Disability Embodiment, Speculative Fiction, and the Testbed of Futurity

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The article analyses depictions of disability embodiment in a range of contemporary North American speculative fiction that depicts post-crisis worlds of social and environmental breakdown. It argues that in each novel bodies are threatened and placed under pressure, particularly in terms of capacity and function. While some resolve this through recourse to humanist narratives of restitution, others imagine futures in which both bodies and societies become reformatted. Bodies remain material, but they also become metamorphized and messy; they hold charged manifestations of personhood, but also leak these conceptions of "person;" they are recognizably human, but also patterned as posthuman. The results are depictions of disability-led embodiment that, precisely because they are formed in imagined possibilities of the future, offer productive possibilities for re-visioning the present.

Testbedding

The phrase "testbed of futurity" appears in William Gibson's 1996 novel *Idoru*, the middle text in his *Bridge* trilogy (also containing *Virtual Light* (1993) and *All Tomorrow's Parties* (1999)). *Idoru* is a recognizable Gibson narrative, where vulnerable central protagonists pursue meaning through urban landscapes saturated with data and technological adaptations, ignorant of crucial information and under the threat of physical harm. The trilogy is also a near-future speculative fiction, with events taking place in the early twenty-first century following the outbreak of "Kansas City flu," a new global pandemic, though in fact the virus only features in the novels in occasional references to a recent past involving necessary mask-wearing. This future is not about lockdown or social restriction; rather it is—in classic Gibson style—concerned with the promise and danger of the virtual (the idoru of the title is Rei Toei, a highly sophisticated Japanese Artificial Intelligence (AI), synthetic

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singer and personality, whose proposed marriage to a real-life pop star provides the narrative drama).[1] Protagonist Colin Laney, a data specialist hired to trace the online lives of celebrities, becomes lost in the confusion of a real-virtual Tokyo. At one point, unsure of his role or the motivation for his actions, he bursts out in frustration during a conversation with Michio Kuwayama, an expert in the creation of Japanese AI entertainments: "What is all this *about*?", Laney fulminates; Kuwayama replies, "It's about futurity," and continues, "'We have never developed a sinister view of technology, Mr. Laney. It is an aspect of the natural, of oneness. Through our efforts, oneness perfects itself.' Kuwayama smiled. 'And popular culture […] is the testbed of our futurity'" (238). It is in the complexities of technology's interaction with the cultural and the social, Gibson stresses, that the future will be developed and refined.

In this article I ask what speculative fiction, and particularly a selection of very contemporary novels (which build on the kinds of foundations laid by writers such as Gibson), suggest disability futures are—to echo Colin Laney—*about* and what constitutes the testbed on which they play out their narratives, particularly in the context of the changes and uncertainties wrought by Covid-19. Because of word limitation, my method is designed necessarily to be exploratory, with an aim to point towards future work that can unpack the complexities raised here in more detail. The novels I discuss have all been published in North America in the last seven years: Emily St John Mandel's *Station Eleven* (2014), Jeff VanderMeer's *Borne* (2017), Cherie Dimaline's *The Marrow Thieves* (2017), Ling Ma's *Severance* (2018), Peng Shepherd's *The Book of M* (2018), Thea Lim's *An Ocean of Minutes* (2018) and Larissa Lai's *The Tiger Flu* (2018). While my argument is drawn from my reading of all these, the central focus is on *The Marrow Thieves*, *Borne*, *and The Tiger Flu*.

To undertake this enquiry is to consider the place of material bodies and cognitive difference in the imagining of possible spaces of futurity, often in terms of radically altered realities. In the novels discussed here, these can be post-apocalyptic dystopias, societies ravaged by pandemics, cartographies of ecological disaster and discarded biotechnologies, landscapes of moral and ethical challenges, and areas of psychological rejection, as well as the communities of survivors who move through them. The locations are often spaces of violence in which bodies are subjected to pressure, marked or broken, and where psychological states and fluctuations of emotion underpin narrative development. They can also be stories of the threat of potential extinction

1. Idoru is a Japanese phrase and concept that has no real translation into English but refers to a female icon of popular culture.

