4 Thinking the Zone

Development, Climate, and Heterodystopia

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Abstract
This chapter interrogates an emergent genre of development zone in the India-Bangladesh borderlands that seek to instil resilience in climate-vulnerable populations. Unlike development zones framed in relation to development as economic growth, these zones venture a darker vision of life in a warming world – one where portable technologies become necessary for managing a future of climate chaos. I propose, following Foucault, understanding these projects as heterodystopias: spaces managed as and in anticipation of a world of dystopian climate crisis that are at once, stages for future interventions and present-day spectacles of climate security. Heterodystopia provides an analytic for diagnosing the visions of time, space, and development embedded in these and other securitised framings of the future.

Keywords: climate change, development, resilience, security, Bangladesh, South Asia

In the spring of 2015, while working in the countryside of Munshiganj in the borderlands of southwestern Bangladesh,[1] my colleague and I came across

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1 In this essay, I discuss Munshiganj and the adjacent island of Gabura. For simplicity's sake, where possible, I refer to these linked spaces simply as "Munshiganj".

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a strange and visually striking project rising incongruously from the flat delta landscape. It was an earthen mound, or *mattir killa*, meant to be used as a storm shelter. The mound was fourteen feet in height and a half-acre in size. It had been constructed in 2011 in the aftermath of Cyclone Aila (in 2009), which caused widespread infrastructural damage and displacement throughout the region. The *killa*, built by a local NGO and financed by a large international NGO, formed part of a vast wave of new projects in the region designed to address disaster preparedness and climate change. What seemed strange about the project was not only its visual appearance, climbing abruptly from its otherwise horizontal surroundings, but its stated purpose: what kind of shelter could this raised mound provide? In contrast to the concrete cyclone shelters that dot the region, the *killa* seemed to offer limited protection. Moreover, though nominally a public good, it had been built on private land. Striking up a conversation with the farmer who owned the land and whose home stood in the *killa*'s shadow, we asked about the project and its uses. He lived some distance from the nearest cyclone shelter, so when the storms came, he claimed, his family and livestock sheltered on the *killa*. But he also added, "In the future, when we are surrounded by water, the children will go up there to live."

The farmer's statements offered a troubling vision of climate change as a future of disaster in which (some) families would survive on earthen plinths as catastrophe unfolded around them. As I will argue here, this statement mirrored an emergent logic of development intervention in the region – an imagining of an atomised family surviving the ravages of climate change alone, assisted primarily by development technology. But as forcefully, the project stood as a testament to the emergence of a particular genre of development intervention (the climate resilient project) and a particular spatial imagination of Bangladesh's southwest delta region: as a development zone managed *as* and *in anticipation of* a world of dystopian climate crisis. In this chapter, I critically engage this imagination. To do so, I consider interventions such as the *killa*, their situation in the India-Bangladesh borderlands, and their relations to broader discourses, anticipations, and anxieties about climate security. These projects function as stages for future interventions and present-day spectacles of climate security. In other words, these projects advance a logic of managing and planning for future climatological disaster that both attempts to produce resilient life in a warming world and displays strategies of containment for audiences elsewhere. We might call these spaces, following Michel Foucault (1998), hetero*dys*topias – a term I offer as a means to analytically diagnose the relationships between these spaces and imaginations of a dystopian future to come.

The *killa*, and other conceptually similar projects that I will discuss later in this essay, are not representative of all interventions afoot in the Bengal delta.[2] Yet their focus on a disaster preparedness that will allow people to remain emplaced in the climatological landscape illuminates a securitised vision of climate change. As I have argued elsewhere, as Bangladesh has increasingly been framed as a "climate ground zero", the southwest delta region has become a space that is viewed with anxiety by both regional and international security actors alike (Cons 2018, 2020). This is due not only to the region's marked climate vulnerability (indeed, it is often described as one of the most climate vulnerable places in the world), but also because the militarised India-Bangladesh border runs through the region.

