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Haal haal ne haal
[Walk, walk and walk]
Exploring the pace of pastoral mobility
among the Rabari pastoralists of western
India

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Thesis submitted to the University of Sussex for the degree of
Doctor of Philosophy in Development Studies (IDS)

Declaration

I hereby declare that this thesis has not been, and will not be, submitted in whole or in part to this or any other University for the award of any other degree.

Signature:

Summary

Drawing on ethnographic research, my thesis explores the temporal experiences of mobility among the Rabari pastoralists of western India to respond to the research question: *Why does pastoral mobility persist, and how does it engage with new and changing circumstances?*

Mobility is a function of both time and space. Yet, scholarship on the temporal dimension of mobility has been limited, favouring the study of spatial trajectories instead. My thesis applies a temporal lens to rebalance our understanding, and shows how time, and the experience of time, is deeply embedded within the practice and politics of mobility. Rather than mere displacement from point A to B, mobility emerges as a temporally mediated affective experience, that is, a lived duration.

The thesis explores different spatio-temporal aspects of pastoral mobility by pivoting around various temporal concepts, such as the rhythms of crop and weather cycles and the synchronicity of the pastoral migrating group to these rhythms, the accelerated TimeSpaces of a rapidly shifting political economy and the 'waiting' experienced by the youth as they seek to reposition themselves in this changing context. These different elements are interconnected and come together for a comprehensive and holistic understanding of mobility

Further, the thesis finds that the concepts and practice of 'pace' and 'pacing' are key to responding to the research question. Pastoral mobility persists because the pastoralists 'pace' their mobility to adapt to, take advantage of, manipulate, and bypass new and changing circumstances. 'Pace' is a way of understanding mobility as a relationship between people, time, and space. The thesis explores the 'pace of pastoral mobility' along three key dimensions: a) the practical, to understand how pastoral mobilities are 'paced' in practice, b) the relational, to understand pace as a relational and social construct; and c) ideological, to show how pace is represented and understood within broader social structures, politics, and development.

Therefore, paying attention to the temporal dimensions of mobility provides new insights and opens new areas for thought and action for pastoralism and development more broadly.

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“If you follow your bliss, you put yourself on a kind of track that has been there all the while, waiting for you, and the life that you ought to be living is the one you are living. Wherever you are -- if you are following your bliss, you are enjoying that refreshment, that life within you, all the time.” – Joseph Campbell.

This is how I have felt in the past years, that I am following my bliss. This thesis is a symbol of things coming together for me, intellectually, emotionally, politically, and spiritually. I think I’m immensely lucky to be where I am, to be doing what I am doing, and, most of all, to have the love and support of all the beautiful people I am going to write about here.

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Note on the thesis

This thesis presents an ethnographic story of Rabari pastoralists from western India. It unfolds through many characters and often in their own words. All names in the thesis are pseudonyms, and names of villages have also been anonymised. The details of fieldwork interactions can be found as an appendix towards the end of the thesis, along with a social map and details of pastoral migrating group configurations. These clearly present the various people who have given inputs and influenced this written work, and whose voices echo through the pages.

Several of the chapters begin with an opening vignette, written in present tense, to bring the reader closer to the lived realities of the pastoralists. Further, discussions are supplemented with direct quotes. The interlocutors speak to us in their own tongue, that is in a Rabari dialect of Gujarati. All words in a language other than English have been *italicised*, and translations are provided in text as well as in the glossary for frequently occurring words. In text translations appear in box brackets []. Round brackets () are used for my own additions.

The thesis is written using two font styles: Century Schoolbook for the main text and Calibri for the vignettes. I have followed the University of Sussex's guidelines for margins, spacing and indentation.

Glossary

Terms in Rabari Gujarati with their meanings in English –

<i>Asmani</i>	- of the sky/ weather
<i>Ben</i>	- sister - suffix added to the names of older women to form an affectionate form of address to an older person.
<i>Bhai</i>	- brother - suffix added to the names of older men to form an affectionate form of address to an older person.
<i>Bhukamp</i>	- earthquake
<i>Dang</i>	- migrating group
<i>Dukal</i>	- drought
<i>Evad</i>	- flock
<i>Evaai</i>	- accustomed
<i>Evaai thavu</i>	- to become accustome
<i>Farvanu</i>	- leisurely travel
<i>Govati</i>	- hired shepherd
<i>Haal (chaal)</i>	- walk
<i>Haal, haal ne haal</i>	- walk, walk and walk
<i>Jokk</i>	- pen/ corral livestock - payment for penning
<i>Maal</i>	- livestock
<i>Maldhari</i>	- livestock keeper
<i>Maja</i>	- enjoyment, wellness
<i>Mukhi</i>	- leader
<i>Rabari</i>	- community of pastoralists in western India, also called <i>Raika</i> - member of the Rabari community
<i>Rann</i>	- desert
<i>Saanta</i>	- lit. link; practice among the Rabari where a brother-sister pair marries another brother-sister pair

<i>Sanstha</i>	- organisation
<i>Sathwaro</i>	- companion, - companionship
<i>Seem/ seemado</i>	- village outskirts
<i>Sultani</i>	- administration
<i>Uttaaro (pl. uttaara)</i>	- migrating camp, also called <i>ghero</i> - main furniture of the camp
<i>Vaandhiyu</i>	- hamlet in the bush - migrating camp
<i>Vaas</i>	- village neighbourhood or hamlet
<i>Vagado</i>	- bush
<i>Yaad (karvu)</i>	- to miss or long for
<i>Zamano</i>	- age, era, times
<i>Zamano fari gayo</i>	- change in times
<i>Zadapi zamano</i>	- fast-paced times

Abbreviations –

FAO	- Food and Agriculture Organisation of the United Nations
GoG	- Government of Gujarat
Gol	- Government of India
IFAD	- International Fund for Agricultural Development
PTI	- Press Trust of India
SSD	- Sardar Sarovar Dam

Important conversions –

Acre	- 4,047 m ²
Hectare	- 10,000 m ²
Bigha	- 0.4 acre
Lakh	- 100,000
Crore	- 10,000,000
1 Rupee	- 0.013 USD on May 13, 2022

Names of the months in the Gujarati calendar and their corresponding months in the Gregorian calendar (can vary year-to-year) –

<i>Kartak</i>	- October - November
<i>Magshar</i>	- November - December
<i>Posh</i>	- December - January
<i>Maha</i>	- January - February
<i>Fagan</i>	- February - March
<i>Chaitra</i>	- March - April
<i>Vaishakh</i>	- April - May
<i>Jeth</i>	- May - June
<i>Ashad</i>	- June - July
<i>Shravan</i>	- July - Aug
<i>Bhadarvo</i>	- Aug - September
<i>Aaso</i>	- September - October

Important days –

<i>Ashadi bij</i>	- Kachchhi New Year, 2 nd day of <i>Ashad</i> month
<i>Uttarayan</i>	- Harvest festival on January 14 each year
<i>Holi</i>	- Hindu festival in <i>Fagan</i> month
<i>Janamasthami</i>	- Lord Krishna's birthday in <i>Bhadarva</i> month
<i>Dussehra</i>	- Hindu festival celebrated in <i>Aaso</i> month
<i>Diwali</i>	- Hindu festival celebrated on the last day of the year in <i>Aaso</i> month

Seasons –

<i>Chomaso</i>	- Monsoon; roughly from <i>Ashad</i> to <i>Aaso</i>
<i>Shiyalo</i>	- Winter; roughly from <i>Kartak</i> to <i>Maha</i>
<i>Unnalo</i>	- Summer; roughly from <i>Fagan</i> to <i>Jeth</i>

Prologue

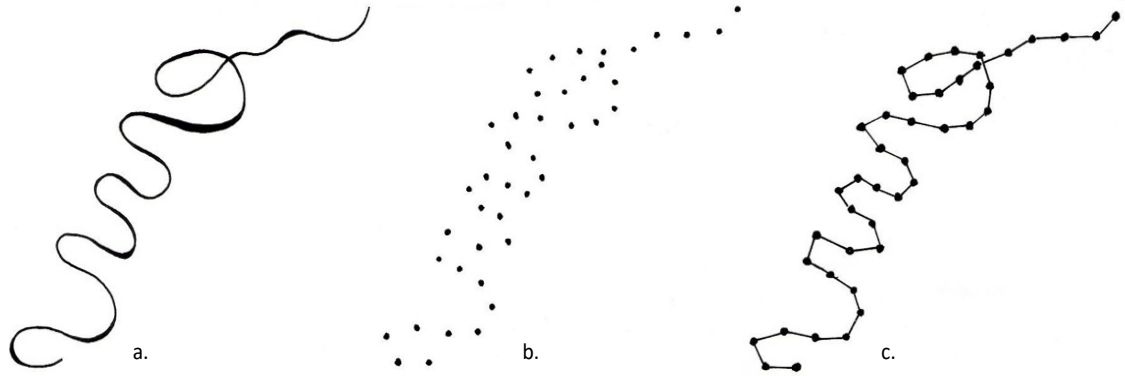


Figure 1. The Corporal's line. Source: Ingold (2006).

“...the Corporal's flourish embodies a certain duration. The line to which it gives rise is, therefore, intrinsically dynamic and temporal... The painter Paul Klee described this kind of line as the most active and authentic. Whether traced in the air or on paper, whether by the tip of the stick or the pen, it arises from the movement of a point that – just as the Corporal intended – is free to go where it will, for movement's sake. As Klee memorably put it, the line that develops freely, and in its own time, “goes out for a walk” (Klee 1961: 105) ... Another kind of line, however, is in a hurry. It wants to get from one location to another, and then to another, but has little time to do so. The appearance of this line, says Klee, is “more like a series of appointments than a walk” (Klee 1961: 109). It goes from point to point, in sequence, as quickly as possible, and in principle in no time at all... What we see is no longer the trace of a gesture but an assembly of point-to-point connectors... This distinction between the walk and the assembly underlies everything I have to say.”

- Ingold (2006: 21).



Chapter 1

Introduction

The day had finally come. The day the pastoralists would cross over the desert and go to mainland Gujarat from Kachchh. The air was buzzing with activity as the group prepared for the journey.

“Haalo ben, uttaara bharvana chhe,” [c’mon sister, we have to load the camp] said Pabiben as she began putting their belongings together. Pabiben’s flock of sheep had joined her sister-in-law Laliben’s flock in a field just off the highway towards Ahmedabad, Gujarat’s biggest city. Pabiben was loading the camp on the tractor whilst Nathubhai, her husband, loaded the lambs in the van. While the women would go by tractor, the shepherds had already left to go on foot with the flock.

It was a perfect winter’s day. The sky was bright and clear, the sun nourishing, the air crisp and cool. The field was located along a railway line for transporting goods from India’s biggest ports and industries in Kachchh to India’s biggest cities. Juxtaposed against the heavy freight passing across was the pastoralists’ minimal camp. Usually, Pabiben’s family hires a tractor just for this day, but this year they are using a tractor Laliben’s family bought to travel throughout the year. Their beast of burden, the camel, was lent to another group for use and safekeeping until the following monsoon season.

I felt such a thrill as we took off with the tractor. Playing local pop music, our tractor stood out against the zooming cars and trucks as it trudged along the Surajbari bridge. Flanked on either side by salt pans, the bridge serves as the main conduit between mainland Gujarat and the island region of Kachchh. Chants of *“jay maldhari”* [hail the pastoralist] erupted as we crossed a group of Rabari pilgrims travelling on foot to a distant temple, showering our journey with their good wishes.

As we crossed the sea, Rani, Pabiben’s daughter, flung a bag in the water. It contained ash from holy lamps and incense sticks as well as broken statues of gods, collected throughout the year, which found their proper resting place by being immersed in the sea. Earlier in the

day Parbhu, Laliben's son, had gone and made an offering at the mausoleum outside their village, along the highway.

After crossing the bridge and driving ahead some distance, we went off-road along a mud path clearly carved for work in the salt pans. I asked Parbhu how much further we would go. He pointed to a distant windmill and said, "somewhere there."

(Interaction on December 22, 2020, Bhachau block,¹ Kachchh district and Maliya block, Morbi district.)



Figure 2. Map showing India, Gujarat and Kachchh

¹ India is administratively divided into states, which are further divided into districts, and still further into blocks.

1.1. Introduction

Pabiben is a nomadic pastoralist from the dryland border region of Kachchh in Gujarat State² in western India (see Figure 2.). Belonging to the Rabari pastoralist community, Pabiben's family keeps sheep and goats, and travels with their animals across the seasons in migrating camps. They graze their animals on the fresh and nutritious grasses of semi-arid Kachchh in the monsoon months. But as the grasses dry out, they move towards sub-humid areas in central Gujarat to graze on crop residues and make the most of market opportunities during the winter and summer months, returning to Kachchh again as rain approaches.

The opening vignette describes the morning that Pabiben's family crossed over into mainland Gujarat from Kachchh. They travelled via the Surajbari bridge that connects the two historically separated regions by salt marshes. The 'crossing over' or *rann tapvu* [skipping/hopping over the desert] is a significant event in the seasonal migration cycle of the pastoralists. The pastoralists attach great importance to their journey to Gujarat not only because of the economic benefits that accrue but also because they share emotional ties with the region and with the act and experience of moving.

The activities of the morning demonstrate the complex logistical considerations that go into the journey, differentiated by gender, age and role. The activities follow a particular order, frequency, and intensity, and involve the co-participation of others. The tasks are coordinated across different members of the pastoral migrating group, who, along with the animals, take different routes and modes of transport. The journey reveals how different mobilities fold in, intertwine, and impinge on each other. These include the differentiated movements of humans and animals or the movement of trains, trucks, and pilgrims that the pastoralists encounter on their journey. Besides the economic rationale of improved animal production, the journey incorporates social, cultural, and religious goals, reflected in the rituals performed along the way. It is more than just traversing the distance between two places, but rather is an emotional experience, eliciting stress and excitement, joy and anticipation, awe and exhaustion. The journey draws different entities - human, non-

² I use 'State' to refer to Gujarat and 'state' to refer to the institution.

human, and symbolic - into relation with each other and in the process generates social forms and affect (Collins, 2018).

Described by Pabiben as *haal haal ne haal* [walk, walk and walk], pastoral mobility is imbued with meaning, history, and ideology. Drawing from “mobilities studies” (Urry 2000, 2007; Cresswell 2006, 2010; Elliott and Urry 2010), I conceive mobility as a “web of relationships” (Cresswell, 2010) that impinge each other in myriad and complex ways, producing and produced by their own representations and affective experiences. As Salazar et al. (2017: 2) describe it,

“A complex assemblage of movement, social imaginaries and experience, mobility is infused with both attributed and self-ascribed meanings.”

I see mobility in the context of pastoralism as a configuration of various relationships emerging broadly from the unity of land-labour-livestock, which is far more layered, politicised, and iterative than simply a livelihood strategy.

Yet, pastoral mobility has historically been denigrated, being seen as an ‘outdated,’ ‘unproductive’ and even, at times, a ‘criminal’ practice. Negative narratives, policies and programmes in the past sought to settle pastoralists and restrict their movements in many parts of the world. Several policies continue to marginalise pastoralists even today, either directly, or inadvertently restricting movement even when intending otherwise. At the same time, advances in scholarship and new realisations among international development actors are pushing for the recognition and safeguarding of pastoral mobility, given its continued practice.

Through this thesis, I seek to unravel the various dimensions of pastoral mobility to understand what it means for pastoralists. I present the story of Pabiben’s family and their experiences of being mobile to respond to the research question: **Why does pastoral mobility persist, and how does it engage with new and changing circumstances?**

Mobility is a function of both space and time. Yet, dominant frameworks have privileged the study of spatial trajectories over the temporal dimensions of mobility. They are located in a colonial and capitalist ontological tradition that valorises spatial fixity, control, and legitimisation at the neglect of temporal aspects.

Through this thesis, I seek to rebalance scholarship by highlighting the temporal dimensions of pastoral mobility to supplement the spatial. Rather than seeing mobility merely as spatial displacement, a vacuous journey between points A and B or an “assembly of point-to-point connectors,” I show mobility in the gesture of a “walk” as conceived by Ingold (2006) in the prologue. Unlike top-down mapped views of pastoral mobility, my thesis sees the *haal ne haal* of Rabari mobility as duration, “intrinsically dynamic and temporal,” (ibid.) rather than as apprehended from certain fixed locations.

“Mobilities are all about temporality” (Urry, 2000: 105). How we move is always a matter of tempo, duration, intensity, and timing (Amit and Salazar, 2020). Beginning with time-geography that revealed the temporal dimension of people’s engagement with space, time has been seen as an important dimension of the experience of mobility. The time spent moving between two places has come to be understood as an active spatio-temporal construction, contextualised and complex, and excluding and including certain people, places, and ideas (Peters et al., 2010).

Drawing from the experiences of the Rabari pastoralists, this thesis builds on understandings of pastoral mobility through a temporal approach. Embedded within a rapidly shifting political economy premised on capitalistic development and globalisation, the pastoralists are engaged in complex negotiations as they navigate these changes. Through a ‘nomadic approach,’ I pick up on key moments to unpack themes such as rhythms, synchronicity, and pace. I show how a temporal analysis of Rabari mobility can open new avenues for exploration and bring nuance into our understanding of pastoralism, mobility, and development in general.

This chapter introduces and justifies the approach and findings presented through the thesis. Section 1.2. describes the drawbacks of a spatial focus and highlights the relevance of a temporal approach for understanding pastoral mobility. It justifies the conceptual approach of the thesis. Section 1.3. provides a literature review to show how most literature on pastoral mobility emphasises its spatial dimensions, at the neglect of the temporal. Section 1.4. explains the choice of the Rabari as an interesting and suitable case to explore the experiences of mobility, while section 1.5. shows how ‘pace’ and ‘pacing’ emerge as the binding concepts for the thesis. Finally, section 1.6. gives the chapter overview to show how the thesis unfolds.

1.2. Foregrounding the temporal

Many scholars have pointed out the dominance of ‘spatialised thinking’ in social sciences (D’Angelo and Pijpers, 2018). For example, Khan (2020: 93) argues that in disciplines such as anthropology, “the sedentarism of bounded places,” their rootedness, and fixity are assumed as the basis of social experience. Termed as a ‘sedentary metaphysics’ by Malkki (1992), such a bent in thinking places moral and logical primacy in fixity and locatedness while seeing as suspect and abnormal all those on the move (Cresswell, 2006). Mobile pastoralists have long suffered the consequences of such conceptualisations, being seen as a “threatening pathology” (Pontrandolfo and Solimene, 2020) on the one hand and as “outdated, irrational, stagnant, unproductive and ecologically damaging” (Butt 2016: 463) on the other.

Adopting and reproducing such negative views of pastoralists, modern states have sought to disenfranchise, criminalise, and settle mobile peoples in many parts of the world. Examples of such policies include the villagisation in Ethiopia and Tanzania that sedentarise pastoralists and promote settled cultivation (Lorgen, 1999), policies in India that promote the rampant appropriation of pastoral resources, classifying them as ‘wasteland’ (Bharwada and Mahajan, 2012), or the anti-open grazing laws in many parts of Nigeria (BBC, 2021). Such policies endorse a linear vision of ‘development,’ ‘progress,’ and ‘modernity’ that excludes pastoralism in favour of commercial agriculture and industrialisation (as will be discussed in chapter 5) and ‘leave behind’ pastoralists as ‘backward’ and ‘outdated’ (as will be discussed in chapter 8 and 9).

Now, as mobility is increasingly being recognised as central to pastoralism’s economic viability and environmental sustainability, such overtly ‘anti-nomadic’ policies seem to be on the decline (Rodgers, 2021). Yet, the “sediment of nomadism” (Kaufmann, 2009) continues to pervade rights-based and people-centric approaches that purport to support mobility (*ibid.*) but, unfortunately, “silently reproduce the same theoretical horizons even when manifestly operating in a new one” (Krätli et al., 2015: 3). For example, policies that seek to provide rights to resources but inadvertently fix pastoralists within enclosed territories, thereby undermining the flexibility of the system (Fernandez-Gimenez, 2002).

Similarly, the spatial thinking continues to pervade scholarship on pastoral mobility, even as pastoral studies describes and criticises sedentarist policies as problematic. Although great strides have been made to counter spatial fixity, pastoral studies continues to assume an ontological position that gives primacy to spatial concerns and relations. That is, scholarship continues to approach mobility through, or have as its starting point, the spatial, as discussed in the next chapter.

Such thinking derives from a long history of spatial biases that have marked scholarship right from colonial times – where spatial fixity underlined conceptual development, modes of representation, and arenas of action. Therefore, such scholarship undermines mobility in two ways: by overemphasising the spatial and by underemphasising the temporal, often simultaneously.

My research, on the other hand, extends the imaginative boundaries of research on pastoral mobility by drawing on the sociological and anthropological literature on time and mobility. While I acknowledge the mutual imbrication of time and space in shaping the experiences of being mobile, I foreground its temporal aspects to destabilise the “spatial imperialism” (May and Thrift, 2011: 2) in development thinking.

As Castree (2009: 33) claims (in reference to Massey’s work),

“...time needs space while space would indeed be ‘dead, fixed, undialectical, immobile’ if it were not for time.”

It is, in some ways, intuitive to think of mobility as spatial given its physicality. As Munn (1992) argues that it may be, paradoxically, time’s pervasiveness in everyday life that makes it invisible to analysis. Pastoral mobility “pleats” (Serres and Latour, 1995) in multiple and simultaneous aspects of time, such as the time of clocks and calendars, diurnal cycles, circadian rhythms, and seasons, as well as age, generation, ideas of progress and modernity, the past-present-future and the synchronisation, ordering, sequencing, and timing of events and activities. It includes durations, rhythms, and cycles - with different velocities, intensities and frequencies - which different actors seek to understand, manage, or manipulate (D’Angelo and Pijpers, 2018). All these aspects interpenetrate and have a bearing on each other and mobility, as we will see through the chapters of this thesis.

Further, the thesis incorporates temporalities not only as objects of analysis, such as the time and timing of mobility, seasonal availability of fodder, animal lifecycles, etc., but also as an analytical frame through which to understand social phenomena, such as through rhythms for fodder access, synchronisation through social institutions, the speed of modernity, etc. Movements always take place in and through time. Different understandings and frameworks of time structure movements differently. They affect when and how mobilities occur and how they are understood (Korpela, 2020). Interrogating the temporal composition of and the rate at which people may enact or deploy their movements provides the opportunity to understand the socio-economic, political, cultural, aspirational, and other dimensions of mobility.

Moreover, seeing mobility through a temporal lens, as ‘duration,’ brings out its affective experiential dimensions. Studying the affective dimensions of mobility is paying attention to the temporal, for the temporal is nothing but that which is experienced. These conceptual underpinnings are discussed further in chapter 10.

1.3. Scholarship on pastoral mobility

Pastoralists are specialised livestock producers who take advantage of the variability in their circumstances, whether environmental, economic, or social, by imbuing flexibility in their own practices, mainly manifested through the organisation and deployment of strategic mobility across resource niches. They manage the grazing itineraries of their livestock in such a way that they feed better than without such management (MISERIOR, 2019).

Agrawal (1999: 7) contends that pastoral mobility is a “naturalized fact”, a “commonsensical inference” in rangeland environments such as drylands, highlands, wetlands, scrublands, etc., to level fluctuations in the availability of fodder and water (Dwyer and Istomin, 2008) in difficult environments.³ Yet popular understandings of pastoral mobility have undergone tremendous changes over the years.

³ Early anthropological studies showed a fascination for mobility that was seen not only as an economic strategy but also as a cultural trait, separating the ‘nomad’ from the ‘other’ (see Pritchard, 1940; Barth, 1961; Khazanov, 1984, for example). Further studies also pointed to various motivations for pastoral mobility such as trade (for example, Dangwal, 2006; Xie and Li, 2008), inter-personal and inter-group

Pastoral mobility was thought of as a backward, unproductive, and harmful practice, a view that persists in many parts of the world, including Gujarat. A point of departure to such thinking in scholarship came with the widespread acceptance of the “new rangeland paradigm” (Adriansen, 2003) that acknowledged that rangelands were inherently non-equilibrial, with often unequal, unpredictable, and short-lived distributions of resources (Behnke, Scoones and Kerven, 1993; Scoones, 1995). The accompanying “new mobility paradigm” (Niamir-Fuller, 1999) showed that mobile pastoralism as a land management system was not as damaging and dysfunctional as previously thought (*ibid.*). It encouraged pastoral mobility as an appropriate resource management strategy that was both economically and ecologically necessary (*ibid.*), providing food, nutrition, and livelihood security as well as environmental sustainability.

The concept of the “mobility paradigm”, proposed in the book *Managing Mobility in African Rangelands* (Niamir-Fuller, 1999), repositioned mobility as the “foundation of future sustainability” as opposed to a “remnant from the past” (*ibid.*: 1). The book provides a synthesis of the different development paradigms of pastoral development, beginning with the “classical paradigm” that sought to limit pastoralism in the 1970s to the “mobility paradigm” in the 1990s.

Niamir Fuller and Turner (1999) argue, and rightly so, that understanding these paradigms is vital as they have influenced fundamental changes in pastoral systems. They recognise that since the mid-1980s, pastoral development projects have adopted a spatial view. Although, by introducing the “mobilities paradigm” they sought to centre mobility, their focus continued to be natural resource management, which was approached through the “mobility paradigm,” yet mobility itself remained secondary. This is reflected in the ‘key words’ identified: resource base, resource users, adaptive strategies and common-property resources, as well as the title of the book that focuses on “African rangelands” rather than on pastoralism, mobility, or livestock.

relations (Gulliver, 1975; Burnham, 1979) and for navigating state appropriation (Irons, 1974; Elam, 1979; Scott, 2009).

The literature discussed in this section is besides the vast complimentary literature that explicitly focuses on the spatiality of pastoralism, such as on pastoral commons (see Peters, 1994; Axelby, 2006; Mwangi, 2007; Bollig and Lesorogol, 2016), land governance and tenure (see IUCN, 2012; Herrera et al., 2014; Korf et al., 2015; Moritz, 2016; FAO, 2016; Robinson, 2019), and rangelands and drylands dynamics (see Krätli, 2015; Behnke, 2016).

In their 2016 paper, Turner et al. propose to breach the contradiction between the need for spatially fixed, exclusionary forms of tenure to protect pastoral resources and a socially porous open system that enables flexible access to accommodate climatic variability by developing a network of transhumance corridors connecting key watering points and encampment sites, rather than singular corridors. In areas with multiple resource users, Lengoibani (2011) argues for conferring existing land rights to all land users, including seasonally migrating pastoralists, to prevent any obstruction or renegotiation of seasonal land uses. Turner and Schlecht (2019) ask us to recognise not only the variabilities in mobility but also its regularities when developing institutions that facilitate necessary movement while protecting against competing land uses. A temporal approach can potentially help build a compelling political case for such provisions by supporting wider claims.

At the same time, scholarship also showed that mobility was not only about coping range management, and land tenure, but rather taking advantage of the variability in rangelands for maximising profits. Such shifts moved scholarship to “living off uncertainty” (Krätli and Schareika, 2010) rather than “living with uncertainty” (Scoones, 1995) in rangelands. For example, Adriansen (2003, 2005) shows from her study that Senegalese pastoralists are not interested in land per se, i.e., good range management, but rather in the relationship of land with livestock, that is a production or economic motive.

Emery Roe (1998, 2020) recognises the organisation of strategic mobility as one among a range of real-time strategies deployed by pastoralists as “process variance” in the face of high “input variance”, where the availability of inputs such as grazing resources is variable. By matching “input variance” with “process variance”, Roe (1998) contends that the system can receive stable output, that is, stable animal

production outcomes. By conceptualising pastoralism as such, he shows it as a “high-reliability institution” (ibid.).

Rather than seeing scattered rainfall as a limiting factor, pastoralists take advantage of such conditions to access resources spread across time and space, ensuring that their herds can always access the best quality grazing (Krätli, 2015). Such studies acknowledge the importance of being at ‘the right place at the right time.’ In fact, they show that given nutritional differences between different plants and the different stages of their lifecycle (FAO, 2021), moving animals sequentially across a series of environments means that pastoralists can keep more animals than if they were confined to one zone (Sanford, 1983). Behnke and Scoones (1992) extend the flexibility inscribed in mobility practices to say that higher stocking rates can be achieved if the animals are allowed full and opportunistic mobility.⁴

In a departure from a spatial analysis of mobility, Turner et al. (2014) provide insights into mobility practices and decision making by analysing data collected from 32 multi-ethnic villages in Mali and Niger. However, they present this in a discrete and descriptive format that fails to capture the pastoralists’ own understanding, organisation, and experiences of moving. Adriansen (2003) captures the motives, values, and preferences behind mobility practices in Ferlo, Senegal, classifying mobility patterns by production motives such as subsistence production, Tabaski,⁵ and commercial production.

Adriansen’s (2003) research on mobility was conducted in part through the help of GPS devices. The coming of GPS and GIS technologies has added a new dimension to the study of pastoral mobility. Liao et al. (2018) used GPS tracking to categorise livestock behaviour into distinct ranges of movement velocity in Borana, Ethiopia, influenced by forage availability and herding practices. Butt (2010) used GPS devices to study the seasonal space-time dynamics of cattle behaviour and mobility among Maasai pastoralists in semi-arid Kenya. Similar to Liao et al.’s study, he explained that seasonal constraints on forage availability greatly influenced

⁴ An offshoot of connecting resource availability with the animal’s nutritional requirements is to study the relationship between animals and pastoralists, their tastes and preferences, their own mobility practices

⁵ Tabaski is the local name for the festival of Eid-al-Adha which involves the ritualistic sacrifice of livestock.

mobility, and the high walking pattern in the dry season was because of the tracking strategies of pastoralists that directed the herd to key resource areas and ensured sufficient nutrition consumption.

Mobility has also prominently been studied in the west African and Arctic contexts. In the context of West Africa, Gonin (2019, 2015) has done good work in thinking through tenure rights and territorialities in mobile contexts as has Thebaud (2018). Gremont (2014, 2017) has written about mobility among the Tuareg of Mali. Among scholars of Arctic mobility, Tim Ingold is well known for taking his learnings from mobile pastoralists into wider understandings of mobilities, human-animal relations, and human-environment relations. Habeck (2006, 2015) has written about the experiences and emotions associated with reindeer herding in Russia. Golovnev and Vitebsky too have published on nomadism and mobility amongst reindeer herders.

Identifying the gap between conceptualisation and methodology to study pastoral mobility, I and other early career researchers were also involved in organising a workshop and a Special Issue of the *Nomadic Peoples* journal (issue 24.2) titled “Methodological Mess: Doing Research in Contexts of High Variability” where we looked at concept, method, and modes of analysis that better integrates the idea of mobility into pastoral studies.

The temporal dimensions of mobility are primarily studied through the lens of seasonality, where mobility is seen to take advantage of the temporal variability in forage availability. For example, Krätli (2015) shows how the pastoralists in the Sahel stretch the rainy season through their mobility beyond what they would experience were they to remain in one place. By moving south to meet the rains at the beginning of the rainy season and then following them north as the season progresses, the herders can stay on greener pastures for longer than would be possible in one location. Axelby (2007) shows the mobility and resource access arrangements of the Gaddi pastoralists in the Indian Himalayas by seasons, albeit indicated by discrete months (of the Hindu lunar calendar). Finke (2021) shows how pastoralists decide “where to go and when to move” by describing pastoral mobility by season while including aspects of animal and plant lifecycles associated with the seasons, such as lambing and nutrition availability. Temporality is incorporated

within pastoral studies through the analysis of either one or paired aspects, such as seasons and plant lifecycles.

While this section has offered a review of literature on pastoral mobility. It is evident that mobility and temporality are only partially conceptualised in the scholarship. Literature on the experiential dimensions of mobility or on multiple temporalities is limited. Most literature on mobility within pastoral studies is concerned with improving livestock production and relates to spatial, territorial, ecological and environmental issues. An explicit focus on the time, timing and temporality of mobility is rare, and therefore this thesis can be a valuable contribution.

1.4. Why the Rabari?

The Rabari are one of India's largest pastoral communities, with a population of a few hundred thousand. Although several Rabari hamlets may be found across central India, they consider themselves to belong to the arid western Indian States of Gujarat and Rajasthan. The Rabari trace their origin to a religious myth where the Hindu god, Lord Shiva, created them to take care of his wife's camels. Many of the Rabari now keep small ruminants instead of camels and remain attached to their 'original' identity as *maldharis* [*maal* = livestock, *dhari* = keeper].⁶ Moreover, they continue to have a strong ethic of mobility, travelling throughout the year with their animals.

The Rabari I worked with keep sheep and goats and belong to the Bhachau block in the border district of Kachchh in western Gujarat. As described in the opening vignette, the families I followed travel westwards in Kachchh during the monsoon

⁶ *Maldhari* is a livelihood-based identity attributed not only to the Rabari but also to other pastoral communities in Gujarat. The pastoralists trace their livelihood to mythical origins, along with 14 other Hindu endogamous communities such as the Bharwad, Ahir, Charan, etc. While for the NGOs and the state, the Muslim pastoralists are also considered *maldhari*, the Hindu pastoralists would not include them within this identity. The identity is mobilised as a political identity by both organisations advocating pastoral rights and the pastoralists themselves. For example, in 2020, four pastoral communities in Gujarat came together as *maldhari* to demand reservations in government jobs.

This identity is different from the *ghumantu* (nomadic in Hindi) or *vicharti* (nomadic in Gujarati) tribe associated with the many communities of travelling craftsfolk, performers and service providers in India. The development trajectories of these communities have been quite different from that of capital asset owning pastoralists.

months, where they graze their animals on fresh and nutritious fodder. They travel eastwards towards agricultural hot spots in sub-humid central Gujarat during the winter and summer months, where they graze mainly on cotton and wheat crop residues. Although this is the general pattern of mobility, each household differs in its production preferences and is confronted with variable environmental conditions, such that the timing and route of their migration journey are not predetermined.

Observing Pabiben's family reveals mobilities at various spatial and temporal scales. It includes the *haal ne haal* of her daily chores, the movements undertaken for collecting firewood and water, loading and unloading the camp, etc. It includes the *haal* of packing up and moving camp every few days, the *haal* of moving from one region to the next with the seasons, and the *haal* of being on the move day on day, year on year.

The pastoralists sync their inter and intraseasonal movements with harvest cycles that are in turn influenced by the weather as well as the politics of agrarian development, as seen in chapter 6. Grossly underexplored within pastoral studies is the role played by social institutions of mobility in enabling timely movements. Collective migration and the social life offered by the migration group are important factors in ensuring the persistence of pastoral mobility. At the same time the modular nature of the migrating group enables it to shapeshift and sync with the rhythms of pastoral places, as seen in chapter 7. Yet, pastoral youth are increasingly struggling to synchronise their spatial mobility with their aspirations and visions of social mobility as seen in chapter 8. The subject of this thesis is how these mobilities are organised, negotiated, regulated, and performed.

Despite their prominence in India, the Rabari are not well researched.⁷ Compared to pastoral groups in Africa, such as the Maasai, the Fulbe, the Borana, etc, there are only a few studies on the Rabari that are publicly available in English. Westphal-Hellbusch and Hellbusch's iconic 1974 book 'Die Rabari' was the first to provide a comprehensive review of the Rabari. Similar to and succeeding their work on the Jat, a Muslim pastoralist community in Kachchh, the book gives an overview of the community – its cultural practices, and social organisation, relations and

⁷ For research on the Rabari, one may look at Arun Agrawal (1999) (on the Raika-Rabari of Rajasthan, and Choksi and Dyer (1996) (on the Rabari of Kachchh).

institutions. Many of their findings, cited in the thesis where appropriate, remain relevant even today.

Although, the community did not receive high scholarly attention – perhaps because of the logistical challenge of working with mobile people and/or the greater interest in crop agriculture in India – it gained a lot of popular interest with photographs of the Rabari adorning tourist pamphlets and magazine covers. Part of the attraction is the Rabari aesthetic – with their black and white clothes (women in full black and men in full white), intricately embroidered through a strong language of motifs, and their silver accessories.

Taking embroidery as the entry point, Frater (1995) wrote “Threads of Identity: Embroidery and adornment of the nomadic Rabaris” interlacing textile art with the community’s history and development. Similarly, taking the entry point of education, Choksi and Dyer (1996) and Dyer (2001, 2009, 2010, 2012, 2014) write about the needs, possibilities, and aspirations for education among the Rabari and its intertwining with their social condition in the past and the present.

Well known studies of the Rabari pastoral livelihood, animal keeping and engagement with the environment have come from Purnendu Kavoori (1999) and Arun Agrawal (1998) who have both worked with the Rabari, known as the Raika, from Rajasthan. While Kavoori (1999) provides a historical analysis of change and adaptation, and the complex interdependence between pastoral production and agriculture and markets, Agrawal (1998) begins with questions from institutional economics and commons theories to understand the collective migration of pastoralists.

Beginning with an interest in understanding why pastoral mobility persists, I chose the Rabari from Kachchh because of my past experience of working in the region and knowing about Rabari livelihoods from my past work and travel experiences. Further, Rabari pastoralism is very much integrated with farming in the area rather than being isolated from crop agriculture. As described before, the Rabari graze on crop residues for a large part of the year, migrating to agricultural hot spots in the winter and summer months. The farmers and pastoralists offer each other mutual benefits as the pastoralists receive not only grazing access but also income in

exchange for the manure droppings of their animals. This interaction described further through this thesis offers a rich exploration of mobility at thematic intersections.

Kachchh is also one of India's fastest-growing regions, as the site of large-scale industrialisation and agricultural expansion. This development served as the laboratory and blueprint for the now-famous "Gujarat model" that formed the backbone of Prime Minister Narendra Modi's national election campaign. Premised on the "globalising modernity of (neo)liberal capitalism" (Scoones and Stirling, 2020: 2), described further in chapter 9, the rapidly shifting political economy brings new threats and opportunities for the pastoralists. Given these various dimensions, I felt that the Rabari would be interesting to work with and would offer insights on mobility that could shed light on new aspects to consider while being relevant to pastoralists and mobile peoples across the world.

1.5. Pacing pastoral mobility

Regarding understanding time and temporality, Adam (1990: 13) has said,

"We can grasp time in its complexity only if we seek the relations between time, temporality, tempo and timing, between clock time, chronology, social time and time-consciousness, between motion, process, change, continuity and the temporal modalities of past, present and future, between time as resource, as ordering principle and as becoming of the possible, or between any combination of these."

Therefore, to understand the temporality of pastoral mobility, the thesis attempts to unravel and explore its many dimensions through various temporal themes across the chapters. They complement and connect with each other to provide a more holistic picture of the experiences of being mobile.

As its binding theme, as will be discussed in chapter 9, the thesis shows how pastoral mobility is enabled, executed, and experienced through 'pacing.' While mobility connotes both the act of moving and the potential for it, 'pacing' defrosts the concept of mobility to indicate a dynamic flow, a process through which mobilities are carried out. Amit and Salazar (2020) describe "pace" as a concept that helps us understand the dynamic relationship between people (in our case, people and animals), space, and time, and to explore further and theorise mobility itself. 'Pace' comes from the

Latin word “passus”, indicating a unit of length roughly corresponding to a walking step (ibid.). Over time it has taken multiple meanings, such as “to walk with often slow or measured tread,” “to move along,” and “to keep pace or regulate the pace of” (ibid.).

An apt way to understand the *haal ne haal* [walk and walk] of pastoral mobility, ‘pacing’ is the process through which people deploy their movements as well as the conditions under which these movements are marshalled, represented, and contested (ibid.). Pacing shows how distance or space is temporally apprehended, that is, the role of temporalities in interaction with space. In an era where mobility and speed dominate, looking at the pace of pastoral mobility offers new insights, to not just think of pastoral mobilities but also to think of mobilities in general, and to address larger questions of development and modernity more broadly.

1.6. Chapter overview

The thesis is organised around 10 chapters, each of which is summarised below. The thesis uses a temporal lens to understand the experiences of being mobile among the Rabari pastoralists of western India. Chapters 5 to 8 explore a different aspect of pastoral mobility through a different conceptual hook, as discussed in the previous section. Each chapter brings out the affective, social, and political dimensions of mobility to supplement the economic rationality that underlies it. In so doing, the thesis brings us closer to the lived realities of the pastoralists and presents a holistic picture of mobility as a lived human experience.

The thesis also moves away from simplistic and linear argumentation in drawing out these aspects. Instead, it presents the story of the pastoralists as being in constant process, in constant negotiation with a “web of relationships” (Cresswell, 2006). It shows the complexity of pastoral life as it uncovers pushes and pulls, changes and constancies, affirmations and ambiguities.

The thesis, thus, employs a ‘nomadic analysis,’ as will be explained in chapter 4, to open to multiple possibilities, which it argues is a fruitful way forward for pastoral development, as well as to think through larger questions of modernity as will be discussed in chapter 9.

While this chapter has given a brief overview of the rationale and approach of the thesis, including a brief background of the Rabari pastoralists and a snapshot of the literature on pastoral mobility, chapter 2 will elaborate on the key concepts of mobility and temporality to show how they are used and understood in this thesis, focusing on the experiential, affective, relational, and processual aspects.

Chapter 3 will go from situating the concepts to situating the Rabari by describing their social and economic background and organisation in relation to pastoralism. It discusses their community and family life, and their social relationships, especially with the farming communities. It also speaks of how the Rabari livestock economy remains lucrative even as development policies restrict its growth.

In chapter 4, I will present my position concerning the Rabari and highlight that the thesis presents a situated analysis. This is key to a ‘nomadic’ approach to research – an approach that moves empirically, methodologically, and analytically with the research subjects and highlights the complexity and multiplicity of pastoral life, as discussed.

Beginning with a vignette that laments the changes in Kachchh in the past few decades, chapter 5 will show the shifts in the region's political economy. The chapter applies the notion of TimeSpace to explain how the spatial transformation of the region is intertwined with the temporalities it engenders. The chapter will show the shifts in the political economy of Kachchh through three axes: firstly, the company – describing the coming of large-scale export-oriented industries in Kachchh – secondly, the canal – elaborating on the politics of the largest dam project in India used as a leitmotif for agrarian change – and thirdly, cattle – describing the boom in the market for animal source products vis-à-vis the increasing political illiberalism in India. Kachchh has become the site of accelerated mobilities through these hyper-capitalist developments and is itself undergoing a rapid transformation, moving fast. The following chapters show how the pastoralists engage with the changes described here.

Mobility involves a “multiplicity of rhythmic assemblages of affect, technologies, materialities and embodied sensations” (Kaaristo, 2020: 64). Chapter 6 shows how

the pastoralists' experiences with a place and the specific time spent there are determined by the intersecting rhythms of crop and weather cycles that repeat annually but with differences. Pivoted around the experiences of Pabiben's family's movement between Kachchh and Gujarat over the fieldwork period from 2019 and 2021, the thesis shows how they gain access to nutritious fodder. The chapter describes how the expansion of commercial agriculture bears upon pastoral mobility.

Building on chapter 6, chapter 7 shows how the pastoralists organise their movements to synchronise with these intersecting rhythms of crop cycles and weather cycles. It describes the institution of the migrating group and how it maintains specific land: labour: livestock ratios to ensure the maximum returns. The chapter elaborates on the role of all the constituents of the migrating group and shows how it shapeshifts by altering its group composition to match resource availability.

Chapter 8 connects the experiences of spatial mobility of the pastoralists with social mobility. Pivoting on the departure of Valo, Pabiben's eldest son, from shepherding to start up a business, the chapter unpacks the different textures of 'waiting' as experienced by the different members of the migrating group. Further, it uses a more long-term perspective to show how a generation of Rabari youth is seeking to uplift their lives. At the same time, their aspirations see them as engaging in leisurely travel for mobility but find them unable to reach this goal.

In chapter 9, I synthesise the thesis thus far under the overarching concepts of 'pace' and 'pacing.' I show three key areas of work that are benefitting through this process. Firstly, the chapter discusses how pastoralists practically time their movements to take advantage of spatio-temporal variabilities and make the most of new opportunities. Pacing is organised through the interlinked features of flexibility and precision and shows how pastoralists match harvest cycles.

Secondly, it shows how pace is relational. The speed of a person, object or idea is only perceived in relation to another. At the same time, it is also in relation with and assembled at the intersection of various social, economic, environmental and political mobilities.

Lastly, pace helps us unpack the standard linear notions of modernity and progress. Premised on the assumption of speed and a 'speed up' culture, a close view of the pace of pastoral mobility opens multiple possibilities.

Finally, in chapter 10, I discuss the main contributions of this work to mobility studies and pastoral studies. Exploring through a temporal lens not only brings out new dimensions of pastoral mobility but also new ways of looking at them. Practically, this opens a new arena for action and the possibility of reframing development interventions for better outcomes. As both 'mobility' and 'pastoralism' are emerging as important ideas and practices, this thesis fills a crucial gap by bridging these two bodies of scholarship.

Chapter 2

Key Concepts: Mobility, Temporality, and Pace

2.1. Introduction

“Mobilities are all about temporality.”

- Urry (2000: 105).

In chapter 1, I introduced this thesis as showing how mobilities and temporalities are co-implicated. I argued that a temporal lens might reveal new dimensions and offer crucial insights for a deeper understanding of pastoral mobility. But what do I mean by ‘mobility’ and ‘temporality’?

This short chapter discusses the concepts of mobility, time and temporality to show how they are used in this thesis. It highlights the experiential understanding of mobility and temporality as suitable to respond to the research question. In section 2.2., I first discuss understandings and features of ‘(im)mobilities’ emerging from the ‘mobilities turn.’ I then discuss time and temporalities and their relationship in sub-section 2.3.1, before highlighting the multiplicity and simultaneity of temporalities in sub-section 2.3.2.

Finally, in section 2.4., I show how mobilities are analysed through a temporal lens to respond to the research question, ‘why does pastoral mobility persist, and how does it engage with new and changing circumstances?’ I show how the dynamics of ‘pace’ and ‘pacing’ emerge through the research to respond to this question.

2.2. Mobility

2.2.1. *The ‘constellations of mobility’*

Habeck and Broz (2015) show how the long drive from the Russian city of Novosibirsk to destinations in the Altai mountains is an essential part of the short weekend holiday undertaken by tourists. Often, ideas of tourism emphasise the

destination as the attraction. The journey there is seen simply as a means to an end, an intermediary stage, an empty, vacuous time. But, observing the significant time spent in the car, they conclude that the ride was as much a part of the trip as the destination. Similarly, the journey described in the opening vignette of the thesis, which saw the pastoralists cross over from Kachchh to Gujarat, emphasises the importance of time spent on the move to overall pastoral experience.

Mobility was ascribed with negative connotations as opposed to the fixity and boundedness associated with being in place (Cresswell, 2010; Salazar, 2018). It remained under-theorised and seen only as the act of displacement between locations, “contentless, apparently natural, and devoid of meaning, history and ideology” (Cresswell, 2006: 3). Studies focused on the causes and consequences of movement at places of origin and destination but paid little attention to the actual journey or journeys between them. Now with scholarship from the “mobilities turn” (Urry, 2000, 2007; Cresswell, 2006, 2010; Sheller and Urry, 2006; Elliott and Urry, 2010; Söderstrom et al., 2013; Salazar and Jayaram, 2016; Adey, 2017) movement between places and events is being acknowledged as central to our world and studied as an object of analysis.

Scholars of the “mobilities turn” argue that the spatialities of social life assume the movement of people, both actual and aspired (Hannam et al., 2006), as well as the movement of ideas, spaces, objects, and non-human beings. Mobilities studies tries to understand the way mobility is produced, understood, experienced, and accessed, not as a discrete and isolated act but rather as a composite phenomenon embedded in its social and historical context (Cresswell, 2010). By doing so, it hopes to develop a new conceptual understanding of mobility that would serve as both content and process – not only to understand mobility and its many relations but also as a lens through which to understand social life better (Urry, 2007; Sheller and Urry, 2016).

When we walk, we walk in specific directions, take certain routes, make certain paths, choosing one over another, and engaging with obstacles and incentives along the way. But we not only walk to some ‘where’, but we also walk in some ‘way’. For example, if I am walking toward a police officer, I may straighten up. On the other hand, I may add a little flair if I am walking towards a date. These ‘ways’ of walking may be conceived as disciplined or sexy, respectively. I may have interactions before,

after and along the journey that may alter the ‘way’ I walk. Therefore, the very act of walking is an effect of, elicits and is constituted by certain ideas, feelings, and sensations mediated by and beside the physicality of moving.

The example of my walk shows that, while mobility has a physical reality that is socially, culturally, and politically coded, it is also imagined, spoken of, and experienced affectively. Cresswell (2006, 2010) highlights these three aspects of mobility for a holistic understanding, although they can only be separated in the abstract rather than in empirical reality:

- a. Mobility as physical movement – as a ‘brute fact’, mapped, measured, and analysed, as the displacement discussed above
- b. Mobility as representation – as expressed through ideas, imaginations, and discourses that develop understandings of mobilities and give it shared meaning
- c. Mobility as experience – as the embodied practice of moving, as emotional and affective responses, as lived experience and a way to inhabit the world.

Together, Cresswell (2010: 18) calls the intertwined web of these aspects and their associated relationships “constellations of mobility,” that is, “particular patterns of movement, representations of movement, and ways of practising movement that make sense together.”

Hägerstrand (1982: 323-324), too, emphasised these aspects of mobility when he wrote:

“The fact that a human path in the time-geographic notation seems to represent nothing more than a point on the move should not lead us to forget that at its tip – as it were – in the persistent present stands a living body-subject endowed with memories, feelings, knowledge, imagination and goals.”

This is exemplified in chapter 6, where we will see Pabiben ‘missing’ the migration experiences in Gujarat. Her memories, and embodied experiences, especially of weather and landscape, elicit a longing for Gujarat as she finds herself ‘waiting’ in camp in Kachchh. ‘Waiting’ reappears in chapter 8, where Valo, Pabiben’s son, is imagining and seeking different mobility experiences, such as *farvanu* or leisure travel that is fast-paced and urban. He desires this as opposed to pastoral mobility, represented in popular conception as “stagnant” and “outdated” (Butt, 2016: 463).

