

# Waterworn

Climate Change Resonance in the Shivalik Hills of North India

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Aase Jeanette Kvanneid

Avhandling for graden philosophiae doctor (ph.d.)  
Universitetet i Bergen  
2018

UNIVERSITETET I BERGEN



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Climate Change Resonance in the Shivalik Hills of North India

Dissertation for the degree philosophiae doctor (PhD)  
at the University of Bergen

Aase J. Kvanneid



PhD Dissertation in Social Anthropology  
Department of Social Anthropology  
University of Bergen  
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*Til mamma*  
*Jeg savner deg*  
*Til Martin, Aksel og Idunn*  
*Jeg elsker dere*

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# Abstract

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This dissertation aims to explore the idea of climate change as it appeared amongst villagers in the rural Shivalik hills of North India.

I traced the discourse behind the practices of diverse local, regional and global development policies as I saw them materializing in the village, and found what appeared to be an ‘awareness campaign’ on climate change.

In the village of Rani Mājri, people live in an area of North India that is defined by the central government as ‘fragile’ and ‘ecologically sensitive’. Situated below the Himalayan mountains and above the Indo-Gangetic plains, the area is expected to be seriously affected by climate change and global warming through more erratic monsoon rainfall, erosion, siltation and landslides. Consequently, the hill village population have over time become subjected to various governmental schemes and projects aiming to both develop the people and conserve the environment, alongside facilitating for the mitigation of climate change.

I argued that this ‘campaign’ became entwined with existing discourses on modernity and environmentalism, so that information on climate change in Rani Mājri became filtrated through a new discourse on climate change *awareness*.

The campaigns directed at developing, modernizing and educating the villagers on issues of climate and environment, thus appeared poorly designed to register that the ‘awareness’ they wanted to propagate, was already there.

Central for my analysis was the social aspects of water, how it was shared and distributed. As a central element in shaping both social and ecological landscapes, people’s relationship with water was explicitly related to notions of power, cosmology and ‘progress’. Water, by controlling it or altering its course, thus affected how people in the village dealt with the environmental and social changes that they perceived around them. This became especially salient through the presence of a state ‘watershed management project’ I followed, and its associated practices. The focus on water also revealed an intimate relationship between humans, deities and the environment in which they dwell, and how this relationship also affected the *idea* of climate change in Rani Mājri.

## ACKNOWLEDGEMENTS

For all its weaknesses and flaws, this work is entirely mine. In the case of any misrepresentations, or in any breaches of the trust bestowed in me, the responsibility lies on my shoulders only.

For all its strengths, this work has also been a result of others, who will be thanked here.

First and foremost, I wish to thank those women and men of Rani Mājri, who put up with the *angrezi*, her nosy questions and strange etiquette, her baby that brought all those sleepless nights to your weary bodies, and her husband who for his dear life could not learn their language; to you, I am grateful, indebted, and honored to have made your acquaintance.

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Outside the realm of India and anthropological departments, thank you to all my friends and my dear family for keeping me (fairly) sane; I am so fortunate to have too many to mention by name, but I trust you know who you are. Thank you!

## A note on Text

*Hindi/Urdu/Pahāri* expressions have been transcribed and Romanized using John T. Platt's (2008) Dictionary of Urdu, Classical Hindi and English, and/or dialogue with professor in South Asia studies, Claus Peter Zoller, unless otherwise stated.

Some simplifications have occurred when, or if, they have established equivalents in roman characters, such as Śiva to Shiva, Pančāyat to Panchayat etc.

*To increase readability*, transcribed words appear generally parenthesized.

*Certain words have* no settled equivalent, such as the Shivalik Hills, which is also spelled Sivalik and Siwalik. As the 'Shiva' in 'Shivaliks' refer to the Hindu deity Shiva, I have chosen Shivalik throughout my text.

*All names of* individuals and places are anonymized, unless otherwise stated.

*The use of* ethnographic present in the textual representation in some of my ethnography, is chosen because the immediateness this brings to certain experiences in the field. Discussions of the appropriateness of the use of tenses in ethnographic writing have been considered before making this choice.

# A Foreword

---

At the end of July 2013, it began to rain heavily after breakfast. People withdrew indoors, the rain again stalling outdoor activity. The monsoon had been going on for a few weeks, so the shower was met with damp sighs, far from the unabashed enthusiasm that the first showers received.

I joined Dipika, my neighbor, in her old, *kaćcā* (mud/dung) house, to wait for the rain to halt. Her husband was late for work in the factory because of the rain, and let my son sit on his cherished motorcycle, parked outside and in shelter, to make the time pass. The shower was heavy, and intense. When it passed, and Dipika's husband could finally drive off, I too was able to continue doing my work – the laundry. I was lucky and could use the tap outside the bathroom outside our room. These water-filled days, the laundry was seldom done in the irrigation channel (*kuhl*) directly, if one could avoid it, as the water was brown and filled with earth, sand, leaves and twigs. I had to visit the toilet before I could resume my work, however, and while I was sitting there, I heard a deep rumble from outside. First, I thought it was thunder, but it made no sense - the sound was deeper, more muddled, and so immediate. Puzzled by the sound I hurried out, and as I stepped outside, I saw my husband and Babu, a young relative of the family we rented our room from, leaning over the rails of the roof above me.

“Did you hear that?” they exclaimed and ran down the stairs towards me. Together, we walked towards the edge of the ledged patio outside our room – and we saw what had caused the sound. Half of the brick wall, built to extend the patio, was gone. It had slid down the steep hill and piled up against the small row of trees aligning the dried-out river bed below. How many meters was it down there? 80? 100? We looked astonished at each other and immediately stepped back – seconds later the rest of the brick wall followed down the hill, just in front of our feet. Now the whole ledged patio was gone, and there was but a brink of land left, a few

meters wide, between the house and the landslide. Padma and Naveen, the two eldest daughters of Prakash from whom we rented the room, arrived with their manure (*ghobbar*) baskets and took initial control over the situation. Ordering everyone else to stand back, they called their mother and began to carry valuable materials like bricks and logs away from the edge. Soon, a stone-faced Prakash arrived. He had been called from his work on the fields, and together, the family cleared the ledge completely.

The landslide that took place outside the room we rented during the North Indian monsoon season of 2013 ended with no casualties, and was approached by the family we lived with, as an event that had to be mediated through ritual. As my dissertation deals in part with the ritual responses to changes in the environment, and approaches them as a part of a ‘resonance’ to the climate change process, this landslide is one that I will return to several times throughout the forthcoming text.

However, the ritual response to the landslide was just one amongst many other responses to environmental and social stress that I observed during fieldwork. Neither of them were met with ritual responses alone.

During my fieldwork amongst rural, small-scale farmers of the lower Shivalik Hills of North India, I spent close to a year (November 2012 to September 2013), aiming to find out how local ideas and discourses of climate change information impinge on how people become ‘environmentally aware’.

I concerned myself with ‘environmental awareness’ in a rural Shivalik Hill village, because life and prosperity there seems to hinge on an environment that is somewhat predictable; a predictability that the acceleration of climate change is found to alter. Over the last decade especially, global policy-programs, national ‘awareness’ campaigns and local government officials, have directed a lot of attention, money and resources at addressing this issue in the Shivaliks. The issue is complex, and concerns both processes of ‘sustainable development’ and, for the last decade, ‘climate change’. Despite the effort

put into these diverse interventions in life and practices in the hills, little appears to have been achieved regarding ‘awareness’, however. Indian farmers are still approached as ‘unaware’ of their current situation, India’s countryside as well as her cities are polluted, and global warming continues unabated.

This dissertation approaches climate change as an *idea*. The *idea* of climate change that I refer to here, is thus referring to a cultural and social conceptualization on the shared knowledge on the global, physical process of climate change. My analysis is directed at addressing one of the reasons why people seem to disengage with it.

A part of that answer lies, I suggest, in the failure to acknowledge that the dominant climate change discourse appears to represent a general, abstract and morally devoid *process*, when in fact, the process of climate change embeds itself as a morally biased idea, inherently connected to the social world in which it is expressed. A ‘resonance’ of climate change to me, is to enrich the idea with a more diversified and complex social world than the current discursive idea of climate change allows for.

Before I begin developing my arguments and clarify my concepts, I need to address my choice of title – *Waterworn: Climate Change Resonance in the Rural Shivalik Hills of North India*.

To be waterworn<sup>1</sup> is to be shaped by water. Like a stone in a river, like a river bed in mountains, like a mountain from rain, ice and snow. With this title, I want to bring the readers attention to how the social relations between people in Rani Mājri has been shaped by water, but not ruled by water. By this, I acknowledge that water does not define people as individuals or the society in its entirety, but that water do play a central role in structuring the past and present for life in these hills.

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<sup>1</sup> Although semantically related, the title was not intended to be a poorer cousin of professor of Climate and Culture, Mike Hulme’s (2017) titled book ‘Weathered’. His use of ‘weathered’ refer to how “cultures and individuals can be thought of as being ‘weathered’ through repeated exposures over time to particular types and sequences of weather” (Hulme 2017:xv).

The way I was introduced to the village of Rani Mājri, was through water. In late 2012, I managed to get in contact with a team of scientists working at one of many state-funded ‘watershed management’ projects in the Shivalik Hills. A ‘watershed’ is the geographical area rainwater flows through, and drains into a common body of water, which in this case is a slightly elevated mountain ridge covering five villages, where the village of Rani Mājri lies at the top. The five-year project was near completed upon my arrival, but the scientists who implemented it, were still involved in some follow-up activities in the village, amongst the most notable at the time of my stay; to oversee and partly finance the restoration/improvement of a traditional water- and irrigation channel (*kuhl*). I will return to the project and those that implemented it, several times below.

Next to this, the prime concern of the villagers during my stay was related to water: through the unpredictability of the monsoon, the winter rains, the lack or abundance of water, the purity of water, the movement of water through steep hills causing land-slides, and the symbolism of water used in ritual. In addition to the role of water in weather and practice, I also found the distribution of water amongst the villagers to be quite revealing of social relations, and of tensions and rhythms in daily life.

I decided thus, to let water guide my way into the field. This also led me to the core of the issue that I aim to address in this dissertation. I observed that there was a tendency amongst policymakers, politicians, social activists and government employees in India to envision the villagers as ‘backward’ and in need of ‘awareness’. This way categorizing the villagers as ‘unaware’, by 2013 at least, was both coupled with a long history of modernizing the Indian village and related to the current global mobilization in communicating human interference with the climatic change processes, and mitigation of its consequences. I found, however, the villagers to be quite *aware* of the environmental processes of global warming, although they voiced their concerns on a somewhat different ‘frequency’; that of deteriorating social relations. Because of the villagers’ perceived lack of a scientific framework to address a certain ‘pre-defined’ idea of global warming, however, the ‘awareness-campaign’ was still legitimized.

This apparent ‘mismatch’ of local response is also why I chose ‘resonance’ as a metaphor in my title. In music, ‘resonance’ explains the quality of a sound, the enrichment of a tone. It is also action and movement; ‘resonance’ is what happens when the vibration in an object cause another object to vibrate. But the movement and the rhythm of the objects affected by the vibration, will vary with whatever composite elements happen to be present in the object touched. The resonance of an action, a sound, a movement or a theory can thus be seen as ‘vibrant’ or ‘rich’ response, and can – but does not need to – imply harmony or echo. To pay attention to a ‘resonance’ of something, an idea, a process, a call - is to acknowledge that there is always reverberation to an idea, to a process, to a call - but one that will vary with whatever objects it touches. Resonance does not stop, as much as it resonates back, again and again, changing a little for every touch.

I argue that a resonance of climate change shows that information about climate change, in its actual and physical change of the planet’s climate, travels around the world as an idea infused with cultural meaning. To me, to speak of a ‘resonance of climate change’, is to acknowledge that there is a local response to the climate change *process* in Rani Mājri. It is also an attempt to enrich the *idea* of climate change to encompass the multiplicity of ways people seek to make sense of the changes they perceive. This enrichment is needed, I believe, because it allows for a fuller understanding of what climate change does to people, and how it might be mitigated. Working from such a notion, draws attention to issues that could otherwise go unnoticed, and to how climate change as idea, process and discourse might transform both social and ecological landscapes in ways one might not be able to predict.



# Introduction:

## On Global Warming and the Failure to Act

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Initially, before I started out my doctoral fieldwork, I wanted to address why people seemed to ‘disengage’ with the climate change *idea*, despite their awareness of the *process*. With all the information available on the dismal prospects of climate change and global warming, people still seem to largely avoid or ignore the issue.

In the process of introducing myself to the burgeoning research on how climate change as an idea has been appropriated in rural places of the world, I found doubts and misunderstandings about what climate change *is* and what it *does*, as well as confusions about how to respond or address the issues. I also encountered curious losses in translation, ‘conceptual mismatches’, between policy-makers and the policy-subjects they wished to address. I also found sincere concerns about ‘disengagement’ with climate change.

In Northern Europe at least, the disengagement with climate change is related to a confusion over “the right thing to do” for those who believe climate change to be humanly induced. The idea is also seen to appeal very differently to what we might call the ‘climate change aware’ on the political left-right axis, where the left traditionally has been associated with socialism and environmentalist movements, and the right with its opposite. Tides are however changing, and with the current climate change scenario, there are ‘environmentally aware’ groups across the political spectrum, acknowledging the process, but disagreeing on its mitigation.

For ‘traditional environmentalists’ (see chapter 1) towards the socialist left, the climate change idea is potent as a motivational force for urging societal change towards a more

‘eco-sensitive’ society, calling for “de-growth<sup>2</sup>” and conservation. For the climate change ‘aware’ towards the more capitalist right, the potential for growth in new industries and old industries, call the financial elite to invest in ‘green’ innovation and ‘green’ development.

No matter where one places oneself on that political axis, however, the idea should be scrutinized because of what it *does*. That is, I argue, amongst other things, to produce confusion, bewilderment and public climate change *disengagement*. The disengagement is expressed physically in the general common people’s failure to adjust to sustainable and ecologically sound lifestyles. Adjustments that might prove to be crucial to maintain some kind ‘good life’ for humanity on this planet, with climate change’s accompanying issues of exacerbating environmental degradation, overpopulation, poverty, and social unrest.

For those who view climate change as a *process* happening devoid of the aspect of human influence, however, the *idea* appears as a veil to shroud what appears to be a leftist critique of capitalist growth. To complicate matters further, and as I will discuss at length towards the end of this dissertation, climate change as an *idea* could also be accused for ‘black-boxing’, or diverging attention from, other and more pressing issues of inequality, marginalization and ‘mis-management’ in those places of the globe where the consequences of the climate change process becomes particularly acute.

One of the places where climate change is seen to exacerbate environmental and social issues, is in rural India. India is a country that has perplexed me many times before, and I knew well how environmentalist notions of sustainability and nature-conservation seemed to struggle taking hold in the country. I also knew to which degree the surroundings acted as a continuous reminder of the issue. The reason was not that climate

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<sup>2</sup> In Europe, and perhaps in Germany per 2017 most clearly, there are popular social movements calling for a ‘de-growth’ society. This is based on thinking that the remedy for the current dismal climate change prospects is to halt and conserve what we have, since society in these movements is seen as ‘running out’ of resources to fuel incessant growth. (See the web-portal [www.degrowth.info/en/](http://www.degrowth.info/en/)).

change knowledge had been poorly diffused, however. India had been attuned to the politics and policies around climate change for some time already.

In 2003, after the capital of New Delhi had been chosen to host the XIX Commonwealth Games, the New Delhi government with the United Nations Environment Program (UNEP), decided that the 2010 Commonwealth Games was “going green” (Press Release, Bindra 2010). The government even introduced the concept of “Ecological Codes” in New Delhi, to announce “a series of green measures from boosting energy efficiency and air quality to expanding the city’s forests” (Press Release, Bindra 2010). In a few years, the ‘green’ policy grew out of New Delhi and became an issue of internal and international relations.

This process was closely linked to the Indian state developing their stance to the forthcoming United Nations Climate Change Conference, the Conference of the Parties (COP21) in Paris, France, 2015. The discussions on the level of national politics at the time varied widely, from being officially “in denial” of a human induced climate change (so that the state could continue its industrial and economic growth), to acknowledging the potentially catastrophic outcomes of “denial”, and work with the political elites of “the West” to stagger emissions and search for more sustainable ways of development.

With the Indian capital preparing for the Commonwealth Games in 2010, the United Nations International Panel on Climate Change (IPCC) report from 2007 also made an impact on Indian internal environmental politics. The report warned of “grim environmental and economic scenarios for India if climate change continues unabated” (R.V Cruz et al. 2007), and underscored how the impacts of global warming were already taking place. The scenario depicted, was one of less predictable monsoon rains, the glaciers of the Himalayan icecaps melting rapidly, the increased intensity of floods and droughts, and mangrove forests disappearing at an alarming rate (R.V Cruz et al. 2007; Wish 2010:1). When certain details on the pace of the Himalayan glaciers melting was proved wrong, however, the report was later rejected by the Government of India based on being too alarmist and ‘unscientific’ (Mathur 2015). The ‘Himalaya-gate’, as it was

nicknamed by media (see for example The Guardian 2010), created much debate on the effects of global warming, and drew public attention towards discussions of the fate of the Himalayas.

The media was not alone in propagating the climate change idea – and its prospects. The concept of climate change appeared not only in international reports, like in the assessment reports from the Intergovernmental Panel on Climate Change (IPCC) (R.V Cruz et al. 2007; Hijioka, Y. et al. 2014), the World Wildlife Fund (2017) and the World Bank (2015), but also in state government policy on national commerce. The concept shows up in the creation of Special Economic Zones (SEZ<sup>3</sup>), in State Action Plans like the one from the Chandigarh Union State Territory Steering Committee (2008), in rural development planning from the Government of Haryana (2010), and in the major regional newspapers (Upadhyay 2016), in TV-commercials, in street vendor gift-shops and on hotel doors. In the urban cityscapes of the North Indian state of Haryana, ‘climate change’, ‘living green’, ‘eco-sensitive living’ and ‘global warming’ was certainly “everywhere”.

Some of these slogans were explicitly directed at making rural hill Indians ‘aware’ of the processes they were, willingly or not, taking part in. In the Haryana State Action Plan on Climate Change, for example, the need for ‘awareness’ in all sectors is mentioned 35 times (Government of Haryana 2011), underscoring its importance. Yet in the village in which I resided for almost a year, those concepts were barely present. Neither when I lived there in 2013, nor at my re-visit in 2016. How could a concept, an idea, be so present in the cityscapes of Delhi and the North Indian joint state capital Chandigarh, and yet remain so absent only kilometers away? Why did the campaigning “fail” to catch on with the rural farmers? Was there something wrong with the way environmental issues were communicated, or the way they were received? Were

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<sup>3</sup> SEZ refers to “special economic zones”, or industrial parks, with slacker taxation rules to enhance economic development and export (Mohanty and Chandran 2017), (Department of Commerce, Indian Govt. 2017).

there aspects to the idea of climate change that had gone unaddressed by most scientists, activists, policymakers and governmental agents? And what ideas of a changing weather, littered surroundings, a polluted groundwater, and a receding forest, existed instead?

Below, I will begin with looking at how ‘climate change’ as concept and idea, appeared in India, and in the area around Rani Mājri, during the time of my research.

## On Climate Change Awareness in India and the Shivalik Hills

At the time of writing, India as a country deals with exacerbating issues of water scarcity, increasing food costs, a vigorous resource competition, and persisting issues with poverty and inequality based on issues related to caste, gender, religion and nationality. These are all issues that, it seems, are coupled with environmental degradation to the extent that changes in the environment itself could become a potential “threat multiplier” (Department of Defense, United States of America 2014; Crate and Nuttall 2009:11). Climate change then, becomes an all-encompassing process that could exacerbate tension, fear, and social upheaval in India. Seen from the perspective of an environmentalist, the situation has become rather pressing, too.

Spending time in the North Indian city of Chandigarh in 2013, the concept of climate change together with ‘global warming’ was literally the word on the street; on street vendor calendars, in local newspapers, and at dinner-table conversations.



Fig 1: Market stall calendars and local newspapers calling for 'green' living, Chandigarh 2012

Unfortunately, there has not been any noticeable change to the level of pollution. India's countryside and her urban areas in fact appeared to be even more polluted in 2016, on my last field visit, than on my first India fieldwork in 2007. The numbers confirmed my impression - Delhi's alarmingly high air pollution levels bearing testimony in particular (Institute for Health Metrics et al. 2017). India is now the world's largest emitter of air pollution gasses, and emissions are rising. India is expected to pass China - who's levels are, at the time of writing, declining. In an article in the New York Times commenting on the results of the 2014 IPCC assessment report, it was warned that the rise of air-pollutive gases not only contributed to global warming, but probably also contributed to the premature death of 1.1 million people in India alone (Anand for New York Times 2017).

The nearly unbearable situation in the urban cities of India has made the media look for culprits. In the same New York Times article cited above, the journalist asks as a rhetorical question why this increase continues unabated. The journalist uses the example

of a 2015 court order, that demanded farmers around Delhi to stop burning the stubble in their fields after their harvest. This court order was legislated to mitigate the air-pollution in the city but was neglected by the farmers. The journalist interviews the farmers responsible for the burning, and the reasons for not conforming to the legislation. The farmers admitted they were aware that their practices contributed to the harmful air for the citizens of New Delhi, but argued that they could not afford the alternative (Anand for New York Times 2016).

Next to governmental- and media bodies addressing the issue, there are extensive studies addressing how Indian politics and policy ‘internalize’ climate change. One example is the handbook of climate change and governance in India, edited by Navroz K. Dubash (2012).

Acknowledging the urgency of the situation, and additionally pointing out the relevance for India’s agricultural dependency, Shri Jairam Ramesh, former Minister of Rural Development and Environment and Forests, writes in the foreword of Dubash’s handbook: “I think there is no country more vulnerable to climate change than India, on so many fronts” (Ramesh in Dubash 2012:xix,xx). The handbook proceeds to offer interesting macro level studies on how climate change affects agriculture, such as the impact of climate change on the ‘apple belt’ in Himachal Pradesh (Rana et al. 2012). In this study, we learn that apple farmers are found to notice a change in climate by their apple quality, color and production.

What the studies say little about, however, is how the two out of three Indians who depend on agriculture approach the *idea* of climate change. These contributions are few, considering that most of the contributions appear quite certain that a role in climate change adaption and mitigation has to be played by the laypeople of India who live in rural, agricultural villages (Government of India 2011). Looking at the contributions to the handbook, however, and to how the issue is talked about in governmental reports and in media in general, it becomes quite clear that climate change issues are approached

mainly in India as a developmental issue, and that raising “awareness” is crucial when mitigating the challenges.

In a Yale-funded Study on Climate Change Communication by A. Leiserowitz and J. Thaker (2012), it is argued that people in India do observe changes to the local weather and overall weather and climate patterns, but that they do so “without understanding the broader issue of global climate change”.

The study explains the low levels of awareness to climate change issues with India’s low education levels. This is based on comparing the answers from their respondents, of whom 75% were urban and 25% were rural, that the level of awareness on climate change and its related issues were especially low amongst the illiterate (where they find that 50% have not heard of climate change), contrasted to those with high school graduate degrees (where 13% responded that they had not heard about it). When lack of knowledge, or “awareness” is defined as being one of the main challenges when mitigating climate change, this justifies political attention and funds to make sure the diffusion of knowledge happens correctly. Sharing knowledge and information on the technical relationship between humans and their environment, was thus a major part of regional policy in the region of my study.

## Environmental Awareness in Haryana

Life in the region in which the village of my fieldwork is located, the Shivalik hills, has changed very rapidly during the last five decades. In cohort with national socio-economic development planning, several of the hill villages have become connected – although peripherally – to political campaigning, education services, health services, electricity and water-grids, telephone lines, and media broadcasting services. This development has, after the 1970s, happened alongside international, national and regional initiatives to protect the hills from environmental deterioration. This happened in part because of new knowledge on ecosystems and biodiversity, and in part because the prosperity of the



plains-region in many ways was found to be dependent on the environmental well-being of the hills (see chapter 1)

In practice, the government established forest reserves and ‘Eco Sensitive Areas’ where resource extraction and industrial development were regulated and developed numerous watershed-management projects to conserve and improve the local irrigation channels (*kuhls*), thought to stagger erosion and enhance agricultural production. Whilst unirrigated land allows for only one reliable harvest during the rainy season, *kuhl*-irrigated fields, however, allow for a second harvest, the winter-crops.

To bring the villagers into “awareness”, Government officials involved in these schemes and projects would frequently travel to the villages to give motivational speeches, or to hold ‘workshops’ amongst the farmers. Eco-Clubs had also been created at local village schools in the hills, and volunteers from local Non-Governmental Environmental organizations would travel the district giving talks on environmental issues. Some would also gather women to motivate and educate them into environmentally sound actions. International actors were involved too, through institutions and governments funding these activities and processes. All done, to make the villagers ‘aware’.

The environmentalist in me wanted to cheer these processes on. To educate people on the precarious balance that allows for life and prosperity on this planet, seems like the right thing to do. To plant trees and live eco-friendly, to save ecological diversity by protecting areas from industrial development, to teach people that their actions have larger consequences, and to act locally and think globally! But at the same time, as I settled in with the farmers and laborers in one of these rural hill villages, I discovered that there was something not quite right, not only in the way knowledge was transmitted from policymakers to people, but from people back to policy.

Firstly, I knew from growing up in Norway, a north European country where most people enjoy comfortable living standard with high levels of education, that knowledge of environmental processes does not necessarily make people choose ‘eco-friendly’

lifestyles. This lack of direct causality between climate change knowledge and sustainable action or response has also been pointed out by several scholars. Mike Hulme (2009:144) for example, did not find education to be one of the reasons the problem with ‘disengagement’ to the climate change idea. Sociologist Kari Marie Norgaard (2011), in her ethnographic study from a small community in Norway, also confirms that education is not enough, and interprets the ‘disengagement’ from it as being a form of ‘denial’. As I will return to in chapter 1, this makes the knowledge-argument an uncertain one at best.

Secondly, I found the people that were considered by the state and the various agencies as being ‘unaware’ subjects to be, in fact, quite ‘aware’ already. Many of the processes that are thought to deplete resources and upset ecological balances were known to them, and they related to them every day, just as the Yale-study above indicated. I also found this relationship to be quite intimate, much because people in these hills are continuously exposed to their surroundings through work, and through life itself.

In the small hill-village I settled in, despite differences in caste and status, workers, daily laborers, farmers, landholders and landless alike, all shared a life where their well-being hinged upon their environment being rather predicable and benevolent. The well-being of the families depends on the crops to yield its bounty, because if it fails, one will go very hungry, one cannot afford medication when needed, children will not attend higher education, and the family might end up heavily in debt. Changes and irregularities to the weather and the surroundings here, is quite important, as it will affect food production, cattle rearing and to what degree the village is habitable at all. In a context such as this, skill, is of the essence.

Plant a seed too soon, a sudden cold-spell or hailstorm might finish it off before its productive life has even begun. Plant it too late, and it might not reach maturity before the season’s growth-conditions have passed or be ruined because the rain they expected did not fall. If the planted area is too exposed to the sun, the bud may wither and dry. Too shady, and it won’t ripen. If the soil is too hard and compact, the roots get deprived of air, and the stem might rot from the water lingering too long. Too sandy and loose, the plant

won't have access to enough nutrients, and the soil will drain the water too fast. Add to this elevation in the terrain, exposure to wild and domesticated animals, and a very variable access to organic and inorganic fertilizer, farming equipment and manpower – when and how a farmer goes about his or her work during a growth season, is a decision that is not taken lightly.

Add to this, even with all this knowledge of how, and when and where, the crops might fail. It might be an individual mistake, like adding too little fertilizer or not weeding meticulously enough. These are mistakes one can learn from and attempt to prevent from happening the next year. However, sometimes, it might be other, larger and more complex reasons for the crops failing, like the weather being unpredictable, or a herd of wild pigs eating half the edible roots, a hail-storm toppling the wheat, or the monsoon coming on too strong, too irregular, or not enough for the rice to grow. If the current prospects of climate change effects in the Shivalik Hills are correct, these events will happen more often, be more intense, and as such, the farmers decisions are supposed to become even more precarious.

Climate change was not spoken of, however. Only a handful could understand some English, and only a couple of adults I met had encountered the concepts of climate change and global warming through media, social networks or education. I recall that a bright, young Rajput girl I knew, approached me with what I found a very informative chapter called “environmental factors” in her book on computer programming. In contrary to the other chapters of the book, this one had no underlined pages. Asking why, if she thought it perhaps not relevant for her study, she plainly stated that she could not understand what was written.

This, and other similar observations, initially aligned my conclusion with the Yale study, that ‘awareness’ on environmental issues amongst low-educated farmers *was* low, and that it was low because people were not educated or exposed enough. So far, I agree with the what the Yale study found above, that the rural, low or un-educated villagers do not comprehend the changes they observe as ‘climate change’. They are in that case

“unaware” of climate change. My dissertation, however, argues that they in fact *do* comprehend climate change, but that they express their awareness in a manner not registered as climate change awareness by those who work so hard to place it there.

## Cosmologies and Ways of Knowing

This did not occur to me, however, until I began to register the responses to a disastrous flood in Uttarakhand, which I describe in chapter 7. The responses were multivocal, both in the city and in the village, but mainly, the relation to global warming seemed to be a rather established fact. Only days after the flood, I had a conversation with a 20-year-old girl from one of the smaller villages. The girl was headed to tend a plot of land her family had acquired down the road from where I lived.

We came to talk about the floods in Uttarakhand, as I knew many worried, and I was curious to find if she also thought that such a disaster could happen in the village. “No, there are many more trees here, and the hills are not so steep” she replied, indicating that as most others in the village, she was also educated in the role of the plant-roots’ capacity to hold water in the soil to prevent it from sliding. Convinced she was too ‘educated’ to make this a matter of Shiva, which the elders frequently did, I asked; So, you don’t think the floods happened because of Bhagvān being angry, then?” “No, I don’t think so...but even if that was the case, Bhagvān is so very far away” (“*Bhagvān bahut, bahut dūr yahām se*”).

This apparent contradiction made me look more closely at chains of causality. This was not the first time I heard that Bhagvān, or God<sup>4</sup>, had withdrawn, and I began to wonder why. The responses that followed this flood, and the landslide I described in the

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<sup>4</sup> Bhagvān: personal nature of the Supreme. Bhagvān might also refer to an abstract God, the aspect of the absolute truth in the universe, or the impersonal Brahman, “the universal substratum” from which all beings emerge (Wadley 1977: 113,114), but referred to locally also as the “*ūpar vālā* ” (the One above). The name can also refer to a personalized God, often Krishna, but also Vishnu or Shiva.

introduction, indicated that religion and ritual played a larger part in people's relationship with the environment than I initially thought. Did the role of Shiva in this, mean that God was seen to have withdrawn his protecting gaze? If so, why? And how does deforestation play a part in what clearly was a religious interpretation of the flood?

Should I approach the two chains of causality for the flood, as one quite being scientific (climate change), and the other one, as religious (environmental retribution from lord Shiva)? And could this be viewed as two authoritative knowledge-forms competing for dominance in the village; as another example of the battle between the old and the new, tradition and conservation, 'modernity' and 'progress'?

There was just one problem with this interpretation. My co-villagers never seemed to make that separation. Both chains of causality for the flood were, by 2016 at least, present within the same village, community, even within the same individual. In both versions, the flood was seen happening as a sort of environmental retribution to social behavior – as a harsh comment on social life, on morality, values and priorities. Both 'versions' were also based in authoritative sources of information; science and Hinduism, one with a world-view which was quite androcentric, and the other, quite 'devacentric'. 'Devacentric' is not a formalized word<sup>5</sup>, but is used in an informal manner to denote a world-view not revolving exclusively on the wellbeing of humans, but also including that of deities and other entities. To opt for a 'devacentric' world-view is thus an alternative to "Hindu world-view" (see chapter 1).

The ease with which both existed as explanations for the flood, made me wonder whether the two 'stories' about the flood could be argued to have been "compartmentalized" to use A.K. Ramanujans (1989) language. This is a concept which he draws from psychology – to describe the way he argues the Indian mind works to avoid the

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<sup>5</sup> For documented uses of 'devacentric', see for example the Buddhist Journal by Macpherson (2013), and in a few academic papers, such as in Palodhi (2017).

‘dissonance’ that might occur, for example when Indian Hindus learn Western science, business or technology practices. The compartmentalizing happens, he argues, when “the new ways of thought and behavior do not replace but live along with older ‘religious’ ways” (Ramanujan, 1989:57).

Ramanujan’s concept of ‘compartmentalizing’ is useful I find, when trying to explain the ease of which I perceived knowledge of environmental processes, global market economics and global warming processes to coexist so seamlessly with the ‘devacentric’ cosmology within the same village - even within the same individual. It also allowed me to look for the elements that allowed for their co-existence, which I suggest was in how both interpretations were seen to be intrinsically social, relating quite explicitly to certain ways of commenting upon social values in a changing society, where how we utilize the knowledge of the world around us is changing. This becomes pertinent when it comes to understanding what climate change does to social life.

The concept of ‘compartmentalizing’, however, implies that there are two kinds of knowledges that appear to be essentially different. This does not agree with the approaches to knowledge by contemporary anthropology I intend to utilize. In these approaches, one has acknowledged that although there are different knowledges and different ‘modes’ of knowing, and that knowledge can be both ‘theoretical’ and ‘practical’, the ‘forms’ are always related and always interacting. Anthropologists David Turnbull (2005), Tim Ingold (2000, 2011) and the anthropologist and political scientist James Scott (1998) have all argued, that the two ‘kinds’ or ‘forms’ of knowledge with which anthropology previously have operated, (that of the local, indigenous and the global, scientific) exist in a dialectical process with each other, as practical and abstract knowledge.

Knowledge associated with the ‘theoretical’ allows for the analyses of large-scale processes. Knowledge associated with the ‘practical’, allows for skill. It is in the practical ‘mode’ of thought, that abstract ideas and theories can be scrutinized, but it is in the theoretical ‘mode’ of thought, that the meaning for, and the reasons for the practical

mode can be scrutinized. (With ‘mode’, I refer to the practice of aligning, calibrating or positioning of an object). As such, both ‘kinds’ of knowledges are needed, and depending on each other.

To argue that knowledge exists as different ‘kinds’, as more or less abstract or concrete, does not mean that either of the ‘kinds’ are value-neutral or perfectly rational. Rather, both are dependent on the culture and the history in which that ‘kind’ of knowledge arose. To relate the ‘modes’ of knowing, is neither to disagree that there are differences in how they are valued. As Turnbull (2005:7) argues, science, or ‘technoscience’ is the autorotative form of knowledge today. Its success, argues Turnbull, hinges on its ‘myth’; that it is both objective and rational. This allows for a polarization between ‘scientific (western) knowledge’ and ‘traditional (indigenous) knowledge’ to persist. If the rational and morally unbiased knowledge is a ‘myth’, then this allows me to argue for the relative ease with which both narratives co-existed. If climate change knowledge only *appears* to be rational and scientific, but in practice, is part of an idea of climate change which is quite morally biased, then the two apparently contradictory explanations were not that contradictory at all.

I will discuss this ‘myth’ of ‘technoscience’ more thoroughly in chapter 1, and their coexistence in chapter 7. The problem I wish to address here, however, is that the policies of climate change as they materialize in the rural Shivalik Hills, seem to operate with the ‘myth’ of scientific superiority quite intact. This, I argue, might have some unintended consequences.

## Knowledge and Power

Upon asking many of the villagers in Rani Mājri, of the names and reasons why things were done like this or that, I would for months only get the answer that “I do not know”. This happened especially when asking women. If I asked why some chose a stick from the *Neem* tree over a toothbrush, or why they would give me Caraway for my stomach

pains, or why they added organic manure to a field every fourth year, the most common response was that I should ask the “*parhe-likhe log*” – the educated people (i.e. not them). I thought, perhaps, that the people I asked did not know. It didn’t occur to me at the time, that they saw their kind of ‘knowing’ as representing all that made them “backwards” in the eyes of teachers, scientists and government officers, the educated people that knew the ‘right’ reason, for these things to work.

Although the scientific climate change idea arguably *had* diffused rather poorly, it was certainly not because of a lack in the capacity for ‘abstract thinking’. Many of the youngsters of the village were far more technically schooled than me, as the Rajput girl of 18 who, about to complete her upper secondary, aspired for a seat in public college. Even if her curriculum on computer programming was outdated by almost a decade (her book regarded learning the software of the operating system of Windows NT v.4.0, which was what Windows was in 1996), the technicalities of Core Java and C++, was way beyond my own. Her proficiency in digits and models, did not help translating the chapter on environmental issues, however. This reason for feeling ‘backward’ had more to do with how their ‘traditional’ way of life became devalued into a poor impression of ‘modern’ way life, a stereotyping that only reinforced the barrier of caste, class and gender that this particular girl had to cross, to attain that very knowledge that she will need in making what for her, would be the right choice for the future.

If the villagers saw themselves as ‘backward’, it was not because they did not wield theoretical or abstract knowledge. It seems to rely more on their knowledge of the world not being validated by an authority (i.e. a scientist or any other ‘properly educated’ person, such as a Brahmin *pandit*<sup>6</sup>).

As will be clear in my forthcoming chapters, the people of Rani Mājri were exposed and involved in global policy as part of a regional concern for a lack of ‘development’ in the

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<sup>6</sup> Brahmin is the highest/purest Hindu caste, see chapter 4, and a pandit is a Brahmin learned in the Vedas, the sacred scriptures of Hinduism.



face of climate change. When analyzing the ‘awareness campaign’, it appeared to be dependent on the degree of which people were considered acquainted with scientific knowledge, argued to be crucial to comprehend, amongst other forms of scientific information, the climate change idea.

In the societies we might call ‘modern’, ‘post-modern’, or even in a process of ‘modernizing itself’, such as India, there is a noticeable difference in valuation, between the way ‘practical’ knowledge that pass on from generation to generation, contrary to the way ‘scientific’ knowledge is passed on from authority is regarded. The close connotation scientific knowledge has with modernity have, I argue, been used quite effectively as a reason for enlightening the ‘backward’ peoples of the rural hills to a more ‘progressed’ society. Climate change thus stops being an idea and appears more as a discourse.

To address how a climate change discourse can be said to take shape, and how it entangles with already existing policies on poverty, development and conservation, will explained in chapter 1. I will there draw on philosopher Paul-Michel Foucault’s (1984,1995) notion of discourse, and his views on power. This is an approach I share with Scott (1998), anthropologist Anna Tsing (2005), and Arun Agrawal (2005), all of whom have developed Foucault’s concept of discourse and power to approach a way to show how a campaign on ‘environmental awareness’ can shape bodies, people, and actions.

Although public education, media and other transmitters of information on ‘awareness’ all played their part in shaping this discourse, the local consequences of the campaign became especially clear in the way the scientists of ICAR-IISWC (the Indian Council of Agricultural Research - Indian Institute of Soil and Water Conservation, hereafter IISWC), developed agricultural practice and the local water-management system, the *kuhl*. Looking at the effects the irrigation system had on agricultural production, water management appeared crucial to address in at least two ways. First, as I return to in chapter 4, water-access mattered for power, for wealth, prestige and for political leverage.

As such, it mattered to caste relations, and to relations between people and their deities, and to their ‘environment’. Secondly, to polarize knowledge in such a way, reproduced a stereotype that was funded on a ‘myth’ of a certain knowledge being inherently different from the others.

These interventions, I argue, drew their force from the alignment that ‘environmental awareness’ has with ‘development’, ‘progress’ and ‘modernity’. I will not attempt a full definition of ‘modernity’ here, but I will work with the concept as being both a historically produced *idea* that has actual social consequences for people, and that it is also about a way people relate to the world around them, as a *mode* of ‘being in the world’ (see my discussion in chapter 1). For the argument, it is perhaps enough to note the close relation there seemed to be between the villagers’ and the governmental officers’ notion of ‘progress’, ‘development’ and ‘modernity’.

## Adjusting to Progress

What is a good life for you? Of what do you worry, and why? The answers I got to these questions during my fieldwork in 2012/13, will perhaps illustrate the relationship I perceive there to be between modernity, knowledge and climate change – and why the issue should be addressed. They went much like this:

It would be to no longer have poor access to public goods such as hospitals and higher education. It would be not having to make the choice of which child to give the richest food, the best education, and which child to deprioritize. It would be to no longer be given unfair treatment by the courts, and lower market prices for their produce. It would be, for many, to no longer to suffer under local caste oppression or gender discrimination. It would be to no longer worry so much about becoming sick from the water they drink, the food they eat, and the air they breathe. And, it would be to no longer be “backward” - a term used by themselves and by the urban literati, when explaining to me the

differences they perceived there to be between themselves, and the “progressed” people of the city.

In their practices, concerns and their hopes for the future, I found that they were certainly ‘aware’ about environmental and developmental issues. In their daily lives, they were concerned about depleting water-tables, the quality of the water, the declining forest cover, pollution in the air and in the irregular rain patterns. Nor was anyone a stranger to seeking possible chains of causality either, to seek explanations and reasons for the changes and difficulties they encountered, be it in ideas of global warming, or in the anger of Lord Shiva. The people here were also aware, that in their own daily practices, they contributed to both the destruction but also the maintenance, of what they themselves valued as a natural beauty and lushness to the place in which they lived. The difference was not one of environmental concerns per se, but in the frequency on which these concerns were vocalized and communicated. The flood I mentioned earlier, for example, was interpreted as being an environmental retribution caused both by global warming and by Shiva’s anger with his devotees. Looking closer at the explanations on “why” the flood happened, they are both direct responses to breaches in morally sanctioned behavior. In both versions, the priorities humans take to advance, to progress and grow as individuals or families, groups or societies, happen irrespectively of the loss of others.

The only difference I found, between how they worried, and how they were ‘expected to’ worry, was that the concerns were not expressed in stories of climate change or global warming. They were rather expressed in stories about social and moral decay. The consequences were thus mitigated in practices directed at mending the relationship among people and between people and deities. It is here the problem of climate change as an idea being lodged within a ‘myth’ of rationality comes in.

The processes the people of Rani Mājri concerned themselves about, was not framed in ‘technoscience’, they were rather expressed in concerns about the processes and changes they saw happening to Indian society, and in the practices through which they adjusted to

them. These were socially and morally conflicting choices, brought about by technological innovation, economic and political changes, changes that could make them a part of what they referred to as ‘progress’, of being or becoming “developed”; as individuals, families, villages or as a country.

These reflections on the advances and drawbacks of modern life on the process of global warming, was not picked up by the people who worked to change – or assist the change – on bringing Rani Mājri into a ‘progressed’ state. It almost seemed if the discourse on ‘awareness’ had shrouded their vision somehow.

It is here important to clarify that I do not find the effort to enlighten the villagers to global warming processes that they, willingly or not partake in, is negative. Nor that all aspects of ‘progress’ are bad. Rather, I believe people need to become aware of what they do not already know, as people should be able to take informed decisions revolving their own lives. Knowing how to deal with new challenges, such as those associated with climate change for example, requires input from new sources, through other networks and experts.

In that, knowledge diffusion is essential. Only by knowing one’s options can one even begin to hope that people take the desired choice – which here could be summed up in the ambitious formulation from the 1987 Brundtland Commission on sustainable development, a: “development that meets the needs of the present, without compromising the ability of future generations to meet their own needs” (Dubash 2012:8). What I do argue, however, is that one might want to take another reconsideration of the way this knowledge is expected to diffuse. Is it presented, humbly, as another alternative to other ways of ‘knowing’ the world – or does it present itself as the *only* way of thinking about the world?

I argue, that in the case of Rani Mājri, ‘environmental awareness’ and global warming knowledge, presents itself more in line with the latter. One consequence of this, is that most people were found to be ‘unaware’ of processes they already had an awareness of:

how harmful pollution was to their environment, how industries expanded mindlessly into agricultural or forested land, and that forest cover was beneficial both with respect to siltation and erosion as it was to precipitation. And this is why I argue climate change policy and knowledge needs more ‘resonance’.

## Why to Listen for Resonance

As my dissertation will proceed to show, knowledge about the environment is woven into a complex web of power, which will tint and color how a certain form or ‘kind’ of knowledge is appreciated, approached, and eventually utilized. This becomes especially clear, I believe, in how Rani Mājrian families are approached with help, guidance and assistance to accommodate to the ebbs and flows of ‘progress’. All the while reminded, that the ‘awareness’ they already are in possession of; the knowledge of how to best deal with their everyday lives, is devalued as passé and as ‘backward’, in the face of science and modernity. This is, as I will argue below, is a devaluation based on a ‘myth’.

As mentioned, the vast array of skills that farmers in the hills of North India utilize when planning, organizing, overseeing, harvesting and storing their crops, bears testimony to the futility of casting one kind of knowledge as either/or. Looking at environmentally related practices in this village can be said to strengthen my argument when drawing attention to farming practices. These practices draw on a multitude of sources, some abstract and some concrete.

Knowledge derived from the Vedas on what kind of behavior society appreciates, for example, are abstract and complex. Just as knowledge derived from politicians, activists and lobbyists on how conspicuous consumption and resource extraction contributes to global warming is abstract and complex too. Knowledge on how essences from a *Neem* stick can be used to fight tooth decay, or how residues from pesticide in a spray-can end up in breast-milk or exterminate pollinators as well as pests, are just as technical and

intricate as knowledge on how essences from a lower caste person or a menstruating woman can defile a meal, spoil good water, or cause the growing buds to wither and die. The difference, as I see it, lies not in the intricacy, complexity, abstractness or generality of knowledge, but in the value ascribed to the knowledge itself.

This dissertation is not meant to be a critical review of how Indian state officials do their job. It is not about revealing some sacred, ecological knowledge amongst the people of Rani Mājri either. Rather, it is about showing how intrinsically social the idea of climate change is.

It is also an attunement towards a realization that the people of Rani Mājri in their actual response to climate change, are not *that* different from anybody else. In Rani Mājri, the climate change idea relates to larger processes of modernity, growth, morality and sociality. Failing to notice this; that the idea expresses itself as part of the social world in which it flows, we might in the process of making people ‘aware’, run the risk of unwillingly contributing to processes of oppression and marginalization, or lose out on a ‘mode’ of knowing the world.

I argue that if the idea of climate change would draw less on the polarizing view of knowledge-archetypes and of incompatible ontologies, and rather be more ‘resonant’ to climate change as a cultural *idea* that is inspiring or intimidating people to act, then we could perhaps communicate easier on how the climate change *process* comes to affect us all. The least one can do is to address the issue, and this dissertation is aimed at doing that.

# Outline of Chapters

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My dissertation is divided into three parts. The first part encompasses the first three chapters, intended to provide the reader with the theoretical context and the background necessary for the following analysis. The second part intends to introduce the context of the anthropological fieldwork, with an empirical focus on practice and skill. The third part encompass my main discussion, focusing on cosmological chains of causality in the context of global warming, modernity and ‘progress’.

## Analytical and Methodological Departures

In this section, I outline the theoretical and analytical background for my discussion. I also position myself to contemporary anthropological approaches to climate change, and suggest how I intend to proceed.

### Chapter 1: Anthropology and Climate Change Resonance

I begin by outlining what has become the sub-field ‘Anthropology of Climate Change’. Climate change appears in anthropology both as a study of the physical phenomenon of global warming and its consequences, and as climate change as an idea. I position myself within this field, and identify a few central, contemporary debates that has informed my own analysis.

After addressing the theoretical background for my forthcoming discussion, I show how in North India, there is a tendency for climate change information to travel enmeshed in an ‘awareness’ campaign, implying the subjects of this campaign as ‘unaware’ of the processes of they are part.

Part three of chapter one spring out of my ethnography amongst the farmers in Rani Mājri, and addresses the problems I see arising from the climate change idea as it manifests itself in global policy to bring ‘enlightenment’ to the ‘unaware’. This leads up to a discussion of the idea being appropriated in a discourse of ‘progress’ and ‘modernity’. I conclude with arguing that in Rani Mājri, the climate change idea embeds itself in concerns about deteriorating *relationships* between humans and the environment, humans and the deities, and humans and other humans.

## Chapter 2: Into the Field. Methodology and Place

This chapter begins with a description of where my fieldwork took place, and how I went about to acquire the ethnography. It also discusses the role of the ‘village’ in anthropological studies, and how the idea of an ‘ideal’ site of fieldwork influence ones’ choices. Moving on to methodology, the chapter will especially address that of participant observation, and the ethical conundrums that was relevant for the process and the outcome of my analysis.

In the final part, I argue that the ‘personal equation’ of an embodied fieldwork gave a tacit sensitivity to certain issues. I proceed to outline parts of my own ‘personal equation’, emphasizing the one that perhaps shaped my ethnography the most; my gender, my age, and my social status as a North European, married mother. The one of gender has perhaps influenced my ethnography the most, and as such, the chapter ends with describing the position of the women in the village in which I resided through a contemporary life-cycle from being a child to an elderly female.

## Backdrops

In the middle section, comprising chapters 3, 4 and 5, I discuss the complexity and the diversity in which people in Rani Mājri relate to the environment, and to climate change.



## Chapter 3: An Introduction to Rani Mājri

In this chapter, I provide a more thorough description of Rani Mājri by giving the environmental issue of the surrounding area an historical context.

My historical introduction is meant to give a perspective on the changes taking place in region, because it is from this that the discourses I discuss in later chapters, gain their momentum. I have chosen to section this historical contextualization into the pre-colonial, colonial and post-colonial periods (or 'time remembered') and lastly contemporary Rani Mājri.

With a more historical approach, attention is drawn to how people, places and relationship change with lengthy time-spans, such as how the dialogical movement of soil and water shapes the landscape by rising tectonic plates, the fluctuations in the world's atmosphere and temperature from ice ages to tropical ages, to the rivers flowing down the Himalayan hills cutting down into the sandy ground of the Shivalik Hills.

It will also describe some of the important changes that simultaneously have occurred in governance the last hundred years, including the creation of an 'Eco-Sensitive Zone' encompassing the village, and an outline of the 'watershed-management project' that guided me to the village in the first place.

## Chapter 4: Waterways

In this chapter, I introduce the contemporary social fabric of the village by following the trajectory of water. I emphasize how water-right correlate to social status based on caste, and how it is seen to juxtapose with economic and political leverage tied to the statuses of landowner and landless.

To do this requires a presentation of the social fabric of Rani Mājri where I focus on economic and political strife, as well as on religious and ritual relations which emphasize unity and cooperation. I attempt to achieve this more complex village reading by

alternating two “optics” with which I bring the different relations forth, one ‘material’ and one ‘ritual’. I choose to alternate these “optics” to argue that to define what the village is, who resides in it, and what might benefit whom, is more complex than it appears in the government records that define the way of ‘progress’.

Finally, the chapter will address how inequality matters for how certain groups, be it because of caste or landownership, are capable to ‘adjust’ to the prospects of climate change.

## Chapter 5: Seasons

This chapter forms the ethnographic basis for my position on knowledge, outlined in chapter 1, and my conclusion in my final chapter.

In this chapter, I emphasize Rani Mājri seasonality as a way of ‘dwelling’ in an environment offered by a phenomenological approach. I follow Rajput landowner families in their daily practices over the six seasons and bring out the importance of the weather; be it rain, wind, sun or drought, in affecting the rhythm and tempo of work and leisure. It will address how the human-environment relationship is often of a quite practical sort, as it is a result of tedious and hard work, and in how it hinges on a benevolent environment.

To initiate the growing season at the right time, for example, the farmers of Rani Mājri were found to draw on numerous sources. They would interpret local weather-signs, listen to meteorological forecasts on the TV, and read reports on the progression of the monsoon in the local news-paper. They would also consider advice given by local priests, farmers almanacs, passing school-principals, parents, grandparents, friends, and family, and probably many other sources that went unnoticed by the anthropologist. All of this, merged with individual experiences of past mistakes and successes, weaving into a ‘feel’ or ‘knack’, into skill.

This interweaved with notions of *auspiciousness*, that was found to be important for knowing when, how and why certain practices should be done. The chapter is thus concluded with a discussion of what notions of auspiciousness meant.

## From ‘Awareness’ to ‘Resonance’

This latter section discusses the issues that arise when the ‘awareness discourse’ overlook important aspects of everyday life. It also forms the background for my discussion around various aspects to climate change disengagement, as the idea transmits around the globe.

### Chapter 6: The Awareness Campaign

This chapter argues that policy work on environmental awareness (thus also on climate change) around Rani Mājri, does not operate on a blank slate, but rather fuses quite notably with the long history of state- and NGO intervention in the Shivalik hills. Looking at the ‘junctions’ this ‘awareness campaign’ filtered through, attention is drawn to how the projects and schemes benefited groups of the village community unequally. Investigating some of the reasons why this inequality became prominent, it becomes apparent that the village community itself was subjected to a more complex discourse.

Considering certain ‘gaps’ and ‘mistranslations’ of knowledge, it is possible to argue that the discourse on “awareness” drew its strength from an old dichotomy between the ‘progressed’ and the ‘backward’; the ‘scientific’ and the ‘non-scientific’. The last part of the chapter thus traces how the villagers became ‘environmental subjects’ based on this dichotomy, and concludes with ethnographic observations of how the dichotomy becomes replicated in the village through what I have called the “awareness campaign”.

## Chapter 7: In the Hands of Bhagvān

This chapter explores reactions to two monsoon-related misfortunes that took place during the time of my fieldwork: a devastating flood and a minor landslide. It also explores the chains of causality that emerged, and how people were found to draw on notions of sin and fate, and of global warming.

My argumentation base itself on what I discussed in chapter 5, that notions of auspiciousness (or; the “right” time for things to happen) was linked to the active relation between humans and their environment, as human action or in-action was seen to influence and alter the surroundings directly. The middle section of this chapter thus proceed to discuss how people react when unexpected misfortune happens (such as the flood or the landslide), and whether it could be argued that humans had played a part in causing the misfortune, as well as fortunate events.

The latter half of this chapter discuss how the ‘scientific’ and the ‘religious’ ideas of the drivers and effects of global warming can be interweaving so easily in the village. I argue this happens because both are, in fact, morally biased climate change interpretations. Both the ideas point to how global warming is related to deteriorating relationships between humans and their environment. This enables a concluding discussion, of why and how I see local responses to environmental degradation and global warming pass unnoticed by policymakers and various community developers. It also opens up for a discussion of advantages and disadvantages with bringing this relationship to light. Thereafter I suggest, tentatively, a way to proceed.

### *Conclusive Remarks*

I conclude the dissertation with a summary of my findings. It also contains a suggestion to how to proceed with approaching climate change less as a neutral fact, and more as a morally infused idea.

This entails to approach climate change as something more than reflecting a scientific process, but a concept that revolves around passing judgements on the numerous relationships that humans have with others, and the world we share.

I conclude to suggest that, if the goal is to motivate people for action or response to the climate change *process*, it might be useful to approach the climate change *idea* by way of “resonance”. In looking for resonance over dissonance to how the *idea* manifests itself in practices, then people appear not so different from each other at all. This will not solve the issues that people around the world will face with a changing climate, but it might make talking about what to do with the issues a little bit easier.

# Chapter 1

## Anthropology and Climate Change

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This chapter includes a short overview of the sub-discipline ‘anthropology of Climate Change’. As I outlined in my introduction, I identified the people of Rani Mājri as subjected to a certain form of ‘awareness campaign’ directed towards sensitizing the rural hill villagers to developmental and environmental challenges in the region.

In this chapter, I will also develop my argument that the local response to the climate change *process* went un-noticed, because the climate change *idea* had become embedded in a particular discourse. This discourse is closely related to how the current climate change situation propagated “awareness” in policy and politics. The discourse was not attuned to people’s intimate relationship with the weather and the rhythm of the seasons, and did not register that people’s daily practices were directed at mitigating future climate uncertainty. As a consequence, the people of Rani Mājri appeared “unaware” and “backward”. I argue, that they were in fact voicing their concerns in another cosmological framework, one of religious morality and changing social relations in the face of “progress”. This enables me to discuss various reasons for the apparent disengagement locally with climate change information, and to look at the relation this information has to local concepts of knowledge and modernity.

This argument of discourse directing attention away from certain ways of knowing the world, requires a more thorough presentation of how I look at knowledge, and how it appears in the North Indian discourse of climate change. Before I do, I would like to turn to the context for the debates that influence ‘anthropology of Climate Change’ at the time of writing.

# The Anthropology of Climate Change

There is no doubt that a global climate change process is taking place, that it happens at an unprecedented speed, and that it will have unknown consequences. From around 1975 until today, the average global temperature has risen sharply, culminating in the warmest year on record, 2016, with a global world average one degree above pre-industrial average (represented by the 1850-1900 reference period) (NASA 2017). The warming of the globe has caused the sea level to rise, as water from melting ice on land and in the sea adds to the expansion of sea water as it heats up. These changes is found to affect global weather patterns, causing ‘abnormal’ weather and ‘irregularities’ in the seasons around the world. An increasingly unified group of experts argue that the tempo of these changes are “very likely caused by human activity” (Crate and Nuttall 2009:10, Hijioka, Y. et al 2014).

The fact that climate change relates explicitly to human-environment relations in being a social, political and economic issue is a relatively recent addition to social anthropology, but the discipline has a long tradition with human-environment studies.

In an impressive reader on Anthropology and Climate Change, Michael R. Dove (2014) for example, show how an Anthropology of Climate Change can be said to have developed from ideas that climate and environment determines human character and culture, and on the effect of climate on the rise and fall of civilizations. Dove traces these ideas back to the 1370s with the Tunisian geographer Ibn Khaldûn, and to the influential philosopher Immanuel Kant, who suggested that climate and psychology were causally linked<sup>7</sup> (Dove 2014:2, see also Peterson and Broad 2009:72; Hulme 2009:20).

