Counter-Mapping, Counter-Histories, and Insurgencies of Subjugated Knowledges in the Fisher Struggle for Ennore Creek

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Abstract: The Ennore wetlands in North Chennai, India were once dense with diverse habitats and interwoven histories. Many of these histories began to unravel from the 1960s onwards, when state-sponsored heavy industry began encroaching into and polluting the wetlands. Local fishers, whose lives, livelihoods, and cultural worlds were ignored by these changes, fought back in a campaign to reclaim and restore the wetlands. This paper analyses how the Save Ennore Creek Campaign and Ennore fishers used counter-mapping strategies to reveal the state's wilful suppression of fisher knowledge and worldviews using maps and plans. It draws from decolonial and ignorance studies literatures to analyse the campaign's counter-maps as cartographic, performative, and affective insurrections of subjugated knowledges and counter-histories that un-made the state's maps and plans, exposed the state's knowledge as wilful ignorance and spotlighted geographical knowledge from the margins as a way of remaking reality and opening up possibilities of alternative futures for the creek and its communities.

Keywords: wilful ignorance, subjugated knowledges, counter-mapping, counter-histories, Ennore Creek, ontological politics

Introduction

Kattukuppam and Mugatwarakuppam are two of four fishing villages located on Ennore Creek at the northern margins of the South Indian coastal metropolis of Chennai. This region was incorporated into the city's municipal boundaries in 2011. Yet its exposure to destructive urbanisation dates to the 1960s. Since then, it has been subjected to degradation and appropriation by state-sponsored heavy industry, including automobile and petrochemical factories, thermal power plants, ports and a ship-building yard. These industries, their attendant infrastructure and their noxious discharges, have violently assimilated Ennore's villages into processes of "fossil neoliberalism" (Kumar 2022:1853), transforming the wetlands into a vast contaminated "technoscape" (Appadurai 1996:34).

The fishers' struggle against this destruction began in the 1990s. It remained invisible outside Ennore until 2014, when fishers joined forces with environmental justice activists from the Chennai-based Vettiver Collective (an informal social justice group). Together they launched the Save Ennore Creek Campaign (SECC) to mobilise solidarity for the fishers' struggle. The SECC had its roots in visits to Ennore in 2011 and 2012 by members of the Collective. Among the Collective's key volunteers were three of the co-authors of this paper, including a fisherman from South Chennai with a reputation as a "maptivist" for his self-taught skills in mapping and campaigning for the rights of coastal communities. In 2014, the Collective was contacted by representatives of Mugatwarakuppam and Kattukuppam fishing villages for assistance in halting encroachments into the creek. Activists began visiting Ennore's fishing villages regularly to learn from fisher elders about the wetlands and what ailed them. They also used India's Right to Information (RTI) Act (Government of India 2005) to unearth documents relating to power plants and ports in the area and analysed them to assemble a picture of how the destruction of the creek had been allowed to occur.

It became apparent that the industrialisation-led erasure (Arabindoo 2022; Raman 2020; Singh et al. 2017) of the creek and its hydro-social cultures was enabled by the manipulation of official records. By redrawing boundaries and redefining categories of land and water, maps, reports, and plans authorising industrial and infrastructure projects had officially wiped out the fishers' livelihoods, knowledges, and customary uses of the creek. Environmental and Social Impact Assessments had denied the existence of fisher and other artisanal livelihoods by declaring common lands adjoining the creek as empty, unused, or barren (CRRT et al. 2018:20). Additionally, fishing grounds in the creek, carefully self-governed through the *paadu* system, were undocumented and invisible in official records, allowing them to be ignored during environmental clearance approvals.

Paadu is a customary system of fishery commons management in northern Tamil Nadu. The Ennore creek is divided into 53 fishing stations or paadu, each identified by a name based on a geo- or topo-graphical, biological, human-made, or spectral feature of the waterlands. Eligible stake-net fishers fish each paadu on a rotating basis. Two villages—Mugatwarakuppam and Kattukuppam—share the paadus by fishing on alternative days. Paadu fishers cannot stake their nets

anywhere but at the designated place, leaving the rest of the river open to fishers from other villages who use other gear.

The state's imposition of landist environmentalities (Agrawal 2005) on littoral spaces that it neither understood nor valued wreaked havoc on the water-lands of Ennore. Faced with the steady degradation of the wetlands, SECC began to counter this pattern of erasure by documenting and translating across cultures, fisher geographical and embodied knowledge in various formats. Some aspects of this knowledge were presented as Cartesian maps to communicate to authorities and courts. But there were other target audiences and other forms of communication too. SECC's counter-mapping included creative and performative modes that were better suited to highlight for public audiences aspects of subaltern geographical knowledge such as relationships and emotional connections with place. Drawing on the embodied experiences of Ennore's human and non-human resideployed counter-mapping campaign counter-environmentality of the littoral to resist the takeover and degradation of the wetlands.

This paper draws on decolonial and ignorance studies literatures to analyse SECC's counter-mapping strategies. It presents the campaign's counter-maps as epistemologies of resistance (Medina 2011) and re-existence (Mignolo and Walsh 2018) that un-made the state's maps and plans, challenged intentional ignorance and epistemic domination. It examines how buried memories and counter-histories were resurrected as the basis of alternative futures for the creek and its communities. Contesting the universal world-making tendencies of conventional Eurocentric mapping, wherein "knowledges are actively made non-existent by the singular world", we propose counter-mapping as a pluriversal world-making practice and an exercise in "ontological politics" (Tornel 2023:51, citing Ingold 2000). Rather than mere map-making, we present counter-mapping as a processual, performative, and affective campaign that repurposes conventional cartography to challenge dominance, and also overcomes its inability or unwillingness to convey the plurality of ways in which human, non-human, and more-than-human agents interrelate with space and time. We first sketch the outlines of our theoretical framing and undertake an overview of the history of counter-mapping. We then analyse three counter-mapping strategies used by the SECC, each of which asserts fisher knowledge of and claims to the creek in ways that draw on counter-mapping's epistemic agency in different ways. We conclude by discussing their wider implications for understanding counter-mapping.