Following Cresswell (2010: 17), I see mobility as a “fragile entanglement of movement, representation and practice,” as discussed above, and pay particular attention to its experiential aspects. Mobility “presses deeply upon the self, its everyday routines, scripts of selfhood, and textures of emotion” (Urry, 2010: 3). Seeing mobility as an experience focuses on what it means and how it is lived rather than its degree or extent. Such a view is reflected in the pastoral maxim “*jyaan maal ne maja aave tyaan amane maja aave*” [where the animals are well/enjoy, there we are well too], as will be discussed in chapter 3.

Repeated by all pastoralists when asked where they travel with their animals, the quote reveals the experience of moving rather than the places, their features, distances, infrastructure, etc. Rather than purely economic terms, they represent their mobility and the gains derived from it in affective and sensuous terms. Further, by describing the experience of their animals, they bring together human and non-human beings in material-semiotic ‘webs of relationships’ that are manifested through mobility.

2.2.2. Features of ‘mobility’

By emphasising experience as qualifying mobility, rather than its extent and enactment, mobilities studies opens the frame of analysis to diverse mobilities and new ways of looking at them. It considers mobilities at various scales and in different forms, such as bodily movements involved in dancing or walking, daily commutes, flying into space, and global flows of finance and labour. For example, Cresswell (2006: 219), claims that the aim of his seminal book *On the Move* is to “connect discussions of mobility from the blood cells coursing around the body to the movement of people across international boundaries.” In his book, he explores mobilities through dance as well as immigration, in photographs and airports, and through politics and advocacy.

Not only do mobilities scholars bring together varied forms of movement, but also an array of the modes of mobility, such as the five types of travel propounded by Urry (2007): corporeal, objects, virtual, imaginative, and communicative. Moreover, these modes are often interconnected and overlap. Nori (2010) shows how, in some cases,

the migration of pastoralists in Somalia has reduced in favour of the long-distance travel of milk through expanding marketing networks, analysing the fluxes in corporeal travel and the travel of 'objects' through his case study. Nilsson and Salazar (2017) show how mobile technology is embedded within Maasai pastoral culture, thereby analysing how communicative and corporeal mobilities intertwine within the social life of the Maasai. In a special issue, Cangià and Zittoun (2020) explore the interplay of imagination and mobility to show how both can be infused with expectation, aspiration, dreaming of other and future selves, and how they can be marked by fear and blockage based on personal experience. It shows mobility not just as physical movement but also imbued in the capacity and potential for it.



Figure 3. Despatializing mobility - from movement mapped across locations to seeing mobility as a qualitatively differentiated and relational flow.

Further, looking at mobility in these ways disrupts the rigid and reified binary between mobility and immobility. Adey (2006) shows that mobility and immobility are only relative; movements are either fast or slow in relation to other movements. A stone on the beach may appear stationary now, relative to our own walking, but it will move and weather over time. Its movements are only slower than our own. This emphasises the experiential, differential, and relational aspects of mobility (ibid.).

Moreover, mobilities and immobilities are co-constitutive and emerge together, as highlighted through the expression '(im)mobilities.' Some mobilities immobilise others. For example, through their case study, Devasahayam and Yeoh (2007) discuss how nannies in Asia are rendered immobile to allow their employers to be mobile, showing the co-implication of mobility and power. Chapter 7 will show how the fixity of the camp in place for an additional day allows the women of Hemangbhai Rabari's camp to visit a nearby temple.

At the same time, it is the fixity of the women at camp that enables the daily movement of the flock. The women's gender role in managing the domestic and social affairs of the camp provides 'care' to men (and lambs) as well as security for their belongings, thereby facilitating extended periods of life on the move. Mobilities rely

on such fixities or ‘moorings’ such as stable social institutions when it comes to the gender division of labour, as well as infrastructure, regulatory frameworks, and social practices (Söderstrom et al., 2013). Therefore, ‘stillness’ or immobility, both material and abstract, are greatly revealing about how mobilities are constituted.

By emphasising the role of experience, the mobilities paradigm shows that while people engage in multiple (im)mobilities, not all are equally meaningful and life-shaping (Salazar and Smart, 2011). For example, while Pabiben longed for the migration experience in Gujarat, as will be discussed in chapter 6, she found her mobility in the camp around her village uncomfortable at that moment. Similarly, in chapter 8, we will see how her son values travel for leisure more than moving with the animals.

The example of Pabiben’s and Valo’s mobilities also shows that mobilities are politically mediated. Mobilities and their materialities, representations, and practices, are both produced by and implicated in the production of political relationships (Cresswell, 2010; Söderstrom et al., 2013). By politics, I mean social relations that involve the production and distribution of power; relations that determine who or what moves where, when, and how, what narratives are constructed around such movements and the experiences they engender. In the example above, Pabiben is uncomfortable because she experienced a delay, a deceleration, in travelling to Gujarat, given agriculture policies that favour crop farming over mobile pastoralism. Similarly, Valo’s aspirations to move out of pastoralism arise from discourses that denigrate pastoral mobility as archaic and unproductive as opposed to modern and fast-paced mobilities. Such policies and discourses are derived from a politics that sees movement as a threatening pathology (Pontrandolfo and Solimene, 2020).

In this section, I have first discussed what I mean by mobility – an “entanglement of movement, representation and practice” (Cresswell, 2010: 18), emphasising its experiential and affective dimensions. Then I discussed the various facets of mobilities such a conceptualisation opens up for analysis - that it applies to all forms, modes and scales of movement that are often interconnected; that immobilities and mobilities co-constitute each other and are often enabled through fixities such as moorings; and that mobilities have different meanings for people and are embedded

in specific social and political histories. Throughout this thesis, these various aspects of mobilities are implied, exemplified, and engaged with.

2.3. Time and temporality

2.3.1. Clock time and lived time

“What is time?” The question, when asked, often changes form into “what is *the* time?” sliding into a singular view of time as that represented by the “invariable beat of the clock” (Adam, 2005: 11). Kümmerer (1996) shows how the dominant view of time is as a ‘point in time’ or a ‘period’ indicating when an event occurs and its duration. Time in this sense is a spatialised measure, represented by the standardised, homogenous, and unchanging units of clocks and calendars. It is discrete and linear, where one moment follows the next, and the past precedes the present and the future, as though they were strung together like beads on a string. In other words, intervals, duration sequence, order, and periodicity, are imagined as a straight axis along which passing time is measured, and events are plotted (Adam, 1990).

Urry (2000, drawing from Mumford, 1963) claims that modernity began with the temporal regularity presented by the clock, that is, with the “routinisation of time” or “taming of time” (Bauman, 2000: 115). Consequently, the time of capital or “industrial time” (Adam, 1990, 2005) is coordinated with the movement of the clock. Such a time is decontextualised, rationalised, and abstracted. Such a ‘time is money’ that is budgeted, used, planned, and allocated (Adam, 2005). It can be ‘wasted’ and ‘saved.’ It is managed, controlled, and subject to commodification, use, and abuse (ibid.). Such industrialised and regimented ways of thinking about time have become naturalised as the only way of thinking about time, maintained by popular and scientific consensus.

Lefebvre (1974/1991) argues that lived time experienced through nature has disappeared, favouring industrial clock time. This thesis shows how this is not true. While the state and capital interests reify the time of westernised clocks and calendars, localised understandings of time continue to dominate the lifeworlds of the pastoralists in Gujarat. Rather than a linear, independent, and invariable given,

time is socially constructed. In his seminal book on time, Stephen Hawking (1988: 33) says,

“There is no unique absolute time, but instead each individual has his own personal measure of time that depends on where his [sic] is and how he is moving.”

Time underpins our experiences and our development as human beings. It is a structuring framework “within which activities are not only organised and planned but also timed and synchronised at varying speeds and intensity, and orchestrated to intricate scores of beginnings and ends, sequences, durations and pauses” (Adam, 2005: 13). Kolinjivadi et al. (2020) distinguish such lived “time” with the “Time” of capital, clocks, and calendars. Unlike the linear, predictable, and disciplining coordination of ‘Time,’ ‘time’ is plural, dynamic, situated, incalculable and not fully controllable (ibid.). Bergson (1886) introduced this differentiation when he separated *temps* from *durée*. While *temps* are quantitative and divisible into spatial units, or ‘instants,’ *durée* is intuitive, sensuous, and qualitative; it is lived duration, “thoroughly ‘temporal’” (Urry, 2000: 116).

Temporality, on the other hand, is the experience of time. However conceived, whether *temps* or *durée*, time is made sense of as temporality. Iparraguirre (2016: 616) considers time as a priori, as given, as the “phenomenon of becoming in itself.” On the other hand, temporality is the contextually situated understanding or “apprehension of becoming” (ibid.: 616). Sharma (2014: 9) explains the temporal as “not a general sense of time particular to an epoch of history but a specific experience of time that is structured in specific political and economic contexts.”

“The Nuer do not use names of the months for marking the time of an event... Time is a relation between activities... Time does not have the same value throughout the year” (Evans-Pritchard, 1977: 119–120). This quote shows how understandings of time are more complex and experiential than simple temporal measures such as those of “industrial time” (Adam, 2005). Experiences of time differ between people and places, given their social and cultural history and are imbued with a multitude of meanings. Iparraguirre (2016: 619) calls this “originary temporality” or the notion and experience of time built by a social group. It denaturalises singular and universal notions of the “hegemonic temporality” of clocks and calendars (ibid.).

While conceding to the situatedness of temporalities, I differ from Iparraguirre (2016) as I do not see communities or temporalities as bounded but rather at the intersections of many interacting, colliding, synchronising, and interweaving times. Through the thesis, I focus on ‘social time’ (Nowotny, 1992) that derives from collective activities and social life. Here various aspects of time converge and acquire a particular cultural character situated in context. Chapter 6, for example, discusses the ‘rhythms’ of pastoral places that bring together the times of farmers and pastoralists, of weather, crops and animals, to shape experiences of being on the move. Chapter 7 shows how the daily roles and routines of the different members of a migrating group are harmonised and synchronise with the rhythms of chapter 6.

2.3.2. The multiplicity and simultaneity of time

While the thesis focuses on the pastoralists’ individual and collective understanding and experiences of time, it cautions against moving from one objectifying temporal frame to another. Guyer et al. (2007), through their study of African land use over the short, mid, and long-term, emphasise temporal heterogeneity. They support, Mbembe’s (2001) claim that Africa is going in multiple directions at once, showing the coevalness of different temporal trajectories. Massey (2005), for example, makes a similar claim concerning global development, where countries are ordered along a linear temporal scale from primitive to modern. Instead, as will be discussed in chapter 9, she claims that countries follow different paths to development, all equally relevant and valid.

While Guyer et al. (2007) and Massey (2005) disrupt the linearity of development trajectories, a similar argument can be made for understandings of the past, present and future. Urry (2000: 116) shows how the past is not one location or point on a timeline; rather, memory is made up of the “piling of the past upon the past,” images that accumulate upon each other and alter over time. In a similar vein, Adams et al. (2009) show how anticipation for the future shapes action in the present, as seen through Valo’s changing ambitions in chapter 8. Taking another example discussed in the past sections – Pabiben’s missing of Gujarat shows how memories of the past shape expectations for the future and have an emotional effect on the present.

I highlight the co-existence of temporal structures, practices, and experiences by showing temporal heterogeneity. For example, for the Rabari, June is not only the 6th month of the Gregorian calendar but also when schools reopen after the summer break. It also overlaps with the month of Ashad on the Gujarati lunar calendar when they celebrate the onset of monsoon and the peacocks sing (as will be discussed in chapter 5), when they consider the night to fall under the *kataniyo* constellation, and when they celebrate the Kachchhi New Year.



Figure 4. Calendar showing dates of the Gregorian month in English as well as the Hindu lunar calendar in Gujarati along with national and religious holidays. Source: DeshGujarat

Adam (1990) contends that time is not just a “fact of life” but rather implicated in every aspect. Therefore, time is that of clocks and calendars, and that of day and night, diurnal cycles, seasons, lunar cycles, age, ageing, and lifecycles, and of the timing, sequencing, and the rhythmic organization of activities (ibid.). It is both an aspiration for the future and a memory of the past, located on the linear axis of past, present and future, as well as the cyclical routine and repetitions of everyday life. All these aspects co-exist and are lived simultaneously.

Adams (2005: 8) shows that time is multidimensional, a “multiplex aspect” of social life. The multifarious nature of time and temporality is experiential and culturally specific. It can be grasped “in its complexity only if we seek the relations between time, temporality, tempo and timing, between clock time, chronology, social time and time-consciousness, between motion, process, change, continuity and the temporal modalities of past, present and future, between time as a resource, as ordering principle and as becoming of the possible, or between any combination of these” (Adam, 1990: 13). All these aspects interpenetrate and have a bearing on each other.

Further, temporalities, just as mobilities, have the capacity to generate affect. Temporalities can produce emotions such as anticipation, desire, and hope as much as discomfort, chronic stress, fear, and despair (Urry, 2000). It can be stolen, lost,

bought, anticipated, and awaited. In fact, paying attention to the affective, such as the affective dimensions of mobility, is paying attention to the temporal because the temporal is nothing but that which is experienced.

Finally, temporalities are also shaped by and embroiled in negotiations of power. Jordheim (2014: 510) explains the political dimensions of time as “the power to control movements and decide about beginnings and endings, to set the pace, to give the rhythm.” As seen in the discussion on Guyer et al. (2013) and Massey’s (2005) scholarship earlier in the section, some temporalities are preferred and privileged over others, affecting how time is thought of, represented, and experienced. Sharma (2014: 10) emphasises temporality’s political dimension and sees time as “a form of power, a site of material struggle and social difference.” Similarly, Bear (2016) shows how anthropologists were increasingly reporting temporal insecurity or conflicts in time as an aspect of the experiences of inequality in their fieldsites. These examples show how time, its control, manipulation, and management are heavily related to the exercise of power.

2.4. The temporality of mobility

This thesis asks the open-ended and inductive question: ‘Why does pastoral mobility persist, and how does it engage with new and changing circumstances?’ At its starting point is the assumption that the persistence of pastoral mobility must be rationalised, given the many predictions of its demise. The second part of the question assumes that pastoralists are faced with new and changing circumstances.

As the following chapters show, pastoralists are very much part of a fast-moving world, where things, processes, ideas, and imaginations are constantly changing. Yet, I use the word “engage” to assume neutrality and keep the investigation open to the various strategies adopted by pastoralists as they move, both literally and metaphorically, with and within a world in flux.



Moreover, the question immediately points to the importance of experience in responding to it. It does not ask for objectivity but instead centres on subjective understandings to make sense of pastoral mobility today. A deep engagement with ground reality, as will be evidenced through the empirical material presented in the thesis, reveals the primacy of the temporal in the organising, understanding, and persistence of mobility.

In the thesis, mobility is conceived as a “fragile entanglement of movement, representation and practice” (Cresswell, 2010: 17). Significantly, mobility is as physical displacement from one location to another, and a political and affective experience. Cresswell’s view emphasises mobility as lived duration, rather than as ‘vacant’ or ‘empty’ time – a perspective that I share. Hence, the thesis highlights the continuity of movement and spatiality, as well as the experiential aspects of mobility as they unfold at the intersections of the “heterogeneous temporal entanglements of lifeworlds” (Fitz-Henry, 2017: 7).

When analysing mobility through a temporal lens, this thesis focuses on the temporal objects and processes that frame and structure the mobility of Rabari pastoralists. It looks at how time and temporality are implicated in experiences of mobility.

When mobility is seen merely as displacement between locations, the time in transit comes to be thought of as ‘dead time’ where nothing happens. Mapped lines linking locations A and B reduce movement to a single, directed displacement, and as enacted in a chronological instant or ‘without time’. Attempts, especially from a transport studies or economics perspective, have been consistently made to reduce journey times and cost, an example of a ‘sedentarist’ perspective (Griffiths et al., 2013).

But when mobility comes to be seen as an experience, then the time spent in (im)mobility, whether physical, virtual, or imagined, comes to have meaning and subjective quality. This reflects the conceptualisation of mobility as a ‘walk,’ as Bergsonian *durée*, as opposed to *temps* or an ‘assembly of point-to-point connectors,’ connecting moments on a timeline, as discussed in chapter 1.

In classical physics, motion cannot be described without time; they are inseparably linked. When something moves, it changes its position in space over time or in a specific time interval. Speed is distance apprehended over time. But popular conceptions of mobility see it as resting on the complete abstraction of time, as discussed in section 2.2. Actions, events, and movements are assumed to occur in or over time, but time itself is not co-implicated in the production of nor is produced by them. While agreeing with the connection of time and motion, I rally against the abstraction of space and stress the significance of looking at the temporal dimensions of mobility.

Sharma (2014) adopts such an approach when she begins her book, *In the Meantime*, with a temporal analysis of the crisscrossing mobilities observed outside the busy Shibuya station in Tokyo. She shows how the convergence of people at the crossing is not random but temporally ordered and how these different temporal itineraries constitute the social space there. Further, the experience of the crossing depends on the temporal position of each of the people.

Importantly, Sharma (2014) problematises the seemingly universal reification of speed, as discussed further in chapter 9. But rather than arguing for ‘slow-down’, instead, she asks us to recognise an “uneven multiplicity of temporalities that is complicated by the labour arrangements, cultural practices, technological environments, and social spaces...” (ibid.: 9).

Through my thesis, I also mobilise ‘pace’ as the binding concept for the thesis. ‘Pace’ emerges as the critical process through which pastoralists manage their mobilities. Space, mobility, and temporality come together and can be understood through the concept of pace. Adey (2006) shows how we have no conception of speed except for its difference, that is, slow and fast, mobile, and immobile are only relative, as discussed

in section 2.2. Bissel (2007) problematises the notion of speed concerning ideas of mobility and immobility, showing how slow movements, such as waiting, are considered deadened as opposed to faster movements. Rather than an abstract and spatialised view of (im)mobilities represented by speed, he proposes to think in terms of embodied action and inaction.

Rather than think of ‘pace’ as abstracted speed, I show how it is enacted in relation to different actors, ideas, and realities. I use the concept to animate and qualify mobility, emphasising how it is lived and felt. Rather than the binary of fast and slow, I show (im)mobilities as unique and differentiated experiences. Someone taking a stroll and someone walking to perform physical labour may both be considered slow, but their experience may be completely different.

Moreover, through a temporal analysis, I focus on the process of ‘pacing’ or ‘being paced’ to draw out nuanced insights about pastoral mobility. While ‘pace’ is the speed at which mobilities are deployed, ‘pacing’ is the active process of regulating the speed and rhythm of mobility. Pastoral mobilities are deeply embedded in webs of power relations at multiple scales that unfold through the thesis, showing ‘pacing’ as an embedded and context-specific process. As Sharma (2014: 7) says, “synchronicity (through pacing) is at the heart of everyday material relations.” Looking at all these aspects allows me to respond to my research question, reiterated earlier. The question emerges as co-referential as the reason why pastoral mobility persists is because of how it engages with new and changing circumstances – that is, through ‘pacing’ mobilities.

Through the key empirical chapters (chapters 6, 7, and 8), I show how concepts such as tempo, acceleration, pace, flow, cycle, rhythm, and synchrony, all constituted at the intersection of mobility and temporality, contribute to the pace of pastoral mobility. They all uncover a different aspect to provide a holistic picture of pastoral mobility. In the next chapters I provide important details to foreground the research, such as details of the community (in chapter 3), methodology and positionality (in chapter 4), and political economic context (in chapter 5), before discussing the empirical case material.

Chapter 3

Placing the Rabari

3.1. Introduction



“Maaro eklo Rabari

Pade lakh upar bhaari”

[My lone Rabari

Can tackle a lakh (others)]

These lines from the famous Rabari pop star Geeta Rabari’s song indicate the community’s pride in itself. The song goes on to describe the various qualities of “maaro mongho maldhari, maaro Raiko Rabari” [my precious pastoralist, my Raika Rabari], namely, innocence, courage, reliability, loyalty, generosity, commitment, trust, and respect. The Rabari take great pride in embodying and upholding these values. Yet, as this thesis will show, the Rabari do not fall neatly into the romanticised image of the ‘noble savage,’ wanderers that have escaped the pressures of civilisation, nor are they backward and outdated as popularly imagined.

The image of the Rabari pastoralist shepherding a flock of sheep by the roadside, sack on shoulders and stick in hand, has long been used to represent Gujarat. The

Rabari are one of the largest nomadic communities in India and are ubiquitous in the semi-arid areas of Gujarat. They travel across vast swathes of the State and beyond to maximise available opportunities. Still, they remain marginal to the state's vision despite being economically profitable, environmentally sustainable, and locally relevant.

This short chapter 'places' the Rabari pastoralists socially and spatially, culturally and economically, within Gujarat to introduce the community and provide a social context for the chapters to follow. In section 3.2. the chapter discusses the Rabari social structures and institutions by looking at community life, the household, the migrating group, and village life. In section 3.3. the chapter proceeds to unpack Rabari social relations outside their community, both within and outside their village. Importantly, it highlights the relationship between farmers and pastoralists, which is not only economically beneficial but also affective and ambivalent. Section 3.4. discusses the Rabari livestock economy in detail, showing their many income sources as well as the social and political conditions surrounding their livelihood.

3.2. Rabari community and family life

3.2.1. Rabari community life

The Rabari are one of India's most significant nomadic communities with a population of a few hundred thousand.⁸ However, as disaggregated data about population is unavailable by community it is hard to estimate actual numbers. They are ubiquitous in Kachchh, easily recognisable in their characteristic attire, black for women and white for men. Many Rabari are still mobile and enjoy the highest social position amongst the pastoralist communities in the State, which is also home to other pastoral communities such as the Ahir, Charan, Bharwad and Jat (Tambs-Lyche, 2008). Perhaps their privileged position and ability to generate returns from pastoralism have retained them within the livelihood as opposed to other communities, as will be explored through the thesis and specifically in chapter 9.

⁸ I assume the Rabari to be an enclosed community as they identify boundaries to their social group, and between their *samaj* [society/community] and others even if interacting closely.

The Rabari of Kachchh are divided further into sub-groups such as the Kashi or Kachchhi Rabari from west Kachchh, the Dhebariya from the centre, the Prathariya from the north-east, and the Vagadiya from the east.⁹ Each of the sub-groups show variations in the livestock they keep and the spatio-temporal organisation of mobility. For example, the Kashi Rabari graze in the stony hills of Nakhatrana block and have many camel keepers. The Dhebariya, on the other hand, are known for their long-distance migration, many travelling to distant States such as Maharashtra, Andhra Pradesh, Chhattisgarh and Madhya Pradesh, spending years out of their 'home villages,' just like migrants who may move for work and remain in the new location for years while maintaining ties with their village.

The pastoralists I worked with belonged to the Vagadiya sub-group, mainly from the Bhachau block of the Kachchh district. I chose this sub-group because they were more accessible and open to visitors. The Vagadiya Rabari are thought of as commercial and entrepreneurial, inhabiting a densely industrialising area that connects Kachchh with mainland Gujarat and beyond.

Among the community, the livestock keepers¹⁰ are organised in *dangs* or migrating groups. Chapter 7 speaks in detail about the role and organisation of the groups. They are autonomous transient communities on the move, with increasingly variable group composition and diffused leadership. Hemangbhai, a young *mukhi* or leader in his early 30s, describes a sort of learning through apprenticeship as shepherds learn from senior *mukhis* and take up leadership roles when they feel confident about being able to meet the obligations it entails. In fact, as Salpeteur et al. (2016) show how the migration group is the site of shared practice and learning as it constructs common experiences and bodies of knowledge. Thinking of joint migration as an adaptive co-management system, they explain how such a system explicitly

⁹ These are only the sub-groups of the Rabari in Kachchh. There are other sub-groups found outside of Kachchh, in other parts of Gujarat and Rajasthan. I have limited experience with groups other than the Vagadiya. They are further divided into sub-sub groups – the Vagadiya have three further sub-groups based on village clusters. For example, the Vagadiya comprise of a 34-village cluster, which is further divided into 3 sub-clusters of 9, 12, and 13 villages respectively.

¹⁰ In this thesis, 'pastoralists' are those that self-identify as so. As the Rabari trace their identity as pastoralists to mythical origins and are a closed endogamous community, all Rabari are referred to and identified as pastoralists in the thesis. The thesis focusses on members of the Rabari community that continue to keep livestock in mobile systems, thereby showing great overlaps between 'pastoralists' and 'livestock keepers.' Where I refer to those Rabari who no longer keep livestock, I explain what they do instead. The thesis also identifies 'shepherds' as those involved in the daily practical work of grazing livestock.

takes into account the dynamic condition of the ecosystem that implies some degree of unpredictability in management (ibid.).

Life on the move not only shapes social organisation and knowledge transfer but also is the social and cultural life of the Rabari. For example, earlier, all weddings in the community took place on the same day, on the birthday of the Hindu god Lord Krishna, who is known to have herded cows in his youth and is worshipped by the pastoral communities. The day was also suitable as it falls towards the beginning of the monsoon and the migrating pastoralists often return to their home villages during this period. But as mobility patterns are changing, given both changes in land use around villages and livelihood diversification among the Rabari, weddings now take place on any suitable day, especially around the festival of Diwali at the end of the monsoon.

Weddings among the Rabari are often organised in *saanta* [link], where a brother-sister pair marries another brother-sister pair. This has implications for mobility as the families become intertwined, and the women may comfortably manage the hearth of either one or combined flocks, as illustrated in chapter 7. In the absence of a sibling pairing, the groom's family must pay a bride price which these days is upwards of rupees 10 lakhs. Women among the Rabari are valued, and despite the patriarchal structure of the community, gender relations are found to be more balanced than in other communities in the region. Rabari women are tenacious and bold given their experience managing life on the move, including the household finances, as the men remain in the bush with their flock. More on the position and role of women, and transformations in them, are discussed in chapters 4 and 7.

3.2.2. The Rabari household and village life

The Rabari family consists of monogamous parents and their children. Marriages are often organised by parents when their children are quite young, and daughters continue to live in their maternal homes until the birth of their first child, with movement between their parents' and in-laws' homes even after. Sons are made financially independent once they are married and the customary transactions associated with marriage are completed. Young couples move into their own home,

often within the same compound as the parents' home, and they may even continue to graze with the family flock.

The Rabari have a dual household system: both in the bush and the village.¹¹ The duality of the household between the bush and the village is also reflected in cultural practices; for example, a newly married couple is given both the gift of livestock, called *daameno*, and the gift of furniture for their village home, called *juriyu*, which includes a 'city' bed, cupboard and utensils (Maru, 2020). In earlier days, the campsite in the bush had more prominence over their village home; as Krupaben, a middle-aged pastoral woman recalled,

"Pehela toh aakho gaam jato hoy ne evu lage. 15-16 loko nu ek vaandhyu, and 20-25 vaandhya no dang. Saathe saathe 200 – 250 loko. Darek dhani ne 500 maal, koi ne 600 – 700. Saathe 10-12 hazaar maal. Ek gaam ma jaao toh maja aave ne. Evu na lage ke ek dang chhe - evu j lage ke gaam chhe. Gaam akhu haltu jaay. Badha chokrao ramat gamat karya rakhe. Amane gaam jevu'j lage. Ame gaam ma aaviye toh amane maja na aave. Ek be dahada rahi ne bhaagi jai. Majaj na aave. Gaam ma badha pot potana ghare dhali jaay. Maal ma toh badu ek khetar ma padyu hoy toh badhu bheru bheru lage."

[Earlier, it would seem like the whole village is going. There is a *vaandhyu* [camp] of 15-16 people and a *dang* [migrating group] of 20-25 camps. 200-250 people together. Each livestock owner had 500 animals, some 600-700. About 10-12 thousand animals together. It's obviously fun if you go in a village. It doesn't feel like it is a migrating group – it feels like it is a village. The whole village is going walking. All the kids play. We feel like it is a village. When we come into the village, we do not like it. We stay for one or two nights and then run away. We do not like it. In the village, all the people go into their own homes. When we go with the animals, everything (all the camps) is in one farm, so everything feels together.]

As Krupaben said, previously the pastoralists would spend considerable time on migration, and migration would be organised in large groups. As chapter 7 shows, given the expansion of agriculture, the size of the migration group is reducing as the pastoralists have less open pasture. In contrast to Krupaben's comment, this leads to many women feeling isolated in camp, as seen through Pabiben's predicament in the vignette of chapter 5.

¹¹ This may also be the case with some farming households that may seasonally stay in a makeshift home by their field.

At the same time, many young people are choosing to stay back in the village to enjoy the comforts of settled life and have access to amenities and social services, such as schooling for children, as well as to have diversified incomes, as discussed in chapter 8. For example, as chapter 8 reiterates, among Nathubhai and Pabiben's four sons, two are shepherds for their flock, while the other two take up jobs around the village, such as working in a salt factory or as security guards for windmills. They stay back in the village, along with the wives and infants of two of the sons. Hence, their village home and village social life are gaining prominence.

The pastoralists maintain a permanent brick-and-mortar home in the village where part of the family, such as the old, young children and their mothers, may live throughout the year. Ranabhai, a pastoralist from Nathubhai's village, highlighted the importance of a village home, even though his wife and children were travelled with him and his flock, and the house remained locked when he said,

"Ghar toh khape, bhale rahevanu ahinya khavanu ahinya, toye ghar toh khape."

[We need a house (in the village), even if we live here (in the bush) and eat here, still we need a house.]¹²

The village serves not only as a location but also as a part of an individual's social identity. In the region, weddings are often organised across villages, and villages are associated with identity. Ranabhai continued, indicating the social significance of having a home,

"Aapde haaru bhalu koi bi kaam karvu hoy aapdu vatan hoy aapdu makan hoy toh aapde kari shakiye. Aa chokro chhe ene parnavu hoy toh ene ghare lai jai ne parnavu. Potanu vatan khape, potanu ghar khape. Kai haru bhalu... ke koi ghardu bhudhu mari gayu hoy toh besava vahaan aave, vagada ma thodi aave."

[If we want to do any good work, if we have our nation, our house, then we can do it. If we want to get the children married, we bring them home to get married. We need our nation, our home. Anything good... or if an older person dies, then mourners will come there, they won't come to the bush.]¹³

¹² Interaction on 22/09/2020.

¹³ Interaction on 22/09/2020.

Ranabhai's comment highlights the importance of the village home for social ritual. In studies on mobile pastoralism, pastoralists are often romanticised as being 'at home in movement,' emphasising the time spent in movement and migration camps. While the rest of this thesis focuses on life on the move, the pastoralists' attachment to their 'own' village and *pucca* (permanent) home must be acknowledged.

There is considerable movement between the migrating camp or *vaandhiyu* and the village as family members visit each other, gather for important festivals and rituals, for births and deaths, for any paperwork or government-related activity, for livelihood diversification such as farming, for visits to the doctor, and so on.

Returning to the camp near Morbi after having spent two days in the village for a festival celebration, Pabiben said,

"Have amarathi aa haala dola nathi thatu. Haave zadapi zamano aavyo. Pehela toh ame nikalta toh kya chek varas pachi gaam ma jaata. Have toh jyaare juo tyaaare javanu thay. Aa chad utar kari ne mathu dukhi aave chhe."

[Now, we cannot do this back and forth. Now it is a fast age. In the past, when we would leave (on migration), we would go back to the village after a year. Now we go (to the village) every now and then. This embarking-alighting (referring to travel) is giving me a headache].¹⁴

Not only does her comment indicate the growing connection with the village experienced by the pastoralists, as discussed before, but also how the development in transportation is implicated in this as travel between Morbi and Kachchh has become easier over the years. Further, she alludes to the rising social expectations to participate in social events in the village as the place gains significance for the Rabari. The rise in mobile technology also supplements this dual household as pastoralists in the bush engage with village life through video calls and social media posts.

3.3. Rabari social and spatial relations

3.3.1. The spaces, places, and relationships of Rabari mobility

¹⁴ Interaction on 13/03/2021.

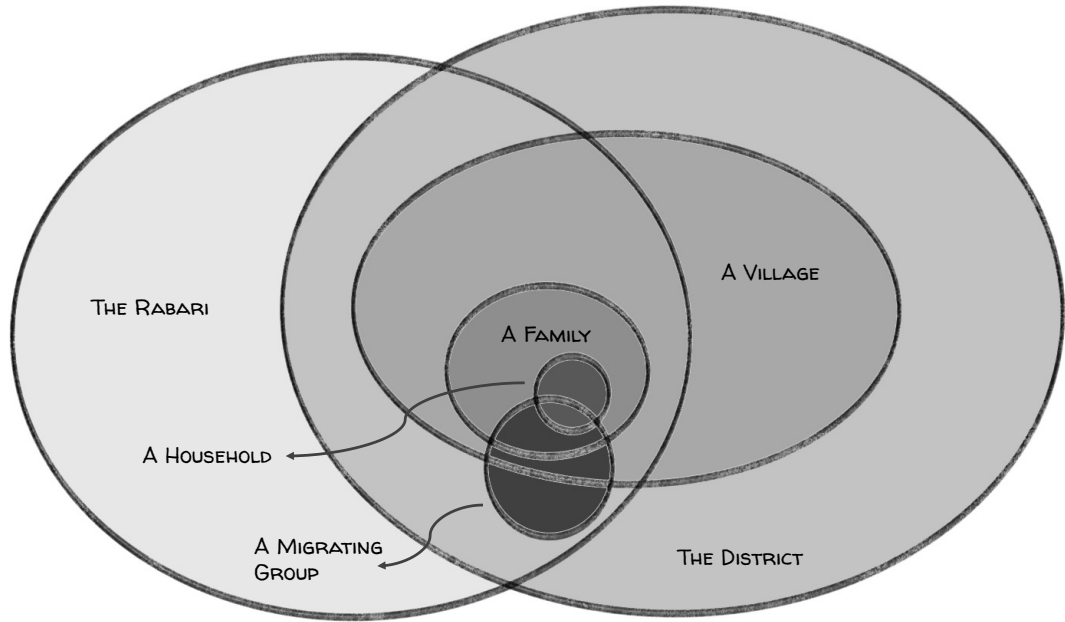


Figure 5. Rabari social and spatial organisation (from the perspective of a household).

While we have spoken about the Rabari sociality and spatiality thus far, the community does not exist in isolation, nor do they have an exclusive territory of their own. See Figure 4 for a representation of the social and spatial relations of the Rabari. The Rabari are one among many communities in multi-ethnic, multireligious, spatially segregated villages (see Mehta, 2005 for a detailed view). At the same time, several villages host Rabari populations. Therefore, as discussed in the previous sections, social relations both within and outside the Rabari community are important and invested in.

As Semplici (2019: 72) says, human beings, like spiders, weave webs of relations along which it is possible to move, the threads rendering space as “possible, habitable and walkable.” The Rabari are constantly interacting with several different actors within their local milieu for both personal and professional reasons. For example, besides his flock of sheep, Nathubhai has farmlands, both owned and encroached, that he has leased out to landless farmers of the Koli community. He also pays a specialised pastoralist from the Jat community to keep his few camels as an absentee livestock owner.

At the same time, while grazing his flock, he speaks with local farmers for fodder access, local livestock keepers that may or may not identify as pastoralists, and other

travelling pastoralists from the Rabari community and others. Besides these, Nathubhai has several interactions in his daily life with shopkeepers, doctors, government officials, other service providers and researchers like me, that may or may not be from the region.

Corresponding to the bricolage of their income sources and social relations, the pastoralists graze their animals across a “complex mosaic” of tenure systems (Robinson, 2019), such as wetlands, grasslands, shrublands, or open fallows, administratively classified as ‘forest land’ under the State Forest Department, ‘wasteland’ under the State Revenue Department, ‘grazing land’ under the village councils, where access is claimed *a priori* given the history of grazing in the area.

At the same time, the Rabari livestock keepers themselves do not remain confined to their own village or region. Instead, as introduced in chapter 1 and will be discussed in detail in chapter 6, they travel across eco-regions in Gujarat to maximise nutrition intake and market opportunities for their flock. While the pastoralists are most likely to be around their home villages in late summer/early monsoons and late monsoon/early winters, they travel westwards further inwards in Kachchh during the monsoon and eastwards towards central Gujarat and the summer months.



Figure 6. Map of Kachchh with key locations marked.

As Figure 6 shows, the Vagadiya Rabari cover a vast landscape. During the monsoon, the Rabari often go to the commons in the Mundra and Mandvi blocks of the Kachchh district, going further to the Naliya grasslands in dry years and then back. Alternately they may go to the high commons in Nakhatrana block, going as far as Mata Na Madh in dry years. They may also go to the Banni grasslands towards the end of the monsoon, after the festival of Dussehra, once the monsoon waters have receded, grasses have grown, and the soil is dry and hard enough for the sheep to walk across. Their route is determined by personal preferences, influenced by experience, rainfall patterns, distance, and direction from their home village vis-à-vis the estimated time needed to travel, social events and rituals that year, such as weddings, animal lifecycles, among other considerations.

Towards the end of the monsoon, the pastoralists graze on the residues of the rainy season crop, such as sorghum, pigeon pea, sesamum, cotton, and castor in Kachchh, before moving towards Gujarat, where they graze on cotton and wheat across the Morbi, Surendranagar, and Ahmedabad districts as seen in Figure 7. The Morbi region is particularly popular among the pastoralists as a cotton-growing agricultural hotspot, while the Bhal region in central Gujarat is known for its wheat crop, as will be discussed in chapter 6. The pastoralists spread out as fields are harvested in Gujarat, moving in an amoeba-like fashion across these regions. Towards the end of the summer, when the pastoralists return to Kachchh in anticipation of the rain, they may find crop residues such as castor, groundnut, and cotton.

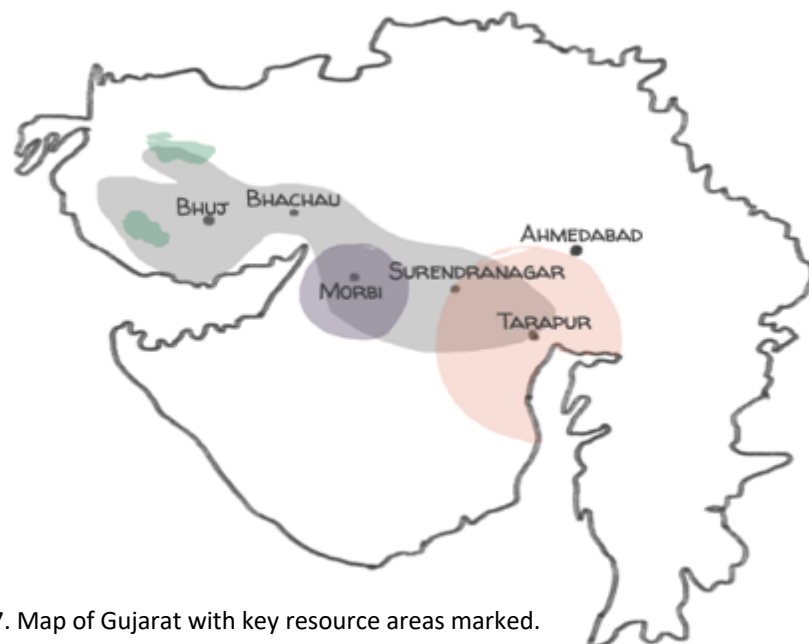


Figure 7. Map of Gujarat with key resource areas marked.

As the Rabari move *along* paths, rather than *across* these distinct locations (see chapter 1), they produce and embody a “temporally ordered sequence of vistas” (Ingold, 2000: 240). Through such ordering, sequencing, and timing across locations, pastoral mobility operates as “place-binding” over space and time rather than “place-bound” (Tilley, 1994 quoted in Ingold, 2009: 13). ‘Place’ is a familiar and known location with meaning for oneself, but only at a particular time, or through a specific temporal experience, as shown in chapter 6. ‘Place’ is a particular articulation of space and time and their associated social, cultural, and political connotations.

‘Place’ is where space and time become operative (Casey, 2001) through culturally specified, political and affective encounters. Space exists in relation to time as ‘place’, and rhythms shape its temporal experience and materiality. Rather than an abstracted space, ‘place’ is lived and experienced temporally.

As Edensor (2011: 190) says,

“Places are continually (re)produced through the mobile flows, which course through and around them bringing together the ephemeral, contingent and relatively stable arrangements of people, energy, matter.”

Placemaking involves concepts, practices, narratives, and perceptions that make place meaningful in a context. It is enacted by pastoralists who visit them, dwell in them and connect with them in different ways. ‘Place’ allows a person to remember, imagine and hold memories (Urry, 2000). For example, farms in the Bhal region of Gujarat have meaning for pastoralists only in the summer when they have plenty of crop residues for the animals to graze and offer plenty of shade and water to protect the pastoralists from the harsh sun. But the same area becomes undesirable as the monsoon arrives; the soil becomes mucky and difficult to walk through, and the fields are no longer accessible for grazing.

3.3.2. Farmer-herder relationships among the Rabari

Through temporally bound movements, the Rabari “repeatedly couple and uncouple their paths with other people’s paths, institutions, technologies and physical surroundings” (Mels, 2004: 16). They draw farmers into fluid and transient communities and create affective relations over shared and common resource use.

This section particularly focuses on how these relationships are built, their different arrangements, how they are enacted and how they are experienced. Pocock (1972) wrote about the Rabari as “seasonal” visitors to farms (as opposed to “occasional” visitors such as blacksmiths) when documenting the Kanbi and Patidar farming communities in Gujarat, indicating the strong farmer-herder relationships and the regularity of pastoral visits even a few decades ago.

It is argued that as pastoralism co-evolved with highly variable conditions like in the drylands, integrating variability within its production process, therefore, offers the greatest returns (FAO, 2021). With this logic, access to a variety of grazing areas is better than just one, and seasonal or intermittent crop-livestock integration between specialised producers, as seen in the case of Rabari pastoralism, is better than farm-level integration (ibid.). The relationship between farmers and herders is based on mutual benefit, as described in section 3.4.

But it is even more than that, as exemplified by Dineshbhai’s quote,

“E toh maara bhai jevo chhe.”

[He is like my brother (referring to Laliben’s son, Parbhu).]¹⁵

Dineshbhai is a farmer from the Morbi district that manages 40 acres of his own and others’ land. He is a strong ally of Nathubhai’s migrating group, as indicated by his statement. In 2020, the migrating group spent a large part of their time in Gujarat, grazing in his fields for nearly three months. But Dineshbhai shared more than a transactional relationship with the pastoralists. The pastoralists’ stay on his farms coincided with the period of the national lockdown associated with the coronavirus pandemic. Dineshbhai was especially helpful in this period, and he supported the logistical needs of the pastoralists while they were camping in his fields; he even organised travel for Laliben’s daughter-in-law when she went into labour.

Similarly, Ishwarbhai also reiterated his positive experience during lockdown when he said, *“amane kashu nadtu nahi”* [nothing is coming in our way], indicating the easy access his flock received when travelling from farm to farm, village to village (Maru, 2020a). Of course, that they are mostly in the bush, are ubiquitous within

¹⁵ Interaction on 04/01/2020.

the landscape of the region, and share caste-class affinities with dominant groups¹⁶ in the region worked in their favour.

Yet, the base of the relationships that facilitates grazing access runs much deeper. Describing a relationship of trust and reiterating some of the qualities of the pastoralists this chapter opened with, Rameshbhai, a farmer in the Morbi district of Gujarat, said,

“Even if our women are working alone in the field, we are not afraid. We trust the *maldhari* that much. We trust their turban (symbol of community) that much.”¹⁷

In a context where women’s preservation is a matter of communal honour and gender relations are extremely guarded, to vest this trust in the Rabari is significant and hence, brought up to indicate the depth of this trust.

I had a firsthand experience of this trust-based relationship. When I went to Rameshbhai’s home to speak with them, his wife did not allow me to enter, suspicious of me despite my appearance and connections in the village. Only after Nathubhai came and vouched for me was I allowed in. In the end, we found each other candidly chatting after a delicious lunch, Nathubhai lying down on their *charpoy* under the fan. Rameshbhai’s wife even asked me to travel with her to a pilgrimage site the following week, which I humbly declined.

There are many instances of such farmer-herder interactions. Farmers would socialise with the pastoralists when they would be camping in their fields, sometimes bringing their children along to play with the lambs. In fact, the migrating camp is an open space, both physically and socially, as people who may not always visit the Rabari *vaas* or neighbourhood in the village visit them in the *vaandhiyo* or their mobile hamlet.

Social visits, especially on occasions of weddings, births, and deaths, are common between farmers and herders. Relationships extend beyond economic matters and

¹⁶ Tambs-Lyche (2008) shows how the Rabari in Saurashtra are part of the *ter tansali* or the thirteen castes that form the core of the political community in villages. This is similarly true for Kachchh, thereby protecting the pastoralists from local discrimination and restrictions. This is unlike Muslim pastoralists, like the Gujjar from Himachal Pradesh, that suffered severe restrictions

¹⁷ Interaction on 09/03/2020.

are maintained across generations. For example, when travelling in Banni in 2015, I met a woman on the bus who was coming from central Gujarat to celebrate Raksha Bandhan, a festival celebrating the bond between brothers and sisters, with a pastoralist whom she considered a brother. Despite belonging to different communities and religions, they shared a bond built through the the pastoralists' annual visits to their farms. On another occasion, I had the chance to go on a social visit with Nathubhai, where he went to visit a Morbi farmer's son who had a job posting in Kachchh.

The Rabari pastoralists have also capitalised on their relationship with farming communities for livelihood diversification, as discussed also in chapter 8. Many Rabari have shifted from keeping animals to keeping tractors and loaders. They take this heavy machinery from village to village, providing services to farmers based on the same relationships as when they were grazing. Many Rabari youths have also migrated to Mumbai to work in clothing factories owned by members of the Patel farming community from their village.

Yet, as agriculture is increasingly commercialising and economic pressures mount, these relationships are becoming strained. Sanambhai exemplified this while discussing grazing access with a relative over the phone when he asked,

“Tagdave chhe ke porva de chhe?”

[Are they hustling, or are they letting (one) pen (enclose animals, mostly for the night)?]¹⁸

He was speaking to someone about grazing access in Kachchh, where the expansion of agriculture is reducing pasture availability, especially in the monsoon when most farms are sown. This, coupled with the booming dairy industry, has enhanced competition between local cattle keepers and migrating pastoralists.

As Nightingale (2019) contends, commoning, the process of sharing resources in common in our case, is never free from the ambivalences and contradictions of power. It is a set of relations that has the contradictory effect of power, both as a productive force to bring “life-giving relations” into action, seen in the close alliance between

¹⁸ Overheard on 22/10/2020.

farmers and pastoralists in this case, as well as the power to be dominating as seen in the conditional access to resources offered to pastoralists in these times.

3.4. The economic location of pastoralists

“Jyaan maal ne maja aave tyaan amane maja aave” [we are happy/ well where the animals are happy] emerged as the motto of the Rabari pastoralists, reiterated by everyone I spoke to. This statement indicates the centrality of livestock in Rabari lifeworld, the importance of mobility for animal wellbeing in their context, and the affective experiences associated with livestock keeping and mobility. It also implies that there are some places that the livestock prefers over others at certain times, emphasising the need for mobility, as discussed in section 3.3.1. and discussed further in chapter 6.



Rabari livestock keeping remains economically lucrative for its high returns and the ownership of capital assets. The average flock size among the groups I interacted with was 300-500 sheep and about 30 goats. Nathubhai's flock of 350 included animals owned by him, those bequeathed to two of his sons and his daughter (while

two other sons are still to be given their share). His flock also included some animals belonging to his and Pabiben's brothers. Harjanbhai, a big pastoralist, for example, continues to keep a larger flock of 700-1000 animals, supported by a larger migrating group that moves frequently and goes further distances (see chapter 6 for more). Livestock mobility is intimately tied to animal production, but while it is premised on an economic rationale, it generates particular affects and folds in multiple dimensions of Rabari social life.

While the sale of wool was once a prominent source of income for the pastoralists, the dwindling market for coarse natural wool favouring synthetics has suppressed this income source. The Gujarat Sheep and Wool Development Corporation (GUSHEEL) abruptly decided to suspend wool procurement a few years ago. In 2014-15, it bought 75899 kg of wool for Rs.43.54 rupees per kilogram. In 2015-16, this dropped to only 1570 kg at Rs.19.76 and then in 2016-17, it was 12063 kg for Rs.12.58, after which it was suspended.

નાયન પશુપાલન નિયામક ની કચેરી ધનિષ્ઠ ઘેરાં વિકાસ ઘટક.ભુલ વાંચિક પ્રવૃત્તિ ની માહિતી				
ક્રમ	પ્રવૃત્તિ	૨૦૧૪-૧૫	૨૦૧૫-૧૬	૨૦૧૬-૧૭
૧	ઘેરાં વિકાસકર્તા ઘેરાંની સંખ્યા	૨૨	૨૨	૨૨
૨	અપવર્ગી હાથેલ ઘેરાંની સંખ્યા	૫૨૬૨૪૯	૫૮૦૭૭૩	૬૩૨૭૧૩
૩	અપવર્ગી હાથેલ ગરબોની સંખ્યા	૫૩૩	૫૨૬	૫૩૫
૪	અપવર્ગી હાથેલ ઘેરાંપાલકોની સંખ્યા	૩૬૭૩	૩૮૭૩	૩૯૪૫
૫	ગિલ ખાદીટી કિ.ગ્રા.	૭૫૮૯૯	૧૫૭૦	૧૨૦૬૩
૬	પરિ કિલોનો ચુકવેલ ભાવ રૂ.	૪૩.૫૪	૧૯.૭૬	૧૨.૫૮
૭	રસીકરણ ની સંખ્યા	૨૭૬૬૦૯	૨૮૧૪૯૧	૨૬૦૧૧૮
૮	રસીકરણ દરખાસ્તો ઘેરાંની સંખ્યા	૧૭૦૪૦૬	૩૩૧૪૭૨	૮૫૧૫૯૨
૯	ગેઝેટીંગ નો છંટકાવ કરેલ ઘેરાંની સંખ્યા	૧૬૫૨૨	૭૪૩૦૭	૨૦૯૯૧૨
૧૦	અરસીકરણ દરખાસ્તો ઘેરાંની સંખ્યા	૪૧	૮૦	૨
૧૧	મરસીકરણ કરેલ નર ઘેરાંની સંખ્યા	૨૫૮૭	૨૦૬૯	૨૧૮૦
૧૨	આરવાર આપેલ ઘેરાંની સંખ્યા	૪૭૯૨૧	૫૮૨૩૭	૮૩૭૬૦

Figure 8. Board at GUSHEEL depicting the trends in wool collection. Source: Personal archives.

