

Movement and Place-making in a Monsoon Terrain*

Movimiento y creación de lugares en un terreno monzónico

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Abstract

The territorialization of the Western Ghats, India, is an act of colonial power either by settled or marginalized particular peoples, practices, and ecologies, privileging a wet-dry binary and spatializing a monsoon landscape. The environment of the Western Ghats, in particular, has been politicized and polarized. Today, indigenous peoples and other 'forest dwellers' have been compromised through the inherited colonial framework; they are excluded by conservation action as is their knowledge that is based on dynamic everyday relationships with place. Efforts to be inclusive are fraught with inadequacies of colonial imaging and use the language that continue to objectify and spatialize nature and culture, which, in turn, propagates the wet-dry divide. The disciplining of the Western Ghats is perpetuated through environmental laws: from the Indian Forest Act, 1865, guarding the land for production, to the Forest Rights Act, 2006, which gives rights to forest dwellers to protect it. Despite these laws, conflicts over access to land and resources continue as the lives of these inhabitants and their relationship with the ground, or world, were never considered on their own terms. How can design unravel how these inhabitants lived prior to colonialism? There is the possibility that they understand place by moving, occupying, and temporally appropriating dynamic conditions of 'wetness' in their ordinary everyday lives. What can be assembled from existing clues, and from a new imagination, to design futures that correspond (Ingold 2011) to a changing environment? This paper will reveal the possibility of a local/indigenous 'wet ontology' (Steinberg and Peters 2015) which privileges everyday practices across time and continually 'makes home' in this monsoon terrain.

Keywords: colonialism, Western Ghats, environmentalism, design research, imagination.

Resumen

La territorialización de los Ghats occidentales, en India, es un acto de poder colonial bien sea por asentamiento o por marginación de pueblos, prácticas y ecologías particulares, privilegiando una bipartición de lo húmedo y lo seco y espacializando un paisaje monzónico. El entorno de los Ghats occidentales, particularmente, ha sido politizado y polarizado. Actualmente, los pueblos indígenas y otros "habitantes del bosque" se han visto comprometidos por el marco colonial heredado; son excluidos, por acciones de conservación, al igual que su conocimiento el cual está basado en relaciones dinámicas y cotidianas con el lugar. Los esfuerzos por ser inclusivos están cargados con deficiencias del imaginario colonial, que usan el lenguaje para continuar la cosificación y espacialización de la naturaleza y la cultura, lo que a su vez, disemina la división entre lo húmedo y lo seco. La disciplina de los Ghats occidentales se perpetúa a través de leyes ambientales: desde la Ley de Bosques Indios de 1865, que protege la tierra para la producción, hasta la Ley de Derechos Forestales de 2006, que otorga derechos a los habitantes de los bosques para protegerla. A pesar de estas leyes, los conflictos por el acceso a la tierra y a los recursos continúan, ya que la vida de estos habitantes y su relación con la tierra, o el mundo, nunca fueron considerados en sus propios términos. ¿Cómo puede el diseño descifrar la forma en la que vivían estos habitantes antes del colonialismo? Existe la posibilidad de que comprendan el lugar moviéndose, ocupando y apropiándose temporalmente de las condiciones dinámicas de "humedad" en su vida cotidiana ordinaria. ¿Qué se puede ensamblar a partir de pistas existentes, y de una nueva imaginación, para diseñar futuros que correspondan a un entorno cambiante (Ingold, 2011)? Este trabajo revelará la posibilidad de una "ontología húmeda" local/indígena (Steinberg y Peters, 2015) que privilegia las prácticas cotidianas a lo largo del tiempo y que continuamente "encuentran su hogar" en este terreno monzónico.

Palabras clave: Colonialismo, Ghats occidentales, ambientalismo, investigación en diseño, imaginación.