The India-Bangladesh border has historically been a source of regional tension: a communally defined line separating a supposed Hindu territory from a supposed Muslim one.[3] In recent years this borderland has also emerged as a space of considerable global climate anxiety, aptly captured in a *New York Times* article tellingly titled "Borrowed Time on Disappearing Land" (Harris 2014). The story vividly ties the effects of fossil-fuel consumption to rising sea levels and their impending effects on low-lying coastal areas in southwestern Bangladesh. While the story itself lays out a familiar narrative – the imminent erasure of many of the islands that make up Bangladesh's delta region – what is perhaps most striking is an accompanying video, which offers a satellite-view model of what will happen to the delta in the face of a thirteen-foot sea-level rise. The video unfolds over a long minute in which viewers watch much of the delta disappear under water. The final text reads, "Scientists expect the rising waters in Bangladesh to displace eighteen million people in the next forty years." The video offers a dramatic illustration of what drives climate anxiety in and about Bangladesh: the prospect of massive displacement, a spectre that manifests most readily in the figure of the climate refugee.

These future displaces will, it is argued, inevitably spill across the India-Bangladesh (and other) borders, leading to regional destabilisation and humanitarian crisis.[4] In response to such anticipated crises, a new set of development programmes have emerged in the southwest delta region. These frame the delta not solely as a space of disaster, but also as a zone of

2 Indeed, as Paprocki (2018) suggests, much programming in the delta focuses on managing outmigration from rural areas and into urban ones.

3 See van Schendel 2005 for the definitive history of this border.

4 For a pure expression of this vision, what Chatervedi and Doyle (2015) have called "climate terror", see the documentary film *Age of Consequences* (2016), which masterfully renders questions of climate change as existential, and possibly unresolvable, global security threats.

development experimentation with techniques for emplacing the climate vulnerable in the landscape. This genre of climate programming evolves portable humanitarian technologies that, in Peter Redfield's (2012, 178) words, "anticipate state [and ecological] failure and seek to provide a small scale, self-contained alternative" (see also Cross 2013). In other words, emplacement programming mitigates against the figure of the climate refugee by offering technologies designed to keep people in (their) place.

Many of these humanitarian technologies intervene at a household scale. They frame the future of climatological borderlands not as comprising communities holding out against the ravages of climate change, but as individual families surviving in self-contained spaces characterised by isolation and fortified against the chaos unfolding around them. Yet these projects are tinged with a seeming pessimism about their own possibilities of success. While they present themselves as awaiting an immanent scaling up in climate hotspots around the globe, their designs simultaneously speak to the limits and futility of these experimental interventions. As I will show, they often serve more as representational technologies for an anxious Western world, claiming that the development industry is forging solutions to impending climate crisis. In this regard, they are spectacles for audiences *elsewhere*.

Anticipatory Development Zones and Heterodystopia

While the empirical focus of this volume is development zones in Asia, a central, broader, and more ontological question undergirds these investigations: what makes a development zone a "development zone" and, beyond that, what makes a zone a "zone". For many contributors, the answers to this question are rooted in a political economy: the development zone is a space from which a set of financial networks expand and within which such relationships coalesce. In the framing of the editors of the volume, development zones are temporally and spatially unbounded sites where both proximate and remote social, political, and economic relationships are co-produced. Yet, at a more fundamental level, one might also think the zone as a more protean thing: a space in which various forms of often-competing imaginations coalesce in profoundly material and symbolic ways. From this standpoint, the development zone shares many relationships with other kinds of spaces in which a multitude of often competing aspirations and anxieties are projected onto space: the sensitive space, the frontier, the chokepoint, etc. (Carse, et al. 2020; Cons 2016; Cons and Eilenberg 2019). From

this standpoint, one might ask the question differently: what is distinctive about a development zone from these other spaces which also continue to be central to national and transnational imaginations of territory, rule, sovereignty, and economy?