Now, rather than being paid, the shepherds pay Rs.5-7 per animal for shearing, higher for black wool that sells less than white. This change is reflected in the changing breed raised by the Rabari. Earlier, the Rabari reared entire flocks of the hardy Marwadi breed that had a full coat of white wool. Now there is growing interest in rearing the Baradi breed, which has a coat instead of wool and rears fatter lambs even though the females do not produce enough excess milk to supplement household consumption.

Manure exchange is one of the benefits of pastoralism to crop production and serves as a critical source of income to meet daily household expenses. This is similar to *contrats de fumure* [manure contracts] common across West Africa (Krätli, 2015) where pastoralists receive access to fodder and water in exchange to manure a farmer's field. In Gujarat, the pastoralists may also receive a payment, *jokk* [(payment for) penning], in cash or grains, especially in areas where fodder is limited, but the pastoralists still pen their animals in the field for manure. In fact, this income (and milk from the animals) kept the pastoralists afloat during the initial phase of the pandemic in 2020, when animal trade was restricted. "When we can get the same benefit for Rs.500, why should we pay 50,000?" asks Rameshbhai, comparing the cost of paying the pastoralists versus paying for chemical fertilizers for the same benefit.

A van load of manure is priced at Rs.6000-7000. A group of experts in India estimate that the value of manure produced by animals kept in pastoral and smallholder systems comes up to rupees 335 lakh crores a year – a benefit vastly underutilised and unaccounted for by the regional and national government (FES, 2016). A thousand sheep provide 500 kilograms of droppings and 700 litres of urine a day (Trivedi, 1995, as quoted in Choksi and Dyer, 1996), for which they receive around Rs.1500-2000 or up to 40 kilograms of wheat per night. This payment kept the pastoralists afloat in 2020 when trade in animals was restricted due to the lockdown associated with the coronavirus pandemic.

In certain parts of Gujarat, manure exchange takes place through institutionalised exchanges. For example, in the Surendranagar district of Gujarat, the migrating group must pay a *dharmajyo* or deposit to the village, which is used communally for infrastructure works, or even a village feast, in return for guaranteed grazing access to the group. This deposit, also known as *ajaaro* ['thousands'] or *rokan* [investment], can be as high as Rs. 3 lakhs and is earned back through manure income from individual farm owners. The village leader who negotiates with the migrating group pays the guard but, in turn, does not pay for the manure. In the Bhal area, this amount is used to assign a guard from the Dafer community to watch over the village boundaries, ensure that the livestock does not wander away, and to keep out other migrating groups.

The primary source of income for the Rabari is the sale of live animals to a growing market for animal source products. The Rabari have two lambings a year, once at the start of the monsoon in June-July and the other towards the end of the winter in January-February, although this is not strictly controlled. They sell the male animals of the flock, preferably when they are a few months old, at a preferred price of Rs.5000-6500 per animal. Trade is good both in central Gujarat as it connects to urban India and in Kachchh as the main port for export is in Kachchh. The flock owner has autonomy over selling decisions and often negotiates with traders to receive a favourable price. The pastoralists do not take the animals to market, but rather the traders come to the camp to buy.

Animal slaughter, especially cattle, is considered sacrilegious in the country, following the tenets of Brahmanical Hinduism, and the pastoralists walk a tight rope between economic liberalism and religious illiberalism, as discussed further in chapter 5. In some cases, pastoralists have resorted to calling traders *sonaro* [goldsmith] rather than the more commonly used terms *vepaari* [trader] and *khaatki* [butcher], while traders have resorted to coming late in the night to pick up animals in response to this tension. During the pandemic associated lockdown, traders, mainly of the Muslim community, were not allowed to come into many villages in Kachchh on the pretext that ‘outsiders’ weren’t allowed even when others were. The pastoralists justify their *paap no dhandho* [sacrilegious work] as their *avatar* [incarnation], ordained through their mythical origins. Yet, the religious taboo restricts collective action both by community institutions and local development actors to improve conditions for animal trade even when it is economically profitable and provides several ancillary benefits.

This is especially evident in the case of large ruminants. The government heavily incentivises the keeping of cattle for the dairy industry, as will be described in chapter 6, but as slaughter is illegal in Gujarat, the State faces a significant problem of abandoned and stray cattle.¹⁹ *Jivdaya* or animal welfare has emerged as an important form of religious charity for Hindu and Jain communities in Kachchh, including the Rabari, who use the money for the building and upkeep of *panjrapoles*

¹⁹ In 2022, the Government of Gujarat also introduced the Gujarat Cattle Control (Keeping and Moving) in Urban Areas Bill to reduce the stray cattle population in cities. This bill was vehemently opposed by pastoral communities.

which are shelters for old, infirm and male cattle and *gaushalas* or shelters for mostly female and lactating cattle, and for providing fodder and medicine.²⁰



Figure 9. One often finds charity boxes like this in Kachchh collecting cash for cattle welfare. Source: Personal archives.

These same *jivdaya* organisations have lobbied to restrict international trade in small ruminants over the years. Around 700,000 live animals are exported from India each year, mainly to the Middle Eastern countries. The main port for such trade is the Tuna Port in Kachchh, administered by the Deendayal Port Trust. In 2018, they lobbied for the Union Minister for Shipping to ban livestock exports from all ports in India, and then again in 2019, they lobbied for the Chief Minister of Gujarat to order a ban which the High Court subsequently overruled. Livestock exports were banned from the port again from March 20, 2020, to prevent the spread of coronavirus ahead of the nationwide lockdown.

While the port was opened for trade on April 30, 2020, trade was restricted again on the very next day.

Some estimates suggest that 90% of India's small ruminants are reared by pastoralists and smallholder farmers in open grazing systems (FES, 2016). The Rabari are very much part of national and global livestock value chains and respond to high demands from a growing middle class. Yet, pastoralists continue to remain socially and politically marginalised despite their economic success. Livestock policies in Gujarat consider small ruminants as “unproductive” animals as they do not contribute to the dairy value chain, and they do not receive benefits such as adapted veterinary services, livestock insurance or loans, or market protections²¹.

Despite these adverse conditions, the pastoralists have found ways to ensure the viability of their livelihood. Robbins (2004) shows how the pastoral livestock

²⁰ The Gujarat government's Gauseva and Gauchar Vikas Board (Cattle Welfare and Fodder Development Board) also provide these services.

²¹ Ironically, trade in small ruminants is permitted for the very same reason – the Gujarat Animal Preservation Act 1964 protects only “animals suitable for milch, breeding or agricultural purposes” and does not consider small ruminants within this category.

production system remains closely tied to the capitalistic development through his study of the Raika pastoralists from Rajasthan. He contends that this contradiction, whereby pastoralism continues to grow ‘inwards’ towards the centre of the regional economy, even while it is increasingly pushed ‘outwards’ to its margins, marks an odd disparity in economic development (ibid.). Like those in Gujarat, the reforms in Rajasthan, as we will see in chapter 4, neglect pastoralism. They seek to “squeeze out” pastoralism through a series of adverse policies and disincentives that favour commercial agriculture and industry instead. Yet, while overlooking pastoral development needs and discursively making pastoralists disappear, the state has inadvertently built an agricultural land use system and export market that depends heavily on pastoralists, as seen through manure sales and animal exports (ibid.).

3.5. Conclusion

This chapter has given an important overview of Rabari’s socio-economic life, beginning with their community organisation and family and extending to social life and relationships outside of their community and village. The chapter especially looks into the relationship between pastoralists and farmers, its ambivalences and its affects, as underpinning pastoral livelihoods and mobility. In the next chapter, I discuss my own positionality and relationship with the Rabari and the ways in which I got to know them.

The Rabari household shows great livelihood diversification and has multiple income streams from within animal production, such as meat and manure (and wool in the past). Rabari livelihoods face many opportunities and threats, as while they remain economically strong, they face social and political marginalisation for their livelihood. I unpack these dynamics in chapters 6 and 8, respectively.

Chapter 4

The Rabari and I

4.1. Introduction

Researchers arrive at their research through a cumulation of past experiences, present context and future aspirations that render their specific version of the research possible. For the sake of starting, though, let me begin my story in 2015, when I first arrived in Kachchh for fieldwork associated with my Master's research. I had then proposed to research state-society relations with a community of Sindhi-Muslim pastoralists in the rich Banni grasslands in the north of Kachchh. I had organised to have logistical support and field assistance from a local NGO. Serendipitously, a poster I made during my first rural internship in 2010 adorned the office walls, welcoming me to this experience – as though I was always meant to be there.

My second day after arriving in the grassland in 2015 saw the highest rainfall in the region for the past 27 years leading to massive floods. Many of the pastoralists I wanted to interview left their villages, migrating to higher areas where they would spend the next 2-3 months, moving every 15 days with the receding floodwaters. Left with few alternatives, I chose to move with them and, hence, had an intimate encounter with pastoral mobility as not only a way of living life but also conceiving life.

Yet, while acknowledged, mobility remained peripheral to my thesis partly because of my poor understanding and translation and partly because of the spatial focus of popular narratives in Banni at the time. Fast forward to 2019 when I found myself in another NGO centre, a poster of Banni on the wall this time, and rain pouring down outside. Drawing on my experiences and interests, I had arrived back in Kachchh to correct my past negligence, that is, to study pastoral mobility in the region, this time with the Rabari.

Hearing of my interest in the Rabari, one of the field workers at the NGO where I was staying, Jitu, told me about a pastoralist that came year on year to his father's

farm in the Khambhat region. Coincidentally, it was this pastoralists' village I was going to the next day to meet a community leader. While the leader was cordial, I was disappointed with his disinterest in my project and decided to meet the pastoralist Jitu had mentioned. Asking around the village for this person, I turned up at his door – it was Nathubhai. Pabiben and Rani received me.

This chapter elaborates on the personal and academic journey that ensued as I got to know the Rabari. In section 4.2. I provide a quick overview of my research timeline and practice. The research plan saw some changes given the unexpected coronavirus pandemic conditions, yet, given field realities, interactions with the pastoralists continued during and after lockdown, providing significant insights into the organisation of their mobility and providing critical direction to the thesis.

I discuss my position as a woman from an urban setting and dominant social group in section 4.3. I show how my interactions with the pastoralists were mediated through my social position, as I was both as an insider and outsider – as someone who ethnically belongs to the region yet is not from within their community or context.

In section 4.4., I discuss the features of 'nomadic research' as the methodology for this thesis research. It not only involves being physically mobile with the pastoralists but also moving between methods and conceptual thesis, as this section will show, before concluding in section 4.5.

4.2. Researching with the Rabari

It was love at first sight – Rani was fashionable, energetic and spunky. A young woman, just out of her teens, she immediately took me in and offered to host me at Nathubhai's camp just outside of the village. I had gotten lucky; they don't spend a lot of time in the *seemada* [edge] of their village, but Nathubhai was camped there in those days. That first evening in camp with them, with its multi-hued sunset followed by conversations over a burning hearth and a restful sleep (despite the goats scratching their horns against my charpoy all night), set the tone for the rest of my fieldwork. This section will describe how I went about organising fieldwork to learn more about the Rabari.

D'Angelo and Pijpers (2018) point out that fieldwork is often understood as a spatial rather than temporal engagement. This obscures the multiple temporal dynamics of fieldwork, as fieldwork processes differ not only over time but also from time to time (ibid.). I found the temporal and spatial boundaries of my fieldwork to be quite fuzzy. Fieldwork for me began through conversations with experts, academics, and pastoralists before arriving in Kachchh in September 2019. In January 2020, I conducted a reconnaissance trip, meeting with local NGOs in Ahmedabad and Bhuj cities. I also visited pastoralists in Bechraji block, Mehsana district, and in Anjar block, Kachchh district. Further, I continue to visit my interlocutors and friends, from my previous fieldwork experience in the Banni grasslands in northern Kachchh.

Fieldwork also continued through phone calls even after I had left the field in July 2021. Still, for the sake of organisation, I describe my fieldwork journey from September 2019 to July 2021 through five linear, chronological phases as below. A more detailed list of fieldwork interactions is available in Appendix I.

a) Phase 1 (September to November 2019) –

In the initial months of fieldwork, I met with pastoralists from villages in the Bhachau and Rapar blocks of the Kachchh district, including staying overnight with them. I arrived just after the main monsoon months, at a time when the pastoralists were expected to be close to their home villages. Interactions in these months offered rich descriptive information on the different factors, patterns, and relationships surrounding mobility.

I was relying on the local NGOs, who I have gotten to know very well through several interactions since 2015, to gain access to the pastoralists. Unfortunately, they could not offer the same handholding as in my previous experience. However, the logistical support and contacts provided were crucial in getting me started. While the NGOs were very familiar with the Rabari, they were not actively working with the community in these blocks, especially not with the sheep keeping mobile pastoralists I was interested in.

Yet, having their reference and being recognised as a *sansthawali* [“from the organisation”] provided credibility as I met with pastoralists. I tried to connect with pastoralists through referrals from other pastoralists, friends, and colleagues. I spoke to pastoralists wherever I could, easily recognisable as they are in their characteristic white and black attire – along the highway, in buses and bazaars, and through social media.

My aim during this period was to identify a pastoral migrating group to travel with. Most of my conversations with pastoralists through initial visits were beginning to be equally generic and specific. As my project aimed to explore beyond what mobility *is*, its pattern, mode, and organisation, to what it *means* and how it is experienced, accessed, and adapted, I felt that a deep and intimate engagement with a single migrating group might offer greater nuance.

b) Phase 2 (December 2019 to March 2020) –

In the initial months of fieldwork, I had diverse experiences of pastoral life. I was looking for a group that was welcoming and could offer logistical support while also having people I found interesting both personally and professionally. I experienced the excitement and exhaustion of travelling with a sizeable migrating group like Harjanbhai’s with five flocks. They moved faster and deeper in the bush than Hemangbhai’s and Nathubhai’s flocks that remained alone and close to their village (see chapter 7). I also experienced rejections, both subtle and direct such as from Virabhai’s group, as discussed in section 4.3.1.

In this phase, I focussed on spending more time with Hemangbhai’s and Nathubhai’s flocks as they were interesting and keen to have me visit, as discussed again in section 4.3.1. While I intended to stay with the pastoralists for longer durations, I found that more than a week in the field was not comfortable as the logistics of being in camp took a toll my hosts and me. Therefore, I travelled back and forth between the pastoral camp and my rented room in Bhuj town, the capital of Kachchh district and the base of many of the regional organisations.

This period was the richest and most fulfilling part of my fieldwork, as well as the most emotionally invested as I prepared to travel to Gujarat with the pastoralists.

The pastoralists were delayed from undertaking the journey, as I discuss in chapter 6, leading to anticipation and frustration, yet making them easier to reach. Further, as I show in section 4.3.1, I faced many disappointments as the time to ‘cross over’ came closer. The people I had built relationships in the past months were showing reluctance in having me travel with them – an experience I was keen to have – due to the logistical challenges involved in the initial segment of the Gujarat leg of the migration cycle.

c) Phase 3 (March to August 2020) –

After a couple of weeks of waiting, I was invited to visit Nathubhai’s camp as they found a rhythm grazing in the Morbi district. The landscape in Morbi was different from in Kachchh – no *Prosopis Juliflora* or *Prosopis Cineraria* trees were found there to provide cover, nor a pond close to the camp. Instead, the whole area was one perfectly plotted field after the other.

But just as the pastoralists began to slow down in Gujarat and welcome me back to visit their camps, the first lockdown associated with the coronavirus pandemic was announced. I found myself locked down in my family’s home in Mumbai for four months with no clarity on how things would progress.

Fieldwork was notionally suspended from late March to September 2020. I was unable to meet the pastoralists and witness more of the Gujarat leg of the migration. I was disappointed as I was unable to go to the Bhal region where the pastoralists go in April – May (neither in 2020 nor in 2021 due to the coronavirus outbreak). Yet, as Nathubhai’s family did not travel there either in these years, the details of the journey I was able to capture was enough for the purposes of the thesis.

Despite being away from ‘the field’ during lockdown, fieldwork continued in practice via phone calls and video calls every other day – a practice I was keen to perform to maintain fieldwork relationships that I had so painstakingly built and was emotionally invested in. As we came to grips with the lockdown, our new circumstances initially drew us closer as I found the pastoralists missing seeing me and wishing me well, saying that I would have been better off were I with them. During this “crisis of mobility” (Rajan et al., 2020), the pastoralists continued to

migrate while I remained locked in. I had noted the importance of timing in mobility, given the late rains and late harvests, but it was this “temporal tear” (Griffiths, 2013) that served as a critical moment to reflect on the differential experience of time for the pastoralists and me.

d) Phase 4 (September to December 2020) –

When I returned to Kachchh after the lockdown, though, I met with a lot of resistance. I was not welcome to groups I was keen to meet such as Hemangbhai’s and Nathubhai’s, in part because I was coming from Mumbai, the epicentre of the pandemic in India in the first wave, and partly because the pastoralists felt suspicious and fatigued by my continued interest in them. They were also deep in the bush in this period given that they were grazing in the commons in the monsoon.

Therefore, I began reaching out to new migrating groups. Shorn of the initial romanticism I had attached to the fieldwork experience; I embraced my role as a researcher more fully in this phase. I knew well that travelling for long durations with the pastoralists at this time posed health risks for both them and me, as well as that it would be difficult to plan given the constant shifts in local advisory.

I bought a car for safe and quick travel upon returning to Kachchh instead of using local transport as I had been doing before. This new form of mobility influenced how I perceived and embodied my role as a researcher and how the pastoralists viewed me. For example, the car was a great influence on Nathubhai’s flock (mostly Rani) in inviting me back to visit them as they insisted on drives to nearby towns on my visits (of course, this is before they realised how run down my second-hand vehicle was and then insisted that I leave it behind!). This tendency of the pastoralists to desire leisure travel is explored in chapter 8.

During this period, I was also able to interview actors other than pastoralists, such as local development actors, researchers, community leaders, farmers, shearers, traders, journalists, and local government officials such as the district agriculture officer, the district livestock officer, and the directors of the Gujarat Sheep and Wool Development Corporation (GUSHEEL) and the Gujarat Institute for Desert Ecology (GUIDE).

Overall, I was more directed during this period, not just on the road but also in my inquiry, as I began to analyse and piece together the story of my thesis. Many of the plans I had proposed for fieldwork were disrupted. Still a more directed approach also meant that I could avoid deviating from my core research interest. For more on the research methods used during fieldwork, see section 4.4.

e) Phase 5 (January to July 2021) –

As I began writing in January 2021, I limited my interaction with the pastoralists, visiting only Pabiben and Nathubhai's camp. I had received the information I needed to go ahead with this piece of work. While I enjoyed spending time with the pastoralists and receiving rich descriptive detail, given the limited time available, I prioritised writing this project.



During the fieldwork process, besides several day trips, I stayed overnight with seven different families or migrating groups, spending a total of 55 nights with the pastoralists, over half of which were spent with Pabiben's family. Fifty-five nights

under the stars does something to someone. I don't sleep as well indoors and exposed to artificial lights anymore.

It is challenging to pinpoint the number of pastoralists and others I met during the research process and the number of villages they come from. Each migrating group comprises several pastoralists who may not participate in conversations mentioned in this thesis. They may not come from the same village given that relatives, friends and peers across villages join together and disband. Further, the pastoral camp is an open social space as many visitors, whether relatives, other pastoralists and livestock keepers, farmers, traders, shearers, or neighbours, pass through the camp and participate in discussions, whose voices are also included within the thesis. The following section highlights my positionality vis-à-vis the pastoralists as I travelled with, participated in, and influenced their daily lives.

4.3. Positionality

"We'll take her with us if she'll agree to be tattooed – neck, face, hands and legs."

"If she'll have large holes made in her ears for the silver."

"If she can drink ditch water that's green or black."

"If she can go for days with no water at all, with nothing but sheep or camel milk."

"You see, we cannot take you because it's too hard and too dangerous for you. Besides, others will think we have kidnapped you. They'll put us in jail."

- Davidson (1996: 107).

When Robyn Davidson, an Australian writer and adventurer, proposed to migrate with the Rabari in 1992, these were the kind of demands she was met with. These demands reflect some of the things that characterise the Rabari and some of the things they hold dear. While I was not confronted with such demands, many of these things still hold – the Rabari appreciated that I was able to drink ditch water – which they still do – and eat whatever they offered (often millet bread and milk) and they did continue to feel responsible for my safety and wellbeing.

I faced my own challenges and advantages when working with the Rabari because of my social position as a young urban female researcher, both from within and away from the community and region. The thesis is written from a deeply situated place where my identity and socio-political position intersect. Rather than reject them, I embrace all the opportunities and limitations such a position allows. This section reflects on my own positionality in relation to the Rabari. By so doing, it presents the nuances that were revealed in relief, in relation to my positionality, and makes explicit the biases that may have seeped into my research approach and insights.

4.3.1. Researching as a woman

As I accompanied their camp from one campsite to the next, my first ‘migration’ experience, Sachiben said,

“Ae amari Vasu ne madad karje ho, ene kaam karavje”

[Help our Vasu out, do her chores.]²²

Sachiben’s eldest son had passed the previous year leaving the mantle of managing his flock to her two grandsons and young granddaughter, Vasu. In her early 20s, Vasu was about the same age as Rani, and reluctant to travel with the flock. Vasu’s mother, too occupied with tasks in the village, was unable to travel with them leaving her daughter to perform all the domestic duties while on the move. Therefore, my desire to travel with their flock was seen favourably by Sachiben, a shrewd woman, who immediately set me off, hoping that I would be of help to Vasu. Their flock would travel with Harjanbhai’s migrating group for that cycle.

Vasu was a real taskmistress. My daily chores included tying and untying the lambs, watching out for dogs, helping to load and unload the camels, helping to collect firewood and water, folding the blankets, washing up the dishes, and chopping vegetables. The youth at the camp often teased my mannerisms and awkward attempts at performing these tasks. The day ended sleeping on the *uttaaro* [charpoy], scrunched up next to Vasu, on top of all the family’s belongings.

²² Interaction on 14/11/2019.

My gender was the biggest constraint and enabler of my work with the pastoralists: it defined my access to the camp, interactions, and daily experiences. While travelling with the migrating group, I was mostly confined to the camp. Similar to what Vitebsky and Wolfe (2001) find for Siberian reindeer herders, Rabari gender relations are quite complex, with a great deal of etiquette concerned with modesty and the maintenance of personal distance while living in close quarters.

The Rabari first came to be known to the world through the craftsmanship of the women – through their embroidery which adorned magazine covers and made it to curio shops across the world. Rabari women have always had a privileged position, and have been responsible for household finances and decision making. They are bold – speaking their mind even against their husbands, if needed, hitchhiking across locations, and influencing social life in many ways.

Although the Rabari display more relaxed gender relations than other communities in the region, the society is organised along patriarchal lines, with women vested with the responsibility for the community's cultural and moral reproduction. Just as their embroidery has now been banned, their voice within the community and household is also waning with women having very little say anymore in livelihood decisions including trade and mobility. Incorporation into mainstream religion and sedentarised society is also affecting Rabari women's independence as women are increasingly made to follow stricter gender norms, restricting their movement, dress, access to technology and so on.

My experiences in the field were intimately tied to the experiences of the women at the camp. While travelling with the camp, my movement was limited to the women's circuits of mobility, such as going to the market, pond, and temple, to maintain gender separateness and propriety. This is reflected throughout the thesis as the female voice is brought front and centre in exploring experiences on the move. I was not able to shadow the *mukhi* [leader] as I had initially planned, nor was I able to go shepherding or have one-on-one time with the shepherds.



Yet, remaining ‘in place’ while ‘on the move’ offered the opportunity to focus on the structure and organisation of mobility. I was able to have a panoramic view of the group’s different interactions through the pivot of the camp. I was also unable to go shepherding with the flock, and one-on-one conversations with the shepherds were challenging to organise.



Pastoralist women bear a great burden in managing the camp when on the move and increasingly so as more and more women are choosing to remain in the village (see chapter 7 and 8). Life on the move requires leanness, so every person in the camp must be useful.

Frater (1999) comments on how members of the camp are required to understand and carry out whatever work is necessary for its functioning with minimal direction and discussion – a feature essential to the survival of a society that operates from a minimum material base in an unpredictable environment. Being unable to perform tasks at the same level as the Rabari moderated my visits and longer-term access to the camp.

Yet, at the same time, my presence had some value in providing both logistical and emotional support as women become increasingly isolated in life on the move, especially as camps become smaller (see chapter 7). I was invited to most migrating camps as women found themselves alone in bearing managing daily chores, as exemplified by Sachiben's ask to support Vasu in the opening quote of this subsection. Through my presence, the women received *sathwaro* or companionship. As the camp could not be left *redhu* [unguarded], my mere presence at camp, watching over the lambs and belongings, was support enough to allow women to perform their other tasks, like washing and collecting water from a source away from the camp.

Given changes in the political economy of the region, there has been a change in the time consciousness of the Rabari. Frater (1999) shows how women have begun to say things like "I do not have time" which is also reflected in the limited time now available with women to pursue activities like embroidery, in which they invested lots of time in the past and are very well known for. This change had a great impact on my access.

The women were especially keen to have me in some moments and not in others. For example, when Varmiben's camp was weaning cotton in farms near their village, they invited me to provide additional labour. She asked,

"*Winava aavse ne?*"

[You will come to wean (cotton), won't you?]²³

As chapter 6 shows, the pastoralists are often required to provide labour in cotton fields in exchange for grazing access. Since most of the men are busy shepherding the animals, those left at camp, including the women, are asked to pitch in. Hence, Varmiben's eagerness to have me around at the time for cotton weaning.

On the other hand, Pabiben and Varmiben asked me not to visit around the time of the crossing to Gujarat, as described in chapter 1, as the women are exceptionally stretched as the camp moves frequently and longer distances. Hosting another person at the time, especially one like me whose safety and logistical needs are

²³ Interaction on 10/01/2020.

perceived as high and yet makes a limited contribution to the group, may have felt too strenuous for them. Hence, I missed the crossing in early 2020, but as I was able to make my own logistical arrangements with the car, I was able to participate in the next cycle in December 2020.

The collective life of a migrating group supports the tasks and tribulations of being on the move, as discussed in chapter 6. While quite adept at managing her *uttaaro* alone, the fact that Vasu was travelling in a large *dang* with plenty of women for support affected how she justified my presence at the camp, for example. With plenty of support available, the burden of hosting me was higher than the utility I offered to the group at the time. Therefore, I was asked to leave as they began travelling further and to more interior regions. This is a great indication of the importance of collective migration not only for professional success but also for the personal well-being of pastoralists.

As the camp is embedded within gendered structures of social relations and female propriety, a female researcher would be preferred over a male researcher for long periods to ensure the safety and comfort of the women. My status as a single woman, though, raised many questions about my intentions and what people might think about my repeated visits. Disallowing me from following the shepherds, Pabiben said,

“..ena chokra juvan chhe. Duniya evu poocheke ene evu shu jaroori chhe ke Nathune vandhya jai ne tyaan reh chhe. Amari kom evu nathi jaanti ke e pashupalan nu bhantar bhane chhe etle e vagada ma aave chhe. Em nathi vichartu koi.”

[...her (Pabiben's) sons are young. The world asks what is the need that she (me) is going to Nathubhai's camp and staying there. Our community does not understand that she (me) is studying pastoralism; that's why she comes to the bush. They do not think like that].²⁴

While Pabiben came to know and trust me, the women of Virabhai's family felt differently. They felt suspicious when I asked to visit the camp in the *vagado* or the bush and asked me to leave. On the one hand, such rejection indicates the exercise of agency on the part of the women and reclaiming of power in our researcher-

²⁴ Interaction on 26/01/2020.

researched relationship. Hence, while it did hurt, I was happy that the women were able to refuse me, ensuring consent for my visits.

On the other hand, it points to the patriarchal structures within the community that very obviously hold the women responsible for maintaining certain standards of sexual propriety, thereby legitimising restrictions on their movement and life choices.²⁵ While I had to adhere to these standards, I was also at the receiving end of advances, suggestive communication, and stalking from Rabari men – an experience shared by many women researchers but insufficiently addressed in academia.

4.3.2. Researching as an insider

“Delete his number,” Nathubhai told me.²⁶ One afternoon, Nathubhai received a friend at the camp who came for tea and a chat. Nathubhai said that their friendship went back a long way. The friend offered his assistance if I needed help in the field and gave me his number. But as soon as he left, Nathubhai and Pabiben asked me to delete his number because he was from a ‘minority’ community, and they did not want me to interact with him.

The past decades have seen growing intolerance against minority backgrounds in India, especially in Gujarat, promoted by an emboldened right-wing conservative political dispensation. These trends have entrenched divisions and enhanced discrimination in an already deeply segmented society, including within the Rabari. For example, during the lockdown, the pastoralists shared and promoted bigoted views and rumours that held a minority community responsible for spreading the virus.

Although administratively classified as an Other Backward Caste (OBC) community, the Rabari place themselves within mainstream Hinduism and at a dominant caste-class position in their local context (as discussed in chapter 3). It is from this position that they interact with the different social groups they encounter.

²⁵ There is growing conservatism within Rabari society, also associated with the politicisation of institutional religion.

²⁶ Interaction on 15/12/2020.

My family is regionally from Kachchh and religiously Jain – one of the richest and least discriminated backgrounds in the country that aligns itself well with Gujarati Vaishnav Hinduism. Originally from Kachchh, my grandfather emigrated from the region to Mumbai when he was a teenager, but, like many other Kachchhis in the city, continued to maintain a relationship with the region. The fact that the pastoralists considered my family's background compatible with theirs also contributed to my access to the migrating groups. Were I from a minority background, perhaps, the investment from the pastoralists may have been weaker given their own preferences as well as that of the wider community who may be suspicious of different backgrounds. Social relations within rural India are strictly guided by caste-class positions and acknowledging my privileged position in this aspect is important.

The pastoralists' familiarity with my village and social position offered some social currency, but, at the same time, I had to negotiate my position as an "indigenous researcher" (Razavi, 1992) and conform to societal expectations in terms of dress, habits, and behaviours. Being familiar with social norms and cultural characteristics in the region, I was able to adapt myself to meet the pastoralists' expectations. This also meant that I was not able to have a strictly professional relationship with the pastoralists – knowledge was shared based on the perceived benefits of association and reciprocal investment in relationship building.

Understanding the local language was one of the most significant advantages of being an 'insider.' Although the forms of the Gujarati language I speak at home and was taught at school are different from the dialect spoken by the Rabari, I was easily able to understand and pick up their language. With the advantage of language, I was able to capture nuances in conversations and understand the different connotations associated with the context. For example, the pastoralists use the word *tapvu* [hop] to connote areas they want to skip, like the desert for example, or the word *tedavyu* [carry] to indicate the relationship between Patels, a prominent farming community in the area, who employ Rabari youth from their villages in their textile businesses in Mumbai. Given my position, I was able to conduct research without the need for assistants or complicated logistical arrangements.

4.3.3. *Researching as an outsider*

As an ‘outsider,’ a non-family member and a non-pastoralist, I had a privileged position in the Rabari camp. I had an intimate view of the complex experiences that the pastoralists are enmeshed in but often cannot articulate. I was able to juxtapose the pastoralists’ experience against global dynamics. Yet, my understanding perforce could only be partial. While I have drawn from pastoral experiences, I have unravelled those aspects that I consider as important – the aspects of mobility and temporality, though central to Rabari lives, hardly found expression in their daily conversations.

‘*Paanji j aay*’ [Kachchhi: ‘she is ours’] is how the pastoralists of the Banni grasslands recognised me. For the pastoralists in Banni, although I come from a different socio-economic background than them, the fact that my family was from Kachchh was enough for them to accept me as a daughter. Unlike the Banni pastoralists, I had to become *evaai* [adapted or accustomed] to the Rabari. They did not seek to take me under their wing or treat me as one of theirs. I had to justify my presence and renegotiate access constantly.

I had initially imagined that I would have to appeal to a migrating group leader to join them on their travels, and I would then be assigned a hearth or family, mainly his, to host me. But I soon learnt that flocks within a group made decisions independently on such matters, and hence, unlike my experience in Banni, I was not required to appeal to a community leader. Yet, of course, any family I approached had to have the social and economic capacity to host an additional person, and therefore, my close respondents were of relatively stable backgrounds.

I had also imagined that my presence with a flock in the bush may raise many questions and affect the pastoralists’ access. This was not the case – while many asked who I was especially in their home village, people from other villages and farming areas were less interested as I arrived autonomously and mostly stayed in the bush. Where they did ask, the pastoralists would say that I am “*sansthawali*” or ‘from the NGOs’ to ward off additional questions.

As an urban, foreign-educated researcher, I was clearly of a different socio-economic background. I conducted research conscious of an “asymmetry” (Razavi, 1992) between my respondents and myself that could only be partially breached by adopting the local language, attire, and social norms. “*Ketli chopdi bhani chhe?*” [How many books (years) have you studied?] they would ask. For them, it was shocking to consider that I was still ‘studying’ given that the community is still coming into formal education with literacy rates lower than the district and national rates (Dyer, 2014). For them, education was a means to an end - that of receiving well-paid salaried jobs. Therefore, to think that not only was I still studying but also *shauk mate* [out of interest] was both surprising and suspicious.

“*Kaik toh maltu hashe*” [you must be getting something], they would say to justify why I would put all the effort into coming to spend time with them in the bush. Some even asked if they could get my job, considering they were *maldhari* and, quite rightly, knew about the profession best. They could not understand why I would leave a well-paying job to pursue a PhD to meet my personal aspirations. This indicates the economic rationale for their livelihood, as well as their precarity in being unable to make professional choices that may not be financially rewarding.

That I am associated with an institute that is globally reputed for excellence in development research, that I am working with people considered influential in pastoral studies, and that I had some experience in international advocacy for pastoralism was of little relevance to the pastoralists. There was a gap between the skills I could offer and the skills they needed to support life in the camp and meet their aspirations. That I could not make *rotla* [local flat bread] on an open fire was embarrassing to them. They could not imagine my mobility between different countries like the UK and India. They felt that lucrative professions for me to apply to after I finished my studies included working at a local bank, the post office, or as a female policy officer – low level but secure government jobs indicating both their aspirational horizons and their perceptions of my position and capacities.

While many older pastoralists still felt a sense of pride associated with their livelihood (even when saying otherwise to extract developmental benefits), the young seemed disenchanted. Younger women like Vasu and Rani resented me for valorising a livelihood and lifestyle they wanted to get out of. This begs me to admit my positive

valuation of pastoralism as an outsider who faces no hardships associated with the livelihood, even as I try to present its complexity through this thesis.

At the same time, this insider-outsider dynamic and the thinking through the ethics of research meant that decisions regarding compensation or remuneration as well as my own logistics remained tricky. I did not, for example, hire a camel and research assistants to travel with me as some ethnographers have done as I wanted to meet with the pastoralists through multiple short visits over an extended period rather than a more single long trip. Plus, I wanted to try to neutralise power imbalances that come from money exchanges – yet this was a thin line as I found myself bringing gifts instead to make up for the efforts and expenses incurred by the pastoralists – and, at the same time, feeling both that I was not receiving enough of their attention and support as well as that I didn't want to be extractive.

4.4. Nomadic research

Mobility theorists emphasise the importance of capturing people's personal and embodied experiences as they move and interact with other humans and non-humans. Instead of being the observers, the traffic cameras that see vehicles pass by and which register their speed, path, and pattern of movement from above, new conceptions of mobility ask us to be co-passengers, experiencing mobility from the inside, observing first-hand how decisions on speed, path and pattern are taken, embodied, experienced, and relayed (adapted from Kalir, 2013). Illustrating through the example of Xavier de Maistre's room travel, where he 'travels' to the different pieces of furniture in his room to look at them with fresh eyes, Salazar et al. (2017) show how the mindset we travel with is far more important than the destination we travel to. Following this sentiment, my approach through the data collection process with the pastoralists has been to follow an immersive process, dig deeper, and gather experiential data as social life unfolded.

Just like Lefebvre's 'rhythmanalyst', I was closer to the lived experiences of the pastoralists, "more aware of times than spaces, of moods than of images, of the atmosphere than of particular spectacles. He not only observes human activities, but he hears (in the double meaning of the word of noting and understanding) the temporalities in which these activities take place" (Lefebvre, 1996: 229). I sought to

pay attention to what has conventionally escaped or troubled social science – the virtual, the affective, and the ephemeral.

Sharing time, rather than ‘spending’ time, with the Rabari gave me a close view of the organisation and experience of being mobile. I had the chance to witness social interactions and overhear candid conversations. I was able to see how spatial mobility was linked to other types of mobility, such as imaginative, informational, technological, and social. I began to understand the experiences of the pastoralists in relief – in relation to myself and others they spoke with, as discussed in the last section.

I soon realised that many of my questions were centred on space or location – where do you take your animals? Why do you go to Gujarat? What do you find when you go there? I found that asking questions about the time, timing and temporality of mobility better aligned with my research objective – that of exploring the *experiences* of being mobile, of really understanding what mobility feels like and means to the pastoralists.

My primary research method was ‘being there.’ In recent years ‘being there,’ ‘go along,’ ‘itinerant’ ethnography or mobile ethnography has emerged as a prominent research method within mobilities studies (Fincham et al., 2010). ‘Being there’ focuses on the immediacy of the context. By ‘being,’ I make myself available to “move with and be moved by the fleeting, the distributed, the multiple, the noncausal, the sensory, the emotional and the kinaesthetic” (Büscher, Urry et al., 2011: 15), present to the affective, embodied, and experiential aspects of mobility. By ‘there,’ I mean an immersion into the lifeworlds of the pastoralists and the submission to a nomadic ontology. Consequently, ‘being there,’ as Grasseni (2004: 16) contends, “means sharing a process of sensory apprenticeship to appreciate and, to some extent, even appropriate the “way of seeing” of the ethnographic subject.”

‘Being there,’ that is, moving physically, methodologically, and conceptually with the movements in the field, is the cornerstone of the “nomadic approach” (Hazan and Hertzog, 2012) to research. Just as nomads that constantly adapt to their changing circumstances, the ethnographer “encounters incessant changes in the field which require her to be physically mobile, mentally alert, emotionally resilient and socially

agile; she must be prepared to modify and revise her theoretical standpoint time and again; and she must cope with the frequent unpredictable mutations in the articles of faith as to the desirable management of anthropological knowledge” (ibid.: 1).

‘Being there’ temporally locates the researcher in the ‘here and now,’ in the present moment that is reflected in the situated insights presented through the thesis. Here, ‘now’ is “a constitutive and productive heterogeneity, a circulation of multiple times within the single instant” (Luckhurst and Marks, 1999 in Burges and Elias, 2016: 4). Therefore, the ‘now’ is the contingent cumulation of history and context rather than an abstracted and discrete moment.

But ‘being there’ is also a ‘doing there’ – research is not a passive form of data collection but rather an active form of knowledge production (Fincham et al., 2010). Research methods are performative. As Law and Urry (2004: 393) contend, “...they have effects, they make differences, they enact realities, and they can help to bring into being what they discover.” Therefore, they need to be reinvented from a nomadic point of view to engage with the fluidity, multiplicity, and vagueness of life. In this section, I speak of how I tried to conduct research imbibing a nomadic methodology that celebrates the non-linear, diverse, complex, and ‘messy’ realities (Pappagallo and Semplici, 2020).

4.4.1. Practically nomadic

Marcus’ (1995) theory of multi-sited ethnography that studies cultural meanings, identities and objects in diffuse time-space forms a starting point for this research. ‘Mobile’ ethnography takes this premise further by dispelling the discreteness of ‘sites,’ focussing on the continuity of ‘the field’ rather than the contiguity of individual sites. Therefore, my ‘fieldsite’ was not a series of discrete locations but rather a “temporally ordered sequence of vistas” (Ingold, 2000: 240) encompassing all the fields and commons, the villages and campsites, the buses and bazaars, temples and tombs, clinics and *kacheris* [government offices] traversed by the pastoralists.

Unlike the pastoralists who ‘walk’ (see chapter 1) along paths, researchers are often transported from one discrete location to the next, where the process of moving

remains ancillary to the research process. This was the case with my research in Banni, where moving to reach the migrating pastoralists while fostering an intrinsic understanding of pastoralism for me was only limitedly reflected in my analysis. The PhD research was different in many ways: first, I spent several days with the pastoralists at a time, including moving with them; second, while I did go back and forth, I did so with an awareness of how it was different from pastoral practice and how it coloured my research; third, I was able to share many experiences with the pastoralists such as going to a religious sermon, being present at weddings, going to the doctor's or going to the beach; and lastly, I reflected on moments I wasn't able to be with them like in the case of the lockdown (see section 3.2) or during the 'crossing over' in 2020 (see section 3.4.1).

Mobile ethnography not only entails "travelling with people and things, participating in their continual shift through time, place, and relations with others" (Watts and Urry, 2008: 867) but also opening oneself to the sensory and experiential aspects of such travel. I am an embodied person inescapably implicated in my research and engaging both cognitively and corporeally with it. "*Haali shakish?*" [will you be able to walk?] was Pabiben's first concern as she saw me struggle across various terrains, from stony paths to mucky depressions that we traversed.

Elsewhere (see Maru, 2020) I have described the daily movements of all the members of the camp. Together with their movements I have described how I moved – I would arrive at the camp at first through public transport often using multiple modes of transport for each journey. During the time that the pastoralists were in crop fields, they would often be close to roads, but I would ask them to pick me up from the main road and walk me to the camp, or I would hitchhike to the camp, or have some relations or NGO contacts drop me to the camp. Post the lockdown I had a car, and I was often made to drive off road and in tricky terrain to reach the camp – but the pastoralists too found the use of my car beneficial and encouraged its use until it seemed to be more of a burden than help.

I would stay with the pastoralists from 1 – 7 days at a time where I would participate in their daily routine such as by helping to fetch water and wood, tying the lambs, putting up the net fence and so on. On days that we would change locations, we

would all work more having to load and unload camp. On other days I would have plenty of time to talk to the women at leisure and write notes.

The camp, exposed as it was, was a social and collective space. Just as it was hard to define the space of pastoralists, it was hard to define the respondents as well. Migrating groups often consisted of multiple flocks, and each flock would have members from multiple households as well as contracted labour. Further, these groups change membership often (see Appendix III). As a social space, the camp would see many visitors pass by every day, including other pastoralists, relatives, farmers, and other village folks, including from communities other than the Rabari. Often conversations would take place over the hearth, with many voices speaking together rather than discrete individuals making it difficult to give a complete and accurate respondents list.

4.4.2. Methodologically nomadic

Indeed, several scholars call for developing methods that keep up with the theoretical advances in thinking about mobility (Cresswell, 2011; Sheller and Urry, 2016). This is also true for the study of pastoral mobility, whose plurality and complexity is often reduced to simple categories (Pappagallo and Semplici, 2020). Methods need to be more mobile to capture the slipperiness of “units that are not” (Law and Urry, 2004: 404) as they move in and out of rigid categories such as farmer/herder, mobile/immobile, past/present/future etc. Here, I mean both methods that are more sensitive to mobile research subjects as well as the mobility, or shift, between methods.

“Mobile methods” try to engage with the material and affective processes of mobile lives. Drawing on ‘new’ conceptualisations, they are reinvented to capture the oft-missed, oft-ignored fluidity, multiplicity, and vagueness of reality (Law, 2004). They acknowledge the limitations of ‘traditional’ research methods such as interviews and focus group discussions that tend to fix, isolate, and hold down movement and incorporate a sensitivity towards (im)mobilities within research methods and practices. Here I elaborate on the methods I used throughout fieldwork to gather the data that supports this thesis:

- Participant observation: As my primary research method, “(mobile) ethnography is an excellent way to get at important aspects of human movement, especially in relating its experiential and sensory qualities to social and environmental contexts” (Vergunst 2011: 203). Ethnography through participant observation allowed me to have an intimate and immersive view of mobility.

At the camp I would observe the many tasks undertaken, the various interactions taking place and I would hear and see the pastoralists as they rationalised, thought through and made decisions regarding various aspects of their lives. Often, I would be involved in some conversations, but these would mostly be personal than livelihood related – when it come to their livelihood, they trusted their expertise and intuition best.

I would record my observations through hand-written notes containing quotes and descriptions. I maintained 4 field diaries and numerous notes on my phone to record the information. A few months into fieldwork, I also started to draw while in the field to represent my own affective experiences in non-textual/verbal formats. I also made some audio recordings – when conversations would begin to get interesting, I would record using a simple app on my phone.

In my initial field days, I was using my phone camera to document the animals and the grasses they consumed, as well as aspects of daily life. But the pastoralists were always wary of a camera, especially the women. “*Phota paadi jau*” [click photos and go] most of the Rabari I visited would say. If someone asked them who I was and what I was doing, they would say I have come to click photos. The Rabari have long been romanticised often by a ‘white’ foreigner gaze, made to pose and paid per photograph. The association of aid and research work with photography, increasingly enshrined within funding proposals, and the Rabari’s perception of it as an extractive practice discouraged me from making pictures during my fieldwork journeys.

- Remote ethnography: Fieldwork for me proceeded through the Covid pandemic where face-to-face interactions were difficult. Mobile

communication, though, emerged as an important research tool. Keeping in touch via phone calls every 2 to 3 days, especially during the lockdown period, was critical in building and maintaining relationships with the pastoralists. Video calls helped break the distance, both material and metaphorical, with the pastoralists, although these were limited, for the sake of maintaining personal boundaries. At the same time, images and posts shared through social media, provided good background material to locate the Rabari.

- Talking while walking: While with the pastoralists, I tried to incorporate methods that would consciously offer the chance to unpack mobilities, and their politics, affects and temporalities. “Talking whilst walking” (Anderson, 2004) is one such method that gave me the chance to harness the objects in the landscapes, events, vistas, and sensations on the go as an active prompt to trigger knowledge recollection and production.

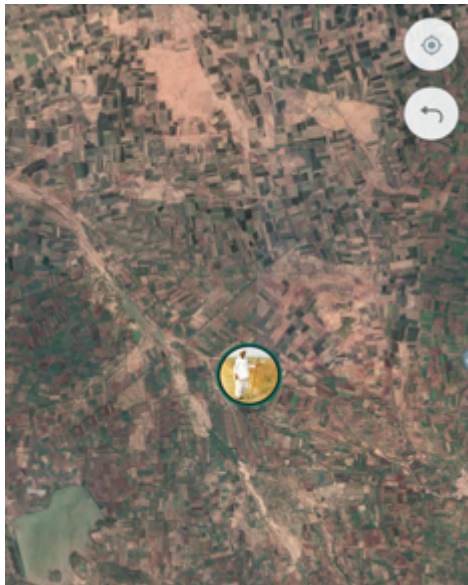


Figure 9. Google Maps location sent by Nathubhai via Whatsapp.

- Mapping: The location function on smartphones, once the pastoralists learnt to use it, helped to provide directions to reach them. I had also bought GPS devices to monitor the times and places of migration, but they were not up to the task. Also, I soon realised that it was not the absolutes of where the pastoralists went and for how long that mattered, given how variable these were, but the process through which they arrived there, their experiences and the associated politics that were worth understanding.

I did capture the significance of different areas in the State for grazing through map elicitation. While “academic requirements for systemisation” (D’Andrea, 2007: 32) repeatedly ask us to locate our research and name ‘a’ field site, pastoralists do not confine to neat boundaries. Therefore, extracting data from sources such as government records or newspapers was difficult,

as data is only available for a bounded space at a specific spatial scale such as city, district, and State. Instead, speaking with pastoralists directly was an effective way to gain insights about the areas to which they travelled.

- Games: I played several games with the pastoralists to examine the “fractious, multiplicitious and unpredictable” (Stewart, 2007: 3) affects of life on the move, such as word association, picture elicitation, and picking from a bunch of picture cards to respond to questions. Such games are excellent tools to bring out thoughts, feelings, and preferences that are not immediately apparent. These games offered ripe opportunities but were only partially successful both because they were unfamiliar methods for the pastoralists and because of logistical concerns, such as less time or difficulty in receiving individual attention in collective settings. Perhaps, playing more local games or using religious metaphors might have helped.
- Photovoice – Although the pastoralists didn’t like to be photographed, they were heavily invested in visual communications given the penetration of smartphones and social media in India. Therefore, after a long period of rapport building, I engaged Nathubhai’s and Hemangbhai’s migrating groups in a photovoice exercise with the support of a photographer friend, Nipun Prabhakar, where members of the community were encouraged to take photographs on their smartphones and share them via whatsapp to depict their experiences. Prompts and example images were also shared. This was also not so successful given the low participation, especially by the women.

4.3.3. Analytically nomadic

Looking at directions on my Google maps one day, Nathubhai said,

“Aa badhu ultu batave chhe”

[This is showing everything the other way around].²⁷

Interpreting the top-down view of the directions, this comment reveals the divergence between the sedentary perspective employed by the maps and the

²⁷ Interaction on 13/03/2021.

experiential understanding of Nathubhai as he thinks of directions from the walker's perspective. Building on this insight, this section discusses how a nomadic analysis centres the pastoralists' own perspective over predefined notions and epistemic categories.

Adam (1990) contends that as social scientists, we tend to simplify our complex social realities until they become conceptually manageable, which is reduced to single or paired aspects. By converting the "mess" of social reality into something smooth and coherent, we lose the "textures of life" and fail to account for its complexity (Law, 2004 in Coleman and Ringrose, 2013: 5). Therefore, when researching with pastoralists, Dyson-Hudson (1972: 9) urges us,

"...to cultivate assumptions of variability rather than invariance, of contingency rather than of regularity, of individuality rather than typicality. We should try for realism and detail and persistently fight the tendency to generalise too quickly from the data we collect."

With a conscious effort to keep theoretical in touch with the empirical, nomadic analysis shifts from the static, sedentary, unitary, discrete, rationally driven, and normatively bound to the political, affective, open, multiplicities of social reality (Cole, 2013; Guyotte et al., 2019). It challenges the "ossifying tendency to fix ideas and categories in time and space" (Abram, 2017: 195) of mainstream development policies, an "ontological flattening" that obscures the rich and multihued experiences of pastoralists and ascribes them unidimensional, singular values (Fitz-Henry, 2017: 8).