Data and Methods

Research for this paper was conducted by an interdisciplinary group of researchers, including academics, SECC activists, and fishers. We accessed SECC's rich archive of official documents obtained through RTI. We analysed project documents, maps, reports, and plans to understand the rationalities born of a systemic misrecognition of Ennore's fishing communities and their worldviews. We interviewed and consulted with fishers, salt-pan workers, and residents in and around Ennore. For the third counter-mapping strategy, we drew on data

generated through participatory action research combining field visits, interviews, story-gathering, and science and arts-based methods including sampling and testing, art and theatre workshops and productions.

Wilful Ignorance, Counter-Mapping, Counter-Memory, and Counter-History

Spivak (1985:264) argued that the assumption of an "uninscribed earth" was essential to how colonialism produces the coloniser in relation to the colonised. Similarly, Mignolo and Walsh (2018) contend that the modern/colonial matrix of power, while being economic, territorial, and political, is first and foremost, epistemological. It produces knowledges, beliefs, and subjectivities that justify, maintain, and reproduce systems of power by ignoring, distorting, or denying knowledges, subjectivities, and life visions that do not fit its frame. The idea that not-knowing is central to how modern/colonial power and domination work, brings decolonial literature into conversation with ignorance studies, suggesting that understanding and challenging domination requires critical analysis not only of epistemology, but also of theories of ignorance.

Philosopher Charles W. Mills (2015:217) defined ignorance as "an absence of belief, a false belief, a set of false beliefs, [or] a pervasively deforming outlook". Writing on white domination in the USA, Mills (1997:18) argued that white ignorance was not a passive not-knowing, but an "active, resilient, and even militant" ignorance that produced "a particular pattern of localized and global cognitive dysfunctions (which are psychologically and socially functional) ... [that produce] the ironic outcome that whites will in general be unable to understand the world they themselves have created". Ignorance allows dominantly situated knowers to misunderstand and ignore whole parts of the world just to maintain power. This idea of ignorance as power resonates with the observation that Eurocentric rationality occludes diverse ways of knowing and reduces the multiplicity of lived worlds—the Pluriverse (Escobar 2017)—to a One World World (Law 2015).

Undoing the violence wrought by dominant epistemologies of knowledge/ignorance/power demands attention to subjugated knowledges, experiences, and memories (Medina 2011). In a reframing of Foucaultian genealogy as an epistemology of resistance, Medina (2011) presented a way of recruiting the power of counter-memory and counter-history to expose intentional ignorance by insurrecting subjugated knowledges (Foucault 2003:9). Official histories, he argued, are produced by monopolising knowledge of a shared past and silencing alternative interpretations to create and maintain the unity of a political body. However, rather than viewing the oppressed as powerless and ignorant, their disparaged and ignored histories are better understood as counter-histories that can "undermine the unity and continuity that official histories produce" (Medina 2011:24). The objective of counter-history is not to invert or fill gaps in official history, but to disrupt it by asserting subjugated ways of knowing. Insurrections against epistemic closure thus involves "turning knowledge(s) against itself (themselves), or ... mobilising some forms of knowledge against others" (Medina 2011:13).

Epistemologies of ignorance that simultaneously produce knowability and unknowability underpin the well documented role of maps in histories of imperialism, colonialism, and neo-colonialism. Through their sense-making protocols (surmeasurement, triangulation, etc.), maps inscribe certain things as "intelligible, surveyable and the proper objects of investigation and knowledge, and others as unintelligible, unsurveyable and epistemologically opaque" (Medina 2011:13). While taken to be self-evidently truthful, maps misrepresent the world in ways that actively re-produce the power/knowledge/ignorance of those who inscribe them. In the 1980s, geographers began, in deconstructive vein, to challenge the hegemony and self-evidence of maps, by presenting them as texts that could be read critically to make domination visible (Crampton and Krygier 2005; Harley 1989; Wood 1992). Others called for reclaiming the map as a "political practice of mapping back ... to criticize, provoke and challenge ways of thinking about space, place and maps" (Halder and Michel 2018:13) to subvert hegemonic views of the world. These geographers drew from traditions of indigenous and subaltern groups who had, since at least the 19th century, used maps to undo the ignorance of official maps, plans, and narratives. Subaltern maptivists have mobilised their histories and lived knowledges to campaign for racial justice (Alderman et al. 2021), women's rights (Dando 2018), and environmental justice (McElroy 2018), and to stake their claim to territory (Cooke 2003; Kollektiv Orangotango+2018; Mesquita 2018; Nietschmann 1995; Peluso 1995; Scazza and Nenquimo 2021).

African American struggles for racial justice have for counter-mapping to expose injustice and mobilise solidarity for their cause from diverse local and international constituencies. At the 1900 Paris Exposition, W.E.B. Du Bois used a map to link African Americans to a wider Pan-African identity drawing on the history of racial exploitation (Battle-Baptiste 2018). The National Association for the Advancement of Colored People and the Tuskegee Institute used counter-maps to mount powerful anti-lynching campaigns during the early 20th century (Alderman et al. 2021). In the US, early 20th century women's rights activists used suffrage maps to push more states to become equal suffrage (Dando 2018). The Dene in Canada and Inuit in Alaska used counter-maps in the 1970s to resist extractivist projects (Kidd 2019). In the anti-Dakota Access Pipeline struggles that began in 2016, the Unist'ot'en and Secwepemc nations used counter-maps as part of their trans-media campaigns (Kidd 2019). Beginning in 1979, the Brazilian Pro-Indian Commission of Acre organised ethnomapping workshops for indigenous groups in the forested border region between Brazil and Peru to translate indigenous cosmo-visions into dominant cartographic representations. These were used for defining, claiming, and managing their territories, as evidence in courts, and as teaching materials in indigenous schools (Gavazzi 2018). Peluso (1995:384), who is credited with coining the term counter-mapping, wrote of the Dayak people in the forests of Kalimantan, Indonesia, who used counter-mapping in the 1990s to mobilise indigenous resistance by "appropriating the state's techniques and manner of representation to bolster resources". legitimacy of 'customary' claims to Others counter-mapping as "any effort that fundamentally questions the assumptions or

biases of cartographic conventions, that challenges predominant power effects of mapping, or that engages in mapping in ways that upset power relations" (Harris and Hazen 2005:115). Such efforts could take the form of performative cartography—as song, poem, dance, speech (Pickles 2004), demonstrations and protests (Dalton and Stallman 2018)—or embodied practices (Alderman et al. 2021).

