

# Unruly Waters, Unsanitary Bodies

## Abject Terrains, Rehabilitation, and Infrastructures of Dispossession on the U.S.–Mexico Border

Carlos Martinez

Received: 1 March 2022; Accepted: 6 September 2022; Published: 30 June 2023

### Abstract

Drawing on ethnographic fieldwork among homeless deportees living in the Tijuana River canal, I examine how the ‘rehabilitation’ of toxic terrains can have corporeal and social consequences for those inhabiting such spaces. For decades, the Tijuana River basin traversing the U.S.–Mexico border has been perceived by officials from both countries as an unruly body of water. Prone to persistent flooding, the canal also experiences flows of toxic sewage from Tijuana’s *maquiladora* industry. In recent years, the riverbed in Tijuana has been inhabited by homeless and drug using communities, many of whom have been deported from the U.S. In response, rehabilitation of the canal and forced drug rehabilitation have been conjoined and promoted by the state as solutions for managing this unruly terrain and its residents. I take the deployment of the term ‘rehabilitation’ targeting both homeless deportees and the canal as an opportunity to consider how the concurrent disciplining of landscapes and human populations has been a central and evolving feature of the Anthropocene. I examine how my homeless interlocutors have experienced ‘rehabilitation’ as a violent process of abjection, dispossession, and captivity, which has converted this transborder landscape structure into a carceral zone under the guise of urban sanitation and health promotion.

### Keywords

Borders, Drugs, Deportation, Homelessness, Anthropocene.

## Introduction

Today I entered the Tijuana River canal near Tijuana's municipal jail with staff from Prevecasa, where they distributed clean needles, naloxone,<sup>1</sup> food, and water bottles to El Bordo's homeless residents. We drove in from one of Tijuana's heavily trafficked thoroughfares running parallel to the canal. After arriving to a large homeless settlement underneath an overpass crossing the canal, Poncho, one of the Prevecasa staff, got out of the car to talk with some of the residents. He wanted to make sure that they were fine with us staying there for a bit to exchange syringes and that everything seemed safe. They replied that we could, so the Prevecasa staff jumped into action. They set up a table outside of the trunk, asked the canal inhabitants to form a line, and provide their names to receive new syringes in exchange for their used ones. The settlement was like a concentrated makeshift village. It contained the most abundant accumulation of materials used for housing that I had seen inside the canal. There were mattresses, camping tents, plenty of chairs, and what even appeared like an outdoor living room space replete with a sofa and table. A precarious walking bridge built with long pieces of steel railing that usually line the sides of many roads in Tijuana allowed villagers to carefully cross over the dark brown stream of sewage and water running through the middle of the canal. The walls of the overpass that provided cover for the village were filled with majestically sized graffiti featuring the kind of Mexican gangster-style cursive writing that my friends and I, as teenagers, would scrawl all over our junior high notebooks and textbooks. The graffiti letters here were much more sophisticated than our novice sketches mimicking the 'cholo' aesthetic that achieved mainstream popularity in the 1990s. Just like many of the canal's inhabitants, this graffiti style has been exported (or rather, deported) from the barrios of Southern California to Tijuana's walls. Though the village is located in the heart of Tijuana's sprawling metropolitan tumult, sandwiched between a hard landscape of concrete and asphalt, it has a surprising tranquility, accentuated by the sound of streaming canal water. I was struck by the small glimpses of order, joy, and conviviality I encountered in the encampment amidst the canal's foul stench and the physical deterioration of its inhabitants. One villager was gleefully flying a kite over the feculent stream of sewage and the piles of garbage strewn about, others were cordially passing a pipe around with crystal meth, and another man was sweeping dirt and dust away from the living room area. The only other visible presence in the canal was the legion of large garbage trucks about half a mile down conducting the ongoing *limpieza* [cleaning] of the sediment and waste that has accumulated over the years. Although the mere presence of the trucks appeared menacing to me,

1 Naloxone is an opioid antagonist medication that rapidly reverses an opioid-related overdose.

knowing full well that *limpiezas* have been used to justify repression against the canal's inhabitants, the cleaning crews and the canal villagers seemed to be coexisting peacefully—at least at the moment. (Field note, August 21, 2020.)

For decades, the binational Tijuana River basin, which traverses the militarised border dividing the United States and Mexico, has been perceived as an unruly body of water by officials from both countries. Prone to persistent flooding, the portion of the river inside Mexican territory was channelised through a federally funded development scheme that transformed Tijuana's urban landscape in the 1970s (Peralta 2012). A toxic brew of sewage containing industrial pollution from Tijuana's massive *maquiladora* industry (tax-exempt assembly plants), agricultural run-off, and residential waste from adjacent informal communities now flows through the canal (Al-Delaimy, Wood Larsen, and Pezzoli 2014; Calderón-Villarreal et al. 2022; Lemus 1995; Grineski, Collins, and Romo Aguilar 2015). Amidst Tijuana's ceaseless growth throughout the 20th century, the riverbed has been inhabited by migrants, labourers, and—most recently—homeless and drug using communities, many of whom have been deported from the U.S. (Albicker and Velasco 2016).

The astronomical increase in deportations of Mexicans from the U.S. in recent decades has led to a permanent presence of deportee communities across Mexico's border cities (Caldwell 2019; Slack 2019). Although they are nominally Mexican citizens, deportees are often thoroughly estranged from their country of birth. In many cases, deportees have few social networks in Mexico and are left stranded and homeless. Tijuana's municipal police visually profile, brutalise, and imprison deportees daily with near total impunity (Pinedo et al. 2015). To cope with their harsh new realities, some turn to drugs such as methamphetamine, heroin, and fentanyl, abundantly available in Mexican border cities, which are also critical trafficking corridors for the illicit international narcotics trade (Albicker and Velasco 2016; Aviña Cerecer 2021).

One of my interlocutors, Javier,<sup>2</sup> had shifted in and out of homelessness throughout his time in Tijuana and often slept inside the canal. Javier was born in Sinaloa, Mexico, and grew up undocumented in Salt Lake City, Utah, from where he was deported after being stopped for a traffic violation. Now in his mid-40s, Javier retained a young look and baby-like smile, accentuated by the fact that he only had a few remaining upper teeth. I learned that most of his teeth had rotted because of his methamphetamine addiction. He also struggled with heroin addiction and often sought out treatment, but with little success.

2 I have used pseudonyms for the names of my deportee interlocutors in this article.

Javier carried a bucket and squeegee with him that he used to wash cars—his main moneymaking hustle. He had a shaved head and fading tattoos above his left eyebrow and along his neck. These features made him easily identifiable by police officers as a Mexican-American man deported from the United States. Like other deportees, Javier was regularly picked up by police officers, occasionally multiple times in a week, and often sent to spend 36 hours in Tijuana's notorious municipal jail located in the city's *20 de Noviembre* neighbourhood, popularly referred to as *La Veinte* (*veinte* being the Spanish word for the number 20). Through my relationship with Javier and other deportees, I became familiar with the weekly activities of police and other law enforcement officials in and around the canal. In one memorable instance, Javier told me that the Mexican National Guard (*Guardia Nacional, GN*) had entered the canal and detained several people. I walked with Javier towards the canal to see if we could get a view of the GN. As we got closer, Javier became noticeably more nervous. Even though we were safely across the street from the canal and not within view of the GN, he hunched downwards while we slowly crept forward, as if he was trying to hide. He was clearly terrified by the prospect that they might see and apprehend him.

Incursions into the canal like this are not uncommon. Popularly referred to by its inhabitants as *El Bordo* (a play on the word border), the canal is managed as an ecological and social nuisance requiring rehabilitation through the deployment of *limpiezas* [cleaning operations]. Sewage from the canal often overflows onto U.S. and Mexican beaches, producing backlash from U.S. officials and residents in Southern California (Smith and Fry 2021). Canal rehabilitation targets the sediment, vegetation, and sewage build-up as well as the homeless communities that have developed there in recent years. *Limpiezas*, like the one to which Javier alerted me, often take the form of militarised crackdowns, or *operativos*, in which dozens of the canal's residents are rounded up by police or federal agents (Morales et al. 2020). They are either sent to *La Veinte* or to one of the city's hundreds of informal drug rehabilitation centres for an indeterminate period (Rafful et al. 2019).