With time, this direction became associated with what later has been called ‘environmental determinism’, from which some arguments derived were often used to

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<sup>7</sup> Kant went as far as to suggest that intense, extreme climates would foster a predisposition towards chaos, half-wittedness, etc., whilst temperate zones would foster tolerant, organized societies (Hulme 2009:20).

justify racism and imperialism (Frenkel 1992 in Peterson, & Broad, 2009:72). This association with determinism and also Darwinism marked an ebb (although never a full halt) in anthropological dealings with the environment. In the 1990s, anthropological interest in human-environment relations again grew as a response to what has been called ‘the greenhouse summer’ of 1988, when the “West” realized that there might be a malign climate change taking place, and that humans could actually be responsible for the destruction of the environment (Hulme 2009: xxxi).

In 2017, there is no longer any doubt that the effects of global warming can be seen to shape social, political and economic relations, politics and policy, financial investments, media discourses and the attention of civil society.

Our knowledge about the process and the prospects of the escalating climate changes, and the indications that the actions of human kind alter the precondition for life on this planet, has led to a burgeoning amount of studies revolving around diverse aspects of climate change in anthropology.

In anthropology, climate change appears both as a meteorological process, a physical fact and as an idea and phenomenon, changing the preconditions for how we live. The situation considered, it has become prominent to address through ethnographic accounts, how climate change impinges on local communities around the world.

Over the last few years, anthropologists have offered rich ethnographic contributions, varying in focus from studies on adaptation, migration, policymaking, governmentality and risk management to perceptions of the environment, and of psychological mechanisms of fear and anxiety. The scope of interdisciplinary possibilities, and public interest, in anthropological climate change directed studies were expressed quite clearly at the 2016 Royal Anthropological Institute (RAI) and the British Museum’s international Climate Change conference in London, UK, where contributions from approximately 560 delegates contributed together, from fields such as development studies, urban planning, linguistics, archeology, meteorology, political ecology, medical anthropology,



environmental studies and art, all somehow trying to grasp the influence of climate change on human, social life (RAI News 2016).

These contributions appeared in the wake of many interesting transdisciplinary conversations on the role of anthropology in climate change studies. Especially with the increasing mobilization from a diverse scientific community arguing for a redefinition of this geological epoch as the ‘Anthropocene’.

According to the western scientific tradition, amongst other, the history and evolution of this planet reaches into ‘deep time’, a recognition of the vastness of earth's geological history<sup>8</sup> (Irvine 2014:162). In this perspective, the existence of humans as species in time is vanishingly small. In deep time, processes take place on a scale human history do not register, or barely registers, such as the geological creation of the Alps or the Andes, which both consist of “materials deposited at the bottom of the sea” (Hutton 1788:219-20 in Irvine 2014:163).

According to the British Geological Survey (BGS), for example, human kind at the present lives in the Quaternary period<sup>9</sup>, divided into the geological epoch of the Pleistocene (approximately 1.8 million years ago) and then subcategorized in the Holocene (which encompass the last 11.700 years of the planets history). The Holocene is characterized geologically in the extent of sediments deposits on land and sea, and it encompasses the rise of post-stone age humans (BGS 2017).

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<sup>8</sup> The discovery of deep time is often attributed to the Scottish naturalist James Hutton (1726-1792), by many thought of as the founder of modern geology (Irvine 2014:162). This is somewhat misleading, argues Irvine, as non-European engagements with earth’s history on deep timescales has been present before that, like with Persian polymath Ibn Sina (c 980-1037), theorizing on uplift and erosion in mountain ranges of the Amur Darya Valley (ibid).

<sup>9</sup> In geology, one operates with a timescale where the largest stretches of time are the *eons*, then comes the *periods*, the *epochs* and finally the *ages*.

The growing interest in renaming the age we live in as longer as the Anthropocene, was popularized by Eugene Stoermer and Paul Crutzen (Chakrabarty 2009a; Haraway et al. 2016). It “names an age in which human industry has come to equal or even surpass the processes of geology, and in which humans in their attempt to conquer nature have inadvertently become a major force in its destruction» (Crutzen and Stoermer 2000 in Haraway, et al., 2016:535; Baer and Singer 2014:13).

This is based on the observations that there has been a high rise in humanly produced carbon dioxide (CO<sup>2</sup>) emissions since 1950s. CO<sup>2</sup> is an important heat-trapping gas which, released through respiration, volcanic eruption, and from human activities such as burning of fossil fuels in industry and transport (NASA 2017) gathers in the atmosphere with other “climate gases”.

This causes what is commonly known as the ‘greenhouse’ effect; heat-trapping gases that prevents heat from escaping the planet’s atmosphere. This process keeps the globe temperate, but the relatively sudden increase of gases have caused an increase in the globe’s capacity to retain heat. In fact, in the 65 million-year records of carbon dioxide levels, scientists are unaware of any paralleled rate of increase of gases. The sheer speed of it makes it difficult to predict scientifically how the earth will respond.

To call for a ‘renaming’ of a geological period is a significant point for anthropologists, irrespectively of being accepted as such, because it signifies the acknowledgement that humans and our environment are explicitly related.

I cannot do justice to the full debate here, but I will superficially address how the concepts of “nature” and “culture” at various points in the discipline of anthropology has been found to be complex and relative to the place and time in which they developed. The concepts are studied as being inextricably tied to the development of western science and philosophy. One important aspect of that, is that nature and culture as concepts appear as dichotomies which receive meaning in being the opposite of the other. It does,

however, not imply that these concepts appear as dichotomies in other ways or places of knowing the world.

Looking to the concept of ‘nature’, for example, one finds that throughout the history of the Roman Empire it began to entail a connotation with ‘wilderness’, which was opposed to cleared, separated and cultivated land (Descola 2013:53-55). Both anthropologists Philippe Descola (2013) and William Cronon (1996) in their historical readers on the relationship between nature and culture in western history, show how there is nothing natural (as in ‘given’) about the concept of ‘nature’, neither is there “nothing natural about the concept of ‘wilderness’” (Cronon 1996:73, also Dove 1992). For a more comprehensive discussion of how studies of the relationship between “nature” and “culture” has varied according to general developments in social science, I recommend Descola (2013) as particularly useful<sup>10</sup>.

That climate change has set the the relationship between humans and our environment in relief once again, has not gone unnoticed in the various departments of anthropology. In the words of Haraway (2016:535): in the Anthropocene, “nature is no longer what conventional science imagined it to be”, and that consequently, “humans themselves can no longer be what classical anthropology and human sciences thought they were” (ibid:535). Earth and its environment can no longer be seen as detached from human kind, but rather as being inextricable from humanity and their actions. If this is true, then

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<sup>10</sup> I appreciate his contribution, not for his redefinition of the terms on animism, totemism, nor his extensive musings on the human-animal relationship, ontology and relativism, but for the way he twists and turns the readers’ mind into really seeing, that there are different ways of classifying even the most basic things. Also Michael Dove’s compilation of key works within the history of anthropological studies of climate and society (Dove 2014) offers a good reader on the subject, and for the role of culture to environmental studies specifically, I recommend Kay Milton’s reader from (2002[1996]) and (Argyrou 2005).

the process of climate change and how it affects both humanity and our environment, is intimately connected to our conceptualization of the evolution of planet Earth, and of the role humans are seen to play in it.

How this knowledge then embed itself with the idea in other places of the globe, then, has recently come into attention with anthropologists.

## The Climate Change Idea in Ethnography

Many of the early ethnographic studies on climate change came as a response to a call from the editors of ‘Anthropology and Climate Change, from Encounters to Actions’ by Susan Crate and Mark Nuttall in 2009. Both authors have engaged with the possible role of climate change as ‘threat multiplier’, a factor that which might magnify and exacerbate existing tensions and problems, and voiced a need for ethnographic contributions to the field of climate science (Crate and Nuttall 2009:11).

Anthropology in particular is well suited to provide this, especially with the rich history of human-environment studies already produced. With such a rich ethnographic biography, I have chosen to concentrate here on the current field at the time of publishing.

To do this, I would like to draw on Baer and Singer (2014), who have attempted to categorize current anthropological approaches to the field by looking at the dominant trends in climate change ethnographies.

Alongside what Baer and Singer (2014) name the *archaeological approaches* (considering “past and current evidence of climate changes and their effects on and responses of human communities” (ibid:61), I see my own contribution as an *eclectic approach*, which in essence is a blend of three approaches, which I outline below.

## *Cultural Ecological Approaches*

These studies are concerned about risk, and about the capability for human social systems to adapt to new potential climate change scenarios. These studies look at how resilient social networks can be, and to what extent culture, or what cultures, have social mechanisms to cope. One such approach is exemplified by the anthropologist Marcela Vásquez-León (2009) who deals with climate change and changing agricultural practices amongst Hispanic farmers in South Eastern Arizona. Whilst Vásquez-León find the farmers capable to adapt (to a certain degree, at least) to a changing climate, it is mostly through the efficacy of social resilience, defined as: “the capacity of an individual, community or system to adapt in order to sustain an acceptable level of function, structure and identity” (Edwards 2009:18 in Baer and Singer 2014:20). Vásquez-León finds that social cohesion in local networks enhance farmers opportunities to manage through rough climates and unpredictable weather, and as such her study enriches our understanding of humans relating to climate change as physical phenomenon and process. Vásquez-León resilience-study does not explicitly address how the climate change *idea* manifests itself amongst the Hispanic, another contribution focusing on risk and adaptation does. Studies in this category, however, have a tendency to address the issue of climate change as physical phenomenon more than as an ‘idea’ or as ‘discourse’, but there are exceptions.

Mathias Borg Rasmussen (2016) in his ethnography amongst Catholic villagers in Recuay, located in the Andean Foothills of Peru’s Cordillera Blanca, notes that the villagers do not only adapt to the climate change process, but to the idea as well (Rasmussen 2016:3). In Recuay, people’s livelihoods are sensitive to changes in precipitation and temperature, and local life revolves around stable water supply from melting water from retreating glaciers that they observe as retreating. The insecurity of water stability worries the people in Recuay, especially as the Atoq Huacanca river, providing them with water, is said to have turned into a “rebel”, or a “Diablo River” (Devil river). This Rasmussen argues supports his argument that “climate is being

adapted into worlds rather than people adapting to climate change” (Rasmussen 2016:2). We see here then, a notion that the climate change process, becomes embedded in a culturally specific idea, crossing over to what Baer and Singer (2014) define as cultural interpretive or phenomenological approaches.

### *Phenomenological Approaches*

These studies concern the ‘sense-making’ of climate change, of perceptions and interpretations of weather and climate phenomena. Studies here concern the construction of meaningfulness, and the perceptions and the interpretations of a changing environment, often exploring the relation between ‘local’ knowledge and climate phenomena (Baer and Singer 2014: 67,71). Here, we find contributions on how people perceive climate change, and how perception matters for the comprehension of the climate change process. As I draw on several contributions from these more phenomenological approaches, I will discuss here what such an approach might entail.

The issues addressed by phenomenological approaches are related to what we might call the knowledge of, but the lack of immediate perception of, climate change. Consider how global climate change happens on a timescale beyond human existence on this planet. The earth’s average climate has been found to have been fluctuating between tropical to ice-age climates several times in its 4.5 billion years, of which humans have occupied its surface for a mere 200.000 years (Tuttle 2017). For a human individual, who – being lucky – will partake in 80-90 years in the planet’s history, his or her experience of ‘climate change’ as physical phenomenon can at best qualify as an experience of change to local weather and the seasons.

The phenomenological approaches on how climate change as physical phenomenon becomes expressed in the *idea*, revolve around the issue of whether humans can experience, or perceive climate change at all.

To illustrate what lies at heart of this complex issue, I would like to draw on some of the reflections made by historian Dipesh Chakrabarty (2009a;2009b) about the ‘Anthropocene’ outlined earlier in the chapter, and what it might come to mean to the perceived segregation of the natural and human histories (and their disciplines).

In one of his lectures, he argues that the climate crisis is tied to how we perceive our life on this planet, but not as socialist, capitalist, nationalist identities (Chakrabarty 2009b:217). Although acknowledging the climate crisis as a crisis of capitalist ‘mismanagement’, he seems to think that the issue runs deeper than that. He argues that “the discussion about the crisis of climate change can produce affect and knowledge about collective human pasts and futures that work at the limits of historical understanding” (ibid:221), and that this limit in part is derived from the fact that humans, although experiencing specific effects of the crisis, cannot experience the whole phenomenon.

Further, Chakrabarty draws upon his Chicago colleague David Archer’s work, to say that humans are kind of “hardwired” into not being able to identify with people two generations before us. We are “deeply present-oriented creatures”, he says, that at the same time can cognitively think very far. Climate scientists are therefore asking the impossible - to “identify in our imagination with something that we can only cogitate about, but not actually agitate about in our hearts.

There is a sense of urgency in the apparently impossible plea of climate scientist: to bring the geological sublime within the realm of affect” (Chakrabarty 2009a).

There have been many insightful observations that has come from utilizing such a phenomenological approach, upon which large parts of my own analysis also draw. But as Baer and Singer (2014) objects, and which will become clearer below, phenomenological approaches often tend to avoid addressing how the knowledge of climate change, or perceptions of the environment, might relate to how social relations also has to do with power. Power, both in who wields it and how it is wielded, is relevant both in how individuals and communities experience their environment. This makes

studies that include both local and global processes of power, possibility and oppression to the idea of climate change, important to address. Here, critical approaches has contributed greatly to the list of climate change studies in anthropology.

### *Critical Approaches*

Critical approaches to climate change as an idea, concept or discourse, can in India be introduced with the works of Bina Agarwal (1992), Meera Nanda (2004), Emma Mawdsley (2006) and Asher Ghertner (2011).

Agarwal (1992) see the environmentalistic and ecological philosophy in India as being very ideological. She argues that the key for saving nature is to better the position of women, and she is critical of the tendency for environmentalists in India to identify women as closer to ‘nature’, and men being closer to ‘culture’. Agarwal thus disputes the “ecofeminist” neglect of economic and political factors (Agarwal 1992:122) and calls for studies that see violence against women as not only ideological, but also material.

Another more radical critique towards ideology in environmental movements in India come from Nanda (2004). She criticizes environmental movements in India for mobilizing the masses by invoking Hindu (nationalist) imagery and myths, arguing that “[j]ust about every popular Hindu ritual or idea has been tapped for its potential for mobilization of behalf of the environment” (Nanda 2004:1), such as the infamous north Indian Chipko-movement which has made women tying *rakhis* (ornamental wristband with ritual significance) to trees, conduct *pāni pūjas* (water worship) to promote water conservation and do Krishna worships to promote pastures for the cows, indicating a tendency to camouflage that social movements (like these environmental movements) are ideologically burdened with “left wing politics but right wing epistemology and cosmology” (Nanda 2004:2).

Mawdsely (2006) too, has looked more closely at the way environmentalism enters Indian national politics through Hinduism, and examines the parallels between the discourses of the Hindu Right and those of neo-traditionalist environmentalists



(Mawdsley 2005:308). She argues that “neo-traditionalist theories”, or romanticized and conservative visions of the past, entangle with environmental history and contemporary environment-livelihood struggles. In so doing, she argues, “they have significant parallels with Hindu nationalist readings of history and change” (Mawdsley 2005:382).

The writer, environmentalist and social activist Vandana Shiva (1988, 2008) should also be mentioned here. Shiva has an enormous influence on the way environmental studies are brought about in India, and her genuine concern for how development in India might cause more poverty “by depriving local communities of the ability to meet their basic needs” (Shiva 2008:4). Shiva draws public attention to the global climate change crisis through discrediting gene modification and farming based on chemical fertilizers, fighting for lowering human energy and resource consumption.

Lastly, Ghertner (2011) draws attention to how environmental policy fuse with internal state politics. Ghertner indicates that environmental policy in India focusing on being ‘green and clean’ is encompassed in a normative assessment of ‘dirt’ and ‘disorder’ in the courtrooms of Delhi. He looks especially to the preparations for the 2010 Commonwealth Games in Delhi, when he notes a clear tendency for policy makers to “more broadly frame questions of urban development and political economy in environmental language at this time” (Ghertner 2011: 148). He notes, that both poverty and disorder were seen to disturb the impression of a ‘clean’ and ‘green’ city, derived from a national pressure to “clean up the city” through different campaigns before the games. One example was the “Clean Delhi, Green Delhi” campaign, which was aimed at instilling the population with “civic pride in the cleanliness and appearance of India's capital city” (Ghertner 2011:148). Consequently, argues Ghertner, lower caste inhabitants of the city slums became subjected to a new form of “green aesthetic”, or more explicitly, “a distinct observational grid (or legibility) for making normative assessments of social space” (Ghertner 2011:148).

As much as I appreciate these critical approaches for drawing attention to important political entanglements the climate change idea might have in policy, the contributions above also lack the perceptive and tacit notion of the environment that the phenomenological approaches offer. The discourse-oriented approaches for example, revolve around problems with the ‘transmitter’ of climate knowledge, and place much of the agency for change on the ‘global’, or the ‘state’. In doing this, the approaches tend to become quite ‘top-heavy’. Reading Agrawal (2005), for example, one is led to see the changes that happened to the Kumaonis, in their practices and perceptions about forests, as happening only because of institutional transformations, as if the state was all there was to inform the Kumaonis on forests.

The critical approaches do not waver for relations that are not embraced in politics and policy, such as those between humans, their friends, lovers, priests, deities, forefathers or ghosts. When I aspire to include all of the above in one approach, my analysis according to Baer and Singer belongs with the somewhat all-encompassing *eclectic approaches* (Baer and Singer 2014:5).

### *Eclectic Approaches*

In suggesting this fusion-category, Baer and Singer admit that as most of the researchers on climate change within anthropology draw on different theoretical perspectives, it does make the boundaries between the approaches are difficult to draw (Baer and Singer 2014:68). One of the examples they mention as an example is Susan Crate's (2008) work on the Viliui Sakha of the Russian Siberia.

Crate looks at how local perceptions of a changing climate (and the melting of the permafrost) are expressed in narratives about the disappearance of the ‘Bull of Winter’, a legendary creature that marks the advent of spring. Quite phenomenological in its approach to the Viliui Sakha’s ‘Bull of Winter’, Crate however also address issues of climate adaptation and migration, risk management, thus mixing political issues with cultural ‘sense making’ in one piece. I find that the ethnographies of climate change

disengagement are quite “eclectic” in their approach, and it is also within this approach I see my own contribution. I would now like to discuss how the approaches mentioned above can work in cohort when analyzing why people engage or disengage with climate change.

Looking at existing studies on this issue, it seems probable that the ‘problem’ of disengagement is located with the ‘recipient’ of climate knowledge, the ‘transmitter’ of knowledge, or in the relation between the two.

To address the first, I find the phenomenological approaches more useful. If the idea fails to lodge itself in the everyday lives of people, it might be related to their unique perceptions of the world, derived in part from ‘culture’, the complex medley of all that might define an ‘us’ from an ‘other’, and the intimate relationship people have with their surrounding milieu.

The second, if the problem is with the ‘transmitter’, it is perhaps best addressed with the critical approaches outlined above. These are attuned with a sensitivity to the eschewed balance of power between those who govern, and those who appear as ‘environmental subjects’. These approaches often locate the issue in the information it self, that when the scope of the issue dawns upon the individual, the sheer vastness of the problem produce anxiety or a sense of powerlessness, in part because of the distance perceived to exist between those in power to make the necessary changes, and those who bear the burden of ‘unwilling’ states.

The latter, if the problem lies in its relation, requires a more eclectic analysis. Locating the ‘issue’ with disengagement in the relationship between the individual’s perception of the world and how society values this relationship, finds the issue being neither the information transmitted, nor that something is the matter with individuals’ inner motivation to act. It rather indicates that there is not really a disengagement with the idea, at all.

Some of the contributions on disengagement related to the trifurcation indicated above, can be exemplified with Norgaard's (2011) ethnography on climate change idea disengagement from 'Bygdaby', a small community in West Norway.

Norgaard (2011) does well in disproving the theory supposing climate change and/or environmental knowledge is enough to create social movements or action. If it did, she argues, Norwegians who are generally well educated, expressing a high public support for environmental movements and being very much 'aware' of the processes of global warming, would manage to transfer theoretical adaptations to real 'sustainable' behavior in their everyday lives (Norgaard 2011: xvi).

This, however, was not the case in Bygdaby per 2011 (Norgaard 2011: xvii). She concludes that this lack of action (or reaction) is caused in part because the mere awareness of the sincerity of the situation is in fact creating a high level of anxiety and stress. This makes Norwegians appear in a state of 'denial'. She is careful to nuance her concept of denial, however, and follows the sociologist Stanley Cohen (2001:8 in Norgaard 2011:10,11) in distinguishing three forms of denial.

One is the *literal denial* (asserting that something is not true – which climate skeptics tend to do. She finds most Norwegians not to be in this category). The second is *interpretive denial*, that "the facts themselves are not denied but are instead given a different interpretation" (Norgaard 2011:10), a form of denial that she does not press any further.

The third is *implicatory denial*. This form of denial is a form of 'socially organized denial', where individuals collectively distance themselves from climate change information (ibid:9), so that what is denied, is not the information per se, but the associated issues; "the psychological, political or moral implications that conventionally follow" (Cohen 2001:8 in Norgaard 2011:11).

This is what she argues is what has happened in Bygdaby, and for her explains the failure to integrate knowledge into social action (Norgaard 2011:11). Her observation is insightful, and her three forms of climate change denial quite applicable, I find, to other

approaches dealing with issues of knowledge transmission, although I find studies that deal with her second form of denial, the ‘interpretive’, of more interest. Especially because the ‘interpretive denial’ might in fact reveal itself to not being a form of denial at all, but an acknowledgement, and a reaction to, the climate change process.

## Epistemological Considerations

To explain this further, I need to outline which strands of the phenomenological and critical traditions that are useful for my eclectic approach. What I find several of other eclectic approaches having in common, for example, is the close relation there seems to be between ‘scientific knowledge’ about climate change and ‘modernity’ when addressing disengagement to the climate change idea around the globe. A discussion of what this relationship means to my analysis will be discussed below. Understanding climate change as an *idea*, however, I need to explain in more detail what a phenomenological approach to ‘dwelling’ and ‘temporality’ might offer. I start out with the latter.

### *Temporality*

As we saw with Chakrabarty (2009a;2009b) above, time-perception and phenomenological approaches to experience has spurred discussions on how, or to what degree, climate change can make ‘sense’ to people or not. To address these discussions, would imply to an outline of the matter of time; what it is and how we do or do not perceive it, is in order.

The study of time is an existential issue that in its complexity fall beyond the scope of this thesis, but to be unfairly superficial, it can be noted that in anthropological approaches to time, one generally operates with two aspects: time as perceived, and relative to individual experience, and time as abstracted and chronological.

This latter version of time is often referred to as the Newtonian, measurable ‘clock time’ with (or with anthropologist Alfred Gell's (1992), B-series time, which continues unabatedly irrespective of human practice and involvement. In a naturalistic, Newtonian understanding of time, time is chronological, linear, and an empty shell, moving on irrespectively of how humans feel about it.

The former aspect of time is thus the one that has been most explicitly addressed in anthropology, via the concept of ‘temporality’. With temporality, as I read Nancy Munn (1992) another anthropologist addressing time, time appears as it is ‘lived’ or ‘experienced’ (resembling Gell’s A-series time). It entails a notion that “views time as a symbolic process continually being produced in everyday practices” (Munn 1992:116). In this category, time can be said to have quality and meaning. To Munn, who focuses on how we can tell or reckon the time, it can also actualize past and future time in the lived present.

The current climate crisis, and the positioning of humans as it appears in the Anthropocene especially (as geological agents) “stretches historical understanding” until it is rendered meaningless. Studying temporality as time as it appears to humans then, is quite in line with the phenomenological tradition I have referred to above, and something that has preoccupied scholars writing on climate change of late. These approaches are asking whether humans can experience, sense or perceive changes in the global climate at all – and whether it is because of this lack of ‘feel’ that people fail to engage. This is also what feminist philosopher Astrida Neimanis from the University of Sydney, together with Rachel L. Walker (2014:558) have argued, building of the assumption of the phenomenologist philosopher Julien Knebusch (2008) that we are able to sense the climate, because we are able to perceive “but the relative stability of the weather over time (...)”. They thus develop this notion by talking about the possibility of bodies being “transfer-points and sensors of climate change”, and in fact “weathering the world” as we live, and dwell in it (Neimanis and Walker 2014: 558,559).

This concept of dwelling and what it has to say for how people perceive their environment, has in Anthropology of Climate Change studies been influenced to a large degree by Ingold (1995, 2000, 2010, 2011). As his approach has also been central to the development of my own analysis, I need to look more closely to what ‘dwelling’ for Ingold entails.

### *On ‘Dwelling’ and ‘Being-in-the-World’*

In anthropology, phenomenological approaches have often drawn on the existential philosophy of Martin Heidegger, who put perception as the most fundamental way humans build all knowledge or wisdom (Smith 2016). Heidegger’s concept of *dasein*, the ‘being-in-the-world’ (or “there-being”), is thus crucial to understand Ingold’s ‘dwelling’ perspective. Although not following Heidegger explicitly<sup>11</sup> (but rather through Merleau-Ponty and Gibson), Heidegger’s notion of *dasein* is also central to the development of Ingold’s approach to understand ‘dwelling’. Some central principles Ingold seems to share with Heidegger are these:

For Heidegger, *dasein* is a being that perceives the world through activities and commitments. *Dasein* perceives as a “being concerned about its being” (Kelly 2016), and does so in the act of ‘dwelling’. Heidegger saw humans as beings that understands “what the world contributes to us and what we contribute to the world (...) without reducing one to the other” (Kelly 2016). Humans to Heidegger live in a “revealed” world. For Ingold, as well as with Heidegger, “I dwell, you dwell” is the same as “I am, you are” (Heidegger 1971:147 in Ingold 2011:10) so that “every person is, before anything else, a being-in-the-world” (Ingold 2000:168).

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<sup>11</sup> If the concept of dwelling came from Heidegger, perception (thus also movement) from Ingold came from the ecological realist James Gibson (1979) (Ingold 2011:11). The essence of perception, argues Ingold, is movement, and Gibson - in rejecting Cartesian dualisms on mind and body - saw perception as “the achievement of the whole organism as it moves about in its environment” (ibid).

Heidegger excluded animals in his concept of dwelling, arguing that they might have an environment, but that they were “deprived of a world” (Heidegger 1995:239 in Ingold 2011:11). This argument makes Ingold depart with Heidegger’s notion of dwelling, and as such Ingold proceeds to define his own use of the word, which I follow up to a point.

Ingold also draw upon Bourdieu (2005, 2010[1977]) and his notion of ‘habitus’ and practice to define ‘being in the world’. To Ingold, in humans’ practical engagement with their environment, they acquire dispositions, a sort of embodied knowledge, adding up to their *habitus*<sup>12</sup> (Bourdieu 2005, 2010 [1977]). Ingold (2000) reads Bourdieu as saying that the habitus does not so much express itself in practice, as it subsists in it, in a “practical mastery that we associate with skill” (Ingold 2000:162).

With Ingold, people develop perceptions and skills in a certain way because their habitus has made them attuned to the environment in which they dwell. With Ingold (2011) we thus recognize a life-world, that relates to a certain notion of place and time. In the act of dwelling, humans perceive a ‘life-world’, one that relates to a certain notion of space (or place) and time (Ingold 2011:142). The dwelling actor with Ingold acts and conducts practical operations, or tasks, in what Ingold calls a ‘taskscape’. This is a concept that for Ingold makes it possible to acknowledge that all tasks are embedded in sociality, and as such, all everyday life practices are constitutive for ‘dwelling’.

In the act of dwelling to Ingold, place takes precedence over space. This is because, Ingold argues; people draw a living from land, not space. They plant crops in the earth, not space. We feel the wind blowing in the air, not space. “Space is nothing, and because it is nothing, it cannot truly be inhabited at all” (ibid:146). And it is actually because of Ingold’s notion of place over space, that makes him depart from the concept of dwelling

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<sup>12</sup> I will get back to Bourdieu and his concept of the habitus in chapter 2, but here it should suffice to note that habitus can be considered a set of lasting dispositions, “laid down in each agent by his earliest upbringing” (Bourdieu 2010[1977]):81), and acting on the individual as the “matrix of perception” (Bourdieu 2010[1977]):83) through which he or she engage with the world.



in his later work. Ingold sees the concept of dwelling as confining people into immobility, and thus departs from ‘dwelling’ as his core concept to give primacy to movement. Departing from ‘dwelling’ to ‘inhabiting’ seems for Ingold a way to give place a sense of movement, which happen “continuously, along lines in a ‘meshwork’ (Ingold 2011: 146,149). Ingold does this by emphasizing that all beings exist in the world as wayfarers in a ‘meshwork’. In his book ‘Being Alive’ (2011) Ingold thus focus more on the act of movement through wayfaring, creating a ‘meshwork’. He argues that as “life happens along a line, not in a place, we are not place-bound, as we move, we make places” (Ingold 2011:148).

Although I do empathize with Ingold’s current move towards movement and away from dwelling in his 2011 ‘Being Alive’, I still find the concept of dwelling more potent than what he offers as an alternative; the very ecological concept of ‘inhabitation’. To me, the concept of dwelling still functions in explaining how people relate to, experience and utilize their knowledge about the environment; at least it does so, if dwelling also entails that perceptions change not only with the individual, but how the individual relates to a larger social structure of power and hierarchy.

This is where, in my eclectic approach, phenomenological approaches run short of answers. These might better be provided by studies in the sub-field of *critical anthropological* approaches, in the way many are directed at addressing how issues of capitalism, development and sustainability influence the climate change idea, and how where global and social hierarchical relations might change because of climate change (Baer and Singer 2014:73,77). In these ethnographies, one might identify a tendency to point to how state or capitalist structures misuse the power they wield. Many, but not all, of these approaches take shape as Marxist critiques of a late-capitalist, or neo-liberalist systems of government, ‘forcing’ people into conspicuous consumption and conformity. The notion of ‘development’ or ‘progress’ in the light of climate change in this perspective, draws upon a knowledge about the world that is quite particular. The climate change idea in Indian politics and policy, for example, reflects quite strongly what Tsing

(2005) has called “the universal dream”, and one that diffuse and intertwine with local relations of power related to class, caste, gender and age. Through campaigns, projects, formal education, media, friends and work, the idea of climate change is materializing in projects, meetings, schemes and school curricula, in places, by face to face meetings, as part of a *discourse*, a concept that below will be addressed more closely.

## Climate Change as Discourse

As I outlined in the introduction, knowledge about climate change, what it does and how to best address it, transmit through a myriad of sources. It passes through state government offices, through United Nation-roundtable discussions, editorial offices and non-governmental organizations. Here, in climate-policy and action, climate change data from models, charts and meteograms stops being just a name for a climatological phenomenon, and appears more as an idea, wrapped within a discourse. When ethnographies of climate change that deal with the idea of climate change being entangled within grids of power uses discourse, they will most often draw on Foucault (1984,1995).

In his ‘Archeology of Knowledge’, Foucault (1995) outline his use of ‘discourse’ as knowledge being caught up in a system of reference, as he exemplifies with the text and the statement. Following Foucault, discourse relates to statement in the way that discourse can be said to be both “the general domain of all statements, sometimes as an individualizable group of statements, and sometimes as regulated practice that accounts for a certain number of statements” (which Foucault (1995:80) admits is rather fleeting), but concludes after a linguistic analysis of ‘statement’ that the term discourse can be defined as the group of statements that belong to a single system of formation (ibid:108) such as an economic discourse, or the discourse of natural history etc.

The statement will constantly be referring to the time when it was produced, what produced it, and what relations brought the text about. In this way, the text becomes a “node within a network” (Foucault:1995:23).

With Foucault, there will be many discourses, many versions of interpreting the text – or making statements about the text, or for me; the idea, or the concept of climate change. To argue that there is a discourse of climate change then, allows for people to disagree on the technicalities around its cause and consequences, but still to participate in the same “conceptual field” (ibid:126).

A discourse will also, however, carry with it all that is ‘not said’, not that it is hushed into silence on purpose, but rather, that it exists under “the positive conditions of a complex group of relations” (Foucault 1995:45). These relations can be seen with Foucault as being primary, i.e. independent of discourse (in my case, that the globe is warming at unprecedented rate), and secondary: what can be said about it (why it is happening, and what should be done about it).

As Foucault’s notion of power is elusive, and “not located in a privileged place or position, but in the relationship itself” (Deleuze 1999:26,27), then discourse too, is neither to be found here nor there, but in the relation and the actions that derive from it. The discourse is then manifesting “as practices that systematically form the objects of which they speak” (Foucault 1995:49).

It thus becomes the task of the social scientist to question the relations’ mode of existence, and to address what it means that just those things were said just then, by that person. “[I]n short, that in one way or another, things said say more than themselves” (Foucault 1995:109-110).

The discourse of climate change then, consists of a particular, and presupposed way, of looking at the process of global warming. One that defines what is possible to talk about as being climate change. In the case of environmentalist policy approaches in India at least, if we can talk about a climate change discourse, then it is as a discourse that works from the premise that humans (from being too many and consuming too much)

exacerbate the global warming process. But the discourse on climate change does not appear without historical context to other discourses. It is rather seen to draw heavily on those of ‘development’ and ‘environmentalism’, and becomes a discourse hard pressed to pin-point as one in its own right.

In India, I argue that there is a conflation of two already established discourses enveloped within the one of climate change. As Dubash (2012) in his edited volume on climate change and policy argue, both the developmental- and the environmental discourses can be said to have been appropriated on the state level, engulfed by climate change as one encompassing approach (ibid:7-9,16). I will thus give these discourses too, a brief mention here.

One can look at the ‘developmental discourse’ with James Ferguson (1994), who argue in his analysis of a 1975-1984 development project in Lesotho, South Africa, that the development discourse is entwined with certain notions of ‘modernity’ and ‘progress’. His ethnography also goes to show how the abstracted policies shaping ‘development projects’ indeed have social effects locally, even the presumed “failed” ones. Ferguson subsequently draw our attention to the fact that such projects can mask or depoliticize other socio-economic factors, even “whisking political realities out of sight” (Ferguson 1994: xv).

The ‘environmentalist discourse’ on the other hand, could be read with Argyrou (2005) as the movement advocating natural conservation as a counteraction to conspicuous consumption. But to complicate matters, to be ‘climate change-aware’ is not necessarily the same thing as being an “environmentalist”, if we with ‘environmentalist’ refer to what has traditionally been associated with a cultural, largely socialist movement in the decades since World War II, seeking to protect ‘nature’ from human harm (Cronon 1996b:25). In the climate change discourse, ‘conservatism’ has to fuse, or make peace, with ‘progress’.

The conflation of the two discourses was explicitly voiced in the 1987 Brundtland Commission on sustainable development, and have later lingered in global policy through, for example, the United Nations Development Program (UNDP) which in 2017 had four out of six profiled cases issuing environmentally sound solutions for development on their webpage (undp.org 2017). The United Nations, with large international conferences, reports, research and mapping teams, and the ability to move significant amounts of allocations and grants, is a major actor in defining both what should be addressed, and how. As one of the foremost institutions ‘transmitting’ climate change knowledge and policy on the globe, The United Nations has been particularly influential in shaping the concept through their Climate Change panel (IPCC) under their Environmental Program (UNEP), a program that even received the 2007 Nobel Prize (with Al Gore) "for their efforts to build up and disseminate greater knowledge about man-made climate change, and to lay the foundations for the measures that are needed to counteract such change"(The Nobel Foundation, 2014).

Although a leading actor, the United Nations is not alone in generating international discourse on environmental issues. Individual states, too, wield much of the same power, accepting or declining advices from the United Nations, they formulate their own climate policies and build political careers on environmental politic or climate change adaptations. Together with the European Union, the World Bank, large international NGOs like the World Wildlife Fund, and all the media houses and lobby groups that take place between these and the state or commercial companies, climate change knowledge, how it is formulated and by whom and in what manner it travels, take on its hue. Let me pause at knowledge for a moment.

In talking about the structuring power, or of the system exerting power to alter, influence or regulate human behavior, I return to Foucault. Foucault weights knowledge as crucial. “If knowledge consists of linking the visible and the articulable, power is its presupposed cause; but, conversely, power implies knowledge as the bifurcation or differentiation

without which power would not become an act” (Deleuze on Foucault, 1999:39). Foucault was intrigued by how power works upon individuals and groups as subtle coercion, making people do what was wanted of them, often without knowing that they do, as a ‘microphysics of power’ (Foucault in Foucault and Rabinow 1984:183).

This becomes expressed in Foucault’s notion of ‘governmentality’. Governmentality refers to “conducting oneself” according to a kind of governmental rationality, exercised by the state to improve its populations. By this rationality – the act of thinking about how things are or ought to be - one can define someone, people, groups, and by defining them, they can be controlled and managed, which is what, according to Foucault, a state does.

Governmentality is a concept which has been used by political scientist Arun Agrawal (2005) to develop a concept of ‘environmentality’. Environmentality draws on the argumentation above but is with Agrawal also to be used as a “specific optic for analyzing environmental politics instead of denoting a particular form of it” (Agrawal 2005:226). To Agrawal, environmentality let the colonial, and the post-colonial Indian state could shape, or form, ‘environmental subjects’: “people who have come to think and act in new ways in relation to the environment”, or: “for whom the environment constitutes a critical domain of thought and action” (ibid:16). This optic becomes quite important also for my own forthcoming analysis, as Agrawal argues, it might change how people “think about their actions, positively or negatively, in relation to the environment” (ibid:17).

In terms of the governmental attention to ‘development’ and ‘progress’ in area of Rani Mājri, one could with Agrawal (2005) argue that the village has become quite ‘readable’ to government interventions as ‘environmental subjects’.

Agrawal utilize in his analysis the concept of ‘environmentality’. Agrawal explores how environmental politics on forest conservation played out in Kumaon, North India, and developed the concept of ‘environmentality’ as a way of exploring the relationship between power and knowledge, and to unfold how the shifts in knowledges have

followed forms of government (Agrawal 2005: xii). The concept thus refers to “a specific optic for analyzing environmental politics instead of denoting a particular form of it” (ibid:226). From this way of viewing, or reading certain relations between the state and the individual in a society, a process of shaping, or creating governmental ‘environmental subjects’ appear (Agrawal 2005).

The way Agrawal argues the state could do this, is through changes in technologies of governance. One example is “community-based conservation” aimed to transform the rural populations into “accomplices in environmental and their own control” (Agrawal 2005:14), “shaped anew by the soft hammer of self-regulation” (ibid:15). New regulatory bodies appeared within the state too, that shaped social environmental interaction in local communities that he calls “regulatory communities”, that enabled new alliances and divisions among local residents and their representatives (ibid:7). These changes occurred together with the creation of forest councils and more networked forms of power. Careful calculation on the part of the state and the community, thus “transformed nature into the environment” for the Kumaonis (Agrawal 2005:66), allowing for the environmentally aware citizen. With the above, one could perhaps imply also, that the climate change discourse has lapsed on to the ongoing process of making ‘environmental subjects’ in North India. One can exemplify how viewing Rani Mājri with an ‘environmentality’ lens, can justify government intervention.

A little higher in the hills than the plain villages, a little lower than the proper mountain villages, one would register a tiny collection of houses with Hindu farmers. This nucleated settlement is placed just so in the Shivalik mountains that its topography seemed resistant to being categorized as either. Most have low levels of education, some have none at all. Most residents have little financial means, some none at all. By the looks of 2017, low prospects of changing this within the next couple of decades. Most of these people live from hand to mouth, rely on the richness of their surroundings: the forest for firewood and fodder, the channel for water and irrigation, the fields for

nutrition and the somewhat agreeable and predictable weather for living, working and resting. But with the villagers working actively towards a ‘better’ life, with access to ‘better’ jobs, ‘better’ education, with prospects of availability and agency, they have also contributed to ‘global warming’ by consumption and intensive farming. People here do not speak English (although some words and expressions will be understood, especially by the youths), and all but a very few are ‘unaware’ of the processes we associate with climate change and ‘environmentality’, such as the processes of the greenhouse-effect, the role of carbon dioxide, or the decomposition time of plastic in the sea.

With the optic or lens of environmentality, there is certainly a need for intervention – for an ‘awareness campaign’.

To make the people of the Shivaliks ‘aware’ of environmental issues, was a peculiar enterprise, and as I discussed in chapter 1, closely entwined with concepts of ‘modernity’, ‘progress’ and ‘knowledge’. As chapter 6 will address more closely, this ‘awareness campaign’ would happen via projects and schemes implemented at all levels and sectors; in industry, health, water, sanitation, in media, education, and civil society in the urban and rural areas of Haryana, and especially, in the rural Shivalik Hills.

The transformation, however, should not be viewed entirely in the negative. As Tanya M. Li (2007:277) has pointed out, power with Foucault is also retained within the subject, as a capacity to act. This is also apparent in Agrawal’s study, where there is a notion that there has in fact happened a “proliferation of power” with the new technologies of governance. Agrawal reads Foucault’s governmentality so that modern forms of power achieve their full effect, not by force, but by turning people into accomplices (Agrawal 2005:217). This gives a dispersion of power and a proliferation of strategies to influence it, as we see in Kumaon. In Agrawal’s case, guards and forest-council members were both officials and locals, allowing for local residents to respond and react, oppose and agree to the subjectification, at least, to a certain extent.

Agrawal does point, however, to a central issue; to the state’s role in producing a certain ‘environmental subject’ suited for governance. If the climate change idea then becomes



lodged, somehow, within preexisting discourses where a certain environmental knowledge is valued higher than any other, I need to address the relation the climate change idea might have with power.

## Environmental Knowledges

In studies of ‘environmental knowledge’ in anthropology, one might often encounter knowledge as being either of these two: ‘local’, which often might be referred to as “indigenous traditional knowledge”, “traditional ecological knowledge” (also shortened as ITK or TEK), or ‘global’, often referred to as being “western” or “scientific”. This categorization of knowledge-types is often treated as being either/or, and occupying polar conceptual positions. This is often the case, when anthropologists wish to address how global policy shapes local practice by transferring a certain kind of ‘new’ knowledge from the ‘west’ to the ‘non-western’.

Many anthropologists have criticized the tendency for policymakers to rely too much on the so-called ‘western’ technical knowledge, and too little on the ‘local’ knowledge – and to equate the former with ‘the rational – the value-neutral’, and the latter with “the irrational – the value biased”. But it has also spurred interesting discussions around the polarization of knowledge archetypes, for example by Agrawal (1995), Huber and Pedersen (1997), Brosius (1997), Scott (1998), Ingold and Kurttila (2000), Cruikshank (2001), Turnbull (2005), Descola (2013).

To complicate matters, Julie Cruikshank (2001), when looking into climate change knowledge amongst the scientists and the locals of Tlingit, North America, argues that “scientific knowledge” and “TEK”, beyond their stereotyped differences, still share similarities. She uses her ethnography to address a point I also wish to press on; that if ‘local’ knowledge might appear vague, subjective, context dependent and open to interpretation, the local Tlingit, “are quite likely to characterize science in similar terms: as illusory, vague, subjective, and context-dependent, and open to multiple interpretations” (Cruikshank 2001:390).

I will in later chapters illustrate how these idealization of knowledge archetypes become reproduced in the general population, as well as in politics and policy, but here I must outline how it is possible to address different kinds of knowledge without this rhetoric. I employ an epistemology discussed by Scott (1998) and Turnbull (2005). They see knowledges as variations, or interrelated ‘kinds’ where the particular and the general, the abstract and the concrete, are matters of positions in a matrix, or along a scale, where all forms of knowledge exist. This way, knowledge becomes expressed in practice as ‘motleys’ or ‘assemblages’, appearing within a context of time, place and power. Below, I outline the relationship between these ‘kinds’ or ‘variations’ of knowledges by looking at some responses to a disastrous flood.

### *Approaching Modes of Knowledges*

Whilst I conducted my fieldwork, the 2013 Uttarakhand flood took thousands of lives not too far from my field site. The responses to the flood in the village in which I resided was manifold, but two responses stood out. The two most common reactions to the flood were that it happened as an act of Lord Shiva, and that it happened because of global warming and climate change. Contrary to what I expected, both responses also coexisted quite unproblematically within families and even within one individual, both immediately after the flood, a few weeks after – and 3 years later. This co-existence puzzled me, both whilst in the field, and in the time spent analyzing my material in retrospect.

Weren’t these chains of causality rather “*Expressio Unius*” – meaning that believing it to be one, excluded the other? This would certainly be so, if one saw these two quite different responses to the flood as belonging to dichotomous types of knowledge.

Most villagers opted for Shiva’s anger or dismay about the human condition as explanation for the flood when explaining to me why and how such a tragedy could happen (and if it could happen in Rani Mājri). It could be argued that this explanation

was one of environmental retribution for human sin, and as such would belong to a local, religious world view, and as such this ‘kind’ of knowledge is both traditional, local, and indigenous. So far so classical TEK/ITK.

On the other hand, the media-dominated view that opted for a global warming/climate change explanation for the flood, one could argue, belongs to a more transnational, technological and scientific world view, closely related to ideas of ‘modernity’, growth and ‘innovation’. So far classical “western-scientific” knowledge. But segregating these types of ‘knowledges’ in this manner cannot be justified when the people of Rani Mājri did not seem to do so.

It seems more fruitful then, to look at knowledge like Scott (1998), Ingold and Kurttila (2000), Ingold (2000, 2011) and Turnbull (2005) does, that is, through practice.

Ingold and Kurttila (2000) for example, in discussing forms of knowledge amongst the Sami people in Finnish Lapland, for example, initially wanted to “incorporate” local knowledge into climate change modeling - to ideally make meaningful prognoses for people at local levels.

What they found was that the Sami people did not “employ knowledge in practice”, as much as they “know *by way* of their practice” (ibid:191-192, italics in original). Knowledge with Ingold’s later works (2000, 2011) becomes closely associated with ‘skill’, or with ‘practice’. Skill with Ingold refers to humans getting to know the world by engaging with it, through a process of development in a historically specific environment (Ingold 2000:25). Here, “humans and non-humans, skillfully conduct themselves in and through their surroundings, attending and responding to the world” (Ingold 2011:11), and create knowledge in practice through the act of “wayfaring” (Ingold 2011:155).

As will become clear below, however, both ‘practical’ and ‘analytical’ forms of knowledge are messier, more closely related, and more complex in their archaeology as they are in their expression than first assumed. Building on Scott (1998) and Turnbull (2005), an image emerges where knowledge is essentially ‘localized’, despite what ‘origins’ a form or ‘kind’ of knowledge might be deconstructed back to. Both Scott and

Turnbull's approaches to knowledge combines very well with Ingold, and the next part will thus shortly address knowledge as *techne* (universal knowledge) and *mētis* (practical knowledge).

To Scott, knowledge in the form of *mētis* can only come "from practical experience" (Scott 1998:6). He argues that practical experiences underlie any activity that we do, and is attained by doing. *Techne*, on the other hand, refers to the universal kind of knowledge, the kind of knowledge that - for reasons of history and economy, has been valued the highest by planners and policymakers, by state bureaucrats and by administrators and lobbyists. For the Greeks, and particularly for Plato, Scott writes (1998:319), *techne* represented knowledge of an order completely different from *mētis*, but was far from as unrelated as it might appear.

To explain their relation, Scott turns to how knowledge appeared in the era of 'high modernism'. In the west, 'high modernism' developed in the late 1800-early 1900s when the stunning transformations brought about by the industrial revolution made lasting impressions on the state planners, the engineers, the intelligentsia (Scott 1998:5). What characterized high modernist thought was a "blind faith in linear progress, technology and science, the expansion of production, the growing satisfaction of human needs, the mastery of nature (including human nature) and, above all, the rational design of social order commensurate with the scientific understanding of natural laws" (Scott, 1998:4).

High modernism then, is to Scott the era when knowledge as *techne* represented the specific kind of knowledge that high modernity needed "in order to rhetorically present itself as the antidote to backwardness" (Scott, 1998:331).

In some cases, the dichotomous positioning of theoretical knowledge being 'western' and somehow part of 'progress' has been a tool for vocalizing marginalized people's right to be heard. Anthropologist Vassos Argyrou (2005) for example, has pointed out in his critical book on 'environmentalism', that the dualism has enabled certain people being able, on the basis of their lifestyles as 'non-western', to portray themselves as "victims of a monumental historical misunderstanding", and "as living embodiments of an urgently

needed ethic of respect for nature, as repositories of a simple, yet profound wisdom that the West has long lost in its heedless march for progress” (Argyrou 2005:viii). More commonly, however, the polarization serves those already in power.

A knowledge-form that could be used to distance itself from the ‘traditional’, or ‘backward’ ways of the “unenlightened”. This enlightened form of knowledge is coated in western, scientific, technical knowledge, which can be “expressed precisely and comprehensively in the form of hard-and-fast rules (not rules of thumb), principles and propositions” (Scott, 1998:319). The colonial regimes, post 1930s, then furthered this way of valuing scientific knowledge and progress, and used it, argues Scott, in “extensive experiments in social engineering” (ibid:101).

But Scott does not separate *mētis* and *techne* as if they were competing versions of knowledge, but sees rather knowledge-practices that sometimes acting regardless of *techne*, and sometimes in accordance. In this way, we could see knowledge manifest, or take shape, “in the moment of practice” (Scott, 1998:332). This way, knowledge becomes a sort of ‘bricolage’, recombining all the time, continuously building on itself, like a coral reef. It might branch out here and there, sometimes adjusting and adapting to context, but in practice, it is knowledge all the same.

This is not unlike the approach to knowledge as essentially being ‘local’, as argued by Turnbull (2005[2000]). With Turnbull, knowledge is seen as a ‘motley’, or as ‘assemblages<sup>13</sup>’ of many components. Turnbull, as Scott, argue for the close connotation that ‘techno-science’ has with modernity; that the concept of modernity itself is in fact based on the authority of techno-scientific knowledge.

As a form of knowledge that “epitomizes planning, rationality and order” (Turnbull 2005:1), it gains much of its force from it being assumed universal. Turnbull further argues, that even if scientists have deconstructed the claims of science and technology by

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<sup>13</sup> This is from Deleuze and Guattari, “like an episteme with technologies added, but which connotes the ad hoc contingency of a collage in its capacity to embrace a wide variety of incompatible components” (Turnbull 2005:44).

placing this knowledge in a sociohistorical setting (see for example Descola, 2013 and Foucault, 1995), “such deconstructions and examinations, whilst prolific and insightful, have had limited success in changing the broader community understanding” (Turnbull 2005:4,5).

This is because, Turnbull argues, both ‘modernity’ and the knowledge upon which it builds, appear as messy as it pretends to be orderly. In fact, science in its ‘modernist’ form must be realized to have been co-produced with industrial capitalism, not in isolation, but in dialogue with all the traditions and ideas from the colonies and the cultures around the world that helped modernity progress in the west (ibid:6). With Turnbull then, we should rather see western science as an ideological marker in the creation of the ‘other’ (Turnbull 2005:7), where scientific knowledge underpins the celebration of ‘modernism’ as supposedly synonymous with development and social improvement (ibid:7), (see also Hulme, 2017).

As I outlined in the introduction and above, I expressed an uneasiness with both how knowledge about climate change is explicitly expressed in terms of scientific, universal knowledge. I was also uneasy with the presumption that this knowledge is perceived as being an entirely different kind, either “indigenous” or “traditional” knowledge. With Scott and Turnbull above, we saw that *techne* had a particular relation to modernity and progress, where it appeared value-neutral and decontextualized when in fact, it was not. As knowledge is expressed in its physical execution, we should perhaps not talk about these as being different type-sets at all. They might better be approached as perhaps more or less theoretical or practical ‘modes’ or ‘orientations’ humans take in the face of new information; with which humans weigh and consider when in doubt of the correct course of action.

Cruikshank (2001), points out a central issue that supports my argument. She observed amongst the Tlingit, that their oral traditions about the glacier melting was different from the scientific historical narrative, because they embodied cultural traditions more

*transparently reflexive* than science. Science, she says, is not so *self-consciously aware* (Cruikshank 2001:391, italics added).

As we have seen with the above, ‘science’ has struggled quite hard to dissociate itself from context, because if it varied with context and became relative, it would not be morally devoid, it would not be universally applicable. One could then argue, that ‘science’ was rather *implicitly reflexive*, and the other modes of knowing, whether it is religiously or ‘traditionally’ or ‘indigenously’ referred to, is, *explicitly reflexive* to society, to individual ethic, moral, value, color the ‘kind’ of knowledge in an unabashed, and biased way.

Both modes should be seen as equally attainable. Still, for those raised in a specific culture, one might appear more or less ‘untainted’ than the other. For tmy Rani Mājrians, for example, my personal (Norwegian, educated, middle class, female knowledge) was just as morally biased and colored by my world as much as their own seemed general, untainted and absolute.

To think about knowledge in this way, both support my phenomenological standing (that what we claim to know depends on our engagement with the world as individual bodies – our perceptions), but also that all knowledge is related to a larger web of meaning. But it is not Occident or Orient *in essence*, not ‘TEK’ or Scientific *in essence* – only in its modes of operandum can be said to be so.

I have so far used Turnbull (2005) and Scott (1998) to argue that knowledge as *techne* (scientific) and knowledge as *mētis* (practical) are not in a dichotomous relation to each other, but rather should be approached as taking shape “in the moment of practice” (Scott 1998:332). I depart then, from the notion that *all* knowledge come from somewhere, that it is contextual, and that through practice, it becomes as ‘local’ as it is ‘global’.

What appears clear from these works cited above, is that there are different kinds of knowledges, but not necessarily different it its ‘indigenous’ or ‘western’ properties. It seems more useful to talk about of different ‘kinds’ of knowledges; some more abstract

and theoretical, and some more concrete and practical. Given the extensive literature in anthropology unmasking the polarization and hierarchy of knowledge, this point had not been necessary to press here, had it not been for the fact that I see the dichotomous forms of knowledge appear as reasons for difference, both in some studies on Indian ‘environmental awareness’, and in Indian politics and policy.

Here, knowledge appear in two forms, one more ‘natural’ to certain cultures than the other. For example, some studies are found to argue that the Hindu, or Indian (non-western) mind is ‘traditional’ in its essence. Lance E. Nelson's (1998) for example, indicates quite clearly, that there exists an idealized Hindu tradition that is entirely “eco-sensitive” in its essence. He further argues that the ‘traditional’ people of India live in a “Hindu universe, though *under siege*, is still very much alive” (Nelson 1998:7, italics added). Under siege from from western influence, Nelson argues, this westernization ‘modernizes’ those ‘traditional’, to the degree that Indian’s are “even becoming postmodern” (Nelson 1998:6).

As a consequence, they are eco-sensitive no more. As Argyrou (2005) too has noted, to educate people into an ‘environmentally aware’ state, is very much related to notions of ‘modernity’. This relation, he argues, produces “the same sort of global power relations and the same sort of logic that mark the modernist paradigm at its core” (Argyrou 2005:x). This kind of rhetoric simplifies and essentializes both “westerners” and “easterners”, with the consequence that people who are not that different at all, appear as alienated species with competing ontologies.

If I am right in implying that the modernist paradigm and environmentalism fuse in the climate change-awareness discourse, this requires us to look closer at ‘modernity’.

### A note on Modernity

Up until this point, I have identified an issue with how ‘rural developers’ in the area of Rani Mājri, who also appear as the climate change-information ‘transmitters’, value



‘techno-scientific’ knowledge higher than the ‘traditional’. Knowledge about climate change through this optic then, with its implications and its mitigations, becomes a sort of discursive regime on how humans should and ought to relate to the environment and our fellow beings.

Entwined with environmentalism, this discourse draws upon decades of ‘the west’ trying – with various degree of success – in educating the ‘non-modern’ into being environmentally conscious. In the process, people are expected to gain what anthropologist Kay Milton (2002) calls a “planetary concern” (Milton 2002:170). This concern, I argue, is aimed to mobilize, on behalf of overall humanity, action that produce a sustainable future for humans on planet earth. This is no less than what Tsing (2005) has called a ‘universal dream’, the “something we cannot not want”; another example of which is world peace (Tsing 2005:8). In this case, the aim is to solve problems implicated by climate change, mass extinction or pollution. The idea of the universal, however, is thought to belong to a western mindset, and “contrasted with more local or indigenous forms of knowledge and being” (Tsing 2005:8).

It appears as if this ‘universal dream’ is inherent in the modernist paradigm, and denotes a certain relation between ‘modernity’ and the idea of climate change.

As Hulme (2017) has argued, the idea of climate change is coated in a certain kind of knowledge about how the world functions that is related to our notion of what is ‘modern’. Even, as, “the very idea that there might be such a thing to be studied as ‘global climate’ and to be the object of political argument is an invention of modernity and the scientific mind” (Hulme 2017:28). But what does this ‘modernity’ denote?

Modernity is a concept difficult to define, but in line with the phenomenological approach above, I follow German Sociologist Hartmut Rosa (2014,2015,2017a,b,c) and address modernity as a ‘mode’ through which we experience the world around us.

To Rosa modernity becomes a state of mind, through which we experience and relate to the world around us. This mode of mind is characterized by a genuine wish to partake in a continuous acceleration of *growth*, on a personal level as well as a material one.

According to Rosa, in a traditional Marxist, sociological approach to modernity, material growth is often seen as a problem with modernity and its ‘mode’ of living.

The apparent alienation between producer, production, and the consumer, curtained behind the spectacle of capitalism, is what has been viewed as producing a sort of loss, or ‘less-ness’ in the relationship between humans and their surrounding milieu, a loss that people seek to amend by consuming more.

