



## CHAPTER 4

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# Ouch! Eew! Blech! A Trialogue on Porous Technologies, Places and Embodiments

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## INTRODUCTION

What kind of narratives and experiences sit at the margins of feminist political ecology (FPE) analyses of health, embodiment and environment? Ilenia, Panagiota and Ingrid started their trialogue as scholars and activists from different backgrounds and relations interested in this question. In this chapter, the stories we share are as much part of our fieldwork notes

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as part of our personal diaries. These experiences transform how we do research, at the same time transforming us. What ties them together is our attention to the relationship between embodiment and environment. We come together thus to discuss the politics of making and remaking health in relation to socio-environmental processes, through the concept of porosity and the realm of technologies. For us, feminist political ecology is a convening space for thinking with the trouble in discourses and practices around health: from the biomedical sciences' gaze and the relational ecology between bodies and places, vis-a-vis the biopolitics of the nation-state to the far from innocent but complex role of both medical and digital technologies in navigating illness.

Recognising that there is ample feminist academic and activist work actively engaging with the concept of embodiment and with the gendered politics of health and medicine, we are particularly interested in how such work can infuse current thinking and activism on social and environmental health and technologies. We are not driven by a "gap" in literature, but rather by our own situatedness in and response-ability towards the embodied experiences of chronic pain, infection and nausea, and how these can inform non-normative experiences and knowledges surrounding health. We borrow the term response-ability from Donna Haraway, as in "proposing together something unanticipated" (Haraway, 2016, p. 130), starting from experiences, theories and epistemologies rarely depicted in the context of FPE and health.

We understand bodies as ecologies, not separated by what happens "outside our skin", but as the interconnected system of life within and beyond our bodies and the economic, racial, gendered, biophysical places we inhabit (Guthman, 2011; Guthman & Mansfield, 2013). Understanding embodied ecologies as relational allows us to see the boundary marked by the skin as connecting, instead of separating, our bodies and our environments (Iengo, 2022; Jackson & Neely, 2015). In this chapter we will reflect on "porosity", as the relational ecology between bodies and environments, departing from the ambivalent experiences of such relations, mediated by medical and digital technologies, as well as gender, race, and disability. We draw together theory and insights from critical disability studies, science, technology and society studies (STS), environmental justice, and political ecologies of the body and of health, to produce powerful elaborations that help queer and crip the binary division between bodies and places, against "the fantasy of self-contained wholeness" (Sadler, 2017). This does not negate the politics of bodily

autonomy, but rather complexifies them by amplifying the demands for self-determination and reparation by BIPOC, working-class people, women, LGBTQIA+ and other marginalised subjectivities in response to the literal embodiments of differentiated and historically contextualised oppressions.<sup>1</sup>

Eco-crip theories constitute a fertile space from which FPE may learn to cast a light on the non-innocent acts and technologies of “seeing” which affect what counts as nature and natural (Jaquette Ray & Sibara, 2017). Such seeing questions and reinvents the ideologies of pureness and desirability for an “elsewhere” and “out there” to be controlled and tamed. And this reinvention influences power-laden notions of desirability and purity within human communities. In the encounter between feminist technoscience and crip studies, we learn about the nuanced and ambivalent entanglements of health, embodiment and technologies (Bailey & Peoples, 2017; Kafer, 2013; Mingus, 2010).

We weave together three stories from Italy, Greece and the United States to point to the tensions that emerge when environmental ethics and discourses do not take into account the intersectional experiences and positions of vulnerability that are often located at the deeply political, intimate and embodied levels.

Ilenia brings in her *chronic pain* experience as a catalyst to learn about how environmental injustice is accumulating in bodies and territories. In her southern Italian hometown, environmental injustice is inescapable. Grassroots socio-environmental justice activism helped many to politicise territorial experiences of illness and contamination, to learn the power of bodies coming together to halt slow violence (Nixon, 2011). In her quest for environmental justice Ilenia is influenced by the epistemic activism of crip communities in producing counter-knowledge on contested illnesses and mutual aid practices.

Panagiota tells the story of the embodied and invisible injustices suffered in romanticised agricultural production of “healthy and local” food products, through the exploitation, disenfranchisement and exposure of immigrant farmworkers to *infection* and ill health. As a white European academic returning to the olive grove-filled countryside where she used to spend her summers, the critical analysis of socio-environmental conflict and inequalities suddenly “hit home”. She

<sup>1</sup> See Michelle Murphy’s important intervention in these discussions in her 2017 article, ‘What Can’t a Body Do’.

observed the patterns of change and inequality in local agriculture, social fabric, labour conditions and health outcomes in the context of neoliberal austerity-ridden Greece.

Ingrid speaks of the ambivalent position of pregnant people depending on two technologies: big pharma-produced medication used in order to be able to deal with *nausea* and navigate place, and digital social media platforms as key spaces of solidarity and empowerment in the struggle to navigate disability and illness. She connects these technologies to the pedagogical spaces and institutional labour context in Vermont, with their attendant privileges and inequities.

Bringing together three distinct and distant stories, we point to how disembodied environmental politics can become exclusive and replicate injustice by showing the commonalities that emerge from embodied and situated perspectives of engaging with ecologies, places, technologies and health experiences.

This chapter brought us together as FPE scholars involved in the WEGO network and engaged in health, environmental justice and embodiment from different perspectives and angles, to engage in a process of knowledge production which happened via multiple digital encounters we held over two years, much of which was during the global COVID-19 pandemic. We started by sharing three stories that relate to these themes, and stem from our positionalities as scholars and activists in FPE. The process moved to a phase of “trialogue”, inspired by Costa et al. (2015) that came out of a set of questions we asked each other in an effort to trace common and uncommon threads in our stories. What we share is a leitmotif of bodily ecologies of health, as well as the knowledge and discourses around them, being shaped both politically, through power, and culturally, through meaning.

## BODILY ECOLOGIES AND THE EMBODIED POLITICS OF VISIBILITY

### *Chronic Pain*

In the summer of 2018, after 20 years of normalised pain and medical gaslighting, I received the diagnosis of endometriosis. I was officially on holiday, but the reality was that I spent days curled up in bed unable to move or talk because of the pulling, stabbing and twisting pain across my

abdomen, lower back, and legs. As it happened cyclically, it was time to search again online for a gynaecologist and hope to get to the source of my pain. The ultrasound showed an endometrioma, an endometriosis cyst encapsulating the right ovary, strangely unseen until then. The gynaecologist explained there was nothing to worry about, instead there were plenty of options ahead, especially one. He turned to my partner and with camaraderie and a condescending tone exclaimed: *“I recommend you go home and engage in ‘you know what I mean’”* openly advising sexual intercourse and pregnancy as a pleasurable (for my male partner) cure (for my gendered body).

—Ilenia Iengo, personal notes

*Ilenia:* What time is it? How long have I been here? I often ask myself while tuning in and out from sleep, without rest, gazing at the walls of my bedroom. There is no linearity in time when a body experiences endometriosis, adenomyosis and fibromyalgia. Some call this coexisting, expanding, retracting, embodied, relational and reclaimed temporality “crip time”. Alison Kafer helps us reflect on the queer genealogies of crip time not only as an accommodation for disabled bodies and minds but as “a challenge to normative and normalizing expectations of pace and scheduling” (Kafer, 2013, p. 27). Chronic inflammation is the common thread connecting the multiple illnesses that persist within my body and the symptom of the past, present and intergenerational damage occurring to the land. I grew up in the shadow of Mount Vesuvius, a geologically fiery territory nowadays called by local activists “The Land of Fires” due to the burning and spewing of toxic waste in dumps and landfills, in the southern Italian region of Campania. A few years ago, I discovered I have deep infiltrating endometriosis, a chronic inflammatory disease embodying the slow violence of Italian capitalist development and biocide (Iengo, 2022). During gestation and growth, toxic substances like dioxins and PCBs have soaked my territory in Southern Italy and crossed the porous boundary between the inside and the outside, they enveloped the bowels of my body in adhesions and endometriosis lesions fuelling the ever-growing familiar pain (Iengo, 2022).