These centres, referred to by locals as either *centros* or *anexos*, are typically run by religious organisations and do not provide opioid substitution treatment. Instead, rehabilitation centre inhabitants are often subjected to various forms of corporeal discipline as a modality for detoxing from drugs (Harvey-Vera et al. 2016). They are also required to adhere to rigid schedules combining daily mass, lectures, and non-remunerated labour. This labour, referred to as *servicio* [service], is often conducted at local markets and other businesses which in return provide the centres with needed food and supplies (Rafful et al. 2019). Homeless people placed in *La Veinte* or in drug rehabilitation centres are also at times obliged to serve as the city's cleaning crews (Camarillo 2020; Fabela 2021). The

rehabilitation of the canal thus takes on multiple sanitising forms. The canal is spatially cleansed of sediment, and people, while its inhabitants are forced to be rehabilitated from drug use and, in some cases, come to serve as the city's sanitary labourers.

While conducting ethnographic fieldwork in Tijuana, I worked with several organisations providing care to the canal's homeless community. I also participated in a study with a binational team of public health and biogeochemical researchers exploring the health risks associated with the use of and contact with Tijuana River water by homeless deportees living in or accessing the canal. The study sought to provide greater empirical evidence of the health consequences related to contact with Tijuana River water, such as skin rashes and gastrointestinal problems (Al-Delaimy et al. 2014; Smith and Fry 2021). We collaborated with two local non-profit organisations which approach health from alternate vantage points—Prevecasa, which advances harm reduction efforts among Tijuana's homeless drug-using community, and Proyecto Fronterizo de Educación Ambiental A.C. [The Border Environmental Education Project] (PFEA), which since 1991 has pursued environmental health advocacy related to the contamination of the river.

Through my ethnographic engagements, I came to see not only the amalgamation of toxic and social burdens associated with living in a polluted urban infrastructure (Calderón-Villarreal et al. 2022), but also how public rhetorics of rehabilitating blighted terrains were used to target and ostensibly purify those experiencing environmental harm. Disposed of and deposited in a hostile terrain by the U.S. deportation regime, in public discourses homeless deportees are widely presented as criminal and failed subjects. Their association with drug use, homelessness, and living amidst the filth of the Tijuana River canal has rendered deportees unsympathetic figures in media and governmental narratives. Just as the canal's deposits of sediment and waste requires vigilant removal, so too must these unwelcome human deposits be expelled and rehabilitated, according to city officials. Flood control and human control have been spatially tied in the Tijuana River canal, an eminently technological, ecological, and social structure of the industrial Anthropocene.

The Anthropocene is characterised as an epoch in which humans have become a dominant geological force in the manipulation and destruction of ecologies throughout the planet (Steffen et al. 2011). The disciplining and exploitation of unruly landscapes in the service of capital accumulation has been central to the Anthropocene—or, as some prefer to call it, the Capitalocene (Moore 2017a). This disciplining of ecologies has often taken the form of massive urban infrastructures, such as dams, railways, and canals, which have required the displacement and

devastation of human and non-human communities alike—a phenomenon referred to in development literature as ‘development-induced displacement and resettlement’ (Terminski 2015). Managing the ecological disruptions emanating from these infrastructures and human-produced waste has become a key feature of the industrial Anthropocene.

At the same time, urban infrastructures existing at the edges of many metropolises, such as sewers, canals, and highway underpasses, have increasingly become homes for homeless and dispossessed communities in cities throughout the world, from Prague to Kolkata to Tijuana (Ghosh 2020; Pospěch 2020). So integral to the reproduction of capital, these marginal urban spaces have oddly become refuges for those considered superfluous to capitalism. After being depopulated in order to be developed, many urbanised ecologies have been repopulated by those with nowhere else to go. Thus, modern infrastructures, such as the Tijuana River canal, have often served both as agents of expulsion and spaces of respite for the marginalised.

Anthropologists have increasingly sought to describe the relationships between humans and the environments they inhabit by probing bodily permeability (Pathak 2020; Lock 2018), chemical kinships (Boyer and Howe 2016; Lamoreaux 2020), and entanglements between bodies, ecologies, and viruses (Mills 2017; Nading 2013; Thelle and Bille 2020). This literature has examined the intimate socialities linking and intermeshing human bodies with more-than-human environments and focalising the bodily as well as social consequences of these relations. My research reveals that how unruly ecologies and toxic terrains come to be managed and ‘rehabilitated’ through public projects can also have corporeal and social consequences for those inhabiting such spaces.

I take the deployment by Tijuana city officials of the term ‘rehabilitation’ targeting both homeless deportees and the Tijuana River canal as an opportunity to pursue what Anna Tsing, Andrew Mathews, and Nils Bubandt (2019) refer to as an anthropology of a ‘patchy Anthropocene’ by examining the concomitant disciplining of landscapes and people. Patches, they posit, are more-than-human landscape structures that have often been shaped amidst the Anthropocene by ‘modular simplifications’ in which ‘everything but that which is required for the reproduction of the economic product should be eliminated’ (Tsing, Mathews, and Bubandt 2019, S189). Through the single-minded fixation on the production of economic capital at all costs, modular simplifications of ecological terrains unleash destructive unintended ecological consequences, such as soil erosion and the proliferation of opportunistic fungi. The ‘regimentation of human and nonhuman life’ inherent to modular discipline, they explain, has stimulated ‘feral effects, of nuclear, toxic, viral, bacterial, fungal, or animal kinds’ (idem, S189).

Drawing on ethnographic fieldwork among homeless deportees living in the Tijuana River canal, I demonstrate how urban infrastructures, often thought of as benign and universally beneficial, can also be understood as sites of modular simplification. This is in addition to other sites such as animal feedlots, coffee plantations, and industrial chicken farms, examples provided by Tsing, Mathews, and Bubandt (2019). Canal and drug rehabilitation have been conjoined and promoted as seemingly simple solutions for managing the feral proliferations which emanate from the social dislocations that are produced by the deportation regime, and the infrastructural development of an unruly ecology. Tijuana's homeless deportees have experienced 'rehabilitation' as a violent process of abjection, dispossession, and captivity, which has converted the Tijuana River into a carceral zone under the guise of urban sanitation and health promotion. Through this ethnographic exploration of a landscape patch, I ask: Whose health and sanitation are preserved in projects of rehabilitation? What purposes and whose priorities does rehabilitation ultimately serve? Moreover, how might conceptions of the Anthropocene shift when practices of biopolitical containment are made central to analyses of what we might refer to as *terrapolitical* control? Here I am joining a growing cohort of scholars emphasising how enduring histories of human inequality grounded in colonial, racialised, and capitalist relations have been constitutive of and amplified by the Anthropocene (e.g., Malm and Hornborg 2014; Moore 2017a; Saldanha 2020; Yussof 2018). Through ethnographically attending to the intersections of human and territorial captivity, I seek to provide insights into the ways that unruly terrains and populations (Briggs and Mantini-Briggs 2003) have been coevally constructed as enemies of civilizational and capitalist progress.

## Infrastructures of dispossession

Today I joined the Border Wound Clinic to distribute syringes, naloxone, and hygiene kits to residents of the canal, near La Veinte. I spoke with a few patients while they were receiving wound care. One patient, Rigoberto, told me that a large group of governmental officials entered the canal a few days ago to conduct a survey among the people living there. He was clearly bothered by the experience and distrusted the officials' motives. He explained, 'That's how they locate us. It's like GPS, but with a pen.' He has good reason to be distrustful—he told me he has been arbitrarily picked up by the police and jailed in La Veinte countless times. The last time he was detained, the police planted 28 *globos* [small plastic wrappers] of crystal meth on him. This provided them with legal justification for taking him to the *ministerio público* [state district attorney], instead of La Veinte, where he could be charged as a drug dealer and be sent to prison for a longer sentence. They tried forcing Rigoberto to admit to being a drug dealer, but he refused. Ultimately, they let

him go but the next time the police caught him, he was promised, he would be sent away to *la pinta* [prison]. (Field note, November 14, 2020).

The Tijuana River canal is a heavily surveilled securityscape (Low and Maguire 2019), chronically patrolled by Tijuana's metropolitan police as well as state and federal security forces. In addition to periodic *operativos* in which several dozen or even hundreds of the canal's homeless residents are apprehended in one fell swoop, police arbitrarily detain smaller groups of inhabitants on a daily basis. The policing of the canal's residents has emerged as a topic of concern among public health scholars in recent years (Pinedo et al. 2015, 2017). Researchers have examined, for example, the various ways that policing tactics, such as syringe confiscation, increase the homeless drug using community's vulnerability to HIV and other infectious diseases by altering consumption practices (Beletsky et al. 2013). The provision of clean syringes and naloxone by harm reduction organisations such as Prevecasa, or the Border Wound Clinic, a volunteer-run binational effort launched by doctors from Tijuana and Los Angeles, has been vital in counteracting these forces. The Border Wound Clinic's slogans, '*Por Una Tijuana Mas Humana*' [For a More Humane Tijuana] and '*Apoye, No Castigue*' [Support, Don't Punish], which are emblazoned on many of their materials, banners, and t-shirts, signal their commitment to challenging the punitive logics ravaging the homeless community by providing free medical care grounded in compassion.