One possible answer to this question might be rooted in political economy (i.e. development zones are imaginative spaces backed up by concessionary policy to facilitate accumulation). Here, however, I would like to venture a more conceptual frame. Development zones are spaces that are fundamentally engaged with particular imaginations of development futures. They are often heterotopic, in Foucault's (1998) sense of the term: spaces that stand in stark relation to all the "undeveloped" zones beyond of them; spaces that herald future possibilities for states, for transnational companies, for aspiring workers. In other words, policy, special designation, and formal enclavement are critical to the making of many development zones, but they might not be their most fundamental dynamic. Rather it is the question of imagining the future of development writ across scales. From this standpoint, the Bangladesh delta is productive to think of as a particular kind of development zone. It is not, unlike many of the zones discussed in this volume, a space that is regulated by formal concessionary policy such as an SEZ. Nor is it a space that is characterised by firm and defined spatial boundaries and demarcations. But it is unquestionably a zone in which the future of development for Bangladesh and, as I argue below, the future of development in a warming world at large is being worked out. Like other development zones, it is profoundly spatially and temporally unbounded. It is also, fundamentally, a stage upon which profoundly troubling imaginations of the future are played out, reworked, tested, and codified. It thus speaks to different and darker futures than many other development zones explored herein.

What kinds of imagination, then, are materialised in the "development zone" of Bangladesh's delta? And in what relation does this space of climate experimentation stand to the multitude of other spaces facing a future of climatic change? The answers to these questions lie not, or at least not only, in the immediacy of capital accumulation, but in securitised anticipation.

Over the past decade, much work has explored the ways in which imaginations of the future are complicit in the reshaping of the present. The broad thrust of this work is that an increasing alignment of planning with security concerns has ushered in a paradigm of anticipatory governance (Adams, Murphy, and Clarke 2009; Anderson 2010; Adey and Anderson 2011; Rippa this volume). This paradigm is marked by a transition from prevention to preparedness and pre-emption (Anderson 2010; Lakoff

2008; Massumi 2015). Such a shift signals a transformation in the logics of planning – one that focuses not on ways to forestall oncoming crises, but rather sees them as inevitable features of the future terrain and, instead, focuses on identifying and addressing vulnerabilities in response capacity. Work tracing the temporalities of disaster risk reduction, vital systems security, and biosecurity shows that anticipation constitutes a powerful logic for remaking the world (Choi 2015; Collier and Lakoff 2015; Whitington 2016; Zeiderman 2016). As Brian Massumi (2015, viii) points out, this shift towards pre-emption and anticipation marks a shift in the ecology of power – an emergence of "a new power for bringing into being". In short, anticipation effects a reordering of the social around future threats.

If anticipatory planning marks the zeitgeist of contemporary governmentality, it is also a profoundly spatial frame, imagining particular places and locals as zones in need of intense management – sites of heightened risk and threat – and as spaces of possible experimentation and innovation. I suggest that we understand what I call heterodystopias here as a specific genre of anticipatory governance (and a specific genre of development zone): one that frames particular spaces at once as zones of experimental development for management of future crisis and as representational sites that enact spectacles of containment and securitisation. Understanding these projects as heterodystopias provides ways to diagnose not only the seeming oddities of the projects themselves but also the conflicted imaginations of the future embedded in their materiality. The heterodystopias I explore speak in the name of resilience, here imagined as the capacity of people to weather future climate crises on their own, potentially without relief from the state (Evans and Reid 2014; Watts 2014).[5] But they also speak to a broader set of anxieties about the future by taking the delta as a demonstration site for climate development.

I frame my articulation of heterodystopia in direct relation to Foucault's brief yet provocative discussions of heterotopia. In contrast to utopias (sites with no real location), Foucault offers heterotopias as counter-sites, spaces of enacted utopias. These places ground a utopian vision and reflect that vision, as in a mirror, back onto the spaces beyond their boundaries.[6] Central to heterotopia is the notion of emplacement – situating or putting in place. *Emplacement* is a fundamentally relational term: one that allows

5 On the genealogy of the concept of resilience, see Walker and Cooper, 2011.

6 For critical readings of heterotopia, see Soja 1996; Hetherington 1997; and Dehaene and De Cauter 2008.

for articulation across space and place (Johnson 2006).[7] Heterotopias, for Foucault (1998, 178), are emplacements that "have the curious property of being connected to all the other emplacements, but in such a way that they suspend, neutralize, or reverse the set of relations that are designated, reflected, or represented [*réflechis*] by them." Their role is either "creating a space of illusion that denounces all real space, all real emplacements within which human life is partitioned off, as being even more illusory [...]. Or, on the contrary, creating a different space, a different real space as perfect, as meticulous, as well-arranged as ours is disorganized, badly arranged, and muddled" (Foucault 1998, 184). The demonstration plot articulates and represents the idealised model of agricultural development. The EPZ heralds an aspirational future of industrial development. The penal colony enacts the containment of those who stand in the way of a perfected society.