Counter-mapping operates on two axes, one vertical, addressing those who are dominantly positioned in formats familiar to them, and the other horizontal, to communicate with and build support among non-dominant subjects (Lugones 2003). On the first axis, counter-mapping runs the risk of undermining resistance by filling gaps in dominant knowledge systems (Pohlhaus Jr 2020). On the second, counter-mapping enables marginalised subjects to build relations with others to sustain and enable their resistance (Appadurai 2012; Pohlhaus Jr 2020).

The earliest known instances of counter-mapping in India are the Mother India maps used to mobilise public sentiment for the Indian independence movement in the early 20th century, and the Mother Tamil maps to counter the hegemonic Mother India maps (Ramaswamy 2001). In the 1970s in Kolkata, Unnayan, a workers' collective, prepared maps of marginalised settlements in the city that were marked as vacant land on official and commercial maps (Sen 2007). These maps assisted settlement dwellers to gain a sense of their place in the city, claim rights to the urban commons, and make improvements to their living conditions (Sen 2007:13). Similarly, in Chennai in 2008, the Urur-Olcott Kuppam fishing village, along with Vettiver Collective's Save Chennai Beaches campaign, documented their use of the coastal commons to counter beach beautification and expressway proposals that designated the shoreline as empty and unused (Kumar et al. 2014). In these instances, "mapping back" (Halder and Michel 2018:13) became a way for marginalised groups to assert their presence in and rights to the city.

In the following three sections of this paper, we discuss three counter-mapping strategies used by the SECC and Ennore's fishers. While the campaign routinely employs GPS technology and mapping to document illegalities or rights, we have chosen these cases for what they offer to wider discussions about countermapping.

The first was a response to a fraudulent map presented in 2017 by the State of Tamil Nadu as the approved version of a statutory coastal planning map to legitimise industrial encroachments into Ennore Creek. Men, women, and children from the fisher community stood in four feet of water to demonstrate that what the map declared as land was, in fact, part of the creek. Here, the counter-map was not a map at all, but an embodied performance of re-territorialisation (Kitchin and Dodge 2007, cited in Hirt 2012), an ontological line of protest. The second example is the fisher-produced map of fishing stations (paadu), which were until then absent from official maps and surveys of the creek. These paadu maps were subsequently acknowledged by the State Wetland Authority and incorporated into proposals for restoration of a portion of the creek. The third strategy we discuss is a multi-modal process of counter-mapping undertaken to challenge a state plan for the eco-restoration of Ennore Creek with a "People's Plan". This counter-mapping process exposes and corrects the epistemic blindness of

conventional maps and plans to the plural ways of knowing and relating to the creek by human, non-human, and more-than-human agents. It uses innovative formats to highlight how "places, experiences, histories, and people that 'no one knows' do exist, within our present geographical order" (McKittrick and Woods 2007:4).

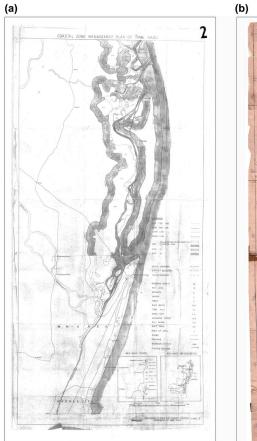
The Fraud Map

In 1991, under the provisions of the Environment (Protection) Act (Government of India 1986), the Government of India (GOI) issued its first Coastal Regulation Zone (CRZ) Notification to regulate coastal development. The Notification divided coastal areas into four zones (CRZ 1-4) based on their fragility and the level of development present, and established rules regarding permissible activities within each zone. Coastal states were required by the Notification to draw up state-level Coastal Zone Management (CZM) maps and plans. Tamil Nadu's Directorate of Town and Country Planning (DTCP) completed this exercise in June 1996 in the form of a report and 30 map sheets (DTCP 1996).

Sheet No. 2, which covered the Ennore wetlands, described the entire extent of the tidal wetlands as CRZ 1A, an Ecologically Sensitive Zone, notating it as "Salt Marsh" and "Salt Pans" and flagging it as a "No Development Zone" (see Figure 1a). However, in March 1997, the Government of Tamil Nadu (GoTN) announced its intent to acquire 7,155.95 acres, including substantial portions of the recently protected wetlands, to establish a "Petrochemical Park". In May 1997, it wrote to the GOI seeking to rezone the area covered by Sheet No. 2 to accommodate the park. The request was accompanied by a map, never approved, that labelled the wetland, including the perennial tidal backwaters, as "Petrochem Park TIDCO project" (see Figure 1b).

Subsequently, both this map and the approved 1996 map disappeared from public view until retrieved by activists in 2017 through painstaking RTI research. In the interim, nearly 3,000 acres of the Ennore wetlands had either been encroached upon or degraded by coal-fired power plants, coal stockyards, ash dykes, ports, a shipbuilding yard, and oil installations.