Instead, a nomadic analysis is embedded in an "ontology of process" or a relational ontology that "privileges change and motion over stability" (Braidotti, 2011: 29). It is situated in the here-and-now and performs from "somewhere specific and hence well aware of and accountable to particular (contextual) locations" (Guyotte et al., 2019: 5) of both researcher and the subjects. Such analysis highlights the contingent quality of data, and there is no attempt to render it objective.

One of the ways in which this manifested was through ambiguity. Not only were the places, people, and conversations ambiguous, but ambiguity was imbibed in the research method itself, "caught between the observation of diversity and the search for meaning" (Palladino, 2018: 120). As Palladino (2018: 120) shows,

“...transhumance, especially as it relates to the seasonal movement of sheep, is not just the site of renewed reflection on the ambiguities of ethnographic method, but also the site of critical reflection on the importance of such ambiguities to an empirically grounded engagement with the many questions about humans, nonhuman animals and the movement of historical transformation...”

Therefore, just as pastoral decisions, as discussed in chapter 7, the methods and analysis for research were kept open and flexible, spontaneous, and considered.

This moves research from the binary logic of “either/or” toward the logic of “and” that is open to new possibilities and transformations (Guyotte et al., 2019). Such a logic of additive possibilities “synthesises a multiplicity of elements without effacing their heterogeneity or without hindering their potential for future rearranging (to the contrary)” (Massumi, 1980: xiii). Therefore, drawing on conceptualisations from mobility and temporal studies, I present the many dimensions of pastoral mobility through this thesis and open to diverse possibilities rather than narrow down on singular research ‘findings.’

4.5. Conclusion

Academic rigour requires paying attention to one’s positionality and methods and being transparent about them in the thesis. But beyond academics, it also reflects the trust and respect between researchers and the people they work with.

Building on the past chapters, in this chapter, I have shown how I am positioned vis-à-vis the Rabari and their many relationships (as discussed in chapter 3). My position as a woman, and especially one belonging to a dominant social group, was particularly important in having access to the pastoralists and mediating my day-to-day interactions.

The rich empirical material presented throughout the thesis reflects these methods and shows them as appropriate given the research question and framework. At the same time, I am aware of the limitations of the thesis in presenting a particular version of the story of pastoral mobility, collected over a limited and particular duration, given the pandemic conditions in these years.

Chapter 5:

Company, Canal, and Cattle: The Timespaces of New Kachchh

It was a crisp autumn morning. I was seated in the shaded verandah of a home in one of Kachchh's furthest villages. A familiar 'thap thap' sound provided the background score to our conversation. It was the sound of Krupaben patting dough to make me fresh millet bread for breakfast, the light clanking of her silver bangles accompanying.

As she cooked, Krupaben began telling me of days past. *"Te di ame maal lai ne baar jata ne toh 200 rupiya lai jaiye toye bahu hata. Aaje toh 50,000 lai jaiye ne toye tuka padiye. Evo zamano aavyo."* [In those days, it was enough even if we took 200 rupees when we travelled with the livestock. Now, we fall short even with 50,000. Such an age is upon us.]

She lamented, comparing an abstract past with the present, *"E zamana ma maja aavti hati. Tyaare koi upadhi nohti maal ma. Chor aave ke evu kai na hato. Chor toh aavta pan amane bik na lagti. Tyaare amara ma taakat hati, have taakat nathi. Aa badhi dava na hati. Dungri rotla khaay ne aavta ne toh amane lagtu ke ghee ghod khaiye chiye. Aaje tame ghee ghod khata jao ne toye kharta jao. Tyaare takat hathi. Pehela khavanu haachu hatu, have dava walu chhe - rog aave chhe. Have zamano fari gayo."* [We enjoyed ourselves in those days. We did not have any troubles when with livestock. There were no thieves. Even if thieves came, we were not scared. We had strength then; now, we do not have strength. All these medicines weren't there. We would eat an onion and millet bread and think we are eating jaggery and butter (better food). Today we eat jaggery and butter and still shed (become weaker). Then there was strength. The food was true; now it is full of chemicals – we get sick. Now the times have changed].

"Back in the day, we would fill butter in a clay pot - we would fill two clay pots of butter and sell it for 12 rupees each. We would get 24 rupees, and with that we would get all the groceries. And still save some money. We would get 20 kgs of flour and other stuff and still have money left. Now even if you take a lakh rupees (to the market), you will run out," added Krupaben.

Further, indicating the incredible pace of change, she says, “Now there are computers. Did you know when the simple cell phones came that, we would have touchscreens? When we got the first telephone in the village, people were shocked about how one could talk through it.

When the touchscreen mobiles came, my brother went to see them. He explained it all to me, about how there are no buttons and only a screen, but I did not believe him. He brought the lady with the phone to my house for me to see. After seeing the mobile, I didn’t sleep all night; I was that surprised!”

Saying this, she served me some hot bread and fresh milk.

(Interaction on October 17, 2019, Rapar block, Kachchh district.)



5.1. Introduction

Kachchh suffered a massive earthquake in January 2001. Often considered an epoch, a temporal marker, that heralded the change in the times, the *bhukamp* [earthquake] is alive in the mind of everyone in Kachchh with a clear sense of life before and after the event. In the years after the earthquake, Kachchh has seen rapid and large-scale transformation in its political economy that has refashioned its economy, nature, and society along capitalist and neoliberal lines (Mehta and Srivastava, 2019).

“*Zamano fari gayo*” [the times have turned] is the axiom of the times for the Rabari. It symbolises the shifts in political economy that have taken place in the region in recent years. Once a forgotten region, a ‘harsh geography’ marginal to mainstream Gujarat imaginary, Kachchh has been repositioned as the engine of Gujarat’s double-digit economic growth (Simpson, 2007). The region is sought to be ‘developed’ and ‘modernised’ through the growth of large scale, input-intensive, and export-oriented industry and agriculture.

These are not simply abstract changes. Rather, these shifts permeate every aspect of life for people in the region, as exemplified by Krupaben in the vignette above. These changes appear in the organisation of the household economy, indicated by rising expenses or morality spoken of through rising thievery. They are also implicated in changing diets and food systems or technology-driven changes symbolised by computers and mobile phones. Krupaben laments these changes and speaks of the decline in their *taakat* [strength] both physically, as diet and lifestyle alter people’s bodily capacities, and politically, as they find themselves increasingly out of kilter with mainstream visions of development.

These changes in political economy are further explained through the rapid rise in prices, quantified by Krupaben when she discussed how the cost of living had risen, not incrementally but exponentially, from Rs. 20 to over Rs. 100,000. Krupaben alluded to acceleration and hypermobilities in other dimensions of life as well. For quick money, the *zadapi zamano* [fast-paced age] has thievery, for example. The *dava* or chemical inputs in crop production seek to accelerate crop growth and

production. The computer and mobile phone represent fast-paced telecommunication devices.

Besides functional changes, the shifts in political economy generate a “mood, feeling, ambience, tone,” a collective sense deployed through media and discourse that creates an “affective atmosphere” (Anderson, 2009: 78) of rapid change, as discussed further in chapter 8.

But even as Krupaben spoke about them, it was evident that these changes are only partial. The Rabari’s interaction with these changes is multi-hued. Rather than simple dichotomies, such as a state versus society, fast versus slow, modern versus primitive, the story emerges as far more complex as the pastoralists selectively adapt, vernacularise, submit to, contest and co-produce these changes across different scales. For example, just as Nilsson and Salazar (2017) show for the Maasai in Tanzania, similarly, the cell phone fits seamlessly in the hands of the Rabari pastoralist on the move, as it becomes embedded within the cultural framework through which mobilities are negotiated.

As the home region of the pastoralists, Kachchh has a pervasive influence on how they organise their mobility, both practically and affectively, as will be seen in the coming chapters. In this chapter, I explore the structural transformation of the region by unravelling the developments in Kachchh (and Gujarat) along three axes, that of the company, the canal, and cattle. I describe these changes and their surrounding politics to show how they contextualise and influence pastoral mobility. For Thrift (2016), space, time and movement are intricately linked and crucial to the embodied subjectivity through which knowledge is produced.

Commercial developments are described through the themes of company, canal and cattle, inscribed in space and time. While these changes appear widely in discourse through the narrative of spatial transformation (Bharwada and Mahajan, 2012; Sud, 2012; Menon et al., 2014), the temporal dimensions of the changes remain sidelined. I use the concept of TimeSpace, discussed in the next section, to describe the shifting but unified spatial and temporal configuration of Kachchh.

Further, I show that these changes are premised on a vision that connects development and modernity with acceleration, or the fast-paced movement of people, goods, and ideas. Such a contextualisation foregrounds the broader contribution of the thesis by opening a discussion on pace and pacing that is addressed in chapter 9.

In section 5.2., I elaborate on the conceptual underpinnings of this chapter, showing how different scholars have sought to integrate the spatial and temporal. I further explain the concept of TimeSpace that is used to analyse the interconnected spatial and temporal dynamics of the shifting political economy. In section 5.3. I explain Kachchh as a region most suited to pastoralism and then proceed to show how negative narratives around drylands are mobilised to undermine and transform the region through temporal notions of progress, modernity, and acceleration in section 5.4. I detail the history and politics surrounding the development of the company, canal, and cattle and show how they are abstracted from the people and places of Kachchh. Yet, as I conclude in section 5.5., the relationship between the pastoralists and shifting political economy is not a simple dichotomy of us versus them, slow versus fast, tradition versus modernity, and so on, but rather multi-layered and multifaceted, as discussed further in chapter 9.

5.2. Integrating space and time

Space, just like time, is not an *a priori* category (Fondahl, 2013) but is created and re-created continuously through the interplay between material production, everyday activity, and spatial and temporal representation (Spacek, 2014). But it has been argued that “timeless space” (Dodgshon, 2008: 11) has abundantly been analysed in the field of geography at the neglect of temporal elements.

In fact, certain spaces imply certain times (Massey, 2005), and a multiplicity of spaces is produced by and produces a multiplicity of times. Spatiality and timing have been central to geographic understandings of processes and materialities (Merriman, 2012). Dodgshon (2008) shows how neither time nor space are ‘containers’ or abstracted from social life, but instead, they are bound up with how we see the relationships between different objects and events.

One of the pioneers to overcome the dualistic formulations of space and time, Doreen Massey (1994: 261), asks us to recognise that “space and time are inextricably interwoven.” Further, she says, “...space must be conceptualised integrally with time; indeed, the aim should be to think always in terms of space-time” (ibid.: 2). She sees them as “sticky concepts” that are difficult to separate (Dodgshon, 2008: 11).

Based on literary theory, a similar conceptualisation of space-time or ‘chronotope’ was proposed by Bakhtin (1981), who showed how different configurations of time and space were represented in novels, and how they influenced the feel of the story. Explicitly foregrounding time through her concept of ‘timescape,’ Adam (2005) claims that we cannot embrace time without simultaneously acknowledging space and matter. For her, space provides the context for embodied experiences of time.

While acknowledging these various ways of looking at space and time, I adopt the concept of ‘TimeSpace’ in this chapter. Developed by May and Thrift (2001), TimeSpace ruptures the duality between time and space to show how spatial variation constitutes the multiplicity and heterogeneity of social time. Thrift (1996) was adamant about emphasising the equal contributions of both time and space to social experience. In an essay written in 1977 (pp. 448 as quoted in Thrift, 1996: 1) on his “obsession” with time-space, he says,

“The essential unit of geography is not spatial. It lies in regions of time-space and the relation of such units to the larger spatio-temporal configurations. Geography is the study of these configurations. Marx once said, “one must force the frozen circumstances to dance by singing to them their own melody.” The frozen circumstances of time only come alive when the melody of time is played.”

By analysing the TimeSpace of Kachchh, I show how the region is brought into a singular, linear, temporal sequence of development, progress, and modernity (Massey, 2005). The following section will show how Kachchh’s geographic remoteness has long been equated with economic, social, and political marginality. The development of the company, canal, and cattle seeks to transform the ‘backward’ and ‘unproductive’ region of Kachchh into what is considered an ‘advanced’ or ‘later’ stage of development.

Premised on the inevitability of neoliberal, capitalist globalisation (Massey, 2005), this chapter shows how these developments are bound with the temporalities of

acceleration. Reflecting “high modernist” (Scott, 1999) policies based on ‘scientific’ and technical advancements and homogenisation, these developments reify speed and the process of speed-up. The large-scale companies manufacturing primarily for exports, facilitated by high-speed electric connections and long-distance transportation of goods, the canal supplying these industries with water from afar and supporting commercial, input-intensive agriculture, and the cattle dairying industry at the intersection of both, breach time and space in new ways and fit well within a paradigm of fast-paced development.

Through metaphors of ‘defrosting’ and ‘dance,’ Thrift (1996) alludes to the movement, and momentum, generated through the coming together of space and time. Through its discussion of the TimeSpaces of Kachchh, this chapter implicates such movement in two ways: firstly, by showing the accelerating movements of things, such as commodities through a global value chain, river waters, and milk – represented through the development of the company, canal, and cattle respectively – that is generated, altered by, and symbolises changes in the political economy. Secondly, the chapter shows the movement, that is, the rapid transformation, in the region itself. Kachchh, thus, emerges not only as a site of hypermobilities but is also in movement itself, that is, shifting rapidly in its spatial and social character.

Sharma (2014) shows how the development of capital goes hand-in-hand with the positive valorisation of speed. Adam (2003: 50) shows how when time becomes ‘money,’ speed becomes “an absolute and unassailable imperative for business.” The development of industries in the region correspondingly leads to the development of ‘industrial time’ (as discussed in chapter 2) that must be conserved, leading to an acceleration in social and economic processes. In the next section, I talk about Kachchh, showing how the pastoralists related to the region before the changes.

5.3. Kachchh, a land of nomads

India’s westernmost border district, Kachchh, lies at the cusp of many complex changes. An island cut off from the rest of India via sea incursions in the south and west and the desert in the north and east, marked by distinctiveness and marginality. On the one hand, Kachchh has been considered a backward and deprived region by a centralising state that equates its remote geography with social

and political marginality (while failing to deliver social services). On the other hand, it is rich in ecology and minerals, and well known for its vibrant, diverse, syncretic, and cosmopolitan society, its cultural heritage, and its various arts and crafts.

Thought of as a “museum of environmental hardship” (Menon, n.d., as quoted in Mehta, 2005), Kachchh’s arid landscape creates a perception of scarcity. Kachchh receives an annual rainfall of 412 mm (1990-2019 average) (up from 350 mm in 1999) over an average of 16 rainy days in the monsoon season (PTI, 2020; Sahjeevan, 2004). This is the lowest in Gujarat and compares quite starkly with the 2377 mm (1990-2019 average) (up from 1800 mm in 1999) received by the Dangs region in south Gujarat (ibid.). It is officially classified as a drought-prone area, with 38% of its land surface receiving less than 75% of average rainfall (Sahjeevan, 2004). However, this average does not reveal the year-to-year fluctuations in rainfall, with almost one drought year in four to five years. Further, the region experiences large inter-seasonal and spatial variability in rainfall, intensifying in the past decades, as will be discussed further in chapter 6. Moreover, rainfall averages do not reveal the experience of these variations that are not only ecological phenomena but also socio-economic, and with religious and cultural connotations (Mehta, 2005).

Yet, Kachchh has a unique landscape with nine distinct ecological zones, with over 75% of Gujarat’s protected areas (ACT, 2004), including thorn forests, grasslands, and mangroves. It is home to a vast diversity of flora and fauna, including various hardy and nutritious grass species that sprout with limited rainfall in Kachchh’s shallow soils. Therefore, while Kachchh may appear a barren desert in a drought, it can burst into bountiful greens with only a little rainfall. In fact, some studies show that varied grass growth is possible with only about 112 millimetres of rain, while agriculture requires at least 250 mm of rainfall (Williams, 1958, as cited in Mehta, 2005).

Discourses of dryland development see dryland areas as harsh and unproductive, a “static nothingness, with scarce resources and remote location” (Semplici, 2019: 39). The poor soils and climatic fluctuations in dryland areas offer limited potential for agricultural development. Policymakers often subscribe to a linear view of development that privileges settled farming and treat drylands, the largest category of land on earth, as a problem. It has been acknowledged that land tenure laws and

land use policies do not always pay much attention to the biophysical characteristics of land (Ghai, 2021).



Several policy initiatives, such as regreening of drylands with alien mesquites such as *Prosopis juliflora* in Kachchh²⁸ or initiatives like the Great Green Wall across the Sahara, ignore the longer-term fluctuations in environments (Scoones, 2018), prescribe control-oriented measures (such as destocking, green-belts, and forest planting) and engineering solutions, rather than working with the structural variability of drylands (Behnke and Mortimore, 2016). Given these biophysical and climatic conditions, migration in and out of the region had become the norm with not just pastoralists but also communities of traders, fishermen and seafarers, some even travelling across continents.²⁹ In the absence of the sedentarising force of a robust agrarian system, mobility had become a way of life in Kachchh. Mobile pastoralism evolved as a well-suited livelihood in the region, giving pastoralists

²⁸ Similar to other places across the world, the Gujarat government promoted *Prosopis Juliflora* through aerial seeding in Kachchh to arrest the inward expansion of the desert. Citing a 1994 study by Kadikar, the Forest Dept Working Plan for the Banni Grasslands (2009) says that the area under *Prosopis* increased from 37,890 hectare in 1980 to almost double at 68,430 hectares in 1992 (ibid.)

²⁹ As Mehta (2005) shows, they say that for every Kachchhi in Kachchh, there is one abroad. They continue maintaining links with the region, which receives large sums of income as remittances each year. In fact, in my conversation with the District Agricultural Officer, he indicated that foreign remittances and earnings from extractive industries, given Kachchh's rich mineral resources, allowed Kachchhis a good income.

economic security and social standing. Pastoralism was preferred over settled farming and ensured the spreading of risks as pastoralists accessed resources over a vast area, optimally using limited resources and adapting to environmental variability (Mehta and Srivastava, 2019). In fact, Westphal-Hellbusch and Hellbusch (1974) note that, in the past, even peasant groups like the Rajput would keep cattle and that the semi-arid regions of Rajasthan, Kachchh and Saurashtra were exclusively for pastoralists.

Emphasising the importance of livestock keeping to the region, Bagabhai, an elderly pastoralist, said,

“Te di kheti ma hamajtu kon, te di toh maal aj rakhta. Te di kheti biju koi na kartu, aa khedutthi e thodu ghanu paake... kai khaas na thatu.”

[In those days, who understood farming? In those days (we) kept livestock only. No one else did farming then, and even the farmer was able to reap only a little... no great harvest.]³⁰

In the same vein Hemangbhai, his son, said,

“Earlier, the villagers would come to us and take animals on loan to save themselves from drought. We would be offered acres of land against one sheep, but we would not take it. Land was freely available, but we did not want to farm. We would think – what do we do with land in this arid region?”³¹

But such a view of drylands is only partial as, while the land may be unsuitable for water-intensive farming, Hemangbhai’s comments show the strength of dryland pastoralism. Williams (1958: 30-31) noted as early as 1958 that,

“... cattle, sheep and goat-raising, rather than crop-growing, seems to be the most profitable line of economic advance for most of the country-side. Moreover, this pursuit is better adapted to the erratic rainfall that afflicts the area; for where grass will flourish, a comparatively small rainfall enables cattle and herds to be kept in good heart, although the same amount would be almost worse than useless to the agriculturalist.”

By rejecting land for agriculture, while at the same time showing sheep as “drought insurance par excellence” (Mehta and Srivastava, 2019: 196), Hemangbhai shows how mobile pastoralism is a useful adaptation to Kachchh’s environment over settled farming. Yet, pastoralists have long been accused of causing rangeland degradation

³⁰ Interaction on 01/12/2019.

³¹ Interaction on 03/12/2019. While he says this, it is worth noting that he owns a small piece of land, passed down from his grandfather and expanded, that is loaned out for contract farming.

through overstocking and overgrazing (Brown 1971; Lamprey 1983; Le Houérou 1989 as quoted in Semplici, 2019). Recent studies challenge this by showing that it is one of the most suitable livelihoods systems to convert the scarce resources in dryland areas into human edible proteins (FAO, 2011) while promoting rangeland health (IUCN, 2012).

Further, Hemangbhai's comment challenges sedentist notions of pastoralism as a fixed system in an enclosed space. He brings to attention the mobility in Rabari pastoralism that spans varied regions in Gujarat and allows it to flourish even through seasonal fluctuations. Moving with livestock means that pastoralists take advantage of multiple habitats and resource reserves across and within ecological niches (Semplici, 2019). This is explored further in chapter 5, as we see pastoral places emerge through interactions between landscapes, humans and animals mediated through mobility.

Cincotta and Panagare (1993) showed that the Bharwad pastoralists of Saurashtra benefit more through mobility – in the form of better prices for manure, better forage for ruminants, and better drought protection – despite having a home and livelihood in the village. It is similar for the Rabari, who not only benefit economically through mobility but also enact and experience an affective relationship with mobility.

By elaborating on the discourses around drylands that see them as 'scarce', 'waste' and 'empty', this section shows how certain geographies and ecologies are seen as unfavourable within the statist vision of progress and modernity, despite what the local lived realities may be. As Massey (2005: 5) elaborates,

“We are not to imagine them (drylands) as having their own trajectories, their own particular histories, and the potential for their own, perhaps different futures. They are not recognised as coeval others. They are merely at an earlier stage in the one and only narrative to tell.”

The space of the drylands is said to correspond with an antiquated time, the TimeSpace of slow growth and slow movements. In contrast, the quote's 'one and only narrative' refers to the singular and linear idea of development that sees capitalistic, fast-paced globalisation as an achievement. This difference in visions of development and dryland trajectories make pastoral areas subject to appropriation

and change, negating the lived experience of pastoralists, whose livelihood is most suited to these areas.

This chapter shows how the TimeSpace of Kachchh is transformed through development policies enacted under the themes of company, canal, and cattle follow that pitch themselves against dryland environments and pastoral livelihoods. This new TimeSpace is increasingly dominating the contextual landscape of pastoralism and leading to new aspirations, negotiations of power, and subjectivities, as seen in chapter 8.

Massey (2005) calls to recognise places that do not pursue such development as ‘coeval’ or equal others with their own parameters for success and their own pathways towards it. She emphasises the multiplicity of TimeSpace, as demonstrated through the discussion on Hemangbhai’s comment. Pastoral trajectories show deviations from standard narratives of acceleration and from discourses that see them as slow. Acknowledging the heterogeneity and multiplicity of pastoral TimeSpaces opens new avenues for development, as discussed in chapter 9.

5.4. The TimeSpaces of New Kachchh

On December 15, 2020, the Prime Minister of India, and the erstwhile Chief Minister of Gujarat, Narendra Modi, laid the foundation of three important projects in Kachchh: first, the world’s largest renewable energy project at 30,000 MW, to be developed for and by large industries; second, a desalination plant to transform 100 million litres seawater into potable drinking water per day to supplement the Narmada canal grid; and third, a fully automated milk processing and packaging plant with the capacity to process 200,000 litres of milk a day (Mint, 2020) These three initiatives are symbolic of the three axes of change discussed in this section: the company, canal and cattle.

This section elaborates on the political history and impact of these developments on the region. Further, through the discussion, the section traces the transformation of the TimeSpace in Kachchh, exploring the four domains that characterise it: a) the rhythms of the environment, daily cycles, bodily rhythms, and seasons, b) the

temporal effect of systems such as industrialisation, religion, and education, c) the relationship with technologies, instruments and tools that affect social practice, and d) the representation of TimeSpace through text and media (May and Thrift, 2001; Jiron, 2010; Page et al., 2017).

5.4.1. Company: a Rann of Opportunities³²

“Agrocel's Marine Chemicals Division has turned *Rann's* [desert] harsh geography and climatic conditions into opportunities by establishing a manufacturing facility for extracting Bromine from seawater, thereby using a renewable resource to generate employment and livelihood for over 500 families...”

- website of Agrocel Industries Pvt Limited

Long ignored on the “economic map” of Gujarat (Tambs-Lyche and Sud, 2016), Kachchh was “deliberately turned into a corporate business opportunity” (Menon et al., 2014) after the earthquake in January 2001. Post-earthquake rehabilitation measures mirrored mainstream narratives of dryland development that sought to bring progress to the “backwater of the prosperous State of Gujarat” (Mehta and Srivastava, 2019: 199), as shown in the description of the Agrocel company above. The economic geography of globalisation and the political ecology of drylands has intersected with the political economy of disaster recovery in Kachchh as its vast stretches of sparsely populated lands were opened for industrial development.³³ Mainstream journalist Mahurkar (2006) wrote,

“Mushrooming across the once-barren land are giant factories linked with gleaming, smooth stretches of concrete trafficways. The picture of development and growth makes it almost impossible to believe that a little over six years ago, the place had been all but destroyed by the killer quake.”

This quote reiterates popular narratives of the development of barren land with ‘giant factories,’ phallogocentric symbols of a hegemonic state that abstracts space from people’s lived realities. Space is thus made instrumental, urbanised, productivist, and homogenising (Wilson, 2013). But not just space, time is also refashioned as the ‘time of opportunities,’ a time that is

³² This is the tagline of the Federation of Kutch Industries Association (FOKIA) (www.fokia.org).

³³ Kachchh is India’s largest single district, with a total land area of 45,652 sq.kms and a population density of only 46 persons per sq.km., compared to Gujarat’s average of 308 persons per sq.km. (GSIDS, 2016).

increasingly regimented to factory working hours and school timetables (as will be discussed in chapter 8), and a time that obscures the history of the region, showing little consideration of local rhythms and temporal practices.

Echoing the story of ‘development,’ Simpson (2006: 935) says,

“In 2003, the road to Bhachau was still silent; the only sound was the wind in the acacia. In 2004, three years after the earthquake, a ceramics firm had started to construct a manufacturing plant at the Bhachau end of the highway. By the end of 2005, there were around 25 medium- to large-scale units dotting the length of the road.”

He points to the dramatic growth around Bhachau, the main town of the Vagad region where I worked. Known as the *praveshdwar* [entrygate] to Kachchh, Vagad has been important in this story of development as it connects the region to India’s biggest cities and is an important conduit of industrial traffic from India’s biggest ports and industries.

Kachchh accounts for many of the total industrial projects currently under implementation in Gujarat (Simpson, 2007). Calling the State a “paradise for investors,” the Industrial Policy of 2003 and its complimentary Gujarat Special Economic Zone (SEZ) Act, 2004 introduced easy regulation for land acquisitions, flexible labour laws, and a fast-track environment clearance process, especially for industries to be set up in Kachchh (GoG, 2003). It exempted industries from most taxes, cess, duties, fees and levies under State law (GoG, 2004). The ‘Kachchh Package’ Incentive Scheme of 2001 offered 100% subsidies to new industries for extendable periods (Hirway et al., 2014).

In September 2020, 72,600 hectares of land in Kachchh were contracted for the ‘world’s largest’ renewable energy plant. Identified as a “complete wasteland” (Nair, 2020), the land for this project is located in the arid areas close to the national border, where large scale marine chemicals industries have also been developed. This area was once a busy transition zone as pastoralists and traders from Kachchh often crossed the area to go to rich and fertile Sindh, now in present-day Pakistan. Narratives of ‘waste’ and ‘empty’ obscure this history while deploying the language of dryland development through industrialisation.



In fact, pastoral resources are first to be appropriated through such narratives, as discussed in section 5.3. For example, their work with the camel rearing Fakirani Jat pastoralists of Kachchh, Mehta and Srivastava (2019) shows how the mangrove swamps near the coastal industries and ports, critical resources for the camels, have been degraded and captured. In another example from the region, the State Forest Department Working Plan (2010) for the Banni grassland, one of Asia's richest grassland regions, sought to enclose close to 42000 hectares of the region partly for biofuel production. The Working Plan rationalised the decision as to the "rejuvenation" and the "scientific management" of the "highly degraded" grassland (Meena and Srivastav, 2009). Yet it also names the company to whom the Department wishes to sell biofuel, revealing its commercial interest.

5.4.2. Canal: a liquid chronotope³⁴

Given the importance of water for dryland development, there is another growth story that is also key to pastoral experiences in the region: that of the Narmada canal.

As it is popularly known, the Narmada canal refers to the canal network bringing water from the Sardar Sarovar Dam (SSD) to Gujarat and Rajasthan (sardarsarovardam.org). The SSD was inaugurated in 2017, 56 years after the

³⁴ Borrowed from Peterle and Visentin (2017) who use the term 'liquid chronotope' to study the Po Delta waterscape in Italy.

foundation stone was first laid in 1961. India's biggest dam at 163 mts in height, the SSD is built over the perennial west-flowing River Narmada. In the post-Independence era, large dams were considered integral to meeting India's energy and irrigation challenges and developing the "Third World" (Mehta, 2005).

Yet, this 'high-modernist' project faced severe backlash from the social movement *Narmada Bachao Andolan* [Save Narmada Campaign]. The proposed dam would submerge 37000 hectares of forest and agricultural land and displace 250,000 people, making it one of the most contentious infrastructural developments in India (Mehta, 2005). In turn, it promised to irrigate 1.8 million hectares of farmland, but an overestimation of efficiency meant that the effective irrigable land from SSD was reduced by 23.3% (SSNL, 1989). By 2019, only 36% of the project was completed at the cost of Rs. 56,000 crores (by 2017 estimates), irrigating only half its target area (Mehta, 2019).

Yet, while images of "water-starved" arid Kachchh and narratives of drylands and scarcity in the region were used to justify the SSD, majority of the water was supplied to the water-rich regions of central Gujarat (Mehta, 2005). The people of Kachchh are still to enjoy the benefits of the project fully, as firstly, the project plan was altered, reducing the volume of water allocated to Kachchh, and secondly, the benefits of the volume allocated have been withheld by delays and manipulation in project implementation (Wood, 2007).

The dam proposed to supply water for both commercial (industrial and agriculture) and domestic use across Gujarat through a network spanning 75,000 km. While the canal waters now reach every village for drinking purposes, the lines for commercial use still need to be developed in Kachchh. Yet an inquiry found that between 2014 and 2018, industries in Mundra, Kachchh, received 25 million litres of water per day while no water was released for irrigation purposes (Dhar, 2019). Mahurkar (2006) credits Narmada waters, apart from the tax incentives, for industrial development in Kachchh, reporting that of the 200 million litres of water made available to Kachchh at the time, mostly for drinking purposes, about a fourth was being transferred to industrial outfits.

The political economy of the Narmada dam has tended to favour industries and commercial farmers in Kachchh, with little contribution to recharging groundwater or reducing soil salinity or meeting the needs of small rainfed farmers or pastoralists (Mehta, 1998). In fact, most of the areas the pastoralists travel to are not serviced by the SSD canal – farms in Kachchh and the Morbi-Jamnagar area of Saurashtra are fed by bore-wells, and the Bhal region in central Gujarat already received canal irrigation from the Mahisagar Dam whose capacity was supplanted by the SSD.

Yet, irrigation through more localised techniques, both indigenous and exogenous, such as dams, ponds and bore-wells, has supported pastoralists. Bagabhai explained,

“Paani toh game tyaan madi jaay. Gaamna evadama, talao ma, bore ma - koi bhalo manas chalu kari pai de, dharm thay, aa toh abol prani chhe.”

[We can find water anywhere. In communal troughs, ponds, bore wells – some good person will switch on the motor to water the animals, it is a good deed for these are unspeaking creatures.]³⁵

The discovery of new areas of groundwater availability and technology for such assessments and development, along with favourable rainfall, has given the opportunity to improve crop output and livestock keeping. Besides, as discussed in chapter 3, local reciprocal relationships and social structures have led to joint benefits for pastoralists and farmers through their mutual interdependence.

Therefore, an ambivalent relationship with the image of the canal becomes apparent, seeing it both as an opportunity and as oppression. It is an opportunity for those who expect to reap benefits through the availability of irrigation, such as those pastoralists who own or wish to own farmlands. Yet, it is oppressive not only because it continues to be elusive and out of reach for the pastoralists but also because it explicitly seeks to undermine pastoral interests in favour of commercial agriculture and industry.

Moreover, in discourse, the pastoralists use the canal as an easy trope, a stand-in, for commercial agriculture that has indelibly changed the landscape of Gujarat and Kachchh, more of which will be discussed in chapter 6. Even if the canal may not be directly responsible for the development of agriculture in the region, it has become

³⁵ Interaction on 02/12/2019.

attached to it as the canal was extensively promoted with images of flourishing commercial agriculture. Policies for commercial agriculture mobilise the same imagery of ‘waste,’ ‘empty,’ and ‘scarce’ drylands that were used to justify the canal (and industry, as seen in section 5.4.1). In a parallel example, Ghai (2021) describes how the Indira Gandhi Nahar Project (IGNP) in dryland Rajasthan sought to transform ‘waste’ tracts into ‘productive’ lands through the new ‘scientific’ hydraulic regimes of canals. Such regimes contributed to the framework that saw commercial agriculture as the only viable livelihood in a region with no prior experience in intensive farming.

This section reveals the complex and convoluted relationship between the pastoralists and the Narmada canal and agricultural development in the region. The TimeSpace in Kachchh and Gujarat is radically transformed through changed hydrology that seeks to capture and divert the organic flow of the river Narmada (and underground water sources), producing altered and accelerated plant cycles, as will be discussed further in chapter 6.

5.4.3. Cattle: where religion meets development

The site of Operation Flood and the ‘White Revolution,’ the world’s largest dairy development project, Gujarat has had a long tradition of cattle rearing and dairying. Most rural households in Gujarat keep a few heads of cattle³⁶ that are often collectively grazed by a pastoralist at the village level. Over a quarter of Gujarat’s agricultural growth is attributed to livestock, mirroring national statistics, and it remains one India’s largest dairy processor based on technologically enhanced processing practices (Gulati et al., 2021).

India has a thriving market for livestock products. It is the largest producer of milk, producing 23% of the world’s milk, 30.87% of Gross Value Added (GVA) from agriculture and allied sectors and 6.17% of total GVA in 2020-21 (GoI, 2022). India is also one of the world’s biggest exporters of beef and mutton. This does not account for the current or potential earnings from underdeveloped or understudied markets for ancillary industries such as hides, fibres, manure, etc.

³⁶ Here, I include cows and buffaloes as is common in India, especially in the dairying sector.

Kachchh's largest dairy, Kutch District Co-Op. Milk Producers' Union Ltd, or Sarhad Dairy, was established in 2009 and collects 330,000 litres of milk a day (sarhaddairy.coop). Despite having a large livestock population,³⁷ including hardy dairy-producing breeds such as the Kankrej cattle and Banni buffalo, problems of scale and technology had limited dairy development in the district at an industrial scale until the 2000s. An informal market for milk and ghee continued to thrive. The introduction of bulk milk coolers in the early 2000s allowed for milk to keep for longer durations and travel longer distances to be processed further, allowing for the establishment of dairying at scale.

Nimmo (2011) analyses the mobile flows of milk to show how it was distanced from the consumer-cow encounter through the advances in distribution technologies, such as refrigeration, as relevant also in the case of milk distribution in Kachchh. Plus, the commercial management of cows altered their milking times as commercial flows superimposed on animal flows (Ibid.). The developments in transportation and refrigeration not only accelerate the distribution of milk, allowing it to reach farther distances but also simultaneously slow down its lifecycle and decay.

The commercialisation of milk is highly incentivised in India. The national and State governments have also provided several incentives for the development of the dairy sector, both to livestock keepers, including fodder development, breed development, livestock insurance, etc., as well as to dairy processing companies towards intensifying production. For example, given the impact of the coronavirus associated lockdown on the Indian economy, the Prime Minister launched the *Atma Nirbhar Abhiyan* [Self Reliance Campaign] in 2020. The only provision made for the livestock sector was an Animal Husbandry Infrastructure Development Fund of Rs.15,000 crore to support private investment in dairy processing, value addition, cattle feed infrastructure, and the export of niche dairy products.

Yet, such commercialisation, supported by a liberalising economy, is embedded in a paradigm of growing religious illiberalism, restricting the potential and sustainability, both economic and environmental, of the livestock sector (see Maru,

³⁷ For many pastoralists, the selling of milk was considered sacrilegious in the past

2017). Cow worship and vegetarianism associated with upper-caste Brahmanical Hinduism appeal to the political elite and are thereby enshrined in policy. Cattle slaughter and beef consumption have been made illegal in many parts of the country. These conservative viewpoints impact the Rabari's socio-economy, as discussed in chapter 3.

Such prohibition was enshrined in the Gujarat Animal Preservation Act of 1954, which mandated certificates for slaughter and was further amended in 2011 to penalise the transportation of animals for slaughter, and the buying, selling, and possession of beef (GoG, 2011). In 2017 the penalties for these offences were intensified, from "imprisonment for a term which may extend to six months or with fine which may extend to one thousand rupees or with both" to "imprisonment for life but shall not be less than ten years and with fine which may extend to five lac rupees but shall not be less than one lac rupees" (GoG, 2017).³⁸ This law both reflects and motivates the social opposition for pastoral livelihoods as the sale of small ruminants for meat consumption³⁹, the main source of income for the pastoralists, also comes to be viewed negatively as discussed in chapter 3.

The above reveals an important aspect of TimeSpaces – that it is politically mediated. While the space is welcoming, even promoting, to commercial dairy industries, seen especially through the example of the provisions in the Atma Nirbhar Abhiyan, it undermines and even penalises pastoralists. By allowing the development of animal-sourced products beyond dairy, the state would enhance the sustainability and profitability of the livestock sector (Maru, 2017). Yet the discourse of 'marginality,' 'illegality,' and 'unholiness' exclude pastoralists from the TimeSpace of state-sponsored developments in the livestock sector, despite their contributions to the national and global livestock economy. Yet, as chapter 3 has shown, the pastoralists carve their niche and find themselves growing 'inwards' to the centre of the region's economy, even as such policies seek to push them out (Robbins, 2004).

5.5. Conclusion

³⁸ The central government sought to impose nationwide restrictions on slaughter through the Prevention of Cruelty to Animals (Regulation of Livestock) Rules, 2017, which were stayed by the Supreme Court

³⁹ Ironically, Aqsabhai, a livestock trader, reports that the influx of migrant workers from other parts of the country for the growing industries in Kachchh has given a big boost to the local meat market.

This chapter discusses the shifts in the political economy of Kachchh along three axes: company, canal, and cattle. Focusing on sectors such as infrastructure, commercial agriculture, and manufacturing (Sood, 2012) with a clear preference for big business, the “Gujarat miracle” (Panagriya, 2012) has experienced high growth rates from 2002-03. While this growth in Kachchh has been widely disproved as damaging and problematic, with poor developmental outcomes (Sood, 2012; Hirway et al., 2014), its temporal dimensions remain unanalysed. Such appropriation is characteristic of the “dryland blindness of planners” (Mehta, 2005: 276) and policymakers who regard drylands as marginal environments at the expense of rich biodiversity and thriving systems that sustain systems like pastoralism.

Shifts in the political economy of Kachchh translate materially into new opportunities and threats for pastoralists, including new livelihood aspirations, as explored in chapter 8, a changing landscape, and adverse politics of land management. At the same time, they also affect the ideas, imaginations, and emotions that bind together the experience of mobility.

Using the concept of TimeSpace, I show how the spatial transformation of Kachchh through the appropriation of nature, land, and resources is linked with temporal notions of progress, modernity, and acceleration. The transformation in Kachchh is signalled through the phrase “*zamano fari gayo*” [the times have turned] which indicates how the transformation in TimeSpace is lived, felt, and experienced by pastoralists. The shifting political economy's interconnected spatial and temporal dynamics are premised on a valorisation of scale, science, and speed.

The resulting TimeSpaces of ‘company, canal, and cattle’ view drylands in Kachchh as unproductive and waste and position pastoralists as backward and primitive. Yet, as this chapter introduces – and the rest of the thesis will show – rather than a simplistic opposition, the pastoralists engage with these changes through multipronged negotiations, via cooperation, competition, and conflict, and relying on a multitude of complex relationships.

The next chapter, chapter 6, for example, shows how the pastoralists interact with agrarian change and graze at the intersection of weather cycles and crop cycles as

they migrate across arid Kachchh and the sub-humid regions of Gujarat. It points to the “coevalness of space” (Fabian, 1983 as analysed in Massey, 2005) that recognises the different development trajectories of different regions and thereby breaches a set trajectory or fixed temporal ordering of the developments described in this chapter, and which will be further discussed in chapter



Chapter 6:

The Rhythm of Pastoral Places

“Pabiben! Kem chho?” [Pabiben! How are you?] I exclaimed as I approached her *uttaaro* or migrating camp.

“Bas! Have amne faavtu nathi, amarathi rahevatu nathi. Have toh bas bhaagi javu chhe. Gujarat ni yaad aave chhe” [Enough! Now we don’t like it; we cannot stay any longer. Now we would like to run away. We miss Gujarat] said Pabiben.

The camp was on a harvested farm not too far from her home village. It was late January in 2020, and soon we were enveloped by the fluorescent hue of a winter sunset. I could see that the camp was leaner; some of the furniture from the camp had been sent back to the village in anticipation of the journey to Gujarat.

Late, prolonged, and violent rains during the past monsoon had damaged the cotton crop in the nearby Morbi district, but government subsidies and the availability of irrigation had incentivised resowing, altering crop cycles and delaying harvest times. The crops were still standing, making grazing unavailable at that time. *“E baju khet khulya nathi”* [The farms have not opened that side], explained Pabiben as she put on some tea to boil.

This year, Pabiben’s family was unable to go on the monsoon leg of their migration to the commons in Kachchh due to the death of their camel, adding to her frustration. They remained near their home village, where they relied on the support of extended family members for transport and other amenities. They moved within a limited radius and infrequently, slowing down considerably. They had been in this field for close to a week when I arrived.

I could relate to Pabiben’s frustrations; I, too, was waiting for their family to travel to Gujarat and to travel with them. It had been nearly three months since Diwali, the landmark festival that heralds the journey to mainland Gujarat. Yet several migrating groups could be found in the last villages of Kachchh waiting to cross over via the Surajbari bridge. In the vacant

moments, while the tea simmered, I sat imagining the journey to Gujarat, including the thrill of new encounters and the social life of being on the move.



“Have koi no sathwaro lai lo!” [Now find some company], I said. *“Ame toh kahiye j chhe! Have kai di nakki thaay”* [I have been saying this, now let’s see when it is decided], says Pabiben. Given the limited fodder in the vicinity of the village, Nathubhai insisted that they remain as a single flock migrating group to avoid

sharing the limited fodder; *“maal ne saaru thaay”* [it is good for the animals], he says. The situation was especially difficult for Pabiben as, without the company of kin and peers, she was left to tend to the camp all by herself all day.

The tea prepared and drunk, Pabiben went into the village to wash, entrusting me with the care of the young lambs at the camp. The camp could not be left *redhu* [unguarded]. Soon the flock would be back, and she would have to prepare the evening meal for the camp members.

(Interaction on January 24, 2020, Bhachau taluka, Kachchh district.)

6.1. Introduction

In the vignette above, Pabiben expresses her longing for the migration experience to Gujarat even while being in a migrating camp and on the move. It is a few days before their flock ‘crossed over’ to Gujarat, as described in the opening vignette of chapter 1, and they seemed to be preparing for the journey, ready to propel. It was an unusual year of slow movement, both given the death of their camel and now the prolonged wait to move towards Gujarat.

The vignette describes a moment of deceleration relative to the previous years, as Pabiben’s family wait for the farms to “open” up and leave for migration. Late rains

accompanied by late harvests in 2019-2020 have kept her flock in Kachchh longer than they are used to. The intertwined but inconsistent dynamics of crop and weather cycles lend rhythm and pace to the movements of the migrating group. Uncomfortable with the pace of her mobility, Pabiben wants to ‘run’ to Gujarat ‘now’ because “*Gujarat javano time thayo*” [it is time to go to Gujarat].

This chapter aims to unravel the intersecting rhythms of crop and weather cycles to show how the pastoralists decide where to go and when. That is, how Pabiben infers “*Gujarat javanu time thayo*” [it is time to go to Gujarat]. Pastoralists seek to synchronise their movements “to coincide with the most propitious conjunctions of covarying phenomena,” as Ingold (2015: 71) says of the rhythms of weather. They make ‘place’ at these ‘propitious’ intersections, developing affective relationships and managing their grazing itineraries to fulfil their livelihood and personal goals.

Meier and Donà (2021: 52) define rhythm as “the arrangement and order of different temporal experiences in time.” Things, events, and experiences are organised temporally in rhythms. They are multisensory and dependent on personal experience as well as particular tasks and modes of movement (Kaaristo, 2020). Therefore, they are important in the spatial orientation and organization of periodic and cyclical activities such as the seasonal migration of pastoralists.

In the vignette we see how crop lifecycles, from sowing to harvesting as they grow and reap fruit, and weather cycles, as they go through varying patterns of rainfall and temperature, intersect and generate specific rhythms. They characterize ‘pastoral places,’ such as Gujarat in this case, which the pastoralists encounter at specific moments and under certain temporal arrangements. Moreover, rhythms mark how places are experienced and how they are known, imagined, remembered, and lived.

The rhythms of pastoral places influence when and how pastoralists move and their experiences of being on the move. These rhythms are simultaneously organic, lived, and endogenous, as well as exterior, imposed, and mechanical (Cresswell, 2010), as this chapter will show. Crop cycles and weather cycles are not only biophysical, natural, and organic, but they are also politically mediated. For example, in the vignette we saw that although the cotton crop was destroyed by the unusual rain,

government incentives and infrastructure that tend to privilege crop agriculture over pastoralism facilitated resowing.

Further, rhythms show temporally constituted uniqueness and are orchestrated at varying speeds and intensity (Adam, 1990). Lefebvre (2004: 78) says for there to be rhythm in movement, there must be varying velocities, fits and stops, “long and short times, recurring in a recognisable way, stops, silences, blanks, resumptions and intervals in accordance with regularity.” Mobilities are paced through rhythms as they align with these fluctuating speeds. Not only are they shaped by rhythms, but also, in turn, produce their own rhythms. Therefore, in order to understand how mobilities are paced, we need to study rhythms, focussing on time rather than space (Kaaristo, 2020).

Hence, we should pay attention to how rhythm and pace relate to each other to better understand mobilities. Understanding these politically mediated “rhythmic assemblages” (Turetzky, 2002) or syntheses of multiple rhythms reveals important features of pastoral places, explains how they are ordered sequentially, and provides a rationale for mobility overall. It also feeds into chapter 7, which discusses how such movements are paced in practice, that is, how social institutions such as the migrating group synchronise with these rhythms to make mobility meaningful. This is alluded to towards the end of the vignette above, where Nathubhai speaks of remaining a single flock group to pace their movements and ensure adequate nutrition for their animals. Lastly, it contributes to the overall thesis argument that reveals ‘pace’ and ‘pacing’ as key to understanding pastoral mobilities, lives, and livelihoods.

6.2. The rhythms of pastoral places

In this chapter, I specifically focus on how rhythms temporally structure ‘pastoral places’ and affect the pace and pattern of pastoral mobility. I focus on three features of rhythms to highlight their relevance to pastoralism: a) the multiplicity and co-production of places and rhythms, b) their sensuous engagement, and c) their cyclical repetition, albeit with differences.

Pastoralists make and experience ‘place’ through temporally situated, context-dependent encounters with space. Golovnev (2019) shows that for a nomad, space and time are inseparable; time seems to wander through space and, at the same time, space changes in the course of time. Chapter 5 has also emphasised this with the concept of TimeSpace as it describes the shifts in Kachchh’s political economy over the years. Spaces are constantly in motion and are also where mobilities converge, generating their own rhythms.

Pastoral ‘places’ are a particular articulation of space and its associated social and power relations experienced temporally, as described in chapter 3. They are constructed in relation to pastoral experiences of them. The field in which Pabiben is camped is temporally organised through rhythms and is experienced differently in monsoon as opposed to the summer, sowing season and post-harvest, as the plants, shrubs, soil, air, sky, people, and activities all change. Understanding the multiscalar temporalities – calendrical, diurnal, human and non-human lifecycle, somatic, mechanical – allows us to examine how pastoralists experience, manage, and perform mobilities in relation to the space.

For Lefebvre (2004: 15), space and time fold into rhythms; “everywhere where there is an interaction between a place, a time, and an expenditure of energy, there is rhythm.” Places are shaped through the various rhythms that emanate from, pass through, and derive from them, thereby contributing to their situated, context-specific dynamics (Edensor, 2016). For example, the character of Morbi, its vista, derives from the crisscrossing mobilities of pastoralists, migrant labourers and farmers, as well as from the sowing and reaping of the cotton crop that grows from seed to bud to boll, as the farms are cleared with the coming of the clear winter skies. While the crop residues are a waste for the farmers, they serve as a key resource for the pastoralists from their situated position. Therefore, a focus on rhythms explains pastoral places as dynamic and processual, as places in movement as opposed to static or as a bounded envelope (Edensor, 2011). It shows pastoral places as being multiple and fluid, shattering binaries between settled and nomadic, agrarian and pastoral, and so on.

For the Rabari, placemaking emerges by linking with crop and weather cycles. Placemaking entails apprehending space at particular times. Pastoral placemaking

is a temporally situated encounter with space and its associated social, cultural and political connotations that imbue it with meaning. Encountering ‘places’ at the assemblage of the overlapping rhythms of crops and weather determine the ‘right time’ to be in a particular grazing area. For example, in the vignette above, the pastoralists are waiting for the cotton crop to be harvested on farms in the Morbi region before going there. These farms, and Morbi as a grazing area, thus become pastoral places when pastoralists arrive post-harvest, where mobilities intersect with space at a particular time to create an affective relationship.

Pabiben highlights her affective relationship with Gujarat through the expression “*yaad*”, which means ‘to miss’ and ‘to long for,’ as memories from past encounters mingle with expectations for the future. Pabiben’s comment reflects on mobilities as very emotional events as places are made sense of through the movement of people. Further, her choice of the word indicates the perpetual “presence of the past” (Serres and Latour, 1996), or the “past and future penetration” (Adam, 1990: 75), that bind Pabiben to places, landscapes, and identity (Vannini et al., 2012). The embodied and affective experiences of the pastoralists are inextricably tied to the rhythms of place as they provide “the sensual, volatile, immanent, and embodied experience of the world” (Edensor, 2011).