Starting from the experience of chronic illness, where the intersection of gender, environmental, class and racial violence produce a complex system of oppression, I present some instances of situated strategies to reclaim our spaces, knowledge, voices and desires as disabled and chronically ill people in socio-environmental justice movements, while working

towards crippling and queering the political relationship between health and environment.

The contaminated body is the terrain for subjectification and politicisation of everyday life (Iengo & Armiero, 2017). Environmental injustice and exploitation accumulate in marginalised bodies which are contaminated twice: first by the toxic substances occupying their neighbourhoods and lives, second by the toxic narratives which silence this injustice, invisibilise the sick bodies, and blame those who live with the consequences of contamination (Barca, 2014). Our communities and territories are considered expendable for the profit and well-being of others; therefore, we fall ill, reflecting the poor health of our neighbourhoods and cities. We get sick and, contrary to the dominant narrative, it is not our fault, nor the consequences of our lifestyles and choices. Some of us may live with chronic illness and disability as a consequence of disabling social and economic environments (Hedva, 2018). The lived experience of disability or chronic illness is confronted with the ableism of a system that classifies us as unworthy and unproductive. We are discarded at every turn of life due to the societally compulsory able-bodiedness and able-mindedness (Kafer, 2003; McRuer, 2002). Such narratives of obliteration, undesirability and aberration to be fixed are inherent even in the prefigurations of radical socio-environmental futures, where chronically ill and disabled bodies are often not contemplated, reproducing our absence (Piepzna-Samarasinha, 2018). The disability justice movement overturns the narrative: disabled and chronically ill people take the floor and do the fundamental work of constructing imaginaries and practices of socio-environmental indispensability (Pellow, 2018) to dismantle ableist ideas according to which chronic illness and disability are merely medical conditions while the material evidence of social and environmental injustice is erased (Kim, 2017). In this intervention, I recollect some of the thoughts, worries, feelings and developments of an ecotransfeminist exploration and expansion of a cripistemology of pain (Patsavas, 2014) together with the emergence of disabled and chronically ill folks' epistemic activism wherein we speak for ourselves (Hamraie, 2012).

I often wonder what would have become of this experience if I didn't have the lens of transfeminism to help me recognise that there was nothing normal or acceptable in being belittled when I came to the ER unable to move or speak out of pain, in the physician's suggestions of pregnancy as cure, or in the 22 years of diagnostic delay. Diagnosis is a fundamental tool in the path of chronic illness and is often linked

to conflicting feelings of validation and discouragement. These feelings express the contradictory, yet impossible to disentangle, tension between the pathologisation that comes with diagnosis and the legitimisation of pain to access support systems. This objective tool of biomedical science, a non-neutral field of knowledge with its eugenic, ableist, racist, misogynist, transphobic and industrial-military-complex roots, holds immense power to shape how the world sees and categorises us and our chaotic embodiment (Clare, 2009; Jaquette Ray & Sibara, 2017; Kafer, 2013; Lorde, 1980).

In recent years, with the composite transfeminist community in Italy, we are elaborating intersectional perspectives on health to include the gendered experiences of disabled and chronically ill folks. Through the feminist practice of self-awareness, we have learned to recognise the structural violence of sexism and patriarchy. Similarly, self-awareness among chronically ill and disabled people helps us to highlight how ableism is at the basis of capitalist, productivist and patriarchal society imposing the standard of productivity upon us that we ourselves have often metabolised. In the autumn of 2021, with the transfeminist network *Non una di meno* (NUDM) we began to reflect on our embodied experiences of patriarchal medicine and the multiple “invisible” and gendered illnesses. I prefer to use the term *invisibilised*, because even if some illnesses do not necessarily leave visible marks on the body, if one pays close attention to these lives, it all becomes very evident. On October 23, 2021, under the slogan “sensible-invisibile”, we took our aching bodies to public space in about 20 Italian cities to share the experiences of people with endometriosis, adenomyosis, vulvodynia, fibromyalgia and pudendal neuropathy. We have organised online national and city-wide assemblies for the construction of a *presidio* to amplify the voices of those who live with these diseases, denouncing the misrecognition and disinterest of the national health care system. In the spirit of self-organised knowledge production, we produced and distributed leaflets with self-help tips, basic information concerning the different illnesses and banners explaining that experiencing pain is not normal and should not be normalised (Jones, 2016). Gendered illnesses reflect social taboos inasmuch as medicine reflects patriarchal oppressions, leading to the social, economic, psychological, health and environmental consequences borne individually by the sick person. In Naples, we gathered in a square with chairs and benches for everyone to rest and participate, where we shared our stories, hung posters where we imprinted the medical violence we have suffered, the

desires that keep us going and reclaimed our experiences beyond the tragic and pitiful narrative, instead politicising disability and chronic illness as the complex and powerful experience, a place of knowledge production to be collectivised.

For the first time in the feminist movement in Italy, we are expanding the historical framework focused on reproductive health and abortion to include the needs and desires of our chronically ill and disabled bodies (Price, 2015). To express the anger that inflames our transfeminist political action is a form of healing from the accumulated trauma and violence (Hedva, 2018). The path for an ecotransfeminism that recognises and fights against ableism as one of the forms of oppression of white and colonial supremacist capitalism is a battle where no one is excluded and where the issues of mutual care, anti-sexism, interdependence, anti-racism, sex work, environmental and social justice can produce powerful alliances to dismantle the master's house. In line with this practice, it is essential that disabled and chronically ill people speak out in ecological and transfeminist battles to broaden the voice of those who defend the earth and the living. We know how important it is to free care work from feminisation through collectivisation, in order to affirm all the different forms of what we mean by and desire about health and reciprocity. Through this process we can make the spaces of militancy and struggles more inclusive for everyone. This is the challenge against a world that portrays us as passive and silent victims if not unproductive and unworthy lives.

### *Infection*

*“Be careful when you go down there, it’s dangerous, don’t wear short pants”* –This was the friendly advice of a woman representing the company in charge of mosquito control in the region of Skala, Greece, where malaria had taken hold during the years 2009–2015. At first, I thought her comment was referring to avoiding getting bitten by mosquitoes in the orange fields I was going to visit. Moments later, I realised she was referring to protecting myself from male farmworkers from Pakistan and Bangladesh. Reproducing racist and colonial imaginations of dark-skinned people as hypersexual, uncivilised, and savage, this pretension of woman-to-woman solidarity made my stomach turn.