But consumption does not seem to amend the ‘loss’. In (late) modern societies, Rosa notes, there is a tendency that “we appear to lose the world as we make it available” (Rosa 2017c:9). The world loses its ‘enchantment’. Rosa draws on for example Jean-Jacques Rousseau here, with his argument that modernity produces a genuine loss in the *quality* of our ‘being-in-the-world’, and on Karl Marx. Marx argued that with capitalism, people became *alienated*. Alienated from his or her work, the product of that work, from nature, from fellow human beings, and in the end from ourselves.

When humans then progress into what Rosa calls ‘late modernity’, we are starting to realize that money in itself that satisfies us, it is rather what money can help us gain: accessibility, availability and attainability to the world that we seek.

For Rosa, another defining feature of modernity is ‘social acceleration’. A modern society, its “mode of stabilization”, or; that which prevents the collapse of society’s structures, reproduces its structure and maintains the institutional status quo is: “(material) growth, (technological) acceleration, and (cultural) innovation” (Rosa 2017b). The modern society, to ‘progress’ depends on a continuous increase of some sort. The problem of modernity following Rosa, however, is not in fact growth or capitalism per se – in fact, growth is an element Rosa sees as a necessary element to achieve a ‘good life’. But the issue is rather inherent in the *tempo* that accompanies the growth; the social

acceleration. The changes in technology, economy and in social organization is occurring too fast for humans to, and here I borrow from the Shivalik Hill villagers, ‘adjust’.

### *The Modern ‘Being-in the-World’*

As Dove and Carpenter (2008:56) point out, it was the “iconic photograph of the earth taken from space” that galvanized public and policy concern for the environment, in the earlier mentioned Brundtland report on Environment and Development from 1987. This very photograph, is also used by Ingold (1995), to develop his notion of sphere and globe (Ingold 1995) and to reflect on the role this image has come to play in policies about the environment. In that image, the earth appears not at all as it has been perceived by humans living in an environment, but instead, represented as a model, a surface, that humans act upon.

This, argues Ingold, has been central to the contemporary environmental crisis, because it entails a humanity that no longer immerse itself within the world, but rather removes itself from it. This act of removal, however, must be taught.

“It is one thing to be familiar with a model”, Ingold (2011) writes, but

“quite another for this model to be so internalized as to structure one’s very thinking about the world. There is no reason to suppose that children are born with the knowledge that the earth is round, let alone that it revolves around the sun”.

(Ingold 2011:99)

Science, Ingold argues, tells us that if you thought you knew the environment you move about in every day, what it is or if it is as it appears to you, you are naïve - you have not yet realized that humans live on a globe, in space. For us to see the ground as below our feet, and the sky above our heads, we have perceived it from where we are physically standing.

Seeing the earth as distanced from human life, Scott's *techne* materialize in a 'global vision' of the earth – one that humans do not experience. Humans rather perceive the world as a three-dimensional sphere, that surround us, and with cardinal directions orienting us. If we travel on a spaceship, we see the world differently - the sky has disappeared, the ground too. There are no places, only space. We do not inhabit the world as much as we “exhabit” it, says Ingold; we are outside, expelled to its outer surface, and as such we cannot relate to the globe as an environment (Ingold 2011:96).

If the sphere, with Ingold, can be known through perception and sensation, the globe on the other hand is only apprehended through “cognitive reconstruction”, which can only be achieved via ‘scientific’ abstraction<sup>14</sup>. Reading this with Rosa (2017c), the “exhabitation” of the world leads to a sense of ‘loss’.

As we saw in the section on Rosa's notion of ‘modernity’ above, the late - modern human experienced a surrounding world that has turned shallow, silent, careless, and cold. Rosa explains with roots in Durkheim's conception of *anomia*, in Simmel's identification of the *blasé attitudes* towards the world and the fellow beings around us, and in Weber's *disenchantment* as a flip-side of rationalizing and calculating the world (Rosa 2017c)

Alas, Rosa argues that the late-modern citizen, the educated and rather well-off social layers of ‘modernized’ societies where people have acquired the means to both access and attain most of what they desire, has realized, that there is still something lacking. Something that that neither accessibility, availability nor attainability can bring forth. This, argues Rosa, is because the problem is in the relationship we have with our surroundings, and that in part, is because of how we have chosen to represent it; as a globe.

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<sup>14</sup> This argument, argues Dove and Carpenter (2008:466) reproduces a ‘divide’ between knowledge forms, between an ontology of direct engagement and one of indirect representation. What Dove and Carpenter though seem to miss, it that with Ingold, both forms are in fact embodied in practice.

Nature, within a 'late-modern' mode of thinking about the world, is an entity of 'the other'. For this to make sense, you must conceive yourself "as being at two with nature", which I agree, might be a modern idea, depending of course, on the definition of 'nature' used (see Cronon 1996a; 1996b and Descola 2013). The chains of causality that arguably color the climate change idea, both in the 'west' and other places, reflect that the disengagement humans experience, is really an issue with relationships. In many ways, this argument runs alongside Hulme (2009a, 2009b, 2013, 2017), especially those made in his latest (2017) book "Weathered". I will outline Hulme's position here.

Hulme identifies in his work that there is indeed a disagreement about climate change as idea, and proceeds to look at how the idea materializes in the 'west', what causes for disengagement there might be (Hulme 2009a). He also scrutinizes what eventual alternative chains of causality thought to cause the contemporary environmental crisis might exist, eventually proposing to address global warming as being an idea infused with cultural meaning (2009a,2009b).

Together with Jonathan Marshall, Hulme was interviewed in a BBC podcast (Malcome 2009b) about the myths people engage in to make sense of the processes that are seen to happen, arguing in fact also along the lines of Chakrabarty in his 2009 'Falling Walls' lecture, that without these myths and symbols of the weather, we get a dispassionate relationship to climate.

A dispassion that leaves no true agitation that can make humans change their current unsustainable behavior. Working primarily from a 'western' viewpoint, Hulme and Marshall in the podcast explore the role myth and grand narratives play in providing meaning and agency for humans, relating it to the global processes of climate change. These myths about the 'workings of the world', they found, were often, although not always, influenced by religious values, but to a large degree distinguishing the climate change idea.

“It is not the hole in the ozone layer; we never had a cultural relationship with atmospheric ozone. But we have stories of climate through millennia. Climate gets endowed with religious language and morality. [This is an] intimate relationship; how we see ourselves, our behavior and our responsibilities and how we think of the performances of the weather”.

(Hulme in Malcome, 2009b)

In the west, Marshall argues, this is exemplified through the myth of chaos and disorder, which is eventually resolved when God comes and organizes it (Marshall in Malcome, 2009b).

In his later book ‘Weathered’ (2017), Hulme follows this notion of how we can be said to ‘experience climate’ with more emphasis, arguing that “climate – as it is imagined, studied and acted upon – needs to be understood, first and foremost, culturally” (Hulme, 2017: xii). Here, Hulme show that as the physical climate has changed though times, so have accounts of its causation too, as we see so clearly from the early Christian tradition and its imagery of sin and environmental retribution from the Gods (2017:39-43,82). Hulme then notes the growing number of initiatives in the contemporary, where religious traditions form alliances to call for action, as for example the international and cross-faith symposium<sup>15</sup> held by the non-governmental organization ‘Religion, Science and Environment’ on Greenland in 2007, which underscored theology’s mission in collaborating with science to motivate people into “responsible stewardship” (Pope Benedict XVI 2007).

Looking at the ‘disenchantment’ and ‘alienation’ that Rosa, and partly Ingold talked about above to lodge climate change in these myths, perhaps happened because humans are terrified by the prospects of an uncaring, inhuman, exhibited planet.

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<sup>15</sup> The symposium focused on the earth’s water resources, and the meeting gathering 200 priests from the Christian, Jewish and Islamic faiths, scientists, theologians and government officials met for a week to discuss the changing environment of the Arctic, and how the humanity should respond (Hulme 2009:142).

With respect to the notion of the Anthropocene, Hulme notes, climate change again becomes culturally attributed to ‘misguided’ human behavior (Hulme 2017:47), as a cultural continuation of the fact that “for much of the past and in most places, climate and humans have been understood to move together, their agency and fate conjoined through the mediating roles of natural processes and supernatural beings” (Hulme, 2017:50). This is not unproblematic. If the idea of climate change is part of a discourse that in its universality muddles its archeology and cultural specificity, the consensus that science aims to achieve on climate change “is problematic at best” (Hulme 2017:33,37).

Looking to other ‘eclectic’ ethnographic approaches to the climate change idea with this theoretical and analytical background, does indicate the validity of my argument: that that if one views the climate change idea to be essentially a comment upon human-environment relations, then the ‘scientific’ climate change idea, and the ‘local’ climate change idea are more related than they first appeared.

What if one were to rather look at perceptions of a changing climate as reactions to issues with modernity? If a sense of lack or loss in the relationship humans have with fellow humans and the world in which they live in, it might explain for a disengagement with a culturally specific climate change *idea*. It does however not exclude engagement with the climate change *process*.

## Climate Change as Retribution for Sin

I see my own approach as an ethnographic contribution to how we engage or disengage with the climate change *idea*. I further argue, that the idea has become so embedded within a discourse, that it relates only superficially with how people engage with the climate change *process*, based on observations that villagers in the lower Shivaliks seems to comprehend global warming as environmental retribution. To explain floods, fires or extreme weather conditions on the immorality of humans is far from new, however, and I draw on a handful of ethnographies discussing how weather and social life intervene.

Before I proceed with the ethnographical contributions, I want to clarify the relationship I perceive there to be between ‘weather’ and climate, as many of the ethnographic accounts I outline below alternate between the two.

With a phenomenological approach, climate change becomes perceptible to the human senses through changes in the weather, but not because climate and weather are the same.

Weather is extremely localized, and climate is rather an aspect of the earth’s atmosphere. Changes in the climate, such as global warming, relate directly to a seasons weather, however, since global weather patterns (the monsoons, the ocean currents, winds etc.) are inflicted by the ongoing climate changes (NASA 2015; US Environmental Protection Agency 2017; Met Office 2017).

Changes in the climate thus becomes expressed in a ‘changing weather’ especially if we see weather as we come to expect it of the seasons. All humans, but perhaps agriculturalists in particular, tend to plan their activities because they expect certain kinds of weather from the season. To bring the abstractness of climate change ‘down to earth’, so to speak, has been a call to which many have responded with looking at people’s perceptions of weather and seasonality.

In this process, Ben Orlove (2009) has noted, that “[i]n many communities, weather and climate are understood as part of a universe infused with spiritual significance. Perturbations are often interpreted in terms of violation of religious, moral, and social norms” (Orlove, et al., 2009:97). That perceptions of the weather, seasonality, perception and morality have been woven in with local conceptions of morality and sociality is not new in anthropology, neither in studies from North India, as will be made clear below.

I begin with a book by Ole Bruun and Arne Kalland (1995), arguing against the (in anthropology at the time) romanticizing idea that environmental perceptions were more 'spiritual' in the religions of the “east” than in the protestant and capitalist nations of the “west”. Huber and Pedersen (1997) based on a fieldwork amongst Buddhist Tibetan farmers, laborers and hunters agreed with Bruun and Kalland (1995), arguing that



Buddhism had little, if any, effect in reducing environmental degradation at the site. What they did find, however, was that ‘nature’ and ‘society’ were conceived to interact in a particular manner amongst the Tibetans, thereby creating what Huber and Pedersen called a ‘moral climate’ (1997:588).

This, they argued, became apparent when they looked at how Tibetans related to the weather in practice. In their daily lives, they find the Tibetans to be constantly engaging with the environment, and the weather was crucial in influencing their strategies. The importance of weather was thus embodied in a number of social institutions and practices, based on a particular system of knowledge. This was a phenomenal world, they argue, “inhabited by a host of spirit powers and deities who are organized into a single ‘ritual cosmos’” (Huber and Pedersen 1997:584).

To ensure a stable environment, the Tibetans were primarily concerned with giving respect to the ‘gods of the world’ (the smaller, more local deities, demons and spirits) by regular and correct offerings, as they saw this crucial in maintaining a good relationship, which would ensure a stable and bountiful environment (Huber and Pedersen 1997:585).

Further, transgressions of moral, (which had regional varieties) was found to be the direct cause for environmental irregularities, as well as personal afflictions, such as illnesses, lower fertility etc.

It appeared to Huber and Pedersen that weather had been perceived and integrated in the fabric of socially lived lives, and as such, weather in what they call the ‘traditional’ knowledge had *qualitative* aspects that differed from the ‘modern’ calculations about weather patterns, precipitation, and temperature. The latter knowledge of the weather is abstracted and can only be measured scientifically and *quantitatively* (Huber and Pedersen 1997:577).

Huber and Pedersen argue, that this ‘traditional’ way of perceiving the weather was losing ground (Ibid: 585), much because of more ‘modern’ ways of relating to the weather had become common. As such Tibetan ecological knowledge was “new” and very much ‘influenced by science’, and Buddhist Tibetans could thus not claim ‘ancient

environmental knowledge'. Huber and Pedersen here operates with a somewhat distorted and polarized view of knowledge, but their observations are valuable, not in making a judgment on what is 'authentic' and what is 'modern' forms of knowledge, but as to how weather and climate is related to human behavior.

From North India, Ann Grodzins Gold (1998,1999[1995]) has studied the cultural construction of the environment in Rajasthan, and connects sociality and morality to weather and climate through ethnographic observation. In a chapter in the earlier mentioned compilation by Nelson (1998) based on her 1993 fieldwork in Ghatiyali, a farming village in Rajasthan, Gold's contribution stand out from the others in addressing the relationship of religion and ecology in India, and make a point of the intimacy that she perceives there to be, between changes to society, and to responses by individuals and groups to these changes.

Transformations to the landscape, to forests as well as to wildlife, she finds, is found to affect "hearts and minds poignantly, even as to the changes in family composition and interpersonal relationships that lie at the heart of ghost and witch stories" (Grodzins Gold 1998:166).

She also notes that even if stories about the changing environment were conflicting at times, "[p]eople portrayed interlocked changes in landscape, agriculture, society, religion and morality" (Gold 1998:166), with a causality that was neither singular nor linear – rather it was "fundamentally ecological in its sensitivity to the web-like interconnectedness of concurrent transformations" (ibid).

In another article, on the abandonment of an agricultural ritual held on the auspicious day of Ākhā Tīj in the same Rajasthani village (1999[1995]), Gold observes that the abandonment, and the subsequent interpretations to why it was abandoned, was intimately connected to larger processes of the Indian society, and conditioned by new technologies in farming, economic development.

In the case of agricultural rituals, farmers would directly attribute the decrease in ritual activity to the increasing use of machine power and the consequent detachment of agricultural schedules from priestly astrological knowledge. I read Gold here as viewing the abandonment of the ritual as a reaction to a ‘re-channeling’ of power, happening because with ‘modernity’ Ghatiyalians don’t depend so much on one, single source of power anymore. In fact, farmers knowledge could be drawn from other places of authority too, and this might be experienced as threatening to those who’s status depends on wielding the one ‘kind’ of knowledge that is currently devalued by so many.

Still, it is first when she considers what she calls, the “pressing realities” of invisible entities in human lives, such as deities and ghosts, that the landscape of Ghatiyali is perceived as one of relationships between humans, deities, and the surroundings in which they dwell.

Utilizing what I would call a ‘devacentric’ approach, Golds find the villagers vocalized concerns about deforestation, about the deterioration of rain and wildlife, to relate to a deterioration of emotional bonds too, of care and love between people (Grodzins Gold 1998:177). As people eat different food, work differently and behave differently towards each other, some sort of environmental retribution is seen to take place.

As mentioned in the introduction, ‘devacentric’ is meant as a play on the word “theocentric”, where a monotheistic God is central to existence, and “androcentric”, where man is central to existence. The use of the term is also meant to reflect the plurality and the creativity that “vernacular” or “local” expressions of Hinduism embrace, reflecting what anthropologist Susan Wadley (1977) and professor of Religion, Vasudha Narayanan (2001) points out; that South Asian Hinduism is often more diversified than it is unified. With ritual engagement across conventional religious boundaries, (see for example Kathinka Frøystad’s (2016) article on multi-faith religious practice as “osmotic worlding” in Karimpur), Hinduism could be argued to be so diversified in its expression, that “any particular practice or belief may be contradicted elsewhere or denied by some Hindu” (Wadley 1977:113-114).

From North America and Alaska, similar observations appear. Cruikshank (2001) look at how glaciers figure in the oral traditions of the Tlingit of Yukon, intending her ethnography to address two debates. One, on the relationship between ‘local’ and ‘scientific’ knowledge I addressed above. The other is to show how oral traditions reveal how ‘sentient’ glaciers are to the Tlingit – how they perceive them to listen, pay attention and respond to human behavior (Cruikshank 2001:378). Her ethnography shows how the oral narratives of the Tlingit remember the Little Ice Age (which was accompanied by global warming when it ebbed out in the 18th century) (ibid:380), and how the stories of the Tlingit are not ‘only’ about perceiving a changing climate through changing glaciers, but about perceiving changes to ‘everything’, with their meanings “enmeshed in social worlds” (ibid:382). Not as explicit as Cruikshank, but also pointing to the same aspect of ‘environmental retribution’, is the observation Rasmussen (see also above) makes from Recuay, and the responses he registered to the changing climate in the Andes as “a symptom of far larger things gone astray” (Rasmussen 2016:9).

Both Gold, Rasmussen (2016) and Cruikshank can be said to observe an interconnectedness between changes in the weather, in the environment and in respect to “world-views”, to moral, myth and meaning – in essence, enriching the climate change idea to encompass a wider, social reality, and to emerge as another environmental ‘commentary’ on our social life. Neither ethnographies are used to argue this explicitly, however, but anthropologist Peter Rudiak-Gould’s (2012, 2013) work from the Pacific, does.

Rudiak-Gould looks at the idea of climate change as it folds out in the Marshall Islands, as one interwoven with stories of morality, stories of social degradation, of morality and modernity. Amongst the Marshall Islanders on the island Ujae, and in the capital Majuro, ‘everyone’ seemed to have heard about climate change – and as such their level of ‘awareness’ was a great deal higher than with my Rani Mājrian villagers. But that did not

change the fact that Marshall Islanders vary in their ‘response’ to changes in their environment as manifold as did mine.

In the Pacific, changes attributed to global warming and climate change has its most salient expression in the rising sea-levels, threatening future inhabitation of these islands. People would also generally rank it as number five concern in their lives, only surpassed by economic hardship, changing lifestyles, population growth, diabetes and other health problems (Rudiak-Gould 2013:90). In relating to the situation, Marshall Islanders were found to blame themselves, through ‘in-group’ blaming and decline narratives. This is not unlike what Norgaard (2011) argued was the case for the Norwegians of Bygdaby. Although the percentage of ‘believers’ in the scientific process was significantly lower than Norgaard found in Norway, 58% of the Marshall Islanders found climate change to be ‘true’ (Rudiak-Gould 2012:48) with a significant minority with doubts.

The Marshall Islanders in question were Christians, and many believed in a God that was in control of the weather. Scientists were also to be believed, Rudiak-Gould found, but there is no perfect certainty to be found neither here nor there. But as Rudiak-Gould does well in pointing out: climate change predictions are about an uncertain future. One cannot know (ibid 2013:69). Central to this ‘in-group’ blaming argues Rudiak-Gould is that the Marshall Islanders relate certain patterns of behavior and consumption to ways of living associated with ‘modernity’. Modernity to the Marshall Islanders, argues Rudiak-Gould, is like a ‘trickster’. In its seductive notion of ‘progress’, ‘modernity’ lures them into a web of consumption, and a practice of “living by money” (Rudiak-Gould 2013:161). The feeling of guilt thus comes from knowing that they could have let it be, but it is themselves who continue to consume this way – because of the positive and useful developments and artifacts that also comes along with it (ibid:34).

In fact, the modernity as trickster-narrative fits uncannily well, Rudiak-Gould finds, with the belief in climate change, because ‘traditionalism’ in the Pacific has much in common

with ‘environmentalism’. Both narrate a fall from a distant past “to a corrupted present and ruinous future” (Rudiak-Gould 2013:92).

That global warming emerges as a sort of environmental retribution becomes clearer seen in the light of Rudiak-Gould’s (2012) article, where we see that the Marshall Islanders in talking about climate change, rather talk about ‘*oktak in mejatoto*’, or changes in the ‘*mejatoto*’ (Rudiak-Gould 2012:47). ‘*Mejatoto*’ does not correspond to only ‘climate’ or ‘weather’, however, but encompass sky, atmosphere, space, climate and weather – even the cosmos in general, and important here, also including the social sphere. Rudiak-Gould suggest that ‘*mejatoto*’ can be said to encompass changes to “almost anything” (ibid:49) from ‘before’. When Rudiak-Gould asks for changes in environment, or weather, he gets sociocultural value judgments, as well as ‘environmental’ answers from the same person.

Rudiak-Gould’s work bring attention to how the climate change process of global warming relates explicitly to the Marshall Islanders *idea* of being ‘modern’. Looking at causality – or who is to blame – confirms that in the Marshall Islands, people are neither ignorant, nor in denial, but that their responses in the face of climate change are rather intertwined with the ‘wrong’ kind of ‘progress’ – seen as the shift towards ‘newer’ and more popular ways of doing things, contrasted with what becomes perceived as its opposite; the ‘backward’, or *passé* ways of doing things. As I will return to in chapter 7, in the context of Rani Mājri, these notions and the way they are valued, functions to motivate people into action, or to avoid certain kinds of behavior. As such, ‘modernity’ becomes something more than a historical product or an analytical category, but rather something that matters to people, even when its textual definitions are varied.

As we see in Rudiak-Gould’s work, both notions of progress and backwardness, or modernity and tradition, are in practice quite ambivalent for most people, and courses of action associated with either have both advantages and disadvantages. I will return to this discussion in chapter 7. Here, it is most pertinent to note that changes to the environment

in Asia, in America and in the Pacific, the weather, the mountains, the forests, the river, the glaciers, the seas, were changing because people changed. In these approaches, climate change as an idea becomes a commentary to the lives we lead, and the choices we make, and why we make them. In this, I argue, these approaches are ones of ‘climate change *resonance*’.

## The Resonance of Climate Change in Rani Mājri

As I pointed out in the introduction and above in this chapter, with a strictly scientific approach to climate change, people’s actual concerns about their local environments, disappears under the radar. People’s relationship to the environment in Rani Mājri was first and foremost practical. That involved a thriving forest and wildlife, a relatively predictable monsoon, as well as it involved a sound development of infrastructure, education, health services and inclusive political arenas. It involved relationships with one’s family and friends, with colleagues and people in powerful positions, as well as with lineage- and village-deities, gurus, forefathers and ghosts. It is within this all-encompassing world view we find the idea of climate change not, and still very much, present. Not in the text-book definition of climate change, but in sharing the same concern, that the ‘progress’ that Rani Mājrians seek, causes an imbalance in a social *and* in an ecological dimension simultaneously. In short, with a reformulation of Gold (1998), if *climate* is moral, it is equally social.

‘Resonance’ is a metaphor that I have found useful when attempting to let the climate change idea encompass both social and ecological processes. As such is a narrower and more textual tool than the *concept* of ‘resonance’ suggested by Ingold (2000), anthropologist Unni Wikan (1992) and Rosa (2014, 2016, 2017), but it is not unrelated. In these approaches, ‘resonance’ as concept relates explicitly to a phenomenological analysis of society, and to a certain ‘attunement’.

Wikan use 'resonance' to advocate a sort of attunement to other world views. Resonance, argues Wikan, is fundamental for the interplay between actors in a social group, and the concept is used to evoke the necessity for 'mutual understanding' on a level 'beyond' the written text or the spoken word (Wikan 1992:463). Ingold (2000:199) defines resonance as concept as the "rhythmic harmonization of mutual attention". Ingold uses 'resonance' to mean a "mutual tuning-in relationship" (Schutz 1951:78 in Ingold 2000:196), but here referring more to the interactivity of tasks, and as a precondition for a successful, social performance (Ingold 2000:196-199). Wikan and Ingold, however, use 'resonance' in a way that risk glancing past difference at the expense of similarity.

Using resonance in the same way as Ingold, is anthropologist Franz Krause (2013). Krause use the concept of 'resonance', to bring forth the dynamic he perceives there to be between social and ecological rhythms amongst the Sami of the Kemi River in Lapland, Finland.

Krause's use of 'resonance' as a concept is not entirely unlike my own use of the word as metaphor, as he is denoting an interplay and a co-action between humans and their environment. His use of 'resonance', however, is more closely drawn to the body itself than my own, as Krause sees the body as 'resonating' to changes in the seasonal rhythm (Krause 2013:23). Although I do not read Krause indicating ecological determinism, to draw the 'responding' body notion too far, one could if pressed on, read his concept of 'resonance' as an argument that human character is defined by its ecological environment. In part, this is because Krause's share the same connotation between resonance and harmony as does Ingold (2000) and Wikan (1992).

Not denying that resonance is a good concept for stressing the 'mutual in-tuning' between humans (Wikan 1992), or the 'in-tuning' in human-environment relationships (Ingold 2000), my use of resonance needs to encompass chaos, too. My own use of 'resonance' is thus better approached as metaphor. It does not mean I disagree with the uses addressed above, but rather stressing its use in music as *rich response*. Here; as an enriched response to a climate change process.



How I approach a ‘resonance’ of climate change, can be better developed with Rosa (2014, 2016, 2017a,b). Resonance to Rosa is an encompassing concept, and embrace harmony or consonance as much as it includes dissonance and disparity. Rosa argues, in fact, that that if something is in complete harmony, it would not be in ‘resonance’, it would be an echo.

So far, I am sympathetic with Rosa’s notion of ‘resonance’, but Rosa too, uses the word less as metaphor and more as a concept. With Rosa, ‘resonance’ refers to a quality in social and human-environment relationships that with modernity, we see a lessening of. The lack of resonance in human to human, or human to world relationships, is what causes alienation in late modern lives to Rosa, and as such the two concepts (alienation and resonance) are opposites. A non-alienated life has resonance with the world, and with the beings with which humans share the world. A resonant relationship is one of quality. Humans find resonance, argues Rosa, in the things and the practices that give us ‘meaningfulness’, whether that be in religion, in art, in love or in politics, social movements and war. Although intrigued by Rosa’s use of ‘resonance’ as concept, and in part denoting much of the same processes myself, the concept does not fit my purpose at the current level of analysis. I proceed then, with ‘resonance’ as a metaphor for ‘rich-response’ to climate change as idea, and as a process.

This ‘rich response’ approach, allows me to address the conceptual mismatches, or ‘gaps’ (see my discussion of Tsing (2005) in chapter 6), that ‘fails’ to produce the correct response to the call to climate change ‘awareness’, and to address why I think it is so.

‘Resonance’ thus allows me to embrace contradictions, both in the subtle practices that implies harmony and potential for a sound human-environment relationship – and for those practices that implies the disharmonious and the destructive. To approach my ethnography with ‘resonance’, allow the responses to that call to include those that did not ‘fit in’ if I had chosen to follow a strictly perceptual approach that might have come from drawing exclusively on a phenomenological analysis of the environment, for

example, or a strict political-ecological approach. My thesis then, aims to address some of these complex Rani Mājrian engagements, or perceptions of the environment, and in so doing, to unfold some aspects that might not come together as well in policy as they should.

As I have argued in this chapter; all knowledge comes from somewhere, and as such, my analysis would not be complete before I outline how I got to it. In my next chapter, I will thus combine an introduction to the place the fieldwork was carried out in, the methodology that was chosen, and the fieldworker that utilized it.

# Chapter 2

## Into the field: Methodology and Place

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Born and raised in mid-1980s Scandinavia, I had acquired a rather ‘environmentalist’ mindset from my early childhood years. At what has become several visits to India during the last decade, this mindset has caused both shock and despair, for what has appeared to me as a lack of consideration for ‘the surroundings’.

I moved to India in late 2012 with my husband and my baby boy, to try to understand why or how people become – or don’t become - environmentally conscious. Neither the place, nor the method chosen was coincidental, even if the practical realization of both must be said to have been created along the way. The analysis that grew out of these months are colored both by my cultural background, my personality, my academic training and my civil status, and by residing in a specific village. This chapter will give a backdrop to certain elements that colored the knowledge I have acquired along the way. I begin, however, with a short note on ‘place’, both as a reflection on how we choose our field-site(s) as anthropologists, and as an introduction to my own.

# India



Fig.2: Location of village on the map of India

# A Place for Fieldwork

The fieldwork I carried out in 2012-2013, with a short re-visit in 2016, was a qualitative fieldwork. It was based firmly upon participant observation, which in reality is a compilation of many methods (Atkinson and Hammersley 2010[2004]:31). It involved structured (formal) and semi-structured (informal) interviews, surveys and questionnaires, collections of life-stories, photography, and a lot of reading. In the following section, I will describe these methods in more detail. I also look at some advantages and difficulties in gathering ethnography this way, as I experienced them in the field and in the later analytical process.

In the preparation before settling in as a fieldworker, one needs to find somewhere to work from - an area, somewhere to settle, at least. This is no easy choice - contemporary anthropology can be done in just about any location; multi-sited, at home, in offices, market-places or in virtual business networks, in small, confined groups, in large sub-cultures, but for me, going to India, it “had” to be a village.

## Why a Village?

There were several reasons to why I chose to do my ethnographic fieldwork in a village. Some of them had to do with my research question, but was also related to previous experiences and my family situation at the time; I was a novice mother, bringing with me a husband who had to complete his own master’s thesis during my fieldwork.

To address the relevance for a rural location for my research question first. To study human-environment relations, which was what I intended to do, did not necessarily prescribe a rural location, neither does it a ‘green’ one, and as such my place of fieldwork might just as well have been urban. My experience from an earlier fieldwork in rural, south eastern Rajasthan back in 2007, had made me interested in how people in rural areas respond and act upon decisions made by urban policy makers, especially as they are

both marginalized and stereotyped by a growing Indian urban middle-class society – an observation I relate to complex reasons which will be addressed more specifically in chapter 3 and 4.

Another was a personal appreciation of the relative calm life of the Indian countryside over the hectic urban centers – while the latter is on the high end of the scale when it comes to air, water and noise pollution. Being a mother, I did not want to expose my son, myself or his father - to more toxicity than necessary, which I guess goes to show how deep the fear of environmental pollution penetrates the mindset of a Scandinavian born in the 1980s.

I had also considered the benefit that you gain from gathering data in one, relatively self-confined area. Since I was breastfeeding a baby, I knew my capabilities for traveling far would not be great. If the village was of a manageable size, one could get the benefit of “knowing everyone”, or at least for them to know who you are and what you are doing there, which saves time when trying to go “in depth” with one’s questions, and to make everyone aware you are there not as a tourist, but to do a job.

Also, I have tended to find other village studies as insightful as they are enjoyable reads. From Gloria Goodwin Raheja and Ann Grodzins Gold’s North Indian village studies on gender and kinship in “Listen to the Heron’s Words” (1994), Lila Abu-Lughod’s study on gender, poetry and resistance from a Bedouin village in Egypt in “Veiled Sentiments” (1999), Sarah Lamb’s study on the aging Indian body in a village in East India’s Bengal in “White Saries and Sweet Mangoes” (2000) , and not the least, Dianne P. Mines’ village study on religion, politics and self-identity from South India in “Fierce Gods” (2005). Perhaps is it a coincidence that these ethnographies were all written by female anthropologists. However, the sensitivity and reflexivity of these ethnographic studies by these anthropologists are something I will always admire, and choosing a village for my research was perhaps a way to aspire for such depth myself. This fear of losing “depth” may also have influenced my choice of location more than I thought.

In Gupta and Ferguson's (1997) discussion on the locations of anthropological fieldwork, we are reminded that the idea of the local, the “place” where we do our fieldworks, is central for the methodology and the advancement of the discipline. The idea of a suitable ‘place’ has been shaped by the early days of the discipline, and by the male, white and Western anthropologist doing fieldwork alone, in a remote location, returning with manuscripts that his research subjects would never read. The times, and the discipline with it, have changed a lot since then. Today, the anthropologist is neither always in a remote location, nor always male or white, our research subjects do read our work, and the idea of the “local” is continuously reinterpreted/discussed within the discipline. With good reason, too.

The idea of studying the “local” has always persisted with me, and even after arriving in India, via Delhi at first, I spent far too much time worrying how I could write about anything related to environment or climate or nature or society - if I was not in a village? Despite knowing that a village did not equal a field-site, the time it took to get “into the field”, concerned me. It took even longer before I realized that I had always been “in the field” all along. Not only were my research questions as global as they were local, the villagers in the village where I ended up related just as much to townships, cities and global markets as they did to their own home village.

This goes to show that even if a set ‘place’ for fieldwork is less decisive for what is being judged as an ‘ideal’ field-site, the idea of the ideal field-site as a relatively bounded area, remains. This is challenging, fieldworks are increasingly “multi-sited”, and people are rather “multi-sited” too. Increasingly, people move about, relate to larger, more complex systems - often virtually as well as physically; certainly, posing a methodological challenge that requires the anthropologist to trace local as well as global interconnections without losing ethnographic depth. The following dissertation is an attempt to do just that.

My original plan, taking my son's health and well-being into consideration, was to settle in a rural area located at a reasonable distance from a decent hospital. My first decision was to work my way north from Delhi. This choice was based on the requirement of a Hindi-speaking area (I knew a little from my previous fieldwork in Rajasthan) and flip of coin. After some weeks, we eventually found a city, and a village which, although located a little further away from a decent hospital than intended, fulfilled my requests. The village I have called Rani Mājri, which loosely translates as 'the abode of queens', as a sign of respect to the hard-working women there. The city where we established our first base, and what also became an urban office/retreat, was Chandigarh, a North Indian city at the base of the Himalayan mountain range. As Chandigarh's history is not unrelated to my forthcoming analysis, the city will appear with its proper name.

## The 'Field' at a Glance

The North Indian city of Chandigarh is a planned city, and its inner city was built for half a million citizens (Chandigarh Administration 2016). parted into sectors, and meant to serve different functions like commerce and housing. The city was originally being named after the Goddess Chandī (Grindrod 1956:294, District Census 2011:14) and was planned and built during the 1950s to serve as joint capital of the states of Punjab and Haryana. The area under construction was far from uninhabited before the city was planned, at least 21.000 people from 58 villages was relocated in the process of establishing the city (Encyclopedia Britannica 2017).

The city took on its shape after the ideas of several architects, but most famously by the Swiss-French architect Le Corbusier, who took over the execution of the city project under Jawaharlal Nehru's ambitions of a modern and India (Scott 1998:131). Of Le Corbusier, it is written that he had almost a mania for simple and repetitive lines, and that he despised complexity - hence the inner city is a testimony to the Enlightenment age, manifesting itself in naked and straight lines, streets and buildings, suited to make transport and information, tax collection and censuses run smoothly and orderly (Scott



1998: 55,107). This has made its physical impression on how the architecture of the inner city appears, and the city is today known, and marketed as “the City Beautiful”. From the beginning, the city was designed to be ‘green’. Industry is segregated from the residential, market and administrative sectors, with a green belt 3-4.500 feet wide. The residential sectors all have squared parks with benches, children's playing areas, trees, paths and lawns, of which many are large, filled with artwork or flowers, and quite well tended. To the North of the city, the Sukhna lake was constructed in 1958 by damming the Sukhna river, to serve the city as drinking water reservoir. Along the lake the recreational area is planted with trees and flowering bushes, and here one also finds the largest and most exquisite residential areas. Here, large villas lie comfortably with well-tended gardens, from where - in clear days - one can look back up into the hills of the Shivalik rising to the North-East, towards the Himalaya mountains.

With time, business and investment opportunities, however, and the reputation of being India’s “city beautiful”, Chandigarh became attractive for many more than for whom it was planned. Although the inner city is still not large seen in an Indian context, with just above one million inhabitants (District Census 2011), Chandigarh has expanded in response to the population pressure, merging its boundaries with adjacent townships. By 2012, what used to be satellite towns surrounding a small city, had by 2013 put Chandigarh at the nexus of what has been called the ‘tri-city’, with the satellite towns of Panchkula to its immediate South-East and Mohali to the South-West making up a massive, urban Northern Union Territory Capital.

The city itself, however, has seemingly failed to live up to its high-modernist ideal of order, effectivity and progress. True, the Rajiv Gandhi IT-park, the myriad of barista’s and pizza-places, five-star hotels and the up-market and gated residential areas does make for a ‘progressed’ image, but one that is not complete without the notable presence of urban byproducts; waste, pollution and poverty. The tenth President of India, K.R.

Narayanan, showed just how salient this distorted high-modernist image has become, when inaugurating an International conference celebrating Chandigarh's 50<sup>th</sup> anniversary:

“Chandigarh is not a castle built in the air. The architecture of Chandigarh could not ignore the compelling needs of Indian Society and the stubborn cultural values despite all its freedom from the fetters of past traditions. There is no city planning that could succeed in the face of our society, habits of our people, lapses of administration and lack of education and health. All said and done, Chandigarh is still the best city and is the cynosure of all eyes.”

(Narayanan in The District Census 2011:11)

Portraying quite eloquently how the “compelling needs of Indian Society and the stubborn cultural values” was experienced as rather chaotic and overwhelming for the local elite to govern after the British colonial management withdrew, it also shows what happens to grand ideas and plans – however well intended – if the “habits of the people” are not considered.

Some representatives of the ‘people’ to whom Narayanan refers, would be those that live in semi-permanent slums, or ‘colonies’ just outside the inner-city. In the colonies of Janta, Mazdoor, and Pandit, dwellers arrive from the rural vicinity of Punjab and Haryana, and the even more populous but not as prosperous state of Uttar Pradesh, to seek employment or to escape harassment, oppression or hardship. They begin their hopeful escape, in small shacks with open sewages where rats, feces and waste run in small channels just outside their door. The children have no offer of any public-school system, and there is little money to go around, of what little there is, often goes to men in large cars offering shady rental contracts, with a lingering uncertainty to stop the city administration ploughing the settlements to the ground.

Other ‘people’ whose habits do not conform with the modernist ideal, live even further out in the periphery of the Union Territory. Most of them are farmers and factory

workers, and they never, or seldom, visit the City Beautiful. Not because it is so far away, but because they do not see themselves as having any business there, as – at the present anyway – the jobs of the inner city are out of reach, and so are the rental prices. Some of those people live in the Shivalik Hills, in a small village, called Rani Mājri.

## Rani Mājri

From a distance, on the shoulder of two hollows, created by the continuous erosion of seasonal streams, the village of Rani Mājri looks like a neat collection of houses with a forested thicket at its back. It is small, even in a hill village context, with just about 50 joint and nuclear households. The village as an administrative unit is geographically bordered to the North by a seasonal river that run in the southernmost hollow, and to the North-East by the government protected forest (*jangal*)<sup>16</sup>, and the steep Shivalik Hills. From here, they begin their slow rise into eventually becoming the Himalayan mountains.

Towards the West the village fields fan out like a peacock's tale flowing out onto the alluvial plains below until they meet the fields that belong to lower-lying villages, the closest one being Bapūli. To the South, the village fields run across a small ridge to meet with the fields of the tiny settlement of Khot. Although lying quite low in the hills, the population in this area by descent define themselves as *Pahāri*, or “of the mountains”, and speak a local version of the dialect by the same name. The village settlement pattern, and social organization in Rani Mājri is based mostly on caste-identity, of which there

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<sup>16</sup> Looking into the etymology of “jangal”, (Hindi/Urdu for forest, wood, jungle) Michael Dove (1992) argues that the word itself has undergone a transformation, from original *jangala*, which referred to ancient civilization, to the contemporary *jangal* now referring to ‘forest’, (not civilization) (Dove, 1992:231,240). This shift in etymology, Dove argues, represents a shift in evaluation, from a civilization (culture) excluding wilderness (nature). This particular shift is too complex to outline here, but it corresponds to historical changes in land use, and to rulers of the land fostering sedentary and intensive patterns of land use which in turn facilitated centralized political and economic control; shifting the balance between animal husbandry and agriculture to favor the latter (Dove 1992:238).

were three: Rajput, the main landowning caste and Lohar, the main artisan caste. Both lived in the village center. Chāmar, the Scheduled or Dalit caste, lived in their own hamlet towards the South, between the main village and Khot.



Fig.3: A rough sketch of the center village of Rani Mājri

The Rajputs were traditionally a warrior caste, and continued to be so as an internally defined category. They were by 2013 also categorized as a “Forward Caste” by the State of Haryana, an externally defined state category, indicating that the Rajput castes receive no positive discrimination by the state such as seats in higher education or in government positions because of their superior position in the caste system.

The Lohars, also the internally preferred name for the caste group, were categorized as a “Backward Caste” by the Haryana State. To belong to this category, is means to be entitled some forms of positive discrimination and reservation in higher education and in government employment. This category generally includes marginalized castes, like tenants and small-scale cultivators (Gupta 2005:414). To be 'Backward Caste' is not to bear the burden of 'untouchability' as the Scheduled Castes mentioned below, but is to be in a depressed economic situation contributing to their “backwardness”, which Gupta defines as to “lack a culture of learning” (ibid:423).

The Chāmars commonly went by the name Harijan, by the upper castes and by the Chāmars themselves. As such, Harijan was the internally defined category. Calling them by the name of Chāmar was derogatory, and as such I will refrain from calling them that. Harijan was the term chosen by Gandhi (Sharma 1984:121) to refer to the Scheduled Caste/Dalit/Untouchable population of India, but seeing that Harijan also seen by some as offensive, I have opted for the State category of “Scheduled Caste”. This seems to be the most accepted term both by the general public and by the people themselves, as an internally used category. To be categorized as Scheduled Caste by the Haryana State had some political and economic benefits, as they were entitled to reservations in higher education and in government employment, as a compensation technique for the social disadvantage of being lowest in the Hindu caste system

Caste and gender regulate a person’s behavior, prospects and residence, and are also intricately interwoven with class. I will get back to class and the caste-based pattern of settlement in chapters 3 and 4 respectively, and to gender towards the end of this chapter.



Fig.4: View from the village roofs in February 2013, out over the North Indian plains

Seen from the rooftops of Rani Mājri, facing westward and about 600 meters above sea level, one can look over the agricultural landscape of the plains below, with smaller villages that grow larger along the major roads. In clear days, one can make out the towering factory pipes of the heavy industry that define the hillier skyline to the North-West, and to the South, the growing tri-city of Chandigarh, Panchkula and Mohali.

On misty days, of which there are many because of the difference in temperature between the valley floor and the hillsides, one can barely see the terraced fields below the village. Partly irrigated by the local water-channel (hereafter by its local name, *kuhl*) system of irrigation, the fields consist of an intricate patchwork of plots bordered by stone fences, and alternate between having an arid and uniform look in the hot and dry seasons, and being a mosaic of green during the wetter growing seasons; the winter-growing season (*rabi*) and the monsoon-growing season (*kharīf*).





Fig.5: The fields as they fan out below the village. This is the monsoon-crops, the ginger is covered with grass to protect the buds from the sun.

In this village, I rented a room with my husband and son in the joint household of Bhagwati and Bhupati, an elderly Rajput farming couple, through the oldest of their three sons, Prakash. I was advised to settle with this household by the people of ICAR-IISWC (the Indian Council of Agricultural Research - Indian Institute of Soil and Water Conservation, hereafter IISWC), as according to these researchers, this would be one of the few households able to feed us.

I will get back to both IISWC, this village and its inhabitants more closely in the next chapter, but in this chapter, I will outline the methodology I used whilst working here.

# Methodology

## Interviews, formal and informal

I began my fieldwork in India doing a range of formal interviews of officials, members of Non-Governmental and Governmental Organizations and other scientists and researchers working on either rural development and/or the environment in the region. I also conducted formal interviews later in the process, as new questions arose.

Doing formal interviews is one of the more well-defined methods to use in ethnography, but as Atkinson and Hammersley (2010) point out, interviews is not the preferred method of gaining in-depth data by anthropologists. This is because the time spent with the subjects interviewed is often relatively short, but also because it relies heavily on verbal articulation. But even if the interview as a method plays a rather inferior part when theorizing on anthropological methodology (Briggs 2007:552), I wished to utilize this method to get an impression of how environmental issues were dealt with and talked about in the public, urban sphere by the policy-makers themselves.

In practice, my interviews would be carried out with public figures by phone or face to face. I would present myself and my intent, arrange a meeting, and prepare a set of relatively open-ended questions regarding the subject at hand. I tried to keep my questions open, trying to minimize the risk of leading the questions into the answer I “wanted”. The interviews would at times be in formal settings in the presence of other employees, like my interviews with the head of the Rural Department at the Departments’ regional office, in semi-official contexts as with NGO-workers at their work site in Chandigarh, or with government middle school teachers at the school property. Sometimes, what began as formal interview settings would become more informal with time, and take place in more informal settings. This was for example the case with the interviews of the retired hydrologist, former government worker and now environmental



NGO-founder R.C. Gupta, who was kind enough to answer my questions taking bed-rest in his Chandigarh residence after a serious back accident.

Ethically, to use information gathered from interviews has its challenges. The social topography of the interview session must be considered, such as the setting, (what structures are at play in an office vs. in someone's home, who is there to hear, the status of the interviewee vs. interviewer, the language in which the questions are framed etc.).

In a way, interviewing as practice, does appear as discursive strategies, but as Atkinson and Hammersley (2010:167) argue, the data springing out should not be rejected as such. Acknowledging the difficulties that one might face in interview situations, I did my best to make sure my interview subjects were informed of my intent and answered as "official" spokespersons, able to withhold or share as much information as they felt comfortable doing.

I have chosen to relate to the information I have gathered through interviews as the kind of information the subjects interviewed would like to publicly share and emphasize in meeting with a researcher. Information gained from doing formal interviews has been used in this study mostly to reveal official viewpoints from public figures, and not as absolute "truths" about an individual or an issue. If this information was communicated because of personal conviction or because of pre-perceived expectations of "correct" answer to the questions posed, I will not know for sure. In the few cases where I felt the information could be classified as "off-the-record", I considered very carefully whether it would be necessary to include it at all, and if in doubt, omitted it.

## Questionnaires

Whilst in the village, I alternated between doing questionnaires and informal/formal interviews at regular intervals. I did this not only because of the information it provided, but also because I felt the need to confirm the reasons for my presence. The local image of a scientist was based on the stereotypical quantitative scientist, one that counted,

measured and calculated data presented in neat graphs and tables. Social scientists doing qualitative fieldwork was a strange and unfamiliar concept - to the degree that I suspected that they thought I did no scientific work at all.

In time, this could have resulted in the villagers' sort of 'forgetting' why I was there, and approaching me as a friend or neighbor, and not as an observing researcher who would use the information collected for an analysis.

To regularly conduct a round of questionnaires, then, not only revealed general attitudes and gave valuable information regarding landholding, power and status, but also proved to give the beneficial side-effect that I was perceived as doing 'real' research.

This also made conducting surveys whilst residing in the village ethically one of the more complex methods I used. Even if I would always present my intent and context for the survey, and the people asked were free to give any reply they wished, the people I surveyed were not "official spokespersons" but private members of households, without much interview experience, some would also respond to the difference in status between interviewer and interviewee.

For example, in one of my first set of questionnaires, I had the eldest daughter of the household in which I resided to accompany me to help me translate from the local dialect to Hindi/English. I began with asking how often people used the forest, what they used it for and the likes. This worked well enough. But in my second half of my questionnaire, I touched upon subjects that concerned the household economic situation. In retrospect, my own lack of sensitivity is quite shocking, as I asked, "how many electrical applications do you (or father in law/father) own", and "how many animals do you (or your father in law/father) own". Firstly, I was not aware, until quite some time later, that one should not discuss family finances publicly, or with anyone but close kin. Secondly, I had not considered that for people who own very little, and who place great status and pride in the quantity of such commodities, enumerating wealth to an unknown white urban researcher undressed their 'poor' status; in front of myself, and the large landowners' daughter.

This bias, however, also worked the other way around.

My early surveys also gave them a very strong association to all the other surveys that had been done in the same region by the state government for censuses and interventions. With time, I realized that many of the families I interviewed during the first days, regardless of my assurances that this was not meant for government reports, were concerned that I would “uncover the truth” about the fridge or the television set they received in dowry. These assets had, I discovered later, been under-reported to the state government census officers, so that the households would qualify for Haryana's “Below poverty Line” (BPL) Index (see chapter 4). A BPL status was important, because the household would then be the recipient of benefits from the state government, for example via ration cards on food grain.

I also realized how my surveys could make people uncomfortable as they knew the answers they provided, for example on caste or landholding, were given to a member of a high caste and landowning household. To gain a sensitivity for this, however, took another method of collecting data; participant observation.

## The Fieldwork Through Participant Observation

To do participant observation is to involve oneself as a researcher in a manner that not only benefits the context of analysis, but that also raises some central issues touching on the core of research ethics and knowledge production, which I will briefly touch upon here.

In theory, participant observation is a way of collecting data that originates back to the American anthropologist Franz Boas (1858-1942) and the Polish-British anthropologist Bronislaw Malinowski (1884-1942). In practice, this method of data collection requires that the researcher spend a lot of time with the same group of people, observing what they do and say, and at the same time engage in selected daily activities (Emerson, Fretz, and Shaw 1995:1). Participant observation then, involves a dual practice of observing and engaging with people, which is a challenging exercise when one attempts to do both at

once (ibid:4), often problematized because in doing one thing, one often excludes the ability to concentrate on the other. As C. Norris (1993:126) points out, however, it is more useful to look at ‘participant-observation’ as moving along a scale that “covers a continuum from complete participant to complete observer”. For me, the way participant observation was carried out in the field rested not only on my capabilities as a person, (which I will return to shortly), but also on a certain conviction that people’s actions and practices carry meaning to a degree juxtaposed to the one of verbal communication, and that all forms of action, practice or communication take place against a background. In the next section, I will elaborate a little further on that point, but first I would like to note a few central ethical issues such fieldworks entail. As this issue has been widely discussed in anthropology, I will only touch upon some central issues concerning my fieldwork here.

### Ethical Considerations to Participant Observation

Some ethical issues are general to the discipline, other are special for the place the research is conducted. An implication of altering ones’ position after context, especially as one treads the border between friend and researcher, one often faces several ethical dilemmas. One might, for example, observe ‘potent’ situation for an ethnographic ‘case’, but there is always a risk that the situations are too personal, too compromising, or too politically sensitive to be included in the analysis.

One can try to limit these occurrences by striving to follow the guidelines for ethical research as provided by the Norwegian National Committee for Research Ethics in the Social Sciences and the Humanities (NESH) which states that researchers “must respect the participants’ autonomy, integrity, freedom and right of co-determination”, and that privacy issues must be approached with caution and responsibility (NESH 2016).

Informed consent has thus been aimed for in any situation, even if informed consent in practice can be a complicated matter. One ethically challenging element in my fieldwork

was the issue of “hidden” vs. “open” observation. How do you tell everyone involved in an event that they are being observed? What about when you don’t really know what you are looking for? And what is private and what is public information – concerning conversations between village leaders for example, or when you realize that your position as researcher might have been overshadowed by that of a friend? Do you stop the conversation, or do you decide to exclude the material, however useful it was for your analysis?

In my own fieldwork, this can be exemplified with the relationship that grew out from sharing the daily lives with one particular Rajput lineage for so long. Not only could they at times forget that I was a researcher (despite my surveys), but their caste status could act in a way as “gatekeepers” to knowledge (Berreman 2012). I became more associated with the Rajputs the longer I lived in the village, to the point that I felt the Scheduled Caste population could not be frank in voicing their opinions, despite my assurances of anonymity. In the first months at least, it was difficult for me to fully realize or acknowledge the structural and personal marginalization of the local Scheduled Caste population by the higher castes.

In Rani Mājri, caste-relationships were in fact quite defining to whom I could spend time with. Compared to earlier fieldwork experience in Rajasthan, however, I found caste regulations less prohibiting in regulating my own ability to move about than it did further south-west in the country.

My visits to the Scheduled Caste hamlet was tolerated by the Rajputs among whom I lived, but I was told not to accept any food or drink in their house as “their food would make me ill” (see chapter 4 and 7 for more on caste and food). With Norris (1993), I thus view the legalistic position as ideal, but in some cases I acknowledge that it is hard to attain completely. I have however done my best to acknowledge where my information might seem biased, and in cases where my role as friend/researcher was clearly confused, this material has been excluded.

Another issue to consider, is recording and storing information. In writing ethnographical fieldnotes, one registers quite a lot that might be sensitive information. I thus took several measures to take care that my interlocutors' anonymity remained intact. One was to make up nicknames for them from the very beginning, that made them easy to remember (for me), but not to anyone else. I would therefore never write anyone's proper name in my notes.

I would also draw on the advantage of writing partly in Norwegian, a language not particularly common to anyone not Norwegian, to utterly camouflage my notes while in the field. All notes written in the field I kept, and still keep, locked in a suitcase.

At certain intervals, however, I would hook up to a computer and transfer text from handwritten notes to a note-program called 'Evernote'. These notes would always be fully anonymized, with all place-names emitted and no personal identification markers left. I have kept my file password-protected, as well as my backup, and kept them on a portable hard-drive to be able to delete any information left in Evernotes 'cloud'-based storage.

There is also a need to mention the degree of empirical precision. Doing participant observation, is often based on "jotting down" field notes to use for later analysis, and often, recording ethnography relies on a good memory.

One has to be effective and make hard decisions on what should be noted, when and where. I did my best to follow the advice of amongst others Atkinson and Hammersley (2010:203-207), on the writing of ethnographic field-notes in trying to jot things down as soon after the observation as possible as details often get lost, but not during observation which it might seem intrusive. Withdrawing to write up more extensive notes every night after my son had fallen asleep, proved helpful both in keeping me focused, but also to remind my hosts that I was doing a social analysis of which their lives were a part.

Regarding precision, the issue of language and communication needs a mention too. The method of participant observation implies the ability to communicate rather freely with

the group of people one intends to study. Not having formal competence, neither in Hindi nor in *Pahari*, my communication skills were at the onset quite low, and as I worked without an interpreter, a lot of information had to be based on observation of daily practices in the beginning. This, however, need not be only a drawback, but might enable the anthropologist to study practices more in detail.

With my basic understanding of Hindi from previous fieldwork, I could within a few weeks manage fine with the younger population, as they would tone down their dialect of *Pahari*, mixing it with standard Hindi (including the occasional loanword from English) when addressing me. With time, I also managed to extend my knowledge of the local dialect to the level that I could engage with ease in small-talk and discussions with elders too -at least if the conversations were kept in reasonable pace. It could not, however, encompass the highly scientific language of ‘climate change’ and its related issues of ‘consumption’ and ‘development’ - concepts that I could not be certain had circulated amongst the rural farmers before, and as such I made a point not to mention in everyday talk, formal or informal interviews or in the use of questionnaires. If the concepts came up, I was careful to take note of who used them, and in what contexts; contexts that spurred many comments, conversations and revealed much of the complexity of what “environmental awareness” might be about - the subject of my analysis in chapters 6 and 7 specifically.

An anthropological fieldwork also implies at times to “emphasize similarity at the expense of difference” (Norris 1993:131). Although this is a “natural” part of ‘adjusting’ to a social setting quite different from the fieldworkers own, some elements of the process might be more uncomfortable than others. This, in my case, is related to certain incidents where similarity is underscored to gain the trust of the society that one is set out to study.

This could be, for example, to alters or exaggerate bits of information or habits to ‘fit in’, and to gain peoples trust, especially in the beginning of a fieldwork, when neither

researcher nor his or her ‘objects’ of study are sure of each other’s footing. Even if they felt “innocent” at the time, they still mattered for the way people related to me.

For example, I hid certain elements of my past (such as my parents being divorced and remarried) as I knew that my own status was related to that of my lineage. I also overstated some personal attitudes, for example the degree of my religiosity. I am culturally a Christian but do not adhere to any religious doctrine, which for the villagers with whom I resided, was an ‘unthinkable’ position to take. (It was thus easier to proclaim Christianity, than to risk being judged as an atheist).

I also understated others, for example, the year of my wedding. My husband and I pushed the date back a few years, so not to reveal how many years we had lived together outside marriage. This is a morally doubtful way of living (at best), both in Hindu communities of rural North India as with the Christian communities of South-coast Norway, and knowing it would reflect badly upon us, and our families, we agreed to adjust the year. Doing this, in fact, makes Norris (1993) go so far as to argue that the practice of the method is “inevitably, intentionally deceitful” (Norris 1993:131).

A little harsh perhaps, but his point does carry relevance considering some of the ethical conundrums an anthropologist faces, trying to balance the intricate position between distanced researcher and immersed individual. I can only hope, that upon reading this, those who made my acquaintance will know us well enough to forgive us these strategies to ‘adjust’.

To conclude this section, I would like to emphasize that in achieving an ethically sound approach, I did my best to inform about my intent and scope of research, and in meticulously aiming for anonymity. Using my best judgment, I have at all times kept private what I understood as being meant for my ears only, and with attention to when information revealed could serve the oppressed but compromise the privileged, and vice versa. Any breaches of this trust will have to be on my shoulders only.



## The Embodied Fieldwork

In trying to sensitize myself to how others might relate to their surroundings, I have emphasized an analytical focus on practice – what people do in addition to what they say they do. As my position on knowledge was outlined in the previous chapter, through the concepts of *mētis* and *techné* (Scott 1998), I observed, and partook, when a particular crop was sown, when a particular tree was chosen for rope, and in the time invested in making brooms. I tried to observe how a farmer knows when it is the right time for tilling of the soil, instead of - or in addition to - asking directly. Sometimes, the answers were coherent with practice, sometimes they were not. When they weren't, a new landscape of questions opened up. Was my question wrong? Was the setting wrong? Was my observation wrong? Was there more to it than a misunderstanding or a misreading of the situation? By spending time trying and failing, and by involving myself in the daily life of those with whom I lived, I would always remember to keep an eye on what people chose to do when. Doing that, the everyday, mundane practices began to take form as a valuable intake to knowledge about social life.