The canal has also been a site of intermittent biopolitical surveillance (Foucault 2007), in which the lives of those residing in it are tabulated and provided with occasional aid by the state—'it's like GPS, but with a pen', as Rigoberto put it. The governmental survey he alluded to was implemented in 2020 as part of the broader governmental effort to 'rehabilitate' the canal, which included the removal of hundreds of tons of solid waste (Sanchez 2020). Although the provision of free meals and medical care to the canal's inhabitants was prominently emphasised in governmental briefings on the progress of the canal's *limpieza*, the destruction and removal of dozens of makeshift homeless encampments was also central to the rehabilitation project. These removal efforts are aimed at countering the canal's persistent flooding of toxic sewage, particularly during the rainy season, into the Pacific Ocean and across the international boundary into the Tijuana Estuary, the largest coastal wetland in Southern California. Although Tijuana's canal community is undoubtedly targeted for punishment by police and governmental authorities due to its socially stigmatised status, the acts of surveillance and expulsion to which community members are subjected are also tied to a broader ecology and history of dispossessive development. Indeed, they are not the only community to experience forced removal from the Tijuana River.



By the mid-twentieth century, the Tijuana River Valley had begun to be viewed by officials in Mexico as a coveted territory for urban development, given the spatial constraints posed by the city's location, abutting the international border, and its mountainous landscape. Prior to the 1930s, Tijuana was little more than a sparsely populated rural outpost, isolated from the rest of Mexico (Herzog 1985). But during the Prohibition Era, when the sale and consumption of alcohol was made illegal in the U.S., Tijuana emerged as a renowned vice outpost engulfed by bars, casinos, and brothels eager to fulfil North Americans' illicit desires (Kun 2010). This was merely the first act in Tijuana's perpetual effort to transform its landscape in response to U.S. proclivities and policy changes.

The Bracero Program, which began in 1942, permitted millions of Mexican farmworkers to work legally in the U.S. on short-term labour contracts and produced a dramatic wave of migration to northern Mexico. Initially aimed at addressing a shortage of agricultural labour during World War II, the programme concluded only in 1964 and issued a total of 4.65 million labour contracts (García 2021). Many 'Braceros' took up residency in Mexican border cities, driving steep population growth between 1940 and 1950 (Gordillo 2009). Then, amidst an economic downturn and growing unemployment in the 1950s, the U.S. immigration policy pendulum swung again. In 1954, the U.S. government, in collaboration with Mexican immigration officials, initiated 'Operation Wetback,' triggering the repatriation of hundreds of thousands of Mexicans to stem the tide of growing labour mobility (Lytle Hernández 2006). Returned Mexicans resettled in northern border cities in droves, further catapulting the region's population growth (Dear and Leclerc 1998).

Several squatter settlements developed in the Tijuana River Valley in the wake of these transnational and domestic migrations. Despite periodic flooding, the watershed proved to be the city's most attractive patch of land for new arrivals to settle. The floodplain's population continued to grow as labourers who constructed the city's Puente Mexico, a major bridge in the city centre, also built homes along the river's banks using leftover materials (Dedina 1995). *Cartolandia* [Cardboardland], the watershed's largest settlement—built from cardboard boxes, bedsprings, used American cars, and other refuse—was inhabited by 10,000 to 15,000 residents by the 1970s. Although Cartolandia developed into a highly organised community, it was derisively viewed as an 'urban cancer' by local authorities (Rocha 2015). Like today's El Bordo community, Cartolandia was immediately visible to travellers entering Tijuana from the U.S. The perception of urban chaos in response to growing floodplain settlements, along with pressures to find more land for formal residential and commercial development, posed political and economic challenges for Mexican authorities.

In this context, the watershed and its settlements became targets for a decades-long campaign of urban, ecological, and social engineering. In 1972, the federal government launched *Proyecto Río Tijuana*, a US\$ 100 million effort to channelise the river and create a new downtown district (Dedina 1995; Rocha 2015). This ambitious project, aimed at converting Tijuana into a modern city and accompanied by the slogan, '*Todo por un Nuevo Tijuana*' [Anything for a New Tijuana], was premised on the removal of the watershed's squatter communities (Mancillas 1993). As René Peralta argues, 'the Tijuana River Canal proved to be a monological solution to control yearly flooding and informal development along its edge' (2012, 139). Buttressed by a utopian and lucrative vision for a 'new Tijuana', government officials called on the military to violently expel thousands of families from Cartolandia and proceeded to bulldoze their homes (Mancillas 1993). A second phase of canal construction displaced 20,000 families from the watershed in 1978. The removal campaign had a brutal culmination in 1980 when the floodgates of the Rodriguez Dam, east of the city, were opened without warning during a period of heavy rain, washing away the homes of the remaining 2,500 riverine residents and killing 80 people (Peralta 2012).

Infrastructures are physical and social technologies that serve to demarcate classed, gendered, and racialised terrains of inclusion and exclusion. As Anand, Gupta, and Appel explain, 'Infrastructures have been technologies that modern states use not only to demonstrate development, progress, and modernity, giving these categories their aesthetics, form, and substance ... but also to differentiate populations and subject some to premature death' (2018, 5). This insight cuts against normative notions of infrastructural development as being a universally beneficial rising tide that lift all boats. For example, megadams, while responsible for the displacement of Indigenous communities throughout the world (Kornfeld 2020), have served as towering symbols of national power in industrialising countries throughout the world. As Rob Nixon suggests, 'to erect a megadam was literally to concretise the postcolonial nation's modernity, prosperity, and autonomy' (2018, 166).

Thus, infrastructures are eminently biopolitical instruments—life-enhancing for some while life-diminishing for others (Anand, Gupta, and Appel 2018). Those living in Mumbai's informal settlements, for example, are subjected to water quotas, making their ability to ensure they maintain a sufficient water supply significantly more challenging than for those living in the city's planned developments (Anand 2015). The biopolitical stakes of infrastructural development are made ominously clear in the proliferation of slum clearance projects in cities throughout the global south, aimed at cleansing and even 'greening' cities (Doshi 2019). As Sapana Doshi observed, also in Mumbai, such cleansing projects often target the socially marginalised as ecological transgressors of habitats while

'lucrative developments are erected in flagrant violation of zoning and environmental laws' (idem, 121).

In the 'age of capital', the ability to appropriate habitats and even to destroy them, if necessary, has emerged as a private right (Moore 2017b). In the final decades of the 20th century, the right to pollute the Tijuana River canal for the sake of economic development was enshrined in practice if not in law through a series of border industrialisation programmes and trade deals—the 1961 *Programa Nacional Fronterizo* (PRONAF), the 1965 Border Industrialization Program (BIP) and the 1994 North America Free Trade Agreement (NAFTA). Together, these programmes sought to industrialise Mexico's northern frontier through developing material and economic infrastructures that could take advantage of the country's unemployed population and strategic location next to the world's largest consumer economy (Hansen 2020).

Although NAFTA was heralded as a 'green' trade deal for its provisions aimed at preventing the creation of 'pollution havens', limited enforcement of environmental rules and cuts to the Mexican government's spending on pollution monitoring resulted in a marked increase of ecological degradation of the Tijuana River basin between 1995 and 2000 (Liverman and Vilas 2006; Reilly 1993). The downstream feral proliferations of this are now being seen in the Tijuana River Estuary across the international border where populations of endangered species have dwindled and an infestation of invasive beetles, which thrive in water with high levels of industrial waste and sewage, have been responsible for the death of native riparian willow trees (Boland and Woodward 2019). Of course, the *maquiladora* industry is not the only source of river pollution. Raw sewage also flows from local businesses and many of the informal settlements that have appeared along the banks of the river in recent decades (Gersberg, Daft, and Yorkey 2004). Many of these informal communities, however, have formed or grown because of the employment provided by the assembly plants that comprise the *maquiladora* industry (Kopinak 2012). But although they provide crucial labour power, most *maquiladora* workers continue to be excluded from 'infrastructural citizenship,' or 'inclusion in the urban network of service provision (e.g., electricity, water, sanitation)' (Lemanski 2020, 593–94).