—Panagiota Kotsila, personal notes



*Panagiota*: “Farmers here used to gamble their cars and houses during the ‘good times,’ in the casinos. A lot of fortunes made and lost down there, all from the oranges”, my father said as we were sipping coffee at the porch of the house where he grew up, at a village near Sparta, Greece. It was 2015 and he had not yet heard about the rise of malaria cases in this region since 2009, which remarkably coincided with the beginning of the economic downturn and what would be a long period of crisis-induced austerity. He was also unclear about why I was visiting the town of Skala, in the agricultural plain of the Evrotas River Delta, an hour and a half drive away—to research land change and agricultural practices, mosquito ecologies, or the living conditions of immigrant farmworkers? Here too, microbes, mosquitoes, oranges, land, immigrants, bodies, farmers, political economy, and public health “are all part of a single story” (Mansfield, 2011).

My family used to own orange trees in the region. Now we only have some olive trees, as they demand less water and attention. “Olives are sacred”, my grandma used to say. She became a widow only a year after she was disinherited by her family for falling in love with my grandpa. She used to collect wild oregano and mountain tea as a source of income to raise her only son. Since my father moved to Athens, the management of the fields is delegated to a local family who in turn hires farmworkers to complete the harvest every winter, getting in return half of the resulting organic, cold-pressed olive oil from the local cooperative. I seem to come from a line of local producers in the region, of hard-working people working the land, of a single mother who struggled to survive.

About two weeks before, I was sitting across the desk of a public health worker in the Hellenic Center for Diseases Control and Prevention, back in Athens. She was rather confidently describing the success of the anti-malaria program in the Evrotas region, through door-to-door visits, body temperature monitoring, drug administration, distribution of bed nets and anti-mosquito plug-ins to the farmworkers living in the fields. At my mention of the deep discriminatory structures and obstacles that immigrant farmworkers face in Greece, she resorted to self-defensive claims: “We tell the farmers to protect their (sic) immigrants, to give them anti-mosquito appliances and take them to the doctor”. I seem to come from a society where the dehumanisation of immigrant subjects is deeply ingrained.

A month later in early August, I was walking around the orange fields in Skala, looking for the shacks and half-finished constructions where

immigrant farm workers lived. As a river delta, the Evrotas region is fertile and supports a vast cultivation of oranges and other agricultural goods. The seaside swamps, lagoons and sandy beaches, coupled with an expansive network of irrigation canals, make the region also a prime location for the *Anopheles* mosquito, a carrier of malaria. Since the late 1990s, male migrants mostly from Pakistan and Afghanistan work in these fields. Some 800–1,000 workers reside there permanently while others only come for the harvesting season. In 2010, the number of immigrants in the region peaked at 1,500, with most of them being irregular and risking deportation under an aggressive immigration policy. In 2011, there were 42 domestically acquired malaria cases documented—the highest reported since 1974.

The first years of rapid malaria spread in the region of Skala (2009–2011), the issue remained concealed in internal reports of local authorities and did not make local news (Kotsila & Kallis, 2019). For the (government-friendly) media, it only became a story worth telling in order to cast blame. Enhancing a neoliberal personification of health risks, vulnerable individuals were presented as the risk themselves, because they were mostly affected by it. During those years, in a context of severe cuts in public healthcare and other welfare sectors, immigrants, sex workers and people with drug addiction were bluntly blamed for the rise of infectious diseases in Athens (Kotsila & Kallis, 2019).

During the first years of spread, malaria was a non-issue for the national public health authorities, as it appeared to mostly affect immigrant groups in the region. But, in 2012, when the number of Greek citizens infected also started to rise, and the tourism sector was facing the risk of a red flag from the World Health Organization, it became a reality worth addressing. Immigrant bodies in Skala were no longer perceived solely as moving the national “productivity wheel” through their cheap labour, but also, at the same time, as potentially blocking it. Immigration was then treated as a disease risk factor, rather than as a site of vulnerability. The biopolitical caring state suddenly “saw” immigrant farmworkers and targeted them as subjects of public health interventions, including enforcing preventive medicalisation only for immigrants, often without their clear consent.

This operated within a broader and historical bio-/necro-politics of immigration (Foucault, 2003; Mbembe, 2020) through which irregular immigrants are discursively and practically treated as ambivalent subjects: a threat to the nation-state’s “well-being”, at the same time necessary as

workers for many of its productive sectors. As such, both a risk and an asset, they are continually being managed and controlled. The malaria epidemic exacerbated this process of “an internal racism of permanent purification” (Foucault, 2003, p. 62) and a “constant exposure to conditions of death” (Mbembe, 2020), by tying already existing xenophobic attitudes and anxieties to concrete health aspects, as immigrants from malaria-endemic countries were blamed for introducing the disease to local environments.

Shirts and pants were drying in the sun on a rope between two trees. I was sitting outside a shack, strategically hidden among orange trees in the middle of agricultural land. These houses were as big as 10m<sup>2</sup> and shared by 6–8 workers, and with no glass on the windows to keep mosquitoes out, still, four years after the malaria outbreak. Some of the men joined me around the table; others seemed to want nothing to do with a white girl holding a notebook and asking questions. They told me how they were not allowed to rent a decent home in the village, how they were owed salaries, and treated “like animals”, how they were the last to be attended to in the health centres. “There is no way to protect from the mosquitoes, but more than getting sick, we are afraid of getting deported”, said one of the youngest from the group. I doubted whether the older man, who kept a big stack of painkillers next to his bed, would agree—his body would not take a malaria infection, or maybe it had already been through it.

A couple of years ago [2014], doctors came here to make tests and give us medicine. A couple nights later, the police came together with others. They beat us, broke our stuff, and arrested some. We couldn't trust the doctors again.

I suddenly realised that malaria was not the outcome of rational decisions about how to better protect from it (wear long clothes, use bed nets, avoid standing water), or of the politically defined spatial and temporal coexistence of orange trees, irrigation canals, mosquitoes and people's bodies. Similar to what Doshi (2017) has highlighted for urban contexts, here also it was the embodied, emotional, and visceral realities of state violence, social exclusion and fear that pushed farmworkers to live in the fields and avoid public health authorities, tests and medical visits, even if it meant that the epidemic from which they were also suffering

would be harder to control. In Skala, just as in most contexts of intensive agricultural production of high-value (mono)crops, immigrant farm workers often lack legal recognition and live precariously from one season to the next. They are not considered part of the population socially or politically—they provide labour but have very limited (labour, health, civil) rights (Agamben, 1998). While targeted public health interventions might have helped fight malaria, they did not question the broader structures of racial capitalism and enduring colonial ideologies that had been shaping immigrants' livelihoods and health for years in Skala, and beyond.<sup>2</sup>

I had spent countless summers in rural Peloponnese, but home for me is the urban centre of Athens, where I lived and studied for most of my life. During my fieldwork, I was a local, but I also was not. Living abroad for seven years, I even felt disconnected from the reality of the deep economic crisis in Greece at the time. I was also a migrant, but one well shielded behind white skin, a European passport, and highly respected institutions. It was these felt “ambivalences, discomfort, tensions and instabilities of subjective positions” (Sultana, 2007, p. 377) that pushed me to tell this story about the margins of recognition, citizenship and belonging. It is there where I found the hands that pick, the bodies that bend, and the faces that—after days of listening and engaging with their stories—smiled back to me.

### *Nausea*

*“So that’s the process of the whole Zofran pump...I’m in the military so, I had to figure out how I’m going to carry this pump around...”*

A vlogger explained via vlog how she experienced Hyperemesis Gravidarum (HG) and how she connected her Zofran pump<sup>3</sup> to her pregnant

<sup>2</sup> Neely (2021) speaks of this in the context of health development programs in the global South. Here, we see one way in which these relationships are reproduced in the context of enduring colonial ideologies in Europe.