There are in anthropology many ways of relating to practice, and the approach takes various forms and adaptations in different schools of research. That the anthropologist gains understanding from participating in local practice, for example, is based on a theory that knowledge entails a certain 'embodiment', and drawing on the theories of Pierre Bourdieu (2005, 2010) and Foucault (1984, 1995), there is more to practice than mere action. It refers to the notion that knowledge and communication of knowledge exists on deeper levels than the written or spoken word, and that insights into life-worlds can be achieved by exposing one's body to the same experiences as the people one wishes to study.

This presupposes a certain view on society, however, that gives preeminence to experience, and to perception - a position to epistemology (the study of how we know)

that has a lot in common with phenomenology (how we experience). In defining the uses of phenomenology in anthropology (and sociology), philosopher Alfred Schutz (1899-1959) emphasized the relevance of the ‘common-sense world’, the everyday life, and how people make sense of it. Seeking to “understand social action in its own subjective terms, yet to describe this world scientifically using the tools of an objective science of society” (Williams 2010:11361), however, the anthropological fieldwork has received criticism from within the discipline. The criticism is founded on the ability anyone has to represent the life of “others”, lastly revisited as part of the discussions surrounding the 'ontological turn' in anthropology in particular, especially through the work of DeCastro (2003), Carrithers et al. (2010) Descola (2013) and Moore (2014). How far into an external life-world can another human being penetrate? How or what at all, of other’s lives can an anthropologist really position him or herself to communicate? Phenomenological approaches have given some possible ways out of this methodological dilemma.

The phenomenological approach to the fieldwork in anthropology, came about in the mid-1980s, as a response to a felt lack in “everyday experiences, contingencies, and dilemmas that weigh so heavily on people’s lives” in anthropological writing (Desjarlais and Throop 2011:93). In what might be called a phenomenological approach to ethnography, the body is viewed as the “existential null point from which our various engagements with the world – whether social, eventful or physical – are transacted” (Desjarlais and Throop 2011:89).

As was outlined in chapter 1, this approach has in later years been popularized with Ingold (2000, 2011). Following Ingold, we can view knowledge as part of human perception: “The knowledge we obtain through perception is practical - and there is no limit to what can be perceived” (Ingold 2011:166).

And this is what makes the anthropological fieldwork possible at all, argues Ingold. In sharing practices, moving through the same environment, the “field of practical activity” will remain “consonant with the experience of those among whom one has lived” (Ingold

2011:167). The fieldworker, sharing the experience of the same practice, will at least share the experience, even if their conceptual frames upon which its meaning is ascribed, are different.

Ingold thus reads Bourdieu's theory of practice (2010) as a:

“kind of practical mastery that we associate with skill - a mastery that we carry in our bodies that is refractory to formulation in terms of any system of mental rules and representations. Such skill is acquired not through formal instruction, but by routinely carrying out specific tasks involving characteristic postures and gestures, or what Bourdieu calls a particular body hexis. (...) And if people from different backgrounds orient themselves in different ways, this is not because they are interpreting the same sensory experience in terms of alternative cultural models or cognitive schemata, but because, due to their previous bodily training, their senses are differentially attuned to the environment”

(Ingold 2011:162)

I agree with Ingold as far as one could argue that such an attunement can be strongly gendered too – or affected by caste, class and age. It also follows from this approach then, that the researcher's scientific practice also takes place “against a background of involved activity” (Ingold 2011: 168-9). This is the Janus face of the method. In doing participant observation the qualitative data will always be based on individual experiences and interpretations. The subsequent analysis becomes unique, as a researcher - however much he or she attempts - can never rid him or herself completely of personal convictions or interests in favor of a “neutral” science.

Any anthropological analysis should consequently dedicate some space to the “personal equation”, at least to make the reader aware of some of the elements that colored this particular analysis. Next, I would like to draw on the aspect of the phenomenological approach to fieldwork that places the researcher him or herself in focus, allowing for an exploration in how the place and the people in fieldworks interact and influence the

researcher, and vice-versa. If one is ready to accept that ethnography produced is not, in fact, completely neutral or objective, one should also look at how the researcher's personality - with all its gestures, habits, quirks and traits as an analytical tool.

## The Personal Equation: “Raw” Moments in the Field

In every fieldwork based on participant observation, the researcher will be integrated and/or excluded from social life based on forces often uncontrollable and unpredictable. Anthropologist James Davies (2010) for example, has outlined how the fieldworker's emotional, and inner life-world has been viewed by the discipline, and how it has changed radically from a point where emotions and the subjective were seen as a distracting element clouding the researchers gaze, to have become an important intake to ethnographical material.

By 2017, what one might call the ‘personal equation’ has gained methodological ground, and an example of this is the work of the anthropologist Michael Jackson (2010) who explores what he calls the “liminal phase of fieldwork” (Jackson 2010:41). These liminal phases, he argues, arise in moments of stress or anxiety when facing the “unmanageability of many of the forces that impinge upon us” (ibid:37). Experiencing stress, fear and even panic, might provide for valuable insights. Jackson himself experienced such panic in waking from a dream whilst doing fieldwork amongst the Kuranko of Sierra Leone. His dream makes Jackson aware of “the importance of dreams and portents in Kuranko life” (Jackson 2010:43), and is crucial for his later understanding of Kuranko 'culture'. Jackson's ethnographically potent dream, is perhaps somewhat similar to what Kirsten Hastrup (2010) in the same volume, call 'raw moments' (Hastrup 2010:204). Hastrup uses this term to emphasize the analytical usefulness of feelings, based on her own experience of something 'supernatural'. In her case, the sight of a 'being' whilst sitting alone in the icy landscape of Arctic Iceland opened up a world of sensory amazement, an experience shedding light on the social world of her informants,

and ultimately, she argues, enhancing her 'cultural knowledge'. Hastrup defines these moments as “thresholds of knowledge”. These are moments that relate to the feelings of the fieldworker, and not to the “analytical habitus” which the anthropologist often strive for (Hastrup 2010:204).

As an example of a potential ‘raw moment’ of my own, I could mention an incident that I described in the prologue to this dissertation. This incident, a land-slide caused by intense rain in the numbing heat of pre-monsoon June, gave us a good scare, as it took the whole patio outside our rented room with it down to the river bed below. No people or animals were injured in the landslide, but I began to worry about the ground beneath the newly constructed building, where our room was the most exposed part, and feared that it could follow suit. Despite insurances made after my households’ offerings to the deities, I was not comforted. The tragic floods of Uttarakhand had happened only weeks before, when close to 6000 lives had been lost, gave me a context for brittle nerves. As a mother of a toddler, I felt I was left with a difficult choice. Should I stay, to show solidarity and keeping up my fieldwork? Or should I take my baby away from what could potentially happen; another landslide? I chose the latter.

I could have accepted the offer to let my husband sleep with the men in the common room, with myself and the baby sleeping in the room of the main building with my landlord’s wife, but I declined. We had come far in conforming to local ideas of family practices, but I was not prepared to share my child’s nightly cries and quarrelsome breastfeeding and nightly diaper disasters with anyone but my husband. For the final months of our stay, we moved back to the city with me commuting and spending 2-3 nights at each location on a rotational basis. This was a decision that bothered me intensely for the rest of my stay. Was I being irrational? How much data did I miss out on? I remember I kept staring at my notebook thinking: “one day in the village used to give me at least three full pages of notes. For every day I stay here, my notebook is three pages short of ethnographic observation”. And what about the rest of the household, did I

not have any concern for them? “Save yourself, leave everyone else behind?” There were no new cloudbursts, and no new land-slides happened in the region that monsoon season. But what initially I experienced as a humiliating “defeat” as anthropologist, was in retrospect, perhaps exactly such a “raw moment”. In relating to my own feelings of fear, anxiety, responsibility etc., I found both the reason and the validity I needed for developing my later analysis.

Not only did the personal experience of distress give me a set of questions that, even if they had no analytical distance, became very valuable for my later analysis. “How could this happen here? Has this happened before? What do you do about it? What can I do about it?” The answers to these questions provided me with a valuable insight into the importance of water, land and family relations, and prompted deeper investigations into notions of climate responsibilities, agencies, and the relationship that people had with the ground beneath their feet.

The small landslide and my reaction to it, turned out to be potent, not only because of these answers, but because of the insecurity that manifested itself, within me as well as in the others of the village. Bluntly put, it made the local responses to something as abstract as environmental degradation more concrete. I will get back to the landslide and the flood in later chapters, and here rather move on to another aspect of the “personal equation” which is of special relevance when doing a fieldwork in Northern India; that of gender. As some gender differences are quite defining when it comes to the amount of ethnographic data acquired, some of the finer details of female lives in North India should thus here be outlined.

## Opening and Closing Gates of Information

As this section will show, being a female is to encounter the world in a certain way, colored by a set of social codes that guide what opinions and freedoms you are entitled to, as well as your practices. It is not to say that males have none, but that in not being a

male myself, I am not entitled to say anything about how different it could have been for a male fieldworker.

Being a woman, a mother and a wife, had its own challenges and benefits to a fieldwork in rural India. To be a mother and a wife had improved my status quite remarkably from my first field visits to India, carried out while I was still young and childless. But then again, my son, as dear to his parents as a child can be, was also as challenging to the fieldwork-process as only a parent could know.

In addition to challenges however, my son was also an invaluable gate-opener in the 'field'. In respects of being an object of public interests in himself (a poster boy as far as white, chubby babies go) his mere presence prompted new acquaintances. His presence in the village also confirmed the legibility of my relationship with my husband (as marriages go in North India, to have a son as your first born is a confirmation that the match is blessed by the gods), and because of being a mother I immediately had something in common with all the other mothers of the village. Young and old, we shared something as basic as marriage and motherhood, with emotions and challenges that could bypass the occasionally large cultural differences that we faced in dealing with each-other. These differences were often entry-points into other ways of thinking than my own (see above), such as what to do with disposable diapers, the how's and when's of cutting your toddler's hair, or how to react when your baby cries all night, or is being a nuisance.

## A Gendered Field

In rural North India, such as in the village of Rani Mājri, the position of women - and men - change with time and place. Not only are there large variations in the status and roles of women throughout India, but there are differences in the roles that women and men bear according to age, caste, class and place, too.

It is necessary to emphasize, given the great differences between people in India today, that in this specific text I will concern myself with women in rural North India - since I happened to be one. I also, although it should be unnecessary to do so, follow Raheja and Gold (1994) in pointing out that women, in India as everywhere else, are multidimensional beings, and that so are men. In empathy with my husband and my male friends in India, men are also gendered beings, although seldom treated as such. One important principle underlying the caste system, is the opposition between ritual purity and pollution (see chapter 4). For example, fertile women in India cannot attain complete ritual purity, as menstruation, childbirth etc. are considered severely polluting processes. As C.J. Fuller (2004:22) also point out, Hindu women are not 'twice-born' (i.e.: not undergoing an initiation rite at early adulthood) and as such ritually inferior to males, even if, as Lamb (2000) points out and as I will get back to shortly, a woman's status change several times during her life.

A 'house-wife' in the village, for example, would have little time for anything but work. The term 'house-wife' was used to honor the woman with the practical family 'zimedārī' (responsibility). A 'house-wife' would have the primary responsibility for receiving guests in the right manner, to oversee what needs to be done within the house, as well as to be the one responsible for preparing (or delegating the preparation) of meals. To cook in rural India is a time-consuming affair, and the 'house-wife' is always the first to rise in the morning, and quite often the last to go to bed at night. As well as doing what any other woman would do: her own, her husband and children's laundry by hand, sweeping the floors, feeding and tending buffaloes and or/goats, bulls and cows, fetching fodder, sow and harvest, and otherwise tending to her children, husband and parents-in-law. To illustrate, and to give a sense of the extent of work expected of farming women in the hills, I will describe an ordinary day for a 'house-wife' in a Rajput, landholding joint household in the early spring season of 2013.

Standing where the *kuhl* enters the village in the wee morning hours of February, one can hear the sounds and smells from the lives led as they materialize. The odor



of cattle-manure fuses with the smell of coriander, urine, grasses, flowers and earth. The light chimes from the goats in the courtyards tingle in the air. A buffalo calls for attention. Butterflies flutter from one bush to another. A dog saunters outside a dwelling, waiting to be fed. There's little for people to hear still, most are asleep, but a faint smell of firewood from the hearths (*chūlās*), gives away the presence of a woman. The 'house-wife' as she is called by the younger women of the house, has been awake for an hour already.

At five in the morning, when it is still dim, the Rajput wife walks outside to tend to the cattle. The manure is swept in heaps, ready to be carried by herself, or her husband's brother's wife, to the fields later in the morning, the animals are then milked and given water, there is no timidness to her labor. It is the "time of God" (*Bhagvān kā time*), or as some called it; "Goddess time" (*Devī kā time*), the auspicious time of day that begins at four, when the "wind" (*havā*; litt. air, wind, gas) of the village protector Kheṛa Baba flows through the village.

In the small kitchen, she is alone preparing breakfast. She is kneading the dough of the flat and round bread - the light wheat flour *phulkā*, and re-heating the thick, yellow maize flour leftover *makkī rotī* from yesterday's dinner. Simultaneously, by skillfully moving vessels and pots here and there, she is making the black milk and water tea (*chaī*), and heating water for the "bath" that everyone will want to take before they eat.

Around six, husbands, children, mother- and father-in laws also get up, going about their morning routine. Whilst waiting for a "bath" (for most household's, this would be to pour water over oneself with a jug out of a bucket), a woman or a child of the house sweeps the floors clean with a locally braided brush made of palm-leaves. If it happens to be a Tuesday, or a Thursday, one avoids washing ones' hair or laundry, out of respect to the deities — it would be an inauspicious thing to do on those days. After the "bath" follows a thorough cleaning of the mouth. Some will be

brushing their teeth with toothpaste and a toothbrush, others prefer the 'dental stick', freshly picked every morning from the Neem-trees in the vicinity.

Every day, except on Sundays and every second Saturday, children and youth dress for school in school uniforms, indicating for anyone initiated which school they attend - private or public, primary or middle school. The shoes are always black, preferably shining - but more often worn and several sizes too big because they have been inherited or bought to fit for several terms. The hair is combed slick and tight - so also with the adults, their hair, long for the women, short for the men, is never budging an inch when they prepare for a new day of labor – at the farm or in factories.

Closer to seven, a small bell is rung. Someone, the husband, or the mother-in-law, is initiating the morning worship (*pūja*) in front of the household shrine. Every house has one, often in the 'common-room' of the house, with the deities that the family keep especially close. In some houses, a jug of water used in the worship is taken outdoors by the person doing the worship, and poured out on the ground in a specific manner, by emptying a water vessel slowly with extended/straight arms. This water is referred to as "water of the sun" (*Sūrya kā pānī*) or as "water for Bhagvān". It is again an act of auspiciousness - done so that "everything will be OK", according to Prakash, in whose household I lived in 2012/2013.

Finally. the breakfast is ready. The first *phulkā* is always given to a cow - or a buffalo in the lack of a cow, for Krishna and for auspiciousness. Then, the men are served, often sitting in the 'common-room' whilst eating. The women will, after serving the men, sit with their legs crossed in the kitchen. The children go to and from as they please, with their *phulkās* smeared with a paste of clarified butter (*ghī*), salt and chili. The leftovers are put on a shelf to be given to the 'house dog' later, the semi-tamed dog who is never cuddled, but always fed.

In return, it will almost certainly always bark, when strangers approach, and also mostly keep the bands of macaque monkeys away from cereals and food grains drying on the roof. Whilst the monkeys are not large enough to harm adults, they can easily attack a child, and are thus best kept away.

All the while, the 'house-wife' waits. She won't take a bath or change her attire before everyone else is done eating, and the kitchen utensils are cleaned. She will finally eat, most often alone in the kitchen, when everyone else is ready and gone for the day.

The women of the house will attend their work, always working, in the house or in the forest or in the fields. The factory workers are off on their Bajaj's or Hero Honda's (light motorbikes), in auto-rickshaws, with their lunch-boxes hanging around their neck. The younger children will be off to school on foot, if they're older, with the public bus which take the older school children to secondary school and above. Most men tie scarves around their heads to shield from the sun, just as their women do with their scarves, and go about their business. When it's not harvest or planting time, and everyone walk to the fields, there is always animals to tend, as well as weeding, cutting, sorting, or repairing to do. If there's public affairs to be handled, bills to be paid, documents to send or receive, court cases to settle, men do them. Women have little time for networking, public affairs or friends; and a good 'house-wife' works, no matter the season.

To be a woman in the village, allowed me to participate in all this work. It also allowed me to 'feel' all the 'behavioral codes' that impinge on a woman's life with such force, 'behavioral codes' that despite all our similarities, showed me that to be a woman in rural North India is another experience entirely compared to being a woman in the North of Europe.

Of the most notable differences were the woman's role of keeping family honor, a particularly salient aspect of being female. Irrespectively of age, her 'misbehaving' would reflect badly not only upon the woman herself, but on her husband, children and extended family, while a boy could to a larger degree carry the weight of shame on his shoulders alone. A good example of this was the practice of eating meat. To a Hindu, this is a rather degrading practice – and in theory that is true for everyone. The occasional indulgence in goats' meat or egg, which most males in the village would do from time to time, was however fine, because it was "made right again" by the women of the household never attending to such a practice. The same could be said for the not so unusual indulgence of alcoholic beverage or cigarettes, and other 'disapproved' habits: unthinkable for a woman, such habits would be tolerated (but still not socially approved) for a man. Another difference, related to the former, was how women were expected to alter their appearance, both with dress, acts, speech and movement, according to where and with whom she socialized. This would be influenced by age or status (as daughter, sister, mother, wife etc.), but also to bodily cycles.

Before I address these codes and how they relate to age, it is first important to acknowledge that I agree with Gold who (in Raheja & Gold 1994) argues that the gestures constituting purdah (female seclusion), such as veiling or lowering their voices is not only a way to conform to tradition or male hegemony, they are self-conscious poses, too. To veil is both a way to keep modesty and uphold family honor, and a strategy to move around in public, protected from the potentially malevolent gaze of not only men, but also of malevolent spirits or ghosts. 'Behind the veil', then, to loan from Lila Abu-Lughod (1999), women might be freer in thought and agency than previously assumed (Raheja and Gold 1994).

This acknowledged, to live as a woman in a rural village of North India is to live a quite restricted life. Being a woman myself, allowed me to see the nuances of female, rural life, and build the trust required for women to share of their knowledge about the world to a

degree I do not think a male anthropologist would accomplish. This is not to argue that our relationship was not colored by difference in status.

As will be a theme throughout my dissertation, the women's self-categorization as 'backward', and inferior to both myself and males, made them often unsure if they knew what I really asked them, or what the "right thing" would be to answer. Upon asking women the names of animals, why they would use this tree instead of that, or the political situation of the state, for example, women would almost always claim to "know nothing". Although many men too, would shrug when I asked about their viewpoints on the degradation of "the environment", (using the local word for surroundings *vātāvaraṇ*, after advice from the youths acquainted with English), women would during my first months of fieldwork, refer to husbands, sons or daughters, who, enrolled in school, could perhaps give a satisfactory answer to the social scientist in their yard.

With time, however, and as we became acquainted, women became more willing to share their knowledge with me, both for my own good (so not to make a fool out of myself), so that I would not inflict harm on my son or my husband unbeknownst, and because they had views and opinions to share and discuss with me.

It is however important that the reader is aware of these behavioral codes, both because they matter to the practicalities of fieldwork, to the gender dimension of work that I return to in chapter 5, and because they matter to the information upon which I base my analysis. Before I outline these codes, however, I will point to Lamb's (2000) explorations of body, kinship and gender in West Bengal, India. Her analysis will better explain how the female body changes through age, by the fluctuations of substances in her body, moving her on a scale of open-close, heated-cooled, and feminine-masculine (Lamb 2000:14).

## Male and Female bodies

For Lamb (2000) femaleness and maleness, are not “binary, opposing categories, grounded in unchanging physical differences” (Lamb 2000:15), but have to be understood more as moving between points on a scale, and as being part of a larger social world, where gender identities are constituted (ibid:21). Lamb explains it like this: All bodies (male or female, young and old) possess relative amounts of heat (or coolness), fluidity (or dryness), and openness (or boundedness).

Women, in general, are commonly seen as more open (*kholā*) and hot (*garam*) than men, particularly in their reproductive years, as menstruation, marriage, sexuality, and childbirth are all processes that are "thought to entail, for women, substances going into and out of the (open) body” (Lamb 2000:188), as well as implying the “heating” properties of sexuality. Although semen too, is a heating substance, women are seen to have more sexual heat, resulting in “overabundance” explaining why blood periodically drains from the body (ibid). With these heating capabilities, the presence or touch of a female body at certain times could disrupt precarious balances, as when for example crossing a field of newly planted ginger when menstruating (which the women of the village told me would make the ginger wither and die).

Older women’s bodies, however, became more closed, cooled and dry with time. Lamb explains the relative freedom of older women as becoming "relatively self-contained” (Lamb 2000:126), as the channels of the body that carries the heating and cooling fluids are drying (Zimmermann 2014). With Lamb, then, we see that at certain stages in life, the woman is seen as open, susceptible and vulnerable, which would make her susceptible to spirit attacks and possessions for example. In other contexts, she is seen as dangerous in her capability of diffusing inauspiciousness and destructive energy to those around her, bringing misfortune and disturbing energy such as heat to zones, whether human or environmental, which should be cool and beneficial.

Men, who are seen as more 'rigid' in their relatively ‘closed’ bodies, could thus more safely conduct transactions in the public sphere, which gave a practical scenario of men

dominating politically, in the village council, and in most (if not all) direct communications with scientific personnel.

In what follows, I will look more closely at the codes of conduct that follow from being a woman in Rani Mājri, based on the information gained from doing fieldwork as one, and I chose to do so by dividing the text into certain generational brackets that mattered very much in the context of my own work - that of girl, daughter-in-law, mother, and mother-in-law. I base these rough characterizations on my observations of Rajput and Lohar women mainly, as well as my own experiences as being an unmarried and childless woman amongst Patidar landowners in rural Rajasthan, 2007, and a married mother amongst Rajput landowners in rural Haryana, 2013.

### *The unmarried girl (laṛkī)*

Unmarried and pre-pubertal girls could move about in the village of Rani Mājri quite freely, although what households to enter would be regulated by those close in kin. As a child, she would play and roam about in pants and ‘frocks’, eat and sleep at the same time of her siblings, whether they be boys or girls. But already at the age of five, when boys still would be allowed to continue their play and roam about in their spare time, girls would, normally, keep closer to the house and family. Not at school or doing homework, she would accompany the women in their work, and eat with them in the kitchens after serving the males (and guests) of the family.

The fewer the members in a family, the younger the girls are when they begin to take responsibility for cooking, or assisting their mothers in household and farming duties. By reaching the pre-teens, most girls will know how to sew, cook, sow, wash, harvest and tend to the farm, skills that will be necessary when leaving the house for marriage.

As an adolescent, after the age of 12 at least, she would wear the *salwar-qamīz* suits, the long pants and tunics that women in this area traditionally wear. The shawl that

accompanies the suit, called *chunni*, will be draped in front of her chest with the tails flowing down her back, never to be used for veiling in her home village.

Education was by 2013 provided for most girls irrespectively of caste or income until the age of 16 (10th standard), and those with parents able to provide, would continue until the age of 18 (higher secondary) or even college.

When reaching into her teens, she would opt for the tight-legged salwar trousers (and not the traditional loose-legged version, set aside for the adult, middle-aged generation). The fabric and print would seldom be coincidental - it would, providing the family could afford it, follow trends and fashions in print and fabric. She could also on some occasions wear the 'modern' style of tight fitted pants, worn with T-shirts or jumpers, if her family could afford it and would allow her to. To wear "shirt-pants" like this, was always desired for other out-of-house activities such as college or visits to the city, but were also acceptable when dressing up for a wedding where the girl carried no symbolic or ritual role (like being in close family to the bride or groom, in which case she would dress in a more traditionally styled "*frock*", or dress).

A girl cannot travel anywhere with ease, especially not without a chaperone. Older, unmarried girls could travel some distance for education, but most often accompanied by a brother, father, uncle - or in some cases, in a group of other girls. (Travels related to work in a 'respectable' occupation such as teacher or clerk would be accepted if the situation would - as it had not yet in 2013 - occur).

As a young woman, your dignity is constantly under surveillance - although not as strict as what I observed other places in rural India, such as in Rajasthan, where the women of the village lived more segregated lives from their male relatives, (some even under *purdah*, the female seclusion from public and or male observation by veiling or physical segregation).

As such, girls would avoid exposure to public spaces or areas where males, either in the shape of a person or a spirit, could endanger the girl through physical or spiritual attacks.



Keeping with girls and women in work and spare time, then, she would seldom share the company of males outside her lineage, unless at school.

After the arrival of menstruation however, there were further regulations to mobility, as menstrual blood is considered a severely polluting transfer of substance.

There are areas in the house and outdoors that one has to avoid - especially under menstruation (see above). Crossing the field at certain stages of cultivation, or generally, entering or trespassing the site of deities when menstruating, could have devastating results, as upsetting the gods and destroying the crops. Other deities' shrines, like Hanuman and Panch Pīr/Vīr<sup>17</sup> (see chapters 4 and 5) could never be visited by a woman. The restrictions on entering the kitchen was however not as rigid as I had previously experienced in Rajasthan, neither was cooking, but touching of water vessels had to be avoided. Post-puberty girls would also never sit on windowsills, doorways or other zones of transgression.

### *The daughter-in-law (bahū)*

In 2012-2016, a female from Rani Mājri would normally marry at the age of 18-22 with a man ideally being two years older. In a marriage between a man and wife, there are several factors to be met. The individual match matter to some degree, age as mentioned, caste and lineage, and 'liking' (one would normally be introduced or at least shown a picture of one's prospected partner. If strong dislike occurred, protests from the girl or the boy might or might not be taken into consideration). With the love that normally arises between parents and child, together with the benefits and the amount of status attained by 'good' marriage alliances, parents would normally stretch to their limits to ensure their daughters position being favorable in her new home.

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<sup>17</sup> According to Claus Peter Zoller, Panch Pīr could be *pāmc pīr* 'the five Muslim saints', but more likely Vīr 'hero, guardian deity' which Zoller believes is the more likely meaning here; 'the five guardian deities'. For readability, I will use Panch, but it is pron.: *Pāmc*.

After what often is a result of years of planning and negotiations, she is married to a husband of the same caste (endogamy), but from a different lineage (exogamy), chosen for her by her parents, in an arranged marriage. Newly-wed, she will move into her husband's household. Irrespectively of her character at her natal parents' house, she will attain a role as submissive and meek, especially in-front of her in-laws (*sasurāl*). If her *sasurāl* is in the position to, and of an open mind, she might be allowed to pursue an occupation if she pleases - perhaps as school teacher, but her first mission is to ensure an heir. Producing a child is expected to transfer her loyalties from natal home to her in-laws completely, and without one, she will remain an outsider there. Giving birth, preferably to a son, will ensure her place in her new home, and a newly married couple will often not hesitate too long before attempting the first pregnancy.

As a childless *bahū* she will again wear the traditional *salwar-qamīz* suit with the loose fitted trousers, and cover her long, braided, black hair with her shawl (*chunni*), always with a full veil (covering her whole face) in front of her husband and other male seniors. The practice of veiling also applied if walking or traveling from the house.

Also, a woman could not address her husband by name, and preferably should not speak to him unless spoken to first. She would also never speak to a man in her in-laws' house, or to older women unless asked to (and never with a raised voice). She would be served last, and keep to the periphery or even withdraw herself completely to the kitchen or her bedroom if strangers or guests of any standing arrived. Her husband will often be out of the house all day, either busy working, studying, or hanging out with his friends – so to get to know each other might take time. But as to every rule - there are exceptions.

With time, she will eventually partake in out-of-house work, such as farming and tending to the cattle. Not confined to the house for work, all married women in the village would move in the village according to the rhythm of work, weather and landscape (see chapter 4). She would still veil, but seldom more than just shading her forehead and eyes. Married women could also normally walk in the forest, and travel wide distances for work of the field, but would seldom make social visits to other women of the village

apart from for larger social events such as marriages or during festivals like the *Rakṣā Bandhan* (or *Rākhī*, lit.; Bond of Protection, where a sacred thread is tied on the wrist of a brother by his sister, and in return he offers her patronage and protection).

### *The mother/The woman*

Her days are filled with work, and she has seldom time for anything but. If her children are small, the grandmother or any other woman confined to the household for diverse reasons (such as being pregnant, post-labor, or in any other way unable to work) will tend to her children. Unless any close family has anyone in the house, the village *anganwadi*<sup>18</sup> (translates as “courtyard shelter”), might be used whilst farm and husbandry are tended.

With age, and the (most desired) arrival of children, tides change. The adult *bahū* is still adhering to the behavior expected of her as compliant, but tend no longer to be so meek. Providing she has given the household sons, her position is now more secure, and frequent quarrels might arise between her and her mother-in-law (*sās*). The adult mother in the house is more visible, she walks and acts more with ease, she does not veil so quickly when a male enters the kitchen, she might even raise her voice in quarrels if her in-laws are not of a violent kind.

The relationship between daughter- and mother-in-law is much fabled in Indian popular culture, but depends like any other relationship on personalities and traits, and can thus both be close and compassionate, or difficult and even hateful. The relationship to the husband could be just as variable, some lived with husbands known to be prone to abuse, others lived in more respectful, caring relationships.

If she is the oldest - or only - *bahū* in the joint household, she might rise to the position of ‘housewife’ (English term used), A good ‘housewife’ would with age and leverage be

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<sup>18</sup> Anganwadi translates as “courtyard shelter”, a structure provided by the Haryana State Government, giving basic health care (one meal) and pre-school activities to children below school-age, “so that their mother can work on the fields”, to quote the local Lohar Anganwadi caretaker.

able to delegate more of the tedious labor to her daughters-in-law, or to lower ranked *bahūs*, and meet her old age with more ease.

The middle-aged couple face many of life's difficulties together, which might make bad blood arise between nuclear families within the joint household, and the wives might find themselves in conflicting positions. Her husband would also with age be gaining more responsibilities, and face difficult times in providing when his parents become unable to work and contribute to household economy. If there are brothers in the picture, their life choices (stay with farming, pursue other occupations) will also be defining for their future prospects.

The relation both with husband and his family will thus affect her role in the house, and to which degree she is involved in decisions such as split-ups of joint families, her children's education or marriage negotiations, or her ability to keep a close relationship with her natal family. The flow of that information will most often end within the male group, and women are informed only when necessary. Politics and economy, decisions around large investments, loans, etc. would seldom (or never) be discussed with wives at all. By 2012-2016, the lack of literacy amongst women aged above 40, did not strengthen their self-esteem in such matters, and thus would often claim to 'not know' anything about such matters.

With no children, however, the adult woman has meager chances to improve her position in the house. She is most often blamed for the childlessness, and might in some cases experience that her husband takes a second wife (although this is far from as common as it was). Her position is nothing but a mere servant, she is unable to return to her parents' family, and prospects of enjoying her old age might be grim.

### *The mother-in-law/the aged woman*

With one or both parents-in-law deceased, and with maturing children with young wives to take over the hard work that has been tearing at her body for years, the older, post-menopausal mother of son(s) in Rani Mājri might enjoy more easy days. If her husband is still alive and well, she might be more involved in decisions involving children and grandchildren, and she will have the authority to reprimand younger men and women with force. She would also seldom think twice to interfere with her sons' decisions on life and economy. She might still veil for her husband at home, or she might not - but her *chunni* would always cover her hair if with her husband in public.

An elderly woman with one or several daughters-in-law doing most of the hard work, could often however take the time to enjoy the company of siblings coming by, or, if in good health, could be traveling herself to visit them, or travel to pilgrimage sites. When at home, however, she will still work as much as her body allows her to do. Even blind and toothless women worked with something - though slowly, there was always a job that waited.

The mother of only girls however, would subsume to an inferior role to potential other *bahūs* with sons, as her daughters would be married off, often with an expensive dowry that - in the case of several daughters - could have been devastating for the household economy. The childless would fare even worse, and bear the responsibility for this childlessness on her shoulders alone. In such a case, she will continue her work with tending the house, the farm, her husband - and her parents-in-law if still alive, but with the same meek and subordinated position she had in her early years of marriage. With no one to care for her but her husband, her well-being rests on the compassion of the husband's brothers, or the second wife and her children (if a remarriage has taken place). The situation for the childless woman could have been better, but still, after years of living together, empathy, common courtesy and respect for the elderly, ensured that she would still be cared for - at least in the cases I witnessed.

For many older women, it would not be an unusual situation if the husband passed on before her, leaving her a widow. By custom a widow in Rani Mājri would not wear the same colorful clothes or jewelry, and her bangles (bracelets) would be broken and removed. Her hair would be kept long, but always un-dyed, and knotted at the back of her head. She would however still be allowed to wear her heavy golden earrings, and her golden nose piercing.

She could, however, walk about more freely, and in a way, her ‘body essence’ became more like a man (Lamb 2000) Her reproductive years being over, she would have little or no ‘heat’ or sexual energy left, making her body not such a ‘threat’ to upset the intricate balance of hot/cold, open/closed, dry/wet as mentioned above. Older women would sit where they pleased (even on doorsills, unthinkable to any other woman), get served before any other women (unless there were guests), they would not lower their voice to speak, and some were even known to enjoy a cigarette.

### *The Angrezī in the field*

For the sake of reflexivity, transparency, and ethical considerations, one should also always remember that one is part of the social world one sets out to study. I have tried my best to take all ethical issues into consideration, both before, during and after my research was conducted. In my further analysis, I work with the knowledge I have, but simultaneously I recognize that it is fallible. With the advantage of the cultural sensitivity that experience, and hindsight provide, one must also admit that some things might have been done differently, as my conundrums described above revealed.

I might be a Norwegian, but to my Indian acquaintances I will always be an “*angrezi*” - an ‘Englishwoman’. There were apparent advantages, and drawbacks, being an ‘angrezi’ woman in the field. Regarding movement and behavior, my position in the village became, in the end, less of a guest and more something likened to a ‘village daughter’

(although not as fully as described by Raheja in Pahansu (1994). In practice, I conformed to much of the same rules as a married woman returning to her natal place (*māykā*), for visits and holidays - relieved from many of the rules of etiquette that she faces in her in-law's place, like not having to conform to veiling, lowering one's voice, or work on the farm (although appreciated, it is not expected of you).

Still, with all the regulations prohibiting women from engaging too much with men, for example, most of my material is derived from conversations with women (mostly Rajput, but also Lohar and Scheduled Caste) and practical engagement in women's work, which included all farm and household related activities except plowing and certain rituals (see chapters 4 and 6). This was not absolute, as the company of my husband (unfortunately unable to speak the local language), coupled with my position as researcher and foreigner, allowed me to engage with men to some degree, both formally and informally discussing politics and economy, without too many eyebrows raised. Also, with my position as married and mother, being a researcher from a University, I was free from some restrictions that the local women lived by. I still chose to adhere to most of the above-mentioned rules of female etiquette, mostly to show respect to the household that after some time became my extended Indian family, in the village that will be better introduced in the two following chapters.

# Chapter 3

## An Introduction to Rani Mājri

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As a small river or stream, the *kuhl* in 2013 began its pathway into Rani Mājri territory at the junction of two ridges. Between these ridges, the stream pours from the northern hills into a small, sub surface tank. Here the water gets diverged into two systems. One system runs along the river-bottom in a pipe to provide *kuhl* water for the villages below Rani Mājri, pouring into their traditional *kuhl* systems. The other run towards the Rani Mājri *kuhl* system as an open water channel (being piped in 2013), with an adjacent, smaller pipeline for drinking water, running along its side.

Accompanied by a narrow, stony path, the *kuhl* cuts along a steep valley side. On its way southward, the water pours through two cemented and open water-harvesting tanks, where the *kuhl* water and rainwater is stored for dry-season use (or, by young boys, used for a dip in warm weather). It passes in the open under a small mango-tree grove (the grove is tiny; the trees are enormous) where a ruin of a past brick construction marks the site where the water enters the village. Allegedly, the village deity Kheṛa Baba's temple was situated here 'before' (year unknown), but after a landslide, a new temple had been constructed for the deity on the other, southern, side of the village.

The path here becomes *pakkā* (solid, in this case, cemented) here, and forces the *kuhl* underground for a bit, as we enter the nucleated village. The *kuhl* continues towards the fields, sometimes in the open, sometimes diving under a '*porcha*' (the small courtyards that front every house) as it passes through the village itself. But let us leave the *kuhl* underground for a minute, and pause.



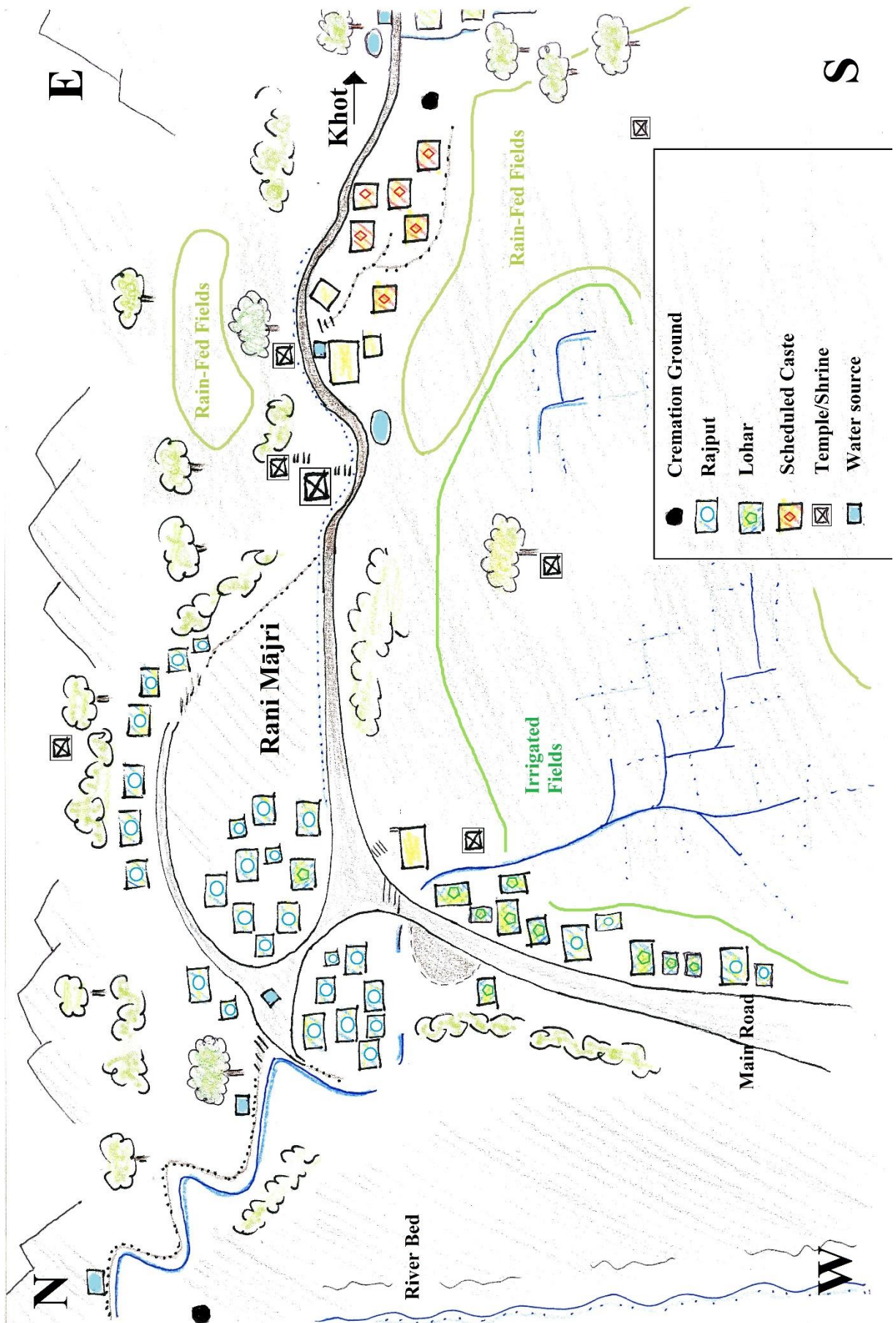


Fig.6: The village map is not accurate, nor to scale, but intended to illustrate settlements according to caste, water, shrines and temples.

Life here, on the plains and in the hills of Northern India, has followed water in the Indus basin as far back as one has been able to identify. The area in the vicinity of the village Rani Mājri has been of great interest to archeologists and paleontologists for decades, as the lower Shivalik hills has a rich fossil deposit, covering the period from the middle Miocene (approx. 23 – 2.6 million years ago), a time of mammal evolution, especially the evolution of apes, to the late Pleistocene (2.5 – 1.8 million years ago), when the humans had evolved and spread through most of the world (Encyclopædia Britannica 2017a,b; University of California 2011).

There are however few textual sources that can provide us with much information of the environment of the Shivalik Hills at such an early stage, even though an interesting paper by archeologist Van der Geer et al. (2008), makes it possible to get an impression of the rich fauna here. During the late Pleistocene, for example, the hills was populated by large animals, a ‘megafauna’, with stegodonts, giant turtles, saber-toothed cats, rhinoceroses, large elephants and giraffids with impressive horns (van der Geer, et al., 2008:83,84).

The first signs of urban settlement in this area dates back to 5000 B.C.E; when the Harappans, the Ancient Indus Civilization, inhabited the area of what today includes the vicinity of Chandigarh and areas along the Ghaggar-Hakra River and its tributaries (Law II. 2008; Mohan 2012), and the area seems to have been populated by humans since. Much of the archeological descriptions of civilization here comes from the study of the Vedas, as the area has a central role in the Mahabharata, the great Indian epic (Narayanan 2001:180). For example, approximately 5-200 years B.C.E, a great battle took place on the plains stretching southwards below the village - a battle of such a magnitude, that thousands of bronze javelins and spears are still found at the site today (van der Geer, et.al 2008:87).

The history of the village Rani Mājri, too, follows the trajectory of water and water irrigation, but not so deep in time. According to the elderly population (the men and women whom I interviewed on “village past” was mostly between 70-80 years old, thus

born in the late 1930s-1940s), the origins of the village as a settlement most likely dates back to the early 1600s, when their ancestors had migrated downward from further up in the hills, and settled to farm what was made available of irrigated and rainfed land.

This period of time was the early modern period in Europe, when the baroque cultural movement dominated the European peninsula, whilst the Americas were slowly colonized, the Ming Dynasty in China went towards a collapse, and Sikhs began to rise in power in Punjab. This is also the time when the local sources estimate that the original, 'kaććā' ("raw"; dug in earth and clay) *kuhl* was built, and Rani Mājri came to be a place, a home, a village, nucleated between the forests of the lower Shivalik Hills, and the flowing alluvial plains.

Through its periods of lack and abundance, the *kuhl* carries water for drinking, household- and ritual activities, and it provides irrigation to the village terraced fields. It is life-giving but also at times life-threatening, it might carry the promise of a decent yield, or the omen of failure and hardship.

By 2013, approximately one third of the village households relied on only local *kuhl* water for all household and irrigation uses, this would generally encompass the larger landowner families. One third utilized their additional access to Government Well water for drinking and cooking purposes, using the *kuhl* only for irrigation and laundry. This was by some a choice, as they considered the Well Water safer to drink, and for others a necessity, as the pipeline diverged from the *kuhl* had no pump and as such only served drinking water for households lying lower than its base. The final third (the landless Rajput and Lohar population and the whole Scheduled Caste hamlet) could only utilize Government Well water, a relatively expensive service according to the subscribers, as no land entitlement gave no *kuhl* entitlement (see chapter 4). Talking about the *kuhl* and the context of it, is to follow the transition from a small and rather hard to reach place, to a contemporary, electrified and road-connected village. A village where people today frequently travel between different positions and occupations, as students, wives, sons,

industrial workers or politicians. To walk along the *kuhl* then, to look at its development and interventions in the physical and social fabric, is also to walk in time.

## Rani Mājri: A Place in Time

Below, I intend to provide a more thorough description of Rani Mājri by giving the environmental issues of the surrounding area an historical context. Attention is drawn to how people, places and relationships change with lengthy time-spans. It will also describe some of the important changes that have occurred the last hundred years, including the creation of an ‘Eco-Sensitive Zone’ encompassing the village, and an outline of the ‘watershed-management project’ that guided me to the village in the first place. My historical introduction is aimed at giving a perspective to the processes that takes place in the region, because it is from history that they gain their momentum. I will begin at the point where the village emerged in time, to the 17<sup>th</sup> century North India, which I have called, the ‘pre-colonial period’.

### Pre-colonial Period

Located in the lower lying regions of the Shivalik hills, in the 1600s, the village must have been bordering the townships of the plains, which were ruled by the Muslim Mughal Empire. According to the village elders, the first settlers of Rani Mājri were the landowning and agricultural high-caste Rajputs accompanied by the lower, leather-working Scheduled Caste. While the immigration history of the Scheduled Caste population is not known to me, the Rajputs had migrated to this area from higher up in northern hills, at a time when this particular location in the lower Shivalik Hills were most likely included in the Hindu kingdoms of Nahan, and later Sirmaur, now a district in the state of Himachal Pradesh.

It is difficult to know exactly the extent of farming in the region at this point in history, but the system of irrigation through *kuhl* systems is known to have been well advanced in the region for a long period of time. Mark Baker (2005), in his book on the development and maintenance of the *kuhls* in the Kangra Valley in Himachal Pradesh, show how the hill kings adopted *kuhls* as “technologies of power” developed by the Gupta empire already in the fourth century C.E. The *kuhls* were community managed but state sponsored, and Baker (2005: 99,107) show how their management was related to networks of power from early on. The Gupta kings gave grants of land to temples and Brahman priests, together with sponsoring the construction of irrigation structures “in order to sanctify and solidify political authority”, and to strengthen political alliances “and in some cases to transform potential rivals into allies” (Baker 2005:99,107). Later, the state sponsorship of *kuhls* provided material benefits to the pre-colonial rulers too, because in addition to symbolic ones, “the tax assessed on irrigated land was significantly higher than that assessed on unirrigated land” Baker 2005:111).

One could assume this involvement of the state in *kuhl* construction was practiced in the area of my study too. The village elders, particularly the old Lambardar (refers to a hereditary status of a landowner who had certain policing rights in the village<sup>19</sup>) and one of his friends, could tell me that the village of Rani Mājri had been given by a hill-king’s daughter as dowry in her marriage. The village then got its name from this princess, a similar practice as identified in the pre-colonial period in Kangra valley by Baker, who finds that 14 out of 19 state-sponsored *kuhls* in his study were named after the king (*raja*) or queen (*rani*) who built them (Baker 2005:107).

During the early 1600s, the Lambardar told me, the princess had lived in Rani Mājri with her husband for a time, until there was a plague that made the king flee to Nahan. The

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<sup>19</sup> Lambardars and Zamindars were parts of a zamindari land management system resembling “feudal landlordism”, that was abolished after independence in India (Gupta 2005:416). By 2017 it is mostly an ornamental title, but the family still receives a pension from the state government.

Lambardar did not know anything else about the king, but that before his death, he had given Rani Mājri - totally two thousand acres - as mortgage to the king of Patiala (the *Patiala Raja*). This transaction of land must have happened sometime after 1691, which saw the first king of Patiala, the Jat Sikh<sup>20</sup> Baba Ala Singh, who throughout the early 18<sup>th</sup> century began his expansion of his Princely state. This was continuing at great pace during the first half of the eighteenth century (Rajadhyaksha 2017).

At some point, the caste of Lohars also settled in the village, as artisans. The Lohars of Rani Mājri had settled in the village as craftsmen, working with wood. With time, they had bought land from the Rajputs to farm, some families in quite large amounts, so by 2013 some Lohar families were full-time farmers and landowners on par with the Rajputs, while others were supplementing farming with minor trade and entrepreneurship as carpenters, lorry drivers and as local shop-keepers.

It is hard to say anything about how the landscape could have looked like in the pre-colonial times, but according to the elders of the village, there was more forest in the hills behind the village as late as the 1930s, but on the plains, there had not been so much - until the 1750s. This was, according to the locals, when the *Patiala Raja* “made” a vast forest because he enjoyed hunting. The kingdom of Patiala had no forests, the Lambardar said, so the *Raja* created one. With time, this vast forest became the small, green forest – island that 260 years later, became a governmental forest reserve.

The origins of this forest is then found in the same decade as the English first arrived in another part of India with their East India Company, a private trading company based in London, England. This trading company would be the beginning of the British Colonial rule in India, and with that, also British descriptions of the area came about in the geographical dictionaries documenting, amongst other things, their advances into the northern frontiers in the early Colonial Gazetteers.

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<sup>20</sup> Jat Sikhs were to my knowledge Hindus that converted to Sikhism in the seventeenth and eighteenth-century India (Rajadhyaksha 2017).

## Colonial Times

In 1805, the British and the East India Company had traveled north, and “ceded and conquered” a relatively narrow passage following the river Yamuna north from Delhi (Ambala District Gazetteer 1883:24). Four years later, in 1809, they reached the Patiala kingdom. The British record the first connection with these particular hills in the Ambala Gazetteer a few years later, in 1814, when the British became occupied with a war between the British Government and the Nepalese (Gazetteer of the Simla District 1888-89). The war, later known as the “Anglo-Nepali war” on the Gurkhas, a Kshetri - Brahmin Nepalese elite (Pemble 2009:374), lasted for two years, and introduced the British to the small kingdoms of the hill state territories.

In a financial backwater at the time, the British governor-general F. Rawdon-Hastings, was interested in new areas of export trade. In the hills, he found it - the wool from the Kashmiri goats (Pemble 2009:366). After the Gurkhas had been defeated, certain parts of the northern provinces were now brought under British rule. Other areas in the vicinity were given as a gift to the British from the Maharaja of Patiala in 1843 because of their strategic location as an entry point to the Himalayan hills and the (soon to be) colonial summer capital of Shimla (Gazetteer of the Simla District 1888-89:27). The kingdom of Patiala however, never subsumed to the British, and existed as a princely state with internal autonomy until 1947, when the kingdom was officially subsumed under the Indian Republic.

With the British expansion northwards, more thorough descriptions of the fauna, or the environment, as such appeared in the colonial Gazetteers, probably because they saw the potentiality in its riches. The area where Rani Mājri lies today, was described by the early British Settlement Reports in the last half of the 1800s, as “frightfully underpopulated”. Mr. Cunningham, the British officer making the draft reports continues; “There are but few wells, and the Ghaggar water is drunk. Fever is extensively prevalent”. The Ghaggar was obviously a major river back then. As Mr. Cunningham describes, the Ghaggar was



fordable simply with boats or elephants, as it would only run “a foot deep” in summer, but in the rainy season, it could reach “six feet in the rains (...). [W]hen in flood, the current is too dangerous for boats, but, except on rare occasions, the stream is always fordable” (Cunningham 1883-84:4)<sup>21</sup>. It seems safe to note that for the villagers of Rani Mājri at this time, who had to cross large distances at foot to reach the Ghaggar, that had to be crossed to reach the cities of the plains, must have been a challenging and time-consuming enterprise.

Little else is mentioned of the area until the Ambala Imperial Gazetteer of India, containing material from 1901, describes the general area where Rani Mājri is located as an area of fertile, alluvial loam, but intersected by torrents. The torrents “pour down from the hills at intervals of a few miles; and it is interspersed with blocks of stiff clay soil, which in years of scanty rainfall are unproductive, so that the tract (...) is liable to famine” (Ambala Imperial Gazetteer 1909:276-277). As deducible from the Gazetteers, the hills above Rani Mājri might not have been specifically densely forested at this point, but the region immediately to the south-east region was, with the Morni Hills and the lucrative Kalesar forest. These forests were noted for their valuable hardwood *Sāl* and *Khair* timber, and for being great for game and sports; so great was the wildlife that rewards were given by the colonial officers for the killing of tigers, leopards, bears, hyenas, wolves and snakes. The ready availability of these valuable species of trees, together with the extraction of limestone and hydroelectric development would also define the (mis)managing of natural resources throughout the twentieth century Shivaliks.

During the colonial regime then, (especially after 1860), a general trend of privatization and state control of common property resulted in an explosive expansion of cultivated

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<sup>21</sup> This early settlement report dates back to 1855, and was published as a “draft Gazetteer” in a published version compiled between 1870-1874 by Mr. F. Cunningham, Barrister-at-Law. In this particular Gazetteer, the Census from 1881 had been utilized, but otherwise consisted of scattered and previously unpublished material, retrieved from the library at Panjab University, Chandigarh.



areas that “resulted in dramatic decline in village commons, especially forests and grazing land” (Baker 2005:15).

Are Knudsen (2011), in his article on forest management in the Northern frontiers of British India showed how the colonial government’s practice of “scientific forestry<sup>22</sup>’ (a forest management practice meant to maximize benefits from forests), constituted this ‘mis-management’, with devastating impacts on forest resources in the region (Knudsen 2011:299).

Agrawal (2005) too, give a similar recount of the forest history of North India. From the last half of the 19<sup>th</sup> century, (reaching a peak during World War II), the level of timber extraction was momentous. The colonial practice also minimized local rights of forest use, like the practice of lopping trees for fodder and burning forest floors for fresh grass and grazing.

Rearing goats became prohibited, as goats were known to contribute to deforestation through over-grazing as far back as in 1902, when the British Colonial Government with a renewed Forest Act<sup>23</sup> (Yadav et al. 2008) closed some lands for grazing, and provided for various soil-conservation measures (Dove 1992; Agrawal 2005).

Returning to the area by the first half of the 20th century, a time when Agarwal (2005:37,44) notes the turn to decentralized regulatory rule of forests emerging as a new technology that would create the ‘environmental subject’ (see chapter 6), it seemed by the Gazetteers to have been a rather underpopulated area. The population in a nearby hill station, by 1909 registered as 62% Hindus, 30% ‘Muhammedans’ (Muslims) and 7%

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<sup>22</sup> Scientific forestry refers to the idea of forest conservation introduced by German botanist, Dr. Dietrich Brandis. It was originally a German/French/Swiss 18th century model of forest conservation with roots “in the eighteenth-century romantic belief in a golden age when there was no deforestation” (Freeman 1994:171 in Knudsen 2011:302).

<sup>23</sup> There has been several Forest Acts, and the one of 1902 builds on the one of 1878, which created three categories of protection: reserved, village and protected forests. *Reserved* forest means that the government can restrict all activities. *Village* forests means that all forest within village boundaries, can be used by villagers. *Protected* forest means all uncultivated lands not being either of the aforementioned categories (Agrawal 2005:72).

Sikhs, and reported to have undergone a sudden decrease because of cholera, fever and small-pox. According to the report made by Yadav et al. (2008) for the Indian Institute of Soil and Water Conservation (IISWC), which was central in developing the local system of irrigation to the state it exists in today, only six families lived in Rani Mājri by 1930, four of Rajput caste and two of Lohars. The report obviously excluded the Scheduled Caste population, as their hamlet was located a bit to the south of the main village, of which numbers at this time is not known to me. (This exclusion is based on the project dealing with landholders, of which the Scheduled Castes were not included. See chapter 6 for more on the consequences of this).

The fields too, would have looked different in the first half of the 20th century. According to the Ambala Gazetteer (1909:276-277), the chief crops grown in these hills were horse gram, a small legume typical for dry land agriculture, and wheat, ginger and *kachālu* (a colocasia version of the taro plant), which thrive in irrigated fields. Availability of maize and fresh greens and vegetables seems to have been low, and trade in surplus yield for money, would probably not have been an option to the farmers of Rani Mājri until the end of the British era. As we now move towards a period of time the elderly population of Rani Mājri remember, I make a break to encompass the time remembered by the current elderly population – the time after 1940.

### Time Remembered (post-1940)

According to the old Lambardar, the village of Rani Mājri had been included under the Patiala State until the end of the British era. He emphasized 1947-48 as a time with great change, as the English rule ended, and the time of the Raja being over. In 1948, then, after the partition with Pakistan, and the end of British Colonial rule, the village history enters “lived memory” or “recent past”, with historical changes being remembered by the majority of the elderly population. As one male villager from the ‘satellite’ village of Khot explained, the difference between the old days (“*kāfī sāl pahle*”), and the recent

time (*abhī*)” was extreme. He described the time between 1940 and 1960 as a time when people had “almost nothing, barely clothes”.

If they were poor in material goods, however, the environment was rich. This becomes obvious in how the Lambardar recalled a landscape and a weather in Rani Mājri quite different to the one that appeared in 2012-2016. In the “old days”, he said, the fields were fertilized with manure from their animals, probably mostly dung from goats and perhaps from cows. This gave marginal yield, but the goats would graze the forest adjoining the village, where fodder, fruits and berries were readily available.

“[Those days] it would rain a lot, on an 8-8<sup>24</sup> day cycle. It made everything clean. And all these fruits were to be found in the forest: the mango, guava, jujube, the *koronta*, *medheer* and *kangoo*<sup>25</sup>. There were many animals too: sparrow, crow, deer, antelope, cheetah, peacocks...it is less of everything now. First came the hunters that killed the animals. The government said nothing. Then the British *Raja* cut the forests down. Now all that is left is the reserved forest”.

(Retired village Lambardar, app.80 years of age)

The trees of the forest were used for Ayurveda medicine, but with the forest disappearing, the interest for it amongst the younger generations waned too, he explained. Now, he sighed, no one remembered how to get the medicine that was in the trees and the plants.

