

Wound-up Worlds and *The Wind-Up Girl*:
On the Anthropology of Climate Change and Climate Fiction
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Abstract

While climate change is occurring in the Mekong river basin, in recent years climate fiction has exploded on the literary scene. In this paper, I attempt to put these phenomena into contact in an ontologically multi-sited ethnography of climate change and climate fiction. Rather than assuming a radical separation between real and fictive worlds, with the consequence that the latter can at best provide metaphors for understanding the former, this entails a lateral comparison that moves back and forth between the realms. On the one hand, as objects of ethnography, works of cli-fi can be examined in terms of the climate-changed worlds they construct and the responses generated within those worlds. On the other hand, as objects for ethnography, these worlds and responses can be laterally compared with different situations, like those found around the Mekong basin. Engaging in both modes of analysis, I experiment with constructing a sliding scale in which present realities in the Cambodian Mekong gradually blur into the cli-fi world of Paolo Bacigalupi's (2009) *The Wind-up Girl*.

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Entering the country from the north, after marking the boundary between Laos and Thailand for many miles, Cambodia's geography is dominated by the Mekong river. After the Khone Falls, one of the numerous places where the doomed French Mekong (1866-1868) expedition got stuck (Keay 2005) the river passes Kratie before reaching Phnom Penh, Penh's Hill, the capital. There, it converges with the Tonle Sap river that has arrived from the big lake to the northwest. Most people think of the Mekong delta as the intricate system of canals and dikes in Southern Vietnam, but the triangular shape characteristic of deltas has its apex at Phnom Penh.

In the rainy season, the flow of the Tonle Sap river reverses. The Mekong is so strong that it pushes water backwards up to the lake, which floods the surrounding plains and extends more than tenfold. As long as memory lasts, this unusual river pulse has created an abundance of fish. Until quite recently, when Irrawaddy river dolphins swam freely in the Mekong and giant cat fish were still common, people living on the lake and by the rivers had no trouble making their catches. But times are changing. Each year it gets hotter and even the Mekong itself seems to be slowing down. Rice fields are drying.

Meanwhile new words, like climate change mitigation, have begun circulating. Appearing in proliferating policy briefs and in the flashy titles of strategies that, everybody secretly knows, though they wish they didn't, end up unread in ministry drawers.

Or words like food security, which is heard much more frequently after it became clear that the Tonle Sap fisheries were headed towards collapse. Once this happens experts started to warn, Cambodians will have nowhere to turn for protein and they will cease to have a sufficient nutritional base. They are referring to the rural population, of course. With enough money one can still get opulent meals in Phnom Penh, by Angkor Wat, and in the resorts.

For all the talk about climate, however, the Mekong collapse is not simply due to the fickleness of nature. The river basin is changing, certainly, but not by itself. No, it has been helped along quite a bit by some people. By which I mean the Cambodian

government elite, which happens to be also the business elite, which—it just so again happens—also controls the police and military. The collapse is nurtured and nudged by these people, and then by foreign investors: from Barang countries, yes, but mainly from Thailand and Vietnam, and especially from China, which seems to be always on the lookout to build more of the hydropower dams, the electricity of which the Thai and Vietnamese want to procure. As for the Cambodian elites, they mainly want to fence the building areas and clear them of rare tree species—rosewood, teak and dipterocarps—convertible into vast fortunes on the Chinese market.

Thus, cascades of dams are built, convoys of rosewood travel north with military escorts, and watts are produced. Meanwhile, the weather warms, rice dries and fish die. Whatever electricity is produced reaches Bangkok and Hanoi but not—surprise—nearby villages.

Anyway, it didn't reach those distant destinations for long either. While clever economists and biologists pointed to the need to balance energy and food security, nobody predicted that both would plummet simultaneously.