Despite now existing as a securitised and contaminated landscape, the Tijuana River canal continues to serve as a place of respite for many deportees. While Tijuana has several migrant and homeless shelters that provide them with short-term residence after their expulsion to Mexico, many deportees are unable to ever transition into permanent housing. When I asked Javier why he lived in El Bordo, he explained matter-of-factly:

'Cuz that's the only place that I can live. There's no shelters. I can't just live in the middle of the block in a *colonia* [neighbourhood], in front of somebody's house. Police won't allow it. I mean, I can't post up in front of a store here in downtown. I can't just pitch a tent. There's nowhere for me literally to go. In the U.S. you can do that but not here. In the park you can't. They come patrol it.

As Javier emphasises, the Tijuana River watershed, which once served as a home for thousands of transnational labourers prior to their dispossession, has now become a home of last resort for deportees, years after its infrastructural development. The dispossessions that evacuated, appropriated, and disciplined the Tijuana River basin have been structured by a staggered conglomeration of militaristic and economic actors. These prior dispossessions and their outcomes still echo in the contemporary policing and cleansing of the canal's unruly landscape. Despite these efforts, the watershed and those who intermittently reside in it reject the regimentation imposed by modular simplification and, like Rigoberto and Javier, refuse detection and apprehension by state authorities. New encampments and vernacular infrastructures, such as walking bridges made from steel railings, and areas of wild vegetation, keep materialising amidst its toxic waters. Governmental authorities nonetheless continue to attempt to contain and sanitise the symptoms of capitalist dispossessions and modular simplifications. To keep this sanitising and disciplining game of Whac-a-Mole<sup>3</sup> going in perpetuity, the polluted river basin and those who seek refuge within it must continue to be targeted by discourses of abjection that demand cleanliness without addressing the systemic causes of these issues. While groups such as the Border Wound Clinic advocate for an inclusive 'humane Tijuana' by providing care for people like Rigoberto and Javier, these public discourses of abjection hinge on the promise of creating a 'new Tijuana' cleansed of the canal's human and more-than-human communities.

## Abject terrains

I had the opportunity to speak with a few canal villagers at length while Prevecasa staff continued distributing needles and harm reduction kits. One man, Alberto, described the last time he was forced to flee the canal when police came to clear their encampment. He and others confirmed that this is a periodic occurrence. When I asked him why he continues to stay there even after all of this, he explained that when police have encountered him outside of the canal, they yell at him, "*¡méetete tú en el canal!*" [get back into the canal!]. Surprisingly, Alberto seemed to have ambivalent and contradictory feelings about his treatment by police officers. On the one hand, he declared that this

3 Whac-a-Mole is a U.S. arcade game that involves clubbing plastic moles that jump out of a table of holes with a mallet.

treatment was discriminatory, referring to the police as *rateros* [thieves] that took advantage of people like him. But, on the other hand, he justified the police's actions. Gesturing towards his disheveled clothes, Alberto said he understood why people who looked like him couldn't be seen out in public. "People who don't have jobs should be living in the canal", he explained. "The people living there don't like to work", he continued. I also spoke with another man, Luis, who seemed tentative about speaking with me at first, but agreed to participating in a recorded interview after I assured him it would remain confidential. Almost immediately after beginning, he told me in a hushed tone, "*Ya van haber muchos muertos aqui*" [there will be many dead here soon]. When I asked him to explain why he thought that would be the case, he became palpably more nervous. He explained that two drug cartels were currently fighting over the section of the canal where the village was located and that many of the villagers will likely be killed amidst this battle. He also expects that there will be another large *operativo* by the police soon, who will force them into drug rehab centres. (Field note, August 21, 2020.)

Deportees often described the impossible nature of homeless life in Tijuana to me in excruciating detail. As both Alberto and Luis related, deportees are captive to several predatory forces that require them to stay on the move while restricting where they can go. As made evident by their frequent crackdowns, Tijuana police maintain the function of cleansing the city's landscape of deportees wherever they find them. Business owners in Tijuana's Zone Norte and Zone Centro neighbourhoods, where the homeless community is concentrated, are often featured in media reports, demanding that the city take strict action to remove these unsightly elements that disturb their customers (AFN 2015; Sanchez 2022). While the canal serves as a site of temporary escape from daily police brutalities, safety is elusive there and can be harshly interrupted at any moment. As Javier explained to me:

If you go into the canal, which is the only place to go, they show up in the middle of the night or else at five or six in the morning when you're still barely waking up. If you've never been woken up and thrown into the back of a police car, I can tell you, it sucks. You're still half asleep and they're kicking the shit out of you, throwing you in the back of a police van and you're like, "What the hell?" That's the kinda stuff they do to you.

When the canal becomes overpopulated with large concentrations of deportees, it too requires cleansing. As the President of Tijuana's Tourism and Conventions Committee once stated, the *limpiezas* are crucial for 'changing the image of the city before the eyes of tourists and Tijuana residents themselves, since an environment of safety and hygiene is generated' (AFN 2015, my translation). But

in a seemingly never-ending circular hunt that merely displaces deportees from one section of Tijuana to another and back, they are also often scolded by police officers to ‘get back into the canal’. I often observed the daily cat-and-mouse scenes of deportees running from police in and around the canal.

The canal has paradoxically come to signify the only urban space where deportees belong—‘the only place to go’, as Javier put it—and a site in need of ceaseless sanitary intervention requiring their removal. Some deportees, as Alberto articulated, have even come to internalise the notion that the canal is where they should be residing, given their unsanitary appearance and lack of work ethic. Although the canal was meant to signify modernity and a ‘new Tijuana’ when it was inaugurated, its faltering structure and association with homelessness and the ongoing drug war have rendered it a site of developmental backwardness. As spatiotemporal projects, or ‘chronotopes’, infrastructures concretise the future-oriented ‘desires, hopes, and aspirations of a society’ through ‘emotional and affective investments’ (Anand, Gupta, and Appel 2018, 19). But as infrastructures deteriorate or take on new aberrant functions, so too can these affective investments crumble into pejorative projections of disapproval, fear, and disgust. Managing ‘the image of the city’, as Tijuana’s tourist industry official astutely notes, becomes just as important as managing the functionality of infrastructures.

The Tijuana River canal is now perceived as an abject terrain by both Mexican and U.S. officials. Drawing on Mary Douglas’ (1966) insights into the ways that notions of purity and pollution become culturally constructed, Julia Kristeva (1982) theorised abjection as the sensation of repulsion to phenomena that transgress one’s sense of corporeal integrity. Abjection has also been conceived of as a spatial process in which societies attempt to impose or maintain a state of purity through a geographic expulsion of that which is deemed threatening or repulsive (Campkin 2013; Popke 2001). For Michelle Murphy, abjection ‘designates “unlivable” and “uninhabitable” zones of social life which are nonetheless densely populated by those who are not enjoying the status of subject, but whose living under the sign of the “unlivable” is required to circumscribe the domain of the subject’ (2006, 152). In other words, abjection constitutes and consolidates notions of normativity within societies through an expulsion of non-normative elements to ‘unlivable’ zones. Several scholars have described how places deemed unsanitary and the communities associated with them come to experience abjection. Sarah Moore, for example, has explored how waste scavengers and residents of communities adjacent to garbage dumps in Oaxaca, Mexico become construed as ‘abject others who pose a threat to the more civilised citizens of the central city’ through their proximity to the city’s refuse (2008, 604).

The abjection of the Tijuana River canal and its inhabitants, I suggest, is a bidirectional phenomenon—while the canal’s image has been tarnished by its inability to contain the city’s sewage and its association with drugs and homelessness, those residing within it have simultaneously become abjected, in part through their association with the ills, smells, and sins of this vitiated landscape structure. Canal rehabilitation and drug rehabilitation have become interlinked strategies for managing this symbiotic abjection. In governmental communiqués and news articles, the polysemous term ‘rehabilitation’ has become equated with development, law and order, cleanliness, and mastery over nature. Throughout 2020, the state government implemented its latest rehabilitation project, costing nearly US\$ 5 million, in response to growing concerns of overflowing sewage and the reappearance of homeless encampments after several efforts to permanently expel them (Vázquez 2020). During this time, city officials provided periodic televised progress updates. Their public statements meandered seamlessly between discussing the removal of sediment and human expulsion.