Heterotopia is a notoriously slippery concept. Yet it provides an interesting lens for thinking about the development zone. Historically, development interventions – especially projects such as model villages, demonstration plots, and pilot programmes – have been heterotopic: counter-sites that are enacted utopias evoking other spaces of potential development (or its lack). They constitute slices of time (what Foucault awkwardly terms "heterochronia") where the future is manifest in the present and within a specific and highly circumscribed geography. Standing, in principle, in relation to all other spaces of *potential* development, these sites both act on those who live within them and act to represent the possibilities of utopian perfection, a developed world in which poverty has been eradicated through technocratic management.

Bangladesh has historically been an epicentre of heterotopic development. Often described as the "Wall Street of development" and as "the Aid Lab" (Hossain 2017), the country has been the site of numerous models and reflections of utopian futures meant for propagation in abstract elsewhere – from the Comilla model of village development in the 1960s through the 1980s, to the Grameen model of entrepreneurial self-help through microcredit in the 1980s through the 2000s. From this standpoint, the country has played host to a multitude of development zones – both of the formal (as exemplified in the explosion of garment manufacturing centres in the country from the 1980s forward) and of the more informal kind. Yet the rise of climate security as a paradigm of development has significantly shifted the frame.

7 My understanding of emplacement in terms of "keeping in place" in this essay is consistent with, but does not encompass, Foucault's broader use of the term. I thank James Faubion for pointing this out.

New development interventions like the *killa*, which emphasise security through emplacement (as opposed to, say, offering development through market integration), work in ways roughly analogous to older heterotopian projects, though towards markedly different and darker ends. They are not spaces framed in relationship to a utopian future. Rather, they are oriented towards a future in which increasing chaos characterises the problems of management and governance. They are climate heterodystopias: windows onto life in a warming world and, as such, opportunities to manage future crises. These spaces are constituted as temporal discontinuities. In and through them, the Bangladesh borderlands emerge as a sentinel site, a space of "vigilant watchfulness that can aid in preparation for an uncertain, but potentially catastrophic future" (Keck and Lakoff 2013). They offer a space that allows for the testing and demonstration not of solutions to climate chaos, but for the management of its presumably inevitable effects. They thus, constitute spaces that facilitate a specific form of anticipatory governmentality – one organised around the deployment of technologies for maintaining life in the imagined multitude of devastated landscapes to come.

Landscapes and Architectures of Heterodystopia

The agrarian landscape of Munshiganj is variously divided between agricultural fields (largely used for growing the *aman*, or monsoon, rice harvest), and brackish-water shrimp aquaculture ponds, or *ghers*. The region is increasingly freshwater-scarce and its soil increasingly saline due to a combination of factors, including the upstream damming of rivers, subsequent saltwater intrusion, aquifer depletion, and the proliferation of brackish water aquaculture.[8] Because of a lack of available fresh water for irrigation, most of Munshiganj's farmers grow only a single rice crop, as opposed to the two to three harvests common in many parts of Bangladesh. The region was severely affected by Cyclone Aila in 2009, which washed away large sections of the protective embankments in the adjacent island of Gabura. This exposed the island's residents and agricultural land to a

8 The *ghers* are outcomes of a three-decade-long boom in export-oriented shrimp aquaculture that continues to structure the politics of land use throughout the southwest (see Islam 2014). Shrimp farming has contributed dramatically to environmental change and to agrarian dispossession in the southwest (Paprocki and Cons 2014). For more on the political ecology of shrimp in the region and its links to climate adaptation, see Paprocki and Huq 2018.

twice-daily tidal inundation of salt water.[9] Immediately following Aila, the island became a humanitarian relief zone. Numerous buildings still bear signs marking them as constructed under the auspices of relief efforts by organisations such as Oxfam and CARE. The devastation of Aila set the stage for the region's transformation to a site for climate programming. Indeed, since 2009, the region has been reconceived as a place where climate change has, effectively, already happened. Consequently, Munshiganj is awash in projects that claim to instil resilience in the lives of residents.