Only the giant American agricultural corporations seemed prepared. Once traditional “green revolution” crops began failing, they stood ready to deliver new generation gene-hacked produce to the hungry masses. Masters of the emerging food-security nexus, they are known as calorie lords. But while their patents unleashed a flood of money, they also set in motion other flows, which a literature predating ecological economics might have described as negative externalities. Actually, they were flows of disease and contamination, of blister rust and cibiscosis, scourges that infected older kinds of fruits and vegetables, and turned liquid the organs of those who inadvertently ate them.

Now, rising waters have almost swallowed the Mekong delta. To the west, in Bangkok, engineers wage a daily life and death struggle to keep it out. Meanwhile, as oil production came crashing down, a gaping hole in supply opened up, which no amount of dams had a chance to fill. As fuel hungry infrastructures ground to a halt, the Vietnamese military entered Cambodia, just like in 1978, only this time not to oust the Khmer Rouge but to take over the country's coal supplies. In Northern Thailand and Laos, too, Thai forces and the calorie lords engage in low-intensity warfare over the remaining energy sources. This is all hushed up, of course, and the areas are strictly off-limits. But persistent rumors have it that these battles are fought by genetically modified people, so-called new people.

A Zone of Indiscernibility

When anthropologists turn to literature, it has often been in search of striking metaphors or vivid analogies. Clifford Geertz (2003: 30), for example, compared Balinese cockfights with themes found in Shakespeare's *Macbeth* and *Lear*. But this was never too serious a pastime. In Geertz's own words, his usage was merely: “suggestive, allusory and en passant.” Given that his aim was to elucidate the cultural aspects of cockfights without any deep interest in what they might teach one about Shakespeare, it was also decidedly asymmetric. At this point in time, however, it may be possible to imagine a different set of relations between the worlds of fiction and ethnography.

In a previous paper (Jensen 2012), I suggested that it is possible to take works of fiction as ethnographic materials and turn them into experimental resources for

anthropological theory.¹ Thus, I attempted to enroll the anthropologist impersonator Carlos Castaneda and the literary critic and author Maurice Blanchot as quasi-informants, with a view to eliciting how each articulates what is found on the “outside” of realms of human action and meaning-making (which in turn provides a contrast to versions of nonhuman worlds depicted by object-oriented ontologists and speculative realists).

This approach shares an orientation with Gilles Deleuze (2003) who, contra Geertz, insisted that art is not primarily metaphoric, but operates instead via an extraction of “blocks of affect” from the world, which the artist reshapes and gives back to the world in new forms. Noticeably, this view also suspends with the assumption that there is any quite definite or clear-cut boundary between fictional and real worlds. Just like “fictional worlds” are never wholly fictional since their creation entails extrapolating or abducting bits and pieces from real ones, “real worlds” are never entirely real either (see Ishii, Jensen and Swift 2016, Smyth 2002), since they are infused with imagined elements and since, also, they are influenced *by* fictions that circulate “back into” reality. Rather than closed wholes, both can thus be seen as performative, open-ended, and leaky sets.² The observation that their mutual relation is never either fixed or unequivocal has led the literary scholar Rita Felski (2013: 28-29) to recommend examining “how literature enters life.” Ethnography might be seen as distinctly useful for that examination.

Yet, similar to Geertz, Felski’s formulation also maintains a boundary, however fuzzy or attenuated, between fiction and reality. What her formulation suggests is a process in which the former “enters” life rather than being constitutively part of it. Inasmuch as the question of how life enters art is not raised, the traffic is imagined to be one way.

It may be possible to disrupt this image by experimenting with forms of lateral comparison (Gad and Jensen 2016) that move *back and forth between* the realms. For an example, consider Elizabeth Povinelli’s (2017: 294) evocative suggestion that an adequate understanding of the anthropocene might be facilitated by imagining Philip K. Dick, author of *Do Androids Dream of Electric Sheep?* and *Ubik*, as a participant in symposia organized by the International Union of Geological Sciences to decide the faith of the anthropocene. By placing Dick among the geologists, Povinelli is creating what Deleuze and Guattari (1994: 19-20) would call a zone of indiscernibility in which “something passes from one to the other, something that is undecideable between them.”