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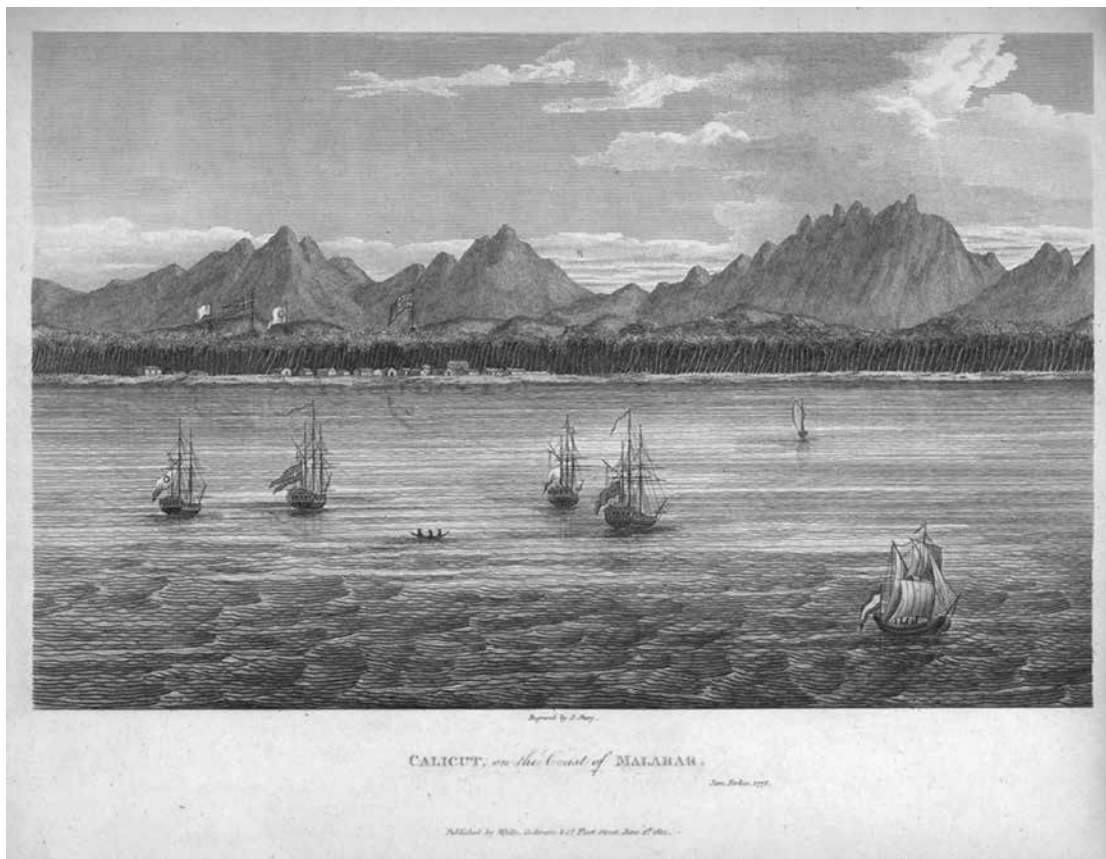


Figure 1. Ridges and valleys. Calicut on the coast of Malabar Coast. Source: Forbes, 1813.

Introduction - Habitat of the Southwestern Ghats

The Western Ghats region, one of the world's 'hottest' hotspots of biodiversity and a UNESCO World Heritage site, is a diverse landscape mosaic stretching down most of the west coast of India from Gujarat to the southern-most tip of the sub-continent and beyond into Sri Lanka. It is nestled between the Arabian Sea and the Deccan Plateau. *Ridges* and *valleys* receive and carry rainwater to most of the subcontinent; rivers flow gently

eastwards and rapidly down the steeper western aspects of the mountains into the sea. This is a monsoon landscape where it rains six to eight months a year, and which is humid, damp, moist, and soaked: never completely dry. This moisture-laden ground is the generator of rich cultural and natural diversity; a myriad of communities and practices that depend on rain; and a plethora of wildlife, vegetation, and minerals.

Today, these landscape features are at the heart of the development-environment conflict. The use

of this language of landforms can be traced back to colonial texts; but the roots of the *image* behind it are more difficult to unravel as they are embedded in visual articulations of geographic maps and object drawings. This lens, which today tends to be assumed by both sides of the conflicts in the Western Ghats, is a work of design—the outsider's *way of making sense* of place dominates our understanding of the Ghats while the local *way of knowing* has not been considered at all.

I speculate that this habitat of the Ghats has been constructed by a colonial intervention, the ubiquitous Mangalore Pattern Roofing Tile. The tile initiates an imaging of the Ghats as a landscape that drains rain off a *surface*, replacing the more local thatched roofs. Thatched roofs, made either from grasses from paddy fields or savannahs, or

from coconut leaves, had the ability to *hold rain* in *depth* within its complex and non-linear material structure.

I explore these two different imaginations that allow us to see the imaging and language that each can initiate: how the Mangalore Tile perpetuates an imagination that is reductive, and how thatch generates an imagination that can *hold* complexity. Each stands apart from the other operationally, and, when engaged on the ground, this difference creates conflicts in the landscape.

While the tile creates a wet-dry binary, local everyday practices are rooted in a particular understanding of dynamic shifting ecological processes of this monsoon landscape that continually appropriate and reappropriate conditions of