Beyond Munshiganj town, ubiquitous signboards mark a dense scattering of climate-related development interventions. These signs simultaneously call out the limited nature of many of these projects: demonstration plots in people's backyards, short-term training programmes that seek to educate farmers on new ways of growing vegetables, single-family rainwater collection wells, and the like. One day, while passing through a hamlet to the east of Munshiganj town, my colleague and I stopped to ask a group of farmers about development programmes in their village. One retrieved a sign marking a USAID vegetable test plot from a disused corner of his yard, and sardonically held it out for display. As his gesture suggested, signboards are often cast away not when projects have run their course, but simply when their beneficiaries lose interest in the interventions.

Residents of Munshiganj are often alternatively bemused and frustrated by these interventions. For example, many of those who lived near the *killa* discussed at the outset of this essay found the project more an exasperating waste than a portent of the future. Many wondered why the mound had been constructed instead of a concrete cyclone shelter that could provide robust protection from the periodic storms that blow in off the Bay of Bengal. Others complained that, because the *killa* was constructed on private property (owned by a farmer who was a politically powerful member of local government), it was, essentially, single-use in nature. One person angrily told me: "As much as I can see, there is not one inch of profit in it. Unnecessary place, unnecessary project!" A group of labourers we spoke with in a nearby tea stall had a wryer take on the project's uses. As one told us, chuckling into his tea, "Well, when the winds come, we will just huddle close together. That way we won't get blown off." If these comments reflected a darkly humorous take on climate-change interventions, they also highlighted a clear understanding of what is at stake in such projects.

9 Following Aila, many were forced to move onto the remaining embankments while the damaged areas were repaired with makeshift earthen mounds. Here, see Roy 2014.

Residents of the region are intimately aware of the impending impact of climate change and the ways it stands to affect livelihoods and lives.

In the concluding paragraph of his discussion of heterotopia, Foucault (1998, 184-185) notes that a ship is the heterotopia par excellence: "The ship is a piece of floating space, a placeless place, that lives by its own devices, that is self-enclosed and, at the same time, delivered over the boundless expanse of the ocean." In contrast, an island might figure as a hetero*dys*topia par excellence – a landscape beset by seas, but firmly fixed in place.[10] As the *killa* suggests, the vision of the future in resilient development projects in Munshiganj is an imagination of family units isolated from, yet fortified against, unfolding catastrophe around them.

Yet what does this vision of the future do, and to what end? To answer these questions, it is instructive to explore one of the most recognisable projects in the Munshiganj region – a "climate-smart integrated house", constructed in Gabura and meant to help residents survive the chaos of climate change in place. We had heard about this house from a WorldFish project manager in Dhaka who breathlessly described its architecture and its many adaptive technologies. WorldFish is an international research organisation and member of the United Nations Consultative Group for International Agricultural Research. The organisation has a large presence in Bangladesh, especially in the southwest.[11] The house itself was a one-off demonstration project constructed at a material cost of USD 6,000.[12] The project was famous, or perhaps infamous, in Munshiganj, and known locally simply as either the *Pani* ("water") House or as *dui toll* ("two-story") a reference to the fact that it was the only home on the island with two stories.

The house sat in a village primarily inhabited by smallholder farmers and landless labourers. It housed a single family chosen through their industrious participation in NGO support groups following Aila. The house contained a showcase of development technology: a covered well for irrigation, storage tanks for drinking water, an indoor fishpond, complex drip-irrigation systems, and much more. When we first visited, these technologies were

10 As such, climate heterodystopian projects articulate with Peter Sloterdijk's (2009) discussion of the absolute island, a space "which is placed as a completely implanted lifeworld into a milieu inimical to life." See also Günel 2011.

