Bricks of the Future:

The Making and Unmaking of a New Beijing

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ABSTRACT: How might the future of a city be foretold in a single ubiquitous, yet often invisible, building material? Across the Chinese capital today, municipal planners, developers, artists, and residents alike are mobilising the brick not only as a window to the past and an indictment of the present, but a key portent of the future. Amid a capricious climate of creative destruction, this article tracks how bricks emerge as historicised artifacts, aesthetic interventions, and weapons used by and against the forces of China's spectacular development. Against clichés of intractable permanence, the Chinese brick today is revealing new and unpredictable vicissitudes as it is co-opted in projects of governance and resistance, demarcating both the material and symbolic parameters of urban belonging in contemporary Beijing. Approaching the lived form of the Chinese metropolis through this traditional architectural material, the article describes Beijing brick in three instantiations: as a lightning rod for debate about the past, present, and future of Beijing's historic old city; as a materialisation of the atmospherics of pollution and "progress"; and as the armament of both development and its opposition. Through these instances, the brick oscillates between being understood as a relic of aestheticised tradition, a symbol of modernisation, and a trenchant instrument of both building and destruction. As extended fieldwork in Beijing evidences, it is precisely this social and material mutability of the brick that today reorients life in the city toward novel human and nonhuman alliances and oppositions, while also conditioning wider political sensibilities about who counts and what matters in official and unofficial imaginings of China's future.

KEYWORDS: brick, building, development, materiality, temporality, China, Old Beijing.

Bricking up, bricking out

When the greatest threat to Xiao Yan's business descended upon the family-run fruit stand in the summer of 2017, it took a rather unexpected form. It was not an eviction notice, demanding they vacate the modest six-by-ten-foot storefront they rented in Beijing's central old city. It was not a new tax on migrant business owners in the capital. It was not a supply-chain issue with the handful of farmers and suppliers they worked with, who had been battling the alternating challenges of drought and flood for months. Neither was it a shortage of customers, with many residents visiting the stand daily and a steady stream of passersby enticed by Yan's bountiful displays of seasonal fruit – mangosteen, lychees, and peaches – delicately arranged and often individually wrapped. Instead, after weeks of rumours, the most potent threat to their livelihood materialised overnight, appearing in the early morning hours not as a bulldozer, but as a stack of bricks.

Just before daybreak, Xiao Yan and her husband watched as orangevested construction workers began to methodically seal off the entrance of their fruit stand between layers of brick and freshly mixed cement. Trying in vain to protest the sudden blockage, her husband brandished a thick folder of documentation, imploring the crew to review their business license and permits, but his pleas fell on deaf ears. The men worked with impressive speed and dexterity. Making their way up the street, the workers tore down storefronts, removed signage, and bricked up the windows and doorways of barbershops, grocers, noodle stalls, cobblers, and drycleaners alike. Accompanied by two officers in riot gear, the construction crew was there to execute a city-wide beautification campaign targeting the capital's historic hutong 胡同 alleyways. Neighbourhood by neighbourhood, block by block – and brick by brick – businesses were sealed up and wiped out from the once bustling streetscape (Figure 1).

Against this backdrop of newly-erected brick walls, this article foregrounds the brick as a key harbinger of urban futures in the capital. For those inured to the glossy renderings of city planners and architects, the brick today might index an antiquated cityscape, falling out of favour as a futuristic metropolis of steel, glass, and concrete rises out of the rubble of old bricks. Yet bricks remain critical determinants of urban futures in China. Vital to both the material and symbolic fabric of the city, they offer a particularly insightful view into the multiple trajectories of China's future. Instead of assuming

the obsolescence of the brick as Beijing's modernising ambitions reach new heights in the fifth decade of reform and opening up, this article takes the brick as an entry point into the contested futures presently taking shape in contemporary China. For, as Beijing's brick-up campaign suggests, in the Chinese capital today, beneath an ultramodern skyline is a city still oriented around the vicissitudes of brick and its material and political mobilisations. Taking seriously this enduring preponderance of the brick poses a guiding question: namely, what role does this conventional building material play in the formation, imagining, and valuation of a global city (Sassen 2001)? Or, put differently, how does the speed and scale of development in China transform the city's relationship to "old" things, like the bricks that make up both the literal and figurative foundations of urban life in Beijing?

Amid a capricious climate of creative destruction, this article tracks how bricks emerge as historicised artifacts, aesthetic interventions, and weapons used by and against the forces of China's urban development. While the scale and speed of this development have declined considerably in the wake of the Covid-19 pandemic, I suggest that the brick remains an important site for considering the ways in which social and material life become entangled in new urban landscapes. Approaching the brick as a site of sociomaterial assemblage and political experimentation, the article describes Beijing brick in three instantiations: as the armament of both development and its opposition, as a lightning rod for debate about the past, present, and future of Beijing's historic old city; and as a materialisation of the atmospherics of pollution and "progress." I argue that the brick continues to figure prominently as an historical, symbolic, social, and material object in the profound urban transformations occurring in Beijing today, and that as such, this prosaic object offers critical insight into the trajectories of China's urban futures, particularly as these future trajectories are reassessed post-pandemic.1

While the brick has long featured as a materially and culturally prominent building technology in China, from the imperial era to the development of the socialist state (Schwenkel 2013; Roskam 2018), here I outline a more recent history of bricks that has emerged in the wake of China's vertiginous growth in recent decades, and the concomitant changes to urban life this has wrought. Anthropologist Christina Schwenkel suggests that bricks "are symbolic cultural objects that convey complex messages and ideologies about cities and the people who build, manage, live in, and experience them" (2013: 254). Following Schwenkel, this article does not address the brick as either solely a material object or a cultural artefact - as though such categories could ever be so clear cut - but instead seeks to move social scientific inquiry toward a more affectively oriented understanding of urban transformation by embedding analysis in a series of passages framed as "socio-material instantiations" of the brick. Whereas infrastructural objects such as bricks might typically escape notice until the moment of their breakdown or collapse (Graham and Marvin 2001; Graham 2009), here I offer renderings of the brick as a distinct mode of becoming, materialising physically and conceptually as open-ended provocation as it transforms from an ostensibly stable entity into an entanglement of relations (Murphy 2013).