In the prelude, I tried to generate a similar effect of indiscernibility. I attempted, that is, to construct a narrative sliding scale in which present realities in the

¹ Among the precursors for this idea, we find the scholar of French literature William Paulson (2001) who argued for a cosmopolitical approach to philology drawing on Bruno Latour, Isabelle Stengers and Jean Paulhan. The literary scholar T. Hugh Crawford (1997) has written a lateral analysis moving between the navigational practices and guidelines of Matthew Fontaine Maury, “the pathfinder of the Seas”, and Herman Melville’s *Moby Dick*. And Donna Haraway (e.g. 1997), of course, has long drawn on feminist science fiction to interpret actually occurring sociotechnical transformations. More recently, Mackenzie Wark (2015) brought into conversation half-forgotten Russian fiction writers, the cyborg perspectives of Haraway and Karen Barad, and Kim Stanley Robinson’s *Mars* trilogy as resources for thinking the anthropocene.

² Language comes in the way of description, for given what I have just said it is of course misleading to continue to speak of “two worlds.”

Cambodian Mekong gradually blurred into the cli-fi world of Paolo Bacigalupi's (2009) *The Wind-up Girl*. In all likelihood it was not very hard for the observant listener to guess approximately where one stopped and the other began. Perhaps, however, the line was also not altogether sharp. I am suggesting that it becomes possible to experiment with an anthropology of climate change and climate fiction at this point of relative indeterminacy.

Climate Change and Climate Fiction

Almost a century ago, the philosopher Alfred N. Whitehead (1926: 196) described the "rate of progress" of life in the West as so fast that most individuals would "be called upon to face novel situations which find no parallel in his past." Since then, discourses of profound and imminent transformation have not, of course, abated. It is tempting to comment on the fact that everything seems to change except the trope of rapid transformation itself, which appears practically immutable. Yet its persistence may have its reasons. After all, it is undeniable that many or most areas of life, across much of the planet, have been subjected to dramatic upheavals over the last hundred years.

Although the perception of rapid transformation has not diminished, the accompanying structure of feeling has changed. While the sense of being dashed headlong into the future has no doubt always been viewed with ambivalence, during certain periods of the 20th century, science and technology were *generally* viewed positively, as harbingers of progress. In science fiction, described by Samuel G. Collins (2003: 81) as a "collective image factory," earlier periods celebrated man's heroic conquest of space, visualized hyper-advanced technology and space and time travel, and imagined exchanges with alien species.

Augmenting the image of the "collective image factory," Deborah Danowski and Eduardo Viveiros de Castro (2017: 7) has recently characterized SF as the "pop metaphysics of our time." Even provisional acceptance of this description puts us on the path of diagnosing a radical change in sensibility. For what the meteoric rise of cli-fi in recent years (Trexler 2015) testifies to is not the upward movement of human intelligence but rather climate disruptions brought about by human stupidity, negligence or indifference, the consequences of which are felt not elsewhere in the galaxy but on our own little planet. Rather than steadily marching towards a better future, as far as pop metaphysics goes it seems obvious that we are hurtling into a climate abyss.

By no means a critic of science and technology, Whitehead (1926: 196) was nevertheless wary of the professionalization of knowledge and the corresponding tendency to modern over-specialization, which, he foresaw, would produce minds "in a groove." Minds in a groove would diminish the collective ability to appreciate or even comprehend the richness and diversity of human life. Paradoxically, at the very moment "when the most delicate, anxious consideration of the aesthetic qualities of the new material environment was requisite, the doctrine of the irrelevance of such ideas was at its height. In the most advanced industrial countries, art was treated as a frivolity" (Whitehead 1926: 195).³ Though, for good reason, Whitehead had nothing

³ The explosion of experimental scholarly formations in response to the ever more obvious menace of climate change, many of which cross over between science, humanities and the arts, point to an increasing appreciation of Whitehead's point. Though, it has to be said, the good intentions and energetic execution of these experiments are not always matched by their artistic or intellectual qualities.

to say about science fiction, he might well have found appealing the notion of collective image factories generating pop-metaphysics to shake specialists out of their habitual grooves.