depicted as embodied contagion, what Priscilla Wald has termed "outbreak narratives." In each, disability-as-difference is a constant, the marked body as a signifier of change and, at times, fear;[2] but *disability-as-becoming* is also a frequent presence, where the relationship between body and self is more provisional and productive because of the details in the novels' imagined futures. Such *reformatting* contests the idea that the body is inherently the host for identity and challenges normative formulations of disability (as well as gender, race, and other formations) that emerge from such a view. In my readings of the fiction, bodies appear as realist and physical, but also metamorphized and messy; they hold charged manifestations of personhood, but also leak these conceptions of "person;" they are recognizably human, but also patterned as posthuman. The results are depictions of disability that, precisely because they are formed in imagined possibilities of the future, revise formations of the dis/abled conjunction and its meaning. In the most insightful of these contemporary fictions new possibilities of bodies suggest futures in which lines between capability, agency, and social participation are negotiated.

Speculating on Disability Matters

Speculative fiction is, R. B. Gill observes, "a widely read but ill-defined grouping of works, [that] fits uneasily into our notions of standard literature […] speculative fiction is marked by diversity; there is no limit to possible micro-subjects and, understandably in such a mixed field, no standard definition" (71, 72; see also Booker). In the words of Margaret Atwood, it is writing that focuses on worlds that "don't exist" and this "non-existence is of a different order than the non-existence of the realistic novel." It "can explore the consequences of new and proposed technologies in graphic ways by showing them as fully operational […] [and] can explore the nature and limits of what it means to be human in very explicit ways, by pushing the human envelope as far as it will go in the direction of the not-quite human" (*In Other Worlds* 62–63). It is distracting to spend too much time on issues surrounding labelling, but I want to stress that the novels discussed here are best seen as speculative, and not science, fiction. The most incisive exploration of the representation of disability in science fiction comes in the work of Ria Cheyne, who reads disability

2. Wald makes a link to disability clear, noting how outbreak narratives often "promote […] the stigmatizing of individuals, groups, populations, locales (regional and global), behaviors, and lifestyles" (3). See also Magnusson and Zalloua, and Lynteris.

depictions through the genre's utilization of "varieties of wonder" (87), but one of the ways in which disability in speculative fiction might be differentiated from science fiction is that the novels I examine here rarely, if ever, produce the kinds of wonder that Cheyne highlights. Embodiment or cognitive difference in these texts is far more likely to exist in spaces of contested belonging, frustrated incomprehension, and jaded indifference than awe, admiration, or curiosity. In addition—and this is crucial to my argument—such difference in speculative fiction slides away from an immediately recognizable sense of the disabled subject *as disabled*, where disability is seen as a straightforward signing of body or mind that signals itself to a reader as an identifiable and apprehensible entity. Rather, the most thoughtful contemporary speculative fictions of disaster and social breakdown place all bodies under pressure, and that which might be conventionally read as disabled (in terms of standard notions of absence, lack, or loss) becomes overturned, producing embodied states that consequently become markers of a re-formed futurity. The best of this fiction presents "bodyminds reimagined," to use Sami Schalk's provocative title from her study of disability, gender, and race in Black women's speculative fiction, a process that "changes the rules of interpretation," a phrase I find enabling in terms of both reading creative depictions of embodiment and forming critical approaches when exploring such creativity (3). I want to emphasize that to re-think interpretation in the ways that Schalk encourages is not to negate disabled agency and presence; rather it heralds a critical process that places innovative disability-led embodiment at the centre of futurity narratives, championing the often-radical potential of the disabled body.