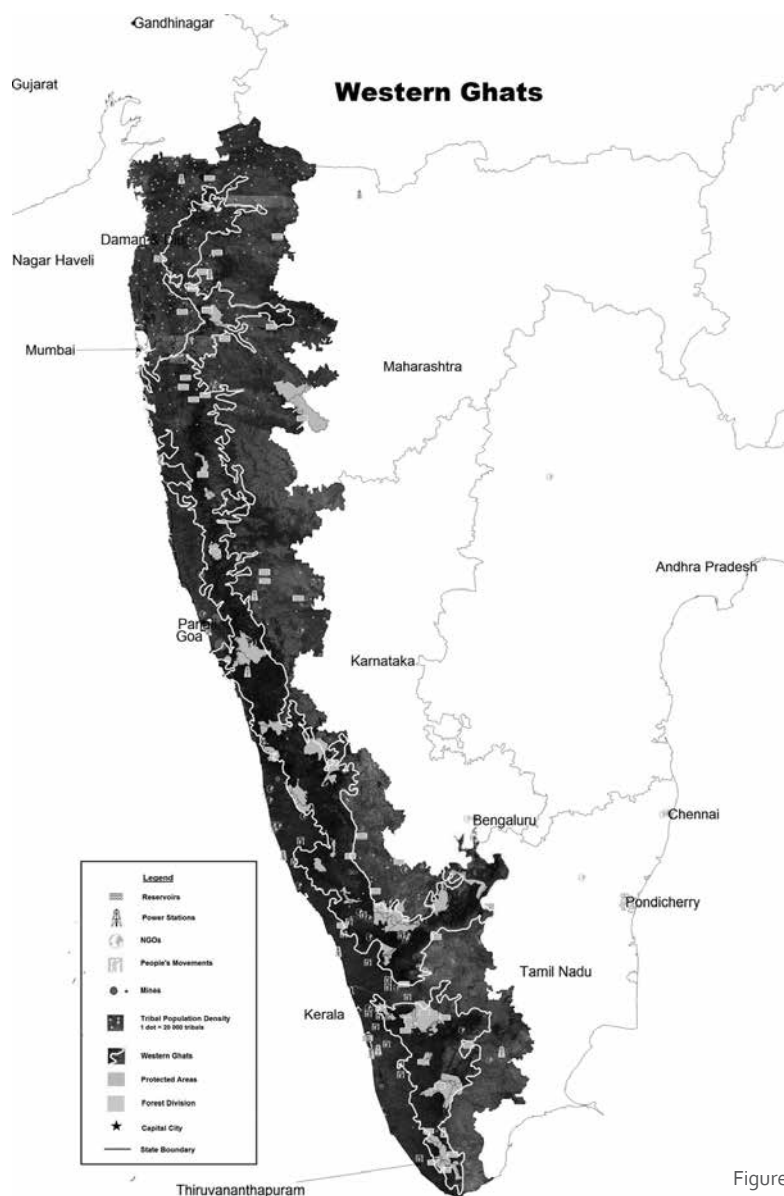


Figure 2. Map of the Western Ghats showing protected areas (Keystone Foundation, n.d.).

wetness across time in the Ghats. This paper will reveal the design of habitat (fixed)—the dominant colonial inherited image together with the language used—and make speculations about local imaging and vocabulary as well as the design of *bidaara* (temporal).¹

Settlement and Surface - Constructing a Contentious Landscape

Surface

In 1864, the Basel Missionaries based in Mangalore, invented the Mangalore Pattern Roofing Tile (as stated in the 1865 Basel Mission Report, p. 30) and set up the first tile factory. Made from local clay found in the Netravati River, the tile was a

colonial intervention that was designed as a roofing element to keep the heavy monsoon rain out. Its design introduced a new language to the locals who were being converted and employed by the missionary factories: the vocabulary of *ridge* and *valley* that is associated with separating wet from dry through the construction of a surface (the tile surface). The tile created new kinds of employment, destabilized non-linear practices, and stilled the terrain (Sateesh 2017). As it did these, it supported and hardened the *idea of settlement* together with new colonial regulations surrounding settlement (Permanent and Forest Settlement), stilling people, practices, and places. This caused conflicts between citizens and government, humans and wildlife, practices and climate. The tile was a political intervention that solidified colonial frames by giving the locals a common language to read and act within these new colonial frames.

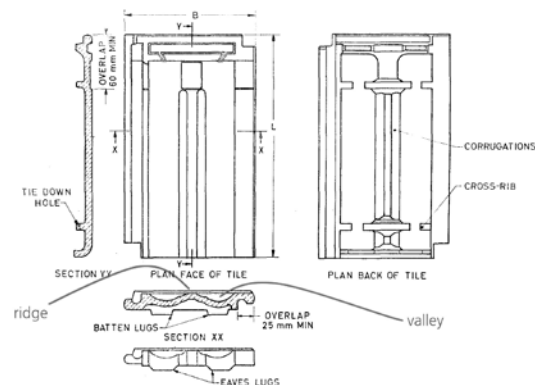


Figure 3. Typical Details of Mangalore Tile. Source: IS 654 (1992).

The Mangalore Tile, through drawings, introduced a drainage imagination with the ridge catching rain to divert it on either side down towards the valleys, draining the roof, and moving water away from and off the roof along a smooth surface for *efficient* flow of water. The tile and its operations simultaneously separated wet and dry and, as it took over the habitat of the Ghats, it placed people indoors, out of the rain. The tile was designed to erase the monsoon from the everyday lives of local inhabitants.



