.4000/chinaperspectives.6537>.
- Lim, Louisa. 2015. *The People's Republic of Amnesia: Tiananmen Revisited*. Oxford: Oxford University Press.
- Lora-Wainwright, Anna. 2010. "An Anthropology of 'Cancer Villages': Villagers' Perspectives and the Politics of Responsibility." *Journal of Contemporary China* 19 (63): 79–99. <https://doi.org/10.1080/10670560903335785>.
- Lora-Wainwright, Anna. 2013a. "The Inadequate Life: Rural Industrial Pollution and Lay Epidemiology in China." *China Quarterly* 214 (June): 302–20. <https://doi.org/10.1017/S0305741013000349>.
- Lora-Wainwright, Anna. 2013b. "Plural Forms of Evidence and Uncertainty in Environmental Health: A Comparison of Two Chinese Cases." *Evidence and Policy* 9 (1): 49–64. <https://doi.org/10.1332/174426413x662554>.
- Lora-Wainwright, Anna. 2021. *Resigned Activism: Living with Pollution in Rural China*. Rev. ed. Cambridge, MA: MIT Press. Apple Books.
- Lupke, Christopher. 2005. *The Magnitude of Ming: Command, Allotment, and Fate in Chinese Culture*. Honolulu: University of Hawai'i Press.
- Mah, Alice, and Xinhong Wang. 2017. "Research on Environmental Justice in China: Limitations and Possibilities." *Chinese Journal of Environmental Law* 1 (2): 263–72. <https://doi.org/10.1163/24686042-12340016>.
- Mah, Alice, and Xinhong Wang. 2019. "Accumulated Injuries of Environmental Injustice: Living and Working with Petrochemical Pollution in Nanjing, China." *Annals of the American Association of Geographers* 109 (6): 1961–77. <https://doi.org/10.1080/24694452.2019.1574551>.
- Mair, Jonathan, Ann H. Kelly, and Casey High. 2012. "Introduction: Making Ignorance an Ethnographic Object." In *The Anthropology of Ignorance: An Ethnographic Approach*, edited by Casey High, Ann H. Kelly, and Jonathan Mair, 1–32. New York: Palgrave Macmillan.
- Mazzarella, William T. S. 2009. "Book Review: The Perception of the Environment: Essays in Livelihood, Dwelling and Skill." *Mind, Culture, and Activity* 9 (2): 150–57. https://doi.org/10.1207/S15327884MCA0902_05.
- McGoey, Linsey. 2012. "Strategic Unknowns: Towards a Sociology of Ignorance." *Economy and Society* 41 (1): 1–16. <https://doi.org/10.1080/03085147.2011.637330>.
- Murphy, Michelle. 2017. "Alterlife and Decolonial Chemical Relations." *Cultural Anthropology* 32 (4): 494–503. <https://doi.org/10.14506/ca32.4.02>.
- Nixon, Rob. 2011. *Slow Violence and the Environmentalism of the Poor*. Cambridge, MA: Harvard University Press.
- Petryna, Adriana. 2013. *Life Exposed: Biological Citizens after Chernobyl*. Rev. ed. Princeton, NJ: Princeton University Press.
- Pitkanen, Laura. 2017. "Black Wednesday: Radiation, Stigma and Property Values." *Environment and Planning A* 49 (7): 1537–55. <https://doi.org/10.1177/2F0308518x17699205>.
- Proctor, Robert N., and Londa Schiebinger. 2008. *Agnology: The Making and Unmaking of Ignorance*. Stanford, CA: Stanford University Press.
- Shapiro, Nicholas. 2015. "Attuning to the Chemosphere: Domestic Formaldehyde, Bodily Reasoning, and the Chemical Sublime." *Cultural Anthropology* 30 (3): 368–93. <https://doi.org/10.14506/ca30.3.02>.
- Shapiro, Nicholas, and Eben Kirksey. 2017. "Chemo-ethnography: An Introduction." *Cultural Anthropology* 32 (4): 481–93. <https://doi.org/10.14506/ca32.4.01>.