Importantly, rhythms temporally structure spaces through their repetition over time, but the repetition does not proceed identically indefinitely (Lefebvre, 2004). Rather new and unforeseen things insert themselves within the repetition (ibid.). The monsoon, for example, repeats cyclically each year but varies in timing, duration, intensity, and so on. It is this “variant repetition” (Adam, 1990: 75) that is causing Pabiben’s frustration as it has resulted in a distortion of expected mobility experiences. While the seasons change cyclically, and crops change and repeat through the seasons, annual and periodic changes in rainfall, agricultural policies, technology, and preferences may cause differences to emerge in this repetitive pattern, as experienced by Pabiben in the anecdote.

6.3. *Asmani* and *Sultani*

Chakubhai: “Since we go there (to the farming areas) regularly, we know that in the *seem* of this village, there will be this planting. And in this season only this will grow, and it will be harvested now, and at this time it will be available, and at that time we reach.”

Hemangbhai: “It is all according to time. We know about the season that at this time, this will grow.”

Chakubhai: “We learn all this.”

Hemangbhai: “We are partly experienced in farming.”⁴⁰

The conversation above with Chakubhai and Hemangbhai reveals, once again, the importance of timing for pastoralism. Season, ‘time,’ and plant growth cycle are used interchangeably, with a special emphasis on their experience of crop agriculture. At the same time, this experience comes from *kaayam* or ‘always’ going to the same areas and building a relationship with it and its people, as seen in chapter 3.

Rabari mobility is influenced by the dynamic interaction of weather cycles and crop cycles, mediated through *asmani* [related to weather, *asman* = sky] and *sultani* [administration]. These cycles are intertwined with each other and with other interrelated factors. They generate rhythms that are not just biophysical but also socially, culturally, and politically coded.

This section discusses weather and crop cycles as relevant to pastoralists to better understand the rhythms of pastoral places. Although *asmani* and *sultani* are discussed separately, this separation is only conceptual. It is important to bear in mind their interlinkage with each other and other socio-spatiotemporal dynamics as they come together in rhythmic assemblages to define pastoral mobility.

⁴⁰ Interaction on 15/12/2020.

6.3.1. Asmani: Weather cycles

*“Ashad mahino aavyo ane mehulo kare zakam ji
Ane dhare chamke jone vij
Eva madhura toke chhe mor.”*

[The Ashad⁴¹ month is here with the beginning of rainfall
See the lightning shine on the edge (of the sky)
And the melodious peacock sings].

These are lines from the most popular Rabari pop song of 2019, titled *Girdhari gher aavo ne* or Come home Girdhari. ‘Girdhari’ is another name for the shepherd god, Lord Krishna. The song goes through the 12 months of the Gujarati lunar year and their different features: the cold of Mah month, the flowers blossoming in Fagan, the pomegranates and grapes ripening in Vaishaak, and the anticipation of the return of the shepherd God with the rain in Ashad.

As they pass through calendar months, marking weather shifts with changes in landscape is not uncommon among pastoral communities. Time appears to be spatially defined through the changes in the landscape and vice versa. We know it

is spring because the flowers have blossomed; the flowers have blossomed because it is spring. Pastoral places are sequentially ordered and materially and socially shaped by weather movements (Vannini et al., 2012). “Moving in sync” with weather means moving around or engaging with it sensuously (Madzak, 2020 in Edensor et al., 2021: 6).



Figure 10. A tweet from the account of the Kachch District Council wishing people on the overflow of the Hamirsar Dam in Bhuj.

Rain has always held a particular significance in Kachchh and for the pastoralists. Even today, a district-wide public holiday is announced when it rains enough for the district’s dams to overflow, and the locals distribute sweets to each other. Kachchhis celebrate

⁴¹ 8th month of the Gujarati lunar calendar. Please see the Glossary for the names of the months.

their new year on *Ashadi bij*, the second day of Ashad⁴² month, that harkens the rains. The pastoralists also begin their ‘economic’ year with the monsoon, and shepherds are hired from monsoon to monsoon. When speaking of “this year’s rain” in the summer (roughly April to June) of 2020, the pastoralists are referring to the past monsoon (roughly July to September) of 2019 when their year began, not the monsoon of 2020, which marks the start of a new year.

Rainfall in Kachchh is highly unpredictable, erratic, and spatially and temporally variable, as discussed in chapter 5, and increasingly so, given the impact of climate change in the past couple of decades. Hence, rainfall rhythms display cyclical repetition, albeit with differences.

The rainfall from 2018 to 2021 in Kachchh is summarised in the table below:⁴³

First recorded rainy day of the year	Last recorded rainy day of the year	District average rainfall	Rain in given year	Percentage
30/06/2019	12/09/2018	1988-2017 – 417 mm	111 mm	26.5%
14/06/2019	15/11/2019	1989-2018 – 401 mm	746 mm	186.3%
Not available	21/10/2020	1990-2019 – 412 mm	1162 mm	282.08%
19/06/2021	20/11/2021	1991-2020 – 442 mm	511 mm	115.60%

While these averages do indicate some of the conditions under which the pastoralists operate, they do not indicate the variation in the spatial and temporal distribution of rainfall or its intensity. For example, the rain on November 14, 2019, my first day travelling with the pastoralists, appeared in the form of a violent hailstorm causing severe crop damage across the state.

⁴² Interestingly, this conception still appropriates dates from the Gujarati lunar calendar. So, while *Ashadi bij* is the new year and the first day of the Kachchhi Ashadi Panchang, the local calendar (now no longer in administrative use), Ashad is the 8th month of the Gujarati calendar, and *bij* is the second day of this month.

⁴³ Source: State Emergency Operation Centre, Gujarat State Disaster Management Authority

When speaking of good rain, the pastoralists prefer moderate well-spaced rain. Describing the kind of rainfall preferred by livestock, Ishwarbhai says,

“Varsad mede mede pade toh haaru. Moto maal hoy toh ene 80% khape, pan jhina maal mate toh 60-70% varsaad e haaru.”

[It is good if rain falls moderately. Large stock (ruminants) needs 80% (of the annual average) rainfall, but for the small stock, even 60-70% is good.]⁴⁴

Such an intuitive and personalised understanding of rainfall defies the practical value of broad and generalised averages. This aspect of being able to thrive in low rainfall makes pastoralism most suitable for dryland environments, as discussed in chapter 5.

Breman and de Wit (1983) show how pasture is usually nutritionally richer where the rainfall is only sufficient to allow limited growth, like in drylands. In Kachchh, they believe that wet season grazing is better in drier areas than in wetter or humid areas as grasses need to be nutritionally richer and hardier to survive in the arid areas.⁴⁵ Understanding this insight dispels beliefs that attach Kachchh to narratives of scarcity and unproductivity, beliefs that create an image of pastoralists migrating out of the region to ‘greener pastures’ to ‘cope’ with its harsh environment. Instead, we now see how Kachchh is also attractive to the pastoralists for its rich grasses such as *bakarkayo*, *ruido*, *mankhni*, *lambda*, amongst others.⁴⁶

Further, given the nature of its geology, Kachchh is not only prone to drought-like conditions but also excessive rainfall. While lower or no rainfall may restrict grass growth, excess or untimely rain may cause the grass to rot, a *“lilo dukaḷ”* [green drought], rendering it unpalatable like a “soaked *chapati* [flatbread].” Further, areas like Banni tend to retain water because of their sandy soil and are suitable for grazing only at the end of the monsoon when the rain waters give way to new sprouts. In contrast, stony highland regions like the Nakhatrana area are preferable earlier. Therefore, the interaction of weather and landscape order and pace

⁴⁴ Interaction on 28/11/2019.

⁴⁵ Interview, Saitesh Vyas, 24/10/2020

⁴⁶ The pastoralists are experts in local ecology and can name several wild grasses and their benefits and the animals’ preferences among them based on the timing. Also, while several studies have been conducted by environmental scientists, botanists, plant biologists and ecologists on the grasses of Kachchh, I do not dwell too much into the lifecycle of these plants, drawing rather on what?

mobilities as pastoralists attune to their context and seek resource-rich regions for their flocks.



2018 saw about 111 mm of rainfall. It was considered the worst drought in Kachchh in 30 years, with sub-district blocks like Bhuj seeing almost no rainfall. Yet, the drought did not have the same effect as in 1988. Known popularly as *sityasi – athyasi* (1987-88), three consecutive droughts were experienced from 1986 to 1988, forcing the pastoralists I spoke with to travel all the way to Maharashtra, the neighbouring state of Gujarat. In fact, most pastoralists distinctly remember those years because of this unique experience.

In years of drought, the pastoralists ask, “where is the drought till?” Chakubhai explained,

“If it has not rained in Rajkot or Ahmedabad, then it is very difficult for the pastoralists.”⁴⁷

Describing his experience of droughts, Hemangbhai says,
“Dukal amuk haara e hoy ne amuk kharab e hoy.”

[Some droughts are good, and some are bad.]⁴⁸

⁴⁷ Interaction on 15/12/2020.

⁴⁸ Interaction on 15/12/2020.

He differentiates between *bhalo varas* or *bhalara* [good year] and *katho varas* [tough year]. Hemangbhai's comment also emphasises the impact of rainfall over time. Rainfall is not confined to the monsoon months only but extends into the rest of the year and after. It impacts crop growth in the winter and summer through soil moisture, irrigation availability and policy incentives, as seen in the vignette above, consequently impacting other relations within the 'web' of mobility, such as animal lifecycles, as will be discussed in section 6.4. This also pushes us to recognise the multiplicity of temporalities that connect and coexist with the weather.

The weather is also experienced affectively. Just as weather acts on the earth's surface, it "impacts on bodily forms such that the rain soaks the skin; goosebumps rise when a breeze flows on bare arms; we tan, freckle and wrinkle under the sun's rays, our skin becoming darker; and chills are able to seep into bones, cramping muscles" (Adams Hutcheson, 2021: 222). Rain does not fall just on the ground but also on people. The body serves as the interface, the medium through which we experience the world. The pastoralists have an intimate experience with weather, understanding its every mood and textured detail. They understand that *gaari taad*, or damp cold is harsher than *vai ni taad*, or windy cold that can be protected against through tenting. Similarly, they know that the humid heat of the monsoon is worse for the animals than the dry heat of the summer.

It is impossible to separate the way we understand the world and perceive it through the body. Knowledge is embodied in the place-to-place movement of pastoralists, and this knowledge, in turn, feeds into how mobility is conceived and organised. Bringing these sensations and bodily affects centre-stage 'defrosts' mobility. As the sensations change with time, they add animation and dynamism to movement.

Pastoralists, just as others, perceive the weather multi-sensuously. As Clement (2021:52) explains,

"...weather, while material, is also social and made through the interplay between collective and individual discourses and embodied experiences of different types of bodies in different places with different histories and lives."

Drought, for example, is now increasingly recognised as a subjective experience, a socio-political event, rather than an objective 'natural' phenomenon emerging solely from low rainfall. Mobilities of weather, such as pastoral mobility, are personal,

political, relational, and contentious. Weather is not just a backdrop or barrier to pastoral mobility, but rather its experience lies at the root of moods and motivations and understandings of the world (Ingold, 2010) – like Vibho’s appreciation of Bhal in the summer as seen in section 6.4. or Rajanbhai’s dislike of Kachchh in the winter because “*ahinya toh badhu sunu padyu hoy*” [here everything is left quiet/abandoned].⁴⁹

6.3.2. *Sultani: Crop cycles*

While the Morbi area in Gujarat is now found to be highly desirable by the pastoralists, Kachanbhai recalled a different history,

“Pehla na samay ma Morbi ma maal jaay ne toh ema rokato j nahi. Thoda di rokay ni pachi e maal bhaagi jaay, Bhal mathi thai ne chek Vadodara baju Kano mulk ma jaay. Unnalo tyaan kadhi ane varsade pacho aave. Aa toh have ahinya paani bahu thai gayo na, ane khatar thayo toh have haaru maal ne, khaava bahu thai padyu, pith walu bahu thai padyu. Pehla aatlu pith e nahotu Morbi baju. Saaro vakhat hoy toh desi kapas thato pan aa Shankar ne Bt toh hachodo na thato.”

[In earlier times, the animals would not stay if they went to Morbi. They would stay for some days then run away, go through Bhal and all the way till Vadodara side, to the Kano nation. They would spend summer there and come back in the monsoon. Now there is a lot of water here; there is manure, so now it is good for the animals; there is a lot to graze as a lot is irrigated. Earlier it was not so irrigated around Morbi. If the times were good, they could grow indigenous cotton, but there was no Shankar (hybrid) or Bt-cotton.]⁵⁰

Unpacking Kachanbhai’s quote reveals many things. Firstly, it speaks of the changing spatiotemporal patterns of mobility experienced by pastoralists. While the pastoralists now spend considerable time in the Morbi and the Bhal areas, in the past, they did not. This also transformed the organisation and pace of mobility given the change in the distance and times of movement, as discussed in chapter 7. At first, they would have to move quickly and ‘run’ from Morbi to reach all the way to the Kano region, while this is no longer the case.

Secondly, it disrupts common perceptions that show pastoralists as subjugated by agricultural development. Here Kachanbhai speaks of the benefits of

⁴⁹ Interaction on 22/08/2020.

⁵⁰ Interaction on 09/01/2020.

agricultural development for both pastoralists and farmers as improved agricultural production also implies the availability of fodder for the pastoralists. However, it is not as straightforward, and one can witness the relationships between farmers and pastoralists fraying in some instances, as are described in this thesis. Still, Kachanbhai's insights provide a starting point to explore developments for pastoralism in recent times.

And finally, Kachanbhai's quote shows how 'pastoral places' are built through repeated affective encounters, as represented in chapter 3 by the phrase "*jyaan maal ne maja aave tyaan amane maja aave*" [we are happy where the animals are happy].

The Kano or Kanam region in south Gujarat has the lush forests of the Baroda region and the agricultural hotspot of Bharuch, which earlier grew cotton and groundnut, and now grows sugarcane. Kachanbhai describes how the pastoralists would migrate to this area even until a couple of decades ago as the crop output in the now popular Morbi area was poor. In good years, if cotton were grown in the Morbi area, it would be standing for several months, unlike the newer short-cycle varieties of cotton. Now with the development of the area as an agricultural hotspot, supported by input-intensive agriculture as indicated by Kachanbhai, the pastoralists prefer not to travel that far.⁵¹

Morbi and Bhal have developed as agricultural hotspots for cotton and wheat, respectively, over the past years due to the combined effects of good rainfall, the development of new technologies and infrastructure, and government policies supporting such growth, as discussed in chapter 5. A 7-district study by Shah and Pattnaik (2014) found that monocrops of cotton accounted for 42-43% of the total cropped area during the *Kharif* season and wheat occupied 89-96% during the *Rabi* season from 2003 to 2010. Rabari pastoralists have incorporated migrating to these areas within their production strategy and maximising on new opportunities, as discussed in chapter 3.

⁵¹ The Kanam area has also simultaneously experienced several changes, considerably increasing the *dharmajyo* (see chapter 3) required for grazing access.



Indigenous cotton was grown in the arid areas of Gujarat earlier as well. In fact, the Vagad region of Kachchh was famous for its cotton that grew without any inputs, including without irrigation, but in certain soil conditions. While it continues to be sown in some unirrigated plots, a crash in prices has made it less attractive for farmers. *Bt*-cotton receives about Rs. 2500 per 40 kg and the production is around 1600 kg per acre, while indigenous cotton fetches Rs. 1600 per kg and the yield per acre is half at 800 kg (Rahman, 2019). Although NGO intervention, including organic certification, has been somewhat encouraging, *Bt* is still the obvious choice for farmers who have access to inputs (ibid.).

Farmers in Gujarat with irrigation can sow *Bt* cotton as early as May, before the rains arrive and harvest before Uttarayan, the harvest festival celebrated each year on January 14.⁵² These farmers are likely aiming for a second crop of wheat or cumin, and therefore harvest sooner than others. As Hemangbhai explains, “If there is water, then the farmer will sow it (the farm). In the past, we would go late to Gujarat; now, we must go early since they remove all the cotton around Diwali time. Now they grow wheat and cumin. Earlier, there was no water, so the cotton would be

⁵² Unlike other festivals whose date varies based on lunar cycles, this one has a fixed date on the Gregorian calendar.

harvested in Chaitra month. First, there was indigenous cotton - it would be harvested late. Now because there is irrigation, they (farmers) sow in Jeth month itself and in four months it is harvested. So, they do a second crop.”⁵³

The Bhal region in central Gujarat grows wheat, whose residue becomes available to the pastoralists after the cotton is grazed. Tagged with a Geographical Indication (GI), Bhaliya wheat is long grain and protein rich. It is excellent for processing into semolina and then into pasta, noodles, pizza, etc., receiving a 25% premium price over other wheat varieties and 40-50% higher than bread wheat varieties (PTI, 2011). The variety can grow under conditions of conserved soil moisture without the need for any irrigation, although one irrigation at maximum tillage, 30-35 days after sowing, can increase the yield by 30-40% (Trivedi, 2008). It is harvested in a short time frame of 120 days. Farms that grow wheat in the winter often grow rice in the monsoon – indicating the quality of soil and water in the area.

Going to Bhal means adapting a quicker pace, as will be explored further in chapter 7, to cover the distances required. The pastoralists must change camp frequently and travel longer distances to reach Bhal, and they must also return rapidly. The black soil in Bhal becomes mucky with the rains making it difficult for the sheep to walk. Besides, the farms become sown anew restricting access to grazing. Therefore, the pastoralists seek to avoid, rather than chase, the rain in Bhal and return to Kachchh with the expectation of grazing on fresh pasture with the impending rains.

Nested within these inter-seasonal movements are also the intraseasonal or daily movements of the pastoral camps as they move from village to village, farm to farm. Technological developments in crop agriculture affect these movements in new ways. The everyday lives of the pastoralists are slowed down or accelerated, like in the vignette, to negotiate articulations of state power. For example, in Morbi, the pastoralists find a patchwork of farms at different stages of crop cycles, depending on the farmer’s production goals and input availability. As discussed before, if inputs are available, the farmer may choose to harvest early.

⁵³ Interaction on 03/12/2019.

Cotton is harvested or weaned by hand by specialised migrant labour, as the seasonality of labour interacts with the seasonality of the crop. The pastoralists are also increasingly asked to contribute labour to wean cotton for grazing access. Once harvested, the animals must graze on cotton crop residues, such as leaves and seeds, within a few days. Standing crops continue to consume soil nutrients, and the farmers are keen to uproot them by tractor soon after harvest. The pastoralists follow farm labourers as they wean one farm and then the next, moving camp frequently and in short distances.

Unlike cotton, wheat is harvested mechanically with a cutter, and therefore, all the farms in a village are harvested together over a few days. “*Aakhi seem khuli jaay*” [the whole outskirts is open], leaving large areas open for the pastoralists to graze. These dynamics contribute to the spatio-temporal character of the place, whether dynamic or placid, fast or slow, with mobile flows of varying tempo, pace and regularity (Edensor, 2010).

While some farms in Morbi are also able to grow wheat, it is insufficient; as Hemangbhai explained,

“*Aa thoda ghaun thi shu thaay, maal ne toh aakho vagado khape.*”

[What does this little wheat do, the livestock need the whole bush.]⁵⁴

Bhal, on the other hand, offers plentiful wheat crop residues and the chance to earn grain in exchange for manure and better market prices for their animals. It also allows for larger migrating groups as flocks of friends and relatives come together, creating a festive atmosphere. Yet the pastoralists don’t always choose to go to Bhal, and this will be explored in section 6.4., as well as in chapter 7.

Further, it is the ‘arid’ regions of Kachchh and Saurashtra that are the most significant contributors to Gujarat’s high agricultural growth in recent years (Pattnaik and Shah, 2015).⁵⁵ Through the development of irrigation infrastructure as discussed in chapter 5, and the increasing investment in agriculture post the earthquake through subsidies on electricity and commercial inputs such as hybrid

⁵⁴ Interaction on 15/12/2020.

⁵⁵ For the period between 2001-02 to 2011-12, Gujarat’s agriculture grew at a phenomenal rate of 11% compared to an all-India average of 3% during the same period (BL, 2018).

seeds, fertilizers and insecticides, the state has promoted the expansion of commercial agriculture into areas that extensively catered to pastoral needs.

However, while agricultural expansion is beneficial in the winter and summer months, it is problematic in the monsoon when what would otherwise be fallow – such as ‘wastelands’ – come under cultivation reducing grazing availability. Showing this link, Virabhai said,

“Have badhi jameen piyath thai gayi etle rokai gayi. Kori jameen hoy evo charingo na male.”

[Now, all the land is irrigated, so it is blocked. We do not get grazing like in fallow lands.]⁵⁶

Further, fallows in the form of ‘wastelands’⁵⁷ that served as “lifelines” or silvipastures for pastoralists were opened for privatisation by industry and ‘competent’ farmers for cultivation of horticulture and biofuel trees using modern technology via a 2005 Government Resolution (GR.JMN/3903/453/A) (previously rejected in 1999) (Bharwada and Mahajan, 2012). In early 2021, the government again invited “high net-worth individuals, institutions and corporate (sic)” for horticulture on lands ranging from 50 to 1000 hectares, offered tax-free for the first five years of a 30-year lease, and with priority assistance to leaseholders to install drip sprinkler fountains, agricultural electricity connections, and solar power panels (FE Bureau, 2021). The leaseholders would have to grow only those crops identified by the government as the intention of the programme is to increase agricultural exports (ibid.).⁵⁸

Therefore, when speaking of the relationship between agriculture and pastoralism, it is important to ask ‘where,’ ‘when,’ ‘what’ and ‘by whom’ to unravel the politics of agrarian change.

⁵⁶ Interaction on 09/10/2019.

⁵⁷ A colonial classification following Lockean ideas classified open lands as ‘waste’ (see Whitehead, 2010). 41% of Kachchh is administratively classified as ‘wasteland’ (Asher, 2014).

⁵⁸ Incidentally, Kachchh’s largest dairy, Sarhad dairy (discussed in chapter 5), is also starting a fruit juice business to capitalise on horticulture development in the region.

In another example, looking over the farm in which they were camped in Kachchh, Bagabhai described the development of commercial agriculture, saying,

“There was no *mindhi aval* (Senna Italica) then - it grows now. No human eats it, nor do any birds. What *dharam* [righteous deed] can we do with it? They grew *ram mol* [sacred crops] earlier – rainfed moong beans, pearl millet and cluster beans. The harvest was like that, sweet. Before some sparrow, some bird would come to the *seemado* [village edge] (to eat grain), now this *mindhi aval* is standing – who will eat this? Even the livestock does not eat this. No one knew about *mindhi aval* then – now the time is like this. No one eats this *mindhi aval*, so it grows well and receives a good price.”⁵⁹

Driven by a motivation to control and accelerate time, as discussed in chapter 5, the state-corporate nexus promotes short cycle hybrid varieties of crops, such as cotton, wheat, and *mindhi aval*, through the rhetoric of progress, science, modernisation, and development. The fast growth of these plants is supported by industry manufactured chemical pesticides and fertilizers, sown with the help of machines, and irrigated through state- managed large infrastructures such as dams and power grids. Therefore, the TimeSpace of agriculture is thus becoming increasingly abstracted from ‘natural systems’, as Bagabhai’s comment shows. Further, he concludes by saying that perhaps because it is abstracted in such a way, it is considered profitable – a poignant remark to reflect on capitalistic development in general.

Temporality is deeply implicated in agriculture, as food production is brought about under certain rhythmic assemblages, with their own distinct histories and forms of environment making. Time serves as a powerful metric to predetermine, discipline and lock in future potentialities (Massumi, 2015). While earlier agricultural practices were connected to the “natural rhythms of climatic variation and seasonal growth and decay” (Edensor, 2020: 255), structural changes in agricultural production systems disrupt this “natural rhythmicity,” obfuscating emergent differences by regularizing crop cycles to a “machine’s atemporal cyclicity” (Kümmerer, 1996). The increasingly capitalist mode of agricultural production in Gujarat seeks to “congeal” the tempos and “flatten” the rhythms of crop production to promote and sustain surplus output (Kolinjivadi et al., 2020). A universal conception of time, calibrated to ensure predictability and control, serves as both

⁵⁹ Interaction on 01/12/2019.

precursor and a product of the imposition of science and technology on the tempos of the biological, physical, and social worlds (Wood, 2008 in Kolinjivadi et al., 2020). Hence, while scholarship pays attention to the dynamics of weather, exploring the implication of policies and governance regimes, as they intersect with the rhythms of weather, may offer new insights for pastoral mobility.

6.4. Following the flocks

This section provides an overview of the spaces and times of pastoral mobility. It details the migration journey of Nathubhai's flocks and others to exemplify how they interact with the crop cycles and weather cycles and sometimes even bypass or subvert them. The section is divided into annual migration cycles, although they overlap and are nested within longer-term migration experiences. Please refer to Figure 7 and Figure 11 for a representation of key resource areas.

a) 2018 - 2019

The 2018 – 2019⁶⁰ migration cycle was portrayed as a picture of misery in popular media. Touted as “Gujarat’s worst drought in over 30 years” (Agarwal, 2019), several media reports showed pastoralists suffering from the low rainfall in 2018. But the experience of pastoralists that I spoke with was not as dismal. Hemangbhai explained the spatial variation in rainfall and emphasised the importance of cross-regional mobility,

“The drought the year before last was okay. There was a drought in Kachchh, but it was good the Morbi side. Again, in Morbi, two villages had a drought, and two were ok. Because it rained a little, so somewhere there was rain, and somewhere there wasn't.”

Travelling with Laliben's flock, Nathubhai had gone all the way to the Tarapur district (to Jitu's village) in the summer of 2019. They had gone there consecutively for the seven preceding years as well, making place through their repeated visits.

Describing the Bhal region, Nathubhai's son, Vibho, said,

⁶⁰ This indicates the migration cycle beginning from the start of the rain in 2018 to the end of summer in 2019. While it is expressed through calendar years, it does not represent a fixed and discrete 12-month period as the migration cycle may be longer or shorter depending on the rainfall in the year. Seasons may intersect, as seen in the vignette, where rainfall continues into what are considered winter months.

“Tamne tyaan bahu gami jashe. Tyaan ghana zhaad hoy ne chaaydo. Ne nahava ghanu pani made. Ane tyaan ni mati chaute nahi kapdane.”

[You will like it a lot there. There are a lot of trees there and shade. And lots of water to bathe. And the soil does not stick to your clothes.]⁶¹

While Kachchh is brutal and hot in the summer, Bhal, with its greenery and plentiful water, is familiar and tied to Vibho’s imagination of their summer. Produced through a particular interaction of crop cycle that provides abundant and nutritious summer grazing and weather cycle that adds a sweetness to the shade and water, Bhal is his ‘place’ in the summer.

At the same time, Hemangbhai’s migrating group had gone all the way to the Ahmedabad district, an area they had been going to for over a decade. Unlike the flock’s solitary condition described in the vignette, the flocks were all *bhega* or ‘together’ in Gujarati, the pastoralists would say, as the area accommodates larger groups.

b) 2019 – 2020

The rainfall in 2019 was also unusual, but unlike in 2018, it was prolonged and violent. This period that serves as the context for the opening vignette of this chapter. Nathubhai’s flock experienced a delay in leaving for Gujarat, eventually leaving in late February 2020 for their shortest migration cycle ever. During this time, Nathubhai’s flock travelled to Gujarat alone for the very first time, joining with Laliben’s flock after grazing in Morbi for a few weeks. It was also the first time the flock travelled without Valo, Nathubhai’s elder son and lead shepherd, as will be shown in chapter 7.

This period also coincided with the lockdown associated with the Corona virus pandemic. The flock continued to graze with the support of farmers, as discussed in chapter 3; however, their narratives revealed both fear and dismissal.

While Sarganbhai and Harjanbhai’s flocks made it to Bhal in the summer of 2020, Nathubhai grazed on cotton crop residues and wheat and cumin in the Morbi area

⁶¹ Interaction on 27/01/2020.

before returning to Kachchh. Part of returning early to Kachchh was that heavy rains of the past year had allowed for a summer harvest of castor. Justifying a similar strategy, Hemangbhai said,

“Pachi mann na thaay ne. Ahinya charvanu madi rahe toh pachi aagad javanu mann na thaay.”

[Then we don’t feel like it. If we get grazing here (in Kachchh/Morbi), then we don’t feel like going ahead (to Bhal).]⁶²

Hemangbhai’s rationale is not that staying in the area was better for the flock but that he did not feel like it. His feeling reflected that of many pastoralists these days who choose comfort and leisure over or alongside production outcomes.

On the other hand, while Ranabhai felt the same way as Hemangbhai, he more explicitly connected his feelings about grazing areas with his animals’ welfare when he said,

“Na amane evu yaad na aave. Amane yaad kevu aave ke maal ne haaru hoy evu yaad aave... Have hon ame ghare rahi gaya ane ahinya haru na rahyu toh te vakhte amane Kathiawar yaad aave... Pan huva haaru hoy evi ritna ahinya haaru hoy toh yaad na aave.”

[No, we do not miss it (Morbi/Gujarat) like that. We only miss where the animals are well. Now we have stayed at home (in Kachchh), and if the animals do not stay well, then at that time we think of Kathiawar.⁶³ But if the animals are just as well here as there, then we do not miss it.]⁶⁴

As is described in chapter 5, areas such as Morbi were earlier considered quite poorly endowed. These quotes also show how an area that was avoided in the past has become significant for the pastoralists with the development of agriculture. The flock returned to Kachchh in May 2020 after only 2.5 – 3 months in Gujarat. Sufficient rain in early July also ensured that their early return was correspondingly met with an adequate supply of pasture for the animals.

On returning to Kachchh before the monsoon in 2020, Laliben and Nathubhai’s flocks parted ways again. Laliben’s village offers plentiful pasture in its commons. But a collective decision of the village allows only 10 flocks from the village to graze

⁶² Interaction on 15/12/2020.

⁶³ Kathiawar is the southern peninsula region of Gujarat that includes the Morbi and Surendranagar districts and borders the Ahmedabad district.

⁶⁴ Interaction on 22/09/2020.

there at a time. Therefore, although Nathubhai's flock was allowed passage and grazing for a few days, they could not stay with Laliben's flock in their village for a longer duration. Nathubhai's flock waited for Sarganbhai's flock to return from Gujarat and joined them and two other flocks for their monsoon grazing cycle across Kachchh. The shape-shifting nature of the migrating group as an institution is the subject of chapter 6.

c) 2020 – 2021

Just as Krupaben spoke of the turn in the *zamano* in chapter 5, Hemangbhai applied the same expression to people and the rain when he spoke of the high levels of rainfall in 2020:

“Manas fari gayo evo varsad e fari gayo. Aavo varsad hoy - 200 taka varsad hoy?”

[Just as people have turned, rainfall has turned too. Is there rain like this – 200% rain?]⁶⁵

Yet, despite the heavy rainfall, as seen in the table in section 6.3.1, given the period, frequency and intensity of rainfall, there was only minor damage to crops and livestock, unlike the previous year. Ranabhai said about the year,

“Hon vakhat haara hata.”

[The rain/weather was good this time.]⁶⁶

Referring to rain as *vakhat* [time], Ranabhai indicated the importance of weather in defining the experience of the times. In French, too, the same word *temps* is used for both the weather and time; both ‘tempo’ and ‘tempest’ derive from the Latin ‘tempus’ meaning time (Ingold, 2012).

As a heavy rainfall year, Kachchh saw consistent rainfall early in the monsoon in 2020, bringing fresh sprouts of grasses, further justifying the early return to Kachchh of Nathubhai's flock. The interaction between the weather and terrain shapes pastoral places in many ways. In Kachchh, Nathubhai's flock travelled with Sarganbhai's migrating group to the undulating grasslands of the Mundra and Mandvi block, which tend to receive plentiful and early rainfall. In dry years

⁶⁵ Interaction on 15/12/2020.

⁶⁶ Interaction on 22/09/2020.

Nathubhai travels to the distant Naliya grasslands in the south-west of Kachchh. Rajanbhai, on the other hand, from Nathubhai's neighbouring village, preferred to take his flock to the rocky hills of the Nakhatrana block to remain on higher ground where water does not collect.

Animal lifecycles are intimately tied to the organisation of mobility and, therefore, to weather and crop cycles. The short migration cycle in Gujarat in the summer of 2020 meant that the sheep had not had enough protein-rich fodder, affecting animal nutrition and reproduction. While in other years, new lambs are born early in the monsoon and feed on fresh grasses, lambing was late in 2020 because of insufficient cotton crop consumption. Late lambing meant that the lambs were still too young at the end of the monsoon to walk long distances or travel to places with soft soil, such as Banni. This also delayed migration to Gujarat in some cases, like in the case of Kesharbhai and Hemangbhai's flocks, and required alternative arrangements, like tractors.

While not focused on in this thesis, drawing attention to animal life cycles shows how temporalities inter-penetrate, as the late monsoon of the previous year results in late lambing in the current year. Further, it shows how the myriad temporalities converge and synchronise to define pastoral mobility. Despite the attempts to overcome the vagaries of the weather through irrigation and inputs, people and animals remain embedded within the "light and dark, wet and dry, cold and warm, growth and decay, birth and death cycles of nature's earthly rhythms" (Adam, 1998: 16).

Leaving for Gujarat in December 2020, Nathubhai joined Laliben's flock from Kachchh itself. But they decided to reconfigure their mobility by travelling by tractor this time around, as will be discussed in chapter 8.

Leasing out their camel to a flock owner from Laliben's village, Nathubhai decided to travel with Laliben in their newly bought second-hand tractor. Both flocks shared fuel expenses and hoped that the tractor would make it easier for the women to migrate, especially as both Laliben's daughter-in-law and Nathubhai's daughter-in-law were travelling for the first time and with infants. More of the dynamics associated with the switch to the tractor will be discussed in chapter 8.

In the previous year, the migrating group had spent most of their time in one village in Morbi because of sufficient fodder, strong farmer-herder relations, and hesitations associated with the lockdown. In early 2021, though, they circled nearby villages. Partly made easier by moving with a tractor, the migrating group was compelled to move from village to village because of the interaction of rainfall and land, where some farms suffered crop damage and delayed harvests while others didn't. Even though the pastoralists never admit to knowing where and with whom they are going, as will be discussed in chapter 7, they return to the same group and location repeatedly, making 'place' through the sensual and practical engagement with familiar spaces. 'Agrarian time' is rhythmic, cyclical and interconnected, and different ways of life, such as that of farmers and pastoralists, become intertwined with these temporalities in diverse ways.

6.5. Conclusion

While chapter 3 showed the various areas across which the pastoralists traverse and the various relationships through which mobility is mediated, this chapter shows how pastoral mobility is organised at the intersection of agrarian dynamics governed by *asmani* and *sultani*, as seen in section 6.3. Rhythms, such as seasons and crop cycles, are pluralistic, diverse, relative, and repetitive. Their particular linear and cyclical repetitiveness makes them inextricably linked to time and highlights the temporal dimension of pastoral mobility.

Although repetitive, these rhythms are not identical and show some variation from one year to the next. This is reflected in the mobility decisions and patterns reflected in section 6.4. This organisation directly feeds into chapter 7, where I discuss the changing composition of Nathubhai's group over time. It forms the starting point for temporal analysis of the pastoral social institution of a migrating group, as I show how the migrating group shape-shifts to match the rhythms of pastoral places.

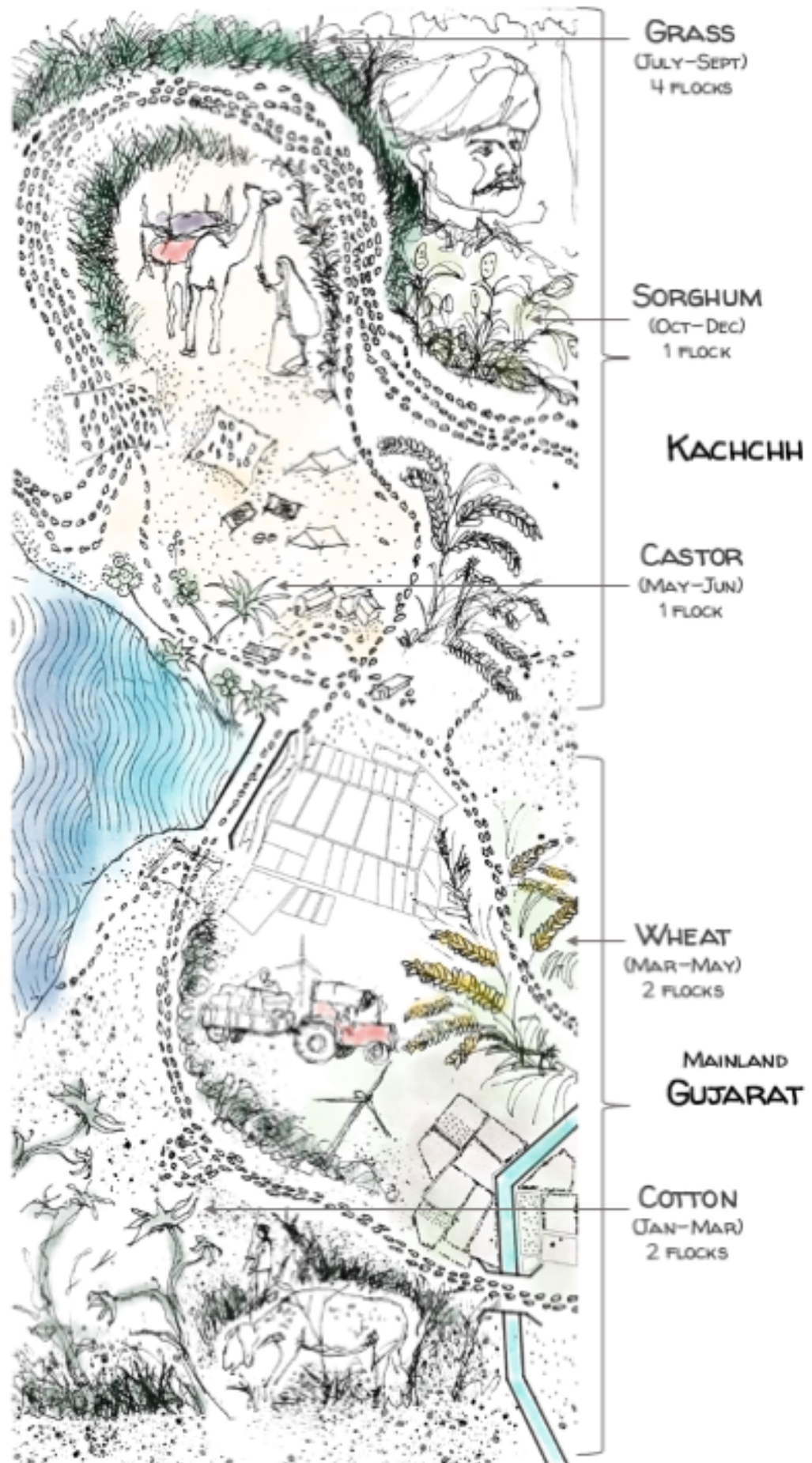


Figure 11. Illustration depicting Nathubhai and Pabiben's migration journey in 2019-2020. Developed in collaboration with Nipun Prabhakar.

Chapter 7

Social Institutions and the Synchrony of Pastoral Mobility

“Have be vaat chhe, ka jaay chhe ka nathi jato. Ame Samakhiyali ma bhega thaya hata gaya athiwadiye, hotele chai pidhi hati. Gher aj chhe hamna, pan have jaavu chhe em kahe chhe” [Now there are two things: either he is going, or he is not going (to Bhal). We got together in Samakhiyali last week; we drank tea at the hotel. He is at home right now, but he says he wants to go (to Gujarat) now], said Harjanbhai as we spoke about Nathubhai’s movements. As livestock keepers and distant relatives, their paths crossed often and they remain in contact. I was visiting Harjanbhai on a millet farm not too far from Nathubhai’s village. Nathubhai came up in conversation, and I was interested in understanding how Harjanbhai perceived Nathubhai’s moves.

“Koi sathwara vagar kya jashe?” [Where will he (Nathubhai) go without company?] I asked, knowing that Nathubhai’s flock was grazing alone close to his village. It was unusual for a flock to be alone for as long as his had been and leave for Gujarat alone.

“Have koi goti le pan aagad javanu na jade. Vachche rahevanu jadi jaay. 2 ghar hoy toye hale pan aagad 5-6 ghar khape.” [Now, he can find someone, but he may not be able to find someone to go ahead (to Bhal). He may be able to find someone to remain halfway (in Morbi-Surendranagar). (There) even if there are two homes (families/flocks), it is okay but ahead (in Bhal), you need 5-6 homes] replied Harjanbhai, highlighting the various migration arrangements available to pastoralists from the region.

Explaining the rationale behind his comment, Harjanbhai added, “In the Morbi region, the farms are small, and the farmers are interested in manure. If there are too many animals, it is not feasible (to have adequate grazing). If the farm is 10 bighas⁶⁷ then he (the farmer) asks how many days can the animals sit (be penned). So, we say that they can sit for five days. If there are few animals, we can also get paid accordingly. When we go to the wheat area, they don’t care about manure as much – as soon as the farms are harvested, we can all go

⁶⁷ 1 bigha = 0.4 to 0.7 acres.

in and graze. If the farm is small (like in Morbi), it cannot have too many animals – if there are 20 bighas (like in Bhal), it can handle 1000 animals, but if it (the farm) is only five bighas, then it cannot sustain so many animals (sic).”

(Interaction on February 3, 2020, Bhachau taluka, Kachchh district.)

7.1. Introduction

While chapter 6 has spoken about the intra and inter-seasonal rhythms for grazing, this chapter shows how the temporalities of mobility among the Rabari articulate with the rhythms of interconnected places through the institution of the migrating group. Flock movements are not only shaped by politically and socially mediated environmental and climatic conditions, as seen in chapter 6, but also by the animals’ nutrition requirements, shepherds’ labour capacities, and the collective goals of pastoralists, all manifested in the institution of the pastoral migrating group. The interaction with Harjanbhai described in the vignette above explains the different configurations of pastoral migrating groups as they seek to manage animal numbers to take advantage of the variability in resource availability and market opportunities such as manure exchanges.

Migrating groups must differ in composition given the specific dynamics of agriculture in each region. Chapter 6 has shown how cotton fields in the Morbi region are harvested one at a time, while wheat farms in Bhal are harvested altogether. Therefore, even though a smaller area of cotton can satisfy the animals more than in the wheat region⁶⁸, cotton farms can accommodate only smaller flocks at a time. Remaining a small migrating group in the cotton areas reduces competition and allows the sheep to receive adequate nutrition.

Moreover, as Harjanbhai comments, manure is valued more in the Morbi region. Hence remaining a small group not only ensures adequate fodder availability but also offers the chance to maximise manure earnings. Along with security and logistical considerations, this explains why Harjanbhai speaks of needing at least 5-

⁶⁸ Hemangbhai estimates that a flock of 100 sheep will need 2-2.5 bigha of cotton and 10 bighas of wheat residues in a day (03/12/2019).

6 flocks together in Bhal while a smaller migration group of 2 flocks is sufficient in the Morbi region.

Similarly, Nathubhai says, “*Aam maal ne saaru thaay*” [It is suitable for the animals like this] in the opening vignette of chapter 6 about remaining as a single flock migrating group in Kachchh. In a year, when they grazed in a limited area around their village, first due to the death of their camel and then due to the delay in leaving for Gujarat, remaining a single flock group helped slow down their movement and allowed for adequate nutrition for their animals. In the past years, they have spent the monsoon months in a medium-sized migration group of 2-6 flocks. This group size is small enough to navigate the increasing constraints to open grazing faced during the monsoon due to the expansion of agriculture and big enough to support the safety and logistical needs of grazing deep in the bush.

This chapter reveals how the migrating group as a social institution internalises and reflects temporalities through its modular, versatile, transient, ambiguous, and shape-shifting nature. It expands and contracts based on personal and collective goals, such as production goals given economic and environmental conditions, as well as social and affective goals such as belonging. Section 7.2. briefly discusses how the pastoralists alter group composition to synchronise their mobility with agrarian rhythms.

In section 7.3. the chapter presents the different institutional arrangements that make the migrating group – firstly through livestock sharing and management arrangements that make the ‘perfect’ flock and secondly through defined roles for different members of the group. The perfect flock ensures that labour is used efficiently while also ensuring that the family's needs for milk and income are met. At the same time, the rigid and specialised roles of the shepherds, group leaders, and women lead to the distribution of responsibilities and have implications for both the flock and the migrating group.

Section 7.4. builds on and synthesises the discussion. It discusses how the migrating group is composed to manage the economies and diseconomies of scale and to pace mobility to ensure that the pastoralists arrive at the ‘right place at the right time’. It highlights the features of negotiation, ambiguity, and ambivalence, through which

the group is constituted, and that which allow the pastoralists to maintain the versatility and modularity of the institution.

7.2. Collective migration and synchronisation

Collective mobility in a migrating group underlies pastoral production. However, as Agrawal (1999) claims, scholarship on mobility makes it difficult to infer whether migration is in collective groups or as individual flocks. From his study with the Raika pastoralists from Rajasthan, Agrawal (1999) contends that certain social, political, economic, and environmental factors make collective migration more appealing than individual. Further, collective mobility requires a radically different social organisation than individual flocks.⁶⁹ Yet the social characteristic of mobility has received limited attention (ibid.).

Collective mobility among the Rabari is organised in a *dang* or migrating group. Each *dang* is led by a *mukhi* [leader] and consists of an average of 2-12 ‘flocks’. I use the term ‘flock’ to represent a human-animal unit composed of the flock of sheep or *evad* and 3 to 5 members of the flock owner-manager family, including one or two women, and hired shepherds, representing the social unit called the *uttaaro* or *ghero*. As this chapter will show, the *ghero* might be composed of complex relations and, therefore, may be best identified by a shared hearth representing pooled incomes.

Rabari mobility emphasises “the continuation of (and continuous) every day caring for the herd” (Pardoel, 2020). Pastoralists like Nathubhai remain with the flock throughout the year; that is, they are always on the move. Each individual associated with a flock plays a specific role, and each individual flock combines with others to form a migrating group to facilitate such mobility. The migrating group moves camp every 1-15 days, with greater frequency in the winter than in the monsoon season, such as moving faster or slower in pace with intersecting rhythms. Apprehended through the camp, pastoral mobility appears as the “systole and diastole of nomadic existence” (Vitebsky and Alekseyev, 2015: 523) movement of the heartbeat, as it races in times of tension and eases in more relaxed times.

⁶⁹ For an example, see Axelby (2007), where he discusses the social organisation of mobility for a Gujjar flock.

Therefore, rather than transposing themselves from one discrete location to the next, the pastoralists “walk” (Ingold, 2006, see chapter 1), experiencing the journey from field to field, village to village, through a series of overlapping and nested mobilities. Such a view ruptures the implied locatedness of mobility as the migrating group can be thought of as ‘flowing’ across grazing areas to synchronise with the rhythms of pastoral places.

Temporal analysis shows how temporalities are internalised by and structure institutions such as the migrating group as it shape-shifts over time through the migration journey. It swells and shrinks from a 2-flock group to a 5-flock group, from a single flock to even 10 flocks as needed. Each flock, in turn, is carefully composed to ensure that the animals are well looked after while at the same time minimising excess labour.

Through changing the group composition, pastoralists imbibe ‘process variance’ in their production system to control, manage and cope with the variability in inputs, such as fodder resources (Roe, 1998, as discussed in chapter 1). The discussion on Harjanbhai’s comments in section 7.1. has exemplified this. Therefore, by regulating the group size, as Nathubhai did, the pastoralists are able to manage the speed and distance of mobility and align their movements to crop cycles and weather cycles, as discussed in chapter 6.

Observing the migrating group reveals the timing, tempo, intensity, and coordination involved in pastoral mobility. Through its dexterity and modularity, the migrating group mediates the relationship between the pace of mobility and the rhythms of pastoral places. The larger the migrating group, the faster it must move to ensure adequate fodder for the animals. At the same time, larger groups not only need to move faster and longer but also facilitate such through frequent camp shifts, logistical support, and affective interactions. Therefore, the decision of where to go and how to constitute a migrating group is partly based on the political economy of the region in question and partly based on the pastoralists’ personal and collective goals that vary over time. For example, in the same year, some pastoralists like Harjanbhai have chosen longer migration journeys while others such as Nathubhai have chosen shorter migration journeys, as shown in section 6.4.

The migrating group is an arena for active negotiation and decision making, ambiguity and contradiction, between different actors from within and outside the community. Section 7.3. elaborates further on the various elements that migrating groups are composed of, while section 7.4. discusses why and how the groups are constituted, adapted, and perpetuated.

7.3. Configuring ‘land: labour: livestock’

Section 6.4 in chapter 6 describes the different group configurations as Nathubhai’s flock travels between Kachchh and Gujarat between 2019 and 2021. The section elaborates on different aspects of the migration journey, such as the season and the kind of fodder available in each area at the time of grazing there, as well as personal and collective considerations such as animal lifecycles and social obligations like weddings and ritual celebrations. All this reveals the migrating group as a flexible but precise mechanism, carefully calibrated for the best ‘land: labour: livestock’ ratio to manage pastoral mobility. While ‘land,’ here denoting fodder availability, has been discussed in chapter 6, this chapter focuses on the ratio of labour to livestock – denoting human (and animal) intervention to support livestock production – by looking at the roles and relationships that surround them.

7.3.1. *Livestock*

The “liquid logic” (Pappagallo, 2022) of livestock is most suited for drylands as livestock are divisible and manoeuvrable assets that can adapt to variable and fluctuating conditions. Pastoralists have been known to manage the stocking densities of their flocks, that is, animal numbers and grazing duration (Schlecht et al., 2020), through a variety of strategies to manage risks and maximise production. These strategies include changing herd size through destocking and restocking, changing the herd composition by changing species, breed, age or sex of the animals, and practices like herd splitting. The extent to which these strategies may be deployed depends not only on the livestock keeper’s decision making but also on external conditions such as market fluctuations, and the characteristics of the livestock itself.

Chapter 3 has spoken about Nathubhai and Harjanbhai's flocks, ranging from 300 to 500 and 700 to 1000 animals, respectively. As we have seen earlier in the chapter, these flock sizes have implications for the distance, speed, and timing of migration, as they respond to and generate certain social, political, and economic goals. For example, certain sheep may be protected from sale as they may be reserved for religious rituals. Keeping large flocks may add to overall prestige and social status, enhancing political clout. Large flocks are associated with larger migrating groups generating a particular social life. Larger flocks support more wool and manure production.