My methods in this article draw from ethnography, media sources, and critical engagements with China's "public culture" both online and on the ground (Rofel 2007). Fieldwork took place from 2012 to 2017 in Beijing² at state-owned planning offices, development firms, and with residential communities in historic areas undergoing revitalisation. In what directly follows, I return to Xiao Yan's fruit stand and Beijing's brick-up campaign of 2017, using this as a basis from which to consider the significance of bricks as highly relational, socio-material objects. I then detail why the brick in particular, as construction material that fuses together various temporalities and desires, is an especially useful portent of urban futures, before offering three additional socio-material instantiations: the brick replica, the pollution brick, and the brick weapon. Most obviously, these examples demonstrate the ways in which the "vibrant matter" of bricks continue to be vital to transitioning China from one physical and social reality to another (J. Bennett 2010). Taken together, they suggest that it is precisely the social and material mutability of the brick that today conditions wider political sensibilities about who counts and what matters in official and unofficial imaginings of China's future.

Brick networks: Alliances, affinities, and assemblages

In the days leading up to the brick-up of Xiao Yan's stand, notifications posted in the area ominously announced plans to "restore the original appearance of the architecture" in Old Beijing, warning against illegal construction and renovations. Precisely what qualified as "illegal construction," however, remained opaque. For months, large red banners in the hutong alleyways heralded the beginning of a new urban revitalisation initiative christened the "Hundred Streets, Thousand Alleys" plan (baijie gianxiang 百街千巷), but additional details were sparse (Figure 2).3 Many business owners had optimistically hoped that the revitalisation campaign would target new construction, leaving their established businesses unscathed. While Beijing's hutong neighbourhoods are by and large residentially zoned, businesses have been operating in the area for decades. In the hutong, courtyard compounds are encased behind walls of traditional grey brick, producing a fractal sequence of partitions between private residences and public streets. Yet, surprisingly, life in Old Beijing is distinguished not by division, but connection. Beijing's back alleys teem with life as residents move readily between personal living quarters, shared courtyards, and public streets, producing a distinct form of hutong urbanism in the process of their daily routines.4 Residents pull out stools to chat with neighbours,

- In January 2023, Xinhua News Agency reported that Chinese officials had drafted a new 21-point plan that aimed to buttress its development market with an infusion of RMB 450 billion (USD 67 billion), in the hopes of curbing a property crisis in the wake of the country's "zero-Covid" policies.
- This fieldwork included shorter trips as well as an extended residence in Beijing from 2014 to 2017.
- 3. According to the Beijing Overall Urban Development Plan, a master plan released in March of that year, the ultimate goal of "Hundred Streets, Thousand Alleys" was to transform Beijing into what it called a "world-class city," but little was known among Old Beijing residents about what this meant or would entail.
- Judith Farquhar and Qicheng Zhang write poignantly on the unique sociality of Old Beijing, while also cautioning against a romanticisation of hutong life that elides the hardships endured by its lifelong residents (2012).

Figure 1. Images of the brick-up campaign in Beijing's historic old city. A shop in the process of bricking up (left). A store puts out makeshift signs to announce they are still operational after the brick-up (right).



Credit: photos taken in Beijing by the author (2017).

Figure 2. A banner announcing the "Hundred Streets, Thousand Alleys" rejuvenation project



Credit: photos taken in Beijing by the author (2017).

Note: on the banner, the slogan "Improvement and implementation of 'Hundred Streets, Thousand Alleys': Building a beautiful home together" (Zhengzhi tisheng luoshi "baijie qianxiang" gongjian meihao jiayuan 整治提升落實"百街千巷"共建美好家園).

folding tables hold rowdy games of mahjong, and — critically — small shops hawk wares that spill out onto bustling alleys too narrow for conventional supermarkets and malls. In the years following China's reform and opening up, state leaders encouraged workers displaced in the transition to launch their own entrepreneurial enterprises. Many of them heeded this call, opening small shops, restaurants, and businesses in a process that would become known as "opening a hole in the wall" (kaiqiang dadong 開牆打洞). Now, however, those holes in the hutong were being plugged.

Municipal authorities clarified that such efforts were part of a broader campaign to beautify the city, enforce zoning codes, *as well as* ease pollution and overcrowding. Alongside the goals of heritage preservation and urban beautification, then, the brick-up campaign coincided with the Chinese state's goal of reducing the population of the capital by 15%, to 23 million, by 2020.⁵ Whereas strategies to meet this aim might have once included eviction notices and widespread demolitions, the bricks were representative of a larger shift in the Chinese state's approach to urban remediation – one that now emphasised "heritage preservation" and "rule of law" over more confrontational approaches (Chu 2014: 352).⁶ Bricked-in, small

- According to China's Seventh National Census, the population of Beijing reached 21.89 million permanent residents in 2021. See www.stats.gov.cn/english/ PressRelease/202105/t20210510_1817193.html (accessed on 11 December 2023).
- 6. See Chu's discussion of the "infrastructuralisation of state power" in this shifting landscape of Chinese politics. Chu also provides a lucid ethnographic account of both the dematerialising propensities of brick and its heterogeneous value in this piece (2014). This article is indebted to both her writing on disrepair as well as her insights on the mutability of brick in our private conversations.

businesses lost their vital connection to the traffic of the street, shops were no longer able to showcase their wares, and restaurants became windowless cloisters. With businesses (en)closed in brick if not in name, any remaining patrons were rerouted through circuitous side entrances within the main courtyard compound. As one shop owner from Shandong Province described, "The authorities have not ordered us to leave, but they made it impossible for us to stay" (interview conducted on 29 June 2017).