<sup>3</sup> A ‘Zofran pump’ refers informally to a subcutaneous (SQ) micropump device for infusing controlled doses of a medication (in this case Ondansetron, which is commonly sold under the brand name Zofran), which ensures faster uptake of the medicine than oral modes of delivery (especially when a person is unable to tolerate swallowing much of anything), while allowing a person greater mobility and independence than with larger, intravenous treatments.

belly and carried it with her in uniform at her workplace. I watched her vlog among many others on YouTube several times and read through the comments of hundreds of others struggling with HG. Both HG vlogs and Zofran were life-altering technologies carrying me through my pregnancy with HG. They exist through corporate infrastructures mediating everyday social relations, *and* they enabled me to leave my bed to continue teaching undergraduate students and to bring my pregnancy to full term. This uneasy reliance on serotonin 5-HT<sub>3</sub> receptor antagonist drugs and social media voyeurism pushed me to empathize beyond my own embodied experiences and to confront my own ableist understanding of various technologies as an early career feminist political ecologist.

—Ingrid Nelson, personal notes

*Ingrid:* It is uncomfortable for me to admit that both the drug Zofran and watching hours of HG vlogs helped me to leave my bed, carry my pregnancy to term and keep my job. While data on HG is woefully rare and unevenly gathered, the Hyperemesis Education & Research (HER) Foundation<sup>4</sup> estimates a “fetal loss rate” of 34%, and more than half of those with HG experience job loss. I understand these drug and social media social technologies on which I relied with thankfulness, ambivalence and as troubling, augmentative and largely unseen in many discussions of pregnancy in my personal and academic settings.

I spent the fall season of 2017 bed-bound with hyperemesis gravidarum (HG) until my insurance provider finally approved the off-label use of Ondansetron (commonly known and sold as Zofran), to enable me to eat again, and to leave my bed to continue to teach undergraduate students. I had lost twenty pounds in my first trimester, was vomiting between ten and twenty times per day and nearly required hospitalisation due to dehydration. Hoping to avoid the occasional foetal heart complications that can occur with taking Ondansetron in the first trimester, my obstetricians initially dismissed my symptoms as me being too wimpy to handle common morning sickness. As a member of my faculty union in the context of the United States, where access to health care is not yet a right, I was privileged to access health care benefits in my union contract that paid a large portion—though not all—of the cost of my medical care. I tried anti-nausea wrist bands, an expensive new drug called Diclegis, and

<sup>4</sup> <https://www.hyperemesis.org/about-hyperemesis-gravidarum/>.

attempted to follow any advice I could find in general pregnancy information materials in books and online to no avail. I remember staring at the bottle of Zofran pills before gratefully taking my first dose, which also triggered intense memories of helping my mother keep track of all of her pills—including her Zofran—during her radiation and chemotherapy treatments for cervical cancer when I was a teenager. She fought hard to access this expensive serotonin 5-HT<sub>3</sub> receptor antagonist.<sup>5</sup> It blocks the working of serotonin in the part of the brain stem responsible for the involuntary vomiting reflex. I remembered my parents arguing about how disgustingly expensive treating cancer can be.<sup>6</sup>

Before swallowing Ondansetron, I was too weak to do much of anything, including watching online videos or engaging with social media. I had to teach two days per week. My partner drove me to my first class, where I sat and drew diagrams and key terms on a “doccam” projected onto a screen; I couldn’t stand and write on the board. I then made my way to my office where I slept on the floor until I had to go to my next class, an advanced FPE seminar in which students co-designed and co-led discussions centring our readings for the day. My partner would then pick me up and I would remain in bed—with the exception of bathroom visits or being driven to the obstetrician’s office—until the last day of classes for the week. Ondansetron made it possible for me to move about in a campus landscape that I otherwise could no longer access due to weakness, dehydration, sudden weight loss, and nausea. Even with this drug, I still vomited most days, just less often. I wasn’t able to eat a “full” meal until after giving birth. Once I had the drug, I also mustered enough energy to at least resume more active teaching. I also started to engage more with social media where I found vloggers who described their experiences with HG.

Most HG vloggers were careful to provide disclaimers that they were “not a doctor” and encouraged viewers to seek professional medical advice if they suspected they might have HG, even as most complained about their doctors not believing them for an unacceptable period of time. Many themes emerged in the vlogs, such as how to distinguish

<sup>5</sup> In 1998, her bottle of ondansetron cost nearly US\$ 1,200.00. Generic versions only became available in 2007.

<sup>6</sup> I deeply appreciate S. Lochlann Jain’s 2015 critical analysis of the cancer industrial complex, a book I have taught in an undergraduate seminar four times with profound impacts, as expressed in various student feedback.

between morning sickness and HG, which results in drastic weight loss and dehydration and does not respond to morning sickness support measures. Others demonstrated how to set up and attach Zofran pumps and others narrated their experience while hooked up to IV lines in hospital beds. Several vloggers addressed losing a pregnancy or resorting to abortion while others addressed finding support to care for toddlers while experiencing HG. Many spoke of financial hardship, job loss and challenges with partners or others in “support” networks who dismissed the severity of their symptoms. These vlogs broadened my understanding of HG across age, race, class, sexuality and other categories. Here, those whose complaints are especially disregarded by medical practitioners, such as women of colour and queer women, wait longer for diagnosis and to receive treatment, if they do. Those without childcare support and who cannot afford time away from work during pregnancy also struggle, centring class and caregiving contexts as critical. There were major differences across class, childcare and work contexts in terms of who experienced job loss or lost the ability to care for their children while pregnant. They also demonstrated the range of severity of symptoms, with some women being hospitalised for long periods, others relying on portable Zofran pumps and others managing with pills while still others experienced resistance to most anti-emetic drugs.

Media studies scholar, Samira Rajabi (2021, pp. 70–71), argues, “The Internet, particularly in the case of traumatic suffering, has been shown to take passive sufferers and enable them to make themselves into active media prosumers, engendering new points of significance and fostering the potential for change...whether the trauma was from experiencing, looking, or feeling empathy, the process of meaning making functioned in the same way”, in the context of a woman’s viral breast cancer photo story created by her husband. The HG vlogs strengthened my empathy for others with HG while providing me with context and thankfulness that my Zofran pills were working enough to keep me out of the hospital while not necessitating a pump or other additional support. This broader perspective also made various remarks by my obstetricians about how I shared something with select celebrities all the more infuriating. Unlike attempting to find experiential connections between myself and a famous person, viewing multiple HG vlogs highlighted illness as always situated in a social, place-based and political-economic context. The vlogs highlighted the essential roles of family and other caregivers, insurance companies and everyday mundane practices shaping experiences of HG.

Many vlogs “disappear” over time or are hard to locate long after they go online. At the same time, other digital presences persist beyond when a vlogger might want them to. HG is both temporary (for the duration of a pregnancy) but also lingers in the sense that since having my daughter I have refused to become pregnant again. Every mention of a second child and the joys that a sibling might bring to my daughter provoke a visceral reaction in my body—never again will I go through that experience, especially knowing that HG is quite likely and often increases in severity with every pregnancy. Some people develop resistance to the drugs. I just can’t *imagine* myself enduring a pregnancy without the drugs that allowed me to eat instead of wasting away in the hospital, this time with a young child to care for. Some with HG decide to have more children, especially if they feel supported and if they know they can access the drugs they need. I would likely need to take unpaid medical leave and that seems unaffordable. Some of my Angolan partner’s extended family see me as a failure for not having many more children. The accusations amount to, “See what you get for choosing a white wife!” when really in this case this is “what you get” with someone who gets HG. Or maybe I wouldn’t get HG a second time around, but the odds are not good. There is a complex temporality to these kinds of calculations.