11 WorldFish is primarily oriented towards fisheries and aquaculture. It plays a key role in discussions of development in Bangladesh today, in part because of the centrality of aquaculture to the country's vision of sustainable development. Yet, as the Pani House demonstrates, it is also involved in a broader range of climate-focused development.

12 Though that house was the only example of this particular design, the genre of the climate-proof house is one favoured by multiple development agencies within Bangladesh and beyond.

Figure 4.1 Climate Smart Integrated House, Gabura, Bangladesh

Photo by the author

demonstrated, one by one, as other residents of the village gathered around to watch. WorldFish claims the Pani House as a model of resilience.[13] As the organisation's project report on the house states:

> Changes in climate will affect local weather patterns and impact many people's livelihoods. The climate-smart house provides protection against cyclones and flooding and supports efficient use of water and energy. Many features of the house are aimed at increasing food production and helping families become more self-sufficient and better able to cope with extreme weather events. (Hossain, Nurun Nabi, and Kaminski 2015, 3)

In other words, the Pani House was conceived as a comprehensive humanitarian technology of emplacement, allowing residents to survive and thrive in a coming ecology that will be both disaster-prone and resource-scarce. It was a project that addressed broad concerns about climate security and migration by providing tools to help residents not migrate. Equally important, the project was a pilot. The report suggests that "communities should work with government representatives to encourage the building

13 For a discussion of the ways that the Climate Smart House fits into what Paprocki terms Bangladesh's broader "adaptation regime" see Paprocki 2018.

of climate-smart housing in vulnerable areas" (Hossain, Nurun Nabi, and Kaminski 2015, 7). The communities in question seem unlikely to be those in the delta, where it is difficult to imagine an intervention that costs USD 6,000 per household adopted at scale, because such a project would quickly run to billions of dollars in cost. Rather, the Pani House was conceived as an abstract and portable technology, ready, though perhaps unlikely, to be deployed in other areas of climate disaster.

In practice, the Pani House's various technologies were fraying at the edges. For example, the complicated drip-irrigation systems that were supposed to allow residents to grow household plants in window boxes isolated from saline soil and raised above flood levels relied on plastic drip spigots. Most of these spigots had broken and were not repairable with materials available in local markets. The stairs to the second story of the house were constructed out of iron, making them rapidly rust in the saline environment. Indeed, as Mehru and Habibur, the residents of the house, told me, a number of problems had emerged with the house's design since its construction. The pair had a series of grounded suggestions for future iterations of the project, such as extending the roof overhang for the house, so that rain was less likely to blow in during the monsoon season. I asked them if WorldFish had collected any of this feedback from them. They told me that they had not had any contact with the designers since the house was built. As Mehru put it: "They have given it to us, but we cannot tell them that we are facing these problems."

The design, architecture, and construction of the house were, I suggest, heterodystopian. They evinced planning not designed specifically for the region, but rather for an abstractly conceived space of climate crisis – one that may be in Bangladesh but could just as well be anywhere. This yielded a range of minor failures of design and planning, such as irreplaceable plastic spigots and iron stairs. Yet more revealing of the heterodystopian vision articulated by this and similar projects were the social implications of the house itself. Foucault (1998, 183) describes a heterotopia in which "everybody can enter […] [but] by the very fact of entering, one is excluded." The Pani House proved similar. Anyone, including other residents of the village in which it was situated, could enter to marvel at the technologies of resilient development on display there. Yet none of these technologies were things that the village at large was meant to benefit from. The house was built and designed explicitly for a single family situated within, but removed from, the rest of the community.

I asked one of the house's designers about this and was told that there were initial plans to make it a community resource. But there were two challenges.

First, WorldFish wanted the house to serve as a proof of concept, something they could test and collect feedback on (something which, apparently, they have not done). "The second challenge was that we were worried that something that belongs to everyone belongs to no one when it comes to work to provide, and that it creates conflicts when it comes to harvesting benefits." This tragedy of the commons vision of development brushes against the many histories of collective organising by landless and smallholder groups throughout Bengal (e.g., Hashmi 1992). But, like the *killa* discussed at this essay's outset, it also articulates an imagination of a climate-affected future necessarily composed of individual families surviving on figurative, and perhaps literal, islands, isolated, and protected from the unfolding chaos around them. An island unto itself, the heterodystopia of the Pani House enacted the dystopia to come.