As David Mitchell, Susan Antebi, and Sharon Snyder have observed, a focus on the "matter of disability" produces "specific modes of differentiated embodiment materialized and impacted through relations between human and nonhuman [and] organic and inorganic bodies and environments," (20) and though Mitchell and Snyder do not focus on speculative fiction here, in another context they discuss what they term "antinormative novels of embodiment," fictions that "reverse the usual line of diagnosis imposed upon disabled bodies" and explore "disability as revelatory of variation's potential for innovation," a "capacity of incapacity" (*Biopolitics* 180–81). The testbed future worlds of post-catastrophe fictions I address are negotiated with precisely these kinds of revelation in mind. Within environments that require some form of "innovation" to survive (true of all the novels discussed here), "capacity" becomes a central concern and is explored across a range of bodies, affiliations, objects, and landscapes. In depicting such range, the best of these fictions position individuals and environments in worlds where the matter

of embodiment becomes a shifting site of complex materials, interactions between states, and reshaped terrains of being, agency, and vulnerabilities. Here, speculations on disability include the vexed question of how the disabled body might be re-visioned in imagined future crises and whether encounters with this vision can productively reshape understandings of its contemporary formations.

Across Landscapes, Between States

In the wave of pandemic reading lists that accompanied the full emergence of Covid-19, Emily St John Mandel's 2014 novel *Station Eleven* frequently took centre stage. As *Open Culture* noted: "Of novels published in the past decade, none has been selected as a must-read in coronavirus quarantine as often" (Marshall; see also Beckett; "30 Books"). Set after the "Georgia Flu" has ravaged the Earth following its origins in Eurasia, Mandel's text has been read critically as a post-financial crash critique of global capitalism and neoliberalism—in Diletta De Cristofaro's words, "the site of an ongoing slow apocalypse of the socio-economic system" (146) and is typical of a mode of near-future pandemic storytelling in which characters flee from urban sites of such economics to the "wilder" spaces of nature. The novel's focus on escape and flight is part of its wider exploration of issues of mobility: much of the narrative is based around a travelling symphony that criss-crosses the (now redundant) US/Canada border, performing Shakespeare to ever-dwindling audiences. While the symphony, moving in carriages, is elegiac, another idea of mobility in the novel is resolutely modern. As Andrew Tate observes: "One of the reasons that the world dies so quickly in *Station Eleven* is because of its relentless mobility and the ordinary miracle of air travel: people travel across the globe in hours and the virus, horribly resistant to treatment, goes with them" (135). Rapid movement inherent in contemporary flows of capital makes the pandemic global, but as the activities of the symphony make clear, the various slow journeys of characters in a post-technological future offer a revision of the resulting crisis.

Given *Station Eleven*'s insistence on the centrality of mobility in its imagining of the future, its representation of disability (non)mobility is striking. As the virus spreads across Toronto, central character Jeevan visits his disabled, wheelchair-using, brother Frank. Locked in Frank's high-rise apartment, the brothers watch the breakdown of the city's infrastructure and the development of civil unrest. Faced with the seeming impossibility of escape, Frank decides

to commit suicide—to "leave first" as he terms it—because of a recognition that he would be unable to "survive" outside (183). For the brothers and indeed the narrative itself, this appears as an irrefutable logic. For Jeevan to take part in the new mobility created by the pandemic, Frank has to die.[3] In addition, Frank's death highlights a perversity in one of *Station Eleven*'s other major themes: the possibility of beauty in the ravages of a post-apocalyptic world. The narrative voice notes at one point: "What was lost in the collapse: almost everything, almost everyone, but there is still such beauty" (57). This idea of the beautiful/natural as organic regeneration—an "awakening world" (232)—threads throughout the novel, part of its belief that, as Tate notes, "an ethical, cooperative version of society might be achievable" (137). But this is pervasive even in the scene where Frank proposes suicide, which is juxtaposed with Jeevan commenting on the "stark and unexpected beauty" of the "silent metropolis" outside the apartment building, a place of (tellingly) "no movement" (182). The novel asserts that, ultimately, the new world will be a place where literature, music, and beauty are still possible, and where new forms of cooperation may lead to just societies, but not for a character such as Frank.