I will return to the Lambardar’s remembered past later, in chapter 6 and 7 as his recollection of the past not only gives testimony to a rich flora and fauna, but also express, I think, another form of loss, associated with ‘modernity’.

Irrespectively of changes to rainfall pattern, the access to water for irrigation and drinking/household activities back in the 1940s remained solely on rainfall, and the *kuhl* channeling the water to the village and the fields. At this point, it was still only a channel

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<sup>24</sup> Out of the context, I understood this as being a way to express the rain returning in regular intervals, as after a short period of rain there would be a short period of no rain – as a matter of speech rather than exact measure of how long and how often it rained.

<sup>25</sup> I have found no translations for these fruits, but the latter are small berries and look like grapes.

dug in soil and clay, and it would run dry in the summer seasons. This would make people (women) to walk to the northern river valley bottom, to small perennial springs to refill their water vessels. This practice continued up until the mid-1980s (see below), when the *kuhl* was gradually improved with areas in cement by the village council<sup>26</sup>, which insured a steadier flow of water through the year.

In the decade that saw the master plan of Chandigarh materializing not too far away, the 1950s for Bhagwati, a Rajput woman in her sixties by 2013, and who married into this village at the age of 12, recalled a time when people only worked, and life was hard. At least it was hard for a newly married daughter in law (*bahū*), which we saw in chapter 2 was (and is) expected to do most of the heavy household labor in an Indian joint family.

“Back then, all the houses were *kaćcā* [here: constructed in clay/dung/mud walls and wooden frameworks]. No proper road connection went to the village, there was no bus, no auto-rickshaws (*autos*), no cars - it was just a path, and you had to walk if you were going somewhere”.

(Bhagwati, app.65 years old)

Although I found no indications that travels per se were less frequent, in fact, as I will return to in chapter 7, wives were remembered to have been visiting their natal villages more often in the ‘past’, as suitable marriage partners were found in the vicinity. The range of travels was however much shorter. People would not travel very far, especially because traveling took time away from other, more pressing tasks.

In 1956, the first initiative for rural education was initiated by a villager who had started a small school in his private house. This initiative was apparently so popular that the villages in the vicinity collected money to give as salary to the teacher. Girls were not allowed to receive any tuition at the time, but the boys, who in 2013 made up the

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<sup>26</sup> The village council per 2012 would refer to the *Panćāyat* (Panchayat), a local village governing system that took over from the hereditary *Lambardar* tradition in the early 1990s. In the Panchayat, a representative leader titled *Sarpanćh* is elected every fifth year.

politically active and decision-making segment of the population as middle-aged and adult men, got their first years of schooling here.

In 1960s Rani Mājri, life seemed to have been revolving around keeping the family fed and clothed. The childhoods of the 60s in the village, was thus quite different from their ‘western’ counterparts, who grew up in the decade which saw most of the western world occupying itself more or less with the joys of pop-culture and the terror of the 'Cold War', between the Communist Soviet Union and the Capitalist United States of America, and televisions, laundry machines and motorized vehicles became accessible for commoners. However, in Rani Mājri as well, the decade represented a time of great change.

During the 1960s, the pace of changes to infrastructure, facilities and communication especially began to escalate. In 1961 the government finally established a primary school in Rani Mājri, and some girls were also allowed education. The school, a small cement building with a small courtyard in the middle of the village, included classes 1st to 6th grade. Males born in the 1960s thus usually had 6-8 years of elementary schooling, while with women of the same age, it varied greatly from no schooling at all, to 4 or (in rare cases) 6 years. The first village radio was also bought in the late 1960s, a battery radio, as no electricity was available at the time.

The magnitude of changes that took place in this decade, becomes especially notable if one looks closer at the village houses. Take the Rajput house in which I resided as an example. In the early 1960s, the house was small and *kaććā*, with a small nook for goats and an outdoor hearth. This is how the houses had ‘always’ been. For hundreds of years, the village houses like this one was expanding when there were times of plenty, and collapsing in times of heavy rain and in times of want. That was what houses had ‘always’ done. But over a few years, the house slowly became *pakkā* (litt; firm, steady), by the addition of the now available building material of bricks, cement, and steel.

Added on here, replaced there, the house changed, and the husbandry changed too. Goats were slowly replaced by a cow or two – animals that would give more milk but demand

more space as it had to be stall-fed, now made possible by advances in building style. Old bedrooms were converted to cattle sheds; in the cattle shed of 2013, there were still hanging faded, crackled and torn posters from the 1980s, picturing dancing deities on the earthen walls.

But the definitive, cognitive line between “the quite some time ago” and the “before”, happened in Rani Mājri a decade later – in the late 1970s. This is when the arrival of electricity, together with two additional forms of new technology: piped water and the green revolution, radically transformed the lives in the village.

The village ‘hooked on’ to these developments rather late. Rani Mājri was not connected to the electricity grid until 1976. (By comparison, electricity arrived in India via Calcutta (Kolkata) already in the 1890s (Das 2009). “Late” is however relative, by 2009, there were still villages in the Shivaliks not attached to the electricity grid, (International Business Publications 2011).

Bhagwati, the Rajput grandmother, remembered well the days without electricity, and could tell me that those were indeed darker times. “Before we had to use cotton wicks burning in oil for light, but it gave off so very little. But when electricity came, everything got so much better – now we had light!” Only one year later, in 1977, the village got connected by (Berreman 1978) *pakkā* (firm, steady) road to a large, historical town in the vicinity, and subsequently to the Delhi-Shimla Highway, making transport and communication to and from the village easier. However, public transport still did not connect to the village (and continued not to do so, even if there by 2013 there was a public school-bus running).

The second life-changing technology which made a definitive ‘break’ with the past into the recent, “modern” times, was the introduction of fertilizer and pesticide (*khetī kī davāī*; lit.: 'treatment' for the fields). The Green Revolution, to be unfairly short, was introduced to North Indian hill agriculture over the 60s and 70s through higher yielding varieties of grains, and later chemical pesticides and fertilizers, land reforms, agricultural credit, modern irrigation systems, modern machinery such as tractors etc. (Berreman 1978:356).

In the early 1980s the ‘modern’ techniques of farming also reached Rani Mājri. According to the farmers, they first began to apply fertilizer and pesticide around 1981, and for almost twenty years (up until 1998, to be exact) they would apply only a little, a tad here and there. The landowners saw great advances in yield during this period, accompanied by a growth in wealth.

In 1982 a public bus transport service started to run from a village a little further down the hill, and communication with the larger towns became easier, especially for education purposes. The middle and secondary schools of the vicinity had up until the 80s been located too far away for many of the school children, especially the girls, to attend. With this, the 1980s thus allowed for women in the village born in the late 70s completing 10 years of schooling, (although this also depended on what conditions were like in their natal villages).

In 1983, another large intervention to the landscape of Rani Mājri happened, when parts of the *kuhl* (as it is led down from the village center down into the fields) was made ‘semi-*pakkā*’, as a result of a Panchayat (village council) initiative. The old *kuhl* was made of stone and earth, and as noted above, it was a fragile open water channel suffering from severe seepage, frequently running off into the river valley unless constantly maintained. Cementing parts of the *kuhl* made the seepage problem smaller, and maintenance work easier.





Fig. 7: Left: Parts of the *kuhl* was still earthen. Right: Note how the cemented *kuhl* can be opened and closed by removing or adding stones and soil.

At around the same time, or somewhat later (the exact year is unknown to me), a sub-surface water tank was constructed by the government (*sarkārī*), at the spring of the *kuhl*, in the hills to the north. The tank was a closed, sub-surface construction, and was intended to retain some of the water for dry-season use, and to pipe some of the water as drinking water to certain landowning households (the design of which I will return to shortly).

As we move into the 1990s, media and communication accessibility developed at great speed. In 1991, the first television came to the village, and news and entertainment could be accessed in image and sound, making the radio unpopular. In 1992, further new and improved crop varieties were introduced to the farmers, and again, there were notable increases to yield and profits (Yadav et al 2008:16). In 2002, the village children no longer had to travel by bus or by foot to receive education after the age of 11, as a middle school (classes 7th to 8th) opened in the village itself, with government teachers traveling



via bus and auto-rickshaw from urban cities and towns, on their rotational duty<sup>27</sup>. A government *anganwadi* (short-time day care) for small children opened in 2003, and the first mobile phone was bought by a villager around 2006.

A few years later, in 2009, the Haryana Government declared the forest island below Rani Mājri a 760 hectare Wildlife Sanctuary (Kumar Dash for Times of India 2009). This encompassed the village and the surrounding area into a surrounding ‘Eco-Sensitive Zone’. The Eco-Sensitive Zone is thought to act as a buffer between the hills and the plains regions, which had over the last decades noticed the side-effects of the “Special Economic Zones” of Haryana, and the lax taxation rules of the bordering Himachal Pradesh (Government of Himachal Pradesh 2013). The Special Economic Zones facilitates for heavy industry, and attracts investors from all over the country to establish industries here, contributing to the expansion of various automotive industries, sanitary-ware production, scientific instruments, pharmaceuticals, electronics, cement etc. in the region. The Eco-Sensitive Zone, to the contrary, prohibits any polluting or highly polluting industry, wood based industry, or any mining activity (Haryana Forest Department 2016). By these measures, the Eco-Sensitive Zone would ensure, that all development happening in this area, will be “ecologically sound” (Haryana Forest Department 2016).

During my fieldwork in 2013, a ‘Wildlife Center’ was established in the reserved forest itself to conserve animal habitats within the forest, but the villagers were more concerned what to do with an eventual increase of wild animals that would eat their crops. Very few could afford the fencing required to keep them out.

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<sup>27</sup> The Haryana State government operates with a Transfer Policy, which implies that government teachers can be shifted to vacancies around their district as part of their duty, with a normal period for each location being 5 years (Government of Haryana 2016).

Forest management within the Eco-Sensitive Zone, including the adjacent village forest, was done by the Forest Guard of the Haryana Forest Department. The Forest Guard was could correct and even punish the larger landowner by fines or imprisonment, as the forest was protected under the Punjab Land Preservation Act (Haryana Forest Department 2017). In this particular area, the Forest Guard oversaw the forest area surrounding four villages in total, all bordering government forest. The Guard claimed to visit them regularly, rotating whom he used to speak with, “drinking tea at a new house every time”, he stated.

The local Guard said that no problems had ever occurred with the people of Rani Mājri, but some of the villagers admitted that the guard was known to make problems for people (“*tang karnā*”, distress, put pressure upon) if any illegal logging was going on, or if they had let their goats graze in areas not regulated for grazing. In the vicinity of Rani Mājri, this particular issue with trees often had to do with the *Khair*, a reddish timber, particularly cherished for firewood and fodder, but one that would be quite visible in the piles of fire wood (*lakṛī*) stored away for winter. The *Khair* was only found in the government protected forest, as around the early 2000s, a few of the major landowners in Rani Mājri had earned a fair amount money selling off much of the *Khair* trees in their fields. By 2013, most landowners had little trees on their land for firewood or lopping, and the brunt of harvesting wood and leaves had to take place in the regulated adjacent forest.

The establishment of the Eco-Sensitive Zone took place at about the same time as the village became part of a Watershed-management Project ran by the Indian Institute of Soil and Water Conservation (IISWC), autonomously working under the Indian Council of Agricultural Research, and the Haryana State Government (via the Department of Rural Development). As the project was quite significant in its outreach, also concerning the 'environmental awareness' that was propagated in the village (which is the subject of chapter six), the IISWC and its watershed-management project will get a brief introduction here.

## Watershed-Management Within an Eco-Sensitive Zone

Every year, IISWC reports state, enormous masses of silt (150-650 tons of silt per hectare per year) is being moved with water from rain and melting glaciers from the Himalayan mountains (Yadav, et al., 2008). The silt and nutrients of the soil moves with the water in rivers and seasonal streams, down the Shivalik hills, and eventually gets carried on to the plains and/or into the sea. This problem of erosion, as we saw from the Gazetteers above, has been an issue in the region for a long time, something which the IISWC researchers confirmed (IISWC pers. comm. 2012; see also Agarwal and Narain, 2000).

Soil and water conservation is thus maintained through the construction of “watershed harvesting techniques”.

Water-harvesting techniques in a watershed means basically to capture the run-off water in the respective village or town. To achieve this harvesting of water, IISWC plant trees, like the *Khel* tree, and grasses, like the *Elophis Binata* (locally known as *Bhabbar*) both having complex and deep root-systems well intended to hold the soil in place. They additionally construct small check dams<sup>28</sup> and solidify existing *kuhl* systems.

Another part of the institute’s job, at least for the last decade or so, has been to raise awareness on Global Climate Change, on conservation and on resource management.

This is done, according to IISWC’s media profile, through various events and lectures both in urban centers and in Shivalik-hill villages (ICAR-IISWC 2016). This is a subject that I will return to in chapter 6. The Haryana State Government has also stressed the need for further Integrated Watershed-management Programs, such as the ones carried out by the IISWC. The Rural Department of Haryana was per 2011, planning for another 1521 micro watersheds for the next 15 years (Government of Haryana, 2011: xxiii). These Programs would involve local NGOs and village committees (Panchayats), which

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<sup>28</sup> A check dam is a small dam constructed across a drainage ditch or channel to lower the speed of water-flow. This allows sediments to settle, and allow groundwater recharge (Stauffer, Carle, and Spuhler 2017).

both are underlined as very important resources in meeting the climate change challenges.

How the IISWC projects generally operate, involves the local village council, the Panchayat, and the respective Regional Rural Development offices for the physical execution of the projects. The IISWC staff also pay regular visits to their contact person in the village, often one of the major farmers with a certain position in village council meetings, orienting about improved crop varieties, holding workshops on farming methods, recording yield and taking samples and analyzing soil quality, level of siltation, water-runoff, soil nutrients, etc.

All IISWCs projects are introduced in collaboration with farmers directly (according to their own method to which I will get back to shortly), who ideally will benefit from their intervention to utilize the maximum of their land. However, the process is far from straightforward, Dr. S.L. Arya, a social scientist working for the IISWC in Chandigarh, could tell me. Many of their projects run into difficulties, sometimes caused by corruption in the system, but more often because of the social situation in the respective villages. In multi-caste villages, or in areas with nomads such as the Gujjars, she told me, the projects are more vulnerable to fail. Thorough social mapping of the watershed thus takes place before any intervention. In their technical facilitation, as we see, there is a strong dimension of social involvement coloring IISWCs projects.

### IISWC's History of Local Self-Governance

In the 1970s, the urban town planners of Chandigarh realized that the prosperity of the plains region in many ways was dependent on the social and environmental well-being of the hills. Then the drinking-water reservoir of Chandigarh, Sukhna Lake (constructed in 1958), had for years been filling up with silt from the denuded forests and hills above the city. The Chandigarh government had already used US\$200.000 per year on dredging operations that did not work (Lenton and Walkuski 2009:18), and were at the time

alarmed of the prospects of having to dig a new lake. The city government thus asked for a study from the IISWC, who found that most of the silt stemmed from an eroded catchment area in the hills to the north-east of the city.

In this catchment area lies a small village, that in the 70s was defined as poor and ‘underdeveloped’, as its inhabitants were heavily relying on common forest land for agriculture and grazing to buffer a continuously impending threat of food shortage. The IISWCs watershed-management project in this village, became a success story for IISWC, which despite its many difficulties, and disputes caused by caste and community disagreements, managed to turn underdevelopment to ‘progress’.

The approach that solved many of the problems with water allotment and local struggles on water rights (subsequently dealing with the other developmental challenges of the village), was the foundation of an association intended to benefit all landholders: a “water association” where the village community had gained the responsibility and the maintenance over the water and the sharing-process - later named “the Hill Resource Management Society” or HRMS, (which in fact, was the predecessor to Joint Forest Management (JFM) policy in Haryana<sup>29</sup> (Haryana Forest Department 2017). The association turned out to be critical for the project’s success (Agarwal and Narain 2000:11), and the HRMS method (later also called Integrated Watershed Resource Management, IWRM) has since been documented by both scholars and policy makers (see Agarwal and Narain (1999, 2000; Lenton and Walkuski 2009). IISWCs main objective from that point in time has been, and continue to be, to mitigate the cause and consequences of such erosion through research, policy making and practical project-planning.

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<sup>29</sup> I cite the government web pages, that JFM intends to: “fulfill the forestry related needs and aspirations of the local people from the adjoining government forests with their active participation in protection and maintenance of these forests”, and to synchronize forest intervention with the local felt needs, all in [a]n atmosphere of goodwill and faith has been created whereby the people feel that it is their program and the government is participating in it (Haryana Forest Department 2017b).

Their projects are especially credited with aiming to “replace the traditional, fragmented sectoral approach to water resources and management that has led to poor services and unsustainable resource use” and to rather base water management “on the understanding that water resources are an integral component of the ecosystem, a natural resource, and a social and economic good” (Global Water Partnership 2010).

The IISWC’s soil-and water management projects later gained international reputation through this successful method, (which also incidentally is an example of the shift Agrawal (2005) describes as a move towards self-regulating bodies of governance), and are participating in the development of numerous soil- and water-conservation related projects in the hills, partly collaborating with large international actors like the World Bank, the Swedish International Development Cooperation Agency (SIDA), the Danish International Development Agency (DANIDA) and others.

In 2007, a watershed-management project was considered in Rani Mājri. Rani Mājri was, and is, in IISWC context, a relatively small project, where five up-hill villages were covered by a small watershed flowing towards the seasonal river of Ghaggar. The watershed is what provides the irrigation systems of these five villages via the *kuhl*. A year later, after ‘social mapping’ had taken place, and the watershed found suitable for development, (see chapter 6) a project was initiated in the village, facilitated by IISWC in collaboration with local and regional state management. It would cover the five villages of the watershed, of which Rani Mājri were at the highest elevation. Since the *kuhl* has turns out so central to the direct and indirect involvement of the government, and to the anthropologist with it, it is perhaps also just suitable that the *kuhl* takes us around the landscape of contemporary Rani Mājri.

## Contemporary Rani Mājri

As we saw in the introductory prologue to this chapter, there have been many changes to the village, to the surrounding area, and to life here, over the last hundred years. At the

last turn of the century, the plains below the village were covered in forest. In 2013, the forest below the village, was reduced to a forest island in a sea of fields. There are trees, intermittently, but so few and far apart that lopping, or fire-wood collection was both a hazardous and time-consuming practice. Wild animals are still found in the forest and in the hills, but even for a local farmer, for whom the *nīl-gāy* (a species of large antelope) and the *bārahsingā* (antelope stag) are a concern and a nuisance, the sight is exotic and a tale to tell at home.

Although the trees are gone, several bushes have thrived in the deforested hills, the wild lantana bush for example. Its orange flowers are beautiful and, covers much of the forest shrubs. Although pleasing the eye, the lantana is a bush which had barely been present in the hills twenty years ago. Avani, a Rajput middle-aged woman I would spend much time with, and her husband, told me that the lantana had become a problem, as it had recently expanded into their farmlands as well.

The Ghaggar (now Ghaggar-Hakra) river, described in the Gazetteers at the early 20th century as a vigorous river, was in 2013 reduced to an intermittent river, bridged and dammed by the controversial Kaushalya dam<sup>30</sup>.

The fields must look very different in their composition too. Remember how the fields carried modest yields of horse gram, ginger and colocasia at the middle of the 20th century? They must have looked quite different from the 2013 version, which seen from the hills above, appeared as an extensive and intricate mosaic of color and variety.

Wheat still dominated the patchwork in winter, but the collage had significant patches of chickpeas in bright green, mustard blossoming in bright yellow, and garlic and onion with their purple and white flowers. In the rainy season, maize, rice, millet, tomatoes and *arbi* (also a colocasia version of the taro) patch the fields. The tomatoes are a late addition to the local agriculture, and have taken over from sugarcane (of which there used

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<sup>30</sup> The dam has been said to be a “failed” project, and several media reports report of an alleged “scam” etc. (Sharma for the Chandigarh Tribune, 2014; Seghal for the Daily Mail, 2015).

to be a lot of back in the 1980s). In kitchen gardens, there is bell pepper, chilies, lady-fingers and bottle gourd.

By 2013, those with irrigated lands have more water, more stable supply, and more of a buffer in the sense that the tanks in the irrigation system store the water and provide gradual distribution. The landowning families with irrigated land, as mentioned above, could also grow two crops a year. This provides yield in both winter growing season (*rabi*) and during the monsoon growing season (*kharīf*), and additionally the option to choose different varieties of crops more sensitive to water distribution, grown more effectively, allowing for surplus sale. Those with most, or all, of their land being rain-fed, are much more vulnerable to fluctuations in rain patterns, and are also left with one harvest, the one of *kharīf*, when the heavy southwestern monsoon-rains replenish the landscape.

From selling the surplus of the harvest, or for the income from manual labor, a household might allot money to buy potatoes from the vegetable truck arriving every fortnight, even when they are not in season in the hills. They can purchase milk from a bag for when the milk-cow/buffalo is pregnant or sick, or a fridge to keep the food fresh for longer. Girls no longer work long days on the farm whilst their brothers get educated, but go to school together with them. They no longer marry at an age of 12 and become mothers aged 15, but most likely marry as adults between the age of 18-22. Lower caste children are given the chance to compete with their contemporary high caste children even if their parents own no land. Some teenagers might even see the point of having ambitions for white collar-jobs. The mother whose child gets pneumonia can get antibiotics, the grandfather can get dentures to chew his *roti*. Many things have certainly become better, for some, at least. Access to *kuhl*-water and to agricultural land, give quite notable differences between people in the village. It is to these differences I now turn.



# Chapter 4

## Waterways

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In the previous chapter, I outlined the general development of the village, and we left the *kuhl* where it disappeared partly under the village, as we gazed across the landscape in time. In this chapter, I unfold the social fabric of Rani Mājri as it appeared in 2013. I will do this, by following the trajectory of the *kuhl* as it flows from the hills and in through the village.

In a way, both the social and the terrestrial landscape in and around Rani Mājri has been *waterworn*. It has been shaped and reshaped by how water runs its course, both as *force majeure*, continuously moving and modifying the landscape, but also in pre-cut channels and ducts. The rain falls, down the hills, the river bed, the forest. All the while, water continuously drains, refill, replenish and drains yet again. In seasons, years, water with wind, frost and sun, the landscape may look stagnant, but it moves. It's exterior; the forests, meadows, gardens, fluctuate with growth and decay, in a paced rhythm, one of familiarity. Earth and stones move slowly, however, altering the landscape in rhythms so slow they are unfamiliar to us. At times however, even the ground beneath our feet may change abruptly, altering that which seemed so certain, so solid.

Sometimes, men inflict these changes directly. With the cutting of trees, the maintenance and developments of the *kuhl*, the expansion and intensification of farm land, the development of roads and networks, the grid of cables and dams and mines, the fencing in of protected areas and the growth and expansion of markets, industry and townships, the landscape is being shaped and re-shaped with humans, animals and buildings. At their respective pace, they change with it. This part of the chapter is intended to draw attention to this dynamic.

By tracing the *kuhl*, the relevance of water and irrigation to caste and class hierarchies becomes clearer, and the village itself appears as a multifaceted place. To illustrate this, I present the village as seen through two different ‘optics’. Using the state policy-oriented optic to ‘read’ the village, Rani Mājri appears as a nucleated village of landowners, a ‘reading’ which justifies certain projects that allow for certain benefits. Using a more phenomenological or perceptual oriented optic ‘reads’ another dimension into the social fabric, a ritual dimension, that makes the village appear more complex, with more complex notions of identity, body, and ‘being-in-the-world’. Using the optics in cohort throughout the chapter, is to argue implicitly that they belong together. In including both, but still making a point of splitting them up when outlining the social fabric of the village, I am anticipating my argument in the next chapter, where I outline and explain how the ‘awareness campaign’ relies too much on the former and too little on the latter ‘optic’. This is important, because policy and power shape not only the material landscape, but the social landscape too.

This becomes especially clear when I focus on water-right. In the village of Rani Mājri, landholding rights give rights to free-of charge irrigation water, and landholding is both a class and caste issue. *Kuhl* water might also be used for household activities and as drinking water. Landless families, to the contrary, have no rights to the *kuhl* water, and must rely on the monsoon rains for agriculture, and otherwise depend on the government water-lines, providing water for a few hours a day, and at a cost. This produces an economic difference, one that became especially salient through my observations of the IISWC aided ‘watershed-management structure’, providing an improved irrigation channel for agriculture in respects of water-runoff, storage and spillage.

To bring out these differences, a description of the village is necessary, but describing it is impossible without referring to caste relationships. It is to those caste-fibers in the social fabric of the village that I now turn.

## Caste-Lines

As mentioned, in Rani Mājri, Rajputs and Lohars live separated from the Scheduled Castes. The two former castes do not socialize with the latter, except in government education. Neither of the two higher castes accepts any food or drink from the Scheduled Castes, and one is expected not to forge relations that involves physical touch, direct or indirect, between the caste groups. In village celebrations or in other contexts where the higher castes eat alongside the Scheduled Castes, the latter will be served and seated separately (and often also after) the two higher castes. The Scheduled Castes keep their respectful distance, and will only be seen in the village center at times of traveling out of the area (their hamlet is not directly connected to *pakkā* road, so they have to walk through the center village if they are to leave via motorized vehicles), or at times of duty (a handful of Scheduled Castes are employed by the Government as village sweepers, or as cleaning personnel at the government school). The relationship between high and low castes of Rani Mājri could perhaps best be described as unequal, but stabilized, per 2016. Generally treated with polite contempt from both sides, there were of course exceptions. Some members of the Scheduled Castes were better liked than others by the higher castes, either because of personality or because of skills possessed. Similarly, the Scheduled Castes would think higher of certain high-caste people than others.

Nevertheless, caste is very much relevant to people in every day village life. To understand the basis for this unwillingness to share food, social life and space, a closer look at what the concept of caste entails is necessary. In theory, one could argue that the caste system is pan-Indian (with regional variations) and that caste as *jāti* (lit.; 'kind', 'species') is based on labor division (Lamb 2000:35; Fuller 2004:13,15). In practice, the pattern is complicated and, since occupations can and are being pursued outside caste indication, labor divisions no longer (if they ever did) signify status and sociability completely.

Caste however still stands apart from other forms of stratification in the elaborate and ritualized practices that ordain and sanction the norms (Gupta 2005:410). These practices, and what exactly lies at the heart of the ranking of castes vis-a-vis each-other, has been the subject of vigorous debate in Indian anthropology, most of which relate quite explicitly to the caste system as it was described by Louis Dumont (1980[1966]).

Dumont gave a thorough analysis of the Indian caste system, with the ritual polarity of purity-pollution as a central organizing principle. His analysis, through being debated and criticized over the years, has spurred many a nuanced contribution to the relationship between caste and rank, royalty and power. This especially affects the discussion around caste identity as founded in a structure of hierarchy revolving around *either* the ritual aspect of purity and pollution, thus the preeminence of the Brahman (priestly caste), *or* ritual aspects of power and distribution, thus giving preeminence to the Kshatriya (royal caste). I cannot do justice to this debate here, but outline it shortly with reference to Raheja's (1988a,b) work. Raheja uses the intricate norms of gift-giving (*dān*) in Hinduism, to illustrate how caste and hierarchy plays out in daily lives of Hindus in rural North India. These analyses of caste, what it 'is' and how it 'functions', remain crucial to understand everyday social life in rural village India, even in 2013.

In Raheja's own fieldwork village of Pahansu, Uttar Pradesh, the dominant landholding caste gave *dān* (gifts) to all castes to ensure wellbeing, prosperity and auspiciousness for their families, their harvests and the village as a whole - or to the village gods and deities, to remove, or 'make far' misfortune and evil (Raheja 1988a:511). In *dān*, argues Raheja, there's a "poison" (inauspiciousness), and by the act of giving *dān* they are pivoting ritual capacity in a center-periphery model. Raheja argues that it is not impurity that is given from a caste of high ritual status with *dān*, but inauspiciousness. By giving away inauspiciousness, the *jajmān* (landholding caste) keeps his own family auspicious, explaining partly his dominance over the ritually purer Brahmins. This is disagreeing with the Dumontian centrality of purity and pollution to explain hierarchy, but rather

places the transfer of auspiciousness and inauspiciousness (*śubh/aśubh*) as the central principle of caste hierarchy.

Hierarchy seen with Raheja's approach, becomes rather contextually stressed or unstressed, and notions of purity and impurity have to be seen as existing alongside values of auspiciousness and inauspiciousness (Raheja 1988a:512), as the king, or landowner, ritually ensures his and the village well-being, by transferring evil to the Brahman, who can handle the evil in the gift by 'digesting' it, or transferring it onward (ibid:514). These transactions, Raheja argues, were not only economic, but subordinated to ritual life as Dumont saw them.

This is relevant, as in Rani Mājri, households do organize themselves partially after what resembles a *jajmāni* structure of village order. A *jajmāni* system refers to how the landowning castes produce and distribute food in the village shared economy. Other castes, such as the carpenter, the washer-men, the barber and the sweeper, would perform services for the *jajmān* (the landholder) in return for produce (Raheja 1988 a, b) (see also Fuller (2004[1992]); Mines (2005) and Berger (2012). Wisser called the system mutual, or symmetrical, indicating grain exchanged for services in a tit for tat manner, apparently beneficial to everyone involved (Mines 2005:60).

Later analyses of Indian villages came to see those relations not as mutual at all, but as forced, coerced, connected to control over food supply, with the landowners using their power as "dominant castes" (ibid:60). Neither was a *jajmāni* relation, where they existed, enclosed within the village, but were and probably always have been, part of wider relations in political-economic systems "of patronage, kingship and trade" (Mines 2005:61). As Fuller (2004) also points out, the context of these prestation's of *dān* also extended beyond the village, as shares of harvest for example, were distributed within a larger political system of landholding via kings and other petty rulers (see also Baker, 2005).

Studies looking to dimensions of food have been especially revealing to the understanding of caste relationships, and given more dimensions to notions of purity and pollution, because food is one vessel where caste-substance transfer easily. The preparation of, the sharing of, and the timing of food, has thus turned out to be quite revealing when mapping out social life and how it is lived in India (see also Daniel 1984; Sax 1990; Lamb 2000; Zimmermann 2014).

Other polluting substances include bodily emissions and waste matters (Fuller 2004:15, Raheja 1988a, b; Lamb 2000). The control of these emissions is thus made subject for quite strict social norms and regulations (female menstruation and sexual energy being an example of such, discussed in chapter 2).

To understand why some substances are polluting to some, but not others, might become clearer when one approaches caste as notions of substance-codes through the work of McKim Marriott (1990), or as a flow of 'vital energy' (Raheja 1988a:506) between humans and their environment<sup>31</sup>. One thus avoids interaction with certain people because they are to various degrees potentially contaminating your own 'body-essence'. These essences are seen to fluctuate, and relate to the body in various ways.

A contamination of the body-essence is seen to happen when a substance of purer value is in contact with a substance of poorer value, such as if a Scheduled Caste were to directly or indirectly touch a Brahmin, vividly illustrated in Lamb's (2000) fieldwork amongst Brahmins in West Bengal.

Being the purest caste, a Brahman must be particularly careful with pollution from the substance-flow from lower, more impure castes, and upon even an indirect touch (such as being seated feet apart but on the same mat with a low caste) would have to bath and cleanse him or herself of the caste-pollution (Lamb 2000:32). Water, it should be noted, is extremely potent, both as purifying and potentially contaminating vessel.

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<sup>31</sup> See also Daniel (1984), Sax (1990), Rosin (2012).

Water, alongside fire, is a purifying substance in Hinduism, and running water of rivers and channels is used for purifying one's body, and preparing it ritually for performing worship. It is also used in rituals and in worship directly. As we see in Rita DasGupta Sharma (1998) and David Haberman's (2006) analysis of the role of water in the river Ganga and the river Yamuna respectively, the water of rivers are able to carry away human mortal sin and its associated substance, moving it away with its free flowing current. Stagnant water, however, as Nita Mathur (2001:25), and Thomas Rosin (2000) also note, lacks such a purifying quality.

As Lyle Mehta (2011) notes from irrigation tank water-distribution in Gujarat, and Baker (2005) from *kuhl* water-distribution in Himachal Pradesh, water is thus revered by all, but controlled by a few. In the outlining of power relations enmeshed with water, water's role in ritual adds yet another dimension to the control of the *kuhl*. It is time that we look closer at the rules of water distributions, and its advantages.

## Water and Right

As pointed out in chapter 3, management of *kuhl* systems has a long history of being related to state management in this region. That hydrology affects social structure has also been described in South India's Tamil Nadu by anthropologist David Mosse (2003), who shows how social life and power relations are closely interwoven with water management practice.

Mosse writes of South Indian water harvesting systems that; "The connections and interdependencies of hydrology interweave with those of caste-class and kinship, business and politics, and generate distinctive patterns of co-operation and conflict" (Mosse 2003:4). This is very much the same case in Rani Mājri, where economic and social mobility is directly intertwined with water-access.

Water was shared amongst the landholders by strict rules for diverging the water between landholders at set times, a system maintained and coordinated by the landowners in regular meetings.

This distribution happened as per a '*barabandī*' system, described by Yadav et al (2008:7) as a part of older forms of administration, where the village originally was divided in to eleven '*sāmīs*' (a ferule; rich arable land). One *sāmī* would be given twelve hours of irrigation water, (during rainy season, six hours of irrigation water), water that is being distributed equally among these eleven *sāmīs*.

Then, the extended families within the *sāmī* will distribute the same water among themselves and so on (Yadav et al 2008:7). In practice, this allocation system would happen by manually diverting the stream of the *kuhl* by filling openings with stone, earth and debris. The operation must happen quickly, and precisely. In the growing seasons, mistakes or complications to adjusting the water amount could mean the success or failure of a crop. As one can see from the map below, the system is rather intricate, and rules of allocation have grown more complex over time.





Fig.8: Map showing all the tiny plots of land, hand-drawn on a large piece of cloth. The cloth measuring approximately  $1\text{m}^2$ , and was made in the 1960s.

Traditionally though, water has been in the hands of the Rajputs, who were the landholders at the very beginning, acting as *jajmāns* of the village (see the discussion of caste and *jajmāni* relationships above). Additionally, this caste had also wielded policing rights in the village through one of the Rajput families being Lambardars.

By 2013, the village Rajputs had been broadly represented in local politics, both through the elected local Gram (village level) Panchayat leader, and through the Panchayat Samiti (district level) leader, (both also happening to be from the same Rajput lineage. The Panchayat council is supposed to hear both sides of a case in disputes, but has been found elsewhere to be undemocratic in its lack of ear to lower caste (or non-dominant family clans) and female participants (Madsen 1991:363), and indications of the same were noted in this village (see below).

The wealthy Rajput males were thus more active politically, both on the local and regional level, than were the Lohars. The landowning Lohars might be their equals in wealth, but in political leverage, there were a caste bias favoring Rajputs. When looking more closely at caste-based issues, we also begin to note the peripheral role of the village Scheduled Castes. In practice, their political influence is marginal, at best. They have a female representative in the Gram Panchayat, but the Lohars and Rajputs would describe her membership as merely superfluous. “She signs her name with an X whenever required”, the Lohar shopkeeper told me as we talked around the subject of reserved Scheduled Caste seats, followed by a short laugh by the men attending the conversation.

The water of the *kuhl* seldom flowed in the water channel along the path towards the Scheduled Caste hamlet, except - at the time of my stay at least - as surplus water during heavy rain in the monsoon. Instead, the water is caught in the IISWC’s water harvesting tanks and piped to provide the southern fields of the Rajput and Lohar with irrigation, and via a smaller surfaced pipe with drinking water running even further south along the pathway, to Khot. Before Khot got connected to the Government well water system, the women from this tiny satellite village would gather and fill their plastic cans at the end of

this pipe. At recurring break downs of the Government water supply, the women of Khot would continue to utilize the drinking water from Rani Mājri. The Scheduled Castes however, were kept out, and the central village water was led straight past their hamlet without shedding a drop.

The Scheduled Caste lack of access to *kuhl* water was not an issue any of the villagers in Rani Mājri wished to discuss any further with me, for many different reasons (as political power was in the hands of Rajputs, there was nothing to gain by falling out with them). But in some occasions, the matter did arise. I first began making inquiries about the *kuhl* water in the hot and dry month of April, when there was much dismay all around, since the Government Well water from Bilaspur had 'gone' again. On the third day with no-one getting any water from their taps, their tanks were running dry. Waiting for someone to repair the alleged broken pump, the situation was particularly acute in the Scheduled Caste hamlet. Upon visiting a woman there, I told her I had seen people from Khot (the tiny Rajput hamlet on the southern ridge) use water from the pipe that looked like it was coming from the Rani Mājri *kuhl*, and asked why they had not done the same.

The Scheduled Caste woman shrugged, and told me that that village water was no good for them. She didn't know what was wrong with that water, but it was something. The hair got all sticky when you bathed in it, and they got ill if they drunk from it, so they would never use that, she said. She might not have known how little I knew of local caste regulations at the time, but she knew very well whom I shared house with; a Rajput and a large landowner. Her answer, that the Scheduled Castes found the water running in the *kuhl* unsuitable for their needs, puzzled me.

A few weeks on, I went with baby Jon for a stroll, and was happy to be invited into a Scheduled Caste house I had not visited before. I was called in by a group of males, where one visiting uncle, behaving as if he was under the influence of alcohol, began to voice his opinions on the Rajputs. The other men grew increasingly uncomfortable with his replies, especially when I asked about the *kuhl* water. "There was water in the *kuhl*

before” one of the men answered initially, “but that was a long time ago. Perhaps a hundred years back”. “And now it is cut because we are Harijan” the uncle interrupted rather aggressively, “and the people with responsibility are doing nothing!” The men were so uncomfortable at this point, that I decided to trail the subject over to something else.

Later, I asked Prakash about the Scheduled Caste access to *kuhl* water, and if it had anything to do with their caste, but he denied any correlation of the lack of water being tied to their caste, only that “they have no land, and so they have no water from the *kuhl*”. That their caste status might have influenced their lack of land to begin with was not seen as an issue. That the Scheduled Castes are not regarded as part of the village, makes them completely left out of certain government initiatives. The IISWCs report for example, had no information on the Scheduled Castes in their social mapping of the village, neither was the tiny village of Khot, that belonged to a different watershed (and as sch utilized a smaller, older *kuhl* to irrigate their fields).

As will be described in chapter 6, in approaching a village for ‘development’ or ‘awareness’, how one defines a village, whom to include and to exclude in the project or the scheme, is crucial. Looking at the two settlements around center Rani Mājri village, they were visually segregated by spaces of uninhabited land in-between them. Rani Mājri appears as one nucleated village, the Scheduled Caste hamlet another, and the small village of Khot, on the southernmost ridge, yet another.

Still, the villagers of both Khot and the Scheduled Caste hamlet talked about themselves as being part of Rani Mājri. It could be, that both the Scheduled Caste hamlet and Khot were versions of what Mark Baker from Kangra valley calls ‘tikas’, small hamlets of settlements – in Baker’s case often with their own irrigation *kuhl*, that related to one ‘mauza’, or ‘revenue village’. These made up the old fiscal units that the precolonial kings used for revenue collection (Baker 2005:55). From the data provided by IISWCs report, this seems likely. According to the report, villagers used to pay rent (*lagan*) to the Patiala king; 1 rupee for irrigated land, and 25 *paise* for rain-fed land, collected by the



village Patwari, which most likely would have been in Rani Mājri. This makes this village the ‘mauza’. As these units have been dissolved and new units have emerged, the old units, including the ‘tikas’ and the ‘mauza’ might in practice still function, but this is mere speculations, I have no ethnography that supports this reasoning.

All three settlements however, saw themselves as part of Rani Mājri. They shared the same post-code, the same Panchayat, and they had been organized under the same Lambardar. Last but not the least, the Scheduled Castes all gathered to celebrate the village protector Kheṛa Baba. This gives a complex village agency, especially salient in the village festival described in the next chapter.

If one pays attention to the deities, where they were placed and by whom they were tended, the village appears to take on another shape. This optic provides a more encompassing, but also a more stratified place, where clear-cut lines between the nucleated settlement and the surrounding villages disappear. With such a tilt in perspective, a much more complex village appears.

## A Village Redefined

The central village of Rani Mājri clings to a hillside, as to avoid using any land usable for cultivation, and just where the village houses lie, the hill declines quite sharply down from the mountains in the west to the plains in the east. The Western houses are thus at the highest elevation, and the Eastern houses lie lower.

At first glance, the houses in the village look rather similar to each other, and it is hard to distinguish them. Most of them are painted in shades of a dusty yellow, some in blushing peach or shades of turquoise, and many are small and built wall-to-wall. A closer look reveals that they are not so similar at all, and that there are stark differences in wealth and opportunities for social mobilization, all of which are related to water access, itself is

related to caste, class and landownership. To be clear, most villagers, including the landowners, were relatively poor<sup>32</sup>.

A few years prior to my fieldwork, before the last Five Year Plan Survey, most likely as a result of the 11th plan survey conducted sometime in 2007 (Planning Commission of India 2017), all the Scheduled Caste households held ration-cards, and so did a few Rajput and Lohar families. After the last survey, none of the households here were still defined as Below Poverty Limit (BPL<sup>33</sup>), as the Scheduled Castes had been provided certain 'baseline assets' through various schemes like the 'The Swacch Bharat Abhiyan', and as such lost the right to these cards. The Swacch Bara Abhiyan campaign was officially launched by the Government of India in "entire rural India" in 1999, aiming to "transform rural India into a 'Nirmal Bharat' state" (litt: a clear/clean India) (Ministry of Drinking Water and Sanitation 2016), and did provide funding for the construction of 'latrines', for example. These ration cards were sorely missed, especially by the poorest families, as they gave the right to free or strongly discounted prices on certain staple-food and household items. Even though many were relatively poor, poverty struck unequally. This had quite a lot to do with the *kuhl* and what it provided, which goes beyond irrigation.

Water was in 2013, and continue to be, a source of constant worry by all villagers, landless and landowners alike. While too intense monsoon rains equal landslides,

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<sup>32</sup> Poverty is difficult to define, but in sociology and anthropology, a starting point is "having too little resources or capabilities to participate fully in a society" (Smeeding 2001). As societies differ, then poverty must be defined both comparatively to other members of society, but also for global lines of measure, a daunting task that have resulted in various definitions in various institutions,

<sup>33</sup> To be BPL in Haryana, at the Census Survey in 2011, is not a definition that match the definition of poverty by international agencies like the World Bank index. Neither does it cohere entirely with the Indian Government's BPL line, which operates with a BPL line drawn at 32 rupees a day in rural 47 rupees a day in urban areas (in 2014) 21, in addition to 14 exclusion indicators, 5 inclusion indicators and 7 deprived indicators or 'baseline assets' in categories such as land holding, type of house, household goods, literacy level of earning member, source of livelihood, etc. (Drèze and Khera 2010:56). The assets give scores from 0-4 points, and the score will indicate if the household is above or below BPL.

damaged crops, siltation and erosion, drought equals less nutritious and diverse foods, less milk, more debt and more hardship. The *kuhl* mitigates all of this, but only to a selected few; the landowners. The water of the *kuhl* does not only irrigate the fields, however. It provides drinking-water too, in an area where clean and safe drinking-water is a scarce resource. Moreover, it provides for the cleaning of utensils, clothes, and bodies – both for ritual and hygiene. This indicates that there are not only economic benefits of controlling *kuhl* water, but there might be ritual and cosmological benefits.

Only a handful of Rani Mājri's population could be categorized as 'large' landowners, owning up to four hectares of land. The majority of these households had, however, small or marginal holdings of only 1-10 *bighe*<sup>34</sup>, which in the metric system would equal 800-8000 sq. meters (less than 1 hectare). The Scheduled Castes and other 'landless' or marginal landholders would assist these major landholders at the large harvesting periods, being paid in produce. This was also customary payback for the loan of farming machinery such as tractors for threshing. I wrote 'landless' in quotation marks above, because the issue of landlessness is complex. In the definition of landless I opt for here, a household holding no inherited or acquired entitlement to arable *and irrigable* land would be landless.

The households calling themselves 'landless' in the central village, of which there were a few, might not have been entitled to any arable land, but all (of whom I were aware) had the benefit of 'leasing' small plots of land (by lineage or via Panchayat, I am not sure). Working small portions of land as their own, entitled them to *kuhl* water, so however small or 'leased' their plots were, they might utilize both growing seasons. The small harvest would also provide, however marginal, a relief to household economy. The Scheduled Castes on the other hand, were all landless per government definition, but not because they had no land to work. By 2013 they had been donated the plots of their

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<sup>34</sup> *Bigha* is used as local land measurement unit, where 1 *bigha* equals 20 *beesve* (or 800m<sup>2</sup>), and 5 *bighe* equals 1 *kila*. 12,5 *bighe* gives the metric equal of 1 hectare (ha). See under Cottah in (Simmonds 1892), also (Gole 1990; Wilson 2014).

houses by the government, and to my knowledge they also utilized a few plots of (unirrigated) land below their hamlet (see below). This land was however not irrigable by *kuhl* as the plots are too far removed from the irrigation network, and as such their landlessness comes with more acute consequences. I will get back to some implications of this a little later in the chapter, but first, I would like to trace the *kuhl* from its periphery, to see whom it excludes, and into the center village, to see whom it includes.

To do this requires a trifurcation of the village, into landowner, marginal landowner and landless, which is quite clearly reflected in the living patterns. Those entitled to *kuhl* irrigation water, live in the central village. The largest houses are also following the trajectory of the *kuhl*. The water enters the village from a north-eastern direction, where there are but Rajput houses, and flows partially below ground in a south-westward direction, until it resurfaces at an open space at the lower village center, in a *cul-de-sac*. Here, most of the landowning Lohar houses also appear, and mix, with various Rajput houses down the paved road, in the flowing direction of the watershed.

The further away from the *kuhl*, however, the smaller the landowner and land-leasing houses become, so the Rajputs living at the higher elevations of the central village, for example, have the smallest houses the smallest landholdings, and the tightest economy. It is to these houses I will turn to below.

## The Kuhl and the Village

### Village Periphery

The Scheduled Caste Hamlet of Rani Mājri is small. There are only eight households, and no real village center as the small houses lie on a row along a small path, part stone, part dust. On the surface these look newer and “better” than many of the Rajput and Lohar houses, as the houses here are relatively new and cemented one story buildings, painted in light, yellow colors. The construction of these *pakkā* houses was, I was told by the



Scheduled Castes, ‘given by the Government’, and most likely a part of the Indira Awas Yojana (IAY), a national program of rural housing subsidies implemented through the Rural Development Department (Ministry of Rural Development 2017; Drèze and Khera 2010:56).

The Scheduled Caste Hamlet was in the landscape positioned between two ridges, one southern ridge, one northern ridge. At the outskirts of the Hamlet towards the southern ridge, a dried-out river bed made a furrow in the landscape. Here, the Scheduled Caste cremation ground (*shmathāna*) lies, and the area was never crossed by the landowners, that would occasionally walk through the Hamlet to reach the mango-grove, or the rain-fed fields, whose northernmost belonged to the Rajputs of Khot, and the southernmost to the Rajputs of the center village. One rain-fed field to the uttermost western corner of the village fields, was utilized by the Scheduled Caste for maize cultivation in the monsoon season, however, and the Scheduled Castes kept a shrine to a field-deity there. The Scheduled Castes were not ‘landless’ per se, then, but had no *kuhl*-irrigated land.

All households had black water tanks to store water for their separate washing nooks. Upon entering them, they were quite similar to any of the smaller houses of the main village. The wedding photos, deities and movie star posters joining the cracking of paint on the wall, the chest of tin to keep their things, the humming old fridge and the boxed TV-set, the naked lightbulb in the roof. There were differences too, however.

The Scheduled Castes would for example worship other deities, or different manifestations of them, then the landholders. Durgā was approached, not as ‘*Śerāmvālī Mātā*’ (she who rides a lion) but in another form, through her Asha Purni Mata form, which had a shrine in Parwanoo. Durgā is both a goddess who has inferior powers to those of the male gods, and simultaneously a form of the all-powerful goddess, the *mahādevī* in Hinduism - uncontrolled, unmarried, and potentially dangerous and destructive (Caughran 1999:515). The *mahādevī*’s popularity in the village was notable, “*Jay mātā dī*” (victory to the mother) was an expression that could be read on just about every auto-rickshaw across the northern regions of Haryana and Punjab. Her popularity is

also mentioned by Katherine Erndl (1998) to have a widespread appeal in both high and low caste, both urban and rural, both Sikh and Hindu households in North Western India (Erndl 1998).

As Durgā is both transcendent and immanent, “her function ranging from such cosmic concerns as the creation, preservation and destruction of the universe to personal concerns - curing diseases, helping people in distress, and so on. She is also the embodiment of *śakti*, the dynamic power of the universe” (Erndl 1998:176). Guru Ravidas worship was also unique to the Scheduled Castes, so was the worship of the folk deity Guggā Pir<sup>35</sup>. In this region, Guggā Pir is a deity on par with Bābā Bālak Nāth (Erndl 1998:182), and according to Fuller (2004:49,50) a powerful protector in many North Indian villages.

The Scheduled Caste hamlet had also hooked onto the electrical grid much later than the main village (in the early 1990s), and had no paved road access. Neither did they partake as consumers of *kuhl* water as they were, according to the Rajputs and the IISWC, landless. As the land was unirrigated by the *kuhl*, they were also excluded of the IISWC watershed-management project. With no access to *kuhl* water, the Scheduled Castes relied completely on Government Well water. This could not be used for irrigation purposes, as it was accessible only for a few hours in the morning, just to refill buckets and water-containers for drinking, laundry and personal hygiene. This meant that they had no possibility for two crops a year, and lacked the possibility for surplus sale. Deprioritized by central governments and policy makers in India (Mehta 2011:381) rain-fed land is seldom encompassed by large scale state development plans, instead left to run its own course.

To be reliant on the rain-fed field alone, is thus quite detrimental for life here. In rain-fed fields, which carries a harvest only in the monsoon season, the risk of failure is high, as

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<sup>35</sup> Also written Gogga and Guga, Fuller says Guga (the hero) converted to Islam and became a Pīr, Guga Pīr (saint), is attracting both Muslim and Hindu devotees (Fuller 2004:50).

moisture provided by the winter rains is unreliable and insufficient for growing the modern variety of seeds which demand more water than traditional varieties to grow (Mehta 2011). No crops or irrigated land give no grass surplus either, to use as fodder for cows, bulls or buffaloes. For fat and protein in their diet, most of these households relied on store bought milk, goats and on chickens for eggs.

With no bulls, the Scheduled Castes had to hand-till the hard, rainfed soil, and with many of the women being busy herding their goats, or working for the government as street-sweepers or washing in the primary school, (positions that would pay 500 rs a month), such a field is sometimes better to lay fallow to prioritize outside-village work. For an uneducated Scheduled Caste, this would often be in the informal work sector, with irregular day-to-day labor, no pension, and no other employee rights. With marginal incomes, a Scheduled Caste family would often send male youth to do factory work before completing 10th standard to contribute to the economy, and girls were generally married off earlier than in the main village, at the age of 18 seemed to be normal. Marriages also often tended to be 'joint', as brothers could marry in one ceremony to save expenses.

Walking up from the Hamlet towards the center village, lifting ones' gaze, one will at first note two enormous mango trees at the top of the small hill. Then, one will see a small shrine in stone, painted in white and decorated with orange garlands. The shrine has a stone figure, looking a little like the head and torso of a man. This is Guru Ravidas<sup>36</sup>, facing the people coming up the path from the Scheduled Caste hamlet. At one's immediate right, there will also be the day-care (*anganwadi*), a small cemented water-tank for cattle to drink, and to the left of Guru Ravidas, shallow pit which in the monsoon becomes a small pond. Above these grounds are rain-fed fields, utilized by Lohars and Rajputs, and the small fields above, also contained the site for IISWC rainfall-monitoring post.

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<sup>36</sup> Ravidas is an important figurehead among Scheduled Castes, especially in North India, (Gupta 2005:421).

Crossing this small, open space, one will pass the middle school, and follow an earthen path, following the ridge Northward. There is an old duct at the inner ledge of the road, where surplus water flow in the southern direction during the monsoon rains, but the duct is mostly dry, collecting leaves, stones, twigs and litter, from all those who trod this path on their way. Following the path northwards for a few meters more, one arrives at the outskirts of the central village, and pausing here, one can turn westward, and take in a breathtaking view of the irrigated fields that fan out below the village center. Turning east, and towards the hills, one become aware, perhaps, of a flight of stairs.

## Village Median

The stairs are steep, and lead to the temple of the village's protective deity, Kheṛa Baba. The land and the people he is said to protect gives an indication that Rani Mājri does not end with the nucleated settlement in the North, but that it also includes the settlements and deities of the village periphery.

Kheṛa Baba was the village protector, its *rakṣā*<sup>37</sup>. Kheṛa Baba translates as 'lord of the village', and went under the 'name' Kshetrapal<sup>38</sup> (*kshetra* litt: land, soil). The importance of such village deities for village identity are mentioned in regional literature (Oberoi 1992:376, Fuller 2004:48). It is thought that Kheṛa baba originates from Rani Mājri, and was regarded to be in a relationship with the village similar to the relationship between husband and wife. Normally village deities lack consorts, and might often have a non-divine origin.

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<sup>37</sup> Here, note the difference in writing and meaning between '*rakṣā*', translating literally as 'protector' - as in the festival of Rakṣā Bandhan (or *rākhī*), and '*rākṣas*' - a being with malevolent intentions - actually 'an evil spirit, demon'.

<sup>38</sup> He was most likely the same kind of land protecting deity as Kshetrapala mentioned as the principal protector of the village and the site itself of Ramkheri, Madhya Pradesh, described by A.C. Mayer in (Fuller 2004:52).



Fig.9: Left: The Khera Baba temple. Right: the shrine of a field-protector, called Panch Pīr (more on the latter deity below)

The temple itself, was a rather simple and modest structure, with walls left unpainted, and a roof that sparkles in white tiles in the January sun. It has a small stone *liṅgam* in the opening, which reveals Khera Baba’s relation to Shiva.

Shiva is one of Hinduism’s ‘large Gods’, and together with Vishnu and Krishna can also be referred to also as *Bhagwan* (Fuller 2004:35). He is worshipped all over India (Mines 2005). Shiva is an ambivalent deity, involved with both asceticism and with worship of the *liṅgam*, a column with a rounded top, seen as phallic, while the base upon which it is placed can be seen to represent the female yoni (vulva)<sup>39</sup> (Caughran 1999:515). Shiva was the deity par excellence in the village, and everyone – including the Scheduled Castes, expressed their “faith in him” (*biswās karna*),

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<sup>39</sup> Good argues that this position represents the union or fusion of god and goddess in the «undivided» (Good 2000:274).

As such, Khera Baba might be seen as a ‘downscaled’ manifestation of Shiva as village protector – making him accessible also for mundane concerns, something that according to Fuller (2004) is well known in Northern India (Fuller 2004:39,40). The deity was cited as the most important deity to all households, irrespective of caste and/or landholding, and his birthday, described in chapter 5, was devotedly attended by all villagers from all the settlements.

The Scheduled Castes cannot walk up the stairs, however, and proceed towards the village which just around the bend from the stairs become visible. A small path to the right, up towards the hills and the forest, diverge from the main path here. Walking up the path, would take one up to the marginal and ‘landless’ Rajput landowners’ houses.

These houses were generally small, mostly two-rooms. In most of the marginal or landless households, the façade was in *pakkā* materials, but with the backsides and with their flooring still *kaććā* in clay/mud/dung with a wooden framework.

Their courtyards were also small, and often earthen. Their hearth (*ćhūlhā*) would be located outdoors, often in a corner of the yard, with a temporary roofed construction to keep it dry during rains. Separate bathrooms were uncommon, and many would use the courtyard nook for their ‘bath’, and the forest of the hills for ‘bowel movements’.

Even if most expressed a yearning for *pakkā* houses, especially because of the repetitive repairs that had to be done to the earthen constructions as the rains would break them down, the old houses with *kaććā* floors and back-walls, are by far the most temperate. Smaller and with fewer windows than their *pakkā* counterparts, they remain shady and relatively cool during the heat, and during the cold weeks of winter, the *kaććā* buildings retain more heat, making the older houses a tad warmer than the upgraded ones. With their cemented floors and larger windows, larger and with a higher ceiling, the *pakkā* houses don’t keep the warmth very well, and remain cold and damp all winter, and unbearably warm during summer. This was not an argument weighing up for the convenience of a *pakkā* house however, and upgrading to *pakkā* state would eat away on household budgets.



The marginal landowners could not afford to stall-feed buffaloes and bullocks, and relied on cows and goats for milk and manure-production mainly. Most of these households had small or marginal landholdings as well, which provided less food and less fodder for livestock. The marginal landholders would thus additionally keep goats (who could graze in the forest) and one or two cows of native breed (that eat less - but also produce less). Their access to the kuhl was also restricted, but not based on caste or landholding as much as by elevation. These houses were located above the natural trajectory of the *kuhl*, and as the *kuhl* system had no pump, these houses would use government well water for cooking and washing. This water, as I have mentioned, came at a cost, and was only available a few hours a day, which made life more difficult in many ways, than their lower-lying neighbors in the village center.

## Center Village

Returning down the path from the upper village, and continuing along the main path, the first building one reaches, is the village primary school. And by the school, one is at a crossroads.

To the left, the path adjoins the paved road east and downward. Here is a small Hanuman temple, the monkey deity devoted to Lord Rama is a central deity for many farmers. As the temple was not allowed to be attended by women, I never witnessed worship here, but I was told it was tended to by landowners.