The Politics and Poetics of Heterodystopia

That the Pani House was constructed as a general solution, as opposed to one that addresses the specific condition on the ground, is not in and of itself, surprising. The notion of piloting and modelling has long been a central dynamic of development (Cullather 2010). Yet the Pani House raised questions about whether the model was, in fact, meant to be (materially) replicated. Like many other interventions in the Munshiganj region, the Pani House appeared to be a project that privileged the act of modelling over the process of learning from and scaling up new development technologies. This permanent provisional condition hints at other possible meanings and purposes of climate heterodystopias. To understand these, it is necessary to attend to the representational dynamics of these interventions as much as to their impact on beneficiaries.

Development is a profoundly visual language. The point of pilot and model projects is that they demonstrate an efficacy of interventions in a particular location that stands in for a multiplicity of other potential locations. These projects – model villages, demonstration plots, and so on – dramatise the distinction between the space of the project and the undeveloped space outside of it. As Nick Cullather (2004, 228) writes of Green Revolution technology, "where the dark green rice stopped, that was the edge of the modern." In Munshiganj, the clustering of projects in a single space further heightened these visual distinctions. In a pattern replicated in many projects throughout the region, the Pani House accumulated other development projects within its perimeter. The Pani House's backyard, for

Figure 4.2 Backyard of the Climate Smart Integrated House, Gabura, Bangladesh

Photo by the author

example, housed an International Union for the Conservation of Nature (IUCN) test patch for climate-smart watermelon production, as well as a USAID irrigated-rice plot. These fields were neatly cordoned off by a blue fish-netting fence that defined the property boundary. The fence marked a stark contrast between the Pani House and the unirrigated, dry, and dusty *aman* rice fields beyond – the agricultural fields farmed by the other residents of the villages. The message in this contrast proved hard to miss. Unlike older visualisations of development, which dramatised distinctions between modernity and tradition, the boundary here marked a division between impending chaos and its potential management. Inside the project boundaries, resilient development flourished. Outside and surrounding it lurked the non-resilient future.

The accumulation of projects within the Pani House served a dual purpose. The first, and most obvious, was that the presence of one project increased the likelihood of success of the others. The USAID rice plot, for example, was being irrigated by the Pani House's private water supply. But more important, this accumulation of projects made the Pani House photogenic. Indeed, the house and its residents appeared in press material for other development organisations working in the region. For example, IUCN designed a poster displaying their test plots in the Pani House's backyard and Habibur, one of its residents, to promote saline-tolerant watermelon

production. The contrast between the climate-smart household and other households in the village was dramatic. But at the same time, it was also beside and precisely the point. The community and the house's residents were not the primary audience for the intervention. Indeed, as my colleague and I were told by a WorldFish project manager in Dhaka, the Pani House was meant more "for the website" than "for the people".

But whether meant as a real project or as a kind of climate set piece, the Pani House also revealed the logics of heterodystopia. The Pani House articulated climate futures in which single families would have to go it alone. The notion of a community – however defined as a potential actor in this climate-affected future – was not part of this vision. Moreover, the question posed by projects such as the Pani House was not whether such a vision of the future – climate wasteland with individual resilient families hanging on by their development-enhanced teeth – was a just vision or an acceptable one. Rather, it was simply whether this articulation of resilience proved workable, scalable, and capable of capturing donor imaginations. These interventions emerge as articulations between not just, or even primarily, development practitioners and their beneficiaries, but between development organisations and a global population increasingly concerned about the impending security crisis of global warming. The message in the spectacular image was clear: technological solutions to instil resilience in the face of ecological change are possible and feasible. Moreover, they are already in the works, emplacing life on the front lines of a warming world.

