



Claiming space: Contested coastal commons in Mumbai

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ABSTRACT

Many of the world's cities are located on the coast, and coastal ecologies and livelihoods are under increasing pressure from rapid urban transformations and climate change. This necessitates paying attention to how coastal spaces are understood and governed, but the spatial dimensions of urban coastal commons has received comparatively little attention. How are coastal spaces framed, understood, and contested? Drawing on scholarship on socio-spatial relations, the 'right to the city', and spatial justice, we explore these questions through tracing the contestations around the coastal commons in Mumbai, particularly focusing on the Coastal Road project and how claims of rights and access by the Koli fishing community unfolded. The case untangles the multi-scalar framings of coastal commons as places that are intimately tied up with Koli identity, versus city planners' view of coasts as mere 'conduits', with the transformation of fluid land-sea commons into legible and controllable territory. We make an argument for the notion of a 'right to the coast as commons' as being conducive for a more climate-resilient city that heeds the particular ecological interdependencies and stewardship of coastal communities.

1. Introduction

Historically, human settlements have had an affinity for the shore, for broad horizons, and the expanse of the oceans. The coasts offer sustenance and opportunities for exploration, facilitating the opening of trade routes and the flow of people, goods, and ideas. Currently, coastal areas are the most densely populated and economically active places on earth (Sachs et al., 2001; McGranahan et al., 2007), and they support important and productive ecosystems (see e.g. Nicholls, 2011) and livelihoods. Many fishing communities around the world depend on the health of coastal ecosystems for their survival (Barbier et al., 2011), not least in India (Panigrahi and Mohanty, 2012).

While congregating along the coastlines has had obvious benefits for humanity, there are threats, too, not least of which is the looming spectre of climate change. Coastal regions and cities across the globe are increasingly being exposed to the hazards of sea-level rise, floods, and storm surges (Balica et al., 2012; Hallegatte et al., 2013; Hanson et al., 2011; Nicholls, 2011; Neumann et al., 2015; Armitage et al., 2017b). Moreover, coastal ecosystems are fragile, complex, and often poorly understood. The pressures on them are increasing, not only from climate change but also from economic development interests, causing

mounting conflicts (Chu, 2006; Masalu, 2000; Morf, 2006; Stepanova and Bruckmeier, 2013; Jentoft et al., 2022).

Such pressures emphasise the need to better understand the contestations around coasts, and how they are framed and understood, who has rights to coastal spaces, what uses they are put to, and why. Coastal places 'embody historical narratives of struggle' through, for example, the construction of dykes or practices of land reclamation (Burley, 2010, DeSilvey, 2012, in Walsh and Döring, 2018). Understanding and governing coastal change requires understanding coastal spaces as socio-natural processes of continuity and change, and as meaningful places of belonging and attachment (Walsh and Döring 2018).

Much of the literature on coastal governance tends to conceptualise coasts in terms of a socio-ecological systems approach (e.g. Armitage et al., 2017a; Schlüter et al., 2019). However, as Green (2020) argues, socio-ecological systems thinking espouses a modernist society/nature binary, a separation of distinct realms of the 'social' and the 'ecological' that is untenable. Other scholars such as Castree (2013) and Swyngedouw (2004) also caution against such dualism. Generally, coasts suffer from definitional ambiguity, argues Catherine Leyshon (2018), positing that there is a need to come up with new language and concepts to critically rethink the approach to coasts. She suggests 'liminality' as a

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useful term to describe coastal spaces as unstable spatial categories (see also McCay, 2008).

To contribute to the critical reflection on coasts as liminal spaces, we find it fruitful to conceptualise coastal spaces as socially produced, drawing on Lefebvre's (1991) theory of space as an emergent phenomenon, arising out of an interaction between physical, social, and mental (or abstract) space (see section 3). In particular, we want to draw attention to *the processes of claim-making* as an important co-constitutive element in the production of coastal space. Coasts, characterised as they are by changeability and fluidity, are arguably natural manifestations of commons, understood as the cultural and natural resources that are produced and held in common (Hadjimichael, 2018) through social practices of commoning (Euler, 2018). We contend that such commoning practices arise out of, but also constitute, coastal space through sharing and maintaining cultural and ecological resources and practices of place-making and stewardship (see e.g. Bennett et al., 2022), but that that such practices are under pressure. While the fluid nature of coasts make them particularly amenable to practices of commoning, they tend to be characterised by multiple claims and contestations around rights and access (e.g. Bavinck, 2005; Hubbard, 2020). For instance, while coasts may be a natural commons, they are often under state authority (Hadjimichael, 2018) as well as subject to increasing pressures of privatisation (e.g. Cabral and Aliño, 2011), which tend to render coasts as more stable, controllable, and profitable spaces.

Our empirical focus is the metropolitan area of Mumbai, home to some twenty million people, including the artisanal fishing community known as the Kolis. Mumbai is a cosmopolitan melting pot and a magnet for migrants, rendering it a complex conglomerate of contrasts with modern high-rises and shopping malls jostling for space with slums and urban fishing villages. The city is undergoing a 'complex social, economic, and political transition into an increasingly fragmentary and polarised metropolitan space' (Gandy, 2008: 108), characterised by a balkanisation of governance responsibilities (Parthasarathy, 2016). In the coastal areas, there is immense pressure on the environment and subsistence livelihoods practised by coastal communities such as the Kolis, and there is an ongoing struggle for access to the coast.

In the next section of this paper, we briefly describe the methodological approach employed, and then move on to outline key themes in scholarly work on socio-spatial relations. We go on to describe the Koli fishing communities and the ways in which the coastal zone has been defined and regulated through the evolving Coastal Regulation Zone (CRZ) norms. We proceed to chart the conflict and ongoing contestations through the case of a large-scale infrastructure project – the Coastal Road project – and associated land reclamation on the western coast of Mumbai. Finally, we discuss these processes of conflict and contestation through the lens of socio-spatial relations, before offering some concluding reflections where we make an argument for recognising a right to the coasts as commons.

2. Methodological approach

The research was conducted as part of a project on transformation in marginal environments (TAPESTRY),¹ in which one of the cases involved Mumbai's coastal areas and the Koli fishing communities. Our initial interest was in mapping out the experiences and responses of the Koli communities to climate change. Studies have shown that climate change uncertainties are increasing the vulnerability of the Kolis (Senapati and Gupta, 2017; Debnath et al., 2016). However, following the first round of exploratory interviews, it became clear that while climate change was a concern, it was not the most pressing issue. The construction of numerous large-scale infrastructure projects along the coast,

most notably the Coastal Road project, was perceived as more immediately threatening in that these would severely restrict the Kolis' access to coastal land and waters. Consequently, we became interested in exploring in more detail the struggles over access to coastal spaces in a rapidly transforming urban context (see Fig. 1).