In late 2016, SECC activists sourced a copy of the original Sheet No. 2 of 1996 from Coastal Action Network, a Nagapattinam-based NGO that had obtained the entire set of 1996 GOI-approved maps for Tamil Nadu much earlier using RTI. SECC activists also used RTI to request the latest approved map from the State Department of Environment. After initially denying that the information was in its custody, the department relented after the intervention of the Appellate Authority. In May 2017, activists accessed a map purporting to be the latest CZM map for the area, allegedly prepared and approved in 1997. The 1997 map, which the activists began to call the "fraud map", was starkly different from the approved 1996 map, which clearly demarcated and protected the Ennore wetlands as a tidal waterbody stretching 16km north—south. The 1997 fraud map omitted tidal waterbodies, including the perennial tidal channel, shrunk the north—south stretch to 13km, and obliterated the Environmentally Sensitive Zone demarcated in the 1996 map.



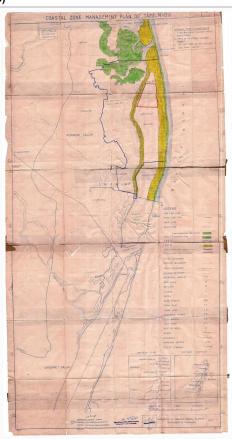


Figure 1: CZM Plan—approved and fraud maps (available in public domain; obtained by Pooja Kumar, SECC, under India's Right to Information Act, 2005)

1a (left): Approved Tamil Nadu CZM map, Sheet No. 2, 1996

1b (right): Fraud Tamil Nadu CZM map, Sheet No. 2, 1997

The fraud map was neither the first nor the last time that development priorities were used to undo the protection accorded to the coast by the CRZ Notification. Indeed, in its lifetime, the CRZ 1991 Notification was amended 25 times, most often to dilute its provisions (Sundar 2014).

The fraud map of 1997 that portrayed the wetlands as inert land suitable for industrial installations, wilfully ignored the creek and its socio-ecologies by denying its wetness and the plural ways in which it was experienced and known by its inhabitants and users. Dominant rationalities portrayed any resistance to the proposal as not only irrelevant, but also unpatriotic. An excerpt from a 2007 court judgement upholding the government's decision to set up the petrochemical park bears this out:

We are therefore convinced that the objection to the proposed Petrochemical Park does not stand the test of logic, a rational approach, eco-environmental realities, socio-economic development, well-settled legal principles and is opposed to the concept of "Sustainable Development" as well as to the progress and prosperity of the nation. (Ramgopal Estates Pvt Ltd v. The State of Tamil Nadu 2007:14.1)

Whether the false claim regarding approval of the 1997 map was made to legalise earlier violations or facilitate future ones is not known. However, in 2016, the Tamil Nadu State Coastal Zone Management Authority (TNSCZMA) recommended clearance for Kamaraj Port Ltd's proposal to construct ancillary port facilities in 1,000 acres of the disputed wetlands. In June 2017, the SECC obtained and published the long-hidden 1996 CZM Plan map and publicly exposed the 1997 map as a fraud (Coastal Resource Centre 2017). They complained to the Expert Appraisal Committee of the GOI's Ministry of Environment, Forests and Climate Change, demanding that the TNSCZMA's recommendation be disregarded. The committee recommended withholding of clearances pending further investigations.

Undeterred, in October 2017, the port began reclaiming the wetlands by dumping dredged material into it, prompting the SECC and fishers to draw public attention to the port's actions through two tactics. First, drawing on the memories of the 2015 floods that exposed the compromised capacity of the creek to absorb rainwaters, they organised two celebrity visits to the creek in October 2017 to coincide with the onset of the northeast monsoon. The first visit was by the actor-politician Kamal Haasan, and the other by Kanimozhi, a Member of Parliament from a prominent regional political party. These visits were part of a larger campaign to present the vandalised wetlands in the ignored northern municipal margins as the city's saviour from floods and to broaden the campaign's support base by enlisting influential urban elites. Besides amplifying the illegality of the port expansion in the public domain, the celebrity visits entrenched the campaign amongst Ennore's women and youth.

Then, in January 2018, the fishers staged a *neer satyagraham*—a demonstration in water (*neer*) to underscore the truth (*satyagraham*). A massive mobilisation of fishing boats and men, women, and children stood waist-deep in water declaring "this is water, not land". The slogan *aaru dhan uyiru* (the river is our life) resounded at the event (see Figure 2). It linked the fishers' existence to the river's, refuting the binaries of official narratives and revealing indisputably what the fraud map hid—that the so-called "land" approved for the TIDCO petrochemical park was, in fact, four feet of standing water. Backed by the enhanced visibility lent by the celebrity visits, the demonstration brought a halt to Kamaraj Port's expansion work in the wetlands, "un-made" (Feola 2019:977) the state's plan and exposed its wilful ignorance. In February 2021, in a case filed by a local fisherman, the National Green Tribunal ruled that the 1996 CZM map was the only approved map, and that the fraud map had no legal status (Mahendran & Ors v. Union of India 2021).

In this case, counter-mapping was an act of embodied placemaking (Sen and Silverman 2014) wherein fishers undid the state's treatment of the creek as uninscribed earth by bodily reinscribing it with their sense of place. It helped subaltern agents critique state knowledge and prove its inaccuracy in courts and among the wider public. Counter-mapping was performed here also as a river



Figure 2: The 2018 *neer satyagraham*—water protest (reproduced by permission of photographer Steevez Rodriguez)

commoning exercise to mitigate "market logics from the conditions of life" (Boelens et al. 2023:1132) by deploying counter-expertise, generating counter-evidence, mobilising solidarities from activists, lawyers, and media, and agitating the issue in public and legal fora. Most importantly, it underscored that counter-mapping is struggle and cannot be seen as isolated acts or outputs.