Today, it has become possible to think of art as providing something else and more than Whitehead's aesthetic considerations pertaining to material environments. Indeed, one of his greatest interpreters, the philosopher Isabelle Stengers (2014: 8),⁴ has contrasted the experiments of physics, which take place in a 'rarefied world,' with those of science fiction, which unfold in worlds "dense with the many repercussions and consequences of the author's hypothesis, a world the inhabitants of which live with opportunities, problems, dilemmas, habits, hopes and fears." Thus, she depicts sci-fi worlds as future imaginaries (cf. Fujimura 2003) that, in the context of cli-fi, offer divergent articulations of what Danowski and Viveiros de Castro (2014) has called Gaia's "thousand faces."

Along such lines, Stengers (2014: 9) characterizes the works of Ursula K. Le Guin and Marion Zimmer Bradley as exhibiting an "art of consequences" that experiments "with the settled, authoritative distribution between the possible and the impossible, the acceptable and the unacceptable." Precisely because sci-fi authors are not beholden to the flawed image of objectivity that much social science has adopted from popular discourses about natural science, they are able to craft "tales that disclose their epoch's capacity to feel that there are other possible ways for a world to consist" (9). In the words of the self-described "cosmopolitical philologist," William Paulson (2001: 112) such worlds can be seen as propositions about "new types of encounter (and conviviality) with nonhumans," and as explorations of the entangled and divergent consequences of such encounters.

This perspective can be brought into communication with Heather Swanson, Anna Tsing and Nils Bubandt's recent discussion of the anthropocene. While Stengers teases open the art of consequences of sci-fi worlds in order to let them seed the "real world," Swanson *et al* suggest that there are things in the world, like the anthropocene, that are already science fiction(al). Thus, they write about the anthropocene that it "pulls us out of familiar space and time [and] allows us to explore emergent figurations, genres and practices for the transdisciplinary study of real and imagined worlds" (Swanson *et al* 2015: 149). While Le Guin for Stengers is a maker of fictional worlds that explore an art of consequences, she becomes for Swanson *et al* an embodied conversation partner about the possibilities for writing at the interface between poetry and science.

But if anthropology can thus be turned into the real world study of the anthropocene as actually occurring science fiction, then, it is perhaps also the case that cli-fi worlds can be turned into objects of and for ethnography.

As objects of ethnography, works of cli-fi can be examined in terms of the climate-changed worlds they construct and the responses generated within those worlds. As objects for ethnography, these worlds and responses can be laterally compared with other ethnographic situations, like those of the Mekong to which I previously alluded. By establishing zones of indiscernibility between such worlds, I am suggesting, cli-fi offers virtual entry points through which the 'nervous system' (Taussig 1992) of actually occurring climate changes, and responses to it, can be elicited. These zones may also, though this is not of course guaranteed, facilitate the

⁴ Available at <https://osmilnombresdegaia.files.wordpress.com/2014/11/isabelle-stengers.pdf>. (visited July 13, 2017).

extraction of some otherwise only dimly perceivable possibilities for alternative climate trajectories.

In other words, and to repeat, declining to take at face value the distinction between the real and the fictional, the anthropology of climate change and climate fiction works as what could be called an ontologically multi-sited ethnography. In the rest of this paper, I offer a sketch of what such an approach might look like. After examining Bacigalupi's *The Wind-Up Girl*, I eventually re-enter the zone of indiscernibility between his South-east Asia of an indefinite future and the climate threatened Mekong of the now.