The topics highlighted above—physical mobility/vulnerability and the place of the natural and "wild"—run through a set of novels that followed the publication of *Station Eleven*. Many, like Mandel's work, follow a model exemplified by Cormac McCarthy's *The Road* (2006) in which movement is a necessity to stay alive, but is continually associated with threat and exposure to physical harm. *The Marrow Thieves*, *Severance*, *The Book of M*, *Borne*, and *The Tiger Flu* all involve journeys (with their accompanying ideas of temporality and teleology) across and in post-apocalypse transitional spaces that juxtapose urban/suburban and natural settings, with characters raiding abandoned homes to find food and avoid attack. In each, bodies are subject to violence or physical limitation: in *Borne*, movement between safe locations is essential to evade predatory mutant biotechnology that surveys a destroyed city, but while characters survive because of this mobility they are still subject to multiple injuries and near starvation; in *The Book of M* a central character who developed amnesia as the result of a pre-pandemic car crash becomes blind while travelling after the crisis of "forgetting" that is the novel's representation

3. It is an irony that in the kind of hectic, 24/7 pre-pandemic world where people with disabilities are frequently judged to be too slow to keep up (in terms of "efficiency" or "productivity"), here they are rendered immobile and unfit for life in societies that are forced to slow down. No matter how fast or slow society is, people with disabilities are always portrayed as slower: if the contemporary world is configured as speed, disability is slow; in slow post-pandemic societies, disability is static (Crary, *Late Capitalism*; Murray, 191–94).

of plague; in *Severance* the psychologically unstable leader of a group of survivors of "Shen Fever" is marked—"partly enfeebled"—by a disabled arm (4–5); in *The Tiger Flu* widespread physical dismemberment and genetic mutation are pivotal to a narrative in which an isolated, "wild" sisterhood needs to regenerate itself through a journey to a city; and in *The Marrow Thieves* scarred and disabled bodies (missing eyes, lower limb amputation, wounds from invasive operations) provide details of the ways in which a Canadian indigenous community negotiates a post-climate catastrophe genocide, as it is "harvested" for bone marrow that will potentially cure the "dreamless" state of the non-indigenous majority population (77, 168).

These are clear instances of bodies seen in terms of capability and capacity, where a by-product of physical harm is some loss of function. But whereas in *Station Eleven* such loss enacts a clear humanist trajectory of disability-as-death, this is not the case in all the other novels. In *The Tiger Flu*, for example, characters who lose hands are "starfish," special community members capable of physical re-growth that allows for the continuity of the collective in the fact of social breakdown; in *The Marrow Thieves*, parallels between marked bodies and an idea of an indigenous community "broken" by a history of settler colonialism are suggested not as decimation, but rather a feature of racial variation akin to the "reconceptualization of history, culture and politics" that Theri Alyce Pickens argues is a product of a critical/creative "turn to Blackness," creating "a fecund space to think through how material consequences manifest" (5). The novel combines such consequences in different bodies with qualities of dreams, language, and other forms of belonging that constitute the becoming of individuals and a specifically indigenous collective. These material occasions also evidence Mitchell and Snyder's "capacities of incapacity," cited earlier, where biopolitics of disability lead to reconfigurations of what bodies are *about* in the fiction. In Dimaline's novel, it is precisely the point that the harmed body *does not* translate into the "broken" community. An albeist language of historical conquest is, it is made clear, an inadequate account of what a future society might be.

My use of the word *becoming* above is informed directly by terms of indigenous reconceptualization, a direct reference to the individual "coming-to" stories that each central character in *The Marrow Thieves* recounts to a communal audience, part of tribal traditions that give detail to the journeys they have taken to their personal present. But such stories are also a model of a "becoming-with," in terms of how at the novel's end the community is brought together. In her work on posthumanist knowledge, Rosi Braidotti has developed a set of ideas around the "radical" subjectivities that "[rest] on

the ethics of becoming," a series of connections that stress becoming-with (among others) ecologies, animals, machines and minorities "by removing the obstacle of self-centred individualism" (*The Posthuman* 49–50). This is the case with *The Marrow Thieves*, where the conclusion sees two groups of survivors come together, dismantling stereotypical notions of blood, tribe, language, communal knowledge, and sexuality, to rather stress affiliations that are queer, ecological, and embodied: "He held his hands out, palms turning upwards in a small ballet of *bone, marrow intact* after all this time, under the crowded sky, against the broken ground" (231; emphasis added). These reformatted becomings are also the matter of disability embodiment: in *The Marrow Thieves*, marked bodies—in spite of their connections to histories of violence—eschew ideas of personal, racial, and indigenous vulnerability and instead speak of a future moving towards complex affiliations of presence.[4]