- Singer, Merrill. 2011. "Down Cancer Alley: The Lived Experience of Health and Environmental Suffering in Louisiana's Chemical Corridor." *Medical Anthropology Quarterly* 25 (2): 141–63. <https://doi.org/10.1111/j.1548-1387.2011.01154.x>.
- Smith, David M. 2000. *Moral Geographies: Ethics in a World of Difference*. Edinburgh: Edinburgh University Press.
- Steinmüller, Hans. 2010. "Communities of Complicity: Notes on State Formation and Local Sociality in Rural China." *American Ethnologist* 37 (3): 539–49. <https://doi.org/10.1111/j.1548-1425.2010.01271.x>.
- Steinmüller, Hans. 2013. *Communities of Complicity: Everyday Ethics in Rural China*. Oxford: Berghahn.
- Stern, Rachel E. 2011. "From Dispute to Decision: Suing Polluters in China." *China Quarterly* 206 (June): 294–312. <https://doi.org/10.1017/S0305741011000270>.
- Tilt, Bryan. 2006. "Perceptions of Risk from Industrial Pollution in China: A Comparison of Occupational Groups." *Human Organization* 65 (2): 115–27. <https://doi.org/10.17730/humo.65.2.69dufcr1hatnpu5v>.
- Tilt, Bryan. 2013a. "Industrial Pollution and Environmental Health in Rural China: Risk, Uncertainty and Individualization." *China Quarterly* 214:283–301. <https://doi.org/10.1017/S0305741013000350>.
- Tilt, Bryan. 2013b. "The Politics of Industrial Pollution in Rural China." *Journal of Peasant Studies* 40 (6): 1147–64. <https://doi.org/10.1080/03066150.2013.860134>.
- Tsing, Anna Lowenhaupt. 2015. *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins*. Princeton, NJ: Princeton University Press.
- Tsing, Anna, and Maija Lassila. 2017. "Interview with Anna Tsing." *Suomen Antropologi* 42 (1): 22–30. <https://journal.fi/suomenantropologi/article/view/65083>.
- van Rooij, Benjamin. 2010. "The People vs. Pollution: Understanding Citizen Action against Pollution in China." *Journal of Contemporary China* 19 (63): 55–77. <https://doi.org/10.1080/10670560903335777>.
- Walker, Gordon. 2012. *Environmental Justice: Concepts, Evidence and Politics*. London: Routledge.
- Wang, Ya Ping, Yanglin Wang, and Glen Bramley. 2005. "Chinese Housing Reform in State-Owned Enterprises and Its Impacts on Different Social Groups." *Urban Studies* 42 (10): 1859–78. <https://doi.org/10.1080/2F00420980500231746>.

- Wiebe, Sarah Marie. 2016. *Everyday Exposure: Indigenous Mobilization and Environmental Justice in Canada's Chemical Valley*. Vancouver: University of British Columbia Press.
- Zerubavel, Eviatar. 2008. *The Elephant in the Room: Silence and Denial in Everyday Life*. Oxford: Oxford University Press.
- Zerubavel, Eviatar. 2011. *Social Mindscales: An Invitation to Cognitive Sociology*. Cambridge, MA: Harvard University Press.
- Zhang, Amy. 2014. "Rational Resistance: Homeowner Contention against Waste Incineration in Guangzhou." In "Contested Urban Spaces: Whose Right to the City?," edited by Bettina Gransow,

special issue, *China Perspectives* 2:45–52. <https://doi.org/10.4000/chinaperspectives.6458>.

Zhang, Li. 2010. *In Search of Paradise: Middle-Class Living in a Chinese Metropolis*. Ithaca, NY: Cornell University Press.

Loretta Ieng Tak Lou
Department of Anthropology
Durham University
ieng.t.lou@durham.ac.uk