A Note on Whole and Partial Worlds

Some authors and some books lend themselves more easily to ethnographic treatment than others. Ursula K. Le Guin, for example, always a crowd favorite, is famous for producing whole worlds (e.g. *The Left Hand of Darkness*, *The Word for World is Forest*) that practically begs the anthropologist to step inside and observe flora and fauna, culture, gender relations, economy and politics. Kim Stanley Robinson's monumental *Mars trilogy* is even more comprehensive.⁵ In *The Wind-Up Girl*, like in most cases, however, no similar depth of historical, environmental or cultural context is provided. Accordingly, we are faced with a different challenge than the basically holistic one of putting together a puzzle where most of the pieces are given. Instead, the issue becomes one of extracting from diverse scenes, happenings and events, and from descriptions of how people make sense of them, bits and pieces of the world. There is a distinct ethnographic quality to this labor, except for the obvious and consequential fact that we are unable to participate in the story and will have to make do with what is provided. Similar to post-holistic ethnography (Marilyn Strathern (1992: 3-4) might say post-plural, cf. Otto and Bubandt 2010), it becomes that much more important to carefully figure out what kinds of problems and concerns the pieces we are actually able to access might form relevant answers to. With this in mind, let us step into Bangkok on a burning hot summer day sometime after the year 2100.⁶

Bangkok, ca. 2100

For a long time, we are not sure how long, the old colonial powers continued to expand and dominate. At some point, it appears, the collapse of the doomed oil-hungry energy system led to widespread violence and hunger. A threshold was passed and new diseases like cibiscosis, Nippon genehack weevil, blister rust and scabis mold began to run wild, indiscriminately infecting vegetables and fruits, destroying landscapes, and making people "cough up the meat of their lungs." Now power is in the hands of the calorie companies that were quick enough to fill the hunger gap. Conglomerates like AgriGen, PurCal and Total Nutrient Holdings wield the power to pressure governments, wage wars and control territories. But Thailand, which has never been colonized, continues to resist.

⁵ This may not be random, given Le Guin's anthropological family connections and Robinson's background as a student of Frederic Jameson (whose study of science fiction (Jameson 2005), incidentally, is more or less the polar opposite of what I intend with the anthropological study of climate fiction).

⁶ No dates are given in the book but reference is made to the newly deceased King Rama XIII. Since King Rama X ascended to the throne in 2016, the book takes place three-four successions after the present.

In Bangkok, conveyor belts are moved by megadonts, “mountains of genetically engineered muscle.” Tethered to machinery these gene-hacked animals, derived from elephants, are also spun into the city’s political economy. Their handlers, mahouts, are organized in the megodont union, which is so powerful that even masters of the underworld, like the Dung Lord, must bow to them.

Not the only biological novelty, megodonts shares the urban ecology with Cheshire cats, named for their ability to blend with their surroundings to the point of near invisibility. Lethally effective hunters, the intensely disliked ‘devil cats’ were allegedly created for the birthday party of the daughter of a wealthy American calorie executive. Afterwards, they spread across continents and exterminated competition everywhere.

Other genetic “inventions” have more carefully considered features. Long struggling with low birth rates, the Japanese began manufacturing “new people,” who would be perfect servants for the aging population. Some are tireless laborers, and some are powerful military variants while others, like Emiko, the wind-up girl who gives the novel its name, have quite different characteristics. With her inability to decline orders, her impossibly smooth skin, and an inclination to intense sexual arousal that she can’t fight, Emiko is a living sex doll.

New people are prohibited in Bangkok but some, like Emiko, have been smuggled into to satisfy the curiosity and perversions of Thai officers and Farang businessmen. They live secret, precarious existences, for the moment between being recognized and being fed to the methane composters from where Bangkok’s green-hued streetlights gain their energy is brief. In Cambodia and the North, there are also new people. There, they fight coal wars on behalf of regional governments and political factions. It is said that some have escaped and created their own enclaves in the mountains.