By the time I arrived that morning at 8 a.m., the construction crew had long finished and departed. Yan remained, stoically sweeping up the accumulated debris while her husband cleaned and covered up any remaining fruit that had been exposed to the construction dust. Bricked up and sealed in, the shop was eerily quiet amid a typically cacophonous rush hour. Asked if she had any forewarning of what would take place that day, Yan replied without looking up from her sweeping. "None. I didn't see any notices. I saw them wheeling in bricks a few days ago in [another] hutong, but I didn't think anything of it. I just thought it was more new construction" (interview conducted on 3 July 2017). A prototypical construction material in a global city renowned for its hyperbuilding⁷ (Ong 2011), the brick failed to arouse Yan's suspicions as it hid in plain sight. Inconspicuous in its ubiquity, the brick had escaped Xiao Yan's notice as an object that could be read as a harbinger of calamity. Now, made viscerally aware of the brick's propensity for both construction and destruction, the solidity of bricks around her unexpectedly marked a new era of precarity for Yan and her family.

To consider both the impact and apparent invisibility of the brick requires an assessment of what political theorist Jane Bennett calls "thing-power": an attunement to the "efficacy of objects in excess of the human meanings, designs, or purposes they express or serve" (2010: 20). Here Jane Bennett builds upon Bruno Latour's Actor Network Theory (ANT) and the "political ecology of things" (2004, 2007) to challenge the ontological assumption that social action proceeds from animate humans exerting their unique agency upon inanimate matter (Chen 2012). Instead, for both Latour and Bennett, it is precisely the associations between human and nonhuman "actants" that make up the social and its conditions of existence. Such vital materialism alerts us to networks of relation that encompass and exceed the human, asking what a consideration of the capacities and forces of things might do to our analyses of political events.

If we are so often admonished to not miss the forest for the trees – the assumed complexity of the whole against its partial and supposedly insignificant details – what then might it mean for scholars of urban China to not miss the bricks for the building? Instead of assuming the progressive obsolesce of the brick as a foregone conclusion in China's dramatic development, this article takes Xiao Yan's experience as instructive in the ways the brick is revealing multiple trajectories of China's urban futures. For in Beijing, running alongside a technological future operating at lightning speed is a parallel future being slowly built – and demolished – not by algorithms or data, but by a remarkably ubiquitous if overlooked object: the brick.

Brick worlds, brick worlding

In Chinese, the term used for building construction is the "work of earth and wood" (tumu 土木), suggesting a deeper insight into both the materials and materiality of building. Issued in the Song dynasty in 1103, the Treatise on Architectural Methods or State Building Standards (Yingzao fashi 營造法式), the oldest existing writing on Chinese state building standards, names tile and brickmaking as one of 13 principal building crafts, alongside stonework, carpentry, and joinery. Traditional buildings at the time were typically enclosed in adobe or masonry walls, with tiles and brick used in projects where a superior finish was sought (Guo 2000). In marked contrast to Europe, where stone masonry was exalted in landmark buildings and monuments, in China, it was bricks that were used for imperial palaces, pagodas, temples, and grand state projects. Indeed, it is thought that the use of baked clay tiles originated in China, with the oldest known bricks found in tombs of the Eastern Zhou (Campbell and Pryce 2003). Solid walling units would later be discovered dating from the late Warring States (475-221 BC).

Housing both living and dead, engendering division or congregation, and requiring continual effort to maintain amid the wear and tear of weather, human use, and nonhuman occupation,8 the brick is a consummate example of complex, more-than-human entanglements. Fashioned of earth and clay, mixed with water, shaped, and then dried in the sun or fired in ovens, bricks exemplify how human desire and material forces are mutually constitutive (Harvey 2015). While the prototypical American brick is reddishbrown in colour, traditional Chinese bricks are grey, often with cyan undertones of blue and green (qingse 青色). This distinctive colour is a product of both human and nonhuman collaboration, originating from both the local clay from which the bricks are composed, as well as the process of drying and/or firing, where oxidation and reduction are often deliberately invoked by adjusting exposure to air (Xia 2015). Thus, it is precisely in the process of its making and the concomitant contingencies of this activity that specific characteristics of the brick emerge. Conglomerations of earth, air, fire, and skill, bricks synthesise elemental and social histories into an object that crystallises in the present but orients itself toward the future plans for future dwelling, use, care, containment, and relation. Yet bricks are also far from neutral objects. Historically dependent on processes of environmental extraction, energy intensive manufacture, exploitative labour, 9 and state power (Dong 2022), bricks demonstrate the ways vitalism can also be toxic and destructive (Fortun 2014). The "vibrancy" of the brick is therefore also an expression of its constitution in and complicity with uneven relations of power.¹⁰ All this is to say that bricks, when interrogated, speak volumes of not

Rem Koolhaas, "Beijing Manifesto," Wired, 1 August 2004, https://rkoolhaas.tripod. com/webonmediacontents/FF_120_beijing.pdf (accessed on 11 December 2023).

^{8.} Occupation by rodents, insects, and even fungi can gradually deteriorate brick structures over time (Angelillo 1997: 48).

^{9.} Howard French, "China to Prosecute 6 in Slave-labor Scandal," *The New York Times*, 16 July 2007, https://www.nytimes.com/2007/07/16/world/asia/16iht-china.2.6676112.html (accessed on 6 August 2022).