As we have seen, the remediation of urban and infrastructural dysfunction has become necessary to quell complaints from the business sector. International abjection, at times couched in condescending and nationalist rhetoric, has also been critical in motivating rehabilitation efforts. The Tijuana River’s transnational flow of waste into the U.S. coastal region has been a contentious topic of concern and diplomatic wrangling for decades. This ecological transgression has increasingly been rendered by U.S. activist groups and officials as a threat to national security, metonymically conjoining Mexico’s unwanted flow of effluent with the flow of unwanted immigrants. Narratives of environmental catastrophe merged with concerns over border insecurity amidst reports that Customs and Border Patrol (CBP) officers patrolling the Tijuana River valley have developed skin rashes, chemical burns, respiratory issues, and other health issues after coming into contact with toxic wastewater (Giaritelli 2019). In playing up the abnormally hazardous nature of Tijuana’s sewage, Christopher Harris, the director of legislative and political affairs for the CBP officer union, recapitulated existing pathologising tropes of developmental backwardness, telling reporters that ‘this is not American sewage, this is Third World sewage’ following a transborder sewage spill in 2017 (Dinan 2017). Deploying militaristic narratives of foreign aggression, CBP agents described the Tijuana River pollution as a ‘biological or chemical attack’ that hindered their ability to seize illicit border crossers and drug traffickers (Ibid.).

As indicated by the above statements, with the rise of global environmental awareness, the inability of 'Third World' countries like Mexico to control their contamination can be disparagingly read as a sign of their developmental inferiority. Such international condemnation coalesces with and reinforces internal 'geographies of exclusion' that villainise unhygienic others, perceived as sluggish stragglers restraining national progress (Sibley 1995). In this context, rehabilitation becomes ever more critical as both an internal and external demonstration of commitment to remedying the nation's social and ecological offences. While Tijuana's overflowing sewage problems are the outcome of rapid and haphazard neoliberal urban development in response to U.S. economic imperatives, rehabilitation of the canal has emerged as a new effort to manage the feral proliferations emanating from the modular simplification of this Anthropocene patch. Likewise, although homeless deportees suffer from a transnational continuum of punishment, expulsion from the canal and drug rehabilitation have been proclaimed as the most befitting correctives for their condition.

While homeless deportees continue to be frequently sent to drug rehabilitation centres as part of the canal's *limpiezas*, their forced internment was most dramatically orchestrated under *Programa Mejora*, a federally funded policing programme implemented between December 2014 and March 2015. *Programa Mejora* resulted in the expulsion of approximately 800–1,000 people from El Bordo, 600 of whom, according to city officials, were involuntarily sent to drug treatment centres (Durán and Caballero 2015; Guerrero 2015; Morales et al. 2020). Jorge Astiazarán Orcí, Tijuana's former mayor and the architect of *Programa Mejora*, and who had been trained as an internal medicine doctor, declared that his career background motivated him to seek a therapeutic solution for El Bordo's ills (Guerrero 2015). Astiazarán frequently affirmed that he sought to address the issue of addiction from a public health perspective by partnering with drug rehabilitation centres (Uniradio Informa 2013).

The premise of *Programa Mejora* was that the primary condition afflicting deportees is addiction. While local media outlets have often referred to homeless deportees as migrants, even though they are Mexican-born nationals, governmental announcements sought to ensure that they were understood to be mere addicts and criminals. As Astiazarán explained to the media, 'Tijuana municipal police know they have to respect the human rights of migrants. However, it is important to differentiate migrants from criminals ... there are no migrants living in El Bordo, there are drug addicts living in El Bordo' (Merlo 2014). According to such pronouncements, residing in El Bordo or engaging in drug use marks deportees not as subjects of humanitarian intervention, but rather as addicted criminals who should be permissibly dealt with using coercive force.



During the course of my research, I learned that deportees often held ambivalent attitudes about drug rehabilitation centres and in some instances their opinions about them changed over time. During one of the first interviews I conducted with Javier, I asked him what he thought about drug rehabilitation centres. Although he had never been forced into a centre by police, he had voluntarily spent time in two of them in Tijuana. Javier was regretful about ever going to them and seemed intent on never returning. He shared his assessment of the true objectives driving the rehabilitation centres and more details about their punishing therapeutic methods:

The thing is, it's not a nice place. They're not there to help you. They're just there to get the state to give them money, they're using you to make money, basically, 'cuz they make money off of you. The state gives them money to supposedly "help you" and the therapy they give you is they whoop your ass and put you in a barrel of cold freezing water for 24 hours in the dead middle of winter and you almost die or something.

At the time I conducted this interview, Javier had begun receiving methadone treatment in the hopes of finally breaking with his heroin addiction. His treatment seemed to be going well. But suddenly Javier's goals and circumstances seemed to change. His mother, who lived in the U.S., told him that she would pay for a *pollero* (human smuggler) for him to cross back into the U.S., but that he needed to get clean first. She offered to pay for him to go back into a rehabilitation centre for three months before crossing. He told me he decided to go to one of the larger centres near the border. I asked, 'no more methadone?' He replied, 'No, I just need to get clean from all of that.'

Aside from being harassed by police several days per week, Javier was also grappling with physical pain from abscesses that had formed on his right foot. At this low point, his mother's offer seemed sufficiently appealing to him. But just a month later, Javier changed his mind again and he decided not to go back into rehabilitation. I asked what had changed for him. He simply grumbled, 'Their therapy is negativity.' He elaborated that in the centres they constantly castigated him and others receiving rehabilitation, making them 'feel bad' for their addictions. He just couldn't submit himself to that again, he said.

These kinds of ambivalent reactions to drug rehabilitation centres are common among deportees. Although many have been forced into drug rehabilitation against their will, some deportees also viewed the centres as providing a haven from the dangers of homelessness and police violence. In the context of Tijuana's brutal terrain, rehabilitation centres, although abusive in their practices and often requiring non-remunerated labour as a condition for residency, at least provide them with food, shelter, and the possibility of personal salvation. Rather than

offering them a permanent solution, rehabilitation centres provide deportees with another temporary home that, like the canal, they can cycle through. Despite the promises made by governmental officials, rehabilitation centres rarely resolve people's addictions (Rafful et al. 2019) and prove incapable of overcoming the social abjection afflicting homeless deportees.

Abjection serves as a means of reproducing existing social arrangements through reinforcing the boundaries of normativity and deflecting blame for social ills onto defiled entities. In the case of Tijuana, abjection simultaneously highlights the failure both of the canal and its subjects so as to justify the sanitising bureaucratic practices that are considered necessary to manage the city's urban governance crises. Because the process of abjection's 'purification is always ambiguous and incomplete' (Moore 2008, 603), acts of expulsion and sanitation must be consistently reinaugurated. In Tijuana's rehabilitation efforts we can see how governments seek to manage the feral effects of the Anthropocene while reinvigorating the ruptured dreams of an orderly modernity. The rehabilitation of the unruly canal and its unsanitary subjects, in other words, also serves as a means for rehabilitating Anthropocene futurity.

## Conclusion

The concept of the Anthropocene has provided scholars with the ability to conceive of the totality of human impacts on the planet since at least the Industrial Revolution as constituting not merely an intraspecies history, but also an interspecies and geological epoch. Yet this telescopic lens on modern multispecies relations also runs the risk of homogenising humanity. Kathryn Yusoff (2018) cautions that for the Anthropocene concept to remain useful, it is necessary to excavate the ways that this geological epoch of intraspecies domination has been simultaneously constituted by inter-human domination. She writes, 'as the Anthropocene proclaims the language of species life—*anthropos*—through a universalist geologic commons, it neatly erases histories of racism that were incubated through the regulatory structure of geologic relations' (Yusoff 2018, 2). Rob Nixon (2014) suggests that as a political project, the Anthropocene concept provides us with a potentially uniting tool for confronting and adapting to global climate change. But as the impacts of environmental destruction continue to advance, he warns 'let's not pretend that we're all in this boat together ... We need to speak out against adaptation by the rich for the rich' (idem).

As Nixon emphasises, our contemporary Anthropocene moment is not merely constituted by ecologically damaging practices but also by efforts at human adaptation and environmental remediation. But adaptation, like rehabilitation, is a two-faced concept. While it can signify earnest efforts to alter human practices in

accordance with ecological equilibrium, adaptation can also imply the reproduction and restoration of human inequalities with a greener veneer. In examining the implementation of colonial environmentalist projects in Canada, Bruce Erickson found that in the ‘desire for a green future, the threat of collapse forecloses the future as a site for creatively reimagining the social relations that led to the Anthropocene’ (2020, 111). As the rehabilitation of the Tijuana River canal reveals, ‘the repair of environments in which we live, vast swathes of which are unproductive and/or outright toxic’ (Lock 2018, 468), can result in the deployment of punitive policies against marginalised subjects who have come to be associated with the Anthropocene’s abjected terrains. In this context, the canal’s homeless deportee community has been simultaneously subjected to both the slow violence (Nixon 2018) of living at the toxic margins of society, and the faster violence of policing and punitive rehabilitation.