In the case of HG, temporality also complicates the building of virtual communities and notions of crip identity politics. Many who experience HG can “move on” after their experience because HG has an end (the end of pregnancy). Within 3 hours of giving birth, I ate my first full meal: a greasy grilled cheese sandwich. Although it gave me some temporary heartburn, the speed with which my body shifted from an aversion to most food (even with the drug) to no more nausea was striking. Three hours! Within the next week, I became ravenous as my body suddenly transitioned into needing to produce breast milk while also gaining back all the weight I had lost during my pregnancy (the opposite situation for many). While there are some who take on HG as a cause to support and to build community around supporting others. This can also get infused with challenging abortion rights politics. Some anti-abortion activists see HG as an instance where they can actively coach pregnant people away from abortion. The majority of vlogs I encountered avoided questions of abortion or framed it as something for the pregnant person and their doctor to work through. There is a plethora of community and activism in these digital spaces, but I wouldn’t call it all good activism or feminist.



Regarding HG activism and temporality, for how long does “responsibility” apply? With whom are we in community, for how long and why? Are short-lived communities of care and activism also laudable? Feminist? What happens to an issue/disease/experience as something worth organising around, if it’s not “chronic” (although it is likely to repeat when pregnant again), and thus, not easy or obvious to build an identity around?

## DISCUSSION

### *Porosity and the Symptoms of Relational Ecologies*

How do these stories speak to the porous, inextricable relationships between bodies and places; bodies and territories?

Chronic pain is a symptom of the porous relationship between body and place, even though it is often silenced in the biomedical sciences. For Ilenia, the embodied and everyday experience of pain sparked the desire to learn from the composite history of struggles for social and environmental justice animated by Black, Latinx, Indigenous and proletarian women and LGBTQIA+ folks (Anzaldúa & Keating, 2002; Kafer, 2013; Lorde, 1980; Pulido, 2008). Their activism employs the politicisation of ill bodies (Iengo & Armiero, 2017) as a peculiar kind of situated knowledge reflecting on how the health conditions of a community have much more to do with the accumulation of institutionalised oppression and toxicity than with a personal fault or incapacity (Iengo, 2022). It took years of days filled with pain, sometimes normalised, or at best met by a sense of pity by a myriad of medical doctors, teachers, friends and lovers, to come to terms with the relevance of pain in understandings of intersecting environmental, social, gender oppressions. A criptistemology of pain contributes to affirming the experiences of pain and the situated, partial knowledge that stems from such embodiment (Patsavas, 2014). In situating the experience of chronic pain within the cultural politics of ableism, a criptistemology of pain criticises the reduction of chronically ill and disabled people’s lives to body parts that hurt.

Ilenia’s chronic inflammatory pain functioned as an instigator to politicise the porosity of embodiment. In the Land of Fires, it means engaging with the uneven infrastructure of chemical relations where dioxin bioaccumulates into human and more-than-human bodies as a result of hazardous waste burning (Iengo, 2022; Murphy, 2017a, 2017b). In this reflection,

Ilenia thinks with the proposition by Sara J. Grossman to be attentive to such relationships of pain and narrative that leak between biospheres and bodies (2019). FPE needs to make space for the crippling and queering work around the politics of knowledge reproduction on socio-environmental health, which go beyond the victim narrative or that of somewhere/someone deemed unnatural, sick, unproductive and in need of fixing. FPE has a long history of amplifying autonomous and grass-roots efforts in producing knowledges that can help us interrogate issues such as the feminised and sexualised nature of care work which does not make space or create possibilities for the sick woman. Ilenia proposes a cross-fertilisation of transfeminism, critical disability studies and environmental humanities in fostering perspectives that move beyond the normative assumptions often found in the biomedical sphere.

Together with comrades and friends, she recalls discussing: What happens when the body who needs care/to be attended to is the one naturally charged with the responsibility of care? A short circuit is the most fitting metaphor, because the entire relational, social, economic system on which the patriarchal society is based upon is the paid, underpaid, unpaid, naturalised and unrecognised labour of women and feminised subjectivities. If the disease keeps her in bed, unable to do much, who will take care of her, what kind of future can she imagine? These are the questions that keep her awake at night, when the pains are not so acute and there is room for thought. There is still a lot we need to do in our political communities to be able to think and practice responsibility towards the vulnerability, care and desires of our non-conforming bodies.

Through a different material experience, in the case of malaria in the Evrotas River Delta, the disease itself was the outcome of and the political ground on which a crisis of biopolitics was articulated and built (Kotsila & Kallis, 2021). This process illuminated how undesired, but otherwise “natural” ecologies, such as those of mosquito populations in wetland environments, become one of the outcomes of state failures in environmental management and result in disease. At the same time, these undesired disease vectors also become the place—the pore itself—of the porous relationships between places and bodies. The fact that those most exposed and affected by this relationship have been immigrant farmworkers makes visible the deeply political processes that underlie the decisions around who, under which conditions and with what consequences, will become entangled with such “undesired” natures. Here,

it is not only how agricultural production will take place and whether it will be sustainable, organic, and local that matters; it is mainly a question of agency, ownership, rights and ultimately social and political power that defines the condition of agricultural workers and their everyday experience of enduring both undesired ecologies and status of undesired/denied citizenship.

Health inequalities are determined socially (Marmot, 2005). Malaria, specifically, demonstrates the need to examine disease under a more holistic and critical framework of socio-environmental evolution and change, as it depends on the intersecting ecologies and geographies of human, mosquito and water bodies. As Carter (2012, p. 2) has noted in Argentina: “malaria thrived in the region’s hot, humid, subtropical environment but also flourished opportunistically in bodies worn down by alcoholism, malnutrition, overwork, and material deprivation”.

Immigration itself, in this sense, can be considered a social determinant of health (Castañeda et al., 2015). The recent work of Teresa Mares (2019) on the dairy industry in Vermont, US, for example, also points to why occupational health risks and the non-access to health care impose tremendous challenges for immigrant workers in their efforts to care for themselves and their dependents. In Skala, too, as Panagiota here explained, malaria spread not only because immigrants did not have access to health care, but because they were working in highly mosquito-prone areas, inhabiting humid orange orchards with irrigation canals, in substandard accommodation and with no access to means of disease prevention. In turn, this was tightly linked to their status as non-citizens and their racial and ethnic background. As Carney (2014) notes, intersectional analysis has to include this experience of “illegality” as an axis of barriers to resource access and “the embodiment of subordinated status” experienced by undocumented migrants (citing Quesada et al., 2011, p. 351”).

It is thus important to think of these everyday embodied realities of experiencing, inhabiting and becoming in relationship to food production—and of any process of human–environment interaction and relation—in order to move away from romanticised visions of places or processes that might appear idyllic and pure in ecological, and as an extension, ethical terms. Although in biological terms, the interaction between bodies and environments are governed by the same biophysical “laws”, the co-becoming of farm and farmer, of earth and earth-carer, of food and food producer, is always conditioned upon intersectional identities and positions of oppression or privilege. We need to speak more of that in our analysis of socio-environmental realities and future transformations.