^{10.} I am grateful to reviewer two for urging me to address the politics of these material relations. For additional critiques of new materialism's depoliticised accounts of human and nonhuman assemblages, see also Büsse (2020) and Richardson and Weszkalnys (2014).

only their environments but also their violent legacies as well as their open-ended potentialities.

Despite this, bricks remain largely absent from both scholarly and social imaginations (L. Bennett 2016; Berki 2023). Yet even their persistent ability to escape notice can be instructive. In his examination of the experience of modernity, historian Reinhart Koselleck defines the future as a "horizon of expectation" anchored in the present but directed toward an imaginary temporality that is always just out of reach with the promise of the "not-yet" come (2004: 260). Formed by expectation, the future here is subject to oscillating emotions and feelings: desire, fear, anxiety, and hope. Shaped alternately by experience and expectation, the past and the future are "relocated" in relation to one another, each both subjective and intersubjective, pertaining to both individuals and collectives (Doughan 2013). In this view, however, the apparent invisibility of the present may actually speak to its critical role in ordering both the historical past and political future.

Koselleck's theorisation is particularly compelling in thinking through the ways in which the brick binds memory to anticipation, even as it so often escapes critical examination. For even as bricks buttress and encircle mundane activities, they gather together multiple temporalities of past and future, like so many refractions in a crystal ball. In the brick-up campaign of 2017 described above, it was precisely appeals to history – specifically, historical preservation – that justified interventions into a projected future where Beijing's *hutong* alleyways would and could be restored to an idyllically ordered if indeterminate time.¹¹ In attempts to restore the integrity of Old Beijing's historic grey walls, then, bricks are the means as well as the ends. This is precisely because the brick is able to materialise both experience and expectation.

Within a single brick, social, historical, and elemental forces combine to offer a material form for plans made but not yet realised. Yet, as I show in subsequent sections, mobilisations of the brick in Beijing today also seek to rearticulate the past toward imagined and idealised futures. In this way, as Xiao Yan's experience illustrates, the brick has long been one of Beijing's great urban determinants. In this process, it is not only buildings, walls, and monuments that emerge, but also political subjects. I now turn to two additional socio-material instantiations of brick with the aim of interrogating the specific relations that have become vital to their continued existence and relevance in China's urban development.

Bogus bricks

In recent years, something strange has been happening to the distinctive grey bricks of Old Beijing's *hutong*. The transformation has not always been readily discernible to the naked eye – especially the untrained eye – but one by one, bricks here are being replaced by dupes. As original grey bricks gradually decompose, "counterfeit" brick has become increasingly common in the area. In the historic old city today, these bogus bricks assume a variety of forms: two-dimensional grey slabs plastered atop walls, brick wallpaper, brick facades painted atop walls, or even the etched outlines of brick carved into wet cement (Figure 3). Such brick simulacra are not only widely derided by residents in passing conversations, but the eventful process of their installation also serves as a lightning rod for debate over the past, present and future in Old Beijing.

11. Embedded in this aspiration is also the persistent modernist design impulse to sanitise and anonymise the ebullience of urban public space. See Holston (1989) for a particularly poignant example.

ight).

Figure 3. Bogus bricks. Historic grey brick juxtaposed with brick lines etched on cement (left). Two-dimensional brick slabs drying on a wall (right).



"Donkey dung might be shiny and smooth on the outside, but it's still shit on the inside," Mr Su explained to me outside the gate of his courtyard home in the centre of Beijing (interview conducted on 11 November 2015). Unabashedly critical of the urban rejuvenation of his old city neighbourhood, he often came outside after his afternoon nap to observe the progress of the latest "beautification" projects in the area. On this day, men had begun work early in the morning, grinding traffic in the alleyway to a halt as they demolished an old wall and put up a new brick façade across the street. Neighbours gradually gathered alongside Mr Yan, some lingering for a moment to shake their heads in quiet disapproval, while others joined him to watch and comment on - and over - the renovation project. "More of this shit!" an elderly man, arms crossed behind his back, bellowed over a worker pressing brick tiles into a wall. Such widespread public denunciation was fascinating to observe, especially because the "fake old" (fang gu 仿古) style of architecture prevalent in many of China's newly developed historic districts - Qing-styled latticed windows, shiny red columns, and upturned eaves in new "old" buildings¹² typically did not inspire the same vitriol in residents of Old Beijing. What set these brick interventions apart, however, was the symbolic significance of bricks for Beijing's life-long residents, who viewed these objects as not only construction materials, but metonyms for Old Beijing as both a particular place and identity.

Beijingers such as Mr Su will be quick to tell you about the perceived quality, integrity, and durability of the original grey bricks that built the homes and walls of Beijing's historic old city centuries ago. But as those bricks begin to decay under the collective weight of regime change, natural disasters, political campaigns, and successive urban development policies, Old Beijing developers have opted to replace them with cheaper, more accessible facsimiles. In this way, they ensure that the exteriors of the old city remain presentable even as, according to Mr Su, the interiors of courtyard homes continue to deteriorate: shiny on the outside, putrid on the inside.