The study draws on multiple field visits over a five-year period from 2015 to 2020 and relies on a qualitative methodology for data collection and analysis. During this period, we conducted group discussions, semi-structured and unstructured interviews with key actors, including fishers from several *koliwad*s (the urban fishing villages or hamlets that most Kolis live in) located in the neighbourhoods of Versova, Khar Danda, Mahim, Colaba, Worli and Juhu, settlements along Mumbai's western shoreline that are affected by infrastructure developments. In addition, we interviewed planners from key urban authorities such as the Mumbai Metropolitan Regional Development Authority (MMRDA) and the Bombay Municipal Corporation (BMC), as well as academics, environmental activists, legal experts, and journalists. We also attended a public hearing at one of the *koliwad*s (Khar Danda, just before the Covid-19 outbreak in 2020) organised by project implementers (a private company and state agencies) and affected *koliwad*s. Digital interviews were conducted in 2020 when travel was restricted due to the pandemic. In total we interacted with more than 100 respondents and held five group discussions.

Respondents were selected based on purposive sampling and snowballing techniques. Interviews were recorded and transcribed where possible, and this information was supplemented by participant observation and transect walks. In addition, we have surveyed numerous policy and legal documents, media reports, and secondary and grey literature dealing with issues of coastal regulation, fishing community land tenure, and urban planning. We visited the *koliwad*s in different seasons and interviewed a cross-section of respondents to get an impression of the diverse perspectives of women, men, youth, and migrant workers. Data analysis proceeded along qualitative lines, where we identified key themes and actors through interviews and group discussions.

3. Making space

3.1. The production of space and place

The sociology of space is a fertile field. Space itself may be 'primordially given, but the organisation, use, and meaning of space is a product of social translation, transformation, and experience; space is constituted through social relations, but also plays a key role in shaping them' (Soja, 1989: 79-80). When exploring socio-spatial relations, it is important to address multiple dimensions of socio-spatial relations simultaneously, such as place, scale, and territory, in order to comprehensively consider the 'polymorphic, multidimensional character of sociospatial relations' (Jessop et al., 2008: 389).

Drawing on Lefebvre's (1991) work on the production of space, we take as the point of departure the emphasis on the social production of space as being intimately tied up with the idea of place and representation; it is the result of continuous interaction between society, space, and the individual over time. His conception of socially produced space rests on three main elements: 'perceived space' (*le percu*), 'conceived space' (*le concu*), and 'lived space' (*le vecu*). Lefebvre articulates a theory of the produced nature of social space and the need to understand its physical (material) surroundings (perceived space), the mental space as theoretically conceived by planners (through e.g. land use maps), and lived space as experienced through everyday spatial practices (Butler, 2005; Butler, 2003; Lefebvre, 1991).

Massey (2005), building on Lefebvre, highlights the openness of space, emphasising the imagination of space as a 'simultaneity of stories-so-far' (ibid.: 50) and as 'open, multiple, and relational, unfinished and always becoming – a dynamic simultaneous multiplicity' (ibid.: 50). Space, for Massey, is highly variegated and dynamically evolving, while

¹ Transformation as Praxis: Exploring Socially Just and Transdisciplinary Pathways to Sustainability in Marginal Environments, supported by Belmont/NORFACE, and the Research Council of Norway (grant no. 289957).

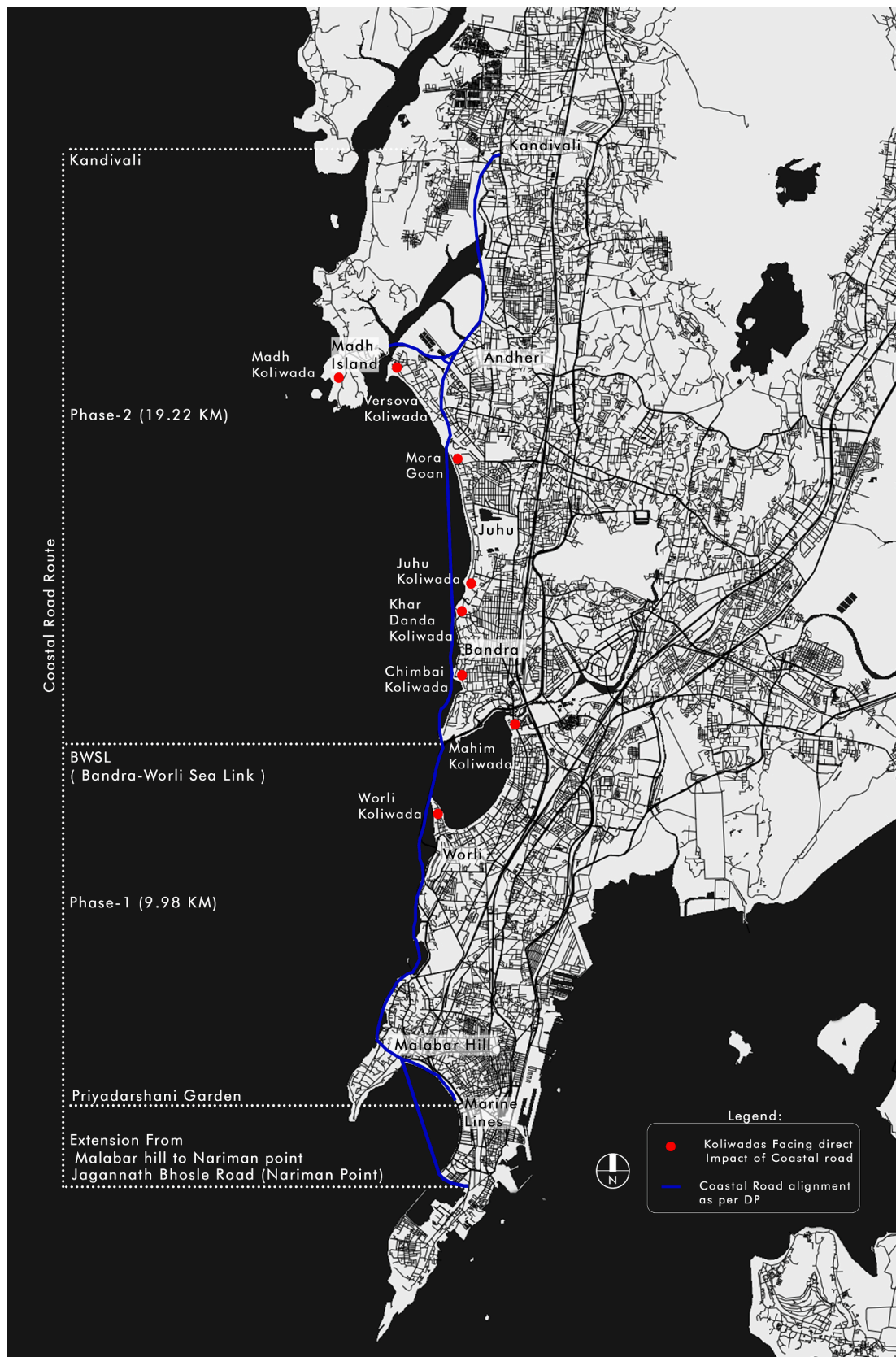


Fig. 1. Map of study area, design by Bombay61 Studio.