Figure 4. Photograph, profile of a tiled roof, Bantwal, Karnataka, created September 2017. Source: Deepta Sateesh, 2017



Figure 5. Drawing: Tile ordering the landscape of the Ghats across scales. Assemblage of tile sections and landscape sections, created October 2017. Source: Deepta Sateesh, 2017.

1. *Bidaara* is a Halepyka term for *hut*. The Halepykas were traditionally an itinerant community that moved from place to place and spoke a hill dialect of Kannada in the Western Ghats. I speculate that *bidaara* is a conceptual term meaning *home-making* rather than "house" which is a spatial object.



Figure 6. Conceptual sketch of water running off the surface and of water seeping into the ground. Source: Deepta Sateesh, 2017.
Figure 7. Photograph of Raman thatching his roof, Wayanad, India, May 2018. Source: Deepta Sateesh, 2018.

Thatch does not remove water, instead it allows it to seep, holding it within the complex mesh-work of its fronds. Working as a gradient of wetness, thatch generates a *threshold imagination* that privileges porosity, not an impervious surface. The language of thatch is: *hold* and *release* (Sateesh 2017), *seep* and *ooze* (Cons 2017), *horizon* and *depth*. This language may be conceptually extrapolated into a material operation of the terrain, allowing one to see a “rain terrain” (da Cunha 2018) of the Southwestern Ghats. If tile exposes the idea of surface, I posit that thatch leads to seeing or experiencing depth and horizon, which begins to expose the experiential/practical frames, language, and imagery that may have existed prior to the colonial eye.

Settlement

The habitat of the Western Ghats is described using a language based on the tile and is fixed by geography, geology, botany, and economics: as can be seen in the Western Ghats Ecological Expert Panel (WGEEP) report (Gadgil et al. 2011).

This imaging of habitat, determined by measuring space, altitude, climate, slopes, vegetation, and soil types (Gadgil et al. 2011), is defined by boundaries that are embedded in the ideas of the Permanent and Forest Settlements. The act of *settlement* fixed space permanently (Powell 1892) and stilled this dynamic wet landscape in a moment of dryness, in a moment of scarcity, fixing it in a drawing of a map. The creation of a map, a visual representation of place, freezes this dynamic terrain in a moment when it is not raining, so that one can see what is there, from above, from afar, and plan. The map, a drawing of points and lines on a two-dimensional surface, allows the viewer to gaze at the world.

During most of the nineteenth century, the British colonizers were surveying India to take control of resources through land settlement. Sir Thomas Munro introduced the Permanent Settlement of 1793 in the Southwestern Ghats from 1799 onwards; it was modified to respond to the more autonomous inhabitants at that time (Bradshaw 1906). This initiated multiple