Back in Bangkok, a small, inconspicuous factory is on the path to make a breakthrough innovation in kink-springs, the coils used to store energy in the new economy. By submerging them in baths of genetically modified algae, the previous Farang manager was close to producing fist-sized springs capable of holding gigajoules. But he has vanished, or been vanished. While waiting for a new manager, the factory is run by Hock Seng, a yellowcard, as the Thai call the viciously repressed Chinese Malaysians who managed to flee north after their mass extermination at the hands of Muslims. The factory is owned by the American calorie-company AgriGen. And just recently a difficult new manager, Anderson Lake, has appeared.

To Hock Seng it seems as if the Farang are protected by the supernatural. By right they ought to have all perished, yet they continue to thrive, like pests. Now they are back with new produce, new patents, new wads of money and, as always, new plagues. This time, however, there are real chinks in their armor. Even the most powerful calorie companies are starting to run low on viable genetic materials, and they are barely able to keep up with the continuous mutations of the diseases. Unbeknownst to Hock Seng, this ties his situation together with the foreign devils, for in reality Agri-Gen has no interest in innovative kink-springs. The manufacturing plant is only kept afloat as a cover that allows Anderson Lake to scout Bangkok for fresh sources of genes.

Something odd is definitely going on. Recently, long deceased fruits and vegetables have begun returning “from the grave.” Bangkok’s markets are once again filling up with potatoes, tomatoes and chilies. Lake is shook to the core as he finds *ngaw*, or rambutan, openly sold on the markets, its reappearance “as shocking as if a Tyrannosaurus were stalking down Thanon Sukhumvit.” From then on, he becomes

increasingly obsessed with figuring out from where the new old fruits are coming. Behind it, he feels certain, sits the Environment Ministry, probably in collusion with his ex-colleague, the brilliant but mad Gibson, who has disappeared.

Lake has been dispatched to Thailand because he has a keen eye not only for new vegetables and fruits, but also for deals, negotiations and politics. Even so, there are many dimensions to life in Bangkok to which his cunning leaves him blind. Mediums speak about crowds of *phii*, ghosts, growing crazy with frustration since, undeserving of the misery of this world, they can't reincarnate, but Lake knows this to be superstition. As for the sick Thai who, wearing Phra Seub amulets, pray and make offerings to King Rama at the city pillar shrine in the hope of being saved, Lake has no doubt they still end up in the morgue. Yet, rather than seeing through the Thai's veil of ignorance, it is Lake himself who fails to grasp the "true relation of each organism to its environment" (Whitehead, 1926: 196) in this foreign world where spirits, infrastructure, genes and politics cannot so easily be disentangled (see also Sangkhamanee 2017). Indeed, Lake's inability to perceive that something connects these realms and entities, and what it is, eventually becomes his undoing.

At the very heart of the city, close to where the Chao Phraya river curves, sits the City Pillar Shrine, Lak Mueang. Perpetually crowded with people who come to make offerings to King Rama XII, the shrine was erected when the capital was moved from Thonburi in 1782. Three centuries later, it was also where the late king had affirmed in a rousing speech that Bangkok would not be abandoned to the waters. On that day, he had declared a dual technological and spiritual war, assigning to the Ministry of Environment the monumental engineering task of building levees and tide pools to protect the fragile city, while tasking monks with the equally daunting job of chanting without cease to protect pumps, seawalls and dikes. Unknown to those who come in prayer, and to Lake, the City Pillar Shrine also houses a secret seed-bank. Stowed away in tightly packed boxes behind thick locks sits Thailand's "treasure trove of biological diversity," its "heritage of millennia."

Bangkok, 2100, is subject to the butterfly effect. After a session of particularly degrading sex with several men, Emiko, the wind-up girl, somehow bursts through her behavioral constraints, snaps, and kills them all in an instant. Her violators turned victims were, it turns out, high-ranked officers affiliated with the trade ministry. The murders are interpreted as assassinations carried out by the competing faction from the environmental ministry and within days a brief, brutal civil war rocks the Thai capital.