The bodies examined here are examples of the kind of complex disability embodiment articulated with such clarity in the work of Tobin Siebers. As he notes, "serious consideration of the disabled body exposes that our current theories of reality are not as sophisticated as we would like to think […] More often than not, these theories are driven by ethical concerns rather than the desire to represent what happens to bodies in the world" (67). Ethical concerns in speculative fiction often revolve around ideas of what may or may not constitute appropriate moral choices in a post-crisis world; which individual emotions are possible, for example, or which pathways to social regeneration acceptable. In such narratives the idea of the vulnerable body is common and can, as Siebers suggests, be read in unsophisticated terms as "evidence" of some need for ethical consideration. For Siebers however, bodies are not so easily positioned. They are material and "real," though—he stresses—not "natural" or "authentic." "The body is, first and foremost," he asserts, "a biological agent teeming with vital and often unruly forces" (68) and it is this idea of unruliness—the rethinking of capacity, the body that refuses to conform to standard expectations of dis-memberment or brokenness—that offers a counternarrative to the assumed humanist normativity of ethical or moral

4. There is a substantial body of scholarship that examines critical indigenous responses not only to post-apocalyptic (particularly pandemic) future narratives, but also the idea of the post-apocalypse, to describe the colonial present. (See Gross's examination of "post-apocalypse stress syndrome" (PASS) and Larsen's assertion that indigenous North Americans are "the postapocalyptic people.") In addition, Dimaline's novel is working with indigenous traditions built on ideas of relationality, animism, and networked being, so its ideas of futurity articulate a continuum of past and present. While the book's particular circumstances exacerbating a future imagining of settler violence are new, it stresses continuity with the cosmologies that guide the indigenous survivors.

choices. I am also drawn toward Siebers's use of *teeming*, because its sense of an overflow, a "too-muchness," fits not only the complexities of the disabled body, but also the cluttered, unregulated, and decaying environments central to much near-future speculative fiction. The ways in which bodies "teem" in their interactions with similarly messy imagined spatial and social worlds of post-crisis provide one of the best examples of the creative unruliness that fiction brings to disability representation.

Societies of Embodiment

It is in the depiction of future social spaces that the fiction discussed here most clearly suggests complex disability embodiment and environments that re-write issues of agency, identity, and community. While some of the novels frame provisional spaces of the future with humanist values of hope, others are more circumspect of such conclusions or offer alternative models built on reworked affiliations. Multi-layered imaginings that reconfigure disability *within* embodiment combine the kinds of material selfhood discussed above and wider ideas of society; they suggest future worlds in which disability reworks abled presence.

Jeff VanderMeer's *Borne* is set in a world of post-climate apocalypse, urban decay, and detritus, an environment produced by the failure of an organization known simply as the "Company" that has unleashed a range of proliferating mutant biotechnologies across a wide city space. Cast-off biotech not only pollutes river and degrades architecture, it also produces monstrous organisms: uncontrollable and mobile chemically modified plant life, giant lizards, beetles that can be inserted into ears to produce fictional memories of pre-apocalypse safety, and particularly an enormous, destructive bear called Mord that dominates the city through its size and ability to fly. Despite such rich fantasies, the novel functions through a gritty realism in which humans battle extreme scarcity to survive. Central protagonist Rachel is a scavenger, roaming locations across the city (including Mord's fur when he is unaware of her presence) for food or objects that can be used in her fortified home.