The Paadu Maps

The boundaries and geographies most salient to Ennore's fishers are those associated with the creek and its backwaters. An unpublished study of Kattukuppam (Coelho and Kuttuva 2019) revealed that for fishers, safeguarding the wetlands was more important than protecting village lands. Their feeling of being "hemmed in" (Coelho and Kuttuva 2019:8) related primarily to the shrinking of the creek's boundaries by the encroaching industries. The creek is not a singular, monolithic, constant body of water, but changes with tides, rains, droughts, storms, and seasons. Fishing in the creek is internally regulated among various fisher communities who use different techniques and gear to target different resources (Govindan 2021). The locally dominant, though still marginalised, Pattinavar community to which the fishers of Kattukuppam and Mugatwarakuppam belong, employ stake nets in pre-determined fishing stations (paadu).

In Ennore, 53 paadus extend across 16km of the backwaters, but many have been abandoned due to pollution, land reclamation, or disruption of tidal flow essential for fishing. In some places, the gently yielding native sediment has been smothered by construction debris or coal ash, rendering the floor too firm for prawns and crabs to lodge. In others, sewage sludge or fine sea sand leaked from reclamation projects made it too soft for setting nets or even wade through without sinking.

Under the GOI's Environmental Impact Assessment (EIA) Notification of 2006, project proponents are required to assess the impact of their activities on local environments and livelihoods. Additionally, the CRZ Notification requires

authorities to identify and clearly mark fishing zones and fish breeding areas in coastal waterbodies. But until recently, *paadus*—key institutions of customary fisher practice—found no mention in project EIAs or official documents; they remained invisible within dominant rationalities of industrialisation, progress, and development. The worlding of modern, capitalist orders requires that official documents ignore *paadus* and assume that the wetlands are uninscribed land.

The *paadu* system, and its uncertain, non-linear, tidal, monsoonal space-time belong to a different world, known only to fishers, and communicated through their everyday encounters and interactions with other fishers. It was unseen and unknowable, unqualified and unworthy of inclusion in official maps and discourse and the world they upheld. It did not matter that the *paadu* system was a time-tested commons governance regime in the water-world of Ennore fishers, because that world itself did not matter. To the fishers, the 53 *paadus* were never known as dots on a paper map, but as places in a dynamic, watery living space that one experienced and got to know by wading through, fishing in, and sharing with other fishers and life-forms.

Using the opening provided by the CRZ Notification's requirement to map fishing zones in tidal waterbodies, fishers turned their efforts toward strengthening and formalising their customary law by committing the *paadus* to paper. In 2016, the SECC began digitally plotting the *paadus* and insisting on their inclusion in the official CZM Plan. SECC's counter-mapping exercises are solidly embedded within the community's long-running campaign to assert and reclaim ignored territorial rights. They draw on Vettiver Collective's history of maptivism and counter-mapping to enliven landscapes with community uses and relationships. In Ennore, counter-mapping began after several years of interactions between activists and the community during which activists first learnt from the fishers about the riverscape, its meanings and functions, and then helped translate this geographical knowledge into evidence and insights in forms and genres appropriate to different target audiences from different cultures.

The paadu map was prepared over several focus group interactions with fishers from Kattukuppam and Mugatwarakuppam villages, sitting around an enlarged Google Earth map. Fishers would list out paadus going from south to north along the river, locate them using local land- or water-marks, and pinpoint them on the map. Precise GPS locations were obtained for each paadu during a fisher-guided boat ride. The prepared map was then reviewed and approved by the administrators of the two fishing villages that shared the paadus, and finally submitted on village letterheads to the government. In 2021 and 2022, the process was repeated as new paadus were added to accommodate new fishers; the updated paadu map was re-submitted to the authorities (see Figure 3).

In August 2022, Ennore fishers accompanied by fishers from other parts of Chennai protested outside the TNSCZMA offices demanding maps that accurately reflected their fishing zones and livelihood commons. In 2023, the State Wetland Authority not only endorsed the fishers' diagnosis of the causes of the degraded state of the Ennore wetlands, but also presented a plan for remediating sections of the river identifying them as the fishers would—using *paadu* names (Tamil

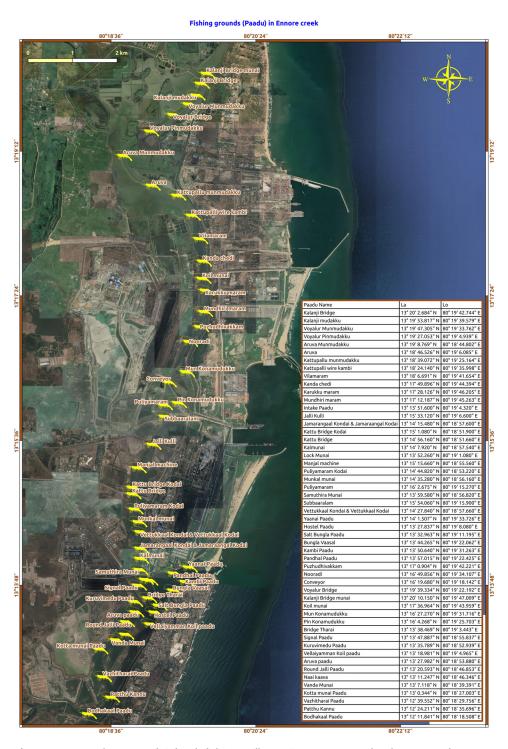


Figure 3: Paadu map of inland fishing villages in Ennore wetlands, September 2023 (co-produced by Kattukuppam and Mugatwarkuppam fishing villages and the SECC; reproduced by permission of K. Saravanan, SECC)

Nadu Wetlands Mission 2023). At the time of writing, Ennore fishers reported with confidence that release of the draft CZM Plan incorporating the *paadu* names by TNSCZMA was imminent.