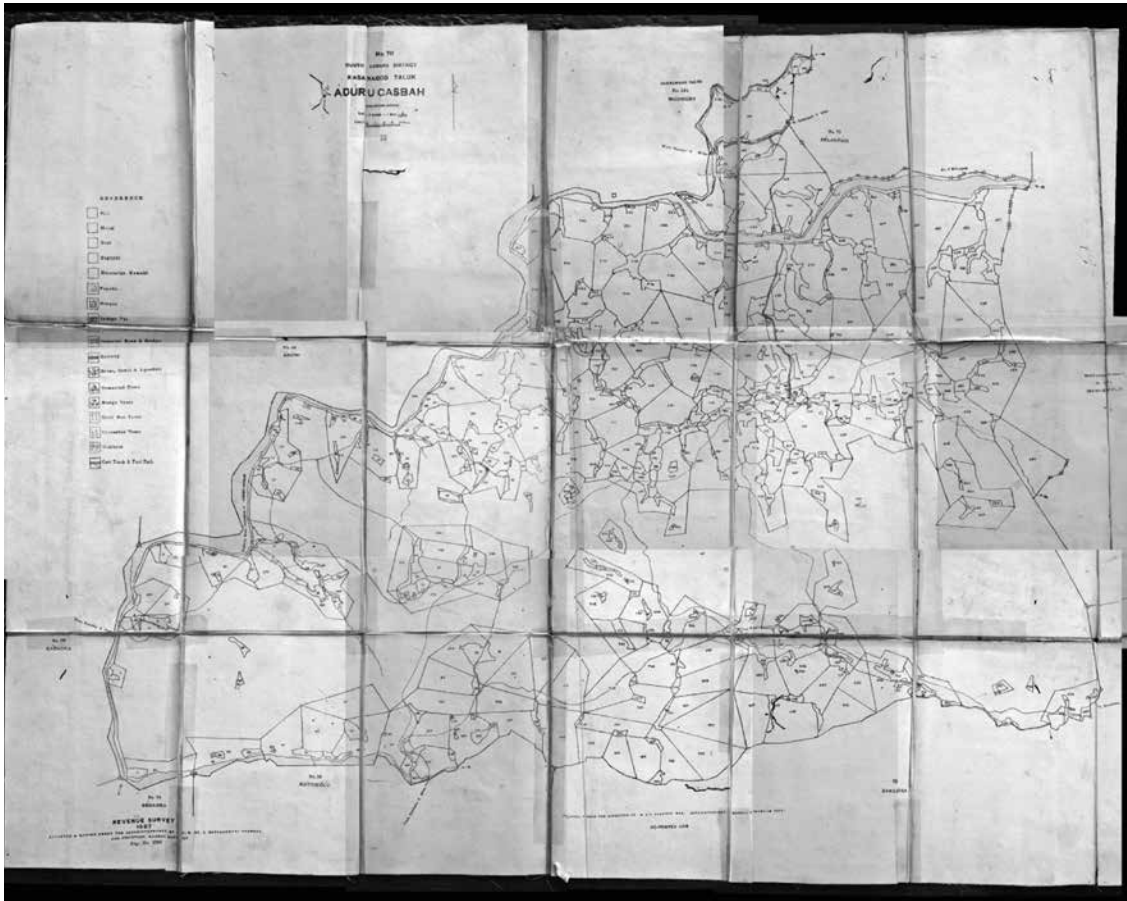


Figure 8. Image of 1897 Revenue Survey Map, Village in Kasargod, District Collector's Office, Mangalore. Taken on 23 November 2016. Source: Deepta Sateesh, 2016.

HABITAT	BIDAARA
GAZE	ENGAGED IN PRACTICE
INDOOR/OUTDOOR	MAKING 'HOME'
STATIC	DYNAMIC/SHIFTING
SPATIAL	PRACTICE-TIME
CERTAINTY/PREDICTABLE	UNKNOWN/EMERGENT
RELIES ON SPACE	RELIES ON TIME
DISCIPLINARY AND SOCIAL CONSTRUCTS	DESIGN/RELATIONAL

Figure 9. Two different worlds or ontological frames. Source: Deepta Sateesh, 2016.

transformations across the terrain, people, and practices in the coming decades. New ideas of ownership, law, land management, and taxation were introduced, which caused multiple peasant revolts in Wayanad, Mangalore, and Coorg (Bhat 1998). These changes were designed to privilege surface, area, dryness, regularized time, a cash-based agricultural economy, and permanent buildings to live in: the setting up of systems that

contributed to the singular agenda of the colonial revenue-based administration. By the 1880s, many of these regions were settled, and had become either revenue or forest land.

Surface and settlement created the habitat: the manifestation of a drainage imagination. This is distinct from a threshold imagination that constructs *bidaara*, privileging *depth* and *movement*.

Kumri Cultivation - Destructive versus Constructive

In search of depth and movement, my research led to identifying and focusing on shifting cultivation, an ancient agricultural practice of the Western Ghats. Shifting cultivation has long been studied by experts and, in India, has been described as a practice carried out by itinerant communities who live in the forests of Northeast India and the Western Ghats. In the 1860s, colonial foresters were experimenting with scientific forestry in the Southwestern Ghats in order to produce more timber for railways and ship-building. As they

surveyed the vegetated areas, they saw the habitat of the Western Ghats in disarray—existing primeval forests were being unscrupulously cut down by the local inhabitants. These areas were then left abandoned for many years, thatched mud houses were left to collapse, and the people continually disappeared and moved across the landscape (Cornish 1874). The Ghats was incomprehensible, unstable, unpredictable and unreliable. The task for the foresters was to order this mess—so that they could see it with clear eyes and clear skies—to make the forests productive and organize them in such a way so as they could be managed by setting up control mechanisms and hierarchies.

Like thatch and the monsoon, shifting cultivation was not adequately understood and was written about in negative ways, particularly in the Kanara and Malabar regions, where it was traditionally called *kumri* and *punam*, respectively. Colonizers paid little attention to these communities as they saw them as vagrants: a nuisance. They recorded the practice of shifting cultivation as being wasteful. They recorded the timber that they valued being burnt (Brandis 1897; Cleghorn 1861), cultivation as being under-productive (Buchanan 1807), and the communities as being 'heathen' and devil-worshippers (Burnell 1894). However, the communities cut trees and set fire to a small patch of land to fertilize the soil to grow millets and access other edibles for their subsistence from the forests and other lands. Once the season was over, they would leave the site to regenerate itself by moving to another location and would only return a decade later, if at all.