Rabari flocks also have a mix of institutionalised ownership and management arrangements. These include:

a) *Vagh-o-vagh* [vagh = part] –

This is a partnership arrangement between two or more flocks. Here, each flock is large enough to generate profits but might benefit by sharing labour and logistics with others. Often, but not always, the partners will only have a single *uttaaro* between them, often managed by the family of one of the partners. The other partner would contribute towards his⁷⁰ expenses, perhaps by way of his manure earnings. Both partners would pay equally if a hired shepherd is required.

b) *Adhyaro* [adh/addho = half] –

This refers to a system of absentee livestock ownership. Often the flock may include animals belonging to relatives and friends who are not shepherding now. While the livestock remains the property of the owner, the flock manager acts as custodian and may sell the sheep, manage their grazing, and extract milk. The price earned from the sale of such livestock goes to the owner. Half of the new lambs born are offered to the flock manager, while the owner is entitled to the rest. The name *adhyaro* comes from this half-and-half arrangement.

c) *Govati* [lit. cowherd] –

This refers to a hired shepherd. According to the pastoralists, a flock of 300-500 requires two shepherds and some support for the lambs. Where this labour is not available within the family, labour is hired through referrals from amongst kin or known people. The

⁷⁰ Livestock is mostly owned and managed by male members of the household, and it is male members that normally enter these arrangements.

hired shepherd often comes with his own animals and is offered a salary, clothes, food, and shoes. If he comes with 50 or fewer animals, he receives remuneration of about Rs. 80,000 paid in advance with Rs. 5000 to Rs. 30,000 as commission on completing the year. If he comes with more animals, say around 100, his pay reduces to about Rs. 20,000 to 30,000. The pay is reduced as the shepherd would be giving a lot of his attention to his own animals, and his 'employer' would have to ensure adequate grazing for them as well. Remuneration is now paid in cash, and there is rarely an exchange of livestock between the employee and employer. He keeps all income from the sale of his animals, pays for their shearing and medicines, and is not required to provide milk for the household. There are several pastoralists available in the labour market from within the community. There are no obligations to continue as a hired shepherd after the term of the year is over. If the shepherd wishes to leave mid cycle, he may leave after returning the advance remuneration for the work not done, although this is not seen favourably.



Most Rabari flocks are a complex combination of these arrangements. Hemangbhai's flock, for example, shows a combination of all three systems. His flock of 150-200 animals also includes some in *adhyaro* belonging to his father, who no longer shepherds. He is in *vagh-o-vagh* with his sister Varmiben's husband's flock. Both have pooled their animals together. Varmiben and her adolescent daughter manage the camp, while Hemangbhai's wife remains in the village to take care of her school-going son, having never managed a camp before marriage. In 2019-2020, they had hired a shepherd and shared his salary,

but in 2020-2021, they pooled their livestock with their nephew Varna's flock. Varna also served as their hired shepherd, and Veno, his younger brother, took care of the camels. They maintained a separate *uttaaro* managed by Vasu, their sister.

Sangabhai, Hemangbhai's older brother, on the other hand, was married in *saanta*, where a brother-sister duo marries another such pairing (refer to chapter 3). He has combined his flock with his wife's brother's flock, who is also his sister's husband. Both ladies take turns managing the camp. Marriage in *saanta* offers this benefit as the ladies remain with the family and do not feel additionally burdened when having to provide for the camp. They also have a hired shepherd, Harjanbhai's nephew, who they pay jointly.

Nathubhai manages a handful of animals on behalf of his brother and Pabiben's brother in *adhyaro*. His son, Valo, was made independent and paid as a hired shepherd starting the 2020-21 migration cycle, although in practice, not much changed for Nathubhai's flock. Valo and Vibho continued to shepherd the flock together as before. Robabhai, Pabiben's brother-in-law, joined the flock in *vagh* with his 70 sheep and a hired shepherd in the summer of 2020 and then again in early 2022, as will be described in chapter 8.

Flocks are combined to achieve economic and social benefits, such as economies of scale by managing more livestock with less labour and pooling camp resources, emotional support and safety, and the transfer of knowledge. Each of these combination flocks enjoys "unit autonomy" (Abu Lughod, 2009) as they may leave and join the migrating group independently. Additionally, while the group leader, the *mukhi*, may make joint decisions regarding where and when to move, as well as enter into agreements for manure exchange, the flock owners and managers reserve autonomy over animal sales and retain the earnings from such sales.

7.3.2. Labour

As mentioned in chapter 3, life on the move requires leanness; therefore, every person in the migrating group travels with a set of responsibilities and a particular role to play. Studying the organisation of daily life, Southerton (2006: 445) says, "The temporal organisation of a day can be hypothesised as one coordinated around fixed events that usually involve the co-participation of others." These daily movements, performed in coordination with others, are nested within the intra-seasonal and inter-seasonal movement and enacted by the migrating group. The migrating group

works like an efficient machine through the coordination of its various moving parts. In this section, I highlight the role of the various members of the migrating camp as follows:

a) *Mukhi*, the leader of the migrating group –

“Who becomes the *mukhi*?” I asked.

“Jene magaj ma badhi mahiti hoi e”

[He who has all the knowledge in his head] said Roomaben.

“Je marva aave toh hate nahi ej mukhi bane”

[He who does not move when they (the villagers) come to hit him] added Bambabhai. *“40-50 thai jaay gaamna toh kahe aavi jao vadhvu hoy toh”* [If 40 to 50 villagers gather, he says, “come if you want to fight”] he continued.

On this cue, Kelabhai, the *mukhi* of their group, showed me a mark on his head where he had been hit with a stick once in a grazing related feud. He said he was in the hospital for 15 days for it.

“Jene magaj hoy, bolta aavde, kehta aavde”

[He who has brains, who can speak, can tell (negotiate)] summarised Roomaben.⁷¹

*

The *mukhi* is the leader of a migrating group. He (as the role is reserved for men) is often a pastoralist with means, with shepherds available for his flock, who is well networked both within and outside the community, can negotiate and deal with authority, and is able to make socio-economic decisions (Agrawal, 1999).

Unlike the Muslim pastoralists, such as in the Banni grassland for example, the Rabari have no centralised and top-down decision making or ‘tribal organisation’ as conceived by Westphal-Hellbusch and Westphal (1974). Rather, the community thus experiences a kind of diffused leadership with multiple levels and circuits of power.

⁷¹ Interaction with Roomaben, Bambabhai and Kelabhai on 15/10/2019.

This means that there is no strict hierarchy within the migration group, and decision making is largely iterative and consensual. As Agrawal (1994, 1999) shows, where decisions are vested with the *mukhi*, it is done through collective agreement and control to take the best and most efficient decision. This type of arrangement suits pastoralists that form “transient communities” (Agrawal, 1999: 18) on the move.

Among the Rabari, age is no bar for becoming a *mukhi*. As long as one believes he has the adequate experience and knowledge for the job, he can do it. An impressive personality seems to be the criteria for becoming a leader among the Rabari (Westphal-Hellbusch and Hellbusch, 1974).

Yet not every *mukhi* is perceived as the same. “If you give my name in the village, then even a young boy will show you where my *dang* is,” said Harjanbhai proudly.⁷² He enjoys the prestige that comes with being known as the leader of a large migrating group. Such prestige is built over time and offers some material benefits – for example, Harjanbhai claimed that he would receive some payment for penning in the field where we were sat in the vignette at the start of the chapter. Although this farm was just on the outskirts of Nathubhai’s village, I had not heard of Nathubhai receiving any such payment in those areas.⁷³

The *mukhi* leads group formation, although group members can also propose others to join. The group often reflects the relations and affinities of the group leader. “Now if I think that I can manage, I take 2-3 *gheras* and go, and if you say, “take me too”, I will take you also, and like that, it (the migrating group) will grow,” says Hemangbhai.⁷⁴ By vesting certain decisions with the *mukhi*, especially flock owners and shepherds save time, energy, and the cost of coordination (Agrawal, 1993).

⁷² Interaction on 21/11/2019

⁷³ And yet, while having a larger migrating group often corresponds with longer distances covered, as well as wealth, it is no indication that such a format is a ‘better’ or ‘purer’ (cf. Khazanov, 1994) form of pastoralism. Mobility, and consequently the migrating group, remains a tool enacted or performed to meet certain economic and social goals, a means to an end rather than an end in itself.

⁷⁴ Interaction on 03/12/2019.



The *mukhi* ensures that the flocks under his care receive adequate grazing. The *mukhi* decides when and where to move and where to camp. He does *niharu* or scouting and enters into negotiations for grazing access. Often the *mukhi* will make trips ahead of the seasonal grazing cycles of the pastoralists. Not only does he have a keen understanding of agrarian dynamics, as discussed in chapter 6, but also of the varied terrain, rainfall, and wild grasses, as well as the animals' tastes, preferences and lifecycles. He undertakes local negotiations daily, as is common among pastoral systems across the world. Consequently, he is also responsible for negotiating collective exchanges such as that of wool and manure.

The *mukhi* understands not only the 'right place' but also the 'right time' to move. He has a kairological understanding of time based on past experiences and intuition. In contrast to the abstracted, objective, and impersonal time of chronology or *chronos*, *kairos* is the perception of "temporal opportunities" (Maffesoli, 1998: 110), "the moment that must be seized" (Ingold, 2000, 335), and "time considered in relation to personal action, in reference to ends to be achieved in it." The *mukhi* grasps opportune moments and makes decisions that are both calculated and spontaneous, as well as attuned to context.

Further, the *mukhi* assimilates information from different sources and responds to individual and collective production goals when making migration decisions. He mobilises his contacts from across the region to ensure adequate information and access. He displays tact, diplomacy, and social manoeuvring to receive the best possible grazing arrangements. He relies on his social relations, built through repeated engagements over time as discussed in chapter 6. ‘Where’ to go is heavily influenced by these relationships that sustain over time.

At the same time, the *mukhi* also keeps his options open and strategically seeks out information from other practising pastoralists. He exercises “intentional deception” (Finke, 2021: 839), for example, by not revealing the group’s exact or accurate location to safeguard against the competition for scarce resources. But, as Finke (2021) shows, some cooperation is necessary to get information and maintain a reputation. The *mukhi* is adept at revealing and withholding information in a way that benefits all.

Notably, the *mukhi* thus performs the role of a “reliability professional” (Roe, 2020) who manages, maximises, and controls risks and uncertainties by employing these various strategies. A “reliability professional” is able to intercept future threats and understand the situation on the ground in real-time. Therefore, just as the *mukhi* they have a step firmly in the present, and another in the future, while relying on past knowledge (ibid.). Further, they are to assimilate knowledge from multiple sources and scales across networks responding flexible and adaptively to uncertainties (ibid.). Moreover, the reliability professional acts as a broker, mediator and negotiator within networks, relying on experience, tacit knowledge, diverse senses, emotional intelligence, intuition and networking (ibid.). Hence, the *mukhi* engages with variability in context by making decisions in the here and now and on the go, ensuring stable animal production, as discussed previously.

b) *Shepherds –*

The Rabari say that as long as the shepherd has his stick, that is, continues shepherding, he does not tire. While the *mukhi* negotiates access for grazing, the shepherds facilitate daily grazing and are involved in the day-to-day management of the animals, including grazing the animals, feeding the lambs, milking the animals,

and taking care of animals' births, diseases, and deaths. Generally, at least two shepherds are needed to manage a flock. Two shepherds can manage a flock of up to 500 animals; therefore, building a flock through arrangements such as *vagh-o-vagh*, *adhyaro*, and *govati* ensures the efficient utilisation of the shepherd's labour. Such flock combinations also allow deploying various strategies such as herd splitting, strategic breeding, etc.



While the *mukhi* negotiates for grazing access, the shepherds, especially the lead shepherd of each flock, determine the daily grazing route between farms, commons, and watering points.⁷⁵ They order and organise the route to have sufficient and varied nutrition for the animals within the given sunlight hours and be able to arrive back at the camp, whether in the same location as when they left in the morning or a new location. They must be mindful of intraday variations in the nutrition requirements of animals and availability in plants (FAO, 2021).

⁷⁵ Similar institutions exist elsewhere as well. Among pastoralists in West Africa they have the institutionalised roles of the *rugga* and *garso*; the *rugga* manages the group and serves as an intermediary that negotiates with farmers, as well as local and administrative authorities for access to water and pasture, while the *garso* decides the daily routes (IoM, 2019). Of course, these institutions are in flux and differently articulated in different contexts; for example, among the Fulani in Benin, the *rugga* assumes the role of a community leader while the *garso* is a senior pastoralist responsible for negotiations who has individual camp leaders under him (Djohy, 2017).

They also manage the daily grazing, keeping in mind season, diurnal cycles, animal lifecycles, and their own needs. Activities are temporally relevant. For example, in the winter, the sheep are watered every two days, while in the summer, they are taken to drink every day. Often afternoons are spent at watering holes where the sheep have the freedom to graze, and the shepherds may rest under the shade of pond-side trees. During the monsoon, the animals are prone to disease and need more medical care. Similarly, while grazing on castor crop residues in the summer, the animals must be strictly monitored to avoid toxicity from overeating. Shearing and birthing are also considered ‘events’ that have their own periods in animal lifecycles and must be engaged with in particular ways.

Just as for the *mukhi*, the role of the shepherd is not without its necessary skillset, tact, and wisdom. Pabiben illustrates,

“Bhale Valo joi futi ne, ghetā ne audkhe nahi, pan eni ek lakdi havri etle amane em thaay ke Vibho thi eni lakdi haari. Uparthe e jigar walo pachō e game tyaan chari aave toh eno maal avro na jaay. Vibhlo bicharo fusko chhe, ema jigar nathi kai.”

[Even though Valo doesn’t watch over (them) well or recognise the sheep, his stick is good, so we feel that it is better than Vibho’s. Further, he is courageous; he can graze (the animals) anywhere, but his animals don’t wander off. Poor Vibhlo is meek; he doesn’t have courage].⁷⁶

Valo and Vibho, Pabiben and Nathuben’s sons, are the shepherds managing their flock. Discussing Valo’s departure from the group, as will be seen in chapter 8, revealed a preference for Valo as a shepherd over his brother Vibho. The conversation highlighted the skills appreciated in a shepherd. Commenting on how Vibho is forgetful while Valo is more observant, Nathubhai said,

“Ena magaj ma rahi jaay ke ahinya aa hatu ane ahinya olu hatu”

[It stays in his (Valo’s) mind that this was here and that was here].⁷⁷

These comments illustrate skills valued for shepherding, such as spatial awareness, courage, and relationship with the animals. There is an increasing need for these skills, given the changing context of pastoralism.

⁷⁶ Interaction on 08/10/2020.

⁷⁷ Interaction on 13/09/2020.

Finally, besides the shepherds that take the sheep grazing, a senior member of the group, sometimes with the help of a young person, is made responsible for grazing the camels⁷⁸ and young lambs. He also supports the women when they change camps and often leads the flock of young lambs that stay back at camp when changing campsites.

c) *Women –*

“Aaje paanch minute pan bethi chhu? Bas haal, haal ne haal”

[Have I sat even for five minutes today? Only walk, walk, and walk]

said Pabiben one evening as Nathubhai and her sons, Valo and Vibho, commented on how she has it easy being at camp all day while they are busy shepherding.⁷⁹ To this, Pabiben replied, that she has also been busy all day speaking of the small-scale movements of her daily chores as *haal, haal ne haal*.

Rabari society is structured around strict gender roles and moral codes along patriarchal lines.⁸⁰ Life on the move persists due to the contribution of Rabari women. The gendered role of the women serves as the fixed “mooring” (Urry, 2007) or “relative permanence” (Cresswell, 2010) through which pastoral mobility is reproduced, both practically and metaphorically. Practically, the fixity of the women at camp or within domestic circuits of mobility enables the male shepherds and camp leaders to undertake varying daily circuits of mobility while ensuring the safety of their belongings and a ‘home on the move’ to return to. Metaphorically, stable gender

⁷⁸ Besides transporting the household items at camp, the (male) camels also transport lambs that may be too young to walk from one campsite to the next. As we have seen in chapter 6, having too many young lambs that cannot move distances can delay migration journeys. Often the number of camels with a flock is also important, as more the lambs and more the people, the more the camels required for transport. The death of their camel (part of an animal’s lifecycle) restricted the mobility of Nathubhai’s camp in the monsoon of 2019, as they remained alone in the vicinity of their village. (Features of human lifecycle, that is, the wedding of Hemangbhai’s nephew and niece Varna and Vasu also led to them remaining a single flock group during the same period).

⁷⁹ Interaction on 24/01/2020.

⁸⁰ Here, I use “gender” simply as a binary classification (Elliot, 2016) between sexes to show the differentiated experiences of mobility between different members of the migrating group. For example, others such as Elliott (2016) and Uteng and Cresswell (2008), have shown gender as a relational, historical, and political process produced by and producing diverse mobilities. This is also relevant in the case of the Rabari. Vibho, Nathubhai and Pabiben’s younger son, for example, much prefers performing tasks at camp, such as loading and unloading the camel, but as a ‘young man’, he is expected to shepherd. This thesis does not look at the construction of gendered relations through mobility due to a lack of space and focus.

roles provide a structure to life on the move and enable its persistence in practical and affective ways.



The Rabari women are responsible for coordinating life on the move by managing daily routines, diets, and domestic life. Moreover, they are also responsible for social exchanges such as marriage. Because of these responsibilities and for safekeeping, the women were responsible for managing household finances. Westphal-Hellbusch and Westphal (1974) report how the women were fully responsible for the economy, including trade. Men were considered short-sighted and stupid, while women bargained tenaciously with traders – perhaps a skill learnt from engaging with the market for domestic needs while men remained in the bush all day. Now this is changing with increasing sedentarisation and monetisation, as more and more women choose to remain at home and livelihoods within the household are diversified.

In daily life, Rabari women are responsible for all the domestic chores of the camp, such as cooking, cleaning, collecting firewood and water, as well as reproductive and care work, such as taking care of the old, sick, and young animals and humans. Importantly they are responsible for setting up and dismantling camps when

travelling with the migrating camp and are therefore implicated in pastoral mobility. They are innovative, resourceful, and tactful as they manage life on the move. They develop technologies, equipment, and processes to support mobility.

Despite the role of Rabari women, their work remains invisibilised and undermined. This was evident in the men's comments that Pabiben does not do enough work at camp, spoken of in the first paragraph of this section. When asked to choose a picture card from among a set of images that best reflected something that was essential for pastoralism, Rani chose a card of the camp on the move – the *uttaaro* loaded on a camel and accompanied by Rabari women. The camel has a special relationship with women; just as they say about men and their stick, they say that Rabari women never tire if they are with the camel. Nathubhai, on the other hand, chose the image of a camel alone, indicating the importance of mobility but neglecting the role of women.⁸¹

Women are also not consulted when making mobility decisions.

“E amara bai manas ni salah koi na le”

[No one takes the women's advice.]

said Pabiben dismissively, as though I was foolish to ask.⁸² She continued,

“E toh aadmi ne theek lage tyaan j. Baiyo no kai na hoy. Baiyo ni salah na le, have ame aa gaam aavya ne toh e koi amari baiyo ni salah na le. Charvanu haru hoy tyaan j jaay, amane kahe ke ahinya jaavanu chhe toh ame lariye lariye halya jaiye”

[(We go) only where the man thinks it is okay. There is nothing of women. They do not take the advice of women, now we have come to this village, yet no one took the advice of us women. He goes only where the grazing is good. He tells us we have to go here, so we follow].⁸³

When discussing possible routes with Bapabhai's migrating group, I asked if they were taking a shorter route that year because Limaben, Bapabhai's sister, had an infant to take care of. Limaben managed the domestic life of their camp. Pat came

⁸¹ Interaction with Rani and Nathubhai on 05/03/2020.

⁸² Interaction on 26/01/2020.

⁸³ Interaction on 26/01/2020.

Bapabhai's reply that no, that is not how they decide. To this Limaben replied that – and she was able to do so openly – men do not consider the women's needs.⁸⁴

Although the men make decisions about where and when to go, mainly by the *mukhi*, the Rabari women influence the journey in subtle and direct ways. In one instance, while grazing on cotton crop residues near their village, Hemangbhai's migrating group was asked to contribute their labour for cotton weaning. Those at camp, mainly the women, were asked to undertake the task as the shepherds would take the flocks out and could not be available. The shepherds would then graze the animals in that part of the field that had been weaned. In this instance, the women underreported the area weaned; that is said that a part was not done when it was so that the flock could graze in the same field the next day. By making fodder available for the next day, and that too beforehand, the women created the opportunity to attend a religious celebration in a nearby temple. The camp would remain in the same spot for one more day, a day for *padao* [to stay]. By having grazing available there, the women had both time and proximity for the visit.

When women must travel overnight or for longer durations, perhaps for visits to the doctor or work in the village, they rely on the support of other women in the camp to provide food for their families.

Young women are increasingly reluctant to pursue a life on the move, especially after marriage, affecting mobility patterns. The lack of adapted social services, such as education for their children, the hard work and difficult circumstances, as well as the negative perception of mobile pastoralism, deter young women, even as pastoralism continues to remain economically lucrative as a livelihood as we will see in chapter 8. Many families are now switching from camels to tractors, both for prestige and to make it easier for the women to load and unload camp and avoid walking long distances. Tractors cannot always go where camels can, but with a tractor, more frequent moves can be made, or longer distances covered, affecting the spatio-temporal pattern of mobility.

⁸⁴ Interaction with Bapabhai and Limaben on 12/02/2020.

The declining size of the migrating group, given the expansion and commercialisation of agriculture, also has an effect on pastoral women as practically it means that they face an increased burden of everyday tasks but also affectively, it leaves them feeling alone and isolated. Pabiben's isolation exemplifies this in the vignette at the beginning of chapter 6. In the long-term, young men are likely to exit pastoralism due to the reluctance or absence of their wives, as will be discussed in chapter 8.

7.4. The migrating group

The migrating group is the key pastoral institution through which mobility is organised. It is a modular mechanism with each flock as an interdependent and independent unit. It is often composed of close relatives and is the site of community on the move. A dextrous human-animal social unit, the migrating group is an assemblage of various relationships associated with mobility and formed through the coming together of the carefully calibrated configuration of 'land:labour:livestock.' With the transition in the regional political economy, especially through the development of commercial agriculture, the rhythm and pace of pastoral mobility has changed. As Sarganbhai, an elderly pastoralist, recalls,

"Pehela badhu dhiru dhiru hatu, aavanu-jaavanu badhu dhiru dhiru. Ek jagya 2-3 divas, athvadiyo rokata. Te di samay saro hato, aaram hato. Have badhu piyath thayu, Narmada na pani aavya. Have machine thi khet ma bhungra paadi de, te di aavu na hatu. Te di toh halyuj javanu hatu."

[Before, everything was slow, going and coming was slow. We would stay in one place for 2-3 days: a week. The time was good then; it was relaxed. Now everything is irrigated. Narmada waters have come. Now they trench the fields with a machine (making it difficult for them to walk through); in those days, it was not like this. In those days, we just had to walk along]

By speaking of the frequency of movement, Sarganbhai is implying that things are faster now and camp shifts more frequent. Such changes also affect group structure and size, as discussed briefly in chapter 3 and as this chapter's opening discussion exemplifies. Transformed from 35 flocks that went to Kanam Pradesh, as Pabiben recalls,⁸⁵ the groups now range from 1 to 15 flocks, as they internalise and reflect

⁸⁵ Interaction on 07/03/2020.

contemporary temporalities by managing group composition. Reducing and varying the group size has been necessary to manage the differential economies and diseconomies of scale across the different resource niches. Of course, the group size is then politically mediated in a structure that privileges settled agriculture over mobile pastoralism.



Altering the group composition regulates the intensity and frequency of mobility. By so doing, the pastoralists synchronise their movement with intra-seasonal and inter-seasonal rhythms as they move within and across resource niches. As discussed in section 7.1, a relatively smaller migrating group is preferred in Morbi due to the staggered availability of fodder and to graze in the area for longer. The Kachchh region, on the other hand, can accommodate medium-sized groups. In Bhal, on the other hand, a large migrating group can be accommodated as all the fields are harvested together. Since there is only a limited time frame during which the residues are available, that is, between harvest and the next agricultural operations, ensuring an optimum 'land:labour:livestock' ratio ensures efficient utilisation of resources and maximum benefits. A larger migrating group is constituted with the intention of going to central Gujarat. It moves ahead faster both as it intends to cover

longer distances, and at the same time, greater numbers of animals require to move across larger areas to receive adequate nutrition.

The distance travelled and the pace of mobility is reciprocally related to the group size. Berge (2020) finds similar dynamics with the Tuareg in Mali, where the richer and larger the group, the more often they move and cover larger areas and longer itineraries. He also finds that when camps have many herds and herders, they often split up for periods of the year, which creates more than one habitual itinerary for the members of a camp.

This highlights the key feature of a migrating group: its flexibility, versatility, and shape-shifting nature. The migrating group is a modular organism constituted seemingly spontaneously on the move. “*Aye toh kai nakki na kahevaay*” [it’s not decided yet] is a common phrase that is used to respond to questions about where and with whom the pastoralists would travel. “*Aagad jaine bhega thai jashe*” [(they) will get together ahead], “*koi ne koi jadi jashe*” [we will get someone or the other], “*Samay thashe te di nakki karshu*” [we will decide when it is time] – I received phrases like this when I asked whom they would travel with. Conversations about *sathwaro* [companionship] were ambiguous and contradictory and conducted through metaphors, implied comments, diplomacy, etc.

Part of choosing companions is choosing where to go, although this is variable and, in many cases, decided on the move as indicated in the previous paragraph. Harjanbhai’s remarks in the opening vignette of the chapter exemplify this, as he says that Nathubhai may be able to find someone to go with to Morbi, but it would be difficult to find someone to go all the way to Bhal. While pastoralists like Harjanbhai and Sarganbhai prefer to go to Bhal, Nathubhai has been returning back from the Morbi region in the past few years. Working with the Senagalese Fulani, Adriansen (2003) shows differences in mobility patterns based on production goals. While the “subsistence pastoralist” only makes limited use of mobility, the ‘Tabaski pastoralist’ (or one who specialises in raising animals for Eid-al-Adha) may even walk to Gambia with his animals and back (ibid.). Unlike Adriansen, it was difficult for me to arrive at a crisp typology of Rabari mobility. Rather, affective experiences of people and places, and sentiments such as attachment, trust, aspiration, and reputation, seemed to influence mobility decisions.

Following the interaction with Harjanbhai, detailed above, Nathubhai's camp left for Gujarat alone for the very first time in early 2020. Conversations about who to join and where to go preoccupied the camp even as they grazed in unirrigated cotton fields in Gujarat. Given the delay in migration in early 2020, as depicted in chapter 6, it was implied that the group would return to Kachchh from Morbi itself. Still the possibility of going to Bhal loomed as Nathubhai received calls from familiar farmers inviting them to their fields. The question of who to go with is also featured in several conversations before the journey. Hemangbhai reported that Nathubhai had been in touch about going to Gujarat together. I was also introduced to Sarganbhai in the village as one possible companion. But no clear explanation for why these companions did not work out was given.

In the end, Nathubhai chose to pair up with his sister, Laliben's flock. Laliben's flock was also alone at the time but grazing some distance ahead in irrigated cotton fields. Laliben was a stable companion for Nathubhai as they had travelled together in the past years. When they got together, it seemed obvious that they would choose to travel together, having travelled with them in the previous year as well. Yet the question of who to go with was kept open and ambiguous.

The agency and freedom exercised by nomads in decision-making have been well documented by anthropologists and even romanticised in popular culture. Working with the Bedouin, Abu-Lughod (1999: 79) suggests the "maximisation of unit autonomy" as the central feature of nomadism. The ability to leave anytime as well as to ask to join a migrating group is a valued feature among the Rabari as well. Keeping the configuration of the migrating group open allows adapting to changing circumstances and making last-minute decisions. Yet this openness rests on a delicate interplay of interests and responsibilities that are politically mediated.

Kinship, for example, is a significant factor in composing migration groups. For example, Varna, Vasu and Veho regularly travelled with their uncle Hemangbhai's flock. But in early 2020, they decided to go with Harjanbhai's migrating group instead, leaving Hemangbhai stranded. Hemangbhai's flock remained close to his village for a while, first because of Varna and Vasu's weddings and then because he had to look for a hired shepherd to support his flock when going ahead. Yet, despite

feeling abandoned by them, when Varna, Vasu and Veho asked to come back with them in the following year, they were welcomed.

Even if people travel together over time in practice, maintaining ambiguity in discourse ensures that the institution remains flexible and attuned to local and current temporalities. It is critical also to keep the *mukhi* in check, for example, as flocks may leave in case of disagreements or misuse of power. A temporal analysis of the migrating group as an institution highlights the migrating group as a means, a mechanism, and a strategy for ensuring that pastoralists can take advantage of variable conditions. Manipulating the composition of the migrating group allows the pastoralists to meet their goals by pacing their movements in sync with the rhythms of pastoral places.

7.5. Conclusion

Rabari existence is dynamically structured through the multitude of coordinated environmental, social, and political rhythms that permeates every level and aspect of their lives (Adam, 1990). The institution of the migrating group provides a framework through which livestock keeping is temporally planned and undertaken, through timing and synchronisation at varying speeds and intensities, and orchestrated with varying durations, pauses, and plays. This chapter shows how the temporalities of collective mobility enacted through the migrating group interweave with the rhythms of interconnected places as well as the agency, affectivity, and relationships of diverse actors.

The migrating groups come together as a transient community on the move. They are versatile, shape-shifting entanglements that flow through pastoral places, shrinking, swelling, and transforming from a single flock group to more as needed. By managing a precise 'land: labour: livestock' ratio, the migrating group controls the speed and timing of their movement. Therefore, they are better able to sequence, order and pace their mobility.

The chapter elaborates on the modular building blocks, that is, the flock and its management, that compose the migrating group. A temporal lens shows how the enduring features of ambiguity and autonomy are critical to the pastoralists' ability

to respond flexibly and precisely to changing circumstances. By so doing, the chapter effectively connects the social with the economic, the affective with the practical, and spatial and social mobility discussed in the preceding and successive chapters, respectively.

Chapter 8

Between Fantasy and Surrender: Waiting and Subjectivity



“E aave toh evu kariye. Aave toh thay” [If he (Valo) comes, let’s do that. We can do it if he comes] says Vibho, Nathubhai’s younger son, about some flock splitting arrangements. His elder brother Valo, with whom he would shepherd, has not come for the Gujarat leg of the journey this year. He has stayed back in the hope of starting up a dairy of his own in a neighbouring village.

“Ee tamaru maane toh bhale pan maaru kay maanto nathi. Hu toh kehti ke rupiya tane dais. Kaik ena pase thi lai le, kaik Kana pase thi lai le, kaik hu aapu, taru etlu haley ane dairy nu setting thay etle tu bhagi jaje” [If only he would listen to you (and come) because he is not listening to me. I was saying that I would give you money. Take some from him (Nathubhai), take some from Kana, I will give some, enough for you to go on, and when the setting for the dairy is done, you run away] says Pabiben.

Members at the camp are not happy with Valo's absence. Pabiben, like the others at camp, has tried to convince him to stay with the flock to no avail. Robabhai, Pabiben's brother-in-law, has come with his animals and hired shepherd to support the flock in place of Valo as they travel in Gujarat. It is close to Holi, the pastoralists are in an unirrigated cotton farm in the Morbi region, and Nathubhai has unusually still not joined another flock to form a migrating group. Conversations about where to go, when to go and who to go with have been preoccupying the camp, and the absence of Valo has thrown them off.

"Dairy rakhwama maja kyaare aave? Ek varharo, ek unalo – shiyala ma dairy nu kai matlab nahi" [When is it good to keep a dairy? In the monsoon, in the summer – there is no point in the winter] says Robabhai, questioning Valo's choice.

Like Pabiben, he proposed paying Valo a wage to shepherd the flock. He offered Rs. 40,000 as an incentive if Nathubhai was willing to match it (although the sincerity of his offer is questionable). Nathubhai also had a call from a Dhebar Rabari⁸⁶, who was willing to pay Rs.10-12,000 a month for three months if Valo would shepherd for him. Now that he was a father and his wife had moved to his house, Valo had been made *nokha* or independent. Although he had been given his share of the flock, his flock continued to graze jointly with Nathubhai's, and he continued to eat at the family hearth when at the camp.

While Pabiben and Robabhai think that if Valo remained out of pastoralism for some time, he would not come back, Nathubhai believes that if he remained unemployed for a month or two, he would learn a lesson and come back to the animals. He would not be able to show his face in the village as jobless, after all.

(Interaction on March 6, 2020, Maliya taluka, Morbi district.)

⁸⁶ A sub-group of the Rabari, see chapter 3.

8.1. Introduction

While there is an increasing embrace of pastoralism amongst international development actors, pastoral youth are found to desire alternative livelihoods. In the vignette above, we see that Valo, Nathubhai's eldest son, has decided to withdraw from his role as a shepherd to try his hand at establishing a dairying business. Valo is a new father at the cusp of independent adulthood and seeks to diversify his livelihood and establish himself as an independent business owner.

Valo's departure from the flock disrupted the 'land:labour:livestock' ratio of Nathubhai's flock, as discussed in chapter 6, and had several implications. For one, Robabhai, Pabiben's brother-in-law, was invited with his flock of 70 animals and a hired shepherd to come to support the group⁸⁷. Further, as discussed in the vignette above, certain strategies were difficult to operationalise, such as splitting the herd between *pakkad* or non-milking animals and *gabhan* or pregnant and lactating animals. Yet, despite the offer of payment as a hired shepherd, both from his family and from others, Valo seemed reluctant to return to pastoralism.

At the same time, the alternatives available to pastoral youth for diversification and livelihood change continue to remain limited. Lack of jobs and a deficiency in education limit options for Rabari youth (Dyer, 2012). Valo's choice to set up a dairy is not too unfamiliar, given his background in livestock keeping and the mentorship of his cousin, who has a dairy. As discussed in chapter 5, dairying is also heavily incentivised by the state of Gujarat. Yet, he must 'wait' to know if his initiative will bear fruit or not.

As Nathubhai and Robabhai question Valo's chances of success in the vignette, the precariousness, uncertainty, and instability associated with a change in livelihood are made apparent. Valo's decision to leave the group is met with frustration, disappointment, worry and loss, all feelings associated with their concern for his prosperity and the future predicament of the flock. This chapter builds on the

⁸⁷ Robabhai also owns a tractor driven by his son. They provide services to farmers in villages in Gujarat. His flock normally grazes on the outskirts of his village throughout the year, given its small size, and he shuffles between travelling with the tractor and overseeing his flock.

sentiments of each of the camp members to capture their sense of mobility and temporality as they ‘wait’ for the outcome of Valo’s venture.

This chapter seeks to explore the relationship between time, mobility, social change, and the way pastoralists make meaning of their lives through the concept of ‘waiting’ elaborated in section 8.2. It explores how short-term experiences of waiting differ by age and gender among members of the migrating group, as unpacked in section 8.3. In section 8.4., on the other hand, the chapter looks at the production and effect of longer-term experiences of waiting as Rabari youth find themselves in a rather liminal position generationally. It thereby connects the spatial and social dimensions of mobility. Mobility emerges as being both burdensome and necessary, liberating and constraining, as I explore the concepts of backwardness and progress, past and the future, acceleration, and deceleration, through the various temporal narratives among the migrating group associated with Valo’s departure.

This chapter shows how spatial or horizontal displacement is entwined with vertical displacement in self-identities (D’Andrea, 2006). Mobility appears not only as a component of economic strategies but also of self-identity and modes of subjectivity (*ibid.*). While these insights are different from the discussions on pastoral mobility in the past chapters, they are deeply interconnected with and complement those findings to provide a holistic picture. The chapter adds to the overall argument that an appreciation of multiple times allows us to understand mobility better.

8.2. Waiting

Lefebvre (2002) claims that waiting is a prominent feature of modern life. Waiting is an inevitable and frequent occurrence in pastoral lives, whether it is the recurrent waiting for rainfall, for farms to ‘open up’ (see chapter 5), for animal sales to pick up, especially in the pandemic years, for government payouts, or the rather prolonged, longer-term and chronic waiting of a generation that seeks opportunities outside of pastoralism. Waiting and anticipation, “halting” and “futuring” (Griffiths et al., 2013), is a way of temporally orienting oneself. It is how the future, or a particular vision for it, defines the present and materially creates trajectories of life (Adams et al., 2020).

Several scholars have tried to elaborate on the different experiences of waiting among the youth. Honwana (2012), for example, speaks of the “waithood” of ‘youth men’ in parts of Africa, who are not children but being unable to find a job, build a home or marry; are not considered social adults or full-fledged citizens either. They feel a sense of being ‘on hold’ or ‘stuck’. Jeffrey (2008) discusses four different textures of waiting time namely, surplus time, where being stuck in a known routine can weigh down on a person; heightened suspense, where a sense of expectation or pining for certain outcomes dominates; lost time, a feeling of being left behind, of being marooned; and panic and inertia, that oscillates between periods of crisis and ‘dead time’, urgency and boredom. But as Griffiths (2014) explains, times in limbo, lag, floating, ‘timepass’, etc., can also offer the potential for freedom and transformation. It can be a time in which to devise new political strategies and prepare for times to come, as well as in which historical inequalities may become manifest (Jeffrey, 2008). As this scholarship shows, waiting can be considered either the blockage of action, an experience filled with substitute meanings, or a meaningful experience in itself (Gasparini, 1995).

The mobilities literature has also paid considerable attention to experiences of being “still/ stuck/ stopped” (Cresswell, 2012: 648), including that of waiting in relation to (im)mobilities. Analysing ‘waiting’ provides a ripe opportunity to capture dimensions of ‘pace’ (Turnbull, 2016) at the intersection of spatial and temporal encounters. However, Bissell (2007: 295) questions the characterisation of waiting as an “immobile being-in-the-world.” Instead, he proposes to focus on the corporeal experience of waiting through the notions of action/inaction rather than as differential speed or deceleration. Scholarship from migration studies is especially attentive to the experiential aspects of waiting as they apply the temporal lens to migration (im)mobilities. Conlon (2011) shows waiting as an active practice that involves introspection of, incorporation into, and resistance within migration encounters, offering new insights into the spacings and timings of migrant (im)mobilities. Portrayals of asylum seekers, refugees, and irregular migrants waiting in refugee camps and detention centres highlight temporal insecurity and conflicts in time as crucial elements of their experiences of (im)mobility and inequality (Jacobsen et al., 2021).

In the Rabari context, social and economic relations are inextricably linked, such that livelihoods are not only objective income sources but also subjective social and cultural experiences that shape life overall. Schlecht et al. (2020) find that political neglect (leading to poor infrastructure and services for pastoralism, for example), land use competition, partial social isolation, and the hardship of work are discouraging the youth from mobile pastoralism. Valo's motivations for leaving shepherding were not only economic but also socio-political, as he sought to uplift his social position from a life of perceived backwardness and hardship to a more 'settled,' modern and lucrative livelihood. The statist vision of linear development, as discussed in chapter 5, seems to exert a "symbolic violence" (Jeffrey, 2008: 955) on youth like Valo, who consider themselves as 'left behind' or 'out of time,' increasingly out of kilter with the shifting *zamano*.

The changes in the socio-economy witnessed in Kachchh since the turn of the century have not only been inscribed materially in space but are also imbibed in people's beliefs and behaviours. They have altered human economic mentalities away from the grounding in social relations and institutions to transactions that draw them away from their social context. Anderson (2009: 78) conceptualises this collective sense, this experience of the times and its "mood, feeling, ambience, tone" as "affective atmospheres," a class of experiences that occur before (prepersonal) and alongside (transpersonal) subject formation, as human and non-human materialities affect one another. This sense is narrated through the axiom of *zamano fari gayo* [the age has changed], discussed in chapter 5.

Therefore, narratives of 'backwardness' that privilege a singular and linear vision of 'modernity' create an oppressive 'affective atmosphere' despite pastoralism being a lucrative profession. This problematically implies temporal linearity, denying the coevals of mobile experiences and incorporating people into normative social structures, as will be discussed further in chapter 9 (Jacobsen et al., 2021).

A linear, chronological approach to time assumes that everyone shares a homogenous 'now,' bringing differing histories, politics, and experiences into a particular alignment in a supposed shared present (Bastian, 2011). Such an approach creates a binary between those 'waiting' and those 'racing' ahead and obscures the differentiated experiences of waiting within social groups, such as the

migrating group. Rather, by demonstrating waiting as a subjective experience, mobility is revealed as complex and multifaceted, and as bringing together many uneven and entangled temporalities (Bissell, 2007). Further, I conclude that waiting should not be considered only as an “active achievement” or “passive acquiescence” but rather as a complex and variegated experience (ibid.: 277).

8.3. Differentiated experiences of ‘waiting’

Waiting is a context-based subjective experience, differentiated by and relational to how actors position themselves vis-à-vis each other and their projections and imaginaries of a future (D’Angelo and Pijpers, 2018). Valo’s parting from the migrating group had implications not only for him but also for other members of the migrating group and his family as they find themselves tightly bound in overlapping economic, social, and affective relations. This section presents a rich description of the variously textured, diverse and differentiated experiences of waiting generated by Valo’s short-lived departure from the group.

8.3.1. *Not yet-ness*

Following the conversation in the opening vignette of the chapter, Pabiben said,

“Dudh toh Dumla ne tyaan dhagla thaay chhe. Hu haanje bethi ti ne. Dumla ne dudh chhe dudh! Arre ketla dhamda aaya. Dhagla. Bora bora aave. Aavda aavda dhamda bhari ne aavta. Bharwad, Ahir na. Bora bora”

[There are heaps of milk at Dumla’s. I was sitting there (at the dairy) in the evening. Oh, what milk he has, what milk! So many cans came. Heaps. Lots and lots came. Huge, huge cans would fill and come. From the Ahir and Bharwad (cattle-rearing pastoral castes). Lots and lots.]⁸⁸

Duma, Nathubhai’s nephew, had a successful dairy in the village and had inspired Valo to open his own dairy. But the journey to owning a successful business had not been without its challenges. Vibho, Nathubhai and Pabiben’s younger son, Valo’s younger brother and co-shepherd recalled,

“Do you know how many jobs he did? First, he worked at the highway toll booth. Then he set up a flour mill in the village. It ran for two months. Then he went to Samakhiali for two odd years. Then he went to the

⁸⁸ Interaction on 06/03/2020.

Naliya side. He set up two dairies; both did not work, and then this (dairy) in the end. Now this is working.”⁸⁹

By highlighting the need for patience and perseverance for establishing a business, Vibho seems to be challenging his brother to show the same kind of spirit.⁹⁰

Valo had been preparing for his dairy for a few months. He had been learning from Duma and dairymen in the village, taking a ride on the dairy van to and fro the camp in the bush and the village every day at the end of the monsoon in 2019. Yet, the success of his initiative was not entirely in his hands. Emphasising the precarity of Valo’s situation, Pabiben said,

“Valo kahe mane dairy nakhvi chhe. Ane dairy nu kai thekanu nathi; upar thi phone aave toh thaay. Dairy dhani hoy ne e phone kare aapva mate toh.”

[Valo is saying he wants to put up a dairy. But there is no sign of the dairy. If he gets a call from above (permissions, etc.), it may happen. If the dairy owner calls to sell it to him, then.]

The situation points to the subjugated political position of Valo in the negotiation as he ‘waits’ for the dairy owner to make up his mind. Vibho spoke of how, faced with such predicaments, Valo was “*padare munjay chhe*” or “disheartened on edge” (literally the edge of the village but figuratively the edge of a new venture). On the one hand, Valo is faced with an anachronistic vision of pastoralism that positions it within narratives of deficiency, deprivation, cultural primitivism, and the incapacity to move (at all or fast enough) towards civilisational progress (Khan, 2020). On the other, he is investing in a business prospect that may or may not work out. But his own outlook is not as bleak as Vibho makes it out to be.

Valo’s anxiety from the prolonged wait is coupled with an excitement for what lies ahead as he seeks to embark on independent adulthood. He displays hopeful anticipation for possibilities to open up using words such as “*haju nahi*” [not yet]/ “*thai jashe/ thashe*” [it will happen]. Valo’s waiting is a sense of ‘not yet-ness,’ that although he hasn’t been successful yet, he might be soon. The new moment of

⁸⁹ Interaction on 06/03/2020.

⁹⁰ Of course, Pabiben was quick to add that Duma was able to take these risks and transition through multiple professions as his mother and wife sustained the household by making and selling coal from *Prosopis Juliflora* highlighting the role of women through these transitions.

precariousness is seen not only as oppressive but as also offering the possibility for new subjectivities, new socialities, and new kinds of politics (Buscher, 2014).



Adams et al. (2009: 247) characterise such a feeling as ‘anticipation’ or “an excited forward-looking subjective condition characterised as much by nervous anxiety as a continual refreshing of yearning, of ‘needing to know.’” According to them, anticipation is a way of orienting oneself temporally to “an ever-changing astral future that may or may not be known for certain, but still must be acted on nonetheless” (Adams et al. (2009: 247). Griffiths et al. (2013: 7) call this the “futuring’ of time,” bringing together linear and cyclical time as it folds in the future into the present.

Yet, things did not seem to work out for Valo regarding the dairy, and he was back with the flock at the end of the summer in 2020. He seemed to have borrowed equipment from Duma and run the dairy for a couple of months in the summer, but his family’s scepticism proved correct. Poor business, complex negotiations and the need for income brought him back to the flock at the start of the monsoon.

“Do you know anyone who can use a driver?” Valo asked me one afternoon after returning to the flock.⁹¹ He was looking for a driving job. Valo’s uncle, Nathubhai’s younger brother, had a taxi service in a nearby town. Valo felt like he, too, could manage this business. Except that Valo did not know how to drive. He was confident, though, that this profession was still not beyond him and that he could learn how to drive easily and on the job.

By my next visit, he was convinced that he would be joining the salt factory on the outskirts of his village to work in a clerical position. His youngest brother had been working there, and he hoped he could join in a similar position. He seemed to have made some visits to the factory as well, even as Pabiben warned him that he would not be able to keep up with the strict daily timetable of a factory job.

Despite his many aspirations, Valo still found himself at the camp and shepherding the family flock in 2022. Although sceptical of his chances of success in his new ventures, Pabiben, as a parent, also sought to safeguard his interests, indicated by statements she made on the phone one afternoon, such as:

“E toh sachava j padse. Thodi ena mola nakhi devay. Aatlo katko ena deva thay”

[We will have to take care of them (his animals). We can’t give up on his animals. At least we can give that bit to him.]⁹²

Rather than feeling “stasis”, “suspension of time”, “limbo”, and “stuck” (German Molz, 2009), Valo found himself having capital assets, such as livestock, and lucrative employment as a shepherd to turn to, safeguarded by his parents. Unable to zero in on a ‘forthcoming’ and ‘stable’ alternative future, Valo moved in and out of pastoralism as he explored his options, moving between “fantasy and surrender” (Bourdieu, 2000: 212, as quoted in Jeffrey, 2008: 956).

As Bauman says, “... nomads, struggling to survive in the world of nomads, need to grow used to the state of continuous disorientation, to the travelling along roads of unknown direction and duration, seldom looking beyond the next turn or crossing; they need to concentrate all their attention on that small stretch of road which they

⁹¹ Interaction on 13/12/2020.

⁹² Overheard on 08/01/2020.

need to negotiate before dusk” (Bauman, 2000: 209). This indicates the constant need to be “fluid, ambiguous, in a state of perpetual becoming, in a constant state of self-transgression” (ibid.: 209). Like Bauman’s nomad, Valo seems to be organising alternatives on-the-move, rather than in suspension and shows conflicted, ambivalent, and malleable identities as he moves in and out of shepherding.

8.3.2. *Meantime-ness*

Aa badhu have thakya ma, dang thakya ma” [This is all exhausted, the group is tired (implying its decline)] says Nathubhai to a visiting Dhebar Rabari that has stopped by the camp for some *chai* while on his way.⁹³ Nathubhai seems to have reconciled to the fact that his ‘business’ was on the decline, waning due to the lack of enthusiastic successors among his children. Unlike Valo’s hopeful looking forward, the past couple of years seems to be characterised by a sense of ‘meantime-ness’ for Nathubhai. Valo’s departure serves as a temporal rupture that seems to have set the group off its predictable course as they wait to understand the outcome of Valo’s departure and to take any deterministic step forward.



⁹³ Interaction on 20/10/2020.

Nathubhai is heard saying, “*Jyaan sudhi chaale chhe tyaan sudhi chalavanu*” [Till it works, we will let it work], indicating that he will keep the flame of livestock keeping alive until it is extinguished.⁹⁴ Contrarily, when I first met him, Nathubhai joked about selling all his sheep to buy a few heads of dairy cattle. He, too, romanticised a future out of pastoralism's ‘daily drudgery’. As a bachelor, he had spent a few years in Mumbai working in a diamond factory.. He seems to keep himself well informed of world news, and was more updated with current affairs, pop culture, technology, etc., than his sons, using his spare time in the day to talk to various people and watch videos on his smartphone. Part of his attraction to having me was to have some fresh conversations and find a way to present himself to new circles.

On the other hand, Pabiben had a more active stand, often saying, “*jyaan sudhi hu chhu tyaan sudhi maal chhe*” [till I am there, the animals are there]. Not only did she keep the flame alive but stoked it till she could, taking up the camp's responsibility in the absence of younger women.

Yet, “*jyaan sudhi*” [till when] continued to appear. It represents this sense of ‘meantime-ness’ where an end is impending but is also unknown. The changes to the group broke migration routines and altered the group composition, but at the same time, any decision on Valo’s venture remained unclear. Having other children and obligations to worry about, Nathubhai continued the migration journey ‘in the meantime’.

Nathubhai is the only one among five brothers to practise pastoralism. Vibho and Valo are the only two among his four sons who practise as shepherds. The other two work in various jobs such as driving a tractor or working as an administrative assistant; one even has a college degree. This has implications for his migrating group and pastoral practices. Unlike Nathubhai, all of Harjanbhai’s six brothers are practising pastoralists, and all their teenage sons are also with the animals. They tend to travel with each other in a migrating group. The stability of the migration group, vibrant camp life, and the interlinked improved production outcomes motivate the young shepherds in Harjanbhai’s family to remain within pastoralism.