As Ingrid explains, the aetiology of HG is still largely unknown, but it is broadly understood as “internal” in cause, rather than the result of exposure to a chemical such as dioxin or a plasmodium parasite...although HG occurs only while a person is pregnant (jokes and feminist writing about fetuses as kinds of parasites abound by the way), and then ceases within mere hours after the end of a pregnancy. Here, Ingrid sees fruitful scholarship from thinkers such as Sophie Lewis (2018, 2019) on gestational justice and the concept of “full surrogacy” as a way to reconfigure the connections, politics and responsibilities between people’s bodies, social connections and places. The shift in her hormones also altered her connections with place through smell. When experiencing HG, her nausea was easily triggered by both commonly recognised foul odours and by mundane smells not normally considered illness-inducing. To this day, the seasonal change to autumn where she lives and works, in Vermont, brings scents of fermenting apples fallen from trees, a variety of fall flowers and seasonal foods, which triggers nausea long after having had HG. Autumn was the time in her pregnancy before her insurance approved Zofran, when she rapidly lost the most weight and was the least mobile. Her brain apparently still associates the scents of this season with the worst of HG for her.

### *Technologies and the Politics of Visibility*

In the case of endometriosis and chronic pain, Ilenia describes her experience of health-related technologies, or the role of technology in experiencing and navigating health conditions, which reveals also how digital technologies can help visibilise and empower in a subversive, emancipatory way. In 2017, she started to search for an online crip community while her symptoms became unbearable, until she was stuck in the house or in bed for weeks or months. In an anglophone context, she found people who told their story, unrecognised by medical staff, others who provided everyday life hacks and advice for managing symptoms, and others dedicated to divulging the latest scientific advancements in simple and accessible language. Where the health professionals had failed in recognising what was wrong, there were so many people who according to the feminist practice “hermana yo sì te creo” (“sister I do believe you”), not only validated symptoms but were filled with anger at how the medical system treats chronically ill women, BIPOC and non-binary people, and at the same time offered empathy and support to those who took the first steps in the community.

Thanks to these online networks, archives of materials to study the complexity of the disease in depth are made accessible, to help awareness-building around the possible therapeutic options, against the oppressive medical myths to be debunked,<sup>7</sup> and the rights that we can affirm as patients. In Italy there is a flourishing of online dissemination and mutual help between people with endometriosis happening at the grassroots level. Info.endometriosis<sup>8</sup> and chroniqueurs<sup>9</sup> are online support communities that divulge expert knowledge and create space for sharing experiences, hacks, and push the boundaries of what counts as knowledge about who is the endometriosis patient from an intersectional and transfeminist perspective.<sup>10</sup> Their work uses digital spaces strategically to build community, and overflows in spaces of grassroots organising with assemblies and self-training events.

<sup>7</sup> Endometriosis is systemic chronic inflammatory illness where endometrial-like tissue creates lesions, cysts and nodules, growing its own nerves and blood vessels causing inflammation, scar tissue, fibrosis and adhesions in extra-uterine context, especially in the pelvic and abdominal area, although it has been found on all organs of the human body. However, the vast majority of medical school training still casts endometriosis as a menstrual issue. For more on the sexist, racist, classist discourses in endometriosis science see: Capek (2000), Guidone (2020), and Iengo (2022).

<sup>8</sup> <https://www.instagram.com/infoendometriosis/>.

<sup>9</sup> <http://chroniqueurs.it>.

<sup>10</sup> In the book, “The Makings of a Modern Epidemic: Endometriosis, Gender and Politics”, author Kate Seear, traces how biomedical science has defined a prototype of person with endometriosis with complex consequences for those identified and those invisibilised. For decades, endometriosis was also called “the career woman’s disease”. Manifested in this definition is the construction of patriarchal, classist and racist medicine that obliterate BIPOC women and LGBTQIA+ folks. In the 1930s, physician Joe Vincent Meigs, concerned about declining birth rates in affluent, white communities in the United States, defined endometriosis as a consequence of prolonged, uninterrupted menstruation. Drawing parallels with primate females, whose menstruation is a rare occurrence between pregnancies, he proposed multiple and early pregnancies as a natural condition for female health. In addition, Meigs spent much energy in advising physicians to encourage their affluent and white patients to reproduce to overcome the population growth of the subordinate classes. To date, it is uncommon to hear such blunt arguments, although the ways in which “the endo patient” is classified and the solutions offered remain the same. An intersectional analysis allows us to unveil how the assumption that the disease affected white, upper-class women who choose a career over family came to be imposed, obliterating and keeping proletarian and racialized women and LGBTQIA+ completely out of the statistics. It takes an average of 7.5 years to receive a diagnosis. For black, racialized and LGBTQIA+ people this time is multiplied out of all proportion, and they face greater difficulties in accessing already risky healthcare, while experiencing more medical violence in “women’s” wards.

Disability justice and crip activism mediated and flourishing via digital technologies has offered us tools to counter-narrate our own bodily experiences, against the pathologisation of the body and the patronising practices of the medical establishment, and to navigate anti-ableist everyday life practices as disabled and chronically ill folks. It is essential to talk about the transformative power of our crip communities without indulging in inspirational narratives of the “super crip” focusing on overcoming illness and achieving well-being *in spite of* the conditions (Clare, 2009; Hamilton, 2014; Schalk, 2016). Nobody can determine what quality of life means to us but us! The mutual aid networks between spoonies<sup>11</sup> have been fundamental for education towards awareness and improvement of symptoms, while reinventing our material and discursive worlds (Hamraie & Fritsch, 2019).

In the activism of chronically ill and disabled people, the issue of data is fundamental: where there is no information, it must be collected through self-organised inquiries and analysed from an intersectional perspective to fill those gaps in the representation of class, race, gender, nationality, sexuality and of course ability, to raise awareness on the lurking oppressions and injustices. Some have called the practice of producing this transformative, creative, knowledge that is specific to the experiences and lives of chronically ill and disabled people, as “epistemic activism” (Hamraie, 2017, p. 132) in opposition to the dominant forms of knowing and acting around disability. Expanding the narrative of contested illnesses allows us to explore together and engage in processes that help recover our dignity and to overcome mainstream discourses that portray people with disabilities and chronic illness as expendable. This work, which is often done via digital technologies, exposes how ability, gender, sexuality, race, class, nationality influence our experiences of biomedical, economic and environmental violence, and from there to think about the practices, technologies and emancipatory imaginaries that we can put in place. These experiences do not allow a linear and universal prescriptive definition of

<sup>11</sup> Spoonie is a concept that refers to the “theory of spoons” used in the world of chronically ill and disabled people as a metaphor and visual representation of the daily amount of physical and mental energies that are indispensable for carrying out various activities. The theory, proposed by Christine Miserandino who lives with lupus, allows us to simply visualize how each disabled or chronically ill person has a limited number of spoons per day to deal with various tasks including showering, cooking, leaving the house, participating in a demonstration, have sex and work.

our political paths, which on the contrary must take into account the complexity and multiplicity of experiences and desires.