While the apparent superficiality of such interventions might be ripe for critique, for developers, they offer a point of compromise between the wholesale eviction and raze-and-rebuild strategies that characterised the last two decades of China's urban development and a new era of "people-centred" and "rationally-driven" urbanisation. In this latter iteration, original residents are permitted to remain but are expected to assume individual responsibility for the conditions of their homes. For developers, clean and orderly (*zhengqi* 整齊) exteriors are critical to maintaining the image of a world-class city. But for residents such as Mr Su, the disintegrating homes they mask undermine this vision of progress. Such disagreement and debate are far from uncommon in Old Beijing today, where the display and performance of Chinese identity intersect with ageing infrastructures and neglected housing stock in the very centre of the capital.¹³

In Walter Benjamin's words, "In even the most perfect reproduction, one thing is lacking: the here and now of the work of art – its unique existence in a particular place" (2003: 103). What gave original objects their "aura" was their location in tradition – the continuity of ritual, presentation, appreciation, and the density of local knowledge. The enduring "aura" of Beijing's historic grey bricks was evident in the reverence with which residents still spoke about them and their characteristics. "Many of these bricks are hundreds of years old," Mrs Zhang told me, holding her palm against the external

western wall of the stationary store her family owned and lived behind. "They were made by trained artisans for imperial homes back then (...). These bricks have survived different dynasties, earthquakes, famine, disaster (...). The bricks today cannot compare" (interview conducted on 29 August 2015).

In these articulations, the brick and its prized grey coloration offered a material artefact of not only the old city's prestigious past as an imperial centre, but also its contemporary significance in anchoring modern Chinese identity.14 After all, it was only in the old city that this last bastion of China's illustrious cultural heritage could be found - a fact that lifelong residents such as Mrs Zhang repeated with pride. Far from rendering the brick an archaic relic, for residents of Old Beijing, the unprecedented speed of the country's development in the last two decades made the material durability and cultural resonance of the brick even more pertinent. Although the grey brick was, of course, not a single, original work of art, its perceived endangerment in a rapidly developing metropolis provided it with a distinct aura of authenticity. It is this aura that makes grey bricks treasured antiques and valuable commodities. It is also this aura that brings together collectives of residential volunteers to scavenge original grey bricks for new Old Beijing construction projects that they do support, such as the Shijia Hutong Museum. Funded by the Chaoyangmen subdistrict government and the Prince Charles Charities Foundation China, the museum is the first institution of its kind in Beijing dedicated to commemorating vernacular hutong history, architecture, and daily life. Residents of the hutong took great pride in the museum, and many made a point of contributing to its "authentic" construction by scavenging historic grey bricks to include in the structure. With this in mind, we can begin to understand how the brick anchors both a moral and political critique in Su and Zhang's observations – an indictment of municipal duties shirked and a comparison between a desirable "then," defined by craftsmanship, quality, and esteemed history, in contradistinction to a vehemently inferior "now."

In this way, even brick replicas conditioned particular political sensibilities. Benjamin himself was ambivalent about the loss of tradition, viewing the liberation from tradition as unlocking a potentiality that allowed works to be co-opted in infinitely novel combinations in the practice of politics and organised collectives. As a construction technology once reserved for China's elite but now made widely available to the masses, bricks can be seen to embody particular socialist values of collectivity and utopian ideals. Knockoff bricks reference these ideals in formal aesthetic even as they adulterate the real and imagined memories of responsive municipal governance and superior tradition – and as such, they generate a notably heated reaction. We might understand the strong aversion to fake bricks as framed by distinct forms of nostalgia: in Mr Su's case, a nostalgia for an earlier, progressive promise of betterment, while in Zhang's, the longing for a traditional past in contrast to an alienating

Kelly Layton astutely points out that it is precisely the emphasis on heritage and history that has paradoxically presaged the destruction and removal of much of its built heritage (2007).

^{13.} See Madeleine Dong's history of Republican Beijing for an analysis of how the capital acquired its identity as a "traditional" Chinese city (2003) and Harriet Evans work on Old Beijing's Dashilar neighbourhood for an oral history of the marginalisation and neglect of residents in the historic core of the capital (2020).

^{14.} For a discussion of modernity's anachronistic other, see Robinson (2004)

present (Boym 2001). As Katie Kilroy-Marac elucidates, nostalgia works both retrospectively and prospectively, "looping back" to a hope that directs itself to a present "that was lost before it ever came into being" (2013: 377). Inhabiting the space between old and new, past and present, deterioration and development, fake bricks provide a touchstone for articulating the twin grievances of developmental failure and high-modern nostalgia in particularly acute terms.

All that is solid

Amid the air pollution crisis of 2015, the city of Beijing was sheathed in a yellow-grey miasma that brought with it grating coughs, a surge in hospitalisations from respiratory ailments, and an eerily unnatural midday eclipse. While some residents sought refuge behind closed doors, windows, or – for the more privileged – within conditioned airspaces (Zee 2015), the dark silhouette of a man could be seen slowly stalking the capital's most infamous landmarks (Figure 4). Dragging a white, industrial-strength vacuum cleaner behind him, he sucked up suspended particulate matter engulfing Tiananmen Square, the Olympic stadium, the National Centre for the Performing Arts, and the storefront of French luxury brand Louis Vuitton. Appearing as an almost otherworldly spectre, he trudged along, wordlessly swallowing up acrid air. The product of this reaper's labours, however, was a somewhat surprising artifact: a single brick.

Figure 4. Nut Brother vacuums air pollution outside of Tiananmen Square.



Source: image from Nut Brother's WeChat page (2015). Screenshot by the author.