being at the same time intimately tied up with a sense of place (Massey, 2005). The notion of ‘place’ can be conceptualised simply as a ‘meaningful location’ (Cresswell, 2013: 4), a site of everyday life and social interaction, which has ‘temporal depth and is bound up with collective memory and social identity’ (Jessop, 2005: 424). The boundaries of a place contain and connect, serving as a ‘strategically selective social and institutional setting for direct interactions that privilege some identities and interests over others’ (Jessop, 2005: 424). Places are not essentialised entities, and should be properly perceived of as processes rather than things (Leitner et al., 2008). ‘Such processes of place-making involve the set of social, political, and material processes by which people iteratively create and recreate the experienced geographies in which they live’ (Pierce et al., 2011: 54).

From the scholarly work on understanding the production of space and place, there emerged the notion of ‘the right to the city’ (e.g. Harvey, 2008; Lefebvre, 1996; Mitchell, 2003; Parnell and Pieterse, 2010; Purcell, 2014; Purcell, 2013) linked to an overarching ideal of ‘spatial justice’ (e.g. Marcuse, 2009; Soja, 2013). While spatial justice arguably is an unachievable ideal – given the often multiple, legitimate, and incommensurate claims to space (Pierce, 2019) – it can still serve a useful purpose as a *leitmotif* for social struggles over space (Leitner et al., 2008). The right to the city has become a rallying cry for drawing attention to the injustices of neoliberal city planning and how it tends to accelerate marginalisation (Pierce et al., 2016). The right to the city encompasses the right of appropriation – which refers to inhabitants’ right to make use of urban spaces, emphasising use value rather than exchange or market value (Lefebvre, 1996) – and the right of participation, articulated as a right to be a part of decision-making processes which produce space (Pierce et al., 2016).

The nature of such rights is ambiguous, as rights are negotiated, contested, and remain unstable for a variety of reasons, especially in dynamic urban spaces in the Global South (Attoh, 2011). The universalist conception of rights tends to obscure the dynamic and ongoing processes of claim-making and negotiating of rights (see Attoh, 2011). References to appropriation and participation in ‘rights to the city’ scholarship clearly build on the social and cultural notions of rights as differential and negotiated, rather than the more universal and fixed natural or civil notions of rights. Therefore, Pierce et al. argue that ‘seeing rights as multiple and partial allows us to engage more deeply with the processes through which rights are understood and contested in the discourse surrounding conflicts over the use of urban space’ (Pierce et al., 2016: 84). They argue for a ‘rights in place’ approach, which involves exploring how rights are created, negotiated, and contested, considering i) the relationships between different rights claimants, ii) the differentiated goals of those claimants, iii) the rights claims themselves, iv) how those claims entail competing urban place-frames, and v) how the successes and failures of these different claimants in enrolling others shape the possibility for resisting oppressive hegemonies (Pierce et al., 2016: 84). We argue that the processes of claim-making at different scales – from claims to space as localised places of attachment to regional zoning practices – do not happen ‘in’ space, but rather are practices that co-constitute the social production of space itself.

3.2. Coastal spaces as ‘places’

While much of the literature on social struggles over space and spatial justice has been concerned with the ‘city’ and the ‘urban’, we are interested in expanding this gaze to include the ‘coast’ – or, more specifically, the ‘urban coast’. Coastal landscapes are in continuous flux, characterised by the diurnal ebb and flow of tides, the expanding and contracting shore, the sudden and extreme events of storm surges, inundation, and destruction. Coasts are spaces of fluid transition, at

times characterised by ‘extreme and powerful dynamics’ (Walsh and Döring, 2018: 146). This is where biophysical systems meet, the salt and fresh water, the wet and the dry. It is the site where terrestrial and marine ecosystems, hydrology, and geomorphologies mesh, but it is not itself entirely marine or terrestrial (Leyshon, 2018).

How, then, does one capture what a ‘coast’ is? The conventional use of a single noun implies some sort of stability, which belies the heterogeneous nature of coasts. Coasts have variously been conceived of as being edges, margins, boundaries, or interfaces, which open for diverse imaginaries and governance approaches. As mentioned in the introduction, Leyshon (2018) ventures the notion of ‘liminality’ to describe the space where land and sea meet, noting that coasts are ‘... relational, fungible, material, symbolic, and processural’ (Leyshon, 2018: 150).

It is the fluidity of land–water relations that makes coasts’ legibility as territory challenging (Blomley, 2019). Coasts often mark territorial boundaries and processes of socio-natural coastal change that can be better understood by appreciating the coast as ‘place’, as culturally constituted sites imbued with meaning and a sense of attachment and belonging (Walsh and Döring, 2018). Coasts are constituted, then, through the locally and specifically place-bound, tied up with people’s interactions, spatial practices, and sense of identity. But coasts are also constituted through larger scales of ‘coastal zones and categorisations regulated in particular governance practices and abstractions of space, and imaginaries of what coasts should be. These practices, we posit, can be regarded as processes of claim-making, of claiming coasts as localised places of attachment versus claiming coasts as abstract categorisations through zoning practices. The production of coastal spaces thus arises out of the interaction between the changeable, physical natures of coasts (perceived space) as well as the tension between coasts as constituted through ‘lived’ space – social processes of place-making and commoning practices – and the ‘conceived’ space of coasts as particular zones, amenable to conservation, territorialisation, or development initiatives with their attendant imaginaries, or place-frames.