Like the Dayak people in Indonesia (Peluso 1995), Ennore fishers appropriated the state's techniques and modes of representation to bolster the legitimacy of their claims to the creek and highlight the unseen world of relationships between water, lands, tides, fish, and fishers. They leveraged the power of maps as inscriptions to claim recognition and value for their relations with the river, their metrics of productivity, and their customary governance arrangements. More than merely a map of fishing grounds, the paadu map should be seen as a cartography of "forms of experiencing and remembering" (Medina 2011:11) marginalised realities and as a tactical tool to assert epistemic agency and repair misrecognition. It revealed the relational hydro-sociality (Linton and Budds 2014) of fisher society with the creek and its ecologies (Hurst et al. 2022). However, it also tells of the hydro-socialities of industries and power plants that reduced the socio-material life of the creek to that of a water source, a sink for industrial waste or an empty space waiting to be reclaimed as industrial real estate (Dewan and Nustad 2023). By using conventional GIS technologies and Western cartography, the fishers challenged from within and went beyond the all-pervasive rationalities that had invisibilised them, using an "in-against-andbeyond" strategy (Feola et al. 2021:3). The paadu maps gave expression to knowledge until then deemed below the level of erudition or scientificity and therefore invalid (Medina 2011).

Counter-mapping the wetlands with *paadu* names given by the fishers is a strategy targeting multiple objectives. First, insisting on the inclusion of *paadus* by name in government documents strengthens and formalises customary law and pries open possibilities of preventing further degradation and even reversing harm. Second, marking sections of the river by *paadu* names asserts fishers' ways of knowing over the state's river survey nomenclature. Third, names convey an intimacy between the named and the namer. In this case, fishers' name-and-claim strategy underscores their belonging to the river. Finally, like how the Tuskegee Institute masked the political nature of its counter-maps by presenting lynching data as non-confrontational "neutral facts", the *paadu* maps too are matter-of-fact representations pregnant with political possibilities.

However, caveats are in order: committing the *paadus* to paper and formality comes with the risk of exposing the flexible and non-formal *paadu* governance system to the limitations of cartesian cartography and the dangers of formal recognition and fixity of maps. Fixity undermines the dynamic nature of space-time and the flexibility required by local governance regimes to increase, decrease, or shift *paadus* in response to changing local contexts. Further, the depthless—though spatially specific—rendering of *paadus* to a two-dimensional map does little to reveal the grave violence experienced by the fishers and their vandalised fishing stations. That said, the use of the master's tools in this case ought to be viewed as a tactical move in a long-running struggle that has also used other performative, creative, and non-cartesian counter-mapping techniques.

The People's Plan for the Eco-restoration of the Ennore Wetlands

This case explores the "People's Plan for Eco-restoration of Ennore Wetlands" (Jayaraman et al. 2024) and events surrounding the launch of its paper report as a counter-mapping campaign designed to challenge official plans and communicate different world views using a variety of conventional and creative forms, including cartesian maps, art, three-dimensional models, and theatre (Dalton and Stallmann 2018; Pickles 2004). The written plan's opening statement reveals the campaign's critical cartographic agenda and the layered geographical knowledge that the counter-mappers sought to convey:

The past never goes away; it lives on buried in the folds of landscapes, in the ebbs and flows of waterscapes, and in the memories of its people, ready and waiting to reignite struggles over the many meanings of water and land. The People's Plan for the Eco-restoration of the Ennore Wetlands recruits the living and buried stories from and about the denizens of these sprawling tidal wetlands to present a plan for its revival that goes beyond conventional actions of deepening, desilting, vegetating and beautifying. The plan is based on an acknowledgement of the complex ecological, economic, cultural and social relationships that are embedded in and woven around landscapes and waterscapes. The People's Plan, therefore, is about reviving and strengthening lost relationships, even as it is about calling out and discarding traditional relationships that are oppressive. (Jayaraman et al. 2024:3)

Since the early 2000s, riverine eco-restoration has been part of an India-wide strategy to project Indian cities as world class and enhance urban real estate value by turning urban waterfronts into recreational zones, eco-parks, or walking and cycling routes (Banerjee-Guha 2009; Coelho 2022; Mathur 2012). These neoliberal eco-restoration projects have been marked by the eviction of subaltern communities from beaches and riverbanks in the name of beautification, clearing encroachments, or addressing pollution—the latter despite evidence that high-income households and industries, not the poor, are the major contributors to urban water pollution (Baviskar 2011; Coelho 2018; Saravanan and Jayaraman 2011).

In 2018, the Chennai Rivers Restoration Trust (CRRT), a special purpose vehicle of the GoTN, commissioned a consultant, Voyants Solutions, to prepare a masterplan for the eco-restoration of Ennore Creek. Its initial proposal for the project (CRRT et al. 2018) followed the familiar pattern of beautification and leisure facilities parading as eco-restoration, and inculpating the poor for pollution. It recommended creating parks along the creek's banks, replete with flowerbeds, paved walkways, children's playgrounds, food kiosks, and ornamental lighting, and advocated for a recreational boat club to secure the creek's future. The creek's existence as an active fishing ground with a complex ecology was erased through an act of wilful ignorance. The report also ascribed the pollution in the creek to open defecation by the poor. The creek's primary polluters and encroachers—ports, power plants, and the Manali petrochemical industrial complex—were barely mentioned; tackling industrial pollution was not part of the agenda for eco-restoration. The decades-long fisher struggle against state-sponsored

degradation of the wetlands that eventually compelled the government to respond with this project found no mention.