For 100 days, performance artist Nut Brother (Jianguo xiongdi 堅 果兄弟) walked for four hours each day collecting smog particles to fashion a brick of coagulated air pollution. Each day, Nut Brother chronicled the date, weather, and location of his work on his WeChat account, along with an accompanying photo of that day's work. Beijing's first and only "air cleaner," he drew the attention of other pedestrians, some of them assuming that he was a newfangled streetsweeper. "Some people thought, 'Wow, Beijing's really awesome, now they've got air cleaners like this,"" Nut Brother recounted to journalists. 15 The irony, of course, was that Nut Brother did not just wield a vacuum that imbibed the noxious haze - he became a vacuum. That is, his performance necessitated that - like so many street-cleaners and municipal workers keeping the capital operational - his own body act as a living machine, inhaling and processing a thick soup of dust, chemicals, and coal daily. Indeed, amid the ecological fallout of China's unprecedented development

boom, every breath in the capital had become a reassertion of shared dependencies, complicities, and commitments (Nguyen 2020). In Beijing, the acrid fog that habitually engulfs the city is made up of a mixture of nitrates, sulphates, carbons, dust, sand, and a shifting compilation of organic and inorganic chemicals¹⁶ (Lang et al. 2017). With each breath, Beijing residents draw these substances into their bodies, confirming and extending their relations with coal, electricity, factories, cars, urban construction, and the region's rapidly expanding deserts (Murphy 2017; Zee 2017). And with each breath, they reaffirm their membership in a community of breathers (Choy 2011b), collectively bearing the shared, if uneven costs of China's vertiginous growth.

Alongside the cycles of his biotic filtration mechanisms, Nut Brother's vacuum worked to imbibe the thick air, hour by hour, day by day, until he had accumulated an ashy layer of approximately 100 grams. With this modest stockpile in hand, he headed to a local masonry to rework the dust into a 9" x 4.5" brick. Despite offers from eager buyers, Nut Brother opted to instead bike to central Beijing, where he then handed the brick over to masons in the process of constructing a courtyard. There, without fanfare, it was laid into a wall. Like a "drop in the ocean," then, the brick disappeared into what Nut Brother described as the concrete jungle of the city.¹⁷

Nut Brother's performance resonated with many across WeChat, soliciting attention from both local and international media as well as municipal authorities.¹⁸ The response Nut Brother garnered suggested that, despite the increasing turbidity of the air in China in recent years, 19 such an overt materialisation of the atmosphere – still imagined as an empty container - yielded a novelty that could attract attention if not generate conversation. If his work was successful in bringing the reality of air pollution to the fore, I want to suggest that this is in no small part because of Nut Brother's strategic decision to rework his manual and biological labours into the distinct form of a brick. A repository of past and present, the pollution brick provided a trenchant critique of the ongoing air pollution crisis while also pointing to alternative future trajectories. For Nut Brother, the brick vividly animated his critique in at least two principal ways: the first, by providing a widely legible symbol of modernisation and its appetite for expansion; and the second, with a material form that is instantly recognisable in its standardised proportions.

- 15. Chris Buckley and Adam Wu, "Amid Smog Wave, an Artist Molds a Potent Symbol of Beijing's Pollution," *The New York Times*, 1 December 2015, https://www.nytimes.com/2015/12/02/world/asia/beijing-smog-air-pollution-artist-brick.html#:~:text=For%20100%20days%2C%20Brother%20Nut,of%20the%20city's%20 air%20problems (accessed on 11 December 2023).
- Hepeng Jia and Ling Wang, "Peering into China's Thick Haze of Air Pollution," Chemical and Engineering, 23 January 2017, https://cen.acs.org/articles/95/i4/ Peering-Chinas-thick-haze-air.html (accessed on 11 December 2023).
- Zheping Huang, "A Chinese Artist Vacuumed up Beijing's Smog for 100 Days and Made a Brick from What He Collected," *Quartz*, 1 December 2015, https:// qz.com/562319/a-chinese-artist-vacuumed-up-beijings-smog-for-100-days-and-made-a-brick-from-what-he-collected (accessed on 11 December 2023).
- 18. While uniformed and plainclothes officers frequently tailed Nut Brother on his walks, they rarely impeded his expeditions.
- 19. It bears mentioning that to date China has made monumental strides in combating air pollution. In Beijing, PM 2.5 levels dropped by more than half between 2013 and 2020. An equivalent shift in Europe and the US took decades to achieve. Despite these impressive gains, Beijing's air pollution remains seven times higher than the World Health Organisation's standard for healthy air quality. See https://epic.uchicago.edu/news/from-airpocalypse-to-olympic-blue-chinas-air-quality-transformation (accessed on 11 December 2023).

In a news interview at the time, the artist explained his rationale by declaring, "Dust represents the side effects of humankind's development including smog and building-site dust."²⁰ As the Air Quality Index (AQI) soared in Beijing in 2015, Nut Brother noted that he wanted to "show this absurdity to more people (...). I want people to see that we cannot avoid or ignore this problem."²¹ That is, in its clean lines and simple form, the brick provides a potent symbol of the externalised costs of breakneck development. As a ubiquitous construction material, it throws both the causes and effects of air pollution into sharp relief, impelling a critical examination of unceasing ambition to build up and out. In this way, the brick came to symbolise modernity itself, along with its relentless – and often deadly – pursuit of progress (Dong and Goldstein 2006).

But its efficacy also stems from the brick's place in a wider common vernacular: the culmination of Nut Brother's performance draws its efficacy from a collective knowledge (both real and imagined) of the weight and substantiveness of a solitary brick. Thus, the performance's impact - that walking in the city for 100 days might yield enough dust to produce a whole brick²² - rests on pervasive imaginaries of the solidity of the brick. This is a solidity that poignantly contrasts the visual absence of an atmospheric emergency with both the material and imaginative presence of the brick. In this sense, most Chinese netizens did not have to exert much effort to imagine what Nut Brother's brick might have felt like - its size, its texture, its weightiness - and therein lay the power of his performance. This was evident in the way online responses reacted to both the medium and the message of the pollution brick. One netizen queried, "Does that mean that my lungs are filled with bricks?" Another, "This means nearly everyone in Beijing has a brick in their stomach. Older people, maybe five." For these commentors, the brick brought a visceral awareness of the attritional violence of air pollution (Nixon 2011) - the jarring visualisation and visceralisation of a stomach full of bricks, accumulated over the course of a quotidian urban life. This was an epiphany of not only the critical imbrication of individual bodies and their built and atmospheric environments (Latour 2005; Mitman 2007; Choy 2011a), but also the burden and responsibilities of those entanglements (de la Bellacasa 2011).