⁹⁴ Interaction on 20/10/2020.

Having a stable group facilitates generational renewal in pastoral practice. Although ‘elders’ like Nathubhai do not romanticise pastoral livelihoods or values, there seems to be emerging discord as intergenerational differences emerge in reproducing pastoral lives, weakening the affective connection to pastoral rhythms. “*Tamara jevani chowki karshu*” [I will be a guard for the likes of you] said Kevabhai, a senior pastoralist, when I asked what he would do if his son abandoned pastoralism.⁹⁵ Known for their courage and honesty, the Rabari are often employed as ‘watchmen’ or building guards in urban India.⁹⁶ Kevabhai’s comment points to the defeat felt by older pastoralists at the failure of generational succession.

Nathubhai’s group is constantly in flux, ambiguous, and contingent, as seen in chapter 6, where group structure and production outcomes are discussed. For Pabiben, Valo’s decision meant increased workload and growing isolation during certain periods, as seen in chapter 5. While there was talk of Valo’s intention to leave for a few months, it was all speculative. Pabiben’s sense of abandonment and discomfort with his decision was apparent when she said, dismissively,

“*Aa chokro paarka kare chhe. Have ene je karvu hoy e kare. Je dhandho karvu hoy e kare, je gotvu hoy e gote biju hu thay.*”

[Now this boy is alienating us. Now he can do whatever he wants to do. Whatever business he wants to do, he can do, whatever (job) he wants to find, he can find, what else.]⁹⁷

As chapter 7 has shown, the family also preferred Valo as a shepherd, valuing his skills over those of his brother Vibho, and hence his departure was particularly hard hitting. Paradoxically, and perhaps because he was not as much a risk-taker as his brother, Vibho did want to continue in pastoralism.

Further, Valo’s departure also coincided with the delay in going to Gujarat and the pandemic associated lockdown in 2020, further exacerbating the uncertainty and instability felt by the group. A rupture from usual patterns, Nathubhai’s flock travelled to Gujarat for less than three months, given the delay in cotton harvests

⁹⁵ Interaction on 22/08/2020.

⁹⁶ None of the people I worked with had this job, although Nathubhai’s brother and one son were employed part-time as guards for windmills in the outskirts of the village. Notably, working as guards and drivers is a common diversification among pastoralists in East Africa as well.

⁹⁷ Overheard on 08/01/2020.

as discussed in chapter 5, as well as the plentiful availability of castor residue in Kachchh towards the end of the summer. All these different dynamics coming together led to a kind of moulting of the pastoral practices of the family, shifting its horizons, organisation, and practice for the longer term.

8.3.3. *Stuck-ness*

Displaying an intergenerational difference in attachments and skills associated with managing a pastoral camp, Pabiben laments the reluctance of younger women to travel with the flock. She mainly holds Valo's wife responsible -for his decision to exit pastoralism as she was unwilling to travel with the flock. She lamented,

“Have aa zamaana ni vauv na aavti hoy, vauv ne vaandh bharvu pohatu na hoy, toh pachi dikro jaane ke have e vandhyu nahi bhare toh pachi maare maal vechvo j padse. Aavu ek haru nahi, badhi thekane. Have evu chale chhe amare jnati ma.”

[Now, if the daughter-in-law of this generation is not coming, she cannot load camp, then the son knows that if she does not load camp, he will have to sell the animals. This is not a single case, but everywhere. Now this is what is happening in our community.]⁹⁸



⁹⁸ Interaction on 26/01/2020.

Besides Pabiben, their camp was supported by their daughter, Rani. While in certain periods, such as when they are camping close to the village or when they have other flocks for company, the women may be alone. But in others, such as during the crossing over or when they are required to wean cotton, the mother-daughter duo may go together to manage the camp. But as an aging woman, Pabiben was disappointed that Valo's wife did not take up the mantle of managing the camp, especially as Rani was soon expected to be sent to live with her in-laws.

Women of this '*zamana*' [age] among the Rabari are subjected to large shifts in their lifecycles and lifestyles due to shifts in the political economy. With increased requirement of labour time, the Rabari community council banned women from doing embroidery as it would take a long time to complete their trousseaus. This move, and subsequent shifts have reduced the time between marriage and cohabitation for women (Frater, 1999). Where once women would go to their husbands' house in their 30s, now they go in their 20s.

Intergenerational differences in feelings towards mobility are especially apparent between older and younger women. New forms of temporal experiences are introduced through differentiated participation in social life (Bastian, 2011). For example, social media accessed by younger women as opposed to older women plays has a significant influence on their sentiments towards mobility and their changing aspirations.

Young Rabari women often do not appreciate life on the move as they feel that it is rudimentary, having no shelter, no proper place to clean or no way to showcase their wealth. Unlike the elders who feel uncomfortable indoors, the younger women aspire for shelter from the elements and homes that emulate those they see on television, as described by Rani in section 7.4. The women feel 'unclean' in the camp, indicated by their reluctance to be photographed, for example, after working in the bush all day.

Aesthetics are especially important to the Rabari, known the world over for their crafts. For example, all the *uttaara* beds across Rabari camps during my years in Kachchh were coloured sky blue and silver. Painting their purple *uttaaro* these colours before they left, Reva, a young woman in Hemangbhai's camp, said that it

was important that they look up to date with their colours. Similarly, Rani had prepared beautiful applique covers for her *uttaaro* and camel to impress passers-by, especially other Rabari, when on their journey in Gujarat.

At the same time, as migrating groups reduce in size, as discussed in chapter 6, Rabari women feel an increasing sense of social isolation. Unlike the older women who consider the camp a social space, the younger women feel cut off from village social life in the camp, as discussed in chapter 3. They compensate by spending hours a day on their phones, often smartphones, swiping through social media updates.

Literature on young people's experiences through transition, unemployment, and waiting is skewed by young men's experiences (Islam, 2020). But young women play a significant role in the persistence of pastoral mobility, as discussed in part in chapter 6. Unlike men, women among the Rabari have only limited choices in pursuing a career. Given the patriarchal social structure and their gendered role in managing the domestic life of the family, they are expected to follow their husbands in cases like Nathubhai's camp as "trailing spouses" and "secondary movers" (Cangià, 2020: 698). Within private life, women can make their expectations clear to their husbands, but if no alternative is available, they are required to comply, like in the case of Valo and his wife. The women, therefore, experience a kind of 'stuckness', stuck in gender mandated roles that they may not necessarily agree with and have little room to manoeuvre.

Moreover, the women increasingly choose to remain in the village to ensure their children are educated. While the men are often focused on short term productivity, the women's temporal horizons extend well beyond their own lives as they seek to secure their children's future. Nimaben reflected,

"Aapde kyar sudhi maal ni lari farvu? Aapde aapdi zindagi bagadi, have chokra ni e bagadvi?"

[For how long should we follow the animals? We have spoilt our lives; now should we spoil the children's?]



The acceleration in social life experienced by the pastoralists, as discussed in chapter 5, is leading to an “evacuation of the near future” (Guyer, 2007) so that the future and long term come into view as needed to be acting upon in the now.

Convinced by Nimaben, her husband sold his livestock and bought a tractor and a JCB loader, like many other Rabari. They travel to Gujarat in a migrating group with other Rabari tractor owners, where they camp in one village⁹⁹ while the machines travel around to nearby villages working the fields.

Nimaben’s children are enrolled in school in that village, an advantage of the change in livelihood that allows them to remain in one village for most of the year. Rajanben’s family also owns and travels with machines, capitalising on the relationships built with farmers through migrating with animals. But they have gone a step ahead and now rent a house in the village in Gujarat where they would first camp with the tractors, again to secure their children’s education.

Having young children to take care of and having a fear of camels, Simaben relies on her sister’s help to move camp and manage daily chores. When I asked her how she would manage when her sister went to her marital home, she said,

“Te di chokrao mota thai jashe. Emne bhanava nahi joie? Maal vechi tractor lai leshu.”

[That day, the children will be grown up. Won’t they have to be educated? We will sell the animals and buy a tractor.]¹⁰⁰

Having her life as a woman intricately tied to the ideas of being a reproductive body, motherhood, and child rearing, her comment seems to indicate that in seeking a

⁹⁹ Nimaben’s family camps in a Bharwad’s field in this village. The Bharwad are another Hindu pastoral community in the region and are said to have a *mama-bhatija* or uncle-nephew relationship with the Rabari.

¹⁰⁰ Interaction on 22/10/2020.

different future for her children – one where they have access to education – she is also hoping for a different future for herself.

8.4. Integrating modernity

The last section has shown the differentiated experiences of waiting as Valo, Nathubhai and Pabiben's eldest son, left shepherding to start his own business. While his departure was short-lived, the event seems to have had a lasting effect on the family's motivations. Practically, there was some restructuring of their mode and pattern of mobility.

As discussed in the previous section, the tractor has emerged as the next step towards 'progress' for the Rabari. A symbol of fast commercialising settled agriculture, tractors offer the possibility to be incorporated into a modern context, both by providing services to expanding agriculture but also through the ownership of the machine itself. At the same time, it allows the pastoralists to retain an ethic of mobility and capitalise on social relations built over the years. It became a popular form of livelihood diversification among the Rabari when agricultural reform policy promoted mechanisation, big infrastructure like dams (as discussed in chapter 5), and practices based on western science. Often not as profitable as keeping animals, given its sunk costs, the tractor symbolises wealth and social status and offers the possibility to upgrade one's life by allowing access to education and other amenities through its rapid mobility.

Now, as the animal market is developing and tractors are becoming commonplace, some Rabari pastoralists have begun using them to travel with the animals rather than use them to provide services, despite the costs. As they prepared for their migration journey in December 2020, Laliben's flock decided to abandon their camel in favour of a tractor. Post Valo's return to their flock in June 2020, Nathubhai decided to join Laliben as they prepared to 'cross over' to Gujarat. He further arranged to share Laliben's tractor to move camp by contributing towards fuel costs. Part of the decision to use a tractor was to encourage the daughters-in-law of both families to travel with and take up the mantle of managing the camp. Given that both women had infants to take care of, the tractor was bought to ease the burden of

walking long distances and loading and unloading all their belongings. Rani and Laliben accompanied the young women to support the camp as well.

Despite this arrangement, Valo's wife, Seju, was not comfortable at camp and went back to the village in two months' time prompting Valo to think of other options, such as driving a taxi or working in the salt factory, as discussed in section 7.3.1. Yet, as none of these options seemed to work out, Valo continued shepherding as a hired shepherd for Nathubhai. He was still with the flock in the spring of 2022.



Having travelled with Laliben's tractor for a year, Nathubhai bought his own pick-up van for travelling to Gujarat in early 2022 and chose not to go with Laliben that year. Robabhai was invited to travel with the group again and share in fuel costs. Nathubhai and Robabhai's flock travelled together and, under Robabhai's guidance, went to the Halvad block of Morbi district, an area where Nathubhai had not been going in the previous few years. Nathubhai's youngest son, who previously worked at the salt factory mentioned in section 7.3.1., was called in to drive the van. This shows the multiple registers at which pastoral mobility operates, the economic and the environmental, the social and the affective, and its adaptive capacity, exemplified through Nathubhai's experiences in the past years.

8.5. *Rahi rahi ne*:¹⁰¹ A generation in waiting

What now for Valo? The last sections have discussed the motivations for his brief departure and the group's temporal experiences during the interim. They have also discussed the options available to him. Yet, Valo has thus far not been able to access opportunities to exit pastoralism with the same level of income and security. His "situational" waiting seems to be embedded in and overlaps with a more pervasive "existential" waiting experienced by a generation of youth seeking alternatives (Dwyer, 2009). This section discusses these dynamics.

Ranabhai recalls days of the past when pastoralist children would accompany their families on migration, knowing that they were fated for the same life. He said,

*"Te di maal charvo ane maal ma farvu - nanka ma maja toh aave j ne.
Pachi mavtar saathe aapde rahevanu hoy. Etle pachi em hoy ke aapde
ahin j rahevanu chhe ane ahin j nikarvanu chhe."*

[In those days, we would graze animals and roam around with the animals – it's just fun when one is small. Then we stay with the parents. So we feel that we have to stay here and end up here.]

In the past, Rabari children did not often go through formal schooling as education was not considered necessary. Rabari youth like Valo were often pulled out of school and recruited as shepherds. Decisions were not based on the individual choice of the young person but rather on the joint interest of the family towards which the child too bore collective responsibility. His generation of youth feel left out of the mainstream view of progress and 'wait' for *sudhar* or improvement in their life circumstances.

Now with the change in *zamano* [age], education is gaining importance. Dyer (2012) shows how education emerged as key to accessing rehabilitation benefits post the earthquake. Investment within the region and increasing interest from the development community gave an impetus to set up educational. Yet, the disdain for pastoralism in the linear visions of development, as discussed in chapter 4, deployed through formal education, begs us to question: what kind of education and for what kind of future? What is the purpose and relevance of education for pastoralists (Dyer, 2009)?

¹⁰¹ *Rahi rahi ne* = After waiting (*rahvu* = to stay)

Alphabet literacy, legitimised through school certificates, is indelibly associated with development (Dyer, 2009). Pastoralists recognise the misplaced conflation of education with formal schooling.

Hemangbhai's comment illustrates this when he says,

“Rabari na chokra kai pan kari shake. Bas emni pase certificate na hoy.”

[A Rabari's son can do anything. They only don't have a certificate (to show) for it.]¹⁰²

They would often tell me, *“jem tamari bhantar em amari bhantar”* [just like you have your studies, we have ours]. Looking at the words scribbled across my notebook one afternoon, Pabiben said my writing looks just like her embroidery – *aa tamari bhantar, aa amari bhantar* [that is your education, this is our education]. When looking for his camel one evening, Hemangbhai was trying to trace his footprints to lead to him. I asked how he was able to recognise his camel's footprints. “Just as you recognise your friends' handwriting,” came his answer.¹⁰³

Yet, formal education is desired and sought after. It might allow pastoral youth to breach the gaps that place them as ‘left behind’ by providing the tools to navigate the rapidly shifting political economy. Education is considered essential for inclusion in the labour market and developing social standing. It is woven into ideas of ‘making progress’ in relation to social and occupational identities, even if it remains unsympathetic towards pastoralism and draws the youth away from their livelihood (Dyer, 2012).

Sarganbhai highlights this when talking about his son, who had finished high school and was awaiting college admissions. He said,

“Bhani le pachi maal ma na aade. Have na aave.”

[After studying (he) won't shepherd the livestock. He will not come.]¹⁰⁴

¹⁰² Interaction on 15/12/2020.

¹⁰³ Interaction on 19/12/2019.

¹⁰⁴ Interaction on 20/10/2020.

This is common rhetoric among Rabari families where young men who have gone to school find themselves disconnected from their socio-economic and cultural context, signalling an exit from pastoralism.

Still, not all who access education can transition successfully out of pastoralism. Presenting an astute analysis of the liminal state of pastoral youth today, Ranabhai says,

“Have haaru banhyu hoy toh ene kyaank naukri made ane kai dhandho kare, have adhuru bhanya hoy e ora e na jay ane para e na”

[If they have studied well, then they can get a job somewhere or do some business, but those who have incomplete education do not go this side (pastoralism) nor that (another profession).]¹⁰⁵

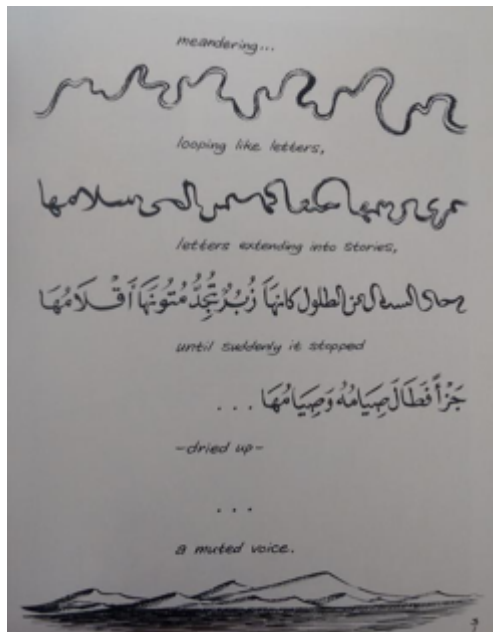


Figure 12. I interpret this image in this context to show how learning experientially on the walk, represented through the meandering line, may be transformed to written letters of formal education and ‘modern’ living, and finally to nothing, as success evades pastoral youth. Source: ‘Munnu. A boy from Kashmir’ by Malik Sajad.

Bapabhai, for example, worked for a year and a half at a clothing factory in Mumbai, run by businessmen from the Patel farming community of his village, but left dissatisfied with the working conditions and wages. He returned to pastoralism as a reluctant shepherd. Gokulbhai, Virabhai’s son, spent five years in Mumbai and even partnered to establish a clothing business but was unsuccessful and returned to pastoralism, his *ghar no dhandho* [family business], where he has assets and good returns. Rather than shepherd the animals, he drives the family’s tractor that has replaced their camel in transporting their *uttaaro*.

Reflecting on his son’s predicament, Virabhai said,

“Bijo koi dhandho sujhto nathi, kai set nathi thatu. Etle maal ma.”

[We can’t think of another business; nothing else is working. So, in pastoralism.]¹⁰⁶

¹⁰⁵ Interaction on 22/09/2020.

¹⁰⁶ Interaction on 09/10/2019.

Rather than admit failure, or the inability to gain profitable employment or business, the pastoralists use mild phrases such as *faavtu nathi* [not comfortable], *kai sujhto nathi* [can't think of anything], *kai bestu nathi* [nothing is working out], *setting nathi thati* [nothing is setting/fitting].

Ranabhai emphasised the importance of education in being able to advance, set up a business, and move into a successful venture, saying,

“Puri bhantar bhane toh ee aagad kai kari shake. Puri bhantar na bhane toh ene aagad nu kai na sujhe”

[If one completes studies, then they can do something ahead. If one does not complete studies, then he cannot think of anything ahead.]¹⁰⁷

Yet, by emphasising ‘*puri*’ *bhantar* he again alludes to the liminal position of many youths who, faced with low-quality teaching and poor learning outcomes, hardly make it past high school, let alone to jobs that disqualify candidates based on minimum educational achievements. Ranabhai recognises and has quiet resignation towards the youths’ regressive position within a linear scheme of development, which invalidates their skills and achievements and holds them in constant struggle, and constant liminality.

Presenting a lucid analysis of the socio-economic dynamics in his context, Ranabhai says,

*“In those days, there was no education among the Rabari community; that’s why we are behind, and they kept studying and moving forward. Now there is education after all the wait, rahi rahi ne. 20-30 years have passed waiting. Now, if we study, when will we rise? However much we study, we cannot be together with (equal to) them (the Patel farming community). They have already accumulated, and we are still left to earn. Now they will earn on their earnings; that’s their business. And we are still in the business of collecting money.”*¹⁰⁸

Ranabhai compares the Patel and Rabari as being part of the capitalist class and the subsistence class respectively. While one earns on invested capital, the other still seeks to accumulate wealth, the difference arising because of a delay in securing formal education. His insights go much deeper, though. He points to a temporal

¹⁰⁷ Interaction on 22/09/2020.

¹⁰⁸ Interaction on 22/09/2020.

sequence in modes of production that sees subsistence production as *pachad* or backward as opposed to advanced or *aagad* capitalism.

In fact, it is the Patel of the region whose offer for land the wealthier Rabari would once refuse, as seen in chapter 5, who are now offering opportunities for diversification to Rabari youth from their village by taking them to Mumbai to work in their clothing factories. Gokulbhai and Bapabhai went to Mumbai to work this way, as discussed earlier in this section. The pastoralists refer to this as the Patel having *tedavyu* [carried/propped up] the youth, qualifying the relationship through metaphors of mobility. This indicates the change in the power balance between the communities over the years. This analysis contextualises the ‘waiting’ experienced by pastoral youth today and highlights its historical contingency, providing a longer-term view of the kind of waiting experienced by the Rabari.

8.6. Farvanu

Nathubhai says,

“Aa zamana na chokraone bas farvanu joie”

[Children of this generation just want to wander.]¹⁰⁹

Temporal narratives around the recurrent theme of *farvanu* reveal the expectations and aspirations of the Rabari. What is the life that they are waiting for? Even though some youth no longer wish to migrate with the animals, mobility remains a dominant aspiration. Rather than an urge to settle, they envision a different type of mobility. *Farvanu* or leisure travel emerged as the aspiration, dream, and fantasy of Rabari youth. While the *dhandho* [business] of pastoralism offers *haalvanu* or walking/moving associated with work and labour, *farvanu* is leisurely, unencumbered, and pregnant with possibilities.

Johnson (1963 (1759): 181 as quoted in Salazar, 2012: 863) says,

“He that travels in theory has no inconveniences; he has shade and sunshine at his disposal, and wherever he alights he finds tables of plenty and looks of gaiety”

¹⁰⁹ Interaction on 11/10/2019.

Although Johnson goes on to say that travel in practice often eludes these romantic notions, that these are nothing but “the fallacies of imagination” (ibid.) that crumble once the journey begins, the Rabari youth still find themselves in the same posture as a traveler in anticipation. For them, the sense of *farvanu* projects travel as voluntary, light, and easy. Further, photos and videos of peers and relatives at different tourist sites serve as images of quick success and prosperity that encourage certain ‘modern’ visions of the future (cf. Jeffrey, 2008).

Describing why travelling is more desirable than migrating, Rani said,

“Amane toh farvu game, bhaar bharvama maja nathi aavti. Maal bharvama ketli e mehenat thay, badhu maal saaman sachavu pade. Farvama toh khali potane sachavanu hoy. Peti ma toh kay na hoy, be jodi kapda, ek chopdi. Etluch lage. Unth padi ne chavama kai maja na aave.”

[We like to travel; we are not enjoying loading things (the camp). It takes so much hard work to load the camp; we must take care of all the luggage and things. In travelling, you only have to take care of yourself. In the trunk (luggage), there would be nothing, just two pairs of clothes and a book. That’s all. It is not fun to be leading the camel and walking.]¹¹⁰



Compared to travelling with animals, Rani perceives leisure travel not to entail as much responsibility or hard work. She qualifies and differentiates mobile experiences. She rejects the burden women must bear in a migrating lifestyle, which includes managing not only the domestic affairs of the family but also the additional burden of loading and unloading camp during frequent camp shifts.

Similarly, speaking of daughters-in-law of the day, Pabiben said,

“Ene maal bharvu na game. Ene farvu game, Honda laine. Zamano evo chhe.”

[She doesn’t like to load camp; she likes to travel with a Honda (motorbike). The age is like that.]¹¹¹

¹¹⁰ Interaction on 05/03/2020.

¹¹¹ Interaction on 26/01/2020.

Pabiben finds it audacious that daughters-in-law can choose not to load camp and choose seemingly easier and pleasurable lives, symbolised through the fast-paced travel on a motorbike, a choice she may not have been able to make nor conceive. She attributes such changing sentiments to the changing *zamano*. She continued,

“*Ene pachi evo hoy ke ahinya jao ne uva jao ane uva jao ane evu badhu.*”

[She (daughter-in-law) may feel like going here and going there and stuff like that.]¹¹²

This same tendency is highlighted when Vibho calls his brother Valo *patangyu* (butterfly), who likes to wander/travel from place to place, similar to his father in many ways. This is ironic as certain romantic notions of pastoralism saw them as wandering aimlessly without the pressures of civilisation.

Pastoralism is hard work, a 24/7 job as the animals must be milked and fed and taken care of. A shift towards *farvanu* is also indicated by Judy Frater’s 1999 article titled “When This chapter has synthesised insights from the thesis and has interpreted them through the concept of pace. I find pace a useful concept because, rather than a discrete point or location-based understanding of mobility, it shows mobility as a dynamic flow and always in process. Such a view makes three key contributions: it practically shows how pastoralists synchronise and speed their movements through the interlinked features of flexibility and precision. In this way, they are able to take advantage of the spatio-temporal variability in fodder availability, as well as other factors such as improved market conditions for better livelihood outcomes.

s transform to bikes: Social change reflected in Rabari embroidery motifs” where she discusses how the changing political economy and aspirations are reflected in the changing symbolism of Rabari embroidery.

A part of why the pastoralists travel in a group is to provide logistical support to each other in case of absences. According to Rani, in a context where mechanisation and leisure are privileged, others may consider them

¹¹² Interaction on 26/01/2020.

subjugated on witnessing their hard work. According to her, others would say, “*ketla heraan thaay chhe*” [they are getting so troubled].

That explains why if she had three wishes, with one, Rani would ask for a job where,

“Betha betha pagaar chale. Kai nai bas aato marvano hoy evi naukri mangu”

[We get paid sitting sitting (without doing much work). I ask for a job where we have to just take a stroll, do nothing else.]¹¹³

In rural contexts where labour is characterised by movement, a ‘stroll’ is considered light work and ‘sitting’ no work at all. It is also interesting to note that while ‘modern’ ‘digital nomads’ seek to fuse labour and leisure by working and travelling together and seek to mobilise their jobs, Rabari youth seek to separate labour and leisure, where work is preferred *betha betha* [sitting sitting] and travel is purely for enjoyment.

Besides a relaxed job, with her other wishes, Rani would ask for a “coffee-coloured” bungalow with all the ‘city’ furniture and a car.

Envisioning a different life in this house, she said,

“Tyaan badhu maru parivar raheshe. Pachi vagada ma na javanu aapde. Bas bungala ma rahevanu ane farvanu”

[My whole family will live there. Then we won’t go to the bush. We will just live in the bungalow and travel.]¹¹⁴

Having grown up in camp, she now desires a life where she no longer moves to and within the bush, where they no longer graze livestock, but where *farvanu* is interlinked with luxurious and settled living. She would like to take her car to Ahmedabad, the biggest city in Gujarat, the urban privileged as signifying ‘progress’, and to local pilgrimages. Southerton (2001) shows how in an era of accelerated global communication and commodity distribution, individuals are exposed to an ever-expanding plurality of lifestyles leading to the need to

¹¹³ Interaction on 05/03/2020.

¹¹⁴ Interaction on 05/03/2020.

experience more and more cultural activities, be busy, and conduct activities at a fast tempo as a symbol of a ‘full’ and ‘valued’ life.

Getting a tractor to migrate in 2020 somewhat felt like a move towards this sense of *farvanu*. The moving camp by a tractor was both more leisurely, given that they did not have to walk, and faster, given its motorised speed, besides representing a sense of progress and modernity.

Lastly, pastoralists position themselves together with loiterers, vagabonds and intruders that are rounded up and chased away (Cresswell, 2006). “Walking was for the poor, the criminal, the young, and above all, the ignorant” (Cresswell, 2010: 25). In contrast, tourists and travellers are invited to places, welcomed, hosted, and entertained. As established through Rani’s wishes, the pastoralists’ vision is to have the privilege of leisurely travel. In a *zamano* where acceleration and mobility are central to people’s experiences and ideas of progress, the pastoralists do not reject mobility in favour of settlement but rather desire an altered sense of mobility that feels as leisurely, light, and welcoming as *farvanu*.

8.7. Conclusion

This chapter provides an elaborate unpacking of a moment of flux for Nathubhai’s camp as his older son, Valo, leaves the migrating group. Through the event, the chapter unpacks the differentiated term experiences of waiting for the members, differentiated by age and gender, as well as unravels longer-term waiting and aspiration.

The chapter shows how the short-term experiences of waiting are connected with and complement the longer-term experiences of a generation that feels ‘left behind.’ These experiences inscribe on identities and reshape subjectivities. It shows how in the short-term the pastoralists cannot deploy certain livelihood strategies, how in the mid-term they shift to traveling by tractor, and how in the long term things are made uncertain. Through these experiences, the chapter explores politically mediated temporal concepts such as backwardness and progress, as the pastoralists position themselves along a linear trajectory towards modernity and progress. It shows discourses that see them as backward and primitive, as *pachad*, as seen in

chapter 5, creates an “affective atmosphere” (Anderson, 2009) that is internalised and connects their experience of spatial mobility, of migrating with the flock, with social mobility or social status and reputation.

Yet, as the chapter shows, that pastoral youth like Valo and Rani do not desire to be fixed in place but rather a different form of mobility, a mobility that is leisurely and accelerated, between rural and urban, and between livelihood in place and movement as a form of relaxation.

Chapter 9

The Pace of Pastoral Mobility

“Maal ne jyaan pogadvu hoy tyaan poge” [the animals will reach where we want them to], said Robabhai over his morning tea. It was a fresh and cool morning; the smells of the animals intermingled with the perfume of moist soil and the smoke from the burning *chulha* [earthen stove].

They were sitting in an unirrigated cotton field in the Morbi district. Nathubhai had just received a call from a farmer inviting them to Bhal, and the members of the camp sat discussing their next moves.

“7 vaage uthiye toh maal Bhal na pahunche” [if we wake up at 7 am, then the animals will not reach Bhal], said Rani, as she awoke and jumped off the *uttaaro*.

(Interaction on March 5, 2020, Maliya taluka, Morbi district.)

9.1. Introduction

Maal ne jyaan pogadvu hoy tyaan poge. The animals will reach where we want them to. This statement was incredibly revealing. At a time when popular narratives spell doom, reiterating stories of resource loss and restrictions on movement for pastoralists, this statement came as a welcome surprise.

“What is the problem then?” asked my researcher’s brain.

Pat came Rani’s reply.

While Robabhai’s comment points to the availability of fodder, and the possibility of overcoming spatial constraints through mobility, Rani’s comment points to temporal constraints.

Mediated through their relationships with farming communities, the pastoralists migrate seasonally across resource niches to ensure access to nutritious fodder

throughout the year, as discussed in chapter 6. Through the timing and sequencing of their collective mobility, the pastoralists take advantage of the variability in the availability of resources and emerging market opportunities.

As described in chapter 6, Bhal is a region in central Gujarat known to produce superior varieties of wheat. Bhal has developed as an agricultural hotspot by adopting input-intensive commercial agriculture. Nathubhai's camp travelled to Bhal for several years, where they received plentiful and nutritious summer grazing and grain in exchange for manure from their flocks. Rather than being marginalised through the commercialisation of agriculture, the pastoralists take advantage of new developments through the sequencing and order of their movements.

While Robabhai's comment on the animals' (and their) movement relates mainly to interseasonal mobility, Rani's comment highlights the temporal organisation of daily routines. Her comment reflects the interlocked and complementary rhythms of the herd and camp that converge every evening. It highlights the nested and overlapping circuits of mobility at various spatial and temporal scales.

These intersecting rhythms produce differentiated gendered experiences. As women, Pabiben and Rani are responsible for loading and unloading the camp. Days when the pastoralists move camp, there is additional work for the women as they must dismantle and set up the camp along with their daily chores, as described in chapter 7. Going to Bhal means frequent camp changes given the distance. Therefore, by saying that they must wake up earlier than 7 am if they want to make it to Bhal, Rani highlights the ordering and timely performance of daily tasks to be able to reach 'the right place at the right time.'

Given the availability of fodder in the Morbi area and the delay in migration that year, as discussed in chapter 6, it was possible and likely that the group does not travel as far as Bhal. This was unlike the previous migration cycle where, in a year of low rainfall, they travelled all the way to Bhal to meet the flock's nutrition needs. That Rani can dismiss the proposition of going to Bhal is telling of the times for the flock as the availability of fodder allows for this option.

Further, Rani's comment is not only about the time of clocks and calendars, diurnal cycles, circadian rhythms, and seasons, but it is also about age, generation, past-present-future and ideas of progress and modernity. Waking up at 7 am, after the elders of the family, Rani demonstrates the unwillingness of young women to travel long distances with the camp, seeing the practice as uncomfortable and outdated, as elaborated in chapter 7. Rather than the temporality of *haal haal ne haal* [walk, walk and walk], symbolising pastoral women's daily chores and hardships on the move, Rani desires *farvanu* or leisure travel, as discussed in chapter 8.

Through the past chapters the thesis has explored various spatio-temporal aspects of pastoral mobility by pivoting around various temporal concepts, such as the rhythms of crop and weather cycles (chapter 6) and the synchronicity of the migrating group (chapter 7) to these rhythms, the accelerated TimeSpaces of a rapidly shifting political economy (chapter 5) and the 'waiting' experienced by the youth as they seek to reposition themselves in this changing context (chapter 8).

This chapter reflects on the simultaneous unfolding of multiple temporalities and the temporal structures within which the pastoralists operate to answer the research question: **Why does pastoral mobility persist, and how does it engage with new and changing conditions?**

This chapter synthesises my findings and shows how 'pacing' emerges as a key concept and practice to respond to the thesis question. Pastoral mobility persists because the pastoralists 'pace' their mobility to adapt to, take advantage of, manipulate, and bypass new and changing circumstances. Paying attention to the pace of mobility allows us to centre pastoral experiences and focus on *how* they are moving.

'Pace' is a way of understanding mobility as a relationship between people, time, and space. Pace connotes movement in action and animates the way pastoralists organise their journeys. This chapter explores the 'pace of pastoral mobility' along three key dimensions: a) the practical, to understand how pastoral mobilities are 'paced' in practice, b) the relational, to understand pace as a relational and social construct; and c) ideological, to show how pace is represented and understood within broader

social structures, politics, and development. All these dimensions are interconnected and overlapping.

Pace is produced practically by synchronising pastoral movements with resource availability. For example, the opening vignette of chapter 6 shows the constraints and possibilities for pacing as Pabiben waits to leave for Gujarat. Late rains had delayed harvests, slowing down the pastoralists in Kachchh as they waited for fodder to become available in Gujarat. Pastoralist movements are not only flexible but also precisely attuned to the rhythms of weather and crop cycles. Moreover, the interlinked features of flexibility and precision appear across pastoral practices and mobility strategies.

But as the farms began to open in Gujarat, Pabiben further delayed ‘crossing over’ by a few days to celebrate an important festival with her family in the village. Having waited for so long, she felt that it was worth delaying for a couple of days more to celebrate together. This shows that while pastoralists migrate for animal production, these movements intersect with other social, cultural, emotional, and political dimensions of their lives. These dimensions impinge on each other, and their interconnectedness allows pastoralists to navigate changing circumstances in varied ways.

As has been introduced in chapter 8, a state of excess activity and speed, an ‘overdrive’ linked to the ideology of globalised capitalism, pervades contemporary society. Such a ‘speed-up culture’ relegates pastoralists and their slow-paced mobilities to a subjugated position, which is internalised, challenged, ignored, and adapted selectively by them. Hence, Rabari experiences provide critical reflection on the wider questions of pace, speed and acceleration.

Further, pace is also ideological and political. In a time where fast-paced mobilities, speed and acceleration are valued and correspond to notions of progress and modernity, Rabari mobilities are attached to notions of ‘backwardness,’ ‘primitivism,’ and a sense of being ‘left behind.’ Pacing is embedded in such a politics in which some mobile practices are considered valuable, such as *farvanu*, and others are devalued, such as the *haal ne haal* of pastoral mobility. These generate certain new

aspirations, as seen through Valo's departure in chapter 8, and open questions about setting and modulating new tempos and rhythms (Amit and Salazar, 2020).

In section 9.2., I discuss the concept of pace and explain how it emerges through insights from the thesis. After that, I discuss the three dimensions of pace introduced here, that is, pace as practice in section 9.3, pace and relationality in section 9.4, and pace and modernity in section 9.5., before concluding.

9.2. The pace of pastoral mobility

This thesis shows how the practice of 'pacing' is critical to the success of pastoralism and its continued relevance. Space, mobility, and temporality come together and can be understood through the concept of pace and pacing, as discussed in chapter 2. Rather than 'point-to-point' connectors that are discrete, homogenous, and location-based, chapter 1 shows how pastoral mobility is the qualified movement of a 'walk,' an integrated experience, performed at various spatio-temporal scales. 'Pace' supports such a conceptualisation as it suggests the continuity of (im)mobilities that involves "speeding up, stopping, slowing down, hurrying, and waiting" (Molz 2009: 272).

While 'pace' is the speed at which mobilities are deployed, 'pacing' (by oneself or 'being paced' by others) is the active process through which the speed and rhythm of mobility are regulated. Pacing emphasises temporality as a process of actively modulating *how* people are moving rather than a singular focus on *where* they are going. Robabhai's comment in the opening vignette of this chapter justifies this focus. Further, pastoral mobilities are deeply embedded in webs of power through which 'pace' is negotiated, controlled, and managed.

Pacing and its attendant relations, technologies, and schemes explain how pastoralists practically take advantage of environmental, social, economic, and political variabilities. As such, pacing is an embedded and context-specific process. Chapter 7, for example, shows how the pastoralists pace their mobility to synchronise with the crop and weather cycles described in chapter 6. The pastoralists enact such pacing in interaction with farm owners, as described in chapter 3.

At the same time, the concept of ‘pace’ is also relevant to explain the changes taking place in the context within which the Rabari travel and work; that is, to think of the ‘new and changing circumstances’ referred to in the research question. As described in chapter 5, Kachchh is undergoing rapid transformation in its political economy, as its built environment and society are transformed along capitalistic and neoliberal lines. At the same time, the region is the site of accelerated movements that connect it to the global market through such development. Hypermobility is seen as a goal as speed is valorised as a symbol of progress and modernity, as discussed in chapters 5 and 8.

Finally, ‘pace’ allows us to explore larger ideological questions of development. Mobility and speed have come to symbolise ‘success,’ ‘freedom,’ ‘progress,’ and ‘modernity,’ as aspired for pastoral youth, as seen in chapter 8. Looking at the pace of pastoral mobility opens our minds to multiple possibilities rather than the binary of ‘fast’ and ‘slow,’ thereby disrupting the singular, linear and homogenous vision of development.

9.3. Pace in practice

The last section has explained ‘pace’ and shown how it is implied in the different chapters. This section discusses the strategic features through which pastoralists practically produce their pace to take advantage of spatio-temporal variability. It explains how mobility, paced through the interlinked constitutive elements of flexibility and precision, contributes to the persistence of pastoral mobility.

Pastoralism has long been defined by the extent, degree, and pattern of mobility, such as ‘nomadic pastoralism,’ ‘semi-nomadic pastoralism,’ ‘transhumance,’ etc. Such categories, as Krätli et al. (2015) show, are not often fruitful as they only describe what mobility *is* rather than what it *does*. Rather than focus on the type or form of mobility, they ask us to look at mobility as a strategy that remains open to change based on the pastoralists’ assessment. When looked at this way, the outcomes of mobility – that of improved animal production – take precedence. Mobility is seen as a fluid practice that responds to changes in context rather than tied to one form or pattern.

Flexibility thus emerges as a key feature of pastoral mobility. Terms such as ‘flexibility’, ‘flexible mobility’, ‘adaptation,’ and so on appear widely across scholarship and policy guidelines on pastoralism. While once condemned as archaic and irrational, flexible and opportunistic mobilities are acknowledged as vital to risk management in drylands, sustainable rangeland management, and the health and wellbeing of the flock.

Pastoral studies acknowledge flexibility as key to timing mobility to be ‘at the right place at the right time.’ Yet the temporality of the strategy, the here-and-now and contextual embeddedness of flexibility, are only limitedly recognised. Being flexible not only means having optionality or variability, but it also means having the agility, the “built-in elasticity” to perceive and respond immediately to change (Hazan and Hertzog 2011). Such real-timeness relies upon an intricate web of mobilities invoking multiple times, timings, and temporalities.

Confronted with change and uncertainty, the ‘nomadic present’ is “abductive,” where reasoning moves between knowledge from past experiences and future expectations to act in the present (Adams et al., 2009). It is acting in the now “by tacking back and forth between nitty-gritty specificities of available empirical information and more abstract ways of thinking about them” (ibid.: 255). This is exemplified by Pabiben’s missing or *yaad*, as seen in chapter 6, where she concludes that it was time to go to Gujarat based on her experience of being there at the time, as well as future expectations of the irrigated landscape in Gujarat as opposed to the aridity of Kachchh. Such reasoning seeks to acknowledge the “contingent assemblage of factors across time that led to the experience in the first place” (Kolinjivadi et al., 2020: 911).

While flexibility is widely acknowledged as an adaptation strategy in scholarship, the role of ‘precision’ in directing pastoral mobility remains limited. Flexibility is incomplete without precision. Without precision, mobility would seem like shooting darts without a board. Precision reveals the limits of both the capacity of pastoralists to adapt and the room to manoeuvre within the context. Pastoralists use their built-in elasticity, their nomadism, to fit “precisely” into windows of opportunity and adapt, negotiate, manipulate, overcome, or bypass changing circumstances. These

‘windows of opportunity’ lie at the intersections of circuits of mobility, as will be discussed in the next section, as the interlinked strategies of flexibility and precision are jointly deployed by pastoralists across space and time.

For example, as seen in chapter 6, Nathubhai’s flock moved among crop fields in Gujarat, slowing down or speeding up to synchronise their movements with harvest times. Rather than following a linear and predetermined path, they made decisions on the go, flexibly ‘zigzagging’ across the villages. But these movements were determined by the precise intersection of crop and weather cycles at which harvest took place. Similarly, the composition of their migrating group composition was variable, flexibly shapeshifting from a multi-flock to a single flock migrating group. But the group was organised to achieve a precise land:livestock:labour ratio, as seen in chapter 7.

Therefore, as produced through the interlinked forces of flexibility and precision, pace explains why pastoral mobility persists. Flexibility and precision work together to enable the best possible outcomes for pastoralists. As opposing but interwoven forces, it is the joint action of *flexibility* and *precision* that holds together the “meshwork” (Ingold, 2015) or “web of relations” (Cresswell, 2006) of mobility, thus leading to its persistence. They connect pastoral practices and institutions with contextual reality as they interconnect and are iteratively co-produced.

Of course, pace is inherently political; it both exerts a political force and is shaped by politics. Yet, as Kaaristo (2020) shows, the distinction between pacing oneself and being paced is not always clear. Chapter 3, for example, shows the ambivalent relationship between farmers and pastoralists, generating constraints and opportunities for mobilities. Mobilities are interrelated and may shift balance as individuals and groups move through time and space. What becomes mobile and what becomes immobile, how they are connected and assigned meaning is also governed by the relational politics of mobility. Such a political orientation thus helps us understand the broader universe within which pastoral mobilities occur.

In the vignette in chapter 6, for example, Pabiben experienced a deceleration given a delay in harvests governed by wider policies that, firstly, promoted the expansion of commercial agriculture and, secondly, facilitated resowing given the high rainfall

that year. The temporal expectations and sense of place were disrupted as Pabiben found herself in Kachchh, alone at camp, for an extended period.

In another example, in chapter 3, we saw Sanambhai ask, “*Tagdave chhe?*” [Are they hustling (you)?]. He was asking a fellow pastoralist about grazing access indicating the unequal power balance that tips in favour of farm owners.

At the same time, the pastoralists pace their mobility through the size of their migration groups. Some migration groups choose to include more flocks and travel longer distances to meet their production goals instead of others. *Mukhis* of larger migrating groups, such as Harjanbhai, accumulate and wield social power in interactions both within and outside their community, as seen in chapter 7.

This section has described how mobilities are paced in practice through the interlinked features of flexibility and precision. Yet, while the section implies the organisation of mobility with the flock for animal production, these mobilities are not only determined and governed by environmental, economic or production considerations but also have social, political, cultural, and affective dimensions. The following section shows how mobilities are organised relationally at the intersection of these many dynamics.

9.4. Pace and relationality

Krätli et al. (2015) show how conceptions of pastoral mobility often derive from their proximity to settled states and reinforce the binary between the ‘mobile’ and the ‘sedentary.’ For example, they give the example of a sample survey undertaken for livestock insurance that classified respondents as ‘fully settled,’ ‘partially settled’ and ‘nomadic,’ without considering that those who are ‘partially settled’ are also technically ‘partially nomadic.’

A sedentist bias historically privileges settled states over mobility and fosters binaries of nomadic versus sedentary, farmer versus herder, civilised versus tribal, and modern versus primitive (Maru, 2020). Deference to reified categories assumes pastoralism as a fixed system in an enclosed space. While the last section has shown how seeing mobility as a strategy undermines such rigid classifications, this section

further this argument by showing mobilities as a) relational to each other and b) in relation with each other.

Pace is the relational perception of mobility and immobility as speed is perceived only when seen in relief or as difference. For example, the vignette in chapter 6 shows how Pabiben is frustrated with the pace of her mobility compared to the previous years. She wished to accelerate and 'run' away.

Rapidity and slowness are not abstract effects but rather enacted in relation with actors, ideas, and realities (Lefebvre, 2004). Chapter 8, for example, shows how pastoral youth are looking for different mobilities that are not simply fast or slow, but perhaps, physically fast while being qualitatively more leisurely. Rani, for instance, desires *farvanu* or leisurely travel to be undertaken by a car. As another example, the pastoralists are now turning to tractors to carry their belonging rather than taking them on camels. While the tractor moves faster, the effort exerted by the pastoralists is less and hence preferred.

Hence, rather than slowness or speed, pace is the qualitative experience of velocity and is always felt in relation to other mobilities. Therefore, distinctions between movement and stasis, fastness and slowness, are best approached as representations of significance and possibility attributed to varying forms, durations, and timings of movement and the intervals between them (Salazar, 2018).

Mobilities are paced simultaneously across various intertwined spatial and temporal scales, as daily movements are nested within seasonal and inter-seasonal mobilities. As discussed in section 9.1., the opening vignette exemplifies this when Rani referred to the organisation of daily movements while Robabhai was speaking of interseasonal movements. Chapter 6 shows how migration group composition influences the frequency of movements; the larger the group, the more frequent its camp changes are. At the same time, the daily movements of the camp members also influence the frequency of camp changes. Varmiben's visit to the temple, for example, immobilised the camp in place for the day.

At the same time, mobilities are integrated across a variety of forms and modes (discussed in chapter 2); that is, they are in relation to each other. Mobilities to

participate in or as part of social or religious celebrations intertwine with mobilities of the flock in myriad ways, as seen in the case of Varmiben's visit, for example. In another paper, I present a snapshot of the daily movements of Nathubhai's family and show how various movements co-constitute daily migration (Maru, 2020). The overlapping mobilities respond to a constellation of social, economic, ecological, cultural, political, and aspirational relationships that are tied to and impinge upon each other.

While early scholarship erroneously assumed that pastoral mobility was simply influenced by environmental factors, that is the variability in fodder availability, Dyson-Hudson (1972) argues against this conflation or "yoking" together of livestock rearing and spatial mobility. He called for the separation of pastoralism, or livestock rearing, and nomadism, or spatial mobility, showing how pastoralists may move for the flock as well as for other purposes.

I agree with Dyson-Hudson's assessment, but only partially. I accept that pastoral mobility is influenced by factors other than livestock rearing, but I do not go as far as arguing for a separation of these phenomena. Rather I recognise the contemporary pastoral movement as a tapestry of several intersecting mobilities that have a bearing on each other (Maru, 2020). The interconnectedness of mobilities provides room to manoeuvre changing circumstances by activating alternate mobilities, across scales, forms and motivations, in response to variabilities (ibid.).

Several studies show that pastoralists move(d) for reasons other than livestock production. For example, Dangwal (2009) shows that Gaddi and Bhotiya pastoralists from north India traded everyday items, such as salt, between India and Tibet in the 19th century, along with keeping large flocks of sheep and goats. Irons (1974) shows how the Yomut Turkmen moved with their herds because of the political and military advantages of such movements. The Rabari I worked with, for example, have certain temples and pilgrimages where they take their animals to pay homage to their local saints, *jokk aapva* [*jokk* = penning, *aapva* = to give] as they say, spending a night or two in the fields adjoining the temple site. Births, deaths, weddings, and festival celebrations are often reasons for the Rabari to speed up or slow down the pace of, or redirect, their movements. Therefore, while pastoral mobility is often conflated with livestock movements, observing how mobilities are

paced reveals the various socio-economic and political forces that influence the speed, distance, timing, and frequency of movement.

Similarly, pastoral mobility is paced in interaction with other socio-economic systems. Pastoralism is understood as an enclosed and fixed system through a narrow colonial viewpoint that sees different landscapes, spaces and subsistence systems in their insularity, rather than acknowledging the intimate relationships that tie them together (Bhattacharya, 2018). Counter to this, Chapter 5 has shown how the integration of crop and livestock systems at various spatial and temporal scales, such as the seasonal movement of the Rabari across regions, offers advantages to both production systems.

Livelihoods are diversified even at the household level. While Nathubhai and two of his sons are primarily involved in pastoralism, his other two sons work odd jobs, such as driving a tractor, working in a factory, as guards to local windmills, or in a doctor's clinic. Nathubhai also farms on owned and encroached land, and owns camels, herded by specialised camel pastoralists, as discussed in chapter 3. What is significant is that the pastoralists move in and out of these various roles. As shown in chapter 7, Valo leaves shepherding to try his hand at business and returns when unsuccessful. Robabhai was 'mobilised' in Valo's absence altering the pace of his and Nathubhai's flocks. Observing the textures, "speeds, scales and viscosities" (Sheller and Urry, 2006: 213) of pastoral mobility, qualified as pace in this thesis, offers the possibility to understand these many interconnections.

9.5. Pace and ideology

"Mobility has become the most suitable trope of our time, an era of accelerating at what seems to be even faster rates of speed..."

- Tiessen (2008: 112)

Modernity is often told as the story of acceleration. It is based on bounded, singular, and linear notions that valorise speed and acceleration. Premised on the "globalising modernity of (neo)liberal capitalism" (Scoones and Stirling, 2020: 2), acceleration is discursively associated with ideals of "success," "freedom," "beauty" (Molz, 2009: 283), progress and advancement. Several scholars have reflected on the *zadapi*

zamano [fast age] or “speed-up culture” (Sharma, 2014) as being characterised by a “fetishisation of speed” (ibid.), “fast-pace” of life, an “overdrive” (Amit and Salazar, 2020), and “being unable to stop and less able to stand still” (Bauman, 2000: 28). In modern times, the speed of movement and access to faster means of mobility has steadily risen to become the main instrument of power and domination (ibid.).