4. Findings: Making coastal spaces in Mumbai

4.1. Mumbai’s coast and the Kolis

4.1.1. The Mumbai coast as ‘place’

Mumbai’s identity is closely associated with the material nature of its coastal geography. Centuries of land reclamation have forged a contiguous landmass of the original seven islands that made up Mumbai, in an enduring enterprise of conquering the sea. The ideas of modernity and urbanism that permeated colonial and post-colonial city administrators left little room for accommodating what Swaminathan (2014: 280) refers to as the ‘archipelagic logic of the sea as an active participant in daily narratives’. The present city still comprises estuaries, wetlands, marshlands, and mangroves which make up a patchwork of ecologically diverse sites and landscapes. Of particular importance are the coastal mangroves. Their extensive networks of aerial roots dampen waves, and serve as protective buffers against high tides and flooding (Baldwin, 1995, cited in Kaujalgi, 2010: 9), and mitigate the effects of climate change (McLeod and Salm, 2006). Moreover, they sequester carbon, filter pollutants, and are important spawning ground for fish, on which coastal fisherfolk depend (Chouhan et al., 2016).

The coast and its mangroves are an intrinsic part of the lives of the Kolis, long-settled artisanal fisherfolk, whose livelihoods are intimately intertwined with the dynamics of the coastal landscape. If Mumbai can be said to have an indigenous community, it is widely accepted that this would be the Kolis (Tindall, 1992), which makes the Kolis unique. In other parts of the world, indigenous communities tend to reside primarily in non-urban, sparsely populated, largely rural terrain

(mountains, plains, forests, islands). The Kolis are an exception in that they comprise a distinct natural-resource-dependent community within a modern metropolis (Parthasarathy, 2011).

The Kolis can trace their settlement in the Mumbai area for at least four centuries and take pride in their claim to being the original inhabitants of the city (Warhaft, 2001). They view the coastal areas as their home, and the sea as taking an active part in their lives, being imbued with spirituality and a will of its own. Frequent weather upheavals, especially during the monsoon season, have given rise to certain rituals – *narial-poornima* – to worship the Sea Goddess, Mumba Devi,² before going on fishing expeditions (Debnath et al., 2016; Warhaft, 2001). The Kolis also revere, protect, and are deeply connected with the coastal mangroves, which form an important element of their cultural practices. In this way, the Kolis have a distinct cultural heritage and sense of the coast as their ‘place of home’, intimately associated with their dependence on the sea and their stewardship of the mangroves. While fishing is a threatened livelihood (Nair, 2021), there is still a strong sense of cultural unity, as attested to by our interviews and interactions with diverse Koli communities (see Fig. 2 and Fig. 3).

4.1.2. Evolving and contested rights to coastal spaces

The nature of the Kolis’ relations with and rights of access to coastal areas has shifted over time. In 1963, a circular based on an extract from 1771 from the time of Portuguese settlement and colonisation, noted that priority of access to coastal spaces should be given to Koli communities for fisheries-related activities. The 1771 extract also specifically mentions fishing rights (according to our interview with Koli representatives at Mahim, 24 January 2020). However, as time has passed, this priority and first formal recognition has been watered down. Many of the open spaces along the coast that were previously considered commons used for boat storage, trade, and for drying of fish, are increasingly being encroached on by urban development. Currently, there is a mix of coexisting and overlapping formal and informal regimes of use rights to the coastal commons (Wagh 2017).

The koliwadās have over time been engulfed by urban expansion, and now exist in a state of flux as ‘urban villages.’ There are about eight such koliwadās in the core of the city itself, and another 22 when one scales up to the greater metropolitan areas (interview with Koli representatives at Mahim, 20 January 2020). The koliwadās are heterogeneous places; each village is unique. Not only are Kolis living in these



Fig. 2. The KFreseolis of Mumbai - artisanal fishing in an urban metropolis. Photo: Hans Nicolai Adam.

² It is from this Sea Goddess that the city derives its name, see Bapat JB and Mabbett I (2016) *Conceiving the goddess: transformation and appropriation in indic religions*. Monash University Publishing.



Fig. 3. Crabs caught by fisher from the Versova mangroves. Photo: Gautam Ruparel, Bombay61 team.

areas, but migrants from states such as Gujarat, Andhra Pradesh, Uttar Pradesh, and Odisha have also made their mark on these settlements, rendering them sites of diversity and heterogeneity. However, in Mumbai's current development plan 2014–2034, the term 'koliwada' is not even mentioned. As a consequence, in 2018 a process of demarcation began, with a survey of all the fishing villages. The union leaders involved in this process encouraged the formation of associations in the koliwadadas to facilitate coordination and mobilisation around the process of demarcation (interview with Koli representatives at Mahim, January 2020). There is a sense of continuous marginalisation, as 'the Koli community has always had to sacrifice lands for infrastructure, amenities, for the "greater good", and to meet the needs of urbanisation' (interview with Koli representatives at Mahim, 20 January 2020). The same respondents mentioned that when concerns are raised by the Kolis, especially concerning land and fishing rights, the court simply dismiss these, stating that 'we can't look after every concern from a smaller group, you [the Kolis] are not fishing anyway'. There is a keen sense of deprivation, as Kolis have had to give up land and resources to meet the needs of expanding urbanisation.

4.1.3. Multiple and mounting pressures

There are increasing strains on the Koli community's traditional livelihood practices. Many respondents pointed out how the primary activity of fishing has undergone massive changes owing to deteriorating water quality, among other factors. The extent of pollution is so widespread that many of the city's creeks have become uninhabitable for aquatic species, and marine life has been severely affected. According to the head of the boat owners/fishers' association, 'eighty per cent of fish species are decreasing' and part of the problem is that the government is permitting the cutting down of mangroves, the main spawning ground of fish, to make way for construction works (interview with Koli representatives, 24 January 2020).

A common view expressed by respondents was that until the early 2000s, most fishers needed to go only daily into the sea, covering a distance of a few kilometres to get a decent fish catch full of variety. A voyage that can generate some revenue cannot be covered in the space of one or two days now – the journey must be at least a week – and the variety of fish caught has dwindled. In addition, labour and fuel costs have increased and the fisherfolk have to go further out to sea, often under challenging weather conditions, to get a profitable fish catch. The

increased riskiness of fishing is causing the younger generation in particular to consider moving into other occupations. Still, there is a powerful sense of cultural unity and identity tied to place:

After the rainy season has ended, we celebrate *narali poornima* in the high tide, on the full moon day. It is the most favourite festival of the Kolis and even [surpasses] Holi. It shows our togetherness as a community, and we pray for a good catch this year (interview with Koli representatives at Mahim, 24 January 2020).