In 1865, India's first Forest Act was passed to initiate the settlement of forests, and to ban shifting cultivation. Subsequently, in the Indian Forest Act of 1878, a number of other practices were also banned including setting fire to grassy areas, accessing firewood and edibles from the forest, grazing, hunting, and building homes. Colonial records show that when the forest surveyors arrived in the late 1880s to settle the forest and assign rights, since *kumri* was already banned in 1865, the communities could not claim these lands (Chandran 2019). The only things left to claim by the locals were the valleys, with *thota* (gardens) and *gadde/vayal* (rice fields) that were taxed based on productivity. The *kan* (sacred

grove) and *kadu* (forest) were annexed to government forests (reserved and protected) (Chandran, Rao, Gururaja, and Ramachandra 2010), *betta* (hill) lands were assigned only to collect leaf litter for manure (Buchy 1995), and *bena/hakkal* (savannah grasslands) were referred to as "wastelands".

Banning *kumri* cultivation enabled foresters to survey, assign rights, and claim rights to any unclaimed lands (Ribbentrop 1900). Historically, the treed areas were designated either as Reserved Forest or Protected Forest (Brandis 1875) while areas that seemed to be uncultivated or abandoned were seen as unproductive and uninhabited and marked as wastelands (Waste Lands Act 1863). These were then designated either to the Revenue Department or Forest Department. Along with banning local practices, the land typologies were either erased or transformed, primarily transferred to one of two categories—forest land or revenue land. Due to the lack of understanding the complexity of the local inhabitant and monsoon, these mobile communities were slowly forced to stop moving, or were left out of the new system. This was the hardening of a nature-culture divide in the Ghats.

Wetness, Depth, and Movement - Traversing the Terrain

From the colonial engagement in the Ghats, two major concepts emerge as being marginalized: shifting cultivation which was banned through *settlement* and forest laws, and a gradient of wetness, removed from people's everyday lives through the design of the tile and the idea of *surface* separating wet from dry. Both were marginalized through viewing the landscape of the Ghats from a distance and seeing it in a state of deterioration. In order to reveal a different ontology, it is important to consider movement (rather than settlement) and depth (rather than wet-dry).

It is possible that the local inhabitants valorized movement and depth, perhaps in correspondence (Ingold 2011) with each other across space and time, through operations of wetness, and seeping and oozing. I borrow from Fairhead and Leach (1996) as they suggest, in the case of Kisisidougou, Guinea, that "if forest is considered to be 'closer to nature', for example, the assumption that use degrades contradicts the Kuranko expe-

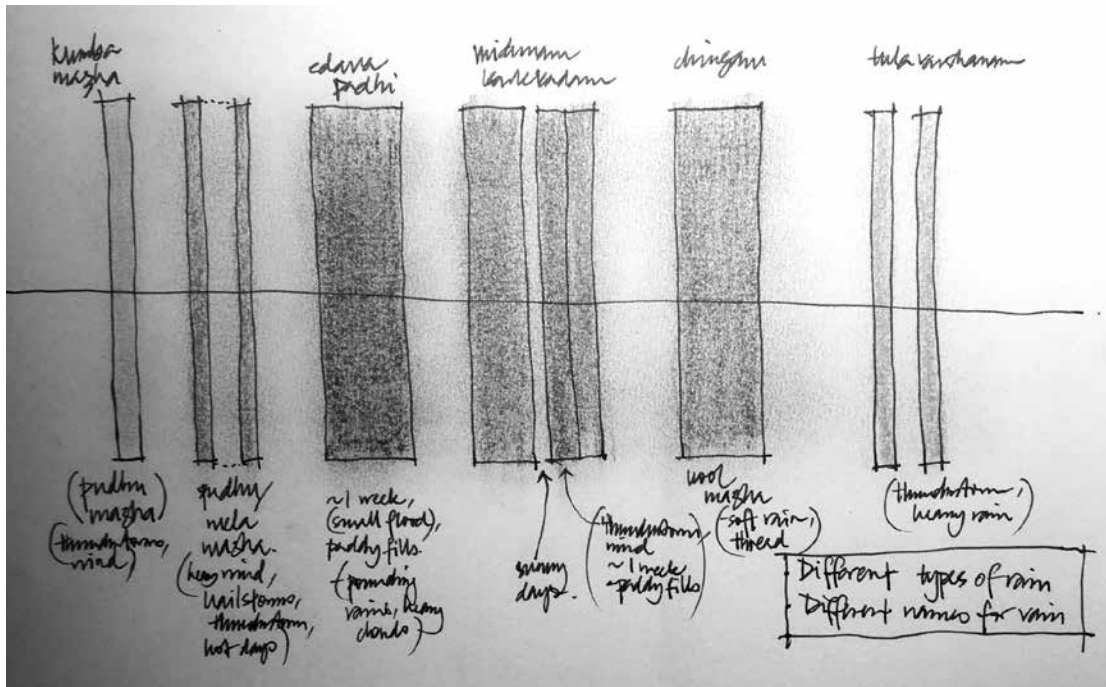


Figure 10. Field notes on types of rain, Raman's interview, 17 January 2018. Source: Deepta Sateesh, 2018.