As I have sought to demonstrate in this study of one Anthropocene patch, the concurrent disciplining of landscapes and human populations has been a central and evolving feature of the Anthropocene with profound embodied and ecological impacts. The minimal recognition afforded to this insight has been buried, according to Yusoff, under a Western epistemic tradition in service of a dominant ‘geo-logic that was necessary for colonial theft’ (2018, 10). She explains, ‘the epistemological divisions of geology and biology and their respective analytics of geopolitics and biopolitics divide the world between the skein of biopolitical coercion and territorial arrangements of populations’ (Ibid.). Without attending to this epistemic rift, dominant Anthropocene analyses may fail to recognise the historical implications, contemporary manifestations, and feral proliferations of this ‘instrumental relation to land, ecology, and people’ (idem, 81).

In the Tijuana River watershed, ecological dispossession, infrastructural rehabilitation, and biopolitical discipline are deeply interconnected phenomena undergirded by a political and affective economy of disposability, exploitation, and abjection. Relentlessly and often ruthlessly engineered to meet the needs of local and global capital, this Anthropocene patch has, over and over again, become a site of varying forms of human and ecological regimentation. The history of Tijuana’s canal infrastructure is intimately tied to the adjacent international border infrastructure through the U.S. and Mexico’s intertwined geographies of migration, deportation, capitalist accumulation, and urban development. Obscuring the region’s shared geographies and ecologies—despite the daily transborder incursions of unwanted human and more-than-human entities—is a trick of colonial modernity that reinforces short-sighted solutions and preempts political possibilities exceeding the nation form. Only in repairing the rifts in our epistemological, geographic, and political imaginaries can we hope to escape the confines of what Theodor Adorno referred to as humanity’s ‘spell of progress’

(1989, 90). Such an effort demands that we set aside sophistic fantasies of order achieved through modular simplification and instead plant our feet firmly in the Anthropocene's shifting grounds to 'stay with the trouble' (Haraway 2016) of unruly landscapes and uncharted futures.

## Authorship statement

This article was conceived and written by the author.

## Ethics statement

This research was approved by the institutional review board of the Committee for Protection of Human Subjects at the University of California, San Francisco, on July 15, 2020 (IRB #: 20-31307 and Reference #: 284749).

## Acknowledgements

I am deeply indebted to the organisations providing care to Tijuana's deportee community, who facilitated access to my interlocutors through allowing me to support their work. I want to thank the founders of the Border Wound Clinic (Patricia Zuñiga Gonzalez and Gilberto Zuñiga), the founders of the Refugee Health Alliance (Hannah Janeway, Ronica Mukerjee, Psyche Calderon, Ximena Rojas, and others), and the directors of Prevencasa (Alfonso Chavez, Lilia Pacheco Bufanda, and Rebeca Cázares-Adame). My research also benefited from my collaboration with a research project led by Alhelí Calderón-Villarreal, which received funding from UC Berkeley's Health Initiative of the Americas. This article was adapted from a chapter in my dissertation, which received crucial feedback from committee members Seth Holmes, Kelly Knight, Charles Briggs, and Philippe Bourgois. I also want to thank the special issue editors, particularly Jennie Gamlin, and peer reviewers, whose insights were critical in strengthening this article.

## About the author

*Carlos Martinez* is Assistant Professor of Latin American and Latino Studies at the University of California, Santa Cruz, and core faculty in the university's Global & Community Health programme. Trained in public health and medical anthropology, his research focuses on the health consequences and sociocultural implications of

the deportation regime, asylum deterrence policies, the global drug war, and migrant captivity in the U.S.–Mexico borderlands.

## References

- Agencia Fronteriza de Noticias [AFN]. 2015. ‘Era Necesario Desalojar “El Bordo”’. *Agencia Fronteriza de Noticias*. March 9, 2015. [http://www.afntijuana.info/view\\_post.php?catid=informacion\\_general&postid=38033\\_era\\_necesario\\_desalojar\\_el\\_bordo](http://www.afntijuana.info/view_post.php?catid=informacion_general&postid=38033_era_necesario_desalojar_el_bordo).
- Albicker, Sandra Luz, and Laura Velasco. 2016. ‘Deportación y Estigma en la Frontera México-Estados Unidos: Atrapados en Tijuana’. *Norteamérica* 11 (1): 99–129. <https://doi.org/10.20999/nam.2016.a004>.
- Al-Delaimy, Wael K., Catherine Wood Larsen, and Keith Pezzoli. 2014. ‘Differences in Health Symptoms Among Residents Living Near Illegal Dump Sites in Los Laureles Canyon, Tijuana, Mexico: A Cross Sectional Survey’. *International Journal of Environmental Research and Public Health* 11 (9): 9532–52. <https://doi.org/10.3390/ijerph110909532>.
- Adorno, Theodor W. 1989. ‘Progress’. In *Benjamin: Philosophy, Aesthetics, History*, edited by Gary Smith, 84–101. Chicago, IL: University of Chicago Press.
- Anand, Nikhil. 2015. ‘Leaky States: Water Audits, Ignorance, and the Politics of Infrastructure’. *Public Culture* 27 (76): 305–30. <https://doi.org/10.1215/08992363-2841880>.
- Anand, Nikhil, Akhil Gupta, and Hannah Appel. 2018. ‘Introduction’. In *The Promise of Infrastructure*, edited by Nikhil Anand, Akhil Gupta, and Hannah Appel, 1–38. Durham, NC: Duke University Press.
- Aviña Cerecer, Gustavo. 2021. ‘Necroliberalism on the San Diego–Tijuana Frontier: The Dispossessed and Their Reproduction Dispositifs’. In *Necropower in North America*, edited by Ariadna Estévez, 223–43. Cham: Palgrave Macmillan.
- Beletsky, Leo, Remedios Lozada, Tommi Gaines, Daniela Abramovitz, Hugo Staines, Alicia Vera, Gudelia Rangel, Jaime Arredondo, and Steffanie A. Strathdee. 2013. ‘Syringe Confiscation as an HIV Risk Factor: The Public Health Implications of Arbitrary Policing in Tijuana and Ciudad Juárez, Mexico’. *Journal of Urban Health: Bulletin of the New York Academy of Medicine* 90 (2): 284–98. <https://doi.org/10.1007/s11524-012-9741-3>.
- Boland, John M., and Deborah L. Woodward. 2019. ‘Impacts of the Invasive Shot Hole Borer (*Euwallacea kuroshio*) are Linked to Sewage Pollution in Southern California: The Enriched Tree Hypothesis’. *PeerJ* 7: e6812. <https://doi.org/10.7717/peerj.6812>
- Boyer, Dominic, and Cymene Howe. 2016. ‘Ep. #35 - Vanessa Agard-Jones’. *Cultures of Energy*. Podcast, Mingomena Media. September 29, 2016. <https://cenhs.libsyn.com/ep-35-vanessa-agard-jones>.