While the coast as 'lived' space is characterised by heterogeneity and diversity, the Kolis' culturally embedded connections with the coast as 'place' remain strong, being deeply integrated into their lives, cultural practices, and social fabric. In the next section we explore coasts as conceived of by planners and bureaucrats, through the framework of the Coastal Regulatory Zone (CRZ).

4.2. Regulating coastal space

4.2.1. The Coastal Regulation Zone (CRZ)

An important aspect of the production of space is the way that it is mentally conceived by urban planners and bureaucrats, through planning and land use maps. In Maharashtra and Mumbai, urban coastal spaces are also conceived of in particular ways by the regulatory practices embedded in the CRZ, and these regulations shape the rights and access practices of Kolis.

The CRZ Notification of 1991 was made under the provisions of the Environmental Protection Act (1986) to ensure the protection of Indian coastal environments, as well as the social and livelihood security of fishing communities. It was an attempt to establish a regulatory apparatus to guide the practices in coastal areas by compartmentalising the coastal landscapes into 'zones' with attendant restrictions and permissions. Used generically, 'coastal zones' could be referred to as 'the area [s] of interaction between land and sea', including how these are influenced by changes in both terrestrial and marine environment (Pernetta and Milliman 1995, cited in Chouhan et al., 2016: 50). The CRZ defines the coast as the area between the low and high tide lines,

encompassing both the ‘wet’ and the ‘dry’ coast.³ It sets out four main categories, namely CRZ I (ecologically sensitive areas), CRZ II (built-up areas), CRZ III (rural areas), and CRZ IV (territorial waters and tidal-influenced water bodies) (Sharma, 2011). The CRZ operates at the regional scale, and it is the Maharashtra Coastal Zone Management Authority and the BMC that are responsible for implementing rules and making integrated coastal zone management plans.

Since its creation, the 1991 CRZ has been amended more than 20 times. In 2011, another notification was published (followed by a subsequent one in 2019), with the intention of strengthening the protection of fishing communities and fragile ecosystems along the coast. Three objectives were set out in the notification: i) Protection of livelihoods of traditional fisher communities, ii) preservation of coastal ecology, and iii) promotion of economic activity that have necessarily to be located in the coastal regions (Sharma, 2011). There is clearly an inherent tension between these objectives.

The four categories of CRZs have been kept with additional details of how these are to be determined (Chouhan et al., 2017).⁴ The regulation states that koliwadās should be mapped and declared as CRZ III (i.e. rural) (Ministry of Environment and Forests, 2011: 16), which is somewhat intriguing, given their very urban locations.

Interestingly, the CRZ states that dwellings in the coastal zone belonging to fisherfolk and tribals, which zone has not been formally recognised by concerned authorities, shall be regularised according to the conditions that they are not used for any commercial purposes, and not sold or transferred to ‘non-traditional’ coastal communities. There is also recognition of rights to space for fishery associated activities (such as drying of nets and boat storage) (Ministry of Environment and Forests, 2011: 9, also interview with Koli lawyer, 24 January 2022). While the state does not explicitly acknowledge the existence of commons in the coastal areas, the idea of coastal spaces as commons is implicitly recognised (Wagh, 2017).

While the notification of 2011 prohibited reclamation and development activities in ecologically fragile areas, many inputs from the Koli community had not been taken into account (Sharma, 2011), and some Kolis objected to certain clauses, stating that these seriously ‘compromised livelihood and habitation rights’ (Chouhan et al., 2017: 974). Particularly worrying to many fishers was the fact that the notification included several special dispensations, one of which concerned the Greater Mumbai area. These special dispensations allowed for the relaxation of regulations to accommodate certain development projects in CRZ I areas, despite the fact that the Ministry had agreed to drop this provision during negotiations preceding the release of the regulation, given the tremendous scope it could open for misuse (Sharma, 2011; Vyas, 2011). Therefore, while ostensibly safeguarding the interests of fishing communities, these special provisions effectively undermined such protective measures by allowing development projects to go ahead in coastal areas vital to Koli livelihoods. In the words of a prominent

city-based academic commenting on the developmental approach by the urban authorities: ‘I don’t see it as an issue of environment versus development. I really see it as a conflict between classes of people, between scales of planning, and between trajectories of urbanisation’ (interview 25 April 2016, Mumbai). The special dispensation for the greater Mumbai areas literally paved the way for a large-scale infrastructure project, such as the Coastal Road, to be constructed in the city’s ecologically sensitive coastal zone.

4.3. The Coastal Road project

4.3.1. Paving the way for the Coastal Road

While the CRZ 2011 did not permit reclamation of land from the sea, the regulation was amended in 2015 to make it possible to reclaim land for development of infrastructure projects.⁵ The term ‘green reclamation’ was used to make the amendment more palatable (Wagh, 2017; see also Udas-Mankikar, 2020). This regulatory change permitted the city authorities to push ahead with the Coastal Road project,⁶ involving the reclamation of a total of 111 ha. The project entails constructing an eight-lane, 29.2 km expressway along Mumbai’s western shoreline, linking the northern and southern parts of the city (see Fig. 4). It is designed mainly for private vehicles, catering for the two to three per cent of Mumbai’s residents who own a car. It is estimated to cost about US\$ 1.7 billion of taxpayers’ money, as it is toll-free (Johari, 2019). Because of the scale of the project and geographic scope, responsibility was split between two authorities. The BMC is in charge of a 9.9 km section (referred to as the south section, running from Marine Drive to Worli), while the Maharashtra State Road Development Corporation (MSRDC) is overseeing the Versova–Bandra sea link (Mahale and Deshpande, 2018).

The go-ahead for the project came in May 2017, when the final environmental clearance was issued by the Ministry of Environment and Forests (MoEF), even though a proper impact assessment had not been carried out (Wagh, 2020; Udas-Mankikar, 2020). The construction will have severely negative impacts, threatening marine life and the livelihoods of the fishing communities (Wagh, 2020). According to Wagh (interview 22 January 2020), ‘in the EIA there is diverse ways to hide and conceal knowledge [...] Qualitative aspects that document socio-ecological changes have been ignored by the court on the grounds that it is not a quantitative assessment.’

4.3.2. Iconic infrastructure and reclaiming of land ‘in the public interest’

The project planners framed the project as being in the ‘public interest’ and ‘green’ in that it would reduce transport times, making mobility more efficient and ‘decongesting’ the city. The project also fits into the global trend of symbolic and iconic infrastructure that is part of the ‘proliferation of megaprojects of iconic development and associated infrastructures’ (MacLeod, 2011: 2630). Mumbai’s planners want the city to be in the league of global cities with characteristic and recognisable infrastructure features that display power and status.