In all of this, however, the latent potentialities of the brick, and the possible futures it might build were not lost on Nut Brother's audience. One comment remarked, "If all the dust in Beijing was collected together, it would be enough to build the world's biggest environmental protection bureau." An excoriation of state bureaucracy and its efficacy in addressing the air pollution crisis, the statement also underscores the instrumentality of bricks as a construction material open to multiple figurations - alternately building lethal or sustainable futures, capable of holding up relations of care or death. Blurring the boundaries between material and metaphor, the brick both literally buttresses and figuratively advances a pernicious civilisation. Yet here, the poison might also be the cure. As one tongue-and-cheek comment suggested, Nut Brother's pollution brick "should be hurled at the Minister of Ecology and Environment's head." It is precisely to the weaponisation of the brick that I now turn in the final instantiation.

Weapons of popular destruction

Late in the summer of 2016, as preparations for Beijing Design Week (BJDW) reached a frenzied apogee, China's premiere design festival found that work on its main exhibition hall had ground to an unexpected halt as workers sought refuge from a hail of debris. Covering their heads with their hands, dozens of people who had assembled that day to renovate the site and move installations into the space had to abandon their work and flee. As a volunteer tour guide that year, I saw my phone light up with messages as organisers attempted to ascertain and address the situation. Just after lunch that day, when most residents in the neighbourhood were settling in for an afternoon nap, a woman dressed casually in matching red separates walked over from her house a few lanes over and began to pelt the workers with bricks. In her fifties, she was short and spright, with a throwing arm that did not require intermittent breaks. Accompanying the bricks was a stream of angry profanities. For over an hour, the barrage only let up as she scanned the ground for more ammunition. As the site was recently repurposed from its former life as an electric relay factory, there was a plethora of brick shards and other construction detritus to draw upon as ad hoc armaments.

Eventually, the woman stopped just as abruptly as she had begun. In the end, it was not the orders of municipal police that brought the attack to an end, but a combination of their pleas and the woman's own physical depletion. From conversations with the neighbours who had gathered to witness the spectacle, I learned that she lived in Old Beijing with her adult son. Recently, hearing that the area was being redeveloped and state firms were looking to acquire new properties, she decided to pursue a buyout under the new "voluntary evacuation" policy (tengtui 騰退, literally to vacate and withdraw).

Whereas once the character 採 (*chai*, to tear down or demolish) was ubiquitous on the exterior walls of condemned structures throughout the capital (Zhang 2006), one is much more likely to find today in Old Beijing a series of *tengtui* notices posted across buildings and community bulletin boards (Chu 2014). Although it is not a legal policy per se,²³ state developers in Beijing have come to implement *tengtui* practices as an alternative strategy that offers existing residents the option to stay in the neighbourhood rather than face permanent eviction. Avoiding the politically heated language

- 20. Chris Buckley and Adam Wu, "Amid Smog Wave (...)," op. cit.
- 21. Tom Phillips, "China's Vacuum-cleaner Artist Turning Beijing's Smog into Bricks," *The Guardian*, 1 December 2015, https://www.theguardian.com/world/2015/dec/01/chinese-vacuum-cleaner-artist-turning-beijings-smog-into-bricks (accessed on 11 December 2023).
- 22. Being composed of an admixture of vacuumed debris and clay, Nut Brother's work also faced online criticism by those who felt wilfully mislead or manipulated by the performance. One WeChat user posited that "what was collected to make a brick could by no means be PM 2.5, but PM 250 (...). Performance art shouldn't be a gimmick."
- 23. The legality of *tengtui* remains obscure. Given the sensitivity of the subject matter, academic writing on the topic within China is also rare with few exceptions in law journals and online publications. Beijing-based property attorney Li Xiaoning has traced *tengtui* to rural practices of land reappropriation for the purpose of developing public greenbelts. She argues that once local governments realised that the practice allowed them to bypass extensive legal paperwork, authorisations, and sanctions at minimal cost, the practice slowly began to spread, eventually reaching urban areas: Li Xiaoning 李曉寧, "集體土地騰退的合法性分析" (Jiti tudi tengtui de hefaxing fenxi, Analysis on the legality of collective land vacation), *Lawtime.cn* (法律快車), 4 November 2014, https://www.lawtime.cn/article/ll1106805996106811090oo328822 (accessed on 15 December 2023). See also Nguyen (2017).

of "demolition and relocation" (chaiqian 拆遷), tengtui offers developers a nonconfrontational and potentially more cost-effective means of acquiring additional property. Under tengtui, homeowners are informed that they can either accept compensation in the form of relocation to a new suburban apartment, or monetary remuneration based on the square footage of their current properties. Alternatively, they can also opt to simply stay put for the time being.

Hoping to seize this opportunity for upward mobility, the woman at the factory had filled out various bureaucratic forms, produced a litany of property titles and deeds upon request, and submitted them all to different municipal offices across the city, only to learn that morning that the square footage of her home was too insignificant to yield a payment that could realistically support her family. According to her neighbours, she became overcome with frustration and fury, making her way over to the factory shortly afterward. Likely an unplanned assault, when she arrived, she made do with the makeshift weapons she could find: brick fragments. Material artifacts of the cycles of construction and destruction the old city had undergone in recent years, the bricks were readily co-opted for her purposes. Indeed, as Julie Chu reminds us, "creative destruction, it turned out, was not just the province of city developers" (2014: 360). What, though, could be made of her decision to lay siege to the primary site of Beijing Design Week? It might be easy to dismiss this as a crime of opportunity, but to do so would mean discounting the political significance of her protest and the profound mutability of her weapons - as well as a key insight regarding the conditions of life within a rapidly changing landscape of hyper-development. Instead, I want to suggest that the brick here was a particularly potent vehicle to convey her grievances, not only because of its rigid materiality, but also because of its polyvalent significance in a mercurial landscape of building and demolition.