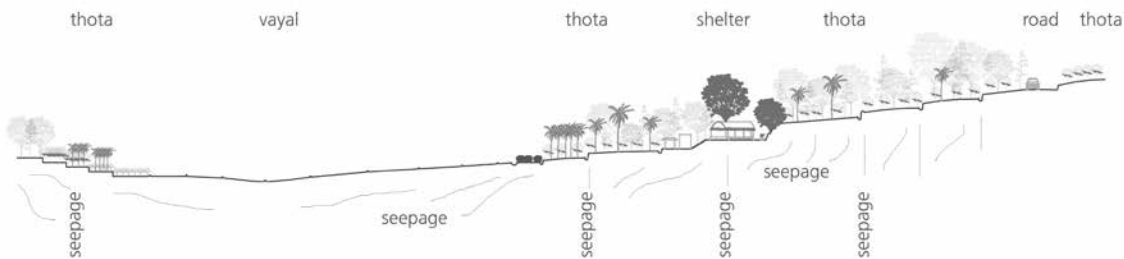


Figure 11. Section through Raman's home. Source: Sateesh, Gupta, and Srivastava 2018.

rience that untouched land tends to be savanna, and that where one cultivates, trees multiply. Different ecologies—interacting soils, vegetation and so on—respond differently to use..." (Steinberg and Peters 2015, 13), and respond differently to wetness through movement.

With these concepts, issues, and images, how can one see as a local, in a rain terrain (da Cunha, 2018)? The architect, planner, and conservationist must shed their view from above that they take for granted to be real and true, and see what is here and now on the ground in the environment, through wetness, and what is changing. Field research was carried out in Wayanad, Thirithahalli, and Kumta to understand the relationship between movement and wetness, particularly with communities who were shifting cultivators only one or two generations ago. Art and design methods were used to record stories and practices over time, through images, drawings, sound,

and videos. Here, design is an imaginative, speculative, and visionary process, and a heightened level of curiosity is required to explore what kind of framework determined the lives of these local inhabitants of the Ghats. What if, when imagining their world, they were viewed as **constructive** rather than destructive? From gathering and assembling all the things that were erased, banned, or converted, I can speculate that these things (including the things that were not marginalized) were all part of a different frame, one in which the gradient of wetness is visible across multiple places, and one that requires movement to correspond with, to continually make, and to maintain. Field recordings were made with the intention of blurring lines that divide boundaries: to find clues of this other world.

From the fieldwork, I found that in many regions of the Southwestern Ghats, such as Kumta, Thirithahalli, and Wayanad, communities practiced



Figure 12. Photograph assemblage: Shaping the terrain to hold wetness across thota, hakkal and gadde. Village headman's house, Bangane, Kumta, Karnataka, May 2019. Source: Deepta Sateesh, 2019.