In the case of immigrant farmworkers, as Panagiota explained, taking care of oneself is often synonymous to avoiding deportation, to be allowed to work and to claim a place in local society. This is no easy task, and it often means balancing between being visible to actors who could help provide this access to basic survival (employers, human rights organisations, intermediaries, fellow workers), and staying invisible to others who would threaten it. Health and well-being were inextricably linked to this balancing act. Malaria, and the technologies used for its documentation and control (Google maps for locating the sheds where immigrants lived in the fields, medical diagnostic and preventive medicine technologies that only were administered to immigrants), were in many ways understood and experienced as a pretext for further biopolitical control and violence against these communities. Indeed, during the malaria spread, there were more frequent invasions of police forces into immigrant homes: Fridays after work, and before being paid for the week, sending many to detention centres, from where some would be deported. During public health visits, workers did not want to admit they were sick, because that would often mean being denied work and housing, but also could not deny examination and treatment because they were afraid of the repercussions. Outcomes of infection were thus defined both by how public health and medical technologies were mobilised and directed specifically to immigrant farmworkers, and as a consequence, by the meanings infused in malaria itself: both by those who portrayed it as a “backwards” disease carried by “backwards” subjects, and by those who suffer it in silence because they are embedded in contexts of exploitation and exclusion (Evered & Evered, 2012; Kotsila & Kallis, 2019).

As the other cases in this chapter also reveal, institutional oppression and control exercised through a biopolitics of health and related technologies, might go unnoticed by those with enough privilege to escape it. Already in the 1970s, the Italian physician and founder of *Medicina Democratica*<sup>12</sup> Maccacaro stated: “medicine is entrusted with the task of resolving, in scientific rationality, this contradiction of the capitalist mode

<sup>12</sup> Since the early 1970s *Medicina Democratica* has been a social movement that fights for the right to health in Italy. It was born in the working-class struggles and the fight against toxicity in the workplace, aiming to change the role of science and especially medicine towards creating knowledge that could be horizontal, collective and participatory.

of production, which on the one hand consumes and extinguishes labor power but on the other needs it to continue to feed itself” (1979, p. 140). While recognising the need for intersectional approaches to institutional exclusions from social welfare systems (Bowleg, 2020), we aim to move towards amplifying the knowledges and transformative justice praxes of those who are captured and oppressed by the state’s medical governmental gaze (Khan et al., 2022). As Petchesky (2016) argues, “there is nothing disengaged, neutral or ‘objective’ in the knowledge or technics that biopolitics employs” (p. 171). Intersectional marginalised communities, from the non-citizen racialised men working in agricultural fields, to the working-class woman in the periphery of a metropolis, to the trans indigenous person with disability, experience in their flesh and bones that provisions of health often come with some sort of state and medical violence in its racist, patriarchal, and classist declinations.

Similarly, so, albeit entangled in a different kind of ambivalence with medical and online technologies, the two “technologies” that opened up access to place again for Ingrid were: one (the drug) by mitigating nausea and the other (the vlogs) by situating her experience among other pregnant people in different contexts, places, work obligations, etc. The vlogs in particular made her understand both the inaccessibility of certain aspects of her university campus and also how privileged she was with regard to the flexibility of work and the protections her contract offered as a member of a union. She has separate reflections on her experiences as a bisexual person in terms of the heteronormativity of the obstetrician’s office, campus spaces, and even the vlogs, but she “expected” these kinds of silences and erasures (and funny moments) of the pregnancy. However, she did *not* expect having HG or how important a fraught drug and watching other pregnant people navigate the condition, explain how to use Zofran pumps and function at work with HG would be to even staying pregnant, keeping her job and avoiding deep depression. She is grateful for these technologies but also cognisant of their origins and broader troubling connections. Ingrid has lingering questions about how FPE should understand these technologies (see Nelson et al., 2022).

## CONCLUSIONS

Through the lenses of the three embodied experiences of chronic pain, infection and nausea, we explored the themes of porosity and technology as they offer us ways to insist on the right to be and the politics



of health in FPE. Building on feminist interventions in environmental humanities, we engaged with the porous relationship between bodies and places, their mutual as much as disabling exchanges and the onto-epistemological understandings that arise from this acknowledgement. The relationship between embodiment and medical/digital technologies challenge understandings of health as an individual characteristic and binary opposite of illness, moving towards narratives that account for health as the complex and ever-changing process deeply affected by access to mutual aid, care networks, medical and digital technologies (proprietary, reclaimed, hacked, never innocent), knowledge over our conditions and the processes of self-determination to repair harm and dismantle multiple systemic oppressions ingrained into our societies. The ambivalent nature of different kinds of technologies employed in and around health has been explored in their capacity to visibilise or invisibilise experiences.

Our chapter centred what is often at the margins of FPE discussions, concerning the kinds of porous relations between bodies and places that continuously permeate and inform politics, from the personal to the broader social level and the ambivalent meanings and usages of digital and medical technologies mediating our understanding and experiences of health and embodiment.

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## REFERENCES

- Agamben, G. (1998). *Homo sacer: Sovereign power and bare life*. Stanford University Press.
- Anzaldúa, G., & Keating, A. L. (2002). *This bridge we call home: Radical visions for transformation*. Psychology Press.
- Barca, S. (2014). Telling the right story: Environmental violence and liberation narratives. *Environment and History*, 20(4), 535–546.
- Bailey, M., & Peoples, W. (2017). Towards a black feminist health science studies. *Catalyst: Feminism, Theory, Technoscience*, 3(2), 1–27.
- Bowleg, L. (2020). Evolving intersectionality within public health: From analysis to action. *American Journal of Public Health*, 111(1), 88–90. <https://doi.org/10.2105/AJPH.2020.306031>

- Capek, S. (2000). Reframing endometriosis: From 'career woman's disease' to environment/body connections. In S. Kroll-Smith, P. Brown, & V. Jan Gunter (Eds.), *Illness and the environment: A reader in contested medicine* (pp. 345–363). New York University Press.
- Carney, M. A. (2014). The biopolitics of 'food insecurity: Towards a critical political ecology of the body in studies of women's transnational migration. *Journal of Political Ecology*, 21, 1–18.
- Carter, E. D. (2012). *Enemy in the blood: Malaria, environment, and development in Argentina*. University of Alabama Press.
- Castañeda, H., Holmes, S. M., Madrigal, D. S., DeTrinidad Young, M. E., Beyeler, N., & Quesada, J. (2015). Immigration as a social determinant of health. *Annual Review of Public Health*, 36, 375–392.
- Clare, E. (2009). *Exile and pride: Disability, queerness, and liberation*. South End Press.
- Da Costa, L. B., Icaza, R., & Ocampo Talero, A. M. (2015). Knowledge about, knowledge with: Dilemmas of researching lives, nature and gender otherwise. In W. Harcourt & I. Nelson (Eds.), *Practicing feminist political ecologies: Moving beyond the "Green Economy"* (pp. 260–285). Zed Books.
- Doshi, S. (2017). Embodied urban political ecology: Five propositions. *Area*, 49(1), 125–128.
- Evered, K. T., & Evered, E. Ö. (2012). State, peasant, mosquito: The biopolitics of public health education and malaria in early republican Turkey. *Political Geography*, 31(5), 311–323.
- Foucault, M. (2003). *"Society must be defended": Lectures at the Collège de France, 1975–1976* (Vol. 1). Macmillan.
- Grossman, S. J. (2019). Disabilities. *Environmental Humanities*, 11(1), 242–246.
- Guidone, H. C. (2020). The womb wanders not: Enhancing endometriosis education in a culture of menstrual misinformation. In C. Bobel, I. T. Winkler, B. Fahs, K. A. Hasson, E. A. Kissling, & T. A. Roberts (Eds.), *Palgrave handbook of critical menstruation studies* (pp. 269–86). Palgrave Macmillan.
- Guthman, J. (2011). Bodies and accumulation: Revisiting labour in the 'production of nature'. *New Political Economy*, 16(2), 233–238. <https://doi.org/10.1080/13563467.2011.542801>
- Guthman, J., & Mansfield, B. (2013). The implications of environmental epigenetics: A new direction for geographic inquiry on health, space, and nature-society relations. *Progress in Human Geography*, 37(4), 486–504.
- Hamilton, A. (2014). Working out some issues: The latest in 'inspirational' ableism. *Bitch*, 62, 5.