The *kuhl* here follow the trajectory of the road and the ridge, downward and eastward, passing in the open towards the fields below. All the houses aligning the road and the watershed downhill, were landholders, with varying shares, and Lohar and Rajput houses would alternate here. Some Lohars were successful farmers with large landholdings, others had only a plot or two, but had made good business on lorry-driving or carpeting. There were differences in wealth also amongst the Lohars then, but not so extreme as between the poorer and richer Rajputs. Lohars and Rajputs kept to their own separate caste communities in everyday social life, and at more minor ritual events. But in other

occasions they were to a certain degree mixed, both in housing and at larger village gatherings/celebrations. What they have in common, however, is that they are landowners, and live in the village center, defined as being in oblong shape, running along the trajectory of the *kuhl*.

To the right, the path is cemented, and takes one through a small and narrow passage. Following the trajectory of the *kuhl* towards its source then, we pass through the central village, and but for one single Lohar household, they are all Rajput. The Lohars purchasing this house from the Rajputs had caused the one of the few remembered quarrels in the village the last decade, and the relation was in 2013 still quite sore.

Quarrels aside, these houses are relatively large, often two-story houses with three to ten rooms. They have indoor kitchens for their hearth (*chūlhā*), and with walls and floors made *pakkā* of cement and bricks. Inside one might find gas-top stoves or wooden frame double beds, one even had an electrical water-heater (for the village luxurious facility).

In the household midst, often in what was the ‘common-room’ of the larger house, one found the house-hold shrines.

Being a deity of great power, one of Hinduism’s ‘large gods’, Shiva, often appeared in the household shrines of the village. Shiva was here often depicted with his ‘consort’ Pārvatī, or as Santoṣī Mā<sup>40</sup>.

In this form, Durgā is controlled by Shiva, and has a benevolent gaze for a household. In the household shrines of the landowners, one would also find a lineage goddess (*kul devī*). The Rajput family in which I took up residence, for example, kept a *kul devī* called Sandog Mata, as their lineage stemmed from a small village close to Sandog in the Morni hills, where this devī is thought to dwell. The origin of the deities, however, seemed rather irrelevant, as very few could recite the histories behind the deities’ present in the

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<sup>40</sup> The Goddess Santoṣī Mā(tā) might have originated in 1960s Rajasthan, and gained a cult after a box-office success movie in Jai Santoshi Maa in 1975 (Babb 1981:388; A Dictionary of Hinduism 2017).



village, and only the Brahman could provide answers matching the texts available on the deities.

Many of the images found at the house-shrines of the central village were also of gurus. It could be a lineage guru, (*kul kā guru*), a guru or gurus whose teachings had been followed in the family for generations, or recent additions. Amongst the Rajputs in particular, Guru Rām Rāī (the eldest son of the seventh guru of the Sikhs), or certain Sant Mat<sup>41</sup> gurus such as Kirpal and Maharaj Charan Singh (Juergensmeyer 1995; Britannica 2017: Sant Mat).

These houses also all have separate bathrooms with a ‘latrine’ too, small two-room buildings with a tap and bucket for bathing at one end and a squat toilet with a tap in the other. Some had rather spacious courtyards, one even tiled – and a handful had shiny black gates in metal, ornamented with white and gold paint. All large landowner houses also had small sheds or other roofed constructions to keep their buffaloes (most major households), cows and goats (a few smaller households), horses and hens (one Rajput house).

Not only does irrigable land provide food that would otherwise have to be purchased, but it provides fodder for this livestock (or *paśu*; litt: neat-cattle, horses, goats, sheep, asses, and dogs). The fields of the larger landowners also produce a considerable amount of grass fodder (*ghas*), which enable the larger landowners to keep buffaloes (most likely the Murrah breed) which in turn produce more and fatter milk than the native cow breed, which was rarely kept by the larger landholders (except for religious/ritual purpose). The landowners could also keep bullocks (a humped cattle breed, most likely a Zebu species), a necessity to till the land, since no tractors can work the fields because of its terraced inclination and the way the plots are separated by stone fences (One was usually collectively rented for threshing only, and parked at the side of the road).

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<sup>41</sup> Sant Mat: religious direction teaching unity of all religions (Jones and Ryan 2006).

For optimal milk production, the buffaloes and the bullocks are stall-fed to ensure an average daily diet of approximately 20-22 kg of green fodder and 5-7 kg of dry fodder (wheat straw, dried maize, sorghum and millet herbage) per day. The amount required for an adult, lactating buffalo is equal to the amount of fodder that would feed 7 adult goats (Arya, Agnihotri, and Samra 1994:447).

Bullocks would also require supplement nutrition in the month preceding plowing, which had to be produced on site, or bought in stores. Except for milk consumption, central in a North Indian diet and ritual, keeping cattle was also important in the production of manure, which was used as organic fertilizer, which again made the irrigated lands more fertile. The amount is quite significant. A Food and Agriculture Organization of the United Nations study from Nepal, showed that the amount of dung produced from cattle and buffalo per animal per day was “about 10 kg and 12 kg respectively giving a total of 3.6 tons and 4.3 tons of dung per animal per annum” (Joshi 2017).

Poverty within the Rajput caste then, was mostly a result of the (continuing) decrease and split-up of landholding per patrilineal laws of succession. Tension and quarrels in this segment tended to be about land, and especially between brothers who had felt unfairly treated when plots were partitioned. A father will by custom split his land equally between his sons, who are left with smaller and smaller landholdings unless one or more of the sons moved out, sold or changed occupation. This practice had left many of the Rajput households over time with poverty-stricken families; unable to gather the resources needed for social mobilization through education and white-collar labor. Still, and despite a certain disadvantage in education and public sectors, the Rajputs were the privileged group politically, as I have shown above.

Walking past the Rajput houses is to leave the village settlement. It is marked with the cemented path halt abruptly at the edge of the northern village. Crossing the *kuhl* over a small stone bridge, the path becomes earthen, and crosses a small open site, before it continues into the village forest. This site is one of auspiciousness, and marked with the

presence of two enormous mango trees. Below them, the Rajputs held *pūjas* for certain deities at auspicious times. To my knowledge, this was a ritual site for Rajputs (and, at some occasions I was told, Lohars – but I never observed this<sup>42</sup>, see also chapter 5).

The most central of the deities tended to here, was Shiva, but also Khwaja Pīr<sup>43</sup>, a central water-deity regarded locally as a “medium size” deity - below, or smaller than Shiva, but above, or larger the local village deity Kheṛa Baba. There have been some mentions of a Khwaja Pīr in regional literature, and both are from Hindu worship in Kangra valley of Himachal Pradesh<sup>44</sup>. In Bakers (2005) case, Khwaja Pīr is mentioned briefly as a local deity who could control, guide and calm the local flooded river. In Ursula Sharma’s (1974) study on ‘public’ shrines in Kangra, there is a reference to a “Khwajah” in her field village too, as “a deity identified by some with various Muslim personages and saints but almost universally associated with water” (Sharma 1974:72).

I did not witness any rituals involving Khwaja Pir, in person, but I was told they took place along the *kuhl*. If he is approached there, this would not be so uncommon according to Sharma (1974), who notes, that although Khwaja Pīr’s power is manifested in the spring, his shrine is not located there, but at more accessible place within the outskirts of the village, where “fields and jungle meet” (Sharma 1974:81). This is because, she believes, as patron deity of all water sources, he must be worshiped from time to time, and thus must be made accessible for the landholding castes (Sharma 1974:86).

Because of the connotation with water and his noted presence in the area, I am rather confident this must be the same deity. As Fuller (2004) mentions, little gods might very

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<sup>42</sup> Being new in the village it was hard to keep track on who attended where during the first months, when this ritual took place.

<sup>43</sup> Pīr, an Urdu term with Persian referents, meaning “spiritual guide”. Its etymology shows the remnants of Turkish and Afghan rulers, perhaps especially during the Mughal empire reigns in the North Indian/Pakistani region throughout the 13th and 16th century (Baker, 2005:115, Zoller 2017).

<sup>44</sup> A Khwaja Khizr, also known as Khwaja Khadir, has been identified with a shrine along the Indus near Bakhar, where he is worshipped by devotees of both persuasions (Coomaraswamy 1989), and is also here identified as a spirit or river-god of wells and streams.

well have been men and women, and Kheṛa Baba too, seemed to have a non-divine origin.

From this site of worship, the *kuhl* continue along a narrow, earthen path. About halfway along the northern ridge, a path cuts down to the dehydrated river-floor. Here, a small sub-surface spring is located, the one that brought relief to the Rajput households in times of drought before the *kuhl* improvement in the 1980s. It is also here – just below the spring, that the Rajput cremation ground (*shmashāna*) lie. The main path, however, leads straight to the small waterfall, and the spring of the Rani Mājri *kuhl*.

## A Center-Periphery Village

As we can see from the above, poverty hit Rani Mājri families unevenly. Many families, across caste-identity, would lack the means to provide sufficient nutrition, clothing and education for most or all members of the household.

For some, however, there were seats reserved in government education and jobs through the quota system. In the village, the Lohars were encompassed by the quota system together with the Scheduled Castes by being defined as a Backward Caste. For the Rajputs being ‘Forward Caste’, however, there was no quota system allowing them to benefit from positive discrimination. To be short, the quota system tries to balance out the negative effects of caste identity with class mobility, even if caste is a collective category and poverty might be very individual. The policy and practice of the Indian quota system is an intricate and delicate issue, which deserves more space than I can provide here, but I refer the interested reader to Gupta’s (2005) account of the current complexity of caste and class status in contemporary India, and how it can materialize in a “consequent clash of multiple hierarchies” (Gupta 2005:424). Others, such as the Scheduled Castes, had been encompassed by other schemes and projects, some of which had lifted their status to be above BPL, but still leaving them in a quite marginalized and impoverished situation. The IISWC watershed management project, did not include the Scheduled Castes, on the basis of them having no irrigable land. Should, however, the Scheduled Castes have been

included? Let me turn the optic somewhat, and view the village as it appears with a center-periphery reading of the landscape.

Looking at the deities and their shrines, the ‘empty’ spaces between the settlements, were not at all uninhabited – they were in fact inhabited by deities. Utilizing a more ritual ‘optic’, a settlement with a more symbiotic relationship between benevolent and malevolent substances, appear. With a center-periphery reading, the hierarchy in a village is not a simple, linear and ‘settled’ high-low dynamic, but a flowing, contextually stressed or unstressed dynamic that exists alongside values of auspiciousness and inauspiciousness (Raheja 1988a:512).

Village gods like Kheṛa Baba has been found to be important for collective village identity. Fuller (2004[1992]) in his study of ‘popular Hinduism’ in South India argues that these celebrations are vital to the ritual construction of village unity, and that they might reveal a more complex village construction. Consider for example the case of Kheṛa Baba’s birthday celebration. Even though Fuller notes the rarity of village festivals outside South India (2004:146), the birthday celebration of Kheṛa Baba in Rani Mājri does seem to present itself as one. Kheṛa Baba was celebrated annually in the heat of the dry summer (see also chapter 5), and his celebration prompted the arrival of women who had married out from the village, and residents of Khot, Bapūli and the Scheduled Caste hamlet.

The Scheduled Castes regarded Kheṛa Baba as their own guardian deity, but it was however mentioned in a few Rajput households that the village protecting deity, Kheṛa Baba, was no protector for the Scheduled Castes, because they kept Ravidas. This was not seen in the same way by the Scheduled Castes themselves, who would claim to place their trust in him, and invited me to his birthday. This ‘partial inclusion’ in the village thus became evident as the Scheduled Castes joined in at the village primary school ground to share the food, especially the (*bhog*) offered to the deity after the ritual

celebrations. The Scheduled Castes were seated separately and served last, and they were not allowed into his temple for the celebration itself, but their presence was required.

This partial inclusion of the Scheduled Castes is also noted with Sharma (1974) in Kangra, who notes that in a village feast (*jag*) dedicated to the lord of rain (here, a deity called Thakur) taking place to provoke rain during a dry winter. The wheat threatened to shrivel in the ears, and the feast was orchestrated by all castes in the village, save the Scheduled Castes (which also here were of the same leather worker-caste). After the ritual, food was shared, but now the Scheduled Castes were summoned to take their share of the food – even those that could not attend had food brought to their homes. When the rain still failed to fall, the reason was speculated to have been that some Scheduled Castes had been turned away when arriving after the food was finished at the feast (Sharma 1974:87). Interestingly, she notes that it was “evidently regarded as most important that every single member of the village should be included in the feast” (*ibid*), which reminded me of my own struggle with finishing the sweet *halwa* (a heated mush of flour, sugar and oil) during the celebration, after Nirmala’s insisting comment; “it is *Khera Baba’s* bhog!”, implying the necessity of me partaking in the meal.

Fuller notes that village festivals such as this tend to have a complex design that, according to Fuller, requires the Scheduled Castes “to be included so that they can simultaneously be excluded (however partially)” Fuller (2004:148). This is necessary for the village to function ritually, it seems, because as good or evil, auspiciousness and inauspiciousness, deities and demons, they are symbiotically linked to each other, and personify respectively “the order and chaos that are, in the Hindu worldview, ultimately inseparable” (Fuller 2004:33). This does make sense, considering Raheja’s (1988 a, b) center-periphery model of hierarchy too.

I mentioned above Raheja’s (1988 a, b) fieldwork from the village of Pahansu, where the dominant landholder (or the king, as it would have been in Rani Mājri under Patiala kingdom rule) gives *dān* (potent and potentially ‘poisoned’ gifts) to the Brahman, who

can handle the evil in the gift by ‘digesting’ it, or transferring them onward in the ritual system (Raheja 1988a:514). The landowner (or king) by giving *dān* ritually ensures his own, and the village’s well-being, as a whole, by transferring evil to the Brahman. The practice of giving these ‘poisoned gifts’ also include the village gods and deities, that remove, or ‘make far’ misfortune and evil (Raheja 1988a:511). Raheja interprets this as the landholders pivoting ritual capacity in a center-periphery model, and the village periphery, as we have seen, consists of the forest and the fields, with various entities having various capacities for either digesting or passing on inauspiciousness.

In Rani Mājri, the large and benevolent deities, such as the controlled forms of the *mahādevī*, like Lakshmi, the kul devī or Pārvāti, were kept close to the village – and household center in household shrines. Others were regarded as benevolent for the whole village, such as Kheṛa baba, whose temple overlooked the village and the fields from its high elevation. Khwaja Pīr too, the local deity that controls water flow, was approached within the village territory, although his powers were, I believe, associated with the spring from which the *kuhl* water is derived, but worship or offerings are not given there (see above).

The uncontrolled forms, however, were kept outside the central village itself. Despite their undeniable popularity, they were part of the village periphery, their shrines located in the fields or in the forest. Not that this made them any less powerful or divine, just more unstable and potentially harmful. Chaṇḍī Devī, for example, had her shrine in the forest. As a form of the ‘great mother’, she had fierce and dangerous aspects (Rodrigues 2003:17). The Rajput women I walked with would take care in greeting her shrine in passing it, as she would be sure no harm befell them in venturing into the forest to lop trees for fodder, when collecting branches for fences or for brooms, herding goats etc. Her powers would also, I was told, keep ghosts and spirits (*bhūt-pret*) away from the village, thus making the forest a safer place to move about.

Other forms of the ‘mother’ were popular too, such as Kālī, also a fierce form of Durgā. In these cases, the Goddess’ *independent form* is worshipped, and not the Goddess as

‘consort’ (Erndl, et al., 1998 :176). As independent, she is powerful, but also lacking the controlling presence of a husband (male deity). The Goddess could be approached at the regionally popular Durgā temple in Dhamra, this was also located away from settlement, in a relatively large and open space.

Another deity tended at the periphery was Panch Pīr (the saint of five). The power wielded by field deities such as Panch Pīr, was considered very strong by the landowners, and if passing their shrines, one would pay his respects through greeting (*praṇām*) them. Protected by Panch Pīr shrine whilst working the fields would, according to the Rajput women prevent one from being bitten by venomous snakes. His goodwill was also crucial for harvest, and after each major harvest, there would be made offerings to the deity “so that everyone’s work will be/turn out good”, as Prakash explained to me (see chapter 5). The Rajput Panch Pīr shrine was a modest stone structure, located on the fields almost in a straight line below the Kheṛa baba temple. Above the Kheṛa baba temple too, was a shrine that women were not allowed in the vicinity of, and that I never saw. This was ‘Soṛ devta’, and his, as with Panch Pīr’s energy (*śakti*) was seen as being particularly dangerous to women. Panch Pir would then probably be what Mines (2005:2014) calls a ‘fierce god’, a powerful agency in villagers’ life.

Fierce gods, argues Mines, are “contingencies of the Umwelt (environment) over which actors appear to have no immediate control” (Mines 2005:213). To control them, however, one can enshrine them. The practice of enshrining a deity, seems to be because also deities (not only ghosts or demons) are seen as dangerous when they are roaming. Roaming, they are uncontrollable, but by “enshrinement”, a deity – no matter his or her size - become accessible, manageable when you build a shrine. In doing this, you invite the deity to settle, “to abandon the lonely and desolate places which are the characteristic haunts of demons and ghosts”, as Sharma (1974:82,83) notes from Kangra. If we see, with Raheja (1988a, b) and Fuller (2004), the capacity for the deities to encompass evil, we also see the pressing need for their presence in the village periphery, almost as if they



were important for a certain auspicious ritual balance, and the village periphery has a function, to encompass or transfer the inauspicious away from the village *as a whole*.

The notion of symbiosis and balance between benevolent and malevolent agencies also appear in Mines (2005) when she discusses South Indian village goddesses of Tamil Nadu. They seem to stand for the *encompassing* village much like the northern Kheṛa Baba. According to Mines, a South Indian village Goddess stands for the whole village, not metaphorical, like a rose for love, but rather as a synecdoche (a trope in which the qualities of one part of a whole may be said to characterize and suffuse the whole). In Mines case, who was called the ‘village people’, depended on who were of owner-cultivator caste or not. But, the benefits of the goddess did befall everyone in the village, including the landless Scheduled Caste population there, just as Kheṛa Baba protects the whole of Rani Mājri, including the Scheduled Caste hamlet. Mines suggests that this ‘encompassing’ role of the village Goddess indicates that what is good for the dominating part - the ‘village people’ - is beneficial for all the others too (Mines, 2005:33), as if there is a symbiosis there. Fuller also notes this, when commenting on the relationship between deities and the village population, that;

“There should always be harmony between the deities and the population and territory that they protect and rule over, as well as compatibility between the people and their land, whose qualities are ingested by eating food grown in village fields and drinking water drawn from village wells” (Fuller 2004:128). The birthday celebrations considered with the theories above, there was a sense of balance that had to be kept by partially including the Scheduled Castes into one encompassing village. This also, however, offers a re-reading on environmental pollution.

In this dissertation, seeing that waste-matters and the concepts of ‘pollution’ are so central to what might constitute pollution, and seeing that many scientists on India have discussed a possible conflation of ritual and environmental pollution, the subject will get a brief mention here. An eventual conflation with dirt, as in ritual pollution, and

environmental pollution<sup>45</sup> (*pradūṣaṇ*, pers.com. C.P. Zoller 2016), should be considered briefly.

### *On Ritual and Environmental Pollution*

In the village of Rani Mājri, older people would opt for “*gande*” (litt.; filthy, dirty, foul) when describing both garbage, smog from factories and the Scheduled Castes. But does the conflation of dirt extend to conflate ritual and environmental pollution in to one? My own material does not indicate such a thing. In fact, environmental pollution appeared with its own distinguished concept of *pradūṣaṇ*, as in the village, younger people opted for *pradūṣaṇ*, not *gande* talking about environmental pollution (see chapter 7), but seeing the concepts accompanying one another so closely, the central discussion on the issue should be outlined.

Raheja's (1988a,b) discussion of the center-periphery model of caste hierarchy, and on the control of benevolent and malevolent substance between a (chaotic) periphery and a (controllable) center, for example, has been expressed in Dipesh Chakrabarty's (1992) article on garbage and the potentially malevolent 'outside', and in Thomas Rosin's (2000) work on recycling and waste in Rajasthan.

Chakrabarty (1992), looked at the dichotomy of inside and outside in Indian society, and how it related to ‘dirt’. Even if the conflation of waste-substance (environmental pollution) and caste- substance (ritual pollution) is not explicitly dealt with, it is still present in the way he finds these ‘borders’ of what is inside (private and clean) and what is outside (publicly managed and dirty) transient and porous (Chakrabarty 1992:543). Chakrabarty looks at the need to control what is ‘not known’ - potential pollution carried on by strangers, especially emphasizing behavior in what many Indians see as a particularly polluted place, the marketplace (Chakrabarty 1992:542). The market,

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<sup>45</sup> *Pradūṣaṇ*, from Sanskrit, is a word that means ‘defilement, contamination’; but that in contemporary Hindi and Pahāri translates as ‘environmental pollution’ (pers.com. C.P. Zoller 2016).

however, is also a place where many strangers interact, and large gathering of people do often tend to result in concrete waste. That strangers might carry both ritual impurity and waste, can still be two different things, although they here follow each other.

The confusion and apparent conflation is however still at hand. As a student of McKim Marriott, Rosin (2000:364) looks at what happens to litter and waste in a city, and finds the streets to be central as a venue where the processes of traffic are “conceptually conceived and experienced” as central in a process of recycling. Rosin observes that people take the center of the road, he interprets this into a larger cosmological analysis of flow, where the center of the road is cleaner and safer for travel than the roads edges, where people shun castaway debris. Dust, used for cleaning buckets and kitchen utensils by women, is also gathered from the center of the lane (Rosin 2000:362). Garbage and ritual pollution again, seem to flow into one and the same concept, making it probable that Indians (in general) have a completely different idea to ‘Westerners’ of what constitutes ‘pollution’.

This conflation, however, is often to be found when the analysis is drawn to a very abstracted level, and might not work as well in practice. I will try to illustrate what I mean with Vijaya Nagarajan's (1998) work on waste and garbage on the ‘earth goddess’ in a Tamil Nadu village. Here we find an attempt at explaining why sacred spaces are allowed to become polluted with waste if waste indeed has this deeper connection with ritual ‘dirt’.

Nagarajan observes that the sacred space<sup>46</sup> of Bhū Devī (the earth goddess) in front of people’s houses, are being littered on during the day. Nagarajan is puzzled by the contradiction between a space being divine or holy at one moment, and littered the next (Nagarajan 1998:277).

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<sup>46</sup> The space is marked by the drawing of the kulam, the hand-drawn pattern in fine powder that is often seen to decorate the space in front of people’s houses in South India

Her conclusion is that “[t]he natural world is a divine being and therefore capable of cleaning herself”, and that “[w]aste, sin and pollution collapse into a category that is seen to be absorbable by both Bhū Devī and Gangā Devī” (Nagarajan 1998:276-277). On a very abstracted level, this might make sense, but does it make sense on the practical level? What if waste is not ritually polluting, just merely plain dirty?

One of the more thorough discussions of a possible semantic and/or symbolic conflation of ritual and material dirt indicating this, is David Haberman’s (2006) fieldwork amongst worshippers of the environmentally polluted River of Yamuna. The Yamuna is one of the most holy rivers in Hinduism, but very polluted by waste and poisonous debris. Haberman is careful not to posit himself as an “oriental ecologist” in response to the critique formulated by Bruun and Kalland (1995) (see chapter 1), and seems to agree that Hinduism has no inherent cosmology that automatically makes people take environmentally sound choices. He also indicates, that it is merely coincidental that water in Hinduism can carry away both environmental and ritual pollution.

If the two notions are related, argues Haberman, it is because the environmental degradation of the Yamuna is both an ecological problem, and a religious crisis (Haberman 2006:1). He subsequently draws the line between the physical condition of the river, and the notion of sacred or ritual purity. Drawing that cognitive line, is exactly what allows the Yamuna to be considered both “dirty” and “pure” at the same time, by the same individuals (Haberman 2006:131-132). As he concludes, the Yamuna may become dirty “but never impure” (Haberman 2006:132).

I will thus work from the notion that ritual pollution and *pradūṣaṇ* are two different things, but rather indicate, that they tend to follow each other, but more as consequences of self-centered action and disregard for the wellbeing of others. I will get back to this, in chapter 7, and here return to the *kuhl* yet again.

## Springboards to ‘Progress’

Seeing the control of water is both politically and ritually in the hands of landowners, one begins to note the relevance of state interference with the physical landscape. When IISWC implemented a watershed management, intended to benefit 'the whole village' via the Panchayat, it was simultaneously one that could, it may seem, serve as a convenient continuation of the old 'water regime'. Baker (2005) emphasizes this in particular from Kangra, where the management of *kuhls* were found to reproduce key social relations, as the use and allocation of water was largely structural and entwined with power on community level. It could thus also be argued, that enforcing the *kuhl* water regime helps the discrimination of females and Scheduled Castes to persist in local power systems. The springboards to 'progress', nor the capacity to 'adjust' to the predicted climate change issues, now seem far from leveled.

For the marginal landowners, and especially the Scheduled Caste population who were 'landless' in the sense that they only had access to rain-fed, hard to reach plots, dependency on outside employment was crucial.

The opportunities for supplementary incomes were by 2012-2016 rather low in the village itself. Many Lohar families had made a fair earning on carpeting, one male worked as the local shopkeeper in the local roadside shop, and two of the women were caretakers in the village day-care center, for a small government salary. One Scheduled Caste couple shared the responsibility for sweeping the streets of the main village, and one Scheduled Caste female washed at the schools, all of which was also compensated with small salaries from the government. The Rajputs had one female working as primary-school cook and teacher assistant, but generally, all castes took advantage of the village being situated within a couple of hours from the industrial factory hubs of Haryana and Himachal Pradesh.

Most Rajput and Lohar males, except those in charge of the largest farms, would commute daily with motorcycle, bus or auto-rickshaw, either as employees or as daily laborers with manual and/or conveyor-belt work, moving and packing soap and washing detergents, motor-engine parts etc. The Scheduled Castes would take additional work as

tailors, or as manual laborers at larger farms in the district, but were far from meeting the requirements of a ‘modern’ society, with less possibilities to ‘progress’.

This was very different for the landowners.

As we saw, a landowner can supplement a farming income with a few sons migrating for work and one son (or a wife) taking care of the land. In addition, being a landowner of reasonable size, one could trade surplus crops or even dedicate some fields for pure cash-cropping as a supplementary income. Many of the largest landowners collectively grew and sold ginger – dried and sold as *sonṭh*, and benefited from individual sales of surplus wheat and tomatoes. Rice and wheat would also be used as payment in kind, for tractor and transport rentals, or for services performed by Scheduled Castes and marginal Rajput villagers at harvest.

Although there were little or no possibilities to expand the amount of land under irrigation, there were certain opportunities to expand farming by “leasing” adjoining village land, or by joining up when selling and buying ginger (which the village land owners did in unison). In this way, landholding families across caste and village borders could be in a reciprocal relationship with each other. For example, the household of Prakash and his brothers worked with field-neighbors ("*hamara san-ji*<sup>47</sup>") from the neighbor village of Bapūli, who rented or ‘leased’ the adjoining land to the household, collectively working the land and splitting the yield 50/50.

A few Lohar and Rajput men from the financially stronger households held white collar occupations, commuting to the larger cities nearby. By 2013 there was one Lohar working as an accountant, one Rajput fire-officer, one Rajput under education to become police officer, and one Rajput working as camera-man for the local TV-station, all males, and all of them belonging to the three families with the largest landholdings.

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<sup>47</sup> I have not found this word in any dictionary, but translated it here as a polite way of addressing those connected to us/bordering us.

These white-collar occupations payed better wages (especially those in the private sector, which were the most sought after) which gave trickledown effects for their children, both in respects of building social networks outside the village, but also in pure social mobility, enabling parents to plan for private education. To educate ones' children through government schooling is free, but by 2013, rural public schooling was seen as inadequate. To meet the requirements of the urban and contemporary workplace, the costly private sector schools or private evening tuition was seen as the only way to access adequate education. (With my own experiences from Indian rural government schools, I have no reason to believe that this is an exaggeration).

Seen from this perspective, we get a village with the larger landowners earning a fair share on selling surplus and cash-cropping, money to be used on health services, building maintenance, farming equipment, transport and education of children for example. Smaller landholders, especially the landless, find a hard time being even close to self-sufficient, and pursue other occupations outside the village to make ends meet. The landowners thus seem as if they do have the better springboard to 'adjust' in the future, but this would be to overlook another form of marginalization.

Seen from yet another perspective, the status of the farmer is not exactly prestigious. Running a relatively small farm in rural hill India in 2013, was a time and labor consuming enterprise. The terrain, the quality and amount of land has always made it hard to meet the increased demand for cash economy in these regions, but to meet the demands for capital has however only increased with time. There is no new farmland to expand onto, and as families grow, larger pieces of land are divided between sons, the next generation ending up with smaller plots than the preceding one. With less land, there is less work - but also less yield. As women still cut the crops by hand, weed by hand and men fertilize the fields by hand and till by oxen, the time spent on work in general to meet the demands for the household then, cannot have declined by any significant amount since pre-colonial times.

As have become clear, access to *kuhl*-irrigated fields provide both more yield, and the possibility of cash-cropping. For many large farms, this was the only monetary income by 2013, and as such, their vulnerability to fluctuations of the market economy was considerable.

For all larger landholders, choices made in the present time, was to ensure that the future could enable the forthcoming generation with the possibility of social mobility, especially via education. This was first and foremost provided to sons, so that they could run the (to be) their farm as a subsidiary income to (preferably) white collar jobs.

Within the Rajput caste, the identity as farmer and landowner was highly underscored, and in this segment, no-one talked about ever moving out or giving up farming completely. This was different amongst the families of the Lohar caste, who for generations had benefited greatly from combining farming with trade – but where the farmer identity was underplayed in relation to the artisan. I found the focus on education and “office jobs” particularly strong amongst the Lohars, who contrary to their Rajput neighbors saw no reason to continue their fathers farming practice unless they had to, as their families had primarily been farmers to begin with. This ability to leave farming behind to embark on more prosperous careers had left very few Lohar households living in the same poverty as some of the Rajput families.

The small Rajput settlement of Khot might serve as an example. Located a short walking distance to the south of the Scheduled Caste hamlet, and built as a small nucleated settlement on a southern ridge, Khot appeared in the same watershed as Rani Mājri, and was partially connected to its *kuhl* by a drinking-water pipe, following the unpaved road that connected the villages. (As we saw above, a letter to Khot would be addressed to Rani Mājri, and they were represented in the panchayat as one village). In theory, the small Rajput population of Khot would also benefit from the same government initiatives as Rani Mājri. But Khot appeared in 2013 as very different than Rani Mājri.



The houses here were small and unpainted. They were crude constructions of half brick, half clay and mud. Few buffaloes could be stall-fed here. Khot had no bus-service or road connection that could ease the journey to the factories or the markets, and the level of education was low in all age-groups, compared to Rani Mājri itself.

Although land under cultivation was relatively large, they had only a small fraction of irrigated farmland, provided by an old, earthen *kuhl*. This *kuhl* had no river as its source, but groundwater that would gather in a tank under a small grove, constructed in the 1980s. For some reason that I am not aware of, their local *kuhl* system had not been improved since then. Their irrigation system was thus vulnerable to drought or years of scanty rainfall, and the landholders here had a hard time keeping themselves self-sufficient. Landholders and Rajput, their influence on local politics was better than the Scheduled Castes, but for many marginal landholders, their income levels per 2013 were not much different. All in all, the contrast between the settlements of Khot and Rani Mājri was stark, and indicated perhaps the relevance of the Rani Mājri *kuhl* and how those who manage it draw power and leverage is based just as much on family lineage and individual agency, as it is caste based.

To acknowledge that poverty and low social mobility also exist across caste identities, is consequently just as important as acknowledging that caste discrimination is still salient. But before I conclude the chapter, there is (at least) one other thread of the social fabric of the village that must be mentioned, and that would be the one of gender.

Since Berreman observed it in the 1960s (Berreman 1978), male work-migration from the hills regions to the plains regions have been an increasing trend. By 2013, the trick for the larger landowning families of the village in contemporary North India, was to find the right balance between farming for self-sufficiency and income. This balance could be achieved by producing several sons, so that one or more could benefit from education and paid labor. This allowed for at least one son remaining to keep the farm going. If the farm had some size, it required the sons to marry wives who could dedicate themselves to

farming. If the farm was marginal, and producing too little for making a profit on sale, the husband would pursue wage-labor, leaving the wife alone with the farm, the livestock, and/or children and elderly in-laws. In the case of Bhagwati and Bhupati's household for example, the three daughters-in-law were all proficient agriculturalists, and although they would very much like to educate their own daughters, they required a hard-working daughter-in-law (*mehnatī bahū*).

This has left women of landholding families in a difficult situation. She is more often than not down-prioritized in education, and her participation in issues involving their own, and/or their children's wellbeing, was close to non-existent. Changes occurring in household labor division has not really benefited the females very much at all, but has rather left her with more hard work. It is still important to acknowledge that although these processes are negative, there are other developments too.

Through these two latter chapters, we have seen also how improved water availability and water security through watershed-management has benefited the village in general by drawing attention to the needs of the villagers. It is a village that by 2013 had undergone great changes – all being remembered by a living generation. From having no access to electricity, education, media, entertainment or piped water, all households had televisions, nearly all had piped-water, and everyone born after 1980 had education, and most children of both genders born after 2000 completed classes 9th-10th (which completes compulsory education in India). Youth of both genders were also increasingly attending and completing “+2”, the higher secondary school level which prepares the students for college, and a handful of males and even one woman traveled to the larger cities of the vicinity to pursue higher education in government colleges. Khot, it was rumored, would soon have a paved road too.

We might conclude from this chapter that the village of Rani Mājri is a complex place, not easy to define. When utilizing a ‘ritual’ optic, the village was seen to encompass

much more than landholding and landless castes, which effectively makes the village less clear to define for policy makers.

The chapter also showed how control of water has been central for both ritual and economic leverage, and indicated issues with the Scheduled Caste settlement being excluded from the watershed-management project based on their lack of irrigated land. I end this chapter on a 'future' oriented note; how will these differences matter in the face of 'progress'? What kind of knowledge is valued, and by whom, in that process?

In the context of climate change and global warming policy specifically, there seems to be a tendency to glance past these ways of knowing the world. The know-how, knack and skill of the rural hill population, I argue, is derived as much from the practical and processual act of *dwelling* (Ingold 2000;2011). Dwelling in a North Indian Hill village implies a mediation of a close connection between the environment, humans and their deities. This relationship, I argue, become apparent if one followed work and practice amongst farmers. My next chapter will therefore look more closely to the daily practices that make up the 'being-in-the-world' that the concept of dwelling denotes, through following the daily practice of Rajput farmers for the most part of a year.

# Chapter 5

## Seasons

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A newly married girl I knew in the village, reflected on the difficult process of adapting to the life in Rani Mājri. Worst of all, she said, was the massive amount of work demanded by the women there. She came from a farming family too, but one on the plains, where the large landowners could use tractors in their harvest. This, she said, enabled the wives to focus more on homely tasks and on becoming good “house-wives”. (English term used). She continued;

“Here... life is a waste. People in [my natal village] think that people here in Rani Mājri are *so* rich, but I have just realized, they are poor - *so* poor! They work all day, but still, they earn no money! Here, what is the use of dreaming?”

(Rajput woman, 24)

This chapter is not about lost dreams however, but rather dedicated to work, and how it fluctuates in intensity and duration through an agricultural year. I have chosen to do so, because it is, I argue, through physical labor and ritual practice that people in Rani Mājri engage with the environment, and that it is in this relationship, that their ‘awareness’ of climate change too, appears.

Attention to seasonality and weather will thus be of relevance for how my analysis proceeds. I have chosen to look at seasonality following Franz Krause (2013), who through following seasonality amongst the Sami of Finnish Lapland, unraveled a dynamic of social and ecological life, where seasons come into being in the rhythm of subsistence activities, rituals, residence arrangements, taboos etc. (Krause 2013:27). His approach brings a notion of “timeliness” into the dwelling perspective, building upon an

intimacy between “place” people, temporality and practice. This chapter will attempt to bring out this temporal sensitivity, the skill that is required for knowing when the right time for sowing is, harvesting, worship or arranging a wedding, and what places, people and times make certain practices auspicious and other inauspicious.

As we saw in the preceding chapters, however, class, gender and caste regulated movement, timing and social influence in Rani Mājri. Their practice, following Ingold (2000,2011) and partly Bourdieu (2010) (see chapter 1), are activities that shape their engagement and relationship to the environment, an environment that is also shaping them. To relate to one’s environment then, I argue, thus happen through the act of ‘dwelling’ (Ingold 2000).

The local expression in Rani Mājri for the environment, or the “surroundings”, was “*vātāvaraṇ*”. *Vātāvaraṇ* literally mean ‘wind covering’, similar perhaps to the word ‘atmosphere’, but also often used in the same way as weather (*mausam*) (pers. comm. Zoller 2016). In this, it is perhaps more likened to the notion of ‘landscape’ that with Ingold (2000) is not a totality to be observed, but a world in which we are immersed (Ingold 2000:207). Dwelling is to be immersed in *vātāvaraṇ*, and indicates a process actualize the relationship I perceive there to be between people and their home-place, the intimacy between the ground, the air, the water, the deities and the people.

To depart from a concept of dwelling, as being immersed in an environment, is however not to denote a romantic, symbolical bond to flora and fauna. It is rather one that denotes a relationship of strife, toil, play, and routine; one of knowledge, and skill. It is to this, I now turn.

# Rani Mājrian Seasonality

## *A Note on Textual Choices*

The text below is sectioned into six seasons. The six seasons is often referred to as being made up by two and two months, but in Rani Mājri they would talk of the hot season as having three, and the spring season as having only one month; this will also be how it appears below in my text.

As the agricultural year is so influential for the work, movement, and temporality of life in the village, I begin with what is counted as the first season in the agricultural year, the rainy season (*Barsāt*).

It also should be noted that in daily conversation regarding public services like school etc., the Gregorian names of months were used, but when talking about ritual dates or activities in relation to these, then Pahāri names connected to the lunar system<sup>48</sup> were used. I have chosen to use the Hindi terms for the months and seasons (as most of the local words were more or less similar or identical to the ones used in Hindi and or Punjabi), with the comparable Gregorian months in parenthesis for readability. Lastly, I have tried to clarify in what ways practices might diverge based on caste and gender, but it is important to keep in mind I base my account largely, but not exclusively, on the practices of Rajput women.

## Barsāt: surging water

In Rani Mājri, the agricultural year begins with the season of *barsāt*, translated here as the rainy season, or the monsoon season. It usually makes its appearance with the onset

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<sup>48</sup> The dates of the (solar and lunar) Hindu calendar are not fixed, and vary with the timings of the sun and the moon, but they generally correspond to mid-solar month to mid-solar month.

of the month of Asāṛh, and lasts through the month of Sāwan, covering the Gregorian calendar from mid-June until mid-August.

The winds that carry with them the warm, moist air from the south western Indian Ocean during Asāṛh are eagerly awaited. The monsoon provides not only relief from the intense summer heat, but its onset kick-starts the agricultural production, power generation and construction. So decisive is the monsoon's effect on national economy, that a former finance minister and President of India, Pranab Mukherjee, allegedly called the Indian monsoon the true finance minister of the country (Narain 2014; Shira 2015).

In Rani Mājri, the farmers talk about the forthcoming rain, but so do the landless and the marginal landholders. The rain is important for everyone; "for everything, everything needs water", the Lohar shopkeeper told me. Dwelling in Rani Mājri at all, depends on a predictable monsoon, on its capacity to refill the aquifers<sup>49</sup>, and to supply irrigation and household consumption.

In 2013, the pre-monsoon signs arrived at the very end of May. It was like the village woke up from slumber. Where people just hours ago had been weighted down by the intensity of the sun and the extreme, dry heat of summer, the winds and clouds that arrived from the plains one afternoon caused hectic activity. Old ladies would place their plastic chairs in the rain, and young girls danced in the water cascading from the roofs. The small and sudden showers would make the soil moist and ready for plowing, but there were preparations to be made before the "real" rains began.

As the pre-monsoon shower halted, farmers hurried down to the fields. There was no time for breakfast now, instead it was brought down to the fields, so one could utilize the maximum of daylight. Even in mid-day sunshine "work goes on" (*kām*

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<sup>49</sup> Aquifers refers to the layer of rock and earth that holds groundwater (National Geographic Society 2011).

*caltā hai*). Rubbish, dead leaves and debris was swept away, or burned to make everything clean (*'sāf safāī'*) - to let the water flow freely in the *kuhl* and to deprive mosquitoes and flies of places to lay eggs.

Before tilling can commence, the soil must be picked clean of stones, twigs and pebbles to be ready for the tilling. Despite the discomfort of the humid heat, literally everyone able to, was picking up the stones that had appeared on the soil surface<sup>50</sup> since last growing season.

One by one, stones were removed by hand, and carried away in baskets. The larger ones were used to maintain the low, dry-stone fences that separated the fields and plots, others were thrown in small piles of pebbles by the road. Broken fences and withered stalks of old tomato plants or grains were removed and sorted.

Around this time, an offering is made to Panch Pīr, the deity of the fields mentioned in chapter 4. Panch Pīr is a field protector deity, whose presence could be extremely benevolent or malevolent for the forthcoming growing season.

Male landowners (women could not attend this particular worship<sup>51</sup>) would sacrifice the blood of a male goat, killed on the fields next to his shrine. This offering is central, as it will benefit the forthcoming *kharīf* growing season with auspiciousness - so that everything would turn out good (*acēhā*), said Prakash.

In the following days, plowing and tilling with oxen could commence. The timing of this tilling is essential. The soil stays moist for a very limited span of time. The early rainfall is often followed by longer heat and dry-spells, which bring the soil back to a stony, cracked surface, impossible for any oxen to plow. The men would plow, as it would be very inauspicious if a woman were to do so. Women would instead concentrate on carrying the two-year old composted manure – now in the

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<sup>50</sup> Pebbles and stones are known to have an upward mobility in sandy soil. There are several geological reasons for this, as being frost heave, water erosion, soil expansion and contradiction through drought and rain etc. (Dregne 1976).

<sup>51</sup> As women were not allowed, I did not witness this ritual, but was given a short recount from Prakash.



state of fertile soil - in baskets on their heads, molding it into the newly tilled soil by hand. Warm and airy, it would enrich the soil for a wholesome produce. There was generally far from enough manure for all plots, however, so even the largest landholders have to prioritize. Only the most valuable crops would receive the organic fertilizer, such as the fields in which they plant the ginger, which will provide *sonṭh*, the cash crop, and main source of income for the large landowners. The farmers additionally rotate which fields are used for what crops, on a four-year rotation.

The work is exhausting and time consuming. In the glaring sunlight and high temperatures, sweat pours and disturbs your vision. Even the fields that lay far from the settlements and the *kuhl* system, like the higher lying or southern fields that during the winter-season lie fallow, are plowed and sown. During the monsoon season, these fields receive enough rain to support a yield of pearl millet or maize, whose seeds are broadcasted on the ground, and then plowed into the soil.

It is late night before the families return to the households for dinner. After a long day's work, people wait a little for the sweat to dry before taking a highly irregular evening shower, (or drizzle - there was soon no more water in the tank). Stomachs growling, people sit in darkness on the roof, stretching to reach the faint winds, hoping to cool sore muscles whilst the "housewife" prepares the food. Finally, the bell is rung. Evening food, (*rāt kā khānā*); rice and lentils, sour milk to drink – again. Food is unvaried, and fresh vegetables have not been available for weeks.

To know the right time for both ritual and planting of diverse crops is crucial. The farmers would have spent the last weeks before the rains preparing the blue crates of ginger-roots that were examined, and sorted into piles depending on whose household they belonged to. They had been bought in Shimla for this purpose only - the heat of summer makes their own homegrown ginger rot.

A successful ginger crop, for example, requires rain for a few days, then a halt in the rain for a few days, as the soil should be moist, but not too wet for the ginger to root.

The ginger is not sown alone, but in rows, along with turmeric and colocasia variants of the taro plant. In between the rows, coriander is sown. The whole family is attending the planting, working as teams digging ditches and trows for water-flow, placing roots in a systematic pattern with other vegetables intended to provide the right amount of shade, water and nutrients to the ginger. The roots, laid out in a pattern, is then pried into the earth with a pry-bar. Finally, rice-grass from last season, and leaves from lopped trees, are put on top covering every little corner to protect the crop for the sun that peer down between these early bashes of rain.

In the early days of barsāt, enjoyment and relief quickly gives way to nuisance. Days pass, with only taunting skies drifting above the village. The season's extreme humidity coupled with extreme heat affect people's moods. The people in the village claimed the heat made them more easily irritated. In disputes, they exchanged short, dismissive comments to each other, but they never amounted to any quarrel, the heat and the labor gave a designated weariness to action. Then, finally, by mid-June, the intense heat was broken off by heavy rain. The monsoon *proper* had arrived.

The monsoon rain is far from constant, but is marked by dramatic shifts and turns. So is work and travel. The increasingly heavy pre-monsoon showers create distortions to communication, bordering havoc in the cities (Bhatia and Khanna for the Chandigarh Tribune, 2013). The streets overflow with rainwater, causing plugged sewers to brim, tarmac to collapse, and trees to topple over in the strong wind. Electricity lines snap, traffic gets blocked.

In the village too, work halts when heavy clouds release a heavy rainfall, making water fall as if from buckets. Strong winds carry cool air and thunder claps that make people hurry home or to shelter. The showers are never that long, there is time

to sit, to wait, to listen. When the rain halts again, people resume their tasks, attuned to the rhythm of the rain.

As the month of Sāwan begins, the activity level is still high, but it no longer carries the same sense of urgency. In Rani Mājri, many of the newlywed girls depart their new homes for the whole of Sāwan, as it is known as a time where, in the first year of marriage, mother-in-law and daughter-in-law should not meet, as anger (“*gussa*”) would arise, straining the relationship.

The days are warm, humid, and sticky; the air so thick with humidity, the surroundings so potent with growth, one feels like it is almost bursting. After a few days with intense showers, everything crawls with life, there are bugs everywhere, in the flour, in the bed, in the bathrooms, in the air. Frogs croak, flies hum, mosquitoes buzz, but the birds are quieter than ever. The work is tiresome. The absence of wind and the high temperatures in between the rains make the sweat pour, itching heat rashes are common. Many become ill, diarrhea and vomiting is common, and is believed to come because of working in the sun, or at times from drinking the monsoon water from the *kuhl*. Its movement through the ground would bring bacteria from the excrements of humans and animals further up hill, and could also become so polluted with silt that though in abundance, it would be difficult to drink. It had been worse before, however, as my old neighbor widow illustrated, by showing how she would have to filter the water for sand and debris through her teeth, teeth that she no longer was in possession of.

There are frequent landslides too, smaller and larger, as the porous soil gets heavy with bashes of rain. This sense of instability is addressed by ritually approaching Khwaja Pīr, as deity of rain and water, he was regarded as a benevolent protector, and as guardian of significant power, reaching far beyond Rani Mājri (see chapter 4). Considered a village- *rakṣā* his *pūja* was performed every year before the monsoons onset. It was done by the *kuhl*, or in connection with unusual and

untimely water-related incidents, such as the one I describe more fully in chapter 6. The ritual devoted to Khwaja Pīr would be initiated by a specific household or lineage, as far as I know Rajput, but could be attended by a larger group. In my case, I do think this group could include Lohars but not Scheduled Castes, as was also noted by Sharma (1974) from Kangra.

As Sāwan progresses, work continues steady, and the rain too. Instead of dramatically falling in buckets, it now drizzles a little every day. After almost two months of humidity, the heat begins to let go, making the air feel almost pleasant. Men, women, unmarried and married, on Mondays throughout Sāwan people work empty-bellied until the sun has set, and everyone gather for dinner, which has been enriched somewhat with the ripening bottle gourd. Fasting from sunrise to sunset every Monday throughout this month is considered a very auspicious thing to do, and many choose to do so, for Shiva and for Krishna<sup>52</sup>, the women told me.

This is the right time for planting the rice grass (*dhān*), and once again whole families gather on the fields. The women fold their trousers (*shalwar*) to their knees, tie the tunic (*qamīz*) above the hips into a knot, and the shawl (*chunni*) around the head.

The sandals are kicked off, their feet make squelchy sounds in the knee-deep water, swapping place with water and mud. Plop-plop, the rice grass goes into the wet soil below the water surface - not too deep, then it won't grow. Sposh-splash - not too shallow, it won't root. Periods of quiet concentration are broken off with periods of cheerful songs (*gīt*). The light breeze gives a playful tint to labor. In a tea-break, an uncle makes a small "windmill" of a stick and a mango-leaf for a small boy who

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<sup>52</sup> Mondays throughout this month is considered especially benevolent for Shiva worship. I have not seen Krishna mentioned in relation to this in literature before, but nevertheless, he was mentioned by the women.

whizz about with it, making it go around and round. A few boys attempt to use the *kuhl* as a water-slide. Finally, there is rest in sight.

Water is in abundance. The fodder gets wet. The laundry gets wet. The floors go muddy. Everything moves with life, there is even green where there should not be any green, like up the walls, rooftops and on the telephone lines and electricity cables. In the late evenings, children flock to the mango-grove between the Scheduled Caste hamlet and Khot, with plastic bags. Nimble, they climb up the majestic trees, shaking the mangoes down to the youngest, left on the ground as a gathering crew, trying to outsmart the sullen cows who feast in the fallen fruits. Ripe mangoes are indulged on the spot, unripe mangoes are carried home and used for the local chutney, intensely sweet and salty at the same time. The maize has grown, it is dark green, the chili plants are lush - the landscape is barely recognizable from only a few months ago, as the season grows into autumn.

## Śharad: flowing water

Śharad ritu, or, “early autumn” season, begins with the lunar month of Bhādoṅ in Hindi (pron: Bhadrpad), or mid-August to mid-September in the Gregorian calendar. It is a season of growth that lasts through the month of Āsin (pron: ashwin) which lasts from mid-September to mid-October.

There’s still the occasional rainfall, and the days are still warm, but the clouds in the sky do not always carry rain with them. As all the crops are now in the ground, the fields look like a wonderful mosaic of green from the forest above the village, where the guava ripens on the intermittent trees. This is a time for rest and of television soap operas, as well as an auspicious time for attending to the relationships to the deities, and to the relationships between people.

As schools reopen after summer, admissions and future prospects are discussed within families. Recruiters arrive from the plains, from Private Primary Schools, Colleges and various Universities. In couples, they approach mothers and fathers, and leave them fliers for dreams and discussion. Most stay dreaming. Along the main roads, devotees of Lord Shiva, dressed in orange, tens of thousands of them, flow along the road on a pilgrimage to Haridwar to carry water home from the holy river Ganga. They are not the only ones that use this season for travel.

Religious journeys are made by the villagers too, at least those who are able to take time from work. Married women of all ages might visit their family in their natal home (*māykā kā ghar*), especially for the festival of *Rakṣā Bandhan*. To be in one's natal home during this ritual considered particularly important and auspicious for women especially.

The bond between sisters and brothers was held in high regard, and during this day, everyone who had the possibility to, would make the journey to their natal village to visit their brothers. Small bundles of grass<sup>53</sup> are tied and hung up around all the entrances to the house, and the girls and women would bring red wristbands (*rakhī*) to tie on their brothers' wrists in return for their protection. The tying of *rakhīs* extended to more distant relatives as well, like cousins or female friends. The atmosphere is relaxed, people are having fun (*mast*), and enjoy the special foods that are prepared for the guests, like the rich *pakoṛa*, fried onions enjoyed with rich and sweet *chaī*.

The women look forward to coming home to their parents, brothers, nephews and nieces, to rest, chat and just be with them. Many arrive in the village too - women who have married out come to stay, for shorter or longer visits, depending on their parents-in-law. Sometimes, as school reopens earlier in Haryana vs. Himachal

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<sup>53</sup> This might be what has been called 'durva' grass, but I have not found any more information on this. It was considered auspicious, and I do believe the practice was related to Ganesha.

Pradesh, the children stay behind after their mothers leave, for weeks on end, the presence of maternal cousins keep the young occupied with chatter and play.

Not everyone can travel, though. There is still a lot to do on the fields. Visiting women are not expected to help, and so the work for the remaining ‘house-wife’ is hard and time consuming. Cutting fodder or crops, all work on the fields should be done carefully and exact. Keeping the fields clean/even (*sāf*) and completing the work on time, is a matter of pride, reflecting upon their own and their family’s dignity and status in the village. The grass fodder (*ghas*) and the ripe chilies or tomatoes are carried home - often alone. The baskets are heavier than they look. The load of grass presses the spine down so that it feels like it will come out through the bum, while shoulders ache from keeping the basket steady upon the head while navigating the twists and turns of the stony, and at times, steep path.

At the onset of Āsin, many people would again fast, and women in particular would take special care to visit the Durgā-temple in Dhamra, a popular temple, five or six kilometers down the hill from Rani Mājri. To worship here during the nine-night Navarātri-festival of the season<sup>54</sup> would also be a very auspicious thing to do. During Navarātri the devī could be addressed, “in all her forms and manifestations” (Rodrigues 2003:16), and women in beautiful garments would during these days be seen walking in small groups from the villages and hamlets in the area to “see the mother”.

After Navarātri, they also initiate the time of the ancestor spirit *pūja*, where girls in particular are introduced to their “atma shanti<sup>55</sup>”. I never witnessed this, but I was

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<sup>54</sup> There are four possible Navarātras, but spring and autumn are the most popular in the village, as they would take place after two important sowing-periods.

<sup>55</sup> I have been notified that ‘atma shanti’ has been mentioned in Hans Hendriksens ‘Himachali Studies’ Vol.1 (of 3) from 1976, but I have not been able to retrieve this document. I will thus refrain from attempting to translate this concept.

told that they would wash the feet of all the girls of the household, and give the “atma shanti” the names of their girls so that it will give them protection. A priest (pandit) will visit each of the households of the village for the proceedings, holding one *pūja* for one household every day for a period of approximately 16 days.

The season’s latest ritual is the *Karvā Cauth*, where married women follow a strict fast (nothing but air should pass the lips, and not even water is drunk) between sunrise and moonrise for the prosperity and longevity of their husbands. This is a popular ritual, not only among the village women but also among the urban female elite, who acquire beautiful *mehandīs* (hennah-‘tattoos’) to testify their adherence to custom. In the village, however, the ritual is only complimenting the many adjustments women do in their daily lives to ensure their husbands wellbeing, such as avoiding calling him by his name, considered very inauspicious as it could shorten his lifespan with a year for each time.

As early autumn grows into late autumn, the temperature allows for boys to pick up evening-play in the street after school, playing a simplified version of basketball or cricket, and the maturing crop adds shades of yellow and orange to the mosaic of shades in green. Harvesting time is around the corner, and work, again, picks up speed.

## Hemant: timid water

The season of ‘late autumn’, consist of the main autumn harvest, and of preparing for winter. The season consist of the lunar months of Kārttik (mid- October to mid-November) and Mārgaśīrṣa (mid-November to mid-December).

In Hemant, butterflies enjoy the heat of the sun, the birds’ tweet, chirp, and chitter. The water in the *kuhl* has lost its ferocity, and is now reduced to a timid stream. Some waste; plastic and paper residue mostly, has begun to gather where the *kuhl*-water drop a meter or so at the primary school. Walking along the timid stream into



the fields in late autumn, one finds oneself encompassed in a yellow world. The maize has turned an ochre yellow, and has reached its full height now. There has been little or no rain for weeks, and the foliage is increasingly withering, and turning dusty from the dry ground. Forest fires are frequently reported in the media. The temperature is dropping too, making the mornings and evenings nippy. These days are best enjoyed, before long the days grow shorter than the night, and the winter chill again will force people to shelter.

As the time of many rituals and auspicious moments have passed, life is again centered on agriculture and work. The harvesting maize and coriander initiate a new period of all-consuming labor. The tomatoes ripen in bulk now, and are carried from the field in blue plastic crates. Carefully treated, they are wiped off in the house, providing the vegetable-soups with a savory tomato base for months, and the household economy with a minor boost for surplus sale.

Not long after the maize has been harvested, preparations for a new sowing season are made. The first half of the winter (*rabi*) crops are sown now. In Rani Mājri, mustard (*sarsom*) and chickpeas are grown together, both popular crops for home use.

Then, in early November, the larger landowning families harvest the valuable ginger. The tedious work of rinsing and cutting the ginger roots into small pieces is necessary for preparing it for the drying process which gives the valuable *son̄th*. The work occupies the whole family, the children as well, when they are not in school. The rice is also harvested now, the food grain kept for own consumption, stored indoors in metal crates. The grass is dried, and stored together with the maize stems for additional dry fodder throughout the winter.

The skies that have been predominantly clear during the day, are now increasingly dense with mist. During Mārgaśirṣa the large cityscapes of Chandigarh and Delhi are increasingly covered by a layer of fog mixed with smog, making the air almost

difficult to breath, coloring the mucus membranes of the nose to an unhealthy black. Winter is on its way. To prepare, women from all households' venture into the forest more frequently, to collect firewood - and extra fodder. The trips to the forest would take time, as the hillside holds the scant forest, and the women must walk and climb long distances. The forest floor is covered by the thick and thorny undergrowth, and the hills are steep at their edges. Beyond the trodden paths they are difficult, even treacherous to climb. The women have to venture outside the paths to find trees apt for lopping, for firewood, or the right leaves for ritual purposes. Loose stones on a sandy slope, a step at the wrong place in the wrong time might set off a landslide, and one would have to constantly cling to roots and branches exposed by the eroded hillsides in fear of joining the way of the pebbles, down the ravine to the river-bed.