If climate heterodystopias like the Pani House only questionably achieve their stated goals, they are, nevertheless, quite successful at producing aesthetic messages. They are spectacular: spaces of juxtaposition that rely on appearances and images as techniques of power (Debord 1995; Foucault 1998). They constitute not only ways to acclimatise populations to particular logics of life in the Anthropocene but also forms of communication between powerful development organisations and their audiences (Yeh 2013). Seen through this frame, residents of Munshiganj are not just the targets of intervention but also the means of production of spectacles of climate resilience – the vehicles through which a set of technical interventions are demonstrated as efficacious in producing a set of resilient-like effects (Dunn 2012). In other words: while projects in Munshiganj framed the area as a space of climate crisis, they simultaneously offered a techno-optimistic claim to donors and concerned individuals elsewhere that development interventions *can* manage anthropogenic crises on the margins of a global empire (even if they are never actually deployed to do so).

Within and Beyond the Zone

The Pani House provided a particularly vivid articulation of the logic of heterodystopia. Yet many others like it dotted Munshiganj's landscape. These ranged from vertical agriculture technologies (projects of replacing household agricultural production in fields with vertical tubes for isolating household vegetable growth from saline soil) to other test houses that, like the Pani House, had received multiple development interventions from multiple development agencies to promote resilient living in the face of climate change. Many homes that had accumulated donor interventions also were situated on the most productive and least saline soil. In other words, they were homes with the least immediate need of such technology but the most likelihood of visibly demonstrating its value. It is crucial to note that such development interventions do not constitute the totality of possible futures, real and imagined, in the delta (Cons 2020). Indeed, those who live in and amongst heterodystopian development projects themselves often enact quite different and more grounded forms of resilient planning (Cons 2018; Tanner, et al. 2015). Such interventions, however, rarely register in the visual economies and anticipatory planning regimes of contemporary climate-oriented development programming.

Development zones are, by definition, spaces marked off from those around them – whether through formal processes of enclavement or the more semiotic technologies of framing projects for consumption through the internet. As with many of the projects discussed in this volume, such marking is often carried out through legal, policy, and material inscriptive technologies – concessions, state zoning regulations, fences, etc. (Li 2014). But the increasing location of development zones in often sensitive borderlands – spaces of anxiety, intense intervention, and discursive overrepresentation (Cons 2016; Billé 2014) – suggests that such zones are also imaginative spaces, defining areas that matter not only in and of themselves, but also for what they do and can represent to others. To that end, such zones are more than just legal/territorial entities. Like 'The Zone' in Andre Tarkovsky's science fiction classic *Stalker* (1979), they are spaces of intense focus for the outside world that frame both existential threat and potential promise. The heterodystopian projects discussed in this chapter epitomise this imaginative framing. They at once dramatise the impending threat of a climate-dystopian future and hold out the promise not that such a threat can be forestalled but that, through application of development technology, it can be contained.

Insofar as these heterodystopian interventions reflect a grim vision of a climate-affected future, they not only foreclose a range of possible ways of

conceiving development within the region but also contribute to producing the southwest delta as a climatological borderland with an eminently translocal future of disaster. Reading these projects as heterodystopias provides a way to diagnose the specific securitised imaginations of the future that are currently being grafted onto places of uncertain ecological change. Peter Johnson (2006, 87) writes: "With different degrees of relational intensity, heterotopias glitter and clash in their incongruous variety, illuminating passages for our imagination." So too heterodystopias.

The Bangladesh borderlands are thus spaces within which we can begin to see the confused projections of climate futures (particularly those involving borders and migration) embodied in present-day development interventions. The emplacing technologies in Munshiganj imagine a world in which populations survive as atomised families, deploying various humanitarian technologies to help them remain fixed in a climate-ravaged landscape. Yet, the recursive constitution of these interventions as spectacles suggests that we should understand them not only as pilot projects of resilience. They also speak in an idiom framed by a broader failure to address climate change at a planetary scale, a set of anxieties about climate-induced migration, and a need to project technological mastery of emerging security concerns in climatological borderlands. Exploring these projects as heterodystopias reveals ways in which security and development are jointly remaking the climate-affected world in the present. It also reveals ways that development zones are bound up not just in realising the material promise of economic growth, but the management of securitised anxiety about dystopian future.

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