The report's definition of the creek's boundaries enacted further denials and erasures. The creek as an eco-society (Boelens et al. 2023) is a complex of wetlands variously referred to by local fishers as aaru (river), paraval (floodplains), sathuppu (marsh), uppalam and uppankazhi (salt pan and salt marsh), alayaathi (mangroves) and thittu (islets). It is defined by the action of tides, storm surges, rains, droughts, and floods. Instead of drawing on biology, hydrology, and local people's nuanced understanding of the micro-habitats of the wetlands to delineate the creek's boundaries, the consultant's reports demarcated them solely based on 1985 revenue maps obtained from the Tamil Nadu Department of Survey and Settlement (CRRT et al. 2019:4 3). This meant that only the creek's perennial channel and some patches of salt pans or backwaters were earmarked for eco-restoration; a major portion of the wetlands was excluded. Furthermore, the report used the draft CRZ map of 2011 to define tide-influenced wetlands instead of the approved 1996 map. This reduced the area identified for restoration and legitimised industrial encroachment that had taken place since 1996. While the report acknowledged that toxic coal ash had leaked from pipes into the creek and reduced its depth, these damages were not addressed in the ecorestoration plan. The final master plan proposed removal of invasive species, mangrove plantation, and engineering interventions for sewage, waste water, solid waste, and tidal management (CRRT et al. 2020:8_24) (see Figure 4a). Industrial effluents were simply to be "monitored" (CRRT et al. 2020:6_22).

Recalling how CRRT's first eco-restoration project on Adyar Creek in South Chennai had been implemented without consulting fishing communities, Ennore fisher representatives and SECC activists demanded that stakeholder meetings be conducted in Ennore, despite the inherent limitations of the state-driven exercise. These were held in 2019, prior to the drafting of the final project report. Significantly, the input of the fishers and the SECC improved the ambition of the project from that of remediating the creek as an urban waste sink, to one suitable for "salt pans, shell fishing, mariculture and ecologically sensitive zones" (CRRT et al. 2020:11_2). It also ensured that the final report recommended the removal of construction debris and partly constructed pilings which had caused damage to fishing vessels and interfered with tidal flows (CRRT et al. 2020:8_16). But these minor changes notwithstanding, the plan's militant ignorance of the actual extent of the creek, and with respect to the wetlands, its dependents and both their conditions was still starkly evident to fishers and activists. They knew that the small gains made were embedded within terms set by authorities, engineers, and experts whose ways of knowing and ignoring had devalued the creek and its inhabitants in the first place. Fraught though such inclusion within dominant epistemic systems was with risks of undermining one's own agency, this game had to be played too.

In 2019, fishers and SECC activists began to work on a counter-plan, which they called a "People's Plan for Eco-restoration of Ennore Creek", to critique CRRT's proposal and shape the eco-restoration framework. Where the state deployed ignorance as power to subjugate fisher knowledges of the creek, the



16

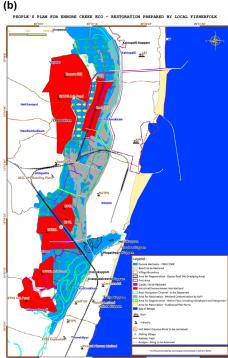


Figure 4: CRRT's plan versus the People's Plan

4a (left): CRRT's comprehensive masterplan for eco-restoration of Ennore Creek (source: CRRT et al. 2020:8-25; obtained by Pooja Kumar, SECC, under India's Right to Information Act, 2005)

4b (right): Map of Peoples' Plan for Ennore Creek Eco-Restoration, coproduced by Ennore fishers and the SECC (source: Jayaraman et al. 2024:45)

People's Plan sought to resurrect such knowledges and counter-histories to expose this intentional ignorance. CRRT's plan failed to address industrial pollutants, damage outside the perennial channel, the consequences to health, livelihood, and local economies from decades of abuse of the wetlands or the many meanings of the wetlands. Fundamental to this effort is an assertion of territory (Boelens et al. 2023) by the fishers, and a rejection of CRRT's restrictive definition of the creek and of its restoration plan. The 1996 CRZ map represented the extent of the wetlands that fishers recognised as their territory and target for ecorestoration. First, a spatial plan was co-developed over several rounds of consultations identifying interventions required across the territory, and a draft of this people's map was launched in December 2022.

This map, however, was drawn up with inputs from only male stake-net fishers from Ennore. Acknowledging the need to reflect the aspirations of Ennore's many social groups, SECC worked for 18 months with a group of academics, fishers, activists, and artists to go beyond male fishers, and think beyond spatio-material relations and the limitations of conventional cartography. This exercise opened fisher knowledge to epistemological incursions from other marginalised groups, including women, salt pan workers, settlers, industrial workers, prawn catchers.

Insurrections of subjugated knowledges must be constantly renewed to resist their own tendency to epistemological ignorance and closure. Medina (2011:21) wrote of this as "maintaining the epistemic friction of knowledges from below", in the interests of a "radical and uncompromising epistemic pluralism, a guerrilla pluralism" (2011:26).

Heterogeneous stories, memories, lived experiences and aspirations of a wide spectrum of Ennore's human and non-human residents were recorded using a transdisciplinary environmental humanities methodology and science and arts-based methods. Histories were documented through interviews and focus groups. Seven young artists, including from the locality, participated in a multi-species justice art lab spread over a three-day residency and four-month workshop to visualise these stories. Local children engaged in a four-month theatre workshop to cowrite and enact a 40-minute Tamil play titled *Oru oorula oru aaru* ("Once there was a river") to elicit discussion about the creek's future and link it to the larger provocation about the collateral damage of urbanisation.

In developing and promoting the People's Plan as a counter to the state's vision of a future reality, fishers and activists are opening up possibilities for subalterns to exercise their right "to live in accordance with their own identities, cultural imaginings, and ways of knowing the world" (Tornel 2023:51, citing Leff 2017). As a counter-mapping campaign to politically enact a geographical reality that is at variance with the aspirations of the dominant system (Dalton and Mason-Deese 2012), the People's Plan is a performance of ontological politics (Bacchi 2020).