Early in the novel Rachel is attacked by a group of feral, physically-augmented children, products of the city's unconstrained technology:

> There were five of them, and four had traded their eyes for green-gold wasps that curled into their sockets and compounded their vision. Claws graced their hands like sharp commas. Scales at their throats burned red when they breathed. One

> wing sighed bellows-like out of the naked body of the shortest, the one who still had slate-grey human eyes. After a while, I wished he'd had wasps instead. (30)

The children "had no memories of the old world to anchor them or humble them or inspire them […] and the most terrible and transformative violence had been visited upon them from the earliest of ages," while "nothing in their gaze could tell you that they were human" (30). As the longer quotation makes evident, this transformation is one of an embodied technology run riot, in which bodies and minds become non/inhuman through pathologies created by the environment. But the children's inhumanity is not countered by any presumption of Rachel's humanism or bodily integrity. The ways in which she is beaten and abused in the attack seen to be part of a daily life of basic, if traumatic, survival: "I was alive, and from past experience I knew in time that I would forget enough to again pretend that we could someday be free. Of the city, of Mord, of all of it. I don't know if that was hope. Maybe it was just stubborn inertia" (33). With her body routinely beaten and broken, Rachel's inertia eschews the speculative trajectories and temporalities of hope common to much speculative fiction. In place of a teleology that allows for escape, she commits to an existence that, as with her attachment to Mord, is fundamentally parasitic but potentially restorative.

Shortly after the attack, the five children are killed by Borne, a living organism Rachel discovers "entangled in the brown, coarse seaweed of Mord's pelt" at the start of the novel (6). The initial description of Borne highlights the in-between nature ("'It' had not yet become 'he'") of its materiality:

> The closer I approached, the more Borne rose up through Mord's fur, became more like a hybrid of sea anemone and squid: a sleek vase with rippling colors that strayed from purple towards deep blues and sea greens. Four vertical ridges slid up the sides of its warm and pulsating skin. The texture was as smooth as waterworn stone, if a bit rubbery. It smelled of beach reeds on lazy summer afternoons and, beneath the sea salt, of passionflowers. (6)

For all of the detail here, however, Rachel realizes that this description is partial. "Much later," she observes immediately, "I realized that it would have smelled different to someone else, might even have appeared in a different form" (6). Borne is a hybrid shape shifter, not solely plant or animal, which grows to mimic other organic forms (including that of Rachel), learns to speak and copy human behaviour, and comes to assert an individuality and selfhood as its/his relationship with Rachel develops "I am not a machine" he says at one point; "I am a person. Just like you, Rachel. Just like you" (63).

In one scene Rachel takes Borne into the city and they are attacked by Mord's proxies, bears "huge in their hideous beauty" engineered for pure destruction

that preserve his dominion (99). Trapped on a roof, Rachel realizes that their only chance of survival is for her to climb *inside* Borne's body as he shifts to become a rock, a process of becoming-inanimate that saves them both. For Rachel, the experience is one of a splitting between the sheltered organic and threatened inorganic: "In one world, I was cocooned inside a living organism that still defied explanation, that was, no matter how I loved it, a mystery to me. In the other world, I was inside a cave trying to hide from a wild animal" (103). In this moment, Rachel—a near-starving, beaten, and vulnerable scavenger—finds safety and the preservation of life within Borne's shifting, almost-literal plastic but still organic body. When she climbs out, however, she notes that Borne now has wounds that cannot be repaired by his usual processes of shape shifting:

> Pieces of Borne had been torn from him by the Mord proxy in its suspicion. These pieces had bounced like rock, settled on rooftop like rock, but now quivered and flexed like hands opening and closing, reformed as Borne flesh […] The Borne that faced me was, even in that dim light, scarred and misshapen […] his left side was fissured and purpling-black and the ring of eyes, darkly luminous, circled his body in a haphazard way, like a rotting carnival ride one loose bolt away from spinning off into the crowd. (106–07)

It is a vivid image, one that erases ideas of normative embodiment and centred selfhood. In this moment, both Borne and Rachel exemplify the kind of leaky bodies and visceral prostheses explored by Margrit Shildrick in her work on the complexities of the microbiome. As Shildrick explores, difference *within* the organic body articulates a challenge to conventional understandings of the human ("Body Shock"; "Matters of the Heart"). It recasts bodies as full of matter, physical states that display transcorporeality as a norm and not exception.