The thicket tears at clothes, and women who could, would swap their sandals with old trainers, worn trousers and torn old jackets - leftovers from husbands or adult sons - to cover their *śalwār-qamīz* suits. There are animals to beware of, too. One seldom encountered by day is the black leopard (*čīta/baghīrā*<sup>56</sup>). Known to roam the hills, they would from time to time kill one of the village goats.

There are however less visible dangers than the large feline moving about in the surrounding thicket. Scorpions can be encountered, so can various sizes of lizards and venomous snakes of every size, from the large and intimidating pythons and boas, to the smaller, but still venomous kraits and vipers. The women do not fear them, however. Keeping within village vicinity, the Rajput women told me they were protected by the presence of Chandi Devī, a fierce form of Durga, as we saw in chapter 4. She was the Goddess that every woman in the village counted on for protection, irrespective of caste. Benevolent when tended to in the correct manner, malevolent when not, Chandi Devī had a shrine to her honor in the forest, a small

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<sup>56</sup> They called it *čīta* (cheeta) and *baghīrā* (bagheera) interchangeably, even though it is not the same animal. A bagheera is a black leopard, and cheetah is a spotted type of puma - and it is critically endangered.

walk up hill above the main village, and the Rajput women I occasionally accompanied, would often (but not always) take care to pass the site.

Continuing through the undergrowth and along the paths, one might come across several useful kinds<sup>57</sup> of twigs and leaves. *Jiggri* and *Butti*, was collected for firewood, *Bijūl* and *Bamboo* for fodder, *Sarali* for making ropes, and the *Khajoor* (the date palm) would be lopped for its leaves at the very top, which are ideal for making brooms. The thorny bush *Kaṅte* was popular for fences, (but this was often harvested by the men, as their thorns and spikes are efficient at keeping animals away from the fields, but also tear badly at hands and clothes). The *Bael*- tree is valued for its tri-foliolate leaves for Shiva, and the wild *Amla*-trees (wild gooseberry), carry small, green fruits for the children, which in winter are still so bitter and tangy that they will make your eyes water.

The *Khair* is valued for firewood, and has a high commercial value, but as we saw in chapter 3, its logging has been prohibited in the region since the early 1900, as per the Punjab Land Preservation Act. I was told that dispensation can be given by the department of Forestry for selling *Khair* grown on one's own property. The *Neem*, *Mango*-tree and *Ber* are also valued trees that grow close to the village. *Neem* provides the daily use of dental sticks and herbal medicine, and *Mango* and *Ber* provide the sweet fruits of mango and *jujube* (Indian plum) respectively. A *Kralti*<sup>58</sup> tree in the center of the Scheduled Caste hamlet was valued for its all-round use; as the large pink and white flowers were used in the yogurt sauce of raita, the buds as vegetable in dishes (*sabzī*), and the leaves as fodder.

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<sup>57</sup> *Jiggri*, *Butti*, *Bijūl*, *Sarali* and *Kaṅte* are trees that I have not found any Romanized way of writing, neither have I found their Hindi or English equivalents. They appear here as I heard them pronounced

<sup>58</sup> I might be the White Silk Floss, also called *Kunth*.

Mārgaśīrṣa of 2012, was also an auspicious time for my host family to holding the kul devī navarātri – the festival dedicated to goddess which is specific to the lineage of the family<sup>59</sup>. This was also considered the right time for completing the building of the new annex, or living quarter of the Rajput household, in which we resided most of the fieldwork duration. With three rooms, one small ‘common-room’ and a cemented patio in front, it even had an attached bathroom with a toilet seat elevated from the floor (the first ‘western-style’ toilet I had seen in the village). But it was still not ready to be lived in, for that, it was not the right time.

## Sardī: streaming water

The beginning of Paush, corresponding to the middle of December in the Gregorian calendar, marks the transition to ‘winter’. Winter will last throughout the months of Paush and Māgh, lasting from mid-January to mid-February. In this cold season, the winter-crops grow, and fog prevails in the hills and in the plains.

Whilst the shady location of the village provides comfort from the sun in the heat of summer, the sun makes people gather on the rooftops in winter, eagerly awaiting the warm light. As the village faces west with a steep hill at its back, the sun does not reach the first rooftops of Rani Mājri until noon - on clear days, of which there are few in winter. The days when the sun won’t be able to brake through the layer of mist, are the coldest. After completing the sowing of the final winter crops in January, the wheat and the onions, the rhythm of daily life now proceeds at a slower pace for a few weeks. In the cold, there are few bugs about.

Winter also brings the arrival of the winter rains, or the ‘second monsoon’, important to the success of *rabī* crops, which can be grown only on irrigated fields.

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<sup>59</sup> I never observed this, unfortunately, as this was in the month we did not live in the village.

The rains are different from the summer monsoon, in that the rain arrives with less quantity and frequency, and with short and dramatic intensity. Thunder and lightning accompanies strong gusts of wind, clouds that carry the rain darkens the sky as if it was nightfall. It halts as sudden as it appears, and the skies clear quickly as the clouds are carried on by the wind.

The intermittent rainfall makes water flow readily available in the *kuhl* again, making the daily routines of washing the laundry or providing water for the fields an easier task after the dry autumn. The rain makes the grass damp and cold, the bedding is damp and cold, the air is damp and cold - and people are damp and cold. Visits to the doctor for fever and cough happen frequently.

The regular tea breaks at 7am, 10am, 3pm and 5 pm with the warm and sweet cup of *chai* is now a welcomed excuse to sit down together, to regain some warmth. As the temperature falls, for those who have indoor kitchens, more people gather in the warmth from the hearth (*cuilhā*) than usual for their breakfast. Even the men who never usually eat there do so now. All outdoor work is postponed to later in the morning than usual, even the morning bath. In any other time of the year, people take their morning baths before anything else, but now those who are able to will postpone it, until almost noon.

The bath-water is heated on the coals from the hearth after the breakfast have been made, and carried steaming buckets into the by and large separate 'bathroom-stalls'. If necessary, and available, a small, unattached metal 'stove' shaped like a pipe with glowing coal in the middle to heat the water in the surrounding 'tube', is used as an extra heating device.

Amongst the Rajputs, the month of Māgh (late January) is a popular wedding month. Being a growing season, the time is auspicious for large social feasts. In 2012, my husband, baby and I had spent the first weeks in the village in late December, in a tiny room of the old main building, waiting to move into the new

building. Our room was almost ready, we were told, but something was the matter. In January 2013, before a wedding was to be held between Prakash's youngest brother and a Rajput girl from a village on the plains, we were finally allowed to move in given the pressure on accommodation for all the guests. A small *pūja* was held in the room meant to be our bedroom, with the lighting of candles in all door and windowsills, and some hasty swirls with the incense stick. Nirmala was especially grateful that I had brought a poster of Ganesha, the elephant-headed son of Shiva and Parvati, and told me that she and Prakash would soon join us. But for some reason, unbeknownst to me at the time, they did not. The two other bedrooms and the common-room were all empty for almost two months, not a piece of furniture was to be seen.

The wedding celebrations that were held in the village in January 2013 was appropriately celebrated with large quantities of food, large tents, large speakers and a deep pitch.

The ceremony is initiated with the bride and groom being ritually prepared in their respective homes on the evening before the wedding. In the evening after the ritual is completed, the grooms' family gathers for dancing and singing joyful songs. The next day proceeds with the departure of *barāt*, the procession of the groom and his family to the brides' home village, to take her back with them. A ritual greeting takes place between the families at arrival at the brides' village, and the wedding ceremony will take place there, completed with the couple making seven circles around a ritual fire, tied together with a piece of string, and pacing their steps to the pandit's steady chanting of sacred mantras.

After a tearful and dramatic departure, the couple is accompanied by women singing sad songs about losing their daughter. In a procession with members from both families, the bride and groom now depart. The bride then arrives with her husband to his village as *dulhan*, 'a young wife', in a procession where the newlywed couple is 'danced' to the courtyard by a group of girls of the house, and

to the beat of hired drummers and lute-players. After some more dancing to the rhythm, the groom and bride thus enters the house after a customary ceremony at the doorstep.

All attention is on the bride, her young and slender body covered completely in the beautiful, heavy red wedding *sarī*. The guests are eager to get a glimpse of her face behind the red veil - there it is – her eyes tired and distressed, the *kājal* has smeared a little.

The ‘house-wife’ of the house pays this no notice. After the ceremony at the door, where she played a central part, she grabs a bowl with bright red dye, which she now carries in her left hand. She dips the palm of her right hand in the dye, and presses it on to the cold surface of the lightly painted cement wall of the house. Her blood-red hand prints are left on every wall in every room. She then proceeds out of the house, where she marks the walls outside.



Fig.10: The red markings the ‘house-wife’ makes with the palm of her hand during the walk around the village.

She will at this point be joined by the couple, and the women of the lineage gather behind them, leaving the rest of the family and guests behind. The women are taking the couple to walk about the village (“*gāmv mem ghūmnā*”) First they walk the length of the *kuhl*, starting with the waterfall in the forest. Returning, they pass the auspicious site where the handmade Shiva *liṅgams* and turtles of clay are immersed in water during *Shivdhāni* (Shivaratri, see below), and the Khwaja Pīr *pūja* is held before Sawān. Then, they proceed through the village via the main street, and arrive at the Kheṛa Baba (village deity) temple, all the while the woman is marking the way with the wet, red mixture with the palm of her hand. When they reach the stairs, some of the women stay behind, but most of them remove their shoes and walk up to the temple.

The bride and groom light incense in front of the temple and perform the worship (*pūja karte hain*). No women are allowed to go up the final stairs above the temple, so the groom, the only man in the crowd, walks up the hill without his bride to make a small offering to the deity enshrined there (whom this was, I do not know, but I am inclined to think this was the deity Prakash had called ‘*Soṛ devta*’)

The mood is light, and the women start dancing and singing for Kheṛa Baba, all forcefully chorusing with the “Jay!” that concludes every verse.

I got no name for this ritual, but Sharma (1974) mentions a similar ritual taking place in a village in Kangra. There is no mention by the red markings made with the palm of the hand in that case, but a ‘ritual tour’ of the newlywed couple does take place there as well, under the name of *vadhai* (meaning congratulations) (Sharma 1974:83). Sharma interprets the ritual as a way of “inaugurating” the bride to central village deities by taking the couple to some of the most the important ritual sites for the lineage, which is what I am inclined to as well. Completing this ritual celebration, they return to the house, and accompany the hundreds of guests in the



eating, dancing, at the celebration party called the *sangīt*, and for the adult men; the drinking of “Indian wine”, the local whiskey mixed with water.

As the wedding season ebbs, daily rhythm is restored to a regular pace of work, school, eating and sleeping. Generally, the days in winter are quiet. In the evening, dark falls early, just after 6 pm. It drapes as a layer of carpet over the village, and because of the lack of steady electricity, the village is often surrounded in complete darkness. Narrow cones of light move in the dark from small flashlights. The evening meal is taken together in the common room, the women carry a metal crate with hot coals from the hearth for everyone to huddle around. The food is spicy now, with a lot of chili and ginger, and fatty with clarified butter (*ghī*). Sleep comes best close to someone.

## Basant: placid water

Translated loosely as “spring”, basant season stretches through the lunar month of Phālgun, corresponding to mid-February to mid-March and the first half of Čaīt (pron: čet) in late March. This is the shortest season in the village, and is characterized by the harvest of the early *rabī* crops.

The mornings are increasingly lukewarm, making the morning baths a less numbing task. The sun will more often gather strength to break the layer of fog, and the direct sunshine gives an opportunity to spread the recently harvested ginger onto the rooftops for drying. They will be dried here for about a month before they are ready to be sold to Delhi, at 2000 rs a kg. Work and rest, a steady rhythm though the day, at the farm, there is always something to do.

In spring, there's flowers everywhere. White, from the neem, yellow and orange from the lantana bush. Those who have kitchen gardens plant lady fingers, coriander, and *methī* (fenugreek), which is dried and used both as a spice and medicine - it is thought to prevent diabetes (*sugar bīmārī*). Tomatoes are still harvested, but there are few of them left now. Soon, tomato-based dishes will give way to white soups, thickened with chickpea flour, with bites of the local radish (*mūlī*). Every fifth day, the *kuhl* water gets directed into these plots for watering

Mid-Phālgun, *Shivdhāni* (Shivaratri) was held. It was a ritual attended by many, also older men and middle-aged women of the landholding castes, but this ritual was considered especially benevolent for young and unmarried women, as it was thought to enhance their married life to be long and prosperous. The girls, but also older men and women, would making and immersing of an individual clay *liṅgam* and an accompanying tortoise<sup>60</sup>. This tortoise was most likely *kūrma*, representing the cosmic axis. The tortoise could also be seen as carrying the world on it back (Desai 2009:318), and would together with the *liṅgam*, be immersed and left in the flowing *kuhl* water<sup>61</sup>.



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Fig.11: Left: *liṅgam* being immersed during spring Shivdhāni. Right: a shelter on the fields. The farmers wish for proper fencing, but cannot afford the expense.

As the wheat matures, one has to be careful not to mistake the green and the fresh, unripe wheat (*kanak*) for *ghās*. The wild antelope (*nīlgāī*) and the swamp deer (*barasingha*) pays no notice, so the men move out to sleep on their fields, protecting their crop against the night-time grazers. From midnight to dawn, the farmers, if they see them, try to scare the bovid with flashing lights.

At the advent of *Ācāit*, the days grow warmer, and the wheat is turning yellow. The first large harvest of the season is the mustard. Earlier on, some of its leaves had been harvested for the regional spiced green vegetable dish served with the yellow maize bread (*sarson ka sāg*), but now the plant has turned white and dry. For weeks, there will be the rhythmical hammering of the wooden bats on the rooftops, beating the mustard bellows for the tiny, black seed to pop out. Some seeds are kept for spices, the rest is pressed in a "machine" somewhere and made into oil, used both for food and hair.

As spring comes to an end, everyone works late with refining the ginger, which has been drying white under the sun for over a month on the roofs. Whole families are sat on the rooftops during the day now, cutting and vending the ginger in manual machines, making the air of Rani Mājri rich with ginger debris. The dust makes the nose bubble with sneezes, and men and women tie scarfs in front of their faces as they work. Perfectly dried, the ginger is now ready for export, and the landowners pool their lot after weighing and measuring their contributions.

This was also the right time for Prakash, his wife and their four children to move down into to the new house. The building had been ready for months, but the time had not been right. It began with Prakash visiting a pandit at the large temple at Nangali, the closest town. The pandit had pointed out the forthcoming Sunday as

the best time for inaugurating the new house, and so, arrangements were made. Four days before the main *pūja*, the household pandit, a slim and mild Brahmin from a small Brahmin-village up the hill, arrives. He worships in the innermost of the rooms in the new building. On the floor, the priest has made a four-corned polygon (*kunḍali*) with rice and colored powder. According to John Gray (2011), writing on house building and auspiciousness in Nepal, the *kunḍali* is “an astrological chart that combines space and time by spatializing the flow of cosmic time as it is manifested in the movement of the planets” (Gray 2011:87).



Fig.12: Right: the *kunḍali*, an image of Sant Thakar Singh and his successor Sant Baljit Singh, Hanuman, and one I am not acquainted with. Left: Women during the main *puja*.

The priest then stays in the room the whole day, leaves at night, and arrives to the same room the next morning. Prakash and Nirmala sleep on the floor on a simple blanket in the room every night until the main *pūja* that took place on a Sunday. Early that morning, the household gathered. Gurvinder, Prakah’s son, washes dust off bricks, and carries them into the common-room, making a fireplace. The women of the house have bathed and dressed in fine pink *shalwār-qamīz* suits, and soon; Bhagwati and Bhupati, Prakash’s parents, his two younger brothers with wives and

their four children gather around the fire. A ceremony is held, with the priest reciting in a soft, low and monotonous voice. During the ceremony, more guests arrive from near and far; mostly from the household lineage.

When the ceremony is done, the priest moves outdoors on the patio, and the arriving guests attend for a longer ceremony, completing at 2 pm, when food is served on the roof for everyone. When the men and children are seated, cross legged on old mats, Nirmala and Prakash walk along the rows. Nirmala pours water on the children's feet, Prakash follows and adds the ceremonial red tilak (mark) upon the forehead, and then Nirmala goes the final round and gives the children a one-rupee coin each. Food can be taken, and the new add-on to the house is finally ready to be lived in. The pictures of the deities and gurus of the household was now moved to the house-shrine. The shrine was a modest space, and like the other ones of the village, was built into the wall.

After the first part of spring harvest is over, and the school exams all have been completed, many enjoy the short break before the harvesting of the wheat. Many children will be away for school holidays visiting relatives, the lack of play and crying and laughter makes the village feel empty for a week or two. About now, the dry maize and rice-grass fodder from the *rabī* harvest will come to an end for many of those who have buffaloes and cows, increasing dependence on wet fodder. The decline in fodder affects lactation for many cattle, and people begin to complain about lack of milk. In the evenings, that are increasingly warm, the sounds of the petrol-driven threshing machines that mix the dry and wet fodder fill the air. The old, manual ones are quieter, only creaking a little in their rusty joints. When the threshing machines have stopped, one is only left with the longing peacock's call.

## Garmī: drought

The hot season of “summer” is the longest season in Rani Mājri, and consists of almost three months; the last half of Čaīt, together with the month of Vaisākh (which is the first solar month of the Hindu calendar, from mid-April to mid-May), lasting all through the month of Asāṛh from mid-May to the middle of June.

At the onset of summer, there is still much farming activity during the day, although the sun and the temperature makes work increasingly demanding. Working in the sun takes its toll on the body. Not only is the heat causing exaggerated sweat, which makes you lose important salts, but the skin turns to a deep brown, almost black, where it is exposed to the sun. In some, the sun causes sun-spots, appearing as light continents on the faces of the elder women. The younger ones are bothered by more acne and small pimples in the heat than usual. The young girls make face-masks of curd and chickpea flour to sooth the skin reactions, the teenagers dream of the fancy bleaching creams they see on television. The thick skin on the heels crack, and keep men and women awake at night with pain. Diarrhea, vomit and fever are other afflictions often attributed to having “worked in the sunshine”.

There are fewer birds singing in the mornings now, and in the day no animals are heard, until the crickets make an inferno playing their never-ending tune all through the heat of night. The flowers have withered, the summer grass is turning yellow and heavy with seeds. This is the time to harvest the chickpeas, and the important wheat. During this major harvest, almost everyone is at the fields at the same time - the landowners, the family and the Scheduled Castes, everyone contributes for a share of the crop.





Fig.13: Wheat maturing in the fields

Hunched down amidst the golden wheat, one sees nothing but rows of golden yellow, and ones harvesting fellows. Surrounded by others, cutting the wheat by hand with the small hand-held scythes is like being inside a threshing machine. The heat is intense - sweat pours, water-breaks are welcomed. The re-used plastic bottles are kept in the shade of the few trees that are left on the fields, giving a tad of cooling effect, as one replenishes with an impressive technique where the tip of the bottle comes nowhere near the mouth. The water is poured into the mouth this way, to prevent it from becoming 'tainted', or *jūṭhā* with inauspicious residue from others.

The mood is light hunched downed under the tree, conversation flows casually. The Scheduled Castes who work for the landowning households also join in the breaks, but are seated a few feet aside from the landowners, exposed to the sun, and not talking or looking anywhere in particular.

Soon break is over, and the wheat must be carried to the spot where the threshing takes place, at a tractor placed at the roadside, which the landowners pool up to rent.

The days are long for everybody, the dinner is getting later by the day. No one goes home to the house before darkness falls, and dinners are eaten as late as 8 or 9 pm. During dinner, there's little talk. People go straight to sleep.

As two weeks have passed, and the last of the harvest completed, one might notice that from every household, women dress up nicely, and walk down to the fields with a tray, offering auspicious food for Panch Pīr for the harvest. Then, comes respite from the hard work. The heat is now so intense that all outdoor work is lowered to a minimum. Tending to the buffaloes, cooking, eating and washing, all is done as early as possible in the morning to avoid the heat. Chickpeas and wheat are sifted sitting cross legged on a shady location. Small grass and bran fly away in the light wind, the grain falling on the floor. The water tank for the cattle is more algae now, than water. The water in the *kuhl* has also stopped flowing. The fields look dead - the ground is now stone hard, cracking up, light brown and dry as a desert.

In high summer, it is so hot the air is stirring. The wind, which otherwise would've been welcoming, feels like a hairdryer to the skin. There is no sweat to cool the body, it has vaporized before you noticed it was there; leaving only a prickly sensation on the skin and a salty residue. People withdraw indoors, to sleep, or rest, from 12 pm - 3 pm. Preferably under a fan, if there's any electricity. The villages often experience unannounced and lengthy power-cuts now, as power demand rises in the cities, with the air conditioners working to keep the temperature down in the malls and offices, and private homes. The heat seems to have no end.

This is also the time for the birthday celebrations of Kheṛa Baba, the village deity, which is celebrated with much festivities. The women would start preparations a few weeks in advance, sewing shirts to give as gifts to Kheṛa Baba, and they would recall stories of other birthdays. All the children are kept home from school; this day is regarded a (very) local holiday, and all the “village girls” (*gāmv kī laṛkiyām*) would return from near and far to their natal village to partake in the celebrations.



The day was celebrated with women's song and dance at the temple, and the occasional possession, or "play", when one could experience possessions by Kheṛa Baba's benign spirit (*havā*, also wind). This was considered a grace, granting sacred vision (*darśan*) to his devotees<sup>62</sup> (Erndl 1998:178). At evening, a meal is shared by all villagers, with people from Khot, Bapūli and the Scheduled Caste hamlet joining in at the village primary school ground to share the food (*bhog*) that was offered to the deity after the ritual celebrations. Wheat flour and sugar-cane brown sugar, fried in oil, sharing the eating of the fatty and sweet *halwa* was very important (see chapter 4), and the whole village participated in the meal.

The heat of summer was not only marked by the movement of the benign *havā* of Kheṛa Baba, but also by mischievous spirits, ghosts and ancestors, (*bhūt-pret*) causing more malevolent possessions. These possessions were nothing like the playful and benign possessions of the deities, but more violent and fierce, causing the one possessed to attack oneself and others as in blind rage. Possessions such as these, writes Erndl (1998), are regarded more as a punishment, or an affliction. In Rani Mājri, in the case of malevolent spirit possession that I observed, the 'patient' became isolated from the village community, even her own family, for weeks. Ritual remedies, mantras and advice from pandits, baba's and *tantriks*<sup>63</sup>, the ritual specialists that were shrouded in mystery, was hastily acquired.

To avoid the *bhūt-pret*, there were precautions to be made, especially regarding regulating movement in accordance with time and place. Between 12 and 3 p.m., the heat is at its most intense, and people stay indoors, in the safe confines of the house.

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<sup>62</sup> That deities are able to take on a wind form is quite common, as has been noted also by Katherine M. Erndl (1998), who has studied devī possessions in Haryana and Punjab.

<sup>63</sup> A *tantrik* is a ritual specialist that is consulted for problems too grave for conventional approaches of worship. The rituals carried out by him sometimes - but not always - include "black magic" (Frøystad 2016), which made the villagers whisper when talking about approaching him.

If one were to work outdoors at that time, one might feel dizzy from the heat, and the spirits, I was told, would sense the weakness of the mind. They might follow you into your home, inflicting disease and problems upon you and your family. In high summer, when the threat is at its highest, extra precautionary measures are taken. The children that had to pass the Rajput cremation ground (*shmashāna*) on their way home from school, for example, such as the children from the small Brahman village up the hill, waited in the Rani Mājri Rajput houses until after 3pm before they went home. Even household animals can be afflicted, like Nirmala and Prakash's buffalo, who stopped lactating for weeks because of a spirit intentionally harassing (*tang karnā*) the family with acute milk shortage.

Midnight is also an inauspicious time. But in the dry heat of summer, nights indoors with fans that stopped swirling because the electricity was cut, were almost unbearable. Many adults thus slept outdoors, on the roofs or the small patios in front of their houses, whilst children – especially girls – would normally stay indoors. Nirmala and Prakash had never slept outside the new annexed building before, and during the first nights, Nirmala started noticing mysterious 'tok-tok' sounds appearing in the dark; like a clock, but unlike it too.

Her husband was a heavy sleeper, and didn't notice the sounds, but she moved indoors, vexed about the situation. After a few nights of this being repeated however, she woke Prakash who then noticed the sounds. The very next day, the household pandit was called. The pandit advised mantras to be recited, and to invoke Ganesha, by placing an image over the door.

The same evening, Prakash brought a metal ladle full of smoking coal from the kitchen hearth. He walked around the new house with the smoke rising, all the while reciting the mantra. The next day, Nirmala felt perfectly safe sleeping outdoors, and the 'tok-tok' sounds disappeared.

As summer slowly moves, people begin to remark and complain about the heat, and about boredom. With the water tanks, they can close the *kuhl* at night and during the larger part of the day, to save the little that is left for a few hours a day, just enough to fill some buckets and do the laundry. There are few vegetables now, as *kuhl* is almost empty of water and cannot supply the kitchen gardens anymore. There's some green bell pepper still, and some bottle gourd (*ghīa*), otherwise it is lentil soup (*dāl*), every day, with sour fermented milk (*lassi*) to drink, thought to lower the heat.

At the end of Asārah, something in the air changes. It was expected. There was thunder in the distance. Quickly, it got darker, so fast it was almost eerie. The temperature plunged. A strong wind carried clouds of lightning, several lightning bolts strike ground close enough to smell them. A drop of rain or two fell. As sudden as the clouds appeared, they disappear, and the skies are again clear, the sun scorching the village as if nothing ever happened. The next day, people prepare for barsāt.

## Place, Time and Auspiciousness

Above, one might note the close relationship with work, movement, ritual and the surroundings, the *vātāvaraṇ*. The act of dwelling in Rani Mājri changed with seasonality; bodies changed, sounds changed, weather, soil, and village changed. That this adherence to local notions of the appropriate rhythm of work, ritual and rest mattered, was underscored by the fact that this rhythm was largely shared by everyone I met in Rani Mājri. To keep with the rhythm, it seems, is auspicious. In Rani Mājri no one spoke of auspiciousness or inauspiciousness (*śubh/aśubh*) to me<sup>64</sup>. They did, however, speak of good (*acēhā*) and bad (*burā*) days or places for a person doing something, not necessarily

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<sup>64</sup> This is probably because my knowledge of the language was so basic when I arrived, that they got used to using a simplified version of it when explaining me things, and *śubh/aśubh* was perhaps easier to talk about to me as being 'good' or 'bad'.

implying that it was good for everybody, actions being ‘good’ or ‘bad’ would depend on your gendered body, your aged body, what caste and lineage you belonged to, as well as the time and place.

Looking to the eloquently written essay by A.K. Ramanujan (1989) addressing what it is that makes an Indian an Indian, Ramanujan argues that in India, there is a notion that all things; even space and time itself, are ‘substantial’ (*dhātu*). In India, Ramanujan states:

“[t]he soil in a village, which produces crops for the people, affects their character (...), houses have mood and character, change the fortune and mood of the dwellers. Time too does not come in uniform units: certain hours of the day, certain days of the week, etc., are auspicious or inauspicious”

(Ramanujan 1989:51).

The notion of what kind of practices, things or timings are considered auspicious/inauspicious (*śubh/aśubh*) is also central for Raheja’s (1988a;1988b) argument, in that with the ritual gift of *dān*, inauspiciousness is transferred out, or away, from the central, landholding castes. There is a value ascribed to time and timeliness, and in the ritual calendar, this becomes very underscored. Fuller (2004) even calls auspiciousness, “a quality of time itself” (Fuller 2004:242).

“For Hindus (...) the calendrical system does not merely define a set of technical divisions of duration, because time and its units are themselves ritually significant. Thus, for example, auspiciousness and inauspiciousness is partly determined temporarily (...)”

(Fuller 2004:266).

A conjunction of people and time seems to be necessary for the auspicious, the benevolent, the good. But the auspiciousness and inauspiciousness is clearly a spatial issue, too, an argument also posed by Gray (2011) in his work on the auspiciousness of housebuilding in rural Nepal.

Gray analyzes how auspiciousness is produced in Nepal by ensuring that the new house is compatible with its spatial milieu;

“The soil, the site, the cardinal directions, and the reigning deities, as well as the vital force of the earth. Together with the auspicious timing of each stage of construction and its associated ritual with the owner’s horoscope, the result of the building process shows auspiciousness to be a harmonious conjunction of person, place and time”

(Gray 2011:73).

We see, with the example from the building and the inauguration of the annex above, that a house can be made auspicious, but according to Gray, it has to be remade auspicious too. Auspiciousness is thus a process of mediating one’s surroundings into being benevolent, good. If the spatial milieu of a house is just as relevant to notions of auspiciousness and inauspiciousness, then this would perhaps also extend to the village itself. With the rituals and practices, of which I was only able to describe a segment<sup>65</sup>, one could see Rani Mājri being continuously remade into a ritually benevolent place to live.

Rani Mājri becomes a good place in process of doing the right thing, at the right place, at the right time – by the right person. This is just what South Indian village gods, goddesses, and the ‘fierce gods’ help to do according to Mines (2005). with their power seen to infuse the soil of the village (Mines 2005:135), the deities in their capacity to bestow auspiciousness and inauspiciousness is quite significant for making a place ‘good’. Built and tended in the right manner, Rani Mājri becomes, through this ritual optic, a safe and protected place to dwell,

But, it is important not to overstate the role of the rituals. Although religious calendars would be consulted when planning anything of importance, the men (because they would

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<sup>65</sup> There were more religious holidays and rituals that took place during my stay than the ones above. I only heard about long after they took place, some I was not there to observe, others happened only with and amongst men. Others again were not much celebrated, such as Holi that year, which was passed by in silence by most households because there had incidentally been several deaths amongst several Rajput- and Lohar lineages.

most often be the ones in charge of initiating projects, rites or plans) would seek advice from numerous sources of information.

To plan for the forthcoming harvest, for example, or other projects, plans or business proposals, they would also talk to their relatives, friends, the school principal. They would consult the weather-forecast, the scientists at IISWC, read the newspapers, and generally, pick up any other bit of information that could help them making the best of any possible situation. I believe this is also what Grodzins Gold (1998,1999) work indicates, when she wrote about farmers abandoning an agricultural ritual, held on the auspicious day of Ākhā Tīj in the Rajasthani village of Ghatiyali. Most villagers of Ghatiyali did not organize resistance to the developments within agro-technology, irrigation schemes and reforestation, but accepted the conveniences that outside agencies institute and funded. She argued this was related to power and social upheaval, because with new technology, the farmers could act irrespectively of the Brahmin's ritual calendar, embedding the abandonment of ritual "in a multiplicity of other kinds of change", such as people wearing other kinds of clothes, eating different sorts of food, and the devaluation of Brahmanical knowledge (see Gold 1999:263,270).

There is, as we will see in the next chapter, much new knowledge circulating in contemporary Rani Mājri, and some of that knowledge is valued higher than are other forms.

Through the flow of the seasons above, there was one element more emphasized than the others; the flow of water. The village is, with the political, economic and social relations I described in chapter 4, truly 'waterworn'. What happens, then, to the complex relations and intimate relationship with deities and sociality in the village of Rani Mājri, when the village is 'developed' with a watershed management project? How is this related to a discourse of environmentalism, modernity and climate change? And what does it matter, that an 'awareness campaign' has materialized in the village? The next chapter is dedicated to answer some of those questions.



# Chapter 6

## The Awareness Campaign

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*“I sit with some farmers in a village. It is a dry period, but water is flowing in the stream. And I ask them; why is there water in the stream?”*

*They will be silent and look at each other.*

*I will ask: Is it raining somewhere?*

*No sir.*

*Is it snowing somewhere?*

*No sir.*

*Is the stream coming from a place with snow?*

*No sir?*

*Then why is it there?*

*Can you see; above the village, you have the trees high up, then bushes, then grass - in three stories? They will agree;*

*Yes sir.*

*And I will say:*

*Yes! There is the water!*

*When you are a man with no hair on your head, after your bath, one swipe with the towel and the head is dry. But when there is a lot of hair on the head, you must dry a lot, maybe three towels are needed before it is dry. See? So basically, it is as simple as that: don't cut the tree”.*

Mr. R.C. Gupta, 2012

The constructed dialogue above, was told to me by Mr. R.C. Gupta at one of our conversations in his Chandigarh residence. R.C. Gupta was a middle-aged, retired state hydrologist. He was also the co-founder and former research partner of the



environmental, non-profit organization SPACE<sup>66</sup>, and had, when I became acquainted with him, recently founded his own ‘Paani Foundation’ (Water foundation) with a former research partner from a World Bank Project. The imagined dialogue between himself and the typical ‘hill villagers’ was intended to illustrate for me, how one should go about when teaching rural hill farmers about forest and water conservation, and ultimately; how people should be approached to become “environmentally aware” citizens in the lower Himalayan hill regions of Northern India.

R.C. Gupta was deeply interested in the role water played in the ecosystem of the rural Shivalik hills, and his Paani Foundation wished to facilitate the interaction between village and government post ‘mountain water system rehabilitation-projects’, such as those carried out by IISWC. The NGO arose out of pure *necessity*, R.C. Gupta could tell me. During his time in the Department of Agriculture, he had been disturbed by what he saw as a lack in “interaction facilitation” between villagers and government officials. He observed that when, say, a watershed project finished, the government officers and the associated researchers would pull out completely (“they will withdraw, everything is withdrawn”, R.C. Gupta: 2012). The project, he observed, would then most likely fail. But by educating the villagers, one could facilitate the transition, making the villagers carry the project out independent of state- and scientist intervention, improving their chances to ‘develop’.

R.C. Gupta represents one approach to the conservation of the Shivalik hills. His approach was not very common in North India in 2012; R. C Gupta was one of the few scientists that had not only noticed a ‘disjunction’ or ‘gap’ between the scientific and theoretical plans and the practical execution of them, but also attempting to do something to close the distance. But in doing that, his approach was also similar to the others that I

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<sup>66</sup> R. C Gupta had met the former IISWC scientist, Dr. S.S. Grewal, through this work in the Haryana government with the Department of Agriculture. Upon R.C Guptas retirement in 2007, he joined S.S. Grewal’s environmental organization ‘SPACE’ (Society for Promotion and Conservation of Environment), founded back in 1997.

have registered – and that was in his assumption that the villager’s knowledge about their environment was totally different from the knowledge the officers and scientists brought with them.

In its universality, the climate change process does something to how one might imagine the world to ‘best’ proceed. This chapter argues that these ideas become discourses in the Shivalik Hills, and inform the practical realities of politics and policies of the state. These again, shape the concrete manifestation of the many ‘projects’ and ‘plans’ that governments, foundations, organizations and institutes indirectly fund or directly initiate, to prepare, mitigate or repair the consequences of environmental stress. Projects that in their creation existed but in theory, far away from the “local” where they are expected to flourish and create some sort of change for the better.

This distance, from the abstracted processes of the “global” to the grounded livelihoods of the “local”, has often been treated as a problem, not only by R. C. Gupta, but for major environmental project leaders, international lobbyists, and for anthropology itself. This is especially the case when a project fails, or when communication does not “reach”, or create the same sort of mobilization that was originally intended. Often, the ‘gap’ between how and what the global ‘we’ know, and how and what the local ‘they’ know, is accentuated as the main issue. This chapter is about addressing the ‘gap’, and about attempting to close it.

To do that, this chapter is divided into three main parts. In the first half of this chapter, I identify in Rani Mājri a process through which the population becomes subjected to a global discourse on climate change and global warming through initiatives directed at an external agent making them ‘aware’. I also address how the ‘climate change’ concept has become part of everyday vocabulary amongst middle-class Indians in the North Indian city of Chandigarh, and how the concept has failed to embed itself in every day conversation in Rani Mājri. This first part then, confirms a ‘gap’ in transmission of the climate change idea.

The second part, addresses how the local rural state departments ‘fix’ the ‘gap’ locally, and describes the various ‘junctions’ where ‘awareness’ is propagated in practice.

The third part addresses the implications of the climate change idea entwining in a set discourse utilizing Agrawal (2005), and why it matters to the people living in the Shivaliks. This is then drawn into an argument, stating that the ‘gap’ in communication between the urban developers and the rural ‘subjects’ is a caricatured ‘gap’, because it draws on a particular stereotype of the rural Shivalik hill villager as ‘backward’ and the urban scientist or government officer as ‘modern’ or ‘progressed’. This identifies another ‘gap’, somewhere between the practical, experience-near knowledge of a close environment, and an abstract, and scientific knowledge that shrouds so much development, environmental and climate change rhetoric. The chapter ends to indicate, that there might in fact be no ‘gap’ at all, but ‘resonance’.

With Tsing’s concept of ‘friction’ and ‘gaps’ we might acknowledge the complexity of universal dreams, that they are hybrid, transient, and constantly reformulated – not fixed. They blend and mix with particular and individual expressions of religion and philosophy, both utilitarian, or liberal, feeding both those in power and those without.

To press Tsing’s argument on, I depart from the notion that between the abstract ideas and the concrete materialization that they effect, ideas always involve, at some point, human interaction. In round-table discussions, in conferences, in offices, in homes and over a meal, people meet, and talk. Here, in places, knowledge is exchanged, altered, modified and adjusted to the context and the issue at hand. Paying attention to these meeting-points, the junctions of information-travel, and by ‘tuning-in’ to peoples every day practices, I suggest it is possible to close the ‘gap’ with ‘resonance’.

## The ‘Awareness Campaign’

Climate change, as a process of global warming and as an idea, is affecting people all over the world - but does so differently for different people in different contexts. In various places, people are also being guided, in various ways, and by various means, how best to adapt their lives to the current prospects of environmental instability. The guidance travels through the world by vehicles of global economy, regional investment practices, local tourism, and policy-shaping United Nations declarations, and take its hue after the rich civil societies through which the idea is molded, and from different philosophical ideas about the relationship between humans and nature. The climate change discourse also depends on existing discourses, of environmentalism and development, and appears in some places, like in Rani Mājri, to urge people into ‘modernizing’, and to conserve their environment at the same time. And rather quickly, too.

The urgency is found in global policy and in local state politics. A comprehensive report on the state of the Hindu-Kush Himalayas, recently published by International Center for Integrated Mountain Development (ICIMOD), the UNEP related Global Resource Information Database-Arendal (GRID-A) and the Center for International Climate and Environmental Research-Oslo (CICERO) for example, warns; that with an increase in average temperature, the changes in weather will cause a reduction in food security linked to the depletion of water, and an increase in extreme weather events causing flooding and landslides. The report concluded that given the situation of the hills, the Indian farmer was found “poorly prepared to adapt” to the consequences of climate change (The Himalayan Climate and Water Atlas: 2015).

Such international reports, as in the one above and as in the context presented in the introduction, the Shivalik hill villagers like those of Rani Mājri become enveloped as the people “most vulnerable to the potential health impacts of climate change” (Wish

2010:2), with similar formulations in the more recent State Gazetteers, such as the one for Haryana (Kumar and Dahiya 2005).

As we saw in chapter 1, the hill regions of rural North India were found to suffer from deforestation, pollution of water and air, and waste – not only from heavy industry, but also from farming. The increase in agricultural activity from the 1960s and up until today has played an important part in India’s food self-sufficiency (Jewitt 2002:6) and has brought about both prosperity and concern. As the increase in demand for produce has led to a vast increase of agricultural land, there has been an introduction of new varieties of seeds as well. These seeds produce a stronger, more bountiful yield, but are also more sensitive to drought and are nutrient intensive - which again have required a rise in demand of irrigation and chemical fertilizers. In the Shivalik hills, these concerns are neither recent, nor left unattended by state government.

The Haryana Government had by 2012, on the cause of these grim scenarios, developed a rather comprehensive policy on climate change impacts for the region, together with encouraging the development of cleaner sources of energy.

To project the climate-scenarios for the state, the Ministry of Environment, Forest and Climate Change in their State Action Plan, rely on IPCCs regional climate output models (IPCC SRES) - which outline a socio-economic scenario characterized by a future of “very rapid economic growth, global population that peaks in mid-century and declines thereafter, and rapid introduction of new and more efficient technologies” (Haryana State Action Plan 2011:xix). Although climate change is suspected to impact the already stressed forest and water situation of the state, it was especially for agriculture, animal husbandry and health where the Ministry of Environment seems to find the highest causes of concern. With the projected rise in temperature, the wheat crops are expected to suffer a decrease in yield by 20% or more. Moisture deficits are also projected to give higher incidents of stem-rot, which will threaten the cultivation of the Indian Mustard. The Action Plan warns that heat stress may lead to a decline in milk productivity amongst

buffaloes and cows, and that heat waves are predicted to cause an increase in deaths from cardiovascular and air pollution to respiratory diseases. This, the Action Plan warns, will add on to the already major outbreaks of infectious diseases transmitted by water (Haryana State Action Plan 2011:xxi).

That policy turned to concrete action was during my fieldwork perhaps best illustrated in the village by various projects tied to the 2010 “Mission Green Haryana”. It had been a massive campaign; the Haryana State government had allotted money to the rehabilitation and construction of 180 water harvesting structures, 116 ponds, protection of endangered species, establishment of wildlife centers or habitats and to the management and protection of natural forest and the engrossment of forest cover.

All together 23 million tree-seedlings were handed out to be planted by the Forest Department and 27 million seedlings were given free of charge for schools and farmers to plant where they liked. As a governmental implementation wing to back up the project, the constitution of 1700 Village Forest Committees for socio-economic empowerment was created, and lastly, a whole 64.8 million rupees (app. \$ 1 million) was set aside for Eco-Tourism activities; log huts, tented accommodation, nature trails etc. All done, to cite the 2010 Haryana Chief Minister, Mr. Bhupinder Singh Hooda, “to bring people closer to nature” (Chawla 2010).

For the urban, educated Chandigarh resident in 2013, the concepts of global warming and ‘green living’ were quite familiar. The concept appeared in print, as well as in conversation. In the city, seasonal irregularities such as elevated temperatures in winter, or the unpredictability of the monsoon were also often talked about by the urban people I encountered as ‘global warming’. Our landlords in Chandigarh, a Punjabi Jat Sikh couple in their 60s, for example, would constantly refer to global warming during the winter of 2012/2013. In December, the weather had been milder than expected for the season, and our landlords were eager to explain to us foreigners how the seasons temperatures ought

to be. “Seven years back we could not sit outside like this, it would be too cold. Now - it is like this, with the global warming and everything”, the Jat Sikh wife sighed.

The wealthy Haryana farmer next door, who had kept his farm but had chosen to outsource the farm-work and live permanently in the city, argued that global warming was tipping the scale for his decision. “(...) It has become all unpredictable. One year it will rain too much, and fields will be flooded, then the next year there is drought (...). It's the global warming”, the farmer said. When he considered the Indian government's lax rules on the import of foods and goods from China *and* with global warming, he could not picture a life as a farmer for himself, or for his son.

The middle-class residents I met in Chandigarh would not only have a clear notion of what global warming was about, but also willingly sharing their opinions on why their concerns about global warming had not made them ‘environmentally active’. A middle school teacher, when commenting on the rather low profile of the environmental Eco-Club in village schools (see below), blamed the state of their immediate environment, which was ‘all right’. As will be remembered from chapter 2, Chandigarh residents took great pride in their ‘city beautiful, with its well-tended parks and its view towards the Himalayan hills. The hills would from the distance of the city always look lush and green, and the city itself attracts a great number of tourists wishing to take in the view of the Shivalik hills from hotels named “The Shivalik View” and “Mount-view Hotel”.

People who traveled, however, like myself, would see that the environment was not ‘all right’ at all, the teacher said. “Those people who travel out, they will think differently about things like global warming”, implying that people who did not leave the city would not acquire the ability to notice that global warming was actually taking place. “Such as your snow in Norway, becoming less”, she added, “that is how you notice the global warming is taking place”.

The lack of engagement despite ‘awareness’ in the city, was also noted by volunteers working explicitly with raising environmental awareness. There were quite a few Governmental and Non-Governmental Organizations active in the city during 2012/2013,

like Deeksha, Sapling, the Environment Society of India (ESI) and the international 'Association Internationale des Étudiants en Sciences Économiques et Commerciales' (AIESEC); all with members variously engaged in recycling, tree-planting and general awareness raising, especially through school workshops and "awareness-camps".

Talking to the leader of the environmental branch of AIESEC, a young, male economy student from Punjab University, on the lack of actual environmental action amongst students, indicated that the 'greenery' of the student's surroundings were blinding people into in-action. "Living here one does not see the problems", he explained. He himself has become "aware" of climate change, not through his studies he claimed, but from watching the Indian Discovery Channel.

None of the active student environmentalists I met during my stay expressed a wish to visit the hills, however, and concentrated their activism to projects in urban city schools, or recruiting city children for 'awareness camps'.

Traveling 'into the greenery' was normally done either because of government duty, such as was the case with the teacher above as part of their rotational duty, and very few, except for tourists visiting 'sites' (the 'nature lovers', to which I will return to later) would actively seek going into the hills if they did not have family residing there.

Even if the level of environmental activism was rather low amongst 'most people', the environmental awareness, at least, seemed quite in place among the educated urban middle and upper-class residents. In the village by 2013, however, it was little to nothing about global warming or climate change in daily conversations, and I recorded it used but for a handful of times.

## Rural Unawareness

Compared to the vivid descriptions of the British colonial officers, and the elders of the village whom I cited in chapter 3, the village by the dry winter of late 2012 possessed but a washed-out version of the rich fauna and wild-life that (might) have been there, a



century ago. The barren hills, the dusty streets, the large areas of hillside that had collapsed into ravines of sand and stone, all confirmed to my eyes the issues of erosion and deforestation.

To my North-European eye, the surroundings of Rani Mājri, at my arrival in the dry winter of 2012, appeared - if not polluted – then at least ‘littered’. The litter gathered in the hillsides and furrows in the landscape, largely paper and polythene refuse/waste, metal, pieces of cloth and cardboard – litter that that would give off a smell of decay when it got stuck in the undergrowth through moist weather.

During my first weeks in the village, I also met what I found to be a rather ignorant attitude towards environmental measures. In January, for example, I offered to help sweeping the roof that had been used as social gathering spot during the recent wedding celebrations. Brushing the glimmering plastic, paper and various other sources of waste into a nice pile, I asked Bhagwati, Prakash’s mother, what to do with it. She told me to just brush it off the edge into the buffalo yard below, to just “*phemk de*” (throw it away!), where they would later bring it with the manure to the fields. I was aware of the lack of public waste disposal in the village, and did her bidding.

Quickly, I discovered that all villagers threw their rubbish down the hill – but not only there, they threw it in the *kuhl* too. And at the side of the road. And in the forest.

Anywhere that was not their private space, seemed fine for throwing litter. I also noted the frequent raising of eyebrows during my fieldwork, caused by my persevere insistence that my husband should bring my sons stinky diapers to the city. I could not make myself to throw them into the thicket below the village, as instructed, repeatedly, by the villagers to do. I tried to explain that with the time it would take these diapers to compost, they would pollute the landscape for a century, at least. But my worries found no ground.

For the first weeks of my stay in the village, I was convinced; the villagers seemed to be ignorant about waste and pollution of their landscape. I was so bothered by the idea I that brought the matter up with Rekha, Prakash’s youngest brother wife. She agreed at first,

saying that waste was pollution (*pradūṣaṇ*). Inquiring closer on what happened to the waste, she then said the waste here in the village was no problem really - because when the monsoon rain arrived, it would take it anyway. I replied a bit surprised: "but then there is just more problems down the hill?" She just shrugged at my objection, in what I perceived to be an "out of sight – out of mind" manner.

I also found, that very few (if any) villagers born before 1985, were familiar with the concepts of "pollution", "environmental" or "global warming". Villagers below the age of 30 had usually encountered the concepts, but very few - only one in fact, expressed a 'scientific' understanding and use of the word 'global warming'. That 'climate change-, or environmental awareness' had not reached Rani Mājri seemed at the outset of my fieldwork then, as a matter of fact.

This could have various reasons, one being the degree of education. As shown in the preceding chapters, many – such as the elderly or adult women, could barely read or write. The villager's proficiency of English was low to non-existent, and as we saw in the introduction, curriculum in higher education was usually in English, causing problems for learning efficiency.

There were few villagers educated beyond the age of 18, but when they were, the concept was more easily vocalized. Aadit, for example, was one of them. Aadit was a young insurance agent who was the 'technical assistant' of the IISWC researchers, one on whom they could rely on technical assistance, as collecting rainfall-data, fixing intricate electrical equipment etc., at the time IICWS began their watershed-management project in the village, the person in the village with the highest education. Aadit was always keen to share his thoughts on what he thought to be my subject of interest, the weather.

One day I stopped to see by him and his wife Gina. They had drawn back from the household with their newly born baby-girl to watch a soap opera on TV. Aadits father had bought up a lot of land in the village, and had done quite well for himself as a farmer. His family was the only one I am aware of (although a few more households could have

subscribed) that could afford the more luxurious channel packages, including the English-speaking Discovery Channel (India).

When I arrived, he began to flick between the channels, and a show where dramatized images of the melting snow and icecaps of the Himalayas caught his eye. “In 30 years, there will be nothing left” the TV presenter said, in that highly dramatized voice that often defines these popular science shows. “Look”, Aadit said; “that’s global warming” (“*global warming haiṁ*”), upon which he nodded and confirmed the processes so vividly described on television.

Although Aadit spoke very little English, he talked to me in a language *I* recognized as evaluations of processes and phenomena. If I approached him to make reflections upon the future, for example, Aadit would oppose his co-villager’s optimism, and rather emphasize the consequences of population-growth, one that he saw would pressure the government to buy the farmland here as well – he had seen too many examples of this in the plains. When everyone else was concerned about Orpita from my household being possessed by a malevolent spirit, Aadit laughed it off as nonsense “*bakwās*”, as ghosts and spirits (*bhūt-pret*) was only superstition. He was also the only person in the village I met who expressed a clearly defined view on what ‘global warming’ was, although, he was not the only one who was familiar with the concept.

As I spent most of my time with women and girls, I seldom met anyone who dared to explain the technicalities of global warming to me, but this is not to say that they did not know. I more than once engaged with the teenage girls of my households on political or social issues, and as they got to know me better, they also began voicing their thoughts and opinions, trusting that I would not laugh at them for having their facts all wrong.

In general, however, the level of exposure to the concept could also be explained with the villagers use of city-space and media.

It was not like the villagers of Rani Mājri lived far away from the cities, nor that they seldom visited them, but they used the city differently when they were there. They went

to the outskirts of the city for treatments at a cheap government hospital, or to stand in line at the public service offices. They would not visit the same hotels, nor would they visit the same kind of stores, not because they necessarily preferred the open space markets over the air-conditioned malls, but because they felt uncomfortable, and very visibly ‘un-modern’ in their manner of dress, haircut and speech (see below).

Neither did they read the same English newspapers as the educated elite in the city, nor did they watch English-speaking TV-channels (they were restricted to the expensive channels that few villagers could afford to subscribe). Newspapers were by 2013 not purchasable in the village at all, in fact. Television was by far the information network that would reach the most, but the villagers would only afford subscribing to the ‘cheaper’ channel packages. These would offer a few local news channels, but mostly entertainment-channels with religious shows, soap operas or music videos. Sports, infotainment or documentaries belonged to the more luxurious channel packages, and only one (perhaps two) households could afford these. The radio was a relic which was, together with the land-line telephones, remnants of the past, and never used during my stay.

This ‘gap’ in information transmission then, could partly answer quite well why the villagers were ‘unaware’ of climate change, and its associated issues with pollution, environmental deterioration and global warming. The state and various NGOs thus aimed to amend this ‘gap’ in various projects and interventions addressed to specifically make people ‘aware’.

In 2013, the year of my fieldwork taking place, ‘environmental awareness’ and ‘being green’ were in the national media and in regional policy, as I outlined above. After the Uttarakhand tragedy, which I describe more fully in chapter 7, the connection with global warming and the deteriorating Shivalik environment became particularly salient. The flood which was covered in both national and international media, was, as in this Times of India article, interpreted by the media-houses as a sign of what was to come. By my re-

visit in the field by 2016, the environmental issues had been fully encompassed in climate change rhetoric.

"We are witnessing several impacts of climate change in the state" Rajendra Dobhal, director general of Uttarakhand State Council for Science and Technology was quoted. He continued:

"Annual rainfall is decreasing and changing its rhythm in the state due to climate change which is adversely affecting the interests of farmers (...). The diseases due to various kind of virus and insects are spreading. Due to lesser rainfall in winter, many crops went extinct, now the alternative crop seeds have to be procured from other states"

(Dobhal in Sharmal for Times of India 2016)

For precautionary measures, N. Bhaskar Rao, chairman of Centre for Media Studies was quoted in the same article, insuring that workshops on Climate Change Awareness would be held in all the 12 mountain states "to raise awareness level among media and the related organizations who play key role in sensitizing people about climate change". The need for this, he said, was that:

"despite the fact that climate change has emerged as a huge issue world over, there is ambiguity about the issue among journalists and masses who need to understand it and espouse the cause with passion for better tomorrow"

(Rao in Sharmal for Times of India 2016)

Even if the sense of acuteness might have reached new heights on environmental issues in the Shivalik Hills post global warming information, the environmental degradation preceding and during this "green" phase in Indian politics has been looked upon as rather acute by Indian and International scientists and scholars for a long time. The deteriorating environment in fact, has been one of the prime causes for state intervention for close to a century. Inspector General of Forests, A.P.F. Hamilton and Colonel Kenneth Mason

expressed his concerns and called for intervention back in the Himalayan Journal of 1935, the anthropologist Gerald Berreman called for ecological preservation back in the 1960s, (Berremann 1978) and the scientists of the IISWC report from 2008. All examples of a scientific community, vocal in the necessity of the state maintaining a sustainable agriculture of the region and to save the livelihoods of the people living off the land, and those living below them.

The IISWC report especially, explains that by ensuring environmental sustainability in the hills, the Indo-Gangetic plains might be prevented from suffering more ecological problems caused by erosion and siltation, protect what is left of the rich wildlife and fauna of the hills, and to slow down economic migration from hill to plain area, increasing population pressure in the plains cities further.

But then again there was this issue with development, of which the people of the hills were also found to be in need of. The Haryana State Government back in 1993 saw the need for an independent governmental implementation wing, to amend the lack of basic infrastructure, modern facilities, access to drinking water, and education in the Shivalik Hills. The Indian national censuses had over decades of charting revealed the region to be seriously “lagging behind” the plain regions in “development” (Shivalik Development Agency 2017a;b). The region is found to suffer from low levels of education (especially amongst women, where only 56% are literate), low crop yields compared to the plains, high incidents of poverty, and a seriously skewed sex ratio caused by female foeticide (837 females per 1000 males), amongst many other mentioned indications, both in this report and others, of the region “lagging behind”(Shivalik Development Agency 2017, Yadav et al. 2008:1, Sarv Shiksha Abhiyan 2015).

To provide the best possible context for development and environmental conservation, the Indian government identified a number of “Eco-Sensitive Zones” throughout the country - a geographical and regulated zone created as “shock absorber” between state protected areas like Natural Parks and Sanctuaries (Kumar Dash 2009; Srivastava

2011:5), and the pressure of the industrialization of Indian society at large. As we saw in chapter 3, the village of Rani Mājri was located within such an Eco-Sensitive Zone, established in 2009 by the Indian government (Haryana Forest Department 2016).

The need for awareness amongst rural hill villagers on issues of climate change and global warming, as well as the enlightenment of ‘general development’, with this seems firmly established. But very few people of the Indian Ministries, or the global organizations of World Wildlife Fund, or the people of United Nations Environmental Program (UNEP) interact with the rural hill population. Except for the occasional scientist as myself, that is left for what we might call the *meso*-, or middle-level actors, consisting of Indian internal policy makers and politicians, regional officers and the environmentalists, expressing their views in national media platforms. From this segment, we also find the people that rural population in the Shivalik Hills mostly meet face to face; as tourists that go trekking in the mountain, students and volunteers, NGOs R.C. Gupta’s Paani Foundation, or the officers from the Forest Department, the local government teachers, the scientists of IISWC and Regional Rural Development officers. Although there are of course many additional ways information in the shape of scientific knowledge about global warming or environmental stress may travel, the ones I outline below, were the ones I observed during the time of my fieldwork.

## Junctions

To my knowledge, the campaign on awareness was most conspicuous in government education through various government officers heading/producing various campaigns, such as the above-mentioned surveys and projects from the Regional Development Office, the Shivalik Development Agency/Board, the Indian Institute of Soil and Water Conservation (IISWC), and last but not the least, for the younger population at least, through public schooling. I start out with the latter.

## *Formal Education*

On my first trip to the village in December 2012, I had noticed a sign, jolly and fresh, outside the middle school. The sign read “SUNFLOWER ECO-CLUB”.

Some while later, a message was painted on the school building in bright white with blue fonts, in both Hindi and English: “Save Water, Secure the Life”. Neither the students nor the teachers knew who had done it. “The government, I suppose”, the teachers said, because that had seen the same writing on the schools further down the hills too.

water is life - the middle school wall said.



Fig.14: Left: The painted letters to the left reads: “Jal hai jīvan hai”. Right: The Eco-Club Sign outside the local school, name of village is removed.

Before moving in to the village properly, I had looked into the public information on the “Eco-Clubs” of the Haryana government schools, and found that they were a part of a 2006 Haryana Department of Environment scheme, where 2850 similar Eco-Clubs had been implemented in the in the government schools of the region. The students of the Eco-Clubs would, according to a press release, “educate the students about a pollution free environment”, and this would happen through initiatives like; “be taken to polluting industries from time to time so as to apprise them about industrial pollution”. In addition, “Regional officers of the Board have been advised to visit schools and colleges to create



awareness among the students about a clean and healthy environment” the spokesman of the State Pollution Control Board was quoted in the release (OneIndia 2006). Initially upon seeing these signs, I was excited, as it confirmed what I had assumed at the outset of my fieldwork; that there was a formal way of educating the rural children about environmental issues.