Much was made of the plans to convert some of the reclaimed land into public spaces such as parks, cycle lanes, and running tracks (Virani, 2021). According to activists, claims regarding the nature and extent of public green spaces that would be created were highly misleading (Singh, 2019). Many protesters were not buying into the ‘green spaces’ rhetoric. As one representative from a neighbourhood in southern Mumbai stated:

⁵ <https://www.ielrc.org/content/e1146.pdf>. The 2019 notification further diluted the protective measures.

⁶ The project was first proposed in 2012 and was taken up as an election promise by the Bharatiya Janata Party (BJP), which came to power in Maharashtra in 2014 (Johari A (2019) As Mumbai’s coastal road construction speeds up, even car owners are joining the protest against it. *Scroll*).

³ The coastal areas of creeks, seas, bays, rivers, and backwaters that get affected by tides up to 500 m from the high tide line, and the land area between the low tide line and the high tide line, are declared as CRZ.

⁴ Including a distinction between CRZ1a and b. CRZ-I, – A. The areas that are ecologically sensitive and the geomorphological features which play a role in the maintaining the integrity of the coast, - (a) Mangroves, in case mangrove area is more than 1000 square metres, a buffer of 50 m along the mangroves shall be provided; (b) Corals and coral reefs and associated biodiversity; (c) Sand dunes; (d) Mudflats which are biologically active; (e) National parks, marine parks, sanctuaries, reserve forests, wildlife habitats and other protected areas under the provisions of Wild Life (Protection) Act, 1972 (53 of 1972), the Forest (Conservation) Act, 1980 (69 of 1980) or Environment (Protection) Act, 1986 (29 of 1986); including Biosphere Reserve [as enumerated in para V(4) (b)]*17 (f) Salt marshes; (g) Turtle nesting grounds; (h) Horse shoe crabs habitats; (i) Sea grass beds; (j) Nesting grounds of birds; (k) Areas or structures of archaeological importance and heritage sites. B. The area between low tide line and high tide line.



Fig. 4. The Coastal Road (the photo is a representative image from BIM's YouTube channel).

We are against the reclamation of the land for the project. It is nothing but a gimmick to create prime real estate with taxpayers' money. The so-called green spaces that will be created [are] only 12 per cent of the reclaimed land [associated with the most] expensive road in India (Sooni Taraporevala, cited in Naik, 2019).

The reclamation was also needed to build a partially submerged sea wall to protect against tides, tsunamis, and floods. The efficacy of such a structure is doubtful, however, as it will obstruct natural underground drainage (Virani, 2021). The project was described as potentially 'mal-adaptive' (IPCC, 2022; Senapati and Gupta, 2017) against projected climate change impacts, particularly sea-level rise. Flooding is a perennial threat, and the city experienced the worst urban flood event in modern Indian history in 2005 when hundreds of people died (see e.g. Adam et al., 2021). Making more of the shoreline impermeable leaves rain and high tide water with nowhere to flow. 'As it is, the sea level is rising, Mumbai already has a huge flooding problem, and the Coastal Road is a disaster in the making' (Sooni Taraporevala, cited in Naik, 2019).

4.4. Networks of resistance

Before construction work began, there was no public consultation, prior engagement, or any attempt to involve citizens and communities who would be affected by the project, reflecting the general negligence of participation in planning processes in Mumbai (Zerah, 2009). The lack of prior consultation and spaces for proper participation was part of the reason why the project triggered a raft of public interest litigations from urban planners and transport experts, environmental NGOs, Koli representatives from affected koliwadadas, and residents in neighbourhoods located adjacent to the coastal areas where construction was taking place. Alliances were forged between the Koli communities and other actors, such as lawyers, academics, activists, and NGOs. A petition was filed by the Collective for Spatial Alternatives (CSA) which is a group of urban designers, architects, and planners working closely with the Koli communities. Petitions were submitted by two fishing cooperatives from the Worli koliwada,⁷ and protests also came from the Khar Danda, Juhu, and Juhu Moragaon koliwadadas. Several environmental NGOs, including the Conservation Action Trust (CAT) and Vanashakti, protested against the project, with CAT pointing out that environment and wildlife clearances had not been granted for the

project (Wagh, 2020).

The public litigations were handled by the regular court system, going first to the Bombay High Court, and then to the Supreme Court.⁸ In July 2019, in response to the petitions, the Bombay High Court stayed the work on the project. In a detailed judgement, the Court ordered the Municipal Corporation of Greater Mumbai (MCGM) to cease work until fresh environmental clearance had been obtained from the MoEF. The MCGM appealed the ruling, and the case was referred to the Supreme Court, which lifted the stay in December 2019. However, the Supreme Court did state that the project could not reclaim more land than was needed for the project itself, acknowledging the point made by several petitioners that the project was reclaiming more land than what was permitted.

While the neighbourhood residents were mainly concerned with the ecological destruction and the level of pollution and construction noise, for the Kolis, it was a question of livelihoods, identity, and sense of place. 'This is a cultural issue – a question of our identity, a question of our survival' (Daileda, 2020), and a 'path to permanent estrangement from [the Kolis'] land and history' (Daileda, 2020). 'Some people are forgetting their culture. But you can combine an urban identity, wearing jeans in an urban setting, and traditional clothes at home' (interview with boat owners' association leader, who also held a government job, 22 January 2020). Once the construction started, Kolis from the Worli koliwada were barred from casting their fishing nets and practising artisanal fishing (i.e., using non-mechanised or small motor-driven boats). Over 11 000 people residing in the Worli area could be affected by the ecological damage caused by the construction (Wagh, 2019). There are about 700 artisanal fishers in the Worli koliwada, and their fishing activities are largely concentrated in the shallow waters, making them particularly dependent on the tidal movements and overall health of the coastal ecosystems to sustain their fishing practices. The leader of the Worli Nakhwa Matsya Vyavsay Sahakari Society states: 'Fishing is our tradition and our right. We know exactly what kind of fish

⁷ Worli Koliwada Nakhwa Matsyavyavasay Sahakari Society Ltd and Worli Machchimar Sarvoday Sahakari Society.

⁸ One would perhaps have expected that these litigations would be handled by the National Green Tribunal, which was established in 2010 to handle cases specifically related to environmental conflicts. It was specifically set up in response to the increasing development pressure on sensitive ecosystems and the people depending on them. It has passed several landmark judgements, such as the one in 2015 when it ordered the Jawaharlal Nehru Port Trust and other involved authorities to pay compensation to several Koli villages in Uran (just outside of Mumbai), for causing destruction of the coastal areas. While this was seen as a significant victory at the time, the NGT's powers and independence have since been curtailed through a variety of means.

is available at what time and in which part of the sea' (Kandukuri, 2019). He recounts how the shore that is being reclaimed for this road is one of the most fertile breeding spaces for lobsters and black tiger prawns, but this marine life is being destroyed by the dumping of debris.