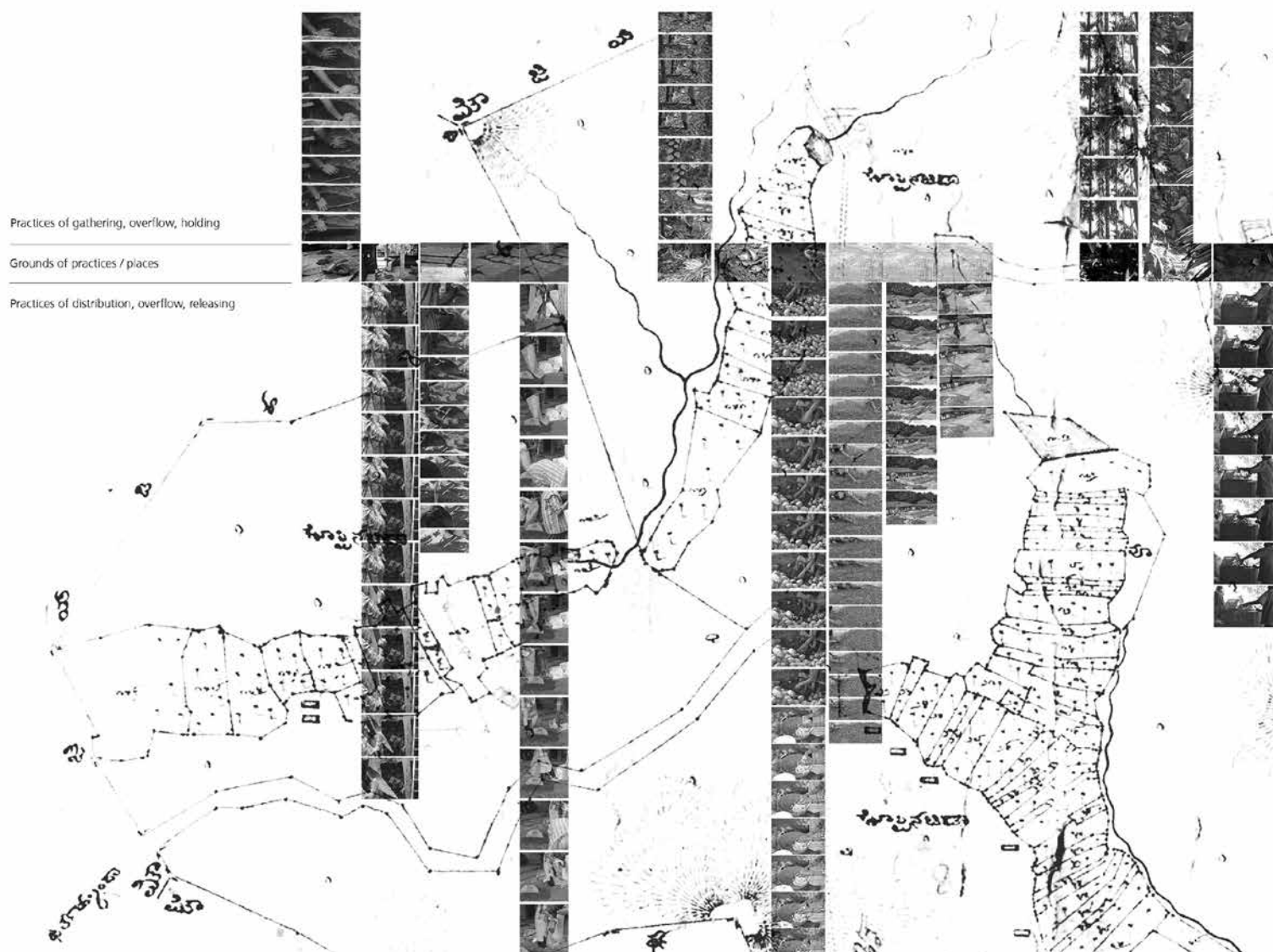


Figure 13. Blurring boundaries across house, thota, kadu. Visual synthesis of multiple practices of Thota, contrasted with its map, Thirthahalli, Karnataka. Source: "Edgy Lines", DEL Laboratory, Deepta Sateesh and Shambhavi Singh (2016).



kumri or *punam* and also grazed in the *bena* or *hakkal*, fetched fruits, honey, and firewood from the *kadu* and *betta*; water from the *hole* (stream) and *keni* (small temporal mud well); cultivated *thota* and *gadde* or *vayal*; and nurtured medicinal plants in the *kan* or *kavu* (Chandran 2019; Mah-ratti 2019). Their shelter, it can be imagined, was situated in the center of all these grounds of practices that may blur into each other—in a state of liminality: an anchor. The communities tended to each of these places with care, nurturing and nourishing them over time as they moved in correspondence with rain.

Although the colonial foresters banned the practice that required more movement and restricted people's access to certain conditions of wetness and porosity that were necessary for everyday life, traces of *kumri* can still be seen in settled terrains, where simple innovations are designed to hold water (bunds, trenches, terraces), and the home is still a *threshold* for the multiple practices across *thota*, *vayal*, *hakkal*, and *kadu*. These multiple practices extend beyond habitat boundaries, beyond the shelter, and depend on particular conditions relating to the ground, moisture, and humidity. This has led to rethinking these local words for landscape: they may be based on conditions of wetness, a *relational* quality that reimagines the Ghats as a *threshold*. Dwelling is an act of situating an *anchor* and generating trajectories of emergent practices that depend on wetness; as Illich writes, "the threshold is like the pivot of the space that dwelling creates" (2006). Each of these places may be seen as temporal, changing across seasons from more to less wet, like the operations of thatch. The monsoon terrain of the Ghats is an ocean of anchors across time, constructing a dynamic meshwork of movement (Ingold 2011) of materials and practices that correspond with rain.

Conclusion - Making Place, Making Home

In Indian thought and philosophical writings, nature is represented in multiple modes, practices, and forms that are intertwined in the active engagement of the ordinary inhabitant. In texts, such as Sangam literature or fables and oral myths, nature is within culture, and descriptions of culture are interwoven through everyday practices drawn into nature (Baindur 2015). The idea of



resilience is *when* (not where) nature and culture are synchronous with one another. Wetness is not *everywhere* but it is everyday, in the ordinary, and in the practice of the local inhabitant's everyday life. *Bidaara*, another design (threshold) imagination, is the continual design of dwelling by movement across a gradient of wetness; movement that corresponds with *rhythms* of rain, working with a different non-linear understanding of *time*.

While the tile and disciplines settled the landscape and local communities through spatialization, *bidaara*, derived from assembling and synthesizing qualitative data, reveals the possibility of the pre-colonial world of the local inhabitant on the ground of wetness: in a "rain terrain" (da Cunha, 2018). Design research here affords a non-linear understanding. It is geared towards inventing new categories and forms of data, strategizing new resilient futures. Design here is the process of describing what *is* (ontological) rather than constructing solutions to problems (epistemological). 

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