The lead up to the launch of the People's Plan report was marked with events and activities to convey horizontally (Lugones 2003) to a wider public the multidimensionality and networked nature of relationships tying people, other lifeforms, and spectral and more-than-human agents to place. The play produced by local children was staged in six different venues reaching more than 600 people. Art works retelling stories, memories, and narratives about fears and expectations of the future were displayed in an exhibition titled "Ghosts, Monsters and Dreams: Reimagining the Good City" at a popular city art gallery attracting nearly 1,000 viewers over three days. A film titled "Poisoned Playgrounds" scripted and produced by local youth, projected Ennore's polluted geography as a violation of children's right to play. The exhibition venue itself was used as a stage for a panel discussion titled "Breathless" featuring local women as experts on the problems and solutions to the health issues faced by the region's pollution-impacted communities. The People's Plan and the final map (see Figure 4b) designed as a vertical communique addressing the government was released at a community event by three retired High Court judges who pledged their support to people's "reality work", a term used by Law (2004) to describe how the world is made, performed, or enacted (Bacchi 2020).

Between 2019 and 2024, the People's Plan's development and its promotion among diverse audiences involved more than a 100 people—fishers, activists, young volunteers, judges, academics, visual and theatre artists, and local residents.¹ This is reality work, an intensely political and contingent exercise of



Figure 5: Fox and Fish—art by S. Kirubavathy, Indian ink on paper (reproduced by permission of S. Kirubavathy)

"assembling a putative [geographical] reality" (Law 2012:161) of what is, how it came to be, and what it can become.

A painting displayed at the exhibition (Figure 5) and the caption summarising a story told by a fisherman reflect how the realities sought to be assembled are "not only human stories but shared stories of conviviality, transformation, and loss between people, spirits, trees, birds, fish, sediment, minerals, and water, among other beings and riverine elements" (Lyons 2023:143–144).

Food for the Fox—As told by a male fisher, Kattukuppam

In those days before the companies came, our river was teeming with fish of different kinds. After a day's fishing, we would sit on the riverside taking the fish out of the nets. The foxes would hang out at a safe distance watching us. Every now and then, we would toss a few fish for the foxes. That was a long time ago. The river is dying. Now there are no foxes...or fish in the river for the foxes. (Jayaraman et al. 2024:32)

Conclusion

SECC's strategies have several implications for wider counter-mapping practice. Firstly, they suggest that counter-mapping is a practice of epistemological resistance/re-existence, involving both unmaking and making. The reference here is to Feola's (2019:979) notion of "unmaking", as "a diverse range of interconnected and multilevel ... processes that are deliberately activated in order to

'make space' (temporally, spatially, materially, and/or symbolically) for radical alternatives that are incompatible with dominant modern capitalist configurations". Counter-mapping, as we have seen in Ennore, is both a tool of epistemic resistance that unmakes dominant ignorance, maps, and plans, and a tool of epistemic re-existence, understood as the "redefining and resignifying of life in conditions of dignity" (Mignolo and Walsh 2018:3). The *neer satyagraham* and the *paadu* maps were both powerful ways of unmaking the official maps of the creek that showed it as an empty channel, and of asserting fisher knowledge and ways of life in a language that the authorities understood and were less likely to ignore. As one fisher put it: "Whenever we use maps to fight, something happens" (Coelho and Kuttuva 2019:18). The People's Plan, on the other hand, was ontological politics in practice—a counter-mapping strategy not only to resist and undo, but also to re-imagine and re-exist beyond the ignorance of official state-sanctioned imaginaries.

Secondly, while maps were amongst the most powerful, and consistently successful, tools of the SECC in prodding state officials to take action, they rarely challenged state/corporate power and dominant representations on their own. In the case of the *paadu* maps, recognition only came after protest outside the offices of the TNSCZMA. In other words, counter mapping is ineffective unless it is embedded within wider struggles of resistance against oppression and the forms of power/knowledge/ignorance that legitimise such oppression. For ultimately, notwithstanding the power of representation, knowledge, and wilful ignorance, the map is not the territory and struggles will not be decided on paper, but "on the ground" (Visible Collective and Paglen 2011:45) or, in the case of Ennore, in the water.

Thirdly, counter-mapping generally takes on multi-genre, multi-media formats, combining Western mapping techniques with spatial, narrative, and performative modes of knowledge production incongruent with Western cartography. This impurity resists "the hard-edged schemas of purity aimed at categorizing, dominating, and controlling the openness of possibilities" (Bailey 2007:84) and interrupts the dominant politics of knowledge production by challenging notions of what actually counts as a map (Lyons 2023; Ortega et al. 2018; Unangst 2023). But to do this, it matters who does the mapping and how. For counter-mapping to be effective, the task of defining what a map is and what it should depict and how is taken from the hands of dominant experts by those whose knowledges they silence, to enable them to represent their worlds as their own, on their own terms, and to transform it according to their own aspirations (Unangst 2023).

Counter-mapping is, therefore, simultaneously about turning knowledge against itself, mobilising one form of knowledge against another (Medina 2011), and generating political subjects who resist hard-edged schemas aimed at categorising and controlling the openness of possibilities (Bailey 2007). The fishers of Ennore found resistant paths by becoming citizen scientists, cartographers and activists, plaintiffs and organisers, not in place of being fishers, but to continue to remain fishers. Through co-production of critical knowledge along with activists, countermapping offered fishers the epistemic agency to transform themselves from victims of dominant ignorance into autonomous, knowing, political subjects.

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Data Availability Statement

The data that support the findings of this paper are available in the University of Westminster's repository at https://westminsterresearch.westminster.ac.uk/item/wq13v/reimagining-the-good-city-from-ennore-creek.

Endnote

¹ Save Ennore Creek Campaign routinely uses arts, including music, visual arts, and theatre, in its struggle. Vettiver Collective's YouTube page (https://www.youtube.com/@vettivercollective6171) has many of the productions. See for instance: a walk-through video of the "Ghosts, Monsters & Dreams" exhibition (https://www.youtube.com/watch?v=UhVTchIH4E8); the viral music video "Chennai Poromboke Paadal" (https://www.youtube.com/watch?v=82jFyeV5AHM); and the music video "Let Chennai Breathe" on air pollution in Ennore (https://www.youtube.com/watch?v=qDwU0jSKmDc).

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