Different social and political organisations such as co-operatives are very active in the koliwadās. They align themselves to competing political parties and interests, with oftentimes opposing views on development interventions. However, the Coastal Road project served to unite many of them in joint action. 'We need collective action ... because of the Coastal Road project, people are finally coming together' (interview with Koli representative, 22 January 2020). Four koliwadās – Chimbai, Khar Danda, Juhu, and Versova – which are all areas affected by the Bandra–Versova stretch of the project – organised several information meetings and brought in representatives from the project to be confronted with the Kolis' concerns. Many Kolis believe that their core concerns have been left out of petitions. 'The government and citizens look at the "greater good" and Kolis are instead told that they do not own Mumbai and that the government feels they will be able to get rid of the Kolis with compensation' (interview with Koli representatives, 24 January 2020).

The extent of consultation after the project had started left much to be desired. One public hearing on the Coastal Road project was attended by the authors in January 2020. It was intended to be a participatory hearing where project implementers and the affected community could discuss the road section passing along four koliwadās. While well attended by the Koli fisherfolk, no representative of the implementing agency (the MSRDC) showed up; therefore, it was left to the contractor to lead the hearing. The contractor's representative was a former police officer from out of state who did not know the local language (Marathi). This meant that the discussion became a perfunctory hearing that only concentrated on presenting the project without any scope for feedback. After the hearing, the Koli fisherfolk pointed out that they were open to discussion but had not been given the space to do so. In a vote-taking of participants at the end of the meeting, all four koliwadās disapproved of the plan. 'The people designing and working on the project are engineers who don't like fish [don't eat it]. What report would an executive engineer produce? The people designing the project don't have the interest of the community in mind' (interview with Koli representative, 22 January 2020).

Other koliwadās in the city were also affected and engaged. A member of the Macchimar Sarvodaya Co-operative Society from the Cuffe Parade koliwada said:

The government is using *our* land for project-related construction such as jetties, reclaiming several acres of the sea, displacing our homes, taking up the space where we park our boats, repair our fishing nets, or dry our fish. In return, we get empty promises that our demands will be met (Hindustan Times, 2 October 2019).

The Coastal Road project has caused communities to come together in resistance and mobilisation, advocating for their rights to the coastal spaces they consider theirs, and which are so essential to artisanal livelihoods. However, their resistance efforts were restrained by the onset of the Covid-19 pandemic.

4.5. Shrinking the space for physical mobilisation

The pandemic shaped the spaces for mobilisation in multiple ways. It allowed the authorities to grasp the opportunity to speed up project work, forcing much of the protest movement to move into virtual spaces, and significantly slowing down court proceedings. The Covid-19 outbreak also shifted mobilisation from physical gatherings to virtual campaigns, engaging in 'scale-jumping' (Smith, 1996; Swyngedouw, 2004). The campaign 'Save Our Coasts' (SOC) was launched on multiple online platforms, including YouTube, Twitter, WhatsApp, and

Facebook, informing about the latest updates, and trying to reach out to a larger audience.

With the benefit of hindsight, the SOC organiser said that more should have been done to get people onto the streets, to mobilise physically, but the campaigners were preoccupied with following the legal proceedings and chasing the case in the courts, as well as having a presence in the media. With the onset of the pandemic, they lost a great deal of momentum for physical mobilisation and reaching out to Marathi-speakers. The SOC organiser also pointed out that it was a question of visibility, in that most people were not aware of what was happening. The ongoing work could only be viewed by those travelling along Marine Drive.

I think on-ground mobilisation is really the only way forward. Social media helps to build a presence among the kind of English-speaking elite and educated people. But the core constituency, whose interests are really being hurt [...] are the marginal communities, especially along the coast. The slum dwellers, the people who will be most affected by sea level rise, by diversion of government funds, by under-investment in public transport. And there is really no way for us to reach them online. To some extent, this is a language barrier. Unfortunately, most of the people organising this are from the affluent English-speaking elite.

(Interview with SOC organiser, October 2020).

Another crucial factor of the pandemic that shaped the mobilisation efforts, was how it slowed down court proceedings. At that point, the courts were transitioning to video conferencing, which slowed the process, also because the conferencing software did not function properly which caused at least two months' delay.

According to the SOC organiser, construction of the road itself had gained too much momentum to be halted, so the fight was now concentrating on the reclamation processes.

A lot of people are now talking about shifting the attention to dealing with what happens to the land [...] what I've heard from people is that they think that the land will be created if it's locked up in litigation, then they'll allow and enable slums to grow up there. And then the government can say, 'Oh there are slums here, we can clear it and build buildings here [with] a profit for the developers' [...] generally it is pretty openly accepted that the government is fully in the pocket of real estate and construction. And on the same note – a lot of what they have been selling the project as, is saying a lot of the reclaimed land will be open space, it will be gardens and running tracks and what have you. And they say in the city that is so starved for space, how can you have an objection to having more green space, it'll be great for everyone.

(Interview with SOC organiser, October 2020).

Moving on from the initial pandemic phase, the resistance and mobilisation underwent notable changes. During the latter half of 2021, various organisations, and groups sympathetic to the Koli fisherfolks' cause engaged in far more organised on-the-ground and onsite protests, infused with a sense of increasing distrust of the authorities. Beginning with *Nariyal Poornima* in 2021, protests traversed the land and made their mark with hundreds of boats being used for protests on the coast, with Worli as a focal point.⁹ Regular daytime and night vigil marches took place in various koliwadās of the city, striking a solidarity pitch with Worli koliwada fishers. The protesters were often joined by local residents, widening the network of mobilisation, and further strengthening their resolve.¹⁰

⁹ https://www.youtube.com/watch?v=wx_QSwC2AF4.

¹⁰ https://www.youtube.com/watch?v=YIDn7jd9_9s.

5. Discussion

5.1. The coast as 'place' versus the coast as 'conduit'

While many cities are coastal owing to humanity's inclination to settle along coastlines, there has been relatively little attention paid to how (urban) coasts are understood and how rights and access to coastal spaces are perceived and negotiated, and with what attendant framings–place-frames, following Pierce et al.'s (2016) terminology, or 'stories-so-far' following Massey's conception (2005). We contend that it is useful to think about coastal spaces as being socially produced through the interaction of perceived, conceived, and lived spaces, and to pay particular attention to the processes of claim-making as an integral, constitutive element of the production of coastal space.