As such, *Borne* should be seen as a speculative fiction that not only imagines how disabled bodies become synonymous with the *extension*, and not restriction, of life (both Borne and Rachel survive and, later in the novel, Borne destroys the proxies), but also depicts modes of embodiment in which the abled-disabled dyad is dismantled and reworked. This particular testbed of futurity still conceives real-world possibilities—environmental catastrophe, urban collapse, uncontrollable biotechnology—but reconceives bodies in the new societies that emerge. Humanism has no place here and the consequent posthumanism that develops is affiliated with a range of positions that reject trajectories (conventions of hope or restitution) linked to the past. At the novel's conclusion, Rachel defeats Mord, but it is "strange, forgotten animals"

that emerge into the city at the end of the conflict, beings who "want nothing from the old world. They need nothing from it." Rachel observes: "In how they pursue their own plans, their own destiny, I find relief. They will outstrip all of us in time, and the story of the city will soon be their story, not ours" (317). This is not, it should be stressed, a dystopian vision; the novel's imagining does not subscribe to such a term. Rather the world that Rachel plans to make is one that engages with and responds to the complexities of the ordinary in a multivariant environment—"The real reality is something we create every moment of every day […] So we set to work" (318–19).

The complex material embodiment and resulting conception of the social central to *Borne* also underpin *The Tiger Flu*, though here a crucial difference is the power of a differentiated organic world envisaged in the novel. As with *Borne*, the environment of *The Tiger Flu* is complex: a group of genetically modified parthenogenic women (the Grist sisters) have been exiled from Saltwater City, an urban centre in which decaying technology (nuclear power, bioengineering, redundant mainframes) is a last reminder of a society that has been ravaged by a male-produced tiger flu pandemic. Embracing their mutant, outsider status, the sisters have developed a mode of community reproduction based around organ transplantation and physical re-growth (characters are designated "grooms," "doublers," and "starfish," capable of the organic replacement and restitution of body parts). As central character Kirilow observes:

> We split, we slit, we heal, we groom, self-mutated beyond the know-how of the clone company Jemini that spawned us and the […] microchip factories that brought our grannies to work for them. But there are flaws in our limited DNA—the DNA of just one woman. We mutate for better and worse, for sickness and health. But more for sickness and worse. Only our starfish can save us, by regrowing whatever grooms like me cut out of them. (20)

The sisters' embodiment here, in terms of origins and development, is almost as complex as that of Borne, but is more extensive in terms of its vital place in protecting the existence of the Grist collective. It is highly material and focused on matter: the grooms and starfish exemplify Mitchell, Antebi, and Snyder's "relations between human and nonhuman [and] organic and inorganic bodies and environments" cited earlier, especially the relationship between bodies and the environmental "wild" in which the community is located. That these are matters of *disability* can be seen in the novel's enaction of the kind of work on disability and organ transplantation by Shildrick, Donna McCormack, and others ("Messy Entanglements"; "The Transplant Imaginary"). *The Tiger Flu*'s

narrative is criss-crossed by states of complex embodied selfhood, environments that sustain (or conversely, kill), and the nonhuman detritus that becomes material for repurposed clothing or homes.

As is clear from even the brief sketch above, *The Tiger Flu* presents a world in which gender is a prime determinant of individual and social identities. Lai's eco-feminist commitment runs throughout, from the celebration of the Grist sisterhood's guiding principles to the critique of the corrupt patriarchy that controls Saltwater City. The novel's protagonists have no interest in the gendered humanist reconstitution of bodies, relationships, and societies common to much speculative fiction; rather women form the future here, whether in separatist groups of city rebels, the productive organic space of the Grist garden that becomes the story's final location, or through the *structures* of the writing as Lai maps out her story. *The Tiger Flu* conforms almost exactly to Susan Watkins's outlining of women's apocalyptic fiction, in which "the replacement of colonial and patriarchal narratives of paternity and conquest with metaphors of mother-daughter relationships" are part of "a stress on circularity and repetition, not only in terms of plot, but also form and narrative structure" (119–20). More than any novel discussed in this article, *The Tiger Flu* is a fluid construction of looping, entangled tellings.