- Briggs, Charles L., and Clara Mantini-Briggs. 2003. *Stories in the Time of Cholera Racial Profiling During a Medical Nightmare*. Berkeley, CA: University of California Press.
- Calderón-Villarreal, Alhelí, Brendan Terry, Joseph Friedman, Sara Alejandra González-Olachea, Alfonso Chavez, Margarita Díaz López, Lilia Pacheco Bufanda et al. 2022. 'Deported, Homeless, and into the Canal: Environmental Structural Violence in the Binational Tijuana River'. *Social Science & Medicine* 305. <https://doi.org/10.1016/j.socscimed.2022.115044>.
- Caldwell, Beth. 2019. *Deported Americans: Life after Deportation to Mexico*. Durham, NC: Duke University Press.
- Camarillo, Omar. 2020. 'Centros de rehabilitación salen a limpiar las calles de Tijuana'. *Blanco & Negro Noticias*, May 14, 2020. <https://blancoynegro.mx/noticiasbc/85-tijuana/34282-centros-de-rehabilitacion-salen-a-limpiar-las-calles-de-tijuana>.
- Campkin, Ben. 2013. 'Placing "Matter Out of Place": Purity and Danger as Evidence for Architecture and Urbanism'. *Architectural Theory Review* 18 (1): 46–61. <https://doi.org/10.1080/13264826.2013.785579>.
- Dear, Michael J., and Gustavo Leclerc. 1998. 'Tijuana Desenmascarada'. *Wide Angle* 20 (3): 211–21. <https://doi.org/10.1353/wan.1998.0030>.
- Dedina, Serge. 1995. 'The Political Ecology of Transboundary Development: Land Use, Flood Control and Politics in the Tijuana River Valley'. *Journal of Borderlands Studies* 10 (1): 89–110. <https://doi.org/10.1080/08865655.1995.9695467>.
- Dinan, Stephen. 2017. 'Border Patrol Agents Infected, Navy Seals Change Training After Sewage Spill from Mexico into Calif.'. *The Washington Times*, May 29, 2017. <https://www.washingtontimes.com/news/2017/may/29/border-patrol-agents-infected-navy-seals-change-tr/>.
- Doshi, Sapana. 2019. 'Greening Displacements, Displacing Green: Environmental Subjectivity, Slum Clearance, and the Embodied Political Ecologies of Dispossession in Mumbai'. *International Journal of Urban and Regional Research* 43 (1): 112–32. <https://doi.org/10.1111/1468-2427.12699>.
- Douglas, Mary. 1966. *Purity and Danger: An Analysis of the Concepts of Pollution and Taboo*. London: Routledge & Kegan Paul.
- Durán, Laura and Caballero, Yolanda. 2015. "'Limpieza" en Bordo dispersa adictos'. *Frontera*, June 22, 2015. <https://www.elimparcial.com/tijuana/tijuana/Limpieza-en-Bordo-dispersa-adictos-20150622-0038.html>.
- Erickson, Bruce. 2020. 'Anthropocene Futures: Linking Colonialism and Environmentalism in an Age of Crisis'. *Environment and Planning D: Society and Space* 38 (1): 111–28. <https://doi.org/10.1177/0263775818806514>.
- Fabela, Octavio. 2021. 'Integrantes de centros de rehabilitación limpian cerca de El Chaparral'. *Uniradio Uniforma*, March 18, 2021. <https://www.uniradioinforma.com/noticias/tijuana/629511/integrantes-de-centros-de-rehabilitacion-limpian-cerca-de-el-chaparral.html>.

- Foucault, Michael. 2007. *Security, Territory, Population: Lectures at the Collège de France, 1977–78*. Translated by Graham Burchell. London: Palgrave Macmillan.
- García, Alberto. 2021. 'Regulating Bracero Migration: How National, Regional, and Local Political Considerations Shaped the Bracero Program'. *Hispanic American Historical Review* 101 (3): 433–60. <https://doi.org/10.1215/00182168-9051820>.
- Gersberg, Richard M., Daniel Daft, and Darryl Yorkey. 2004. 'Temporal Pattern of Toxicity in Runoff from the Tijuana River Watershed'. *Water Research* 38 (3): 559–68. <https://doi.org/10.1016/j.watres.2003.11.002>.
- Ghosh, Anindita. 2020. 'Status of the Urban Poor in Kolkata—A Case Study Regarding Squatter Settlements Along the Beliaghata Canal' In *Urbanization and Regional Sustainability in South Asia: Socio-Economic Drivers, Environmental Pressures and Policy Responses*, edited by Sumana Bandyopadhyay, Chitta Ranjan Pathak, and Tomaz Ponce Dentinho, 217–30. Cham: Springer International Publishing.
- Giaritelli, Anna. 2019. 'Border Patrol Agents Fall Prey to Illnesses Plaguing Migrant Holding Centres'. *Washington Examiner*, June 16, 2019. <https://www.washingtonexaminer.com/news/border-patrol-agents-not-immune-to-onslaught-of-illnesses-plaguing-migrant-holding-centres>.
- Gordillo, María L. 2009. 'The Bracero, the Wetback, and the Terrorist: Mexican Immigration, Legislation, and National Security'. In *A New Kind of Containment: 'The War on Terror,' Race, and Sexuality*, edited by Carmen R. Lugo-Lugo and Mary K. Bloodsworth-Lugo, 149–66. Leiden: Brill Publishers.
- Grineski, Sara E., Timothy W. Collins, and María de Lourdes Romo Aguilar. 2015. 'Environmental Injustice along the US–Mexico Border: Residential Proximity to Industrial Parks in Tijuana, Mexico'. *Environmental Research Letters* 10 (9): 095012. <https://doi.org/10.1088/1748-9326/10/9/095012>.
- Guerrero, Jean. 2015. 'Tijuana Mandates Drug Treatment for Hundreds of Homeless'. *KPBS*, April 13, 2015. <https://www.kpbs.org/news/evening-edition/2015/04/13/tijuana-homeless-get-compulsory-treatment>.
- Hansen, Lawrence Douglas Taylor. 2020. 'The Origins of the Maquila Industry in Mexico'. In *Migration in Wirtschaft, Geschichte & Gesellschaft*, edited by Heike Knortz and Margrit Schulte Beerbühl, 123–140. Göttingen: Vandenhoeck & Ruprecht Verlage.
- Haraway, Donna J. 2016. *Staying with the Trouble: Making Kin in the Chthulucene*. Durham, NC: Duke University Press.
- Harvey-Vera, Alicia Yolanda, Patricia González-Zúñiga, Adriana Carolina Vargas-Ojeda, Maria Elena Medina-Mora, Carlos Leonardo Magis-Rodríguez, Karla Wagner, Steffanie Anne Strathdee, and Daniel Werb. 2016. 'Risk of Violence in Drug Rehabilitation Centres: Perceptions of People Who Inject Drugs in Tijuana, Mexico'. *Substance Abuse Treatment, Prevention, and Policy* 11 (5).

- <https://doi.org/10.1186/s13011-015-0044-z>.
- Herzog, Lawrence A. 1985. 'Tijuana'. *Cities* 2 (4): 297–306.
- Kopinak, Kathryn. 2012. 'Globalization in Tijuana Maquiladoras: Using Historical Antecedents and Migration to Test Globalization Models'. In *Tijuana Dreaming: Life and Art at the Global Border*, edited by Josh Kun and Fiamma Montezemolo, 136–47. Durham, NC: Duke University Press.
- Kornfeld, Itzchak. 2020. *Mega-Dams and Indigenous Human Rights*. Northampton, MA: Edward Elgar Publishing.
- Kristeva, Julia. 1982. *Powers of Horror: An Essay on Abjection*. New York, NY: University of Columbia Press.
- Kun, Josh. 2010. 'Tijuana and the Borders of Race'. In *A Companion to Los Angeles*, edited by William Deverell and Greg Hise, 313–26. West Sussex: Blackwell Publishing.
- Lamoreaux, Janelle. 2020. 'Toxicology and the Chemistry of Cohort Kinship'. *Somatosphere* (blog), January 17, 2020. [somatosphere.net/2020/chemical-kinship.html/](https://somatosphere.net/2020/chemical-kinship.html/)
- Lemanski, Charlotte. 2020. 'Infrastructural Citizenship: The Everyday Citizenships of Adapting and/or Destroying Public Infrastructure in Cape Town, South Africa'. *Transactions of the Institute of British Geographers* 45 (3): 589–605. <https://doi.org/10.1111/tran.12370>.
- Lemus, Blanca E. 1995. 'Industrial Growth and Water Pollution on the Mexico—U.S. border: The Case of Tijuana — San Diego'. *New Solutions: A Journal of Environmental and Occupational Health Policy* 5 (1): 48–54. <https://doi.org/10.2190/NS5.1.h>.
- Liverman, Diana M., and Silvina Vilas. 2006. 'Neoliberalism and the Environment in Latin America'. *Annual Review of Environment and Resources* 31 (1): 327–63. <https://doi.org/10.1146/annurev.energy.29.102403.140729>.
- Lock, Margaret. 2018. 'Mutable Environments and Permeable Human Bodies'. *Journal of the Royal Anthropological Institute* 24 (3): 449–74. <https://doi.org/10.1111/1467-9655.12855>.
- Low, Setha M., and Mark Maguire. 2019. *Spaces of Security: Ethnographies of Securityscapes, Surveillance, and Control*. New York, NY: New York University Press.
- Lytle Hernández, Kelly. 2006. 'The Crimes and Consequences of Illegal Immigration: A Cross-Border Examination of Operation Wetback, 1943 to 1954'. *Western Historical Quarterly* 37 (4): 421–44. <https://doi.org/10.2307/25443415>.
- Malm, Andreas, and Alf Hornborg. 2014. 'The Geology of Mankind? A Critique of the Anthropocene Narrative'. *Anthropocene Review* 1 (1): 62–69. <https://doi.org/10.1177/2053019613516291>.
- Mancillas, Jorge R. 1993. 'It Is Poverty That Kills People—Not Rain'. *Los Angeles Times*, January 25, 1993. <https://www.latimes.com/archives/la-xpm-1993-01-25-me-1524-story.html>.