In the coastal city of Mumbai, the Kolis have a distinct identity as an urban indigenous group, owing to their long history of settlement along the city's coastline. Their identity as artisanal fishers, and spatial practices of commoning, their 'lived' space, contributes to creating and re-creating the coastal spaces as place, as cultural and ecological commons bound up with deep-rooted meaning, collective memory and social identity (Jessop, 2005). While the Kolis are a heterogeneous community where migrants make up a large proportion of the population in koliwadās and many Kolis are seeking alternative livelihoods, there is still a strong cultural group identity which is intimately connected with the coastal landscapes. The coastal land and waters are imbued with spiritual importance, reflected through continuing practices of paying obeisance to the Sea Goddess to protect against unstable weather, storms, and floods, and the continuous observation of ceremonies and rituals associated with the practice of fishing (Nair, 2021; Debnath et al., 2016; Bapat and Mabbett, 2016).

The Kolis' long history of settlement on the coast has given rise to a partial recognition of their rights to coastal land and waters reflected in the regulatory apparatus of the CRZ that conceives coastal spaces in neatly compartmentalised categories, but which does not explicitly recognise the coast as commons. While the original purpose of the CRZ was to ensure the protection of Kolis' customary rights to use the coastal commons, this protection was effectively undermined by the addition of the clause which allowed the construction of coastal roads, giving city authorities the mandate to physically transform coastal landscapes. The planners' view of the coast was not considering it as a 'place', a living space for the Koli communities, but rather conceiving of it as a 'conduit', to use Swaminathan's apt phrase (Swaminathan, 2014). The coast is regarded as a barren stretch of land that the city authorities can lay claim to and convert into an iconic infrastructure project.

5.2. Transforming water into territory

To make the permission of land reclamation more palatable, the authorities highlighted the 'public' nature of the 'green' spaces that would be created alongside the expressway itself, emphasising that these would be public spaces open to all, such as parks and cycle lanes. However, such public spaces are narrowly understood (Parikh, 2021). As argued by the architect Alan Abraham, these so-called 'green' spaces will be useless, squeezed in between roads, making them virtually inaccessible, and views of the sea will be obstructed (Virani, 2021). There is a sense among ordinary citizens and pundits alike that it is a strategic ploy to pander to the city's powerful estate developers (Indorwala, 2015). The physical transformation of water into land effectively constitutes a 'reworking of land–water commons into a restrictive propertied regime' (Parikh, 2021: 272). By reclaiming land from the sea, the planners seek to bring under control the liminal nature of the coast (Leyshon, 2018), trying to tame the fluidity of land–water relations and make the coast legible as territory (Blomley, 2019) that the city authorities can develop. The city authorities' marshalling of the scalar argument of the larger 'public interest' that would be putatively served by these 'green' spaces thus creates a whole new set of rights relations.

5.3. Claiming spaces

The Kolis' claiming of a right to coastal space includes the right of participation, to be a part of decision-making processes – the processes which form part of the production of space (Pierce et al., 2016). Denied this right, and constrained by the pandemic, they forged networks of resistance and engaged in 'scale-jumping' (Smith, 1996; Swyngedouw, 2004) through the SOC campaign to enrol a broader network in support of their claims (Pierce et al., 2016). Although their efforts were insufficient in the face of the powerful urban authorities and developers' interests, the Kolis and the larger public shared a strengthened sense of the coast as theirs, as part of their own and the city's cultural identity.

The struggles over the Coastal Road project highlights a very asymmetrical relation between different rights claims. At one end is pitted the city authorities' claim to have the right to regulate and develop urban space 'in the public interest.' At the other are the heterogeneous coastal communities of Kolis for whom the coastal landscapes are strongly associated with a sense of place, identity, and livelihood, and who lay claim to the coast as their home. The perceptions of such urban coastal spaces emerge through the 'stories-so-far' (Massey, 2005), with the city's urban planners embedded in the imaginaries of Mumbai and its coastline in a singular and narrow-minded vision of city development as being construed of concrete and steel, rooted in an outmoded way of thinking (Daileda, 2020; Kadri, 2019). This vision is embedded in the history of the city as growing through a continuous process of land reclamation, without heeding what Swaminathan (2014) terms its inherent 'archipelagic logic'.

6. A right to the coast as commons – and a more resilient city

6.1. A right to the coast as commons

Recent attempts by scholars to untangle the differential and often fractured rights that are being contested have highlighted the negotiated and contingent nature of rights. The notion that rights are not absolute, but rather emerge from particular communities which change over time, requires one to examine how such rights are created and contested.

In this paper, we have shone a light on how struggles and processes of claim-making produce coastal spaces – of coastal spaces as 'place' constituted through practices of commoning versus coastal spaces as conduits. Although there are limitations to the study in that we could have engaged in-depth with more stakeholders, we show how the nature of coastal spaces brings additional dimensions to the debate on 'rights in places' by tracing how coasts as lived, ecological spaces are being marginalised by the 'modernist' urban place-frame embraced by urban planners. Disdain for coastal spaces as productive places rich in natural diversity and cultural heritage, and insistence on retaining the age-old practice of reclaiming the sea and transforming it into land and profitable real estate, threatens to undermine the city's ecological integrity and its coastal communities. For this reason, further research needs to focus on how to provide alternative imaginaries for urban coastal spaces.

While Mumbai's authorities draw on arguments of 'public interest' and city-wide benefits of 'decongestion' and 'modernisation,' there is another argument at the city scale which points to the crucial role of coastal spaces as cultural and ecological commons. The Koli heritage is an important part of the city's history and identity, and the maintenance of the ecological commons is a crucial element of protection for the city itself. While purporting to modernise by transforming sea into land, the urban planners, through destroying the coastal commons, are effectively undermining the city's cultural history as well as its ecological protective buffer against floods and sea-level rise. Current planners are falling desperately short in terms of understanding and appreciating the importance of ecological elements in their spatial planning practices. The Kolis' effort to claim coastal space plays a crucial role in increasing the city's resilience to climate change. The social transformation that is

needed to make the city more sustainable consequently hinges on grassroots mobilisations and actions to claim a right to the coast as commons, and to translate this into urban planning narratives that are not based on outdated visions of what a city should be.

CRedit authorship contribution statement

Synne Movik: Conceptualization, Writing – original draft. **Hans Nicolai Adam:** Data curation, Writing – review & editing. **A. Alankar:** Writing – review & editing.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

Data will be made available on request.

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