Chapter 5 has shown how the drylands of Kachchh are seen as empty and unproductive. Through developments under the axes of the company, canal, and cattle, the region is sought to be incorporated within a linear univocal and sequential vision of modernity. These changes seem like an “encapsulation” (Kavoori, 1999) of the pastoral way of life not only by fast-paced capital-driven development that places unflinching faith in abstracted notions of technology-driven growth but also by an interested and invested state that carefully picks the beneficiaries of this growth, chooses which science is right, and in fact is able to well integrate unscientific religio-cultural discourses within its agenda.

Recognising the hegemony of modern temporalities, Bauman (2000: 12) contends,

“Modern ‘chronopolitics’ placed them (pastoral nomads) not just as inferior and primitive beings, ‘underdeveloped’ and in need of thorough reform and enlightenment but also as “backward”, “behind time” and suffering from “cultural lag”, lingering at the lower rungs of the evolutionary ladder and unforgivably slow or morbidly reluctant to climb it to follow the ‘universal pattern of development’.”

Such a view has led to several adverse policies since colonial times that saw mobility as a threatening pathology, criminalising mobile peoples, restricting their movement, settling them within camps, and enclosing pastoral resources. The “sediment of nomadism” (Kaufmann, 2009) continues to this day through policies that privilege spatial fixity, such as the provision of social services or titles to land, that inadvertently hamper pastoralism even when meaning not to, as discussed in chapter 1.

A disdain for the development trajectory of pastoralism was implicit in earlier anthropological scholarship, even when speaking in favour of pastoralism. Khazanov (1994), for example, showed how “nomads,” as specialist livestock producers, not only interacted with but also depended on the sedentary “outside world”. While a departure from earlier isolationist accounts that relegated pastoralists into a niche

of their own, the book perpetuated the binary between the ‘nomad’ and the ‘outside world.’ Humphrey and Sneath (1999), in their book, *The End of Nomadism*, show how mobile pastoralism is compatible with many social and economic systems, including technologically advanced and market-oriented ones. While seeking to show pastoralists in good light, they continued to defer to a linear order of development.

Pitched against the fast times of modernity is the apparently slow and measured pace of pastoralists. Chapter 8 has spoken about the temporalities of waiting experienced by Rabari youth who feel like they are ‘lagging behind’, and who must ‘catch up’ or ‘leapfrog’ to where others have reached” (Scoones and Stirling, 2020: 1). They aspire to fit into the “light” and “liquid modernity” (Bauman, 2000) and the acceleration of *farvanu* and city life.

While mobile ways were out of favour in the “solid stage of the modern era,” Bauman (2000: 13) claims the current era of “liquid modernity” is witnessing the “revenge of nomadism over the principle of territoriality and settlement.” Highlighting the centrality of mobility in current times, he says (ibid: 13),

“The era of unconditional superiority of sedentarism over nomadism and the domination of the settled over the mobile is on the whole grinding fast to a halt.”

Yet, while ‘digital nomads’ and ‘neo nomads’ are welcomed within this era of hypermobilities, pastoralists remain outside the “hard-wired, one-track race to the future” (Scoones and Stirling, 2020: 1) of contemporary modernity. Elliott and Urry (2010) list thirteen different kinds of the social practice of contemporary mobility, such as business and professional travel; tourist travel; discovery travel; refugee, asylum, and homeless travel; and even military and medical travel. Yet these focus on fast, global, and urban movements at the detriment of movements like those of the pastoralists. As Agrawal (1999: 20) says, mobile pastoralists “are taken to be nothing but remnants of outdated social formations that have no place in our modernity.”

Yet, as Graeber and Wengrow (2021: 125), highlight,

“This is precisely why the ethnographic record is so important. The Nuer and Inuit should never have been seen as ‘windows on to our ancestral past’. They are creations of the modern age just the same as we are – but they do show us possibilities we never would have thought of and prove that people are actually capable of enacting such possibilities, even building whole social systems and value systems around them. In short,

they remind us that human beings are far more interesting than (other) human beings are sometimes inclined to imagine.”

Following, this invocation, I encourage us to look closely (but not romantically) at the pace of pastoral mobility to draw insights from pastoral experiences to address both pastoral and mobilities studies, and development in general.

As discussed in this section, the idea of modernity is premised on the promise of certainty (Adams et al., 2017) - the promise that a linear and singular pathway to progress, represented by speed, is the best and only possibility for our present and future. But as Scoones and Stirling (2020: 1) point out:

“Given diverse uncertainties, there is no single assumed endpoint; no one version of modernity and progress, and so directions chosen in the pursuit of sustainability and development depend on social and political choices.”

They contend that failures to embrace uncertainties as an ontological position can lead to possibly the “gravest form of oppression in the world today: the invisible foreclosing of possible futures” (ibid.: 2). Instead, embracing uncertainties offers a more plural vision of progress with multiple versions of modernity that incorporates different viewpoints and pathways (ibid.).

Therefore, I seek to abandon linearity in favour of opening to the multiple pathways to development produced by pastoralists. I am not devaluing the ‘fast’ mobilities of modernity in favour of ‘slow’ pastoral mobility but aim to show that pastoralists do not move singularly fast or slow, but rather sometimes fast and sometimes slow, sometimes leaping and sometimes crawling. Pastoralists disrupt the seductively simplified narratives of acceleration as they display “not a singular tempo or its quickening but rather an “assemblage of different beats”... not as a singular abstract temporality but as the site where multiple temporalities collide” (Crang, 2011: 189).

Similarly, Sharma (2014: 8) questions the discourses that argue that the world is speeding up as a “problematic cultural context for the way people understand and experience time.” She shows that different social groups have different relationships with differentiated mobilities. At the same time, she considers a valorisation of “slow” movements, such as the increasingly popular notions of slow living, slow travel, etc., as equally problematic for perpetuating the binaries between slow and fast (ibid.). Instead, just as this thesis aims to do, she ruptures the binary between

going fast and slow to show an “uneven multiplicity of temporalities that is complicated by the labour arrangements, cultural practices, technological environments, and social spaces that respond to this so-called globalised, speedy world” (Sharma, 2014: 9).

The Rabari, for example, selectively adapt, bypass, or embrace new developments as they engage with them. For example, most Rabari youth, including young women, own a smartphone and have active social media accounts even though they continue defecating in the open. The smartphone has penetrated rural India as a mobile technology that is accessible and portable and helps build and maintain social connections, an essential feature in pastoral contexts. It helps receive real-time information and maintain connections with the village and relatives left behind. While mobile phones are adapted and assimilated within daily life, toilets are bypassed, something inexplicable for urban mentalities that have engaged with the introduction of these technologies differently.

Further, as chapter 8 has shown, pastoral youth adapt to new developments in the political economy on their own terms. Rather than seek menial jobs in factories as labourers or work on farms as one may assume, the pastoral youth seek autonomy and leisure. Working in a factory or farm is laborious and requires a certain set of socio-economic achievements like a minimum educational qualification. But having economic security within pastoralism means that the youth can seek to bypass such jobs and start small businesses of their own, albeit businesses in which the community has the experience, such as dairying or driving a taxi.

Rather than adhere to the oppressive temporalities of factory work, the youth seek to be their own bosses and associate leisure with higher social status bypassing the ‘industrial stage’ of ‘modernity’. Migrating with tractors instead of camels is also part of the same adaptation for leisure, as seen in chapter 7. While the youth do not reject a desire for the luxuries of modern and urban life, they generate “altertemporalities” (Kolinjivadi et al., 2020), produced not outside of capitalist development but in interaction with it. Through this, they seek to coordinate their time “not only to enhance the possibility of survival but also to reclaim the material and symbolic conditions for the flourishing of life” (ibid.: 907).

At the same time, mainstream visions of the ‘globalising modernity of (neo)liberal modernity’ are not without their own aesthetics. The animal production of the Rabari is very much part of a global value chain and supplies to a growing international and domestic market. In fact, India is considered a prominent exporter in the international livestock market. Moreover, Rabari production remains lean, efficient, and sustainable, given its low reliance on external inputs, synchronisation with plant lifecycles, and consequent nutrient cycling. Yet, pastoralists are considered inferior and primitive. New technologies are celebrated for their transformative potential, yet practices such as pastoralism that are efficient, sustainable, resilient, and productive are considered backward,¹¹⁵ revealing the politics and aesthetics of modernity (Vansintjan, 2020).

Similarly, chapter 5 has shown how negative narratives are associated with dryland regions like Kachchh, despite rich ecology and culture. Massey (2005) has shown how spaces are organised on a linear sequential scale based on a hegemonic view of development, justifying the development along the axes of company, canal, and cattle. Such a perspective rejects the “coevals of space” or “cotemporality of space” as different regions follow their own organic pathways (ibid.).

Observing pastoral mobility shows how it brings together various objects, ideas, and events. The pace of pastoral mobility emerges as polychronic, multitemporal, and one that gathers time in “multiple pleats” (Serres and Latour, 1995: 90). The discussion above shows that the pastoral experience is the “poetics of multiple *durees* coming together” (Kofman and Labas, 1996: 29). The concept of pace highlights the multiplicity of modernities as experienced by the pastoralists to challenge the “singularisation of value registers” (Fitz-Henry, 2017: 3); that is, the deference to only one way of valuing or interpreting development.

9.6. Conclusion

Due to their mobility, pastoralists have historically been seen as either wanderers who escaped the pressures of civilisation or as inferior, unsophisticated, and irrational peoples. Hence, the death of pastoral mobility has been predicted time and

¹¹⁵ Although several experts and international development agencies now do recognise these qualities of pastoralism.

time again. Yet, pastoral mobility continues to be a key to pastoral practice and way of life in many parts of the world. Given the importance of mobility, this thesis has sought to understand, ‘Why does pastoral mobility persist and how does it engage with new and changing circumstances?’

This chapter has synthesised insights from the thesis and has interpreted them through the concept of pace. I find pace a useful concept because, rather than a discrete point or location-based understanding of mobility, it shows mobility as a dynamic flow and always in process. Such a view makes three key contributions: it practically shows how pastoralists synchronise and speed their movements through the interlinked features of flexibility and precision. In this way, they are able to take advantage of the spatio-temporal variability in fodder availability, as well as other factors such as improved market conditions for better livelihood outcomes.



Secondly, the idea of ‘pace’ and ‘pacing’ ruptures the dichotomy of mobility and immobility in favour of a relational view of rapidity and slowness. Further, it shows how pastoral mobility is not just about livestock mobility but rather in relation with several aspects of pastoral lives, such as social, cultural, religious, and affective aspects, which become apparent when mobilities are qualified as pace. Moreover, it

shows pastoralism as a livelihood in interaction with other systems and across ecological zones, especially its integration with crop farming, as a way of breaking the divide between the settled and nomadic, farmers and pastoralists.

Thirdly, the idea of “pace” is used to symbolise and explore the idea of modernity. Seen through a sedentist bias, pastoralists have always been relegated to an inferior position. Their seemingly ‘slow’ mobilities seem to be in conflict with the fast pace of modernity. Unpacking pastoral experiences ruptures the binary between fast and slow to show how mobilities are paced in a variety of ways, sometimes fast, sometimes slow, and differently at other times. Recognising the temporal footprint in pastoral mobility dispels the homogenising effects of rigid chronologies - enshrined in bounded, fixed, linear, and singular notions of progress and modernity, and practically offers the opportunity to capture the pastoralists’ capacity to adapt to changing times.

Chapter 10

Conclusion

10.1. Introduction

This thesis has explored the temporality of pastoral mobility. Drawing on ethnographic research with the Rabari pastoralists of western India, the thesis has looked at how time, and the experience of time, is deeply embedded within the practice and politics of mobility. It has shown how mobility is not merely a displacement from point A to B but a lived duration, a temporally mediated affective experience. Further, rather than a static phenomenon, the thesis finds that the concepts of ‘pace’ and ‘pacing’ better represent the dynamic nature of mobility. ‘Paced’ at the intersection of various flows, mobility is more than an abstracted sense of speed and slowness. It is contextually situated and intertwines with various actors, institutions, and ideas.

Cresswell (2010) has listed six constituent elements of mobility, namely: a) motive force – why something moves; b) velocity – how fast it goes; c) rhythm – what its rhythm is; d) route – what route it takes; e) experience – how it feels; and f) friction – when and how it stops. Through an empirically grounded analysis, I bring out all these different elements of pastoral mobility in the thesis. While the initial chapters lay the foundations for the thesis by discussing the concepts (chapter 2), community (chapter 3) and context (chapter 5) underpinning the analysis, the later chapters discuss pastoral experiences through the themes of rhythms (chapter 6), the migrating group (chapter 7), and social mobility and waiting (chapter 8). Finally, the penultimate chapter (chapter 9) brings together the insights from this thesis through the concepts of ‘pace’ and ‘pacing’ discussed as a practice, a relation, and an ideology.

Adam (1990: 5) has said,

“Our concepts and theories, our seeing and our actions are all mutually implicating and fundamentally interconnected.”

Therefore, academic scholarship such as this has the potential to influence policies and programmes on the ground. This chapter highlights the key empirical,

conceptual, and practical contributions of this thesis and their relevance in addressing questions of development today.

10.2. Empirical contributions

10.2.1. Contributions to pastoral studies

This thesis contributes to current debates within both pastoral and mobilities studies. Pastoral mobility is about space *and* time. In chapter 1, I argue that despite the co-implication of space and time in pastoral mobility, literature from pastoral studies has tended to focus on its spatial dimensions and neglects the temporal. Therefore, through a rich and textured description, the thesis has shifted focus away from the farms and fields and the features of the places of origin and destination, often found in scholarship on pastoral mobility, to the lived temporalities of mobility. It has, hence, filled a critical gap in the literature by highlighting the times, timings, and temporalities of pastoral mobility.

Further, although the Rabari is a prominent pastoral community in India and has a strong ethic of mobility, there is limited scholarship available on the community. In general, there are far fewer studies on Indian pastoralists as compared to other parts of the world despite their large population and important contribution to national and global livestock markets. Therefore, through the case of the Rabari pastoralists, the thesis brings into conversation evidence from a neglected region in pastoral studies.

Notably, the case study highlights the interactions between pastoralists and farmers. While such an integrated crop-livestock system is found in many parts of the world, it has not received much attention especially, in English language academia. Analysing such a system can provide insights to address key issues in pastoral development today, namely pastoral land tenure and conflict between farmers and herders.

Not only is the study a great case from India for pastoral studies broadly but is an important contribution to Indian pastoral studies itself for the above reasons – because it records the life and times of a prominent Indian community, and also gives

some insight into a particular type of production system that integrates crop and livestock at scale. The context of Rabari pastoralism in India is unique given the specific landscape and weather conditions, as well as the social dimensions given the population density and the specific caste-class-religion dimensions that enable and hinder mobility. The temporal becomes even more relevant in such a context, and the thesis makes a unique contribution by bringing theoretical debates from different disciplines, only limitedly explored in Indian academia, to the study of Indian pastoralism.

10.2.2. Contributions to mobilities studies

“All the world seems to be on the move,” say Sheller and Urry (2006: 208) in their seminal paper introducing the “new mobilities paradigm.” Yet, as Quicke and Green (2018: 646) point out, mobilities studies do not seem to pay attention to “mobile (or nomadic) cultures.” Instead, the focus seems to be on fast-paced urban mobilities. Therefore, I offer the case of the Rabari pastoralists to introduce more scholarship on ‘traditional’ or customary rural mobilities. At the same time, I seek to bridge the theoretical and empirical divide between pastoral studies and mobilities studies.

Moreover, thinking through the concept of ‘pace’ is gaining interest within mobilities studies, especially when thinking of migration mobilities. Through the reflections presented here, the thesis builds on the concepts of ‘pace’ and ‘pacing’ that might be interesting in other contexts as well.

Söderstrom et al. (2013) identify three key features of critical mobilities, which are: a) they appear as problematic in the discourse of governments and media, b) they have the capacity to provide critical perspectives on the constitution of society through an approach that foregrounds these mobilities, c) they probe the limits of the mobilities approach itself as well as productive encounters with the ways of thinking. Given these features, I believe that pastoral mobility could be considered a critical mobility that provides vital insights.

Understanding pastoral mobility offers the empirical, methodological and conceptual alternatives that could efficiently and creatively address global challenges and complexities. This is also the outlook of the Pastoralism, Uncertainty, and Resilience

(PASTRES) project to which my research is affiliated. The project seeks to draw lessons from pastoral cases to address global issues such as financial and commodity systems, critical infrastructure management, disease outbreak response, migration policy, climate change, and conflict and security governance, all of which have a strong component of mobility or can be seen as mobile systems.

10.3. Theoretical contributions

This thesis has sought to understand why pastoral mobility persists and how it responds to new and changing circumstances. It has responded to the question through a temporal analysis of pastoral mobility. It has looked at the temporalities of pastoral mobility both as objects for analysis and as an analytical lens through which to look at aspects of social life. It has looked at several aspects of time, such as seasons and crop cycles, age and generation, the past, present and future, and the ideas of progress and modernity. Moreover, it contends that an appreciation of the interconnectedness of these aspects fosters a more holistic and deeper understanding of pastoral mobility.

As chapter 9 shows, **‘Pace’ emerges as the overarching binding concept** that brings together the various reflections from the thesis. ‘Pace’ qualifies mobility and adds texture to our understanding of mobility. Three dimensions of ‘pace’ are discussed: **the practical, the relational, and the ideological**, each of which has its own significance. Further, ‘pace’ is seen both as a phenomenon and as the process of ‘pacing’ and ‘being paced.’ It is imbued in its social and cultural history and is politically mediated.

Further, pace can be seen as **a fact, a process, and a method**. Pace as a phenomenon is the experienced and lived speed at which mobilities are deployed in relation to people, non-human beings, ideas, and institutions. It is processual as mobilities are variously ‘paced’ through active engagement, contextual situatedness, and political mediation. And finally, it is methodological, as ‘pace’ can be used as a starting point to uncover the entanglement of relationships manifested through mobility.

Through the notion of pace, several key dimensions of pastoral mobility come to light. Firstly, while flexibility is well recognised as lending agility and adaptability to pastoral mobility, the thesis contends that flexibility alone cannot secure the advantages of mobility. It is **the interlinked features of flexibility and precision** that ensure that pastoral strategies are contextually attuned to maximise on environmental, social, economic, and other variabilities. Whether it is linking with harvest cycles, managing the composition of the migrating group, or altering the breed of the animal, the various strategies deployed by pastoralists show the intertwining of flexibility and precision.

Secondly, we see that mobilities are deployed not in isolation but rather **in intersections with different mobilities at various scales**. For example, religious mobilities like visits to the temple routinely intersect with livestock mobility, as discussed through several examples in chapters 7 and 9. Similarly, short-term daily movements intersect with longer-term intra- and inter-seasonal movements, as seen in the opening vignette of chapter 9. Importantly, livestock mobilities intersect with agrarian mobilities, whether it is movements of crops or agrarian labour (as seen in chapter 6).

Thirdly, mobilities are **multiple and non-linear** such that there is not one but many possible manifestations and pathways towards development and progress. Tracing the different trajectories of different pastoralists and migrating groups, the thesis shows that rather than an ‘either/or’, they follow an inclusive ‘and’ configuration as discussed in chapter 9.

Fourthly, mobilities are revealed as **affective experiences**. Realities are not outside of oneself but made meaningful through lived experience. Paying attention to the temporal automatically highlights the affective and shows mobility as lived duration.

Lastly, pastoral mobilities have **limits** and thresholds to adaptation. Amit (2006: 104) questions that “if the restructuring of work and markets (along capitalist lines in my case) requires increased “flexibility” to succeed, then it is hard to view one’s adaptability to this circumstance as altogether or even primarily of one’s own choice and making.” We walk a thin line between overemphasizing capitalist oppression

and thereby undermining pastoralists' capacity to adapt, on the one hand, and becoming insensitive to the slow violence of accelerated transformations over time, on the other hand. Observing the interplay of 'pacing' and 'being paced' alerts us to the political mediation of pace.

10.4. Practical contributions

Several hundred million people worldwide are estimated to be practising mobile pastoralism today (FAO, 2022). Pastoralists make great contributions to global and national economies, as well as to environmental sustainability (ibid.). Mobility is increasingly recognised as key to these achievements and to the social, cultural, and affective life of pastoralists. In the past couple of decades, several international organisations, regional government institutions, and national governments have begun advocating in favour of pastoralism and mobility.

For example, the FAO-IFAD¹¹⁶ joint evaluation on their engagement in pastoral development, published in 2016, explicitly acknowledged that pastoral development had been misunderstood for most of its history, with mobility having suffered the most. A follow-up toolkit published by IFAD in 2018 on a holistic approach to engaging with pastoralism and a paper published by FAO in 2021 on updating understandings of pastoralism both centre mobility as a key area of work.

Kindled through my fieldwork experiences in Kachchh in 2015, my interest in mobility was stoked by being in the middle of these conversations. Working with the Pastoralist Knowledge Hub at the FAO, I constantly engaged with experts, pastoral representatives, and policymakers from across the world for whom pastoral mobility was a key concern. During my time at the FAO, I contributed to two policy documents on pastoral mobility as well, namely: *Crossing Boundaries: A review of legal and policy arrangements for sustainable pastoralism* and *Making Way: Developing national and legal policy frameworks for pastoral mobility*. The designation of 2026 as the International Year for Rangelands and Pastoralism (IYRP) by the United

¹¹⁶ FAO is the Food and Agriculture Organisation of the United Nations, and IFAD is the International Fund for Agriculture Development. Together they are responsible for the UN's work with food production systems and agrarian livelihoods.

Nations also signals the commitment of member nations to pay attention to pastoral systems.

Yet, as discussed in chapter 1, policies on pastoralism have not kept up with new understandings and continue to show a ‘sedentist’ bias, that is, be based on ideas of spatial fixity, control, and legitimisation. They overemphasise the spatial and undermine the temporal. Therefore, they inadvertently undermine or limit the potential benefits that the pastoralists may enjoy through mobility.

Laws such as community rights to land view pastoralism as a fixed system in an enclosed space and assume spatial security as the basis for safeguarding livelihood. Yet, while pastoralists seek secure access to resources, they also require flexibility to accommodate ecological, climatic, political, and economic uncertainties, a phenomenon termed the “paradox of pastoral land” by Fernández-Giménez (2002). Therefore, although well-intentioned, policies that confer exclusive tenure rights fail to recognise the advantages of mobility and the social relations of sites and paths that may have multiple users across time.

Such narratives and policies dominate pastoral development in India. The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 (or the Forest Rights Act, 2006) is one of the main policies used by Indian civil society to advocate pastoral rights. Yet, the policy lacks important accommodations for mobile populations, instead enclosing communities within defined territories and transferring power from local institutions to statutory institutions. Paying attention to mobility and the temporal organisation of mobility and strengthening institutions that support these can ensure inclusive decision making and sustainable livelihoods.

A similar argument can be made for transhumance corridors that narrow grazing opportunities for pastoralists through their “boundedness” and “staticity” (Rodgers, 2022). For example, in the Sahel, pastoralists and agriculturalists were assigned to a specific territory based on the assumption that different environments favoured different socio-economies (Retaille and Walther, 2011). Corridors were made to prevent rivalry over resources between the two zones, which peaked especially around droughts (ibid.). An oversimplification built on the rigid definitions of

‘nomadic’ and ‘sedentary,’ this zonal model failed as it did not account for local social practices and the interconnections between farmers and pastoralists. Further, this limits the potential benefits to be had through the seasonal integration of crop and livestock systems.

This research challenges and nuances some of the debates about Indian pastoralism and drylands. Most importantly it emphasises the interconnection between eco-regions, livelihoods and actors and disrupts views of pastoralism as fixed and bounded. Despite being dominant in Kachchh - so much so that one could imagine that there is no area in Kachchh where pastoralists may not have passed – pastoralism is invisibilised in the imagination of the state. The dryland region, largely seen as ‘waste,’ ‘empty,’ and ‘barren’ has been transferred to other uses such as industry, horticulture, and intensive farming, as well as been subject to deleterious ‘greening’ and conservation policies.

While the spatial has explicitly been foregrounded in these policies, temporal considerations are often misunderstood or ignored. For example, during the summer of 2020, the Bakerwal pastoralists in the north Indian state of Jammu and Kashmir paid a heavy price because of a delay in migration given the lockdown associated with the coronavirus pandemic (Hassan, 2020). While they were granted special permission to access their pastures, providing spatial security, a month's delay meant that their animals suffered as temperatures rose in the plains (*ibid.*) - grazing was not available in the plains as the lands they leased for winter grazing were now sown and the jungles had become overrun with poisonous herbs. And when they did receive permission, the time available in the hills was too little to cover all the pastures leading to a loss in productivity (*ibid.*). While this was a special case, given the uncertainty associated with the pandemic, it provides an opportunity to understand the importance of timing for mobility and how it may be politically mediated.

In a landmark recognition of pastoral mobility, the Economic Community of West African States (ECOWAS) introduced a Transhumance Protocol in 1998 to regulate cross-border pastoral mobility in the region. It seeks to facilitate mobility through designated corridors but only at designated times and in designated volumes. Several west African countries also enacted ‘Pastoral Charters’ around this time to

manage mobility, such as Niger (1993),¹¹⁷ Guinea (1995),¹¹⁸ Mauritania¹¹⁹ (2000), Mali (2001)¹²⁰ and Burkina Faso (2003),¹²¹ with each country imposing its own guidelines. Togo, for example, defines the number of pastoralists entering the territory, where from, as well as the dates of arrival and departure annually¹²² (IOM, 2019). It also requires that authorities be informed 60 days in advance of their arrival (ibid.).

The above examples of cases from northern India and western Africa show how policies overlook the temporal dimensions of mobility. They assume the “boundedness” and “regularity” of pastoral systems (Rodgers, 2021), as they do not account for the need for movement across ecological regions, like in the case of the Bakerwal, or where the Togolese government assumes predictability of movements. A temporal analysis also highlights intersections between pastoralist mobilities and mobilities of other resource users that are temporally ordered. At the same time, it also accounts for mobilities such as infrastructure or market and others that coincide and connect with pastoral mobility.

Understanding regions like Kachchh as a rich seasonal pasture, as a zone of mobility and turning the focus to understanding the importance of rotational grazing from rangeland restoration, including its temporal dimensions, can shift the narrative and actively involve pastoralists in holistic development initiatives. Although embedded within the political imperatives of national governments, a temporal analysis of mobility would have opened new ways of organising and more inclusive outcomes. It would have helped understand when the pastoralists use what resource areas. Such an analysis, combined with studies on animal lifecycles, market dynamics, daily routines, and generational aspirations, would have perhaps offered ways to secure resources (bearing in mind the overlapping rights of different resource users), facilitate mediation, and improve animal productivity in ways that have not been thought of before.

¹¹⁷ Ordonnance N° 93-015 du 2 mars 1993 fixant les Principes d’orientation du Code rural en Niger.

¹¹⁸ Loi N° L/95/051/CTRN portant code pastoral en Guinea

¹¹⁹ Loi 2000/044 portant code pastoral en Mauritanie

¹²⁰ Loi N° 004 du 27 février 2001 portant Charte pastorale en République du Mali

¹²¹ Loi N° 034/2002 du 14 novembre 2002 portant Loi d’orientation relative au pastoralisme au Burkina Faso.

¹²² They allow a window of stay from January to May, with dates adjusted each year according to rainfall and agricultural conditions (FAO-CIRAD, 2020).

Further, unlike the discrete, uniform, and measurable times of the state, the pastoralists' understanding of time is more experiential and attuned to context. So, for example, in the Togolese policy described above, providing 60 days' notice before moving would be rather difficult for pastoralists.

It also pushes us to see how the social is deeply shaped by the economic and vice versa. For example, in the case of the Rabari their social perceptions, relations and identity is deeply intertwined with the pastoral economy as it continues to remain lucrative. As the spatio-temporal relations of the livelihood undergo transformation so do the social aspects which requires that policies keep up with this changing field and think about implications at intersections rather through isolated silos as it has tended. In India for example, policies on pastoralism must lie at the intersection of the Ministry of Environment and Forests, the Ministry of Animal Husbandry, and the Ministry of Tribal Affairs.

At the more ideological level, the technocratic fetishisation of the time of clocks and calendars locks in the future to equate progress with capital (Kolinjivadi et al., 2020). It causes us to “exaggerate modernity’s inescapability, furthering its normalisation, pervasiveness and ultimate submission to it” (ibid.: 912).

Premised on the valorisation of speed, the control and manipulation of time have emerged as the dominant force channelled in the era of “liquid modernity” (Bauman, 2000). As Virilio (1986) shows, modern society is marked by a kind of spatio-temporal acceleration, a fetishisation of speed manifested through capitalistic consumption, as discussed in chapters 5 and 9. In this *zadapi zamano* [fast age] “only the sky (or, as it transpired later, the speed of light) was now the limit, and modernity was one continuous, unstoppable, and fast accelerating effort to reach it” (Bauman, 2000: 9). This “hegemonic temporality” of speed and access to faster means of mobility, whether that of people, objects, spaces, or ideas, has evolved as the main tool of power and domination (Bauman, 2000).

Insights from pastoral mobility can dispel the homogenising effects of rigid chronologies enshrined in bounded, fixed, linear, and singular notions of progress and modernity. Instead, it reveals mobility as contextually “paced,” sometimes fast

and sometimes slow and mostly in between, both materially and metaphorically. Seen as such, the thesis challenges the valorisation of speed and acceleration in discourse, imagination, and action in current times, not in favour of ‘slowness’ but rather to open up multiple possibilities.

What possibilities does a temporal analysis of mobility open for pastoral development? What new language can be adopted to speak of pastoral mobilities? What innovations and interventions can be deployed? How can policies and programmes better reflect pastoral realities?

As Lipscomb (2011: 281) says,

“The cultivation of temporal alternative[s] has a central political importance.”

A greater appreciation of the temporal dimension of mobility opens a new arena for action for pastoral development. It offers the possibility to design better policies, harness greater potentialities, and foster improved outcomes for pastoralists. With the growing interest in these fields, the time is ripe for exploring new ways of thinking about pastoralism and mobilities.



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Appendix I

Details of fieldwork interactions

In this appendix, I present detailed information regarding my fieldwork activities. The information provided here supplements the text in section 4.2.

During the duration of my PhD, I spoke with professors, scholars, experts, and NGO leaders working with pastoralists across the world, both professionally and academically. Specifically, during fieldwork I spent significant time interacting with local NGOs and using their facilities for work and stay in Kachchh. I presented my work at various academic forums and received feedback on different aspects from several peers and seniors. I also participated in various conferences and advocacy events organised by local and international development actors. Therefore, my work is embedded within and has gained from an ecosystem of knowledge on pastoral issues that may not be fully represented through the information presented here.

In the tables below, I mention names of pastoralists I visited and interacted with during the fieldwork period.¹²³ I have most often mentioned the names of the women¹²⁴ who hosted me. Often it is the male pastoralists or male head of households who are mentioned. Although access was negotiated with the male pastoralists, I mention the name of the women to honour the effort they put into hosting me. Where visits took place in the field or in the village homes, several members of the family and migrating group were most likely present, including hired shepherds where applicable. Moreover, as mentioned in the chapter, the camp was a space of many interactions with farmers, relatives, traders, shearers, friends, neighbours, and passersby all visiting. Therefore, although singular names are written, collective interactions must be assumed.

¹²³ All names are pseudonyms. For simplicity's sake, I have only named those pastoralists in full whose names appear in the thesis. In the case of other Rabari pastoralists, I have used initials. In case of others, I have used their role as descriptor.

¹²⁴ In the case of Rani and Pabiben, most times one or the other hosted me, or sometimes both were available at camp. Yet for simplicity and consistency, I have referred to Pabiben throughout the table.

Lastly, although I mention 'field' or 'village home' as the location, it is most likely the main location of interaction but not only as I may have gone also to the village home, market, watering hole, temple as well as travelled with the pastoralists as well.

Visits with pastoralists:

Date	Block	Village	Location	Name	Stay
28-Sep-19	Anjar	Anjar	Village home	K D	
30-Sep-19	Bhachau	Village W3	Village home	H R	
01-Oct-19	Bhachau	Village K1	Village home	B R	
01-Oct-19	Bhachau	Village K1	Field 580	Pabiben	Overnight
02-Oct-19	Rapar	Village L2	Village home	Roomaben	
03-Oct-19	Bhachau	Village O2	Village home	L R	
07-Oct-19	Bhuj	Village E2	Field 480	V R1	
09-Oct-19	Bhachau	Village W3	Village home	Virabhai	Overnight
10-Oct-19	Bhachau	Village W3	Village home	H R	
11-Oct-19	Bhachau	Village C2	Tea shop	G R	
11-Oct-19	Bhachau	Village K1	Field 580	Pabiben	Overnight
12-Oct-19	Bhachau	Village K1	Field 580	Pabiben	
14-Oct-19	Rapar	Village L2	Field 867	Roomaben	Overnight
15-Oct-19	Rapar	Village N1	Village home	D R1	
15-Oct-19	Rapar	Village N1	Village home	VR2	
16-Oct-19	Rapar	Village K2	Village home	K R	
16-Oct-19	Rapar	Village K2	Village home	Village headman	
16-Oct-19	Rapar	Village E1	Village home	Krupaben	Overnight
17-Oct-19	Rapar	Village E1	Village home	Krupaben	
10-Nov-19	Bhachau	Village T1	Tea shop	R R	
10-Nov-19	Bhachau	Village K1	Field 580	Pabiben	Overnight
11-Nov-19	Bhachau	Village T1	Tea shop	B R	
12-Nov-19	Bhachau	Village W3	Village home	Virabhai	
13-Nov-19	Bhachau	Village C2	Tea shop	G R	
13-Nov-19	Bhachau	Village M3	Village home	Sachiben	
14-Nov-19	Bhachau	Village C1	Field 297	Vasu	Overnight
15-Nov-19	Bhachau	Village C1	Field 297	Vasu	
21-Nov-19	Bhachau	Village I	Field 457	Vasu	Overnight
22-Nov-19	Bhachau	Village I	Field 457	Vasu	Overnight
23-Nov-19	Bhachau	Village I	Field 438	Vasu	Overnight
24-Nov-19	Bhachau	Village B1	Field 532	Vasu	Overnight

27-Nov-19	Bhachau	Village N2	Field 587	Pabiben	Overnight
28-Nov-19	Rapar	Village L2	Field 864	Roomaben	Overnight
29-Nov-19	Rapar	Village L2	Field 864	Roomaben	
01-Dec-19	Bhachau	Village B3	Field 286	Varmiben	Overnight
02-Dec-19	Bhachau	Village B3	Field 286	Varmiben	Overnight
03-Dec-19	Bhachau	Village B3	Field 286	Varmiben	Overnight
04-Dec-19	Bhachau	Village B3	Field 286	Varmiben	Overnight
05-Dec-19	Bhuj	Village C3	Field	N R	
15-Dec-19	Bhachau	Village N2	Field 593	Pabiben	Overnight
16-Dec-19	Bhachau	Village N2	Field 593	Pabiben	Overnight
17-Dec-19	Bhachau	Village N2	Field 593	Pabiben	Overnight
18-Dec-19	Bhachau	Village O3	Village home	Sachiben	Overnight
19-Dec-19	Bhachau	Village B3	Field 275	Varmiben	Overnight
20-Dec-19	Bhachau	Village B3	Field 275	Varmiben	Overnight
21-Dec-19	Bhachau	Village W3	Field	Limaben	
06-Jan-20	Bhachau	Village N2	Field 595	Pabiben	Overnight
07-Jan-20	Bhachau	Village N2	Field 595	Pabiben	Overnight
08-Jan-20	Bhachau	Village N2	Field 595	Pabiben	Overnight
09-Jan-20	Bhachau	Village W3	Field 389	Limaben	Overnight
10-Jan-20	Bhachau	Village O3	Field 279	Varmiben	Overnight
11-Jan-20	Bhachau	Village O3	Field 279	Varmiben	
17-Jan-20	Bhachau	Village B3	Field 226	Varmiben	Overnight
18-Jan-20	Bhachau	Village O3	Field 263	Varmiben	Overnight
19-Jan-20	Bhachau	Village O3	Field 263	Varmiben	Overnight
20-Jan-20	Bhachau	Village O3	Field 263	Varmiben	Overnight
21-Jan-20	Bhachau	Village O3	Field 263	Varmiben	
24-Jan-20	Bhachau	Village M1	Field 593-2	Pabiben	Overnight
25-Jan-20	Bhachau	Village M1	Field 593-2	Pabiben	Overnight
26-Jan-20	Bhachau	Village M1	Field 593-2	Pabiben	Overnight
27-Jan-20	Bhachau	Village M1	Field 593-2	Pabiben	Overnight
28-Jan-20	Bhachau	Village N2	Field 590	Pabiben	
02-Feb-20	Bhachau	Village T1	Tea shop	A shearer	
03-Feb-20	Bhachau	Village B2	Village home	V R3	
03-Feb-20	Bhachau	Village B2	Field 543	Vasu	Overnight
04-Feb-20	Bhachau	Village B2	Field 543	Vasu	
12-Feb-20	Bhachau	Village M1	Field 593-2	Limaben	Overnight
13-Feb-20	Bhachau	Village M1	Field 597	Pabiben	Overnight
14-Feb-20	Bhachau	Village K1	Village home	Pabiben	
04-Mar-20	Maliya	Village D1	Field 612	Pabiben	Overnight
05-Mar-20	Maliya	Village D1	Field 612	Pabiben	Overnight

06-Mar-20	Maliya	Village D1	Field 612	Pabiben	Overnight
07-Mar-20	Maliya	Village D1	Field 612	Pabiben	Overnight
08-Mar-20	Maliya	Village W4	Village home	Bharwad pastoralist	
08-Mar-20	Maliya	Village D1	Grocery store	Group of farmers	
09-Mar-20	Maliya	Village D1	Village home	Rameshbhai Farmer	
09-Mar-20	Maliya	Village W4	Tea shop	S R	
29-Jul-20	Bhachau	Village L3	Field 418	Camel herder	
29-Jul-20	Bhachau	Village L3	Field 476	Simaben	
29-Jul-20	Bhachau	Village L3	Field 473	K V	
29-Jul-20	Bhachau	Village L3	Village home	K H	
29-Jul-20	Bhachau	Village L3	Village home	D R2	
29-Jul-20	Bhachau	Village K1	Field	Ranabhai	
29-Jul-20	Bhachau	Village K1	Field 568	J V	
22-Aug-20	Nakhatrana	Village S2	Field 371	Rajanbhai	
08-Sep-20	Bhuj	Bhuj	Visiting relations	Nathubhai's visit	
12-Sep-20	Mandvi	Village O1	Field 471	Pabiben	Overnight
13-Sep-20	Mandvi	Village O1	Field 490	Pabiben	Overnight
14-Sep-20	Mandvi	Village O1	Field 490	Pabiben	Overnight
15-Sep-20	Mandvi	Village O1	Field 490	Pabiben	
20-Sep-20	Rapar	Village L2	Village home	Roomaben	Overnight
21-Sep-20	Bhachau	Village L3	Village home	D R2	
21-Sep-20	Bhachau	Village L3	Village home	G R	
21-Sep-20	Bhachau	Village W2	Village home	Sanambhai	
22-Sep-20	Bhachau	Village B2	Village home	Rajanbhai	
22-Sep-20	Bhachau	Village B2	Village home	Nimaben	
22-Sep-20	Bhachau	Village K1	Field	Ranabhai	
23-Sep-20	Bhachau	Village S1	Field 469	Simaben	
20-Oct-20	Mundra	Valadiya	Field	Pabiben	
22-Oct-20	Bhachau	Village S1	Field	Simaben	
22-Oct-20	Bhachau	Village W2	Field 451	Sanambhai	
13-Dec-20	Bhachau	Village K1	Field 550	Pabiben	Overnight
14-Dec-20	Bhachau	Village K1	Field 550	Pabiben	Overnight
15-Dec-20	Bhachau	Village O3	Field	Hemangbhai	
15-Dec-20	Bhachau	Village S1	Field 497	Simaben	Overnight
16-Dec-20	Bhachau	Village S1	Field 497	Simaben	

21-Dec-20	Bhachau	Village T2	Field 669	Pabiben	Overnight
22-Dec-20	Maliya			Crossing over	
23-Dec-20	Maliya	Village O3	Field 278	Hemangbhai	
25-Dec-20	Bhuj	Village L1	Village home	Livestock Trader	
04-Jan-21	Maliya	Village M3	Field 762	Pabiben	
04-Jan-21	Maliya	Village M3	Tea Shop	Dineshbhai Farmer	
13-Mar-21	Tankara	Village B4	Field 775	Pabiben	Overnight
14-Mar-21	Tankara	Village B4	Field 783	Pabiben	
02-Jul-21	Bhachau	Village N2	Field 612	Pabiben	Overnight
03-Jul-21	Bhachau	Village N2	Field 612	Pabiben	Overnight
04-Jul-21	Bhachau	Village N2	Fied 612	Pabiben	Overnight
05-Jul-21	Bhachau	Village N2	Fied 612	Pabiben	

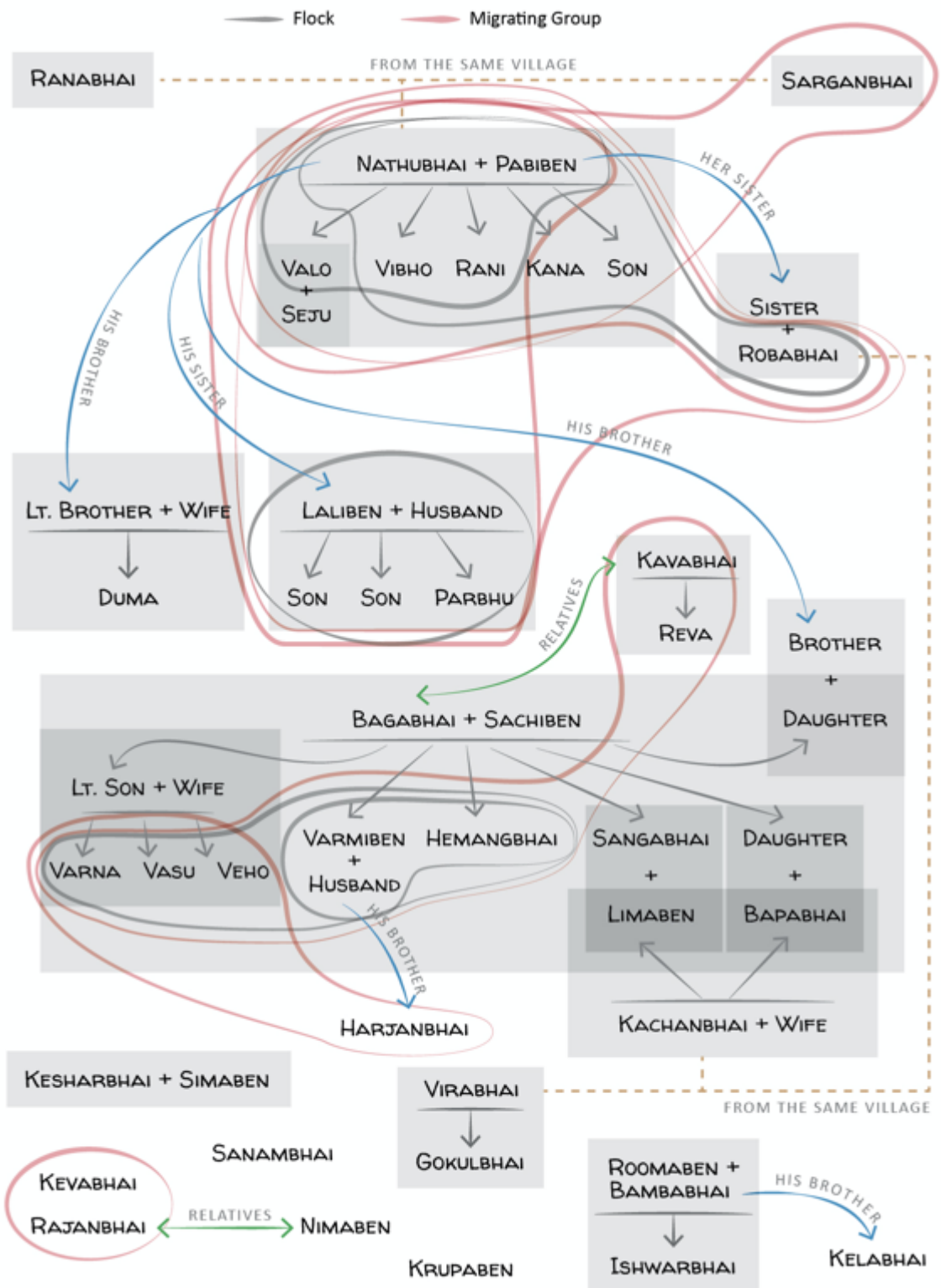
Officials interviewed:

Date	Place	Office	Designation
29-Aug-20	Bhuj	Gujarat Institute of Desert Ecology	Director
17-Oct-20	Bhuj	District Administration Office	District Animal Husbandry Officer
04-Dec-20	Bhuj	Gujarat Sheep and Wool Development Corporation	Director In-charge
08-Dec-20	Bhuj	District Administration Office	District Agriculture Officer

Appendix II

Social map of the Rabari interlocutors

This figure shows all the different people that have appeared throughout the thesis and the relationships between them. Developed in collaboration with Ammi Maru.



Appendix III

Migrating group configurations

In this appendix I mention the different configurations of Nathubhai's migrating groups as they travel across various resource areas through the year. This appendix seeks to supplement the text in chapter 6.

	Location	Period	Members	No. of animals	Main grazing
Dang 1	FLOCK 1				
	Kachchh district, Bhachau block	October 2019 – mid-Feb 2020	Nathubhai, Pabiben, Valo, Vibho	300 – 500	Grass, Sorghum

Dang 2	FLOCK 1				
	Morbi district, Maliya block	Mid-Feb – mid-March 2020	Nathubhai, Pabiben, Rani, Vibho, Robabhai, hired shepherd	400 – 600	Unirrigated cotton

Dang 3	FLOCK 1				
	Morbi district, Tankara block	Mid-March – late May 2020	Nathubhai, Pabiben, Rani, Vibho, Robabhai, hired shepherd	400 – 600	Irrigated cotton
	FLOCK 2				
		Mid-March – late May 2020	Laliben, Husband, Parbhu, Son 2, Son 3, Daughter-in-law 1	500 – 700	Irrigated cotton

Dang 4	FLOCK 1				
	Kachchh district, Bhachau block	Mid May – mid-June 2020	Nathubhai, Pabiben, Valo, Vibho	300 – 500	Castor

Dang 5	FLOCK 1				
	Kachchh district, Mundra and Mandvi blocks	Mid-June – early November 2020	Nathubhai, Rani, Valo, Vibho	300 – 500	Grass
	FLOCK 2				
		Mid-June – early November 2020	Sarganbhai, daughter, hired shepherd 1, hired shepherd 2	500 -- 700	Grass
	FLOCK 3				
		Mid-June – early November 2020	Mother, son, daughter-in-law, infant, hired shepherd 1, hired shepherd 2	300 – 500	Grass
	FLOCK 4				
		Mid-June – early November 2020	Father, son, daughter-in-law	100 – 200	Grass

Dang 6	FLOCK 1				
	Kachchh district, Bhachau block	Early November – late December 2020	Nathubhai, Pabiben, Valo, Vibho	300 – 500	Sorghum

Dang 7	FLOCK 1				
	Morbi district, Tankara block	Late December 2020 – early June 2021	Nathubhai, Rani, Valo, Vibho, Seju, Infant	300 – 500	Irrigated cotton
	FLOCK 2				
		Mid-March – late May 2020	Laliben, Husband, Parbhu, Son 2, Son 3, Daughter-in-law 1, Infant	500 – 700	Irrigated cotton

Dang 8	FLOCK 1				
	Kachchh district, Bhachau block	Early June – Late July 2021	Nathubhai, Rani, Valo, Vibho,	300 – 500	Castor, grass

Appendix IV

Photo Credits

Page No.	Description	Credit
1	Rabari man with a watch tattoo	Nipun Prabhakar
16	Top: Packing up camp and loading the van on the day of the cross-over	Nipun Prabhakar
16	Middle: Loaded tractor with Rabari camp on the road from Kachchh district to Morbi district	Nipun Prabhakar
16	Bottom: Tractor with pastoralists alongside the mobilities of cars and trucks, commuters/tourists and objects on the Surajbari bridge	Nipun Prabhakar
48	Rabari pastoralists shifting camps	Natasha Maru
52	Rabari with sack on shoulders: an icon of Gujarat	Nick Mayo
67	Rabari pastoralist with his flock in the morning	Natasha Maru
79	Two unmade charpoy beds in the morning, including mine, the researcher	Natasha Maru
82	Rabari family churning butter in a period with good milk output	Natasha Maru
83	Utensils carried by the pastoralists for a life on the move	Natasha Maru
100	Pastoralists members using their smartphones in camp at night	Natasha Maru
107	Kachchh's landscape post monsoon with a pastoral flock and camp in the distance	Natasha Maru
113	Rabari pastoralist overlooking his flock with a freight train in the background	Nipun Prabhakar
121	Rabari woman alone at camp	Natasha Maru
123	Rabari woman preparing tea	Natasha Maru
132	Pastoralists grazing in the monsoon	Natasha Maru
136	Pastoralist in cotton farm with sheep	Nipun Prabhakar
155	Pastoralists in cotton farm on a winter morning	Natasha Maru
159	Pastoralist tending to his sheep and administering medicine	Nipun Prabhakar

161	Shepherd leading his flock with his stick – the stick is a symbol of pastoralism	Nipun Prabhakar
164	Pastoralist woman with the flock in the morning	Natasha Maru
168	Migrating group in field showing multiple camps	Natasha Maru
172	Pastoralists at camp in the morning	Nipun Prabhakar
180	Young shepherds with their flock	Nipun Prabhakar
182	Shepherd leaving the field with his two dogs	Nipun Prabhakar
185	Pastoralist woman loading camp on a camel	Natasha Maru
187	Hands of pastoralist woman with watch tattoo	Natasha Maru
190	Pastoralists pushing a van stuck in the mud – the perils of shifting from camel to truck	Natasha Maru
196	Pastoral youths clicking a selfie	Natasha Maru
218	Pastoralist couple on charpoy enjoying a bit of relaxed time	Natasha Maru
230	Traces of pastoral camp	Natasha Maru