- Hamraie, A. (2012). Universal Design research as a new materialist practice. *Disability Studies Quarterly*, 32(4). <https://doi.org/10.18061/dsq.v32i4.3246>
- Hamraie, A. (2017). *Building access: Universal Design and the politics of disability*. University of Minnesota Press.
- Hamraie, A., & Fritsch, K. (2019). Crip technoscience manifesto. *Catalyst: Feminism, Theory, Technoscience*, 5(1), 1–34.
- Haraway, D. (2016). *Staying with the trouble: Making Kin in the Chthulucene*. Duke University Press.
- Hedva, J. (2018, 17 January). *Letter to a young doctor*. Triple Canopy n. 24. Retrieved March 10, 2022 from <https://www.canopycanopycanopy.com/contents/letter-to-a-young-doctor/#title-page>
- Iengo, I. (2022). Endometriosis and environmental violence: An embodied, situated ecopolitics from the land of fires. *Environmental Humanities*, 14(2), 341–360.
- Iengo, I., & Armiero, M. (2017). The politicization of Ill bodies in Campania, Italy. *Journal of Political Ecology*, 24(1), 44–58.
- Jackson, P., & Neely, A. H. (2015). Triangulating health: Toward a practice of a political ecology of health. *Progress in Human Geography*, 39(1), 47–64.
- Jain, S. L. (2013). *Malignant: How cancer becomes us*. University of California Press.
- Jaquette Ray, S., & Sibara, J. (Eds.). (2017). *Disability studies and the environmental humanities*. University of Nebraska Press.
- Jones, C. E. (2016). The pain of endo existence: Toward a feminist disability studies reading of endometriosis. *Hypatia*, 31, 554–571.
- Kafer, A. (2003). Compulsory bodies: Reflections on heterosexuality and able-bodiedness. *Journal of Women's History*, 15(3), 77–89.
- Kafer, A. (2013). *Feminist, queer, crip*. Indiana University Press.
- Khan, Z. H., Iwai, Y., & DasGupta, S. (2022). Abolitionist reimaginings of health. *AMA Journal of Ethics*, 24(3), E239–246. <https://doi.org/10.1001/amajethics.2022.239>
- Kim, J. B. (2017). Crippling East Los Angeles: Enabling environmental justice. In Helena María Viramontes's "Their dogs came with them". In S. J. Ray & J. Sibara (Eds.), *Disability studies and the environmental humanities: Toward an eco-crip theory* (pp. 359–380). University of Nebraska Press.
- Kotsila, P., & Kallis, G. (2019). Biopolitics of public health and immigration in times of crisis: The malaria epidemic in Greece (2009–2014). *Geoforum*, 106, 223–233. <https://doi.org/10.1016/j.geoforum.2019.08.019>
- Kotsila, P., & Kallis, G. (2021). Politics of austerity and 'otherness' as public health determinants: The malaria epidemic in Greece during crisis (2009–2014). In R. Calvário, M. Kaika, & G. Velegrakis (Eds.), *The political ecology*

- of austerity: Crisis, social movements and the environment* (pp. 92–111). Routledge.
- Lewis, S. (2018). Cyborg uterine geography: Complicating ‘care’ and social reproduction. *Dialogues in Human Geography*, 8(3), 300–316.
- Lewis, S. (2019). *Full surrogacy now: Feminism against family*. Verso.
- Lorde, A. (1980). *The cancer journals*. Aunt Lute Books.
- Maccacaro, G. A. (1979). L’uso di classe della medicina. In *Per una medicina da rinnovare, Scritti 1966–1976* (pp. 406–434). Feltrinelli.
- Mansfield, B. (2011). Is fish healthy food or poison? Farmed fish and the material production of un/healthy nature. *Antipode*, 43(2), 413–434.
- Mares, T. M. (2019). *Life on the other border: Farmworkers and food justice in Vermont*. University of California Press.
- Marmot, M. (2005). Social determinants of health inequalities. *The Lancet*, 365(9464), 1099–1104.
- Mbembe, A. (2020). *Necropolitics*. Duke University Press.
- McRuer, R. (2002). Compulsory able-bodiedness and queer/disabled existence. In S. L. Snyder, B. J. Brueggemann, & R. Garland-Thomson (Eds.), *Disability studies: Enabling the humanities* (pp. 88–99). Modern Language Association.
- Mingus, M. (2010, January 22). Interdependency (excerpts from several talks). *Leaving Evidence*. <https://leavingevidence.wordpress.com/2010/01/22/interdependency-exerpts-from-several-talks/>
- Murphy, M. (2017a). What Can’t a Body Do? *Catalyst: Feminism, theory, technoscience*, 3(1), 1–15.
- Murphy, M. (2017b). Alterlife and decolonial chemical relations. *Cultural Anthropology*, 32(4), 494–503. <https://doi.org/10.14506/ca32.4.02>
- Neely, A. H. (2021). *Reimagining social medicine from the south*. Duke University Press.
- Nelson, I. L., Hawkins, R., & Govia, L. (2022). Feminist Digital Natures. *Environment and Planning E: Nature and Space*. <https://doi.org/10.1177/25148486221123136>
- Nixon, R. (2011). *Slow violence and the environmentalism of the poor*. Harvard University Press.
- Patsavas, A. (2014). Recovering a criptistemology of pain: Leaky bodies, connective tissue, and feeling discourse. *Journal of Literary and Cultural Disability Studies*, 8(2), 203–218.
- Pellow, D. N. (2018). *What is critical environmental justice?* Polity Press.
- Petchesky, R. P. (2016). Biopolitics at the crossroads of sexuality and disaster: The case of Haiti. In T. Schrecker (Ed.), *The Ashgate research companion to the globalization of health* (pp. 191–212). Routledge.
- Piepzna-Samarasinha, L. L. (2018). *Care work: Dreaming disability justice*. Arsenal Pulp.

- Price, M. (2015). The bodymind problem and the possibilities of pain. *Hypatia*, 30(1), 268–284.
- Pulido, L. (2008). FAQs: Frequently (un)asked questions about being a scholar activist. In C. R. Hale (Ed.), *Engaging contradictions: Theory, politics, and methods of activist scholarship* (pp. 341–366). University of California Press.
- Rajabi, S. (2021). *All my friends live in my computer: Trauma, tactical media, and meaning*. Rutgers University Press.
- Sadler, J. (2017). War contaminants and environmental justice. In S. Jaquette Ray & J. Sibara (Eds.), *Disability studies and the environmental humanities. Toward an eco-crip theory*. University of Nebraska Press.
- Schalk, S. (2016). Reevaluating the supercrip. *Journal of Literary and Cultural Disability Studies*, 10(1), 71–86.
- Secar, K. (2014). *The makings of a modern epidemic: Endometriosis, gender, and politics*. Ashgate.
- Sultana, F. (2007). Reflexivity, positionality and participatory ethics: Negotiating fieldwork dilemmas in international research. *ACME: An International Journal for Critical Geographies*, 6(3), 374–385.

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