Cosponsored by the Ministry of Culture and Beijing's municipal government annually, Beijing Design Week features architectural forums, exhibitions, and a design fair that highlights everything from leisure and lifestyle to urban planning and industrial innovation. During its almost two-week long duration, Old Beijing sees an influx of pop-up shops, public art installations, and performances focused on the history of the area as well as its imminent and imagined futures. In an urban landscape undergoing radical and reoccurring transformation, BJDW offers a utopian promise of a better, more prosperous, and more beautiful future. Each year, the initiative draws hundreds of thousands of visitors, architecture aficionados, and national and international media outlets to Old Beijing. Although events are generally open to the public, residents in the area typically take part in BJDW less as participants and more as "lively backdrops," adding to both the cachet and charm of BJDW's location in the historic old city. In this sense, part of the allure of the event lies in the novel dissonance of its middle-class tastes and glossy, future-oriented subject matter in contradistinction to the culturally and aesthetically "traditional" setting. While some residents enjoyed walking around neighbourhood fairs, viewing the goods on display, or visiting the public art installations, for many the purpose of the event, specifically its focus on architectural design - above say, development, heritage, or nation - remained mysterious. As one resident relayed to me on 10 October 2015, "We have been told our neighbourhood would be developed for years now, but instead, all we get is Design Week.

They come and talk about design – designing this, designing that – people are always talking about design, but who are they designing for?"

Against the background of Beijing Design Week, this piercing query highlights an important disjunction between the work of design and the world, between theory and practice, and between form and matter. Even as Old Beijing residents marvelled at the beauty of buoyant outdoor canopies that responded to sound and movement, interactive light displays projected onto historical buildings, and "responsive design solutions" for hutong homes that included compostable toilets and sliding walls during Design Week,24 they wondered openly how these ideations could be practically applied to make a material difference in their daily lives. Tim Ingold has articulated this as a "kink between the world and the architect's idea of it" (2010: 94). For Ingold, this was the result of an inherent flaw in contemporary design thinking - the notion that the objects of design stand before us as a fait accompli, complete in themselves, rather than as processual "gatherings" of human and nonhuman trajectories. Quoting Matisse Enzer, a building contractor who worked closely with architects, Ingold elucidates, "Architects think of a building as a complete thing, while builders think of it and know it as a sequence - hole, then foundation, framing, roof, etc. The separation of design from making has resulted in a built environment that has no flow to it" (2010: 93). "Making" here in Ingold's usage is not, however, an activity that culminates in a finished product. Instead, it is one that weaves together multiple material forces and flows, and as such continues in the everyday use and maintenance of built designs and efforts to resist their material propensities toward entropy. If we take Ingold's arguments to heart, it is precisely in the gap between the world and the architect's vision of it that the brick is located. And it is precisely this quality - one thoroughly enmeshed in processes of making and becoming – that renders the brick a particularly powerful weapon to hurl at the centre of a festival celebrating design. As the brick coalesces the physicality of making and the aspirational affects and projections of design, it serves as a potent signifier of the many progressive futures that have been undone in the process of redevelopment.

A harsh reminder that we design in, for, and with the world, the barrage of bricks launched that afternoon violently reinserted bricks into an event in which they were conceptually, if not physically, absent. The brick here rematerialises an increasingly abstract conversation about design. If the pertinent question hovering above Design Week is, "Who is design for?", the flying brick answers this with a forceful thud: design should be for the people, the common people (laobaixing 老百姓) in particular, that are by definition comprised of the heterogenous masses. In her assault upon the factory, the woman in the above vignette highlights not only the brick's anarchic proclivities, coming apart without an alliance of human and nonhuman efforts to continually shore them up, but also their inherent mutability. Here again, the brute materiality of the brick intermingles with its symbolic figuration as a quotidian object of building.

These are all actual projects featured in Beijing Design Week iterations between 2014 and 2017.

The capricious qualities of brick

In the vignettes above I have attempted to show how the mercurial qualities of brick can anchor new political subjectivities looking to intervene in China's urban futures. In the brick-up campaign, bricks that siphon and enclose justify their reworking of the present with appeals to history, even as they remake urban futures based upon this imagined past. Entwining multiple temporalities in the service of political critique, the proliferation of fake bricks in Old Beijing serves as a catalyst for debate about China's past and the trajectory of its future - as well as those tasked with executing those visions. As I explored in Nut Brother's pollution brick, bricks combine the utopian hopes of a mass-produced construction material with the instant recognisability of a quotidian object that has long fortified and supported our most mundane and intimate activities. An open material and symbolic figuration, bricks could just as easily be used as weapons in the service of development - as in Xiao Yan's experience - or against development - during an international event like Beijing Design Week. It is precisely because of the potentials and contradictions so neatly contained within their streamlined forms that bricks are able to serve as such potent tools of prognostication and political criticism. Thus, in the blur of a capital whizzing toward hyperreal horizons, bricks have found a second life in the interstitial spaces between past and future, tradition and modernity, construction and destruction, abstract ideation and material worlds. Far from being rendered obsolete, they have gained a new political relevance in a shifting Chinese landscape. As Mrs Zhang relayed as we

surveyed the brick wall outside of her home, "each brick has a story to tell," the key of course being that you just have to know how to ask.

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