In the aftermath of the carnage, the young lieutenant Kanya, who has worked as a double agent for trade, is promoted as head of the new ministry of the environment. Her first task is to lead the "white demons"—calorie people, whose weapons ensured the victory of the trade ministry—into the seed-bank, where they will receive samples in reward. But Kanya is haunted by her mentor and only friend, Jaidee, who died as a result of her double crossing. Inside the sacred vault, his insistent whispering prompts her to kill the foreigners. Kanya then orders the monks to move the seeds into the country, and her men to destroy the pumps and water locks that protect Bangkok from the water.

The City Pillar Shrine, site of Bangkok's inauguration as Siam's capital and the place from where the war against water was commenced, is thus also the place where the city is given up. Yet, this letting go, or letting loose, too, is what ejects the hated Farang calorie lords from the country and, thus, perhaps, what opens the path to another future.

Wound-Up Trajectories

Akin to the surprises Philip Dick might conceivably spring at the geologists' symposium, I suggested earlier that lateral comparisons of actually occurring climate change and virtually occurring climate fiction could facilitate the invention of more varied and interesting responses to the anthropocene. Rather than general and abstract, such responses would have to be specific. I don't mean they would have to be formulated as concrete interventions or to-do lists (and anyway, anthropologists are generally in no position to dictate to others why, how and where they should intervene). I mean, instead, that, rather than elucidating climate change as a literary idea, a trope, or a philosophical problem, it would address particular sites, problems and concerns.

It is therefore not random that the specific zone of indiscernibility with which I have experimented here aims to establish a point of contact between Mekong climate change the *The Wind-Up Girl*. Not only do the plots unfold in adjacent countries with long, tangled histories: the latter can also be seen as creatively abducting or extrapolating from tendencies that are virtually present in the former, if not practically bubbling to the surface.

This is why I have suggested that *the Wind-up Girl*, while of course not reducible to present Mekong realities, can be used to tease open some barely perceptible tendencies located within them. Such a prying apart is what I mean by speaking of climate fiction as an object *for* other kinds of ethnography. Let me therefore turn to some aspects and qualities of *The Wind-up Girl* that seem pertinent for sharpening or reorienting the concerns that presently shape the future imaginaries of the Mekong.

Climate change profiles suggest that the Mekong basin will be hit hard and early by global warming. In Cambodia, preliminary effects, including extreme heat waves and extended droughts, mixed with periods of violent flooding, are already occurring. Faced with new threats to their livelihoods, rural populations living along the rivers and in the delta are trying to adapt. Since current events are expected to be only a pale version of what is to come, climate mitigation is also an urgent concern among multilateral organizations, governing bodies and NGOs.

Meanwhile, the great Tonle Sap is already overfished, and fish populations are predicted to decrease by more than 30% over the next decades as plans to build up to 200 uncoordinated dams in Laos and Cambodia are underway. Even if American calorie execs have yet to arrive in Phnom Penh, there is little doubt that food scarcity is a growing issue.

Since river fish is easily the most significant source of protein for Cambodians, depletion of the fish stocks would threaten much of the population with (further) malnourishment. And since the ruling party is aware that hunger causes social unrest, some foreign experts believe that waving the flag of food security is the best chance, however slim, of delaying some of the dams. In the short run, dam cascades are thus a more immediate threat to Cambodian people, animals and ecologies than climate change.

Justified by the need to generate electricity to the largely off-grid local population, most dams are commissioned to Chinese companies under 30-year BOT (buy, operate, transfer) schemes. More consequential than the needs of the poor, however, is the fact that the country imports around 60% of its electricity from neighboring Thailand and Vietnam. Should either country decide to tighten the screws, Phnom Penh's mansions and special economic zones might well find themselves in darkness.