- Merlo, Esteban. 2014. 'Pide alcalde diferenciar a migrantes de delincuentes'. *Uniradio Informa*, September 5, 2014. <https://web.archive.org/web/20140908034833/https://www.uniradioinforma.com/noticias/tijuana/292329/pide-alcalde-diferenciar-a-migrantes-de-delincuentes.html>.
- Mills, Elizabeth. 2017. 'Biopolitical Precarity in the Permeable Body: The Social Lives of People, Viruses and Their Medicines'. *Critical Public Health* 27 (3): 350–61. <https://doi.org/10.1080/09581596.2017.1282153>.
- Moore, Jason W. 2017a. 'The Capitalocene, Part I: On the Nature and Origins of Our Ecological Crisis'. *The Journal of Peasant Studies* 44 (3): 594–630. <https://doi.org/10.1080/03066150.2016.1235036>.
- Moore, Jason W. 2017b. 'The Capitalocene Part II: Accumulation by Appropriation and the Centrality of Unpaid Work/Energy'. *The Journal of Peasant Studies* 45 (2): 237–79. <https://doi.org/10.1080/03066150.2016.1272587>.
- Moore, Sarah A. 2008. 'The Politics of Garbage in Oaxaca, Mexico'. *Society & Natural Resources* 21 (7): 597–610. <https://doi.org/10.1080/08941920701759551>.
- Morales, Mario, Claudia Rafful, Pieter Baker, Jaime Arredondo, Sunyou Kang, Maria L. Mittal, Teresita Rocha-Jiménez, Steffanie A. Strathdee, and Leo Beletsky. 2020. "Pick up Anything That Moves": A Qualitative Analysis of a Police Crackdown against People Who Use Drugs in Tijuana, Mexico'. *Health & Justice* 8 (1): 9. <https://doi.org/10.1186/s40352-020-00111-9>.
- Murphy, Michelle. 2006. *Sick Building Syndrome and the Problem of Uncertainty: Environmental Politics, Technoscience, and Women Workers*. Durham, NC: Duke University Press.
- Nading, Alex M. 2013. 'Humans, Animals, and Health: From Ecology to Entanglement.' *Environment and Society* 4 (1): 60–78. <https://doi.org/10.3167/ares.2013.040105>.
- Nixon, Rob. 2014. 'The Great Acceleration and the Great Divergence: Vulnerability in the Anthropocene'. *Profession* (blog), March 2014. <https://profession.mla.org/the-great-acceleration-and-the-great-divergence-vulnerability-in-the-anthropocene/>.
- Nixon, Rob. 2018. *Slow Violence and The Environmentalism of the Poor*. Johannesburg: MTM.
- Pathak, Gauri. 2020. 'Permeable Persons and Plastic Packaging in India: From Biomoral Substance Exchange to Chemotoxic Transmission'. *Journal of the Royal Anthropological Institute* 26 (4): 751–65. <https://doi.org/10.1111/1467-9655.13365>.
- Peralta, R. 2012. 'Illicit Acts of Urbanism'. In *Tijuana Dreaming: Life and Art at the Global Border*, edited by Josh Kun and Fiamma Montezemolo, 136–147. Durham, NC: Duke University Press.
- Pinedo, Miguel, Leo Beletsky, Nathan Alamillo, and Victoria D. Ojeda. 2017. 'Health-Damaging Policing Practices Among Persons Who Inject Drugs in Mexico: Are

- Deported Migrants at Greater Risk?' *International Journal of Drug Policy* 46: 41–46. <https://doi.org/10.1016/j.drugpo.2017.05.028>.
- Pinedo, Miguel, José Luis Burgos, María Luisa Zúñiga, Ramona Perez, Caroline A. Macera, and Victoria D. Ojeda. 2015. 'Police Victimization Among Persons Who Inject Drugs Along the U.S.–Mexico Border'. *Journal of Studies on Alcohol and Drugs* 76 (5): 758–63. <https://doi.org/10.15288/jsad.2015.76.758>.
- Popke, E. Jeffrey. 2001. 'Modernity's Abject Space: The Rise and Fall of Durban's Cato Manor'. *Environment and Planning A: Economy and Space* 33 (4): 737–52. <https://doi.org/10.1068/a32175>.
- Pospěch, Pavel. 2020. 'Homeless People in Public Space and the Politics of (In)Visibility'. *Space and Culture* 0 (00): 1–14. <https://doi.org/10.1177/1206331220906091>.
- Rafful, Claudia, María Elena Medina-Mora, Patricia González-Zúñiga, Janis H. Jenkins, M. Gudelia Rangel, Steffanie A. Strathdee, and Peter J. Davidson. 2019. "Somebody is Gonna Be Hurt": Involuntary Drug Treatment in Mexico'. *Medical Anthropology* 39 (2): 1–14. <https://doi.org/10.1080/01459740.2019.1609470>.
- Reilly, William K. 1993. 'The Greening of NAFTA: Implications for Continental Environmental Cooperation in North America'. *The Journal of Environment & Development* 2 (1): 181–91. <https://doi.org/10.1177/107049659300200109>.
- Rocha, Christian. 2015. 'Boomtown Modernism: Urban Planning and Crisis Management in Tijuana, Mexico. 1960–1982'. PhD diss. Nashville, TN: Vanderbilt University.
- Saldanha, Arun. 2020. 'A Date With Destiny: Racial Capitalism and the Beginnings of the Anthropocene'. *Environment and Planning D: Society and Space* 38 (1): 12–34. <https://doi.org/10.1177/0263775819871964>.
- Sanchez, Glenn. 2020. 'Contabiliza Secretaría de Bienestar a 563 personas en "El Bordo."' *El Imparcial*, November 6, 2020. <https://www.elimparcial.com/tijuana/tijuana/Contabiliza-Secretaria-de-Bienestar-a-563-personas-en-El-Bordo-20201106-0003.html>.
- Sanchez, Glenn. 2022. 'Piden comerciantes atender a indigentes de Zona Centro'. *El Imparcial*, January 3, 2022. <https://www.elimparcial.com/tijuana/tijuana/Piden-comerciantes-atender-a-indigentes-de-Zona-Centro-20220102-0002.html>.
- Sibley, David. 1995. *Geographies of Exclusion*. London: Routledge.
- Slack, Jeremy. 2019. *Deported to Death: How Drug Violence Is Changing Migration on the US–Mexico*. Berkeley, CA: University of California Press.
- Smith, Joshua E., and Wendy Fry. 2021. 'EPA Says Help is on the Way for San Diego Beaches Fouled by Sewage from Tijuana'. *Los Angeles Times*, February 13, 2021. <https://www.latimes.com/california/story/2021-02-13/tijuana-sewage-san-diego-beaches>.
- Steffen, Will, Jacques Grinevald, Paul Crutzen, and John McNeill. 2011. 'The Anthropocene: Conceptual and Historical Perspectives'. *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences* 369 (1938): 842–67. <https://doi.org/10.1098/rsta.2010.0327>.

- Terminski, Bogumil. 2015. *Development-Induced Displacement and Resettlement: Causes, Consequences, and Socio-Legal Context*. New York, NY: Columbia University Press.
- Thelle, Mikkel, and Mikkel Bille. 2020. 'Urban Porosity and Material Contamination From Cholera to COVID-19 in Copenhagen'. *Journal for the History of Environment and Society* 5: 171–80. <https://doi.org/10.1484/J.JHES.5.122473>.
- Tsing, Anna Lowenhaupt, Andrew S. Mathews, and Nils Bubandt. 2019. 'Patchy Anthropocene: Landscape Structure, Multispecies History, and the Retooling of Anthropology: An Introduction to Supplement 20'. *Current Anthropology* 60 (S20): S186–97. <https://doi.org/10.1086/703391>.
- Uniradio Informa. 2013. 'Propone el doctor Astiazarán atención al problema de las adicciones y migrantes'. *Uniradio Informa*, May 7, 2013. <https://web.archive.org/web/20130610120042/https://www.uniradioinforma.com/noticias/eleccionesbc/articulo191265.html>.
- Vázquez, Carolina. 2020. 'Limpieza de la canalización del Río Tijuana es todo un reto'. *PSN En Linea*, December 21, 2020. <https://psn.si/limpieza-canalizacion-rio-tijuana-reto-cv/2020/12/21/>.
- Yusoff, Kathryn. 2018. *A Billion Black Anthropocenes or None*. Minneapolis, MN: University of Minnesota Press.