When the flu comes to the Grist Village, it threatens the inhabitants because of their compromised immune systems and Kirilow is forced to leave for Saltwater City to seek help. Once there, she finds Kora, a fifteen-year old girl who is unaware that she contains Grist DNA passed down to her by a relative before the expulsion, and that she is "one of the old kind of starfish" (328). Kora returns with Kirilow to the village and in a final passage that takes place over 150 years after the previous section of the novel, the reader learns that she has evolved into a "Starfish Tree," from which human organs can be harvested for the perpetuation of the women of the community: a transformation from human to plant form that presents her selfhood as part of a dispersed assemblage and network of the organic and inorganic. For her part, Kirilow is now an "ancient groom elder," whose storyline finishes with her holding a "wrinkled, blackened bit of matter" that turns out to be a severed hand that informed the plot at a crucial moment earlier in the novel.

If *Borne* ends with Rachel's cautious commitment to daily work in a decimated city, *The Tiger Flu* concludes on a celebration of collective social memory and learning, as young girls surround Kora's trunk while she tells them the history of the village, and the tangibility of physical matter is signalled by the hand Kirilow has kept for a century and a half. While very different, both conclusions share a speculative view of future societies in which

bodies and their meanings are made "unruly," to return to Siebers's term. The "teeming" nature inherent in this disruption speaks of overlaps between selves and environments, with the societies produced profoundly different from their pre-catastrophe forms.

Conclusion

The Tiger Flu works to remind that gender cuts across all the fiction discussed here (as does Rachel's narrative trajectory as the strongest survivor in *Borne*), while *The Marrow Thieves* functions equally in terms of creative revisions of race and sexuality. The powerful anti-humanism of these categories showcases ideas of futurity that are also those of disability embodiment (Nayar; Schalk; Pickens), blurring questions of inside and outside, before and after. They are all elements of imagined speculative worlds that, as Schalk and Pickens remind, "reimagine" and "reconfigure" not only bodies and minds, but also environments and societies.

There are important caveats: the near futures envisaged in the fiction discussed here are all North American and as such share crucial commonalities. The testbeds they explore stem from comparable social locations and should, in fact, be understood as challenges to or reaffirmations of an idea of *comfort*. Most are fundamentally suburban narratives in which (despite cross-cutting issues of embodiment, material difference, race, and gender) it is an idea of the "comfortable" that is thrown into crisis. Nearly all the novels I analyse pitch middle-class characters into crumbling middle-class/professional worlds, whether the arts in *Station Eleven*, the corporate world in *Severance*, post-graduate privilege in *The Book of M*, or biotechnology in *Borne*. Arguably, only *The Marrow Thieves* and *The Tiger Flu* genuinely begin with communities already outside of the structures of power and acceptance, where post-settlement and exile are precursors to post-apocalypse. These collapsing worlds then, should be understood as stories of the near future that are peculiarly *local* (Wolf-Meyer 4–14). Whether local forms are returned to (conventional relationships, communities of hope) or deconstructed (new relationships with bodies and environments), it is important to note that other cultures and societies will find different localities to express their imagined futures.[5]

While the bodies in question in these fictions are constitutive of a certain

5. I do not have space here to investigate the complexities in the writing locations of the various authors discussed, especially those who are Asian North American. For more on this, see Ling.

kind of located contemporary capitalism, it does not necessarily follow that the aesthetics and formal strategies involved in their imagining are equally contained. Creativity is many things but includes the imagined rewriting of past assumptions and the challenging of presumed social outcomes, and the speculative fiction examined here places disability-led bodily transformation at the heart of these processes. Disability disrupts the capacity inherent in comfort. In *Feminist, Queer, Crip*, Alison Kafer notes that "the futures we imagine reveal the biases of the present; it seems entirely possible that imagining different futures and temporalities might help us see, and do, the present differently" (28). The pull of humanist reconstitution and reunion is never far away in some of the novels analysed here, and is exactly the kind of bias Kafer highlights, but the reformatted embodiment and societies depicted in *The Marrow Thieves*, *Borne*, and *The Tiger Flu* are precisely the kind of different imagination she also suggests. If it is these versions of self and environment—situated through interconnections, suspicious of wholeness, creatively material—that readers see in the testbedding of future fiction, then there are productive possibilities for re-visioning the present, even during what—on our worst days—we fear as an unimaginable crisis.

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