Despite this vulnerable situation, it is quite unclear how much electricity is actually generated by the dams that have been built so far. Informally, it is well known that the main reason Cambodian politicians are pushing so many dams is because it gives them the opportunity to seize lands and cut down forests. Indeed, stories circulate of ghost-dams that have never produced any electricity at all, their *only* function being to cover-up for resource extraction. Possibly a similar logic of extraction influences the recent surge of mining concessions, which perhaps prefigures Bacigalupi's Vietnamese-Cambodian coal wars.

The severely tried Cambodian peoples have not experienced any full-blown wars since Pol Pot's reign of terror ended in the late 70s. Even so, militarized state repression and continuous forms of low-intensity violence have shaped each of the trajectories just mentioned: dam cascades, deforestation and mining. In a pattern of crony capitalism similar in general form to those described elsewhere (e.g. Tsing 2005: 56) these are trajectories where political, business and military preoccupations shade into one another. And while no genetically modified new people yet stand ready to jump at their masters' wink, there is no shortage of rural adolescents that serve practically the same purpose. After all, there are many kinds of "natural resources" to exploit.

So far, the ruling powers remain firmly in their seats. Yet, their trajectories are becoming ever more entangled; wound-up, like a kink-spring approaching its limits. It is not unlikely that it will be climate change that unwinds the food-energy-military nexus, with who knows what effects.

Unwinding a World

As Isabelle Stengers (2005: 41) writes, there are so "many reasons not to believe in the human world; we have lost the world, worse than a fiancée or a God." And indeed, at the present moment a nexus of forces conspire to produce a Mekong in which it is difficult to believe. In some ways, the zone of indiscernibility with which I have experimented is premised on a sense of having lost the world, for Bacigalupi's wound-up world is even grimmer than Cambodia's present. But while establishing contiguity between these worlds has been my starting point, the inventive possibilities are not going to be found where the worlds blur, but rather where they, after having blurred, split apart once more. At this moment—neither quite real nor quite fictional—it becomes possible to take up again the "strange and adventurous task of trying to believe in this world and in this life" (Stengers 2005: 42). Stengers (2005: 49) also insists that this entails an "empiricist conversion." Obviously extending far beyond conventional exemplars like tables, rocks, and matters of fact, the empirical, as I have invoked it, reaches into the twilight zone of words and worlds.

With the power of megadonts and the lubrication of algae baths, the AgriGen factory aims to compress ever-more joules into ever-smaller coils. Suffering daily sexual humiliations, Emiko contemplates death. Hot on the track of the mysterious *ngaw* fruits, Anderson Lake traverses Bangkok, nerves on edge. Flooding with rumors and conspiracies, the divine city itself is politically super-charged. At multiple registers and different scales, *The Wind-up Girl* articulates a high-tension, wound-up world.

But it is a changing world. Metamorphoses, at first barely perceptible, gain momentum. As kink-springs are wound tighter and tighter, the algae baths that lubricate them spread diseases that kill workers and lead to the shutdown of the factory. Anderson Lake's nervous energy is transferred to, and dissipated by, his desire for the wind-up girl whom he ends up protecting against his better knowledge.

Emiko's pent-up anger leads her to kill her tormentors and inadvertently start a war. And Kanya finds herself flushing out greedy farang, criminals and corrupt politicians alike, not to mention flooding Bangkok. At the end, the city is uninhabited except for scattered refugees, a few hidden new people and yellow cards, and the ineradicable Cheshire cats.

For Whitehead (1926: 198) the point of an empiricist conversion was to collectively strengthen our "habits of concrete appreciation of the individual facts in their full interplay of emergent values." By developing a lateral comparison in which certain "individual facts" pertaining to climate change in the Mekong and its current social environments have been infused with some "emergent values" extracted from a future Bangkok in a process of unwinding, I would like to think the present analysis encourages such a habit formation. The process that leads to letting go of the too-high-tension existence of the divine city, has come to nourish, at least for me, "a speculative appetite" (Stengers 2014: 12) for what will also, sooner or later, come to replace the wound-up Mekong worlds of the now.

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