The principal at the middle school of the village, a senior male from a larger city on the plains, also confirmed that there was indeed an Eco-Club in the school, “for the children to learn about their environment” he said. (The teachers spoke Hindi, but used the English ‘environment’). The activities they had done, was to take the children to the forest and teach them about plants. It had happened, “once in a while”, he said.

Talking to the school children later, however, there seemed to be little to no activities at the local Eco-Club. Most of the school children I asked during my stay said they did not really know what the club was about, or that they hadn’t really done anything with the Eco-Club as they could remember. A few mentioned they had gone in to the forest once, and a few of the younger women married into the village from other villages, did remember their own Eco-Club from their village schools, as they had been taken on an excursion to villages in the hills to “teach them to close their taps to save water”. Another of the village school teachers, a middle-aged woman from another large city on the plains, readily admitted that they hadn’t done much related to the Eco-Club in the village. “We planted some pods for trees, but there hasn’t been much more”, she sighed. “You know, in the village, so much greenery is already there...”.

There seemed to be an idea that rural people would have difficulties to fathom the extent of the climate change process - as they lived ‘in the greenery’. “Even in Chandigarh, people will not really understand, because of this greenery here”, she said.

Apparently, she said, there was more Eco-Club activities in the city, where she had been stationed before<sup>67</sup>. She indicated this was because city children have to learn how plants and trees grow. It seemed almost like she found it of no use to be teaching village kids about environmental issues, like global warming - of which she herself seemed quite 'aware'.

She had not been the only one to suggest this. As we saw above, in the city of Chandigarh, people did seem to "blame" the greenery of the hills and the well-kept parks of 'the city beautiful' for the lack of environmental engagement, at least from the urban population.

It did seem as the mediocre interest on behalf of the teachers to focus on environmental issues in an area was caused by the amount of other pressing issues, however. The prospects of education for girls and the low-castes, to mention one, and for the children in general to fulfill national standards to pass on to higher education another. To press matters of global warming, might seem like an extra curriculum activity, for which there might be little time.

Both of the teachers with whom I was acquainted with seemed very concerned on behalf of the hill-students, and were quite aware too, that the education they could offer them, was not the one they would opt to provide for their own children (who attended other, and private, schools in the city). Neither of them were shy blaming the government school system, on which they were part, on how bad (*kharāb*) it was, and how difficult it

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<sup>67</sup> For the rotational duty, teachers have the option of a 'priority list', and the state operates with a complex calculation of 'points' which improves or decrease the teachers' chances of being shifted to an undesired zone, graded from 1-7, where the lowest number indicate a school located close to the district or block headquarter, and the highest number indicate a school located far away from district or block headquarter. The need for this has been the popularity of teaching in urban areas, and the difficulty of filling positions in rural areas of the state. This is underscored with the incentives teachers are given for opting for duty 'anywhere in the state', where they could risk being stationed in a remote hill station. If this was to happen, the teacher is compensated financially with 10% of basic pay increase (School Education Department, Haryana 2016).

was to be a teacher in the hills. "The higher you go, the poorer are the people", one of the teachers explained. It seemed that 'general awareness' for 'development' was just as important to address, something that was also reflected in the work done by IISWC.

### *The Indian Institute of Soil and Water Conservation*

IISWC was most likely the actor that provided most of the junctions for the adult landholding farmer– or face-to-face meeting points, where global ideas, knowledge-systems and projects materialized in practice. Even if the Institute is associated with the Indian Agricultural ministry, on the local level the scientists – among whom are geologists, hydrologists and social scientists, work with the Rural Development office and the local Panchayat. As we saw in chapter 3 and 4, the IISWC provided technical facilitation for water harvesting techniques and soil and forest preservation. Precautionary 'social mapping' was considered crucial to a project's success, so in the start-up phase of the project, Dr. S.L. Arya took up part-time residence in Rani Mājri around 2006/2007.

The issues IISWC were to address in Rani Mājri, were those of water-scarcity and non-productive farming. After the 'social mapping' of the watershed was conducted, the institute concluded in a preliminary report by Yadav et al. (2008), that a renovation of the existing terrace systems (*kuhl*) was necessary, and so was the construction of check dams. These would stagger the drainage causing the erosion of the nearby hills. The project proposed a budget of rs 54 lakh (5.4 million rupees, app. \$84.000) to mitigate the following persevering issues:

One of the main issues identified in the report was of nutrient loss, caused by high water runoff and erosion, which again gives poorer yield (Yadav et al. 2008:i). The report further stated that the farmers reliance on old traditional food-crop varieties also lowered their yield. The old food-crop varieties have a much higher risk than more modern

varieties to fail, according to the report, due to their susceptibility to insects, pest and disease. The villager's traditional sowing techniques were also critiqued, as broadcasting (i.e. to scatter seeds on the field by hand) would result in an "uneven distribution of plants in the field", and a low germination percent. The farmers were also found not to be weeding their maize crops, nor showing any understanding for "proper doses of fertilizers, proportion of various nutrients, time and method of application", which would result in "heavy variations in yield levels" (Yadav et al. 2008:29-30).

The report suggested that the farmers in the project would be introduced to higher yielding crop varieties, balanced fertilizing techniques, line-sowing methods, weed-control measures through farmer training and crop demonstrations, to "raise awareness" on appropriate farming techniques (Yadav et al 2008:30-31). The report also suggested to revive the "tradition of organic farming", as organic fertilizers in combination with chemical fertilizers was seen to improve "soil health" (Yadav et al. 2008:iii).

The socio-economic benefits growing out of more modernized techniques of farming and a controlled water-scape were considered quite high. The report aimed not only to enhance farming, but to rehabilitate the environment, make production sustainable, and provide a "better livelihood" (Yadav et al. 2008:iii) for the villagers. This would be done by enhancing the cash crop ratio for markets, and by generating regular employment opportunities for 58 persons in the watershed area (Yadav et al 2008:100). A five-year 'water-management' project was thus implemented around 2008, facilitated by and large by IISWC in collaboration with local Panchayat and the Rural Development Department.

At the time of my fieldwork in 2013, the project was looked upon as a success (Dr. Arya pers. comm. 2012). The IISWC researchers had already at the initial phase noted "a strong sense of community participation" (Yadav et al. 2008:7), and the team confirmed that the farmers had been very interested in extending the irrigated area and increasing their yields, and had collaborated willingly with the officials to do so.

By 2013, IISWC scientists were visiting the village at regular intervals, to check up on the *kuhl*-building process, or to register soil-samples and recording yield and rainwater amounts. The team would arrive in pairs or in a group of three, in white cars or jeeps. The researchers would be both male and female, and appearing very different from the villagers. The female researchers especially, dressing in shirts or jumpers and pants, hair never veiled, even loose, and never wearing any of the traditional bracelets (*bangles*) or the *sindūr* (the vermilion red stripe on the mid-hairline) that adorned the married women of the same age in the village.

Sometimes the researchers would buy tomatoes, or other surplus crops for home-use, as it was thought that uphill food was purer than the plains-produce (see later in this chapter). At other times, the researchers would sit for a cup of tea and give the farmers advice, on what markets would give the best profits. They brought young researchers too, occasionally. Interns or degree students, who would do surveys in the village on soil or water management. As far as I observed, (there was one German student visiting Rani Mājri with Dr. Arya for a few hours during my visit), the students and the researchers would mainly interact with Prakash, who was IISWCs contact person in the village. Dr. Arya herself would seldom accompany the team, but did appear at a Rajput village wedding in January 2013. For the landholders IISWCs project with its follow-up was very much valued, especially Dr. Arya's personal involvement was appreciated. According to Dipika, my next-door neighbor and friend, Dr. Arya was especially remembered for speaking up against the men who drank too much alcohol, and for being the one who, in Dipika's words; "made the government do a lot of improvements in the village". As a symbol of how fondly she was remembered, a self-made, stuffed teddy bear, wrapped in plastic to preserve its bright colors, was conspicuously placed in several Rajput and Lohar houses. This was made during Dr. Arya's sewing lessons, which were much appreciated by the women who had not learned to sew at home.

This personal involvement was no doubt very beneficial for several of the women and men in Rani Mājri. Despite the ‘care’ of single individuals, however, one might note the manner in which traditional methods of farming was efficiently replaced by more modern techniques, to benefit the landholders, and the role IISWC plays in ‘education’.

Although I never observed the IISWC team ‘educating’ the villagers in environmental awareness directly, it should still be safe to note that the team educated them in ‘general awareness’, especially regarding farming practices. The IISWC directly intervened in both the physical landscape, and the social. They also “educated” the local farmers in using the appropriate techniques and tools to tend their land, to conserve and maintain their forest, and for how to make the most out of their environment (by state regulation and maintenance of the water-structure of the village). Also, as chapter 4 especially has addressed, it was through the IISWC that the state most directly intervened with local power relations. They also influence the villagers economic and political relation to a ‘larger’ market, and – their ‘awareness’ on environmental processes directly.

It thus becomes difficult not to see these junctions as demonstrations of how well a state government with both policy and action might shape, not only the landscape, but also the ‘environmental subject’ (Agrawal 2005:16). This subtle coercing of the ‘environmental subject’ is nothing new in India. As we saw in chapter three, it began to take full force after the 1920s, when landscape was classified into different zones, into what Agrawal calls a taxonomy of forests, designed to protect the forest from humans (Agrawal 2005:37,44), an argument draws support from analyses of state-forest relations such as above-mentioned Dove (1992), Baker (2005), Agrawal (2005) and Knudsen (2011). But what took place alongside this new forest classification and (mis)management, was a turn to decentralized regulatory rule of forests emerging as a new technology of governance, with local forest councils to report and regulate rules of timber extraction. To recap from chapter 1 and 3, this self-governance was aimed to transform the rural population by “the

soft hammer of self-regulation” (Agrawal 2005:15), such as the Hill Resource Management Societies (HRMS).

I suggested in chapter 1, that following Foucault (1995), the right kind of knowledge has to be formulated scientifically to be seen as ‘truth’ or ‘right’ knowledge. This, also with Foucault, is intricately interwoven with power-relations. But as power with Foucault is never really localized (Deleuze 1999:26), but diffuse and relational, it is difficult to grasp, to analyze and to talk about. One way to “identify” or “diagnose” power has been to look at resistance, with two classical examples being James Scott (1989) and Lila Abu-Lughod (1990), analyzing ‘diffuse’ power amongst peasants in the Malaysian village of Sedaka, and amongst the women of the Awlad ‘Ali Bedouins of Egypt. Both approaches however, require a form of an expressed manifestation of resistance towards power. In the village of Rani Mājri, I found no such forms of downright resistance, and as such the power that I argue there is in the discourse of climate change, is hard to grasp ethnographically.

Sometimes, the shaping of the environmental subject (as in Agrawal’s Kumaon), happens quite noticeable in India. Edited school curriculums or new rules and regulations intended to conserve or develop, provokes audible reactions, ranging from cheers and enthusiasm to acts of civil disobedience. This is communicating in capital letters how environmental- and climate change knowledge has in the shaping of subjects.

Other times, however, the ways of climate change knowledge dispersion happen quite indirectly or subtle. They might show up as large money transfers from one nation state to another, supporting “green” or “eco-friendly” projects or initiatives, in economic incentives to use electric vehicles, in fashion and social media, or in movies and documentaries portraying a post-apocalyptic world. It is those indirect, and subtle ways of coercing people into being, acting or doing things that concerns not only themselves or their immediate kin, but also others about whom they have no knowledge, that are the most difficult to pinpoint.

To further the view posited here by Agrawal, it appears that one should let the development and conservation processes already (and long-time) going in the Shivalik hills, continue to propagate ‘awareness’ about environment and climate change issues. As Agrawal argue, these techniques of government, are probably the most ‘humane’, given what he saw as the current options (Agrawal 2005:91,93,). Not only could the climate change situation have severe outcomes for life in the region, but people seem to be more gently persuaded into ‘environmental awareness’ with a subtle coercion of self-governance, which arguably seems fundamental for humanity to prosper on this shared globe. I do not wish to conclude with the possible convenience of self-governance, however. It seems more pressing, I argue, to address the need of ‘awareness’ in the first place, and what ‘gap’ it intends to close.

## Mistranslations, Gaps and Frictions

To a scientist like R.C. Gupta, to protect the environment (especially the forest), and restoring and repairing water management facilities like the irrigation *kuhl* systems, was something that could only be achieved by transferring knowledge from those who knew, to those who did not yet know. For humans to prosper in cohort with their environment, the Indian farmer can be taught to preserve and to maintain if only made aware of their role in the larger ecosystem. I do not disagree with R.C. Gupta that, the best decisions are always taken when all options are presented. R.C. Gupta has seen the attempt at transferring this knowledge as a ‘failure’, however. So, have the scientists of IISWC, who could tell me that: “There is so much lost in translation, from the ones in France or wherever, making the plans, to English, to Hindi, to the local dialects or to Panjabi...” (member of IISWC staff 2012).

The issue thus seems to be in some sort of mistranslation. The issues with translation, I suggest, go deeper than the linguistic conversion of concepts, as the IISWC researcher indicated, but rather points to an existence of ‘conceptual gaps’.



A problem that is often brought out by policymakers, is exactly the ‘loss of translation’ from the ideal, often western policy-making to the muddy political and local practices ‘out there’. Often, the lack of such conformity and agreement on environmental issues has been addressed as a problem between the local and the global. Between society and the individual. Between large scale and small scale. Between the experience-near and the experience-far. As if there were ‘gaps’ between the entities of scale, “black boxes” where information changes expression, hue or tint – or get lost, misunderstood or taken the wrong way. For anthropology, these issues have been thought of as very difficult to address, even as “invisible, boring, or uninteresting” (Tsing 2005:172). With Tsing’s approach in her book ‘Friction’ (2005), however, that changed.

From the perspective of the scientist, knowledge utilized to better the lives of people and their environment, is often voiced as the ‘universal dream’ (see chapter 1). Tsing is arguing that as scientists move to explain, they move uncomfortably between context and anti-context, between claiming and refusing context, in a practice she calls “worlding”, “the always experimental and partial, and often quite wrong, attribution of world-like characteristics to scenes of social encounter” (Tsing 2010:48). To Tsing, it seems this is not only what scientists do, but what all people do – all the time. ‘Worlding’ however, also leaves “gaps”, or misunderstandings, and it is just those “gaps” that Tsing finds interesting to develop (Tsing 1995:196).

What she finds potent in these ‘gaps’, is that they are in fact not a void – but areas of ‘friction’, a sort of a creative process happening in a junction of information transfer, in actual, concrete meetings and engagements. ‘Friction’ is neither only beneficial nor destructive, but an indication of action in places where certain forms of knowledge and practices compete for attention. (One could thus argue, that the concept of ‘resonance’ intends to grasp this ‘friction’).

Through her concept of ‘friction’, Tsing ‘grounded’ a global discourse, where there was no explicit resistance or opposition to power. Tsing takes us to the mid-1990s rainforests in the Meratus mountains of South East Kalimantan, Indonesia, and to the environmental disaster carried out by logging companies there. She carries out an extensive fieldwork, both amongst the Meratus’ Dayaks, urban environmental activists, United Nations policy makers and mountaineers to mention a few, on the situation, but the stories she is being told about when, how and where these campaigns to save the forest are being carried out, they curiously ‘mismatch’. The mismatching came to fore in the junctions of information - the meeting points between peoples with different intentions and agencies. This created conceptual “gaps”, that left awkward engagement, or “conceptual spaces and real places into which powerful demarcations do not travel well” (2005:175).

The losses in translation indicate the presence of conceptual ‘gaps’ to which Tsing refers, and this also requires me to look more closely to the ‘gap’ I encountered, considering its sources.

Looking to R. C. Gupta’s perceived necessity of a Paani Foundation, might give an indication of where to look. R. C. Gupta, as well as the IISWC saw that there was an aspect of Indian development and conservation measures that view the rural population as being not in a state to handle development and conservation. He, or she, has to be made ‘aware’ in a particular manner, enlightened, in fact. When ‘aware’, the farmer will then make the “right” consumer choices, choices that will preserve the environment and contribute to national GNP at the same time. During my stay in the village in 2013, this became apparent in another example of ‘awareness’-raising, this time on cleanliness.

## Awareness and Enlightenment

In June 2013, just before the monsoon-season began, the Rural Department sent the head of office to hold “motivational talks” in certain elected villages in the rural region. This year, Rani Mājri was one of them. The talk was part of the ‘Swacch Bharat Abhiyan’, the

clean India mission from 1999, when revamped by then Prime Minister Narendra Modi aimed to “bring about an improvement in the general quality of life in the rural areas” (Ministry of Drinking Water and Sanitation 2016). The Government wished with the campaign to achieve a “Nirmal” (lit.: clean) status by 2022, by adopting a ‘community led’ and ‘people centered’ strategy, as yet another example of the “intimate government” of which Agrawal speaks (2005:196).

As the day arrived, people (generally male, Rajput and Lohar villagers) gathered in the open space at the end of the paved road. Some chairs and a desk was carried out from the primary school. No one sat down on the chairs, but stood, waiting for the White Government Jeeps. The waiters were impatient – there was other work to be done.

When the officer and his crew arrived, they arrived with a local journalist and a camera-man. The officer sat down behind the desk, addressed the crowd, and began to speak in an authoritative voice about the importance of keeping the village clean, especially to control the outbreak of the expected water-and vector-borne illnesses during the soon impending monsoon. He emphasized the importance of keeping their kitchens clean, and gave a short description of how to best clean it. He also added how people should wash their hands with soap after using the toilet - and about the necessity of avoiding open defecation. He eventually opened for questions, which there were but a few - mostly concerning how to apply for money from the government to construct a latrine.

When the short speech was over, a few men from the Scheduled Caste hamlet stepped forward with brooms, brooms with which the officer and two other men from his crew, now proceeded to sweep a section of the street, an act which was documented by a local news-station’s camera-man. The officer and his crew then departed promptly, and people went back to work.

This meeting was quite representative for rural villager-government official interaction I observed. It was perceived as an honor to be greeted with the officer’s presence, and the officer and his staff played their authoritative role well. Not greeting or addressing any of

the villagers directly, the speech, and the awkward part of sweeping the street with Scheduled Caste brooms conducted quickly. The few men from the Scheduled Caste hamlet appeared only to provide the brooms, and to remove them after the job was done. To sweep public areas in the village, were, as everyone knew well, a defiling task handled by Scheduled Caste members. The sweeping-display made the men grin awkwardly at each other. The women looked at the spectacle from the roofs of their houses, shrugged and shook their heads in light amusement, before returning to work.

I would later interview the head of department, Mr. Sharma (interviewed 2013) and his team, about the state of the village. I was greeted with a warm welcome, and both Mr. Sharma and those of his team that were in office (eight) were ready to talk and share their concerns in the interview.

Regarding the villages, they agreed that there was “not much” happening. Some connectivity work, on roads and mobile phone networks was still needed here and there, but apart from that, the villages and the villagers were being “much the same” as they had been “in the past”. Described as generally peaceful and collaborative, the officers had no problems they felt urgent to address, except to address their state of being “underdeveloped” (Sharma, 2013). In asking explicitly why waste and pollution had not been parts of his talk on keeping the village clean, the officer shrugged, and said “it is not so much of it here, so that’s no problem”.

It was not that the officers were ‘unaware’, or didn’t perceive waste as being a problem. The staff had described sincere concerns about the developments in industry (see above), about how the building of factories had really boomed over the last few years, and about the consequent pollution of air and water. A recent, devastating flood in Uttarakhand (see chapter 7) was fresh in their memory, and the team mentioned climate change and global warming as direct causes for the occurrence of flash floods. The rising temperatures of the seasons in general was also a concern, a ‘heating’ that was seen to intensify with

deforestation and air-pollution. This was however not the matter the officers were in the village to discuss that day, but another form of ‘awareness’ to cleanliness.

It could seem as if the villagers were perceived by the officers, as not being enlightened enough for the simplest, mundane tasks, such as keeping themselves and their house clean. If this was the case, then talking about the highly scientific processes of environmental issues and climate change, could in fact be perceived as addressing a very complicated issue, for a very ‘simple’ audience.

### *A Note on Being ‘Jangli’*

Most people I met in the cities of Delhi and Chandigarh, marveled at my stupidity for wanting to live in a hill village. Some would pity the villagers, for all those things they did not possess.

Amongst those things they were seen to lack, I noticed one element in particular; that of general education. The middle-aged taxi driver from Chandigarh phrased it very clearly, as he would often readily comment upon the differences between rural and urban lifestyles and attitudes upon driving me to Rani Mājri. He would sigh, observing farmer’s children in the cramped buses and auto rickshaws on their way to study in the plains colleges, talking about them being bypassed literally - and metaphorically - by the privately driven urbanites. He pitied the poor, and felt that not enough was done to help them ‘progress’. When I at one point discussed the cloudburst and the devastating landslides in Uttarakhand with him, and told him that in “my” village, people thought that the flood had to do with the anger of Shiva (see chapter 7), he shook his head in disbelief; “There are no educated people in the village. This is about science! (Litt.: “*Paṛhe-likhe log nāhīn haīn gānw maīn. Yah science ke bāre mem hai!*”).

As far as status and agency went, the difference perceived to exist between city people – often referred to as the ‘reading- and writing people’ (“*paṛhe-likhe log*”) and the ‘village

people' ("gān'on maim log") was perhaps an ambiguous difference, but one that mattered to how communication between the government officials and the villagers took place.

As most meetings between villagers and the urban people visiting the village because of public duty (because they have to), and because they are higher in status because of their role as teachers, the derogatory display of power is quite important. I witnessed quite a few of these 'displays'. Another particularly illustrating example, was when two female teachers, previously stationed in the village, stopped by "my" household. What began as a regular interrogation on my objectives in the village, ended up with the teachers directly insulting the women of the household by pointing out all the "stupid and backward" ways of speaking and behaving that I had been taught to be polite and good behavior, from my female friends and acquaintances in the village<sup>68</sup>. Nirmala sighed after the two teachers had left her home, and when I attempted to tell her that no matter what they said, she was not inferior to them, she shook her head, disapprovingly, and said: "They are not like us. We will never become equal. We, are people of the soil (*mittī*)".

As a contrast to the perceived 'progressed' lifestyle amongst the urban population ('progress' was used by the villagers as the opposite of 'backwardness'), being rural, or 'backward', seemed to entail a certain relationship with the past, with traditional ways of doing things, that had been left 'behind' by the urban elites. To be 'backward' was considered as the "drawbacks" of being Pahāri, as it entailed hard work and stricter rules on social roles of caste, gender and age. This was expressed quite clearly in the struggle of 'adjusting' to village life, described by a Rajput farmer's daughter who married into the village at the time of my stay. Not defining herself as a Pahāri (she came from a small-scale farm on the nearby plains), she compared her natal home to her new home in the following manner:

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<sup>68</sup> In this case: not to call my husband by name, but by the name of my eldest child so that his life would not be shortened, to keep my hair closely tied with a braid in respect for said husband, and not to whistle indoors (or in the village) so as not to attract malevolent spirits. All of which to the urban teachers was 'ridiculous'.

“You know, this is a hilly area. People here are not progressive-thinking...thinking things like...women should not have employment (*naukrī*). My village is on the plains, our thinking is more like in the city. There, a woman can ride on a scooter, and have a job. Life is easier”.

(Rajput woman, 22)

These stereotypes of the hill peasant have a history, and they interweave with a particular connotation with the hill villagers and the forest; as people who need to be made ‘aware’. This follows, as I see it, a longer history of urban-rural relationships in India.

With the analyses referred to earlier by (Dove (1992), Agrawal (2005) and Knudsen (2011), we saw how the British colonial government associated forested (*jangli*) landscapes with the absence of civilization and positioning the people living in these hills as civilizations ‘other’ (Dove 1992:243). We also see the peculiar alignment of rural, forest people with wilderness and disorder, and a stereotypification of the ‘*jangli*’ or ‘*junglee*’ people as people who do not “obey the norms and laws of the country” (Dove, 1992:239).

The colonial environmental narrative can thus be said to have gone “hand-in-hand with subjugating local tribes and rulers variously termed ‘wild’ and ‘belligerent’” (Knudsen 2011:315), aligning forest and hill (rural) people firmly on the side of “nature”, with the plains (urban) people with “culture” (Dove 1992:239). We are left with a rural citizen that appear so very different from his or her urban plain counterparts.

On being *Pahāri*, or “off the mountains” back in the mid-1960s, Berreman (1978) in his fieldwork rural Garhwal, then a part of Uttar Pradesh, now a district in North-Western Uttarakhand, notes how “the *Pahāri* represent a way of (...) exhibiting a number of distinctive features of social organization, religion, economy, and technology sufficient to make them seem quite strange, unorthodox, and *jangli* (“uncivilized”) to the people of the plains” (Berreman 1978:330). To be ‘*jangli*’ was not the word that was used the most when talking about rural people or the lifestyles of the *Pahāri* people of Rani Mājri, neither the word opted by themselves - but the word “backward” was. The terms seem to

denote much of the same – a certain difference in ways of living, that make them appear ‘uncivilized’.

In what I have outlined above, I see a relationship where ‘scientific’ knowledge is playing a central part, especially when polarized in a dichotomous relationship between ‘scientific’ knowledge and ‘traditional’ knowledge’. This is ‘mismatch’, or ‘gap’ that implies, such as with Agrawal’s (2005) Kumaonis, that people’s practices and perceptions about forests are ‘traditional’, but that they can be made ‘modern’ (and environmental) after institutional transformation. With this optic, the state shapes the policy, and the policy shapes the people. But there is something lacking in Agrawal’s approach. There are no deities there, no forefathers, no ghosts, that might influence the strategies and actions that people take to achieve, nor does anyone address what for a villager, is a ‘good life’. When one does, one sees that the relationship between ‘progress’ and the ‘past’ was deeply ambiguous.

One example was expressed in how the metropolitan youth, for example, would long for the ‘simple’ rural ways of living.

### *‘Selfies’ with ‘Nature’*

A small, upper class minority of Chandigarh youth, would actively seek experiences with “the wild”- Trekking and nature loving has not really been what people have tended to associate Indian youth with at all, but no matter where their inspiration is drawn, “wild”, or natural nature ‘trends<sup>69</sup>’ in India by 2017. As Tsing (2005) describe the provincial Indonesian “nature lovers” to be part of a class formation, this would also be true for this segment of young, urban Indians. Educated people for whom nature has become transcendent and romantic, what Tsing finds to be “key distinction of cosmopolitan youth” (Tsing, 2005:130).

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<sup>69</sup> For a thing, idea or attitude to ‘trend’, is a way to denote a certain elitist popularity, in contrast to what is popular with ‘the masses’.



These personal experiences of this sort of nature, strengthen the alternative image of how different the rural environment appears to the urban Chandigarh elite. Their quite idealized image of the rural hills, often excludes the sociopolitical realities of farmers struggle, caste discrimination, alcohol, misuse, malnutrition and poverty, so prevalent in the development discourse, but rather portrays the hills as natural, pure, simple, serene and peaceful.

When the urban “nature lovers” traveled to the mountains, they did so to see “sites”, enjoy “views” or for “trekking” in and around the hills stations of Shimla, or those lower lying hill-stations closer to the city itself; Morni and Tikkar Tal. Following the global trend of sharing experiences on social media, the “nature lovers” also expressed their longing for, or experiences with, “real” nature through large sharing platforms like Facebook and Instagram, or in personal blogs<sup>70</sup> like the impressively comprehensive “Hills of Morni” by A. Dhillon, (aka Mornee Tramp). I cite;

“The laid-back life on the hills is the closest one can get to paradise. (...). The absence of traffic and the stink of the urban chaos. The clouds that swim into your homes. The simple hill folks. (...). It’s no coincidence that all the sages and rishis of ancient India sought the refuge of the hills for quietude and for experiencing divinity. There is something about hills that brings calmness to the heart. The experience of being ‘in-sync’ with nature and God. (...) The road to Morni takes you nowhere else. There is no money to be made. No room for the profiteers. But there is romance. There is peace”

(Amitabh Dhillon aka Mornee Tramp 2016)

Social media such as Instagram and Facebook was increasing in popularity amongst the handful of older youth with smart-phones as well. For the youth of Rani Mājri, however, to be taken pictures of in the fields, or with the traditional *shalwār-qamīz*, was

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<sup>70</sup> A ‘blog’: personal web log.

embarrassing – they would turn away or hide behind their work, until I got the idea and stopped taking pictures. The youth themselves, however, used social media as a platform to keep in touch with friends, and to show off, with ‘fancy’ hair in ponytails, and in western style outfits like tight fitted pants and T-shirts.

The waterfall of the village was a popular site for taking pictures with one’s smartphones, to be shared on social media by the girls. It seemed urgent for many of these youths to distance oneself from the rural lifestyle in which one was raised, and a way to do this was to picture oneself posing in front of what was perceived as serene landscapes, such as waterfalls, or open mountain views, in the same way that metropolitan youth would be doing in more far-away places. The beautiful (*sundar*) backgrounds were then either photo-montaged into their wedding photos or on pictures posted on their Facebook and Instagram profiles.

In enquiring, why Rani Mājri was considered a good place to live for the youths of the village, however, it was not because it was considered particularly ‘beautiful’. The village was just an ordinary village in ordinary village surroundings. Other places, they considered, were much more beautiful, and they would urge me to travel and see them – the beautiful Mughal Yadavindra gardens, the spectacular view from the ‘timber-trail’ – a cable-car journey up into the Parwanoo-hills, or the view of the Himalayan mountains from Shimla. These were all sights that would be better if I wanted to see ‘beautiful’ surroundings.

For the youth, the village was an attractive place because it had family and friends, and a city not too far away, and not too close either. The absence of waste, pollution and smog of the cities, was quite valued. For the adult villagers, not acquainted with trends or interested in following ‘fashion’, other aspects of ‘tradition’, ‘serenity’ were also sources of pride for a villager, such as paying due respect to the elders, and keeping good relations with the deities. In fact, and quite interestingly, adults would frequently talk about the village having both environmental *and* social qualities that made it a ‘good’

place to live, and these were almost always contrasted with life in the plains. My next chapter will address both issues, because, I argue, the issues are intimately related.

# Chapter 7

## In the Hands of Bhagvān

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In the previous chapter, I looked at how the lack of ‘scientific knowledge’ amongst people in Rani Mājri was one of the prime indicators of ‘backwardness’, and how the stereotype of the ‘backward’ villager continued to inform governance, and the molding of general urban-rural figurations. In the process, I also found an ambiguous relationship with modernity and with ‘progress’, vocalized together with environmental concerns that, I argue, did not echo the climate change idea, but resonated its process. In Rani Mājri, the climate change idea exists not as monotonous or uniform adaption, imitation or duplication, but as ‘resonance’ that indicates an intimate relation between social and environmental change.

To exemplify the connotation, I draw on the environmental concerns that people expressed in the village, and how they were accompanied by social change, indicating that global warming was viewed as some sort of environmental retribution for the ‘wrong’ kind of progress. I start out, however, with looking at two weather-related events that took place during my stay in Rani Mājri. The two events were both outcomes of erratic monsoon rains; the first being a violent and massive disaster, the Uttarakhand Flood (also called the Indian Tsunami) in June 2013, and the second a smaller, local landslide happening in the village itself a few weeks after the Uttarakhand tragedy. The two incidents differed in scale and magnitude, as well as in the reactions and interpretations that the incidents were given. I begin with the first and most dramatic incident, the Uttarakhand flood.

## The Uttarakhand Flood

Although the monsoon might always have been an ambiguous ally, the villagers in Rani Mājri generally agreed that since the late 1990s, the monsoon has been particularly irregular. One year a weak monsoon might cause depleting drought and critical food-crop failure, the next the monsoon might come in too strong, and the torrential rains cause landslides, devastation and havoc. As we saw in chapter 4, the monsoon rainfall is crucial for everyone in these areas, regardless of landholding, caste or occupation; as such, its behavior over the past years seemed to be easily remembered, and its onset will always be awaited with tense anticipation regarding its time of arrival, duration and intensity.

In 2013, the monsoon-season arrived 'on time', which means 'as expected' by the local farmers. However, the rains came on strong, faded away prematurely, for then to return with ferocious intensity. This caused not only agricultural distress upon its return, but also illustrated how multi-vocal a response to climatic shifts in rhythm can be.

In mid-June 2013, clouds had drifted tauntingly towards the Himalayan mountains for days, without shedding a drop of rain. The school-teachers from the city denied any of my hopes for the rain to appear soon, the news had reported of possible onset dates later in June. Amongst the farmers however, there was talk, that the rains were surely approaching. Bhagwati, Prakash's aged mother, had commented upon a circle around the moon as being a sign of rain to come any time the previous evening. Increased intensity of heat over the last few days had also made several of the women remark that the rains would definitely be over us soon.

The next morning, someone in the village had decided there were enough indications, and initiated the preparations for the first rains. This brought hectic activity to the whole of Rani Mājri, and demanded much from everyone able to work. But would rain fall?

It did.

The first few days, just a little rain fell, a teaser of what was to come. All day, the families worked the fields from sunrise to sunset, immersed in work, and sweat. The days

that passed in between the first showers were characterized by extreme temperatures combined with humid air, causing excessive sweat and heat-rashes, dehydration and consequent fatigue - and erratic sleep at night. With the temperature approaching forty<sup>71</sup>, my husband and I decided to take our toddler Jon to our air-conditioned city-apartment in Chandigarh for a break for a few nights. Although the village would be a few degrees cooler than the plains, the city had a steady electricity supply - the village did not.

The very first thing that met us when we arrived in town, were newspaper front-pages with images of a recent and obviously massive, flood in the upper Himalayan regions of Uttarakhand - a neighboring state to the east. Red, fat-font numbers communicated the number of dead, missing or injured, accompanied by bird-eye helicopter images of the difficult rescue operations carried out by military forces.

A cloud-break lasting for several days, happening simultaneously with the rapid melting of snow and ice in the mountains, led to massive movement of water and debris, which blocked rivers and caused overflow and landslides. The consequences of what was later popularly referred to in the media<sup>72</sup> as ‘the Himalayan Tsunami’. A massive flood cascaded down the steep hills into the valleys below. The mountainous area is normally sparsely populated, but in May and June every year, these hills are crowded with pilgrims, following the pilgrimage of the ‘Chota Char Dham<sup>73</sup>’ (the four small abodes), popular pilgrimage sites both for Sikhs and Hindus. The flood obliterated villages, displaced 100.000 people and causing the death of several thousand people (the numbers are varying between 4-6.000 people dead<sup>74</sup>). The following weeks, national news in print,

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<sup>71</sup> I registered a maximum temperature in the village of app. 39 degrees Celsius / just above 102 Fahrenheit.

<sup>72</sup> See for example BBC News (2013), Discovery Channel (2013), Rajgopal (2013).

<sup>73</sup> Most popular are the four temples representing the three major sectarian strands in Hinduism; in Badrinath, pilgrims visit the abode of Vishnu. In Kedarnath, the abode of Shiva, and at Gangotri and Yamunotri, the abodes of the goddesses of Ganga and Yamuna.

<sup>74</sup> State Government, a year after the incident, in 2014 reported 169 people died and 4021 people as missing (presumed to be dead) (Dr. Satendra et al. 2014), others operate with a death toll at app. 5748 (Nair 2014).

cable and viral, were filled with extended coverage of the floods, so were people's conversations.

## Resonance

As with any disaster of scale, people asked why and how this could happen, and the quest for answers colored both dinner conversations and the national media in the days and weeks to follow. The explanations for the disaster were many, but most would link the devastating outcome of the flood with the combination of government (mis)management of forest and hill ecology and extreme snow-melting in the Himalayas, coupled with erratic and intense rainfall. Many major news-publishers viewed the latter element, that of the temperature and the rain, as tied to the effects of global warming and climate change, but both media and the scientific community seemed divided on where to place the blame. Nayanika Mathur (2015) for example, was one social scientist who argued that the over-emphasis on climate change by the Indian state as the main culprit for what she calls the 'myth' of Himalayan environmental degradation, was done with intent to shroud other and more harmful "human-induced policies and practices" (Mathur 2015:102). A hybrid story thus emerged, of state (mis)management *and* global warming in a lethal combination.

One example on how the story was interpreted as 'hybrid' incident, was found in the English newspaper 'The Hindu', where the director of People's Science Institute, Ravi Chopra, argued that the floods were far from a 'freak' accident, but rather, a sign of what is to come. Chopra writes:

"Several reports from the Intergovernmental Panel on Climate Change (IPCC) have repeatedly warned that extreme weather incidents will become more frequent with global warming (...) With utter disregard for the State's mountain character and its delicate ecosystems, successive government has blindly pushed roads, dams, tunnels, bridges and unsafe buildings even in the most fragile regions. Last week's flood have sounded an alarm bell. To pursue development without concern

for the fragile Himalayan environment is to invite disaster. Eco-sensitive development may mean a slower monetary growth rate but a more sustainable and equitable one”

(Chopra, for The Hindu 25th June 2013).

The article pointed at both issues of ‘development’, over-consumption, environmental deterioration, and a faulty state governance. By many of those I spoke to in the city, environmental explanations were also voiced as the most likely cause of the ‘Himalayan Tsunami’. The employees of the regional Development Office, my Chandigarh-based taxi-driver, the shop-keepers at the Chandigarh Sector 15 market, my Chandigarh landlords, their neighbors and other friends and acquaintances I made during our time in Chandigarh were in unison: global warming and the short-sightedness of people building roads and dams and hotels where there should be none, was the ‘real’ reason behind the tragedy.

This interpretation of events, however, was not the dominant response in the village when I returned a few days later. In the village, another dimension was added, the anger of lord Shiva.

## A Dance of Shiva

When I returned to Rani Mājri, news had reached the villagers. The flood was often talked about during the first days, either because it happened to be on the TV-news, or because someone knew someone that had been hit by the flood. Because I was genuinely concerned, I would ask people; “do you think something like that can happen here?”, “why do you think it happened?”, or “are these floods usual for the season?”. The answers revealed that some were worried and reported sleeping poorly after the incident, while others denied anything of the sorts. Almost everyone, however, had a reply to why it happened, or whether it was to be considered a “normal” event.



To most of the families to whom I voiced my concern, it seemed that the flood and its consequences was a sort of environmental retribution from Shiva. I first became aware of this aspect, when Prakash, and his younger brother Bikram, were watching the “News Nation” morning-television news a few days after the incident. The program was showing snippets of post-flood reportages, the dramatic portrayal of houses collapsing into the frothing river, people being stuck in hillsides, helicopter rescue operations, etc. Prompted by the dramatic images on screen, I asked whether these massive land slides and flooding were normal for the monsoon season, and Prakash explained to me that indeed they were, but not with these consequences. As I knew from earlier conversations that Prakash was vaguely familiar with the term ‘global warming’, and that he had a tendency to take an elevated position and distance himself from what he considered to be “nonsensical speculations”, I asked if he thought it to be ‘global warming’.

Prakash shook his head confidently. No, this had originated from “the hands of God; we people cannot do anything” (*Bhagvān ke hāthom meṁ haiṁ; ham log kuch nahīm kar sakte haiṁ*). In fact, he knew why too; An old goddess temple had been demolished at the flood site - or removed [he was not sure]. A new one had been built at a different site, and this relocation had angered lord Shiva. In his anger, he had sent the flood as a punishment for the wrongdoing. This information he had gotten from Jammu, where his oldest daughter Padma was residing for her final exams.

That a relocation of a temple was to blame, was not a unique explanation for Rani Mājri. I did encounter a few, early news reports on the incident where explanations similar to the one I heard from Prakash were given, like this one, told by workers in a medical relief team on site to a reporter:

“For the locals, the floods were more than just a natural disaster. A priest told us that the government had angered the gods and brought this disaster upon the people. According to legend, he said, the Char Dam pilgrims were protected by Dhari devī (an avatar for the Hindu Goddess, Kali Mata). However, the idol had been shifted from its original place in view of the Hydel Power Project. This angered the devī and Lord Śiva, who’s one form is Kedarnath, and a few hours

later there was cloudburst and floods, he said. He added that a king in the 1880's had made a similar attempt, which with similar results. Many locals and religious leaders had strongly opposed the shifting of the idol.”

(Bajwa and Boparai, for Global Post (2013).

Woven together with an apparent side-comment on a hydroelectric power project, the role of Shiva should also be noted here. Not only is the village of Rani Mājri mainly Shaivaite, and Shiva one of the largest and most popular deities here, but Kedarnath - the abode of Shiva in the region of Gharwal was hit most badly by the flood. There were also two images that circulated the news more than any others; the image of a flooded Kedarnath with its buildings collapsing into the surging water, but for its massive Shiva temple left standing intact. The other; a large Shiva statue submerged in the floodwater of Rishikesh. Both images became iconic for the disaster, and for many, illustrated the mighty force that Hinduism ascribes to lord Shiva, the very same deity that was seen to initiate the Uttarakhand flood.

In fact, the news-article cited earlier, a flood victim survivor in Uttarakhand described the disaster as “It was like Lord Shiva doing his Tāṇḍav” (Bajwa, & Boparai, 2013), which is the dance where Shiva comes out of his ascetic state, and destroy in order for creation to take place (Fuller 2004:36). Shiva is sometimes thought of as an antisocial god, indifferent to the world, he will retreat to the summit of Mount Kailash in the Himalayas - his favorite place of meditative repose. He is not so much the destroyer of this world, as he is a god who transcends the moral order of man. His indifference, or detachment, is however not complete. The preservation of cosmos (maintained by Vishnu), does also depend on Shivas involvement with it - for example by destroying it (Fuller 2004:36).

Shiva and his anger continued to color the explanations provided in the days following the incident, but after a weeks' time, the reasons why the disaster struck, had become elevated to a more structural moral breach, to a societal failure that continued to disturb

and concern people in the village. A few weeks after the incident, two Rajput women in their late thirties became quite agitated when underscoring the moral corruption causing Shiva's anger. According to the women, it was the moral decline in the world today, that had made Shiva so angry. I knew from earlier conversations with both male and female middle-aged farmers, that they shared a rather commonly held dislike for what they saw as tendencies that children no longer respected their parents, or that families took less care of their elderly. Shiva also knows of this, and thus had sent the flood as a punishment or warning. The two Rajput women emphasized how he had even killed his own devotees, pointing to how this underscored the sincerity of his anger. "There is sin in the world, filth/dirt (*gandagī*) has spread in it!" they exclaimed. The level of immorality had now been raised to a more general level, beyond the single immoral act of moving the goddess temple.

By 2016, when three years had passed, the dominant explanation for the Uttarakhand flood still seemed to be that it had been caused by Shiva. Talking about the recently completed monsoon season with a middle-aged Rajput couple on the fields an early morning during my re-visit in October 2016, the notion of environmental retribution caused by moral decay was brought up. The couple seemed to have settled on an explanation that Shiva had been upset because of the trade of water bottles.

Water bottle sales are booming in India (Bhushan, for Economic Times 2016), but in the village, local water is still drinkable from the tap. The idea of selling and buying water in bottles was thought to be an unnecessary and extravagant and condemnable expenditure, an act found appalling to Shiva. I have interpreted this, as Shiva making a statement through sending the flood as a warning; an environmental retribution for a society that would not adhere to the morally sound practices of the 'past', especially since the flood hit pilgrims, devotees of Lord Shiva himself. When I asked the villagers why his anger was so sincere, the only explanation for this would have to be that; they ought to have known better.

But this explanation was not unequivocal. As I had heard in town, some people would also blame the stupidity and short-sightedness of developers in the region. One of the more influential and wealthy farmers of the village, a middle-aged Rajput politician, sighed that people never learned. Why they would build hotels and all in an old river bed, he could not understand. With heavy rainfall, the water will always find its old course and flood the place, he said. When I asked him of any correlation to ‘climate change’, he could not see it, (because, as he admitted, he did not really know what that was all about). His daughter, 19 years old and currently awaiting her marriage after completing her “+2” (Higher Secondary) the same year, came to his aid, and explained that it was ‘global warming’, which her father would shrug at, indicating that he still did not know what that meant.

That education is relevant to ‘sensitizing’ youth to the concept, however, is not my point here. Education – not awareness per se, as we saw argued amongst others by Norgaard (2011) is in any case not found to make people ‘environmentally conscious’ in their practical engagement with the world. What struck me as most interesting was how ‘global warming’ and the notion of sin, *karma* and fate seemed to blend so seamlessly amongst the major part of the village population. This was not at all unique to this village, and as I will discuss below, it is an example of how both the ‘climate change’ model and the ‘devacentric’ model can be read as environmental retribution for general, moral decline.

In chapter 5, I emphasized the auspiciousness that arose out of timely actions by the right people performing them in the right places. Here, I would like to have a closer look at notions of inauspiciousness, ‘untimeliness’ and fate. I do this, because concerns about ones’ future prospects, I found, revealed that social and environmental concerns nested together, as part of ‘progress’.

Before I outline the concepts of sin, *karma* and fate, however, I would like to show how they came into play in another monsoon-related incident, a local land-slide.

## Losing Ground: Adjusting to Fate, Fortune and Untimeliness

As I have shown in the preceding chapters, all villagers, regardless of occupation, caste and gender, were in some way dependent on local weather; especially on the relative predictability of the monsoon rains.

As we awaited the rain, the discomfort of the heat preceding it, made me was eager to know if the villagers thought the monsoon would come “on time”, or if it had been “timelier” before.

I had asked several adult and elderly people about it, who gave quite coherent replies. There was no way of knowing whether the monsoon would come “on time”, because the right time was up to Bhagvān. The Rajput widow Lalita, aged somewhere around 80, would for example say that; “whenever the rain comes is not in our hands. That, birth and death, these are three things we cannot do anything about - this is not for us to know, they are for Baghvān to know”.

But just because something is in the hands of the deities, that does not mean that humans are without agency. Sometimes, adjustments can be made to increase the chances of a benevolent outcome, for example, as we saw in chapter 5. To approach and appease the deities imbued with the power to protect the village and its inhabitants, the *rakṣās* (protectors) and the ‘fierce gods’ was part of daily routine. In planning and starting new projects, in completing and utilizing them; to address Kheṛa Baba, Khwaja Pir, or the ‘fierce’ gods as Panch Pir and Soṛ devta, was done regularly to insure the village being a beneficial place.

When bad things happen anyway, however, the villagers’ notion of fate or destiny, (*qismat*)<sup>75</sup>, also seemed to indicate that one can mitigate the consequences. An example of this is the landslide that happened in the village just weeks after the Uttarakhand flood that I described in my introductory vignette.

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<sup>75</sup> *Qismat*, from Urdu litt; “fortune, luck, chance, fate, destiny” (Platts 2008).

After the materials and the buffaloes had been moved away from the edge of the landslide, the women returned to their daily routines after the landslide, Prakash sat down with a worried mine, discussing the costs with a friend. Apparently, they had tried to enlarge the ledge by mounting a brick wall there a few years before, intending to expand the area to keep buffaloes. This had cost several *lakhs* (hundred thousand rupees), that had now gone down the hill. His friend tried to cheer him up, but Prakash's face remained sullen. His mother approached him with a jug of water, which he took with him without a word. I did not find it suitable to follow him. Out of concern for new landslides, my husband and I drove to our city apartment with Jon the same evening. Our bedroom bordered the site, and I had no intentions of ever sleeping there with my son again.



Fig.15: Dog resting on what was left of the ledged patio. Picture taken after the first landslide at the site.

At night, Prakash called me, telling me that yet another rainfall had caused another small landslide at the same site, but that they reckoned the worst to be over now. He begged me

to come back, which I did, but alone, this time. When I returned, the sense of drama and urgency from the day before had cooled off. There was a clear tension below the surface, however, when I discussed the matter in private with Prakash's younger brother's wife, Orpita. She was making lentil-soup with maize-bread (*dāl-makki*), when I admitted to her I was worried about sleeping in the bedroom, which bordered the slide-site.

She admitted being worried too, but she insisted it would be fine now, as they had given Khwaja Pir, a local deity, sweet porridge (called *dahlia*). I was fairly unfamiliar with Khwaja Pir at that time, and had only heard his name mentioned briefly when my son was ill with diarrhea, and Prakash had given him *kuhl* water to drink to sooth his upset tummy. We had not lived in the village for long then, and at that point I was more upset to learn they had given him *kuhl* water, from which I myself had fallen quite ill from drinking, than the fact that someone called Khwaja Pir had anything to do with the water.

It seemed the *pūja* (worship) had taken place by the site where the *kuhl* enters the settled parts of the village whilst I had been in the city. I was eager to hear more of this ritual I had missed. Orpita lifted the last, puffed *roṭī* from the fire, and patiently hunched down next to me to explain. "The way he [Khwaja Pir] has done it now - with all the water that has taken the wall, he should not do it like that! If he becomes angry, he might bring the whole house with him! It can happen!" Terrified at the prospect of the whole house sliding down the ravine, I asked if she thought Khwaja Pir to be angry now, but she did not think he was "But you never can know, he does as he pleases", she added. Now, they had given Khwaja Pir sweet porridge, and additionally asked if Bhagvān could "look their way", so everything would probably turn out fine.

Not being acquainted with Khwaja Pir's ways, however, I could only assume that he had neglected to protect the village from this massive rainfall in anger, or by haphazardly glancing past the village (forgetting to protect it). Questioning why, I could not make out not a specific act or event done by the family or the village that had initiated the heavy

rain, or the lack of protection, but rather Bhagwati stated that this was a part of their family's fate (*qismat*).

It was, it seems, the consequence of the landslide that was fated. It could have had other consequences, for other families – but in this family's fate, this misfortune was to happen. Still, the misfortune was not accepted passively, but mitigated – to prevent such things from occurring again. In Rani Mājri, the notion of *qismat* was invoked in several contexts, but often as explanation of misfortune, as mentioned above. It concerned matters of life and death - Orpita's childlessness for example (It is my *qismat*, she sighed), or the death of a relative from cancer (“It was my uncle's *qismat*”, the young Rajput girl explained).

*Qismat* was as much collective as it was individual. The Scheduled Castes in the Hamlet would explain the Scheduled Castes poverty with *qismat*, like Smiti, a middle-aged woman who had just returned from a government hospital in town. Newly operated, she excused the watery tea she served me (a sign of want) and agonized about their current economic situation. “Only Bhagvān can help us now. He is the only one”. “Is there really no way out for you?”, I asked, knowing well she had daughters to marry off that had been bothering her since I first met her. She responded rhetorically: Had I seen how they live in the village? How good everything is over there? And do you see how it is here? “No, to be poor is our *qismat*”, she said.

Animals were bestowed with *qismat* too. A goat had gone missing, and I had joined Avani, a middle-aged Rajput woman I often spent time with, to look for her. We had to turn home without any goat however, and I asked Avani if she worried about it being killed. “If the goat does not come back, it is her *qismat*”, she said, but admitted she would be sad as it was the mother of the three kids she had left. When the goat was found one day later, killed by a panther just behind the village, Avani was sorrowful, but accepting of the goats' fate.



In neither of the cases were the individuals or groups afflicted by misfortune passively accepting destiny, however, destiny was rather actively manipulated. The childless Orpita got medical advices from a government fertility clinic, had expensive x-rays taken at a private clinic, ate pills prescribed by an ayurvedic practitioner, she sought the advice of priests, and devoted herself to the mother goddess - even a tantrik was approached, giving her mantras and advising the family to acquire a goat from him, which would encompass the evil spirit that possessed her and was seen to cause her childlessness.

The deceased uncle had gotten medical care from a hospital for his cancer, and the goat was searched for by Avani and her husband until dark fell that day. The Scheduled Castes worked as much as they could, to cover up the expenses for their bare necessities; water, food, clothes and electricity, medical care - and marriages. With the landslide, fate was also approached with agency, in the form of ritual measures, with worship and devotion, as if ‘adjustments’ could be done.

“*Adjust karna*” (English word ‘adjust’ used) was an expression that was used when trying to make the best, or adjust, to a difficult situation (as when the bus never arrived and you got late for work), to give one’s body time to adjust to shifts in temperature (as when allowing the body to cool from hard manual labor before hitting the shower), or in adjusting to the village water after ‘shifting’ (moving) because of marriage or work.

As Heid Jerstad (2017) also notes amongst the Pahari villagers of ‘Gau’ in Himachal Pradesh, to “adjust karna” was to make possible what seems almost unthinkable, like fitting eight people onto a three-seat row on the bus. It could also denote adjustments to new scenarios, as to be young and hopeful, but cope with the fact that after marriage, a housewife is all you will ever be.

Anja Wagner’s (2013) observations from work among the Himachal Pradesh Gaddi, too, points to adjustments of the body in relation to the context as a technique to cope. If you do not take time to adjust, you will – in the case of taking a shower when your body was still hot and sweating – develop a fever. In the case of dealing with a difficult situation, suffer the consequences for it.

This idea of ‘adjustment’ also showed up in the case of my own wish for a girl for my next pregnancy, when I asked quite bluntly if *qismat* was “pukka” (set, fixed). Asking what to do if my *qismat* was to have only sons, Nirmala, the middle-aged Rajput woman of my household, advised me to try this: "Tell the devī that if she gives you a girl, you will visit her temple and give 12 or 101 [rupees] or whatever you have every time, and take fast so and so often - then maybe". If I approached the devī with enough devotion, it seemed, my *qismat* could be adjusted.

There was, I found, no indication in practice that *qismat* was passively accepted, neither that it could not be augmented or approached only by rituals. But when all known remedies fail, one is rather forced to make ‘adjustments’ to the new scenario. To ‘adjust’, I find particularly interesting in this context, as the concept entail both acceptance and realignment, leaving much agency with humans in the face of abrupt changes, such as the ones climate change arguably will bring. For that argument to be clearer, however, I must outline the concepts of *karma*, *qismat* and *pāp* (sin).

## Karma, Qismat and Pāp

*Qismat* it seems, is part of the natural order, or a person’s *karma*. In Hinduism, fate is written at birth on one's forehead. But *karma* and its relationship to *qismat* is not as straight forward as the concept of ‘fate’ in English imply; as if there is a set destiny waiting for you in your future.

According to Wadley and Derr's (1990) study of the responses to a village fire in Karimpur, North India in 1984, *karma* is affected by purposeful action, thought and desire. These actions are continuous in life (one is, after all, always acting) but are categorized as either *pāp* (sin) or *punya* (merit). The actions, thoughts and desires of a person, will again affect one's ‘body substance’.

In Francis O. Zimmermann's (2014) interpretation of the ecological significance of Sanskrit texts, the Hindu body is seen as consisting of a network of channels or veins. Like a river, the network of channels starts out from where it left off in the karmic cycle, changing its hue through touching, breathing, eating and living into aligning more or less with the three Vedic conceptions of substance codes, or 'body essences'.

The Hindu body read via Zimmermann's interpretation, is seen to contain more or less of three main substances; *Sattva*, *Rajas*, and *Tamas*, which have associated tempers, tastes and 'natures'. It is important to note here, that in the priestly castes (Brahman) *sattva*, the purest essence - of knowledge, clarity and primary essence of the cosmos - is thought to dominate. In the warrior castes, (Kshatriyas, like the Rajputs of the village), the *Rajas*-essence - that of action and heat - is thought to be dominant. In the Scheduled Castes, (the shudras of the Varnas), the *tamas*-essence - the most impure essence causing indolence, delusion and ignorance - is thought to dominate.

Peoples actions, inactions and what they eat, is seen to affect this balance of essences in a person's body, for example by eating a heating fruit or vegetable when you are pregnant (as a 'cool' body state is thought fortunate for the baby), and an imbalance might inflict illness or misfortune. If the *karma*, the natural order, for a person is to be born and to live within the Kshatriya caste, then one might propose that food, action, thought and desire that stabilize the *Rajas*-essence will be benevolent, and align ones *qismat* in a fortunate direction. Fate thus appears 'adjustable' to action or inaction: what you do or do not do, who you're with and who you're not with, what you eat and what you do not eat.

Closely linked to the notion of fate, *qismat* and *karma*, is the *dharma* of a person, animal or any subject. *Dharma* refers to adhering to a particular moral order of the universe; "that which is to be kept", "religious observance", or "prescribed code of conduct" (Platt's 2017). *Dharma* can be said to be both thing and action, and something that a person has and does; and most importantly, it is *dharma* that defines their actions (*karma*) as good or bad, giving a person merit (*punya*) or sin (*pāp*; sin, evil) as "fruits of action" (Wadley and Derr 1990:139).

By adhering to *dharma*, one can be given merit from the deities, a merit that might be decisive for one's *qismat* in life. Not adhering to *dharma*, to sin, would give misfortune of some sort. A person, writes Wadley and Derr (1990:138), can sin because of overt intention *or* because it is fated – in one's '*bhāgy*' (Hindi for *qismat*). To adjust one's *qismat* into a more benevolent one, will in line with this reasoning, give less chances for doing sin, which again would make adhering to *dharma* easier.

This notion of fate is quite 'devacentric'. It is related to the benevolence and malevolence of the deities more than humans. Still the deities and humans do not stand in passive relation to each other, but rather responding to each other's choice of action. This became particularly clear in the responses to the Uttarakand flood, when several of the people I talked to emphasized how Shiva had revolted at something in society itself being very 'wrong', that sin had spread in the world, and that people were not adhering to *dharma*. We see here, a connection with the environment, the weather in particular, ties up with notions of morality and sin (*pāp*). Since global warming will, it is presumed, lead to more of the same kind of weather that has been described above, it would be interesting to look at how the notion of *karma*, *fate* and *sin* would appear aligned with the climate change idea.

## A Fated Climate Change?

When the disaster in Uttarakhand was ascribed to Shiva in Rani Mājri, it was placed within a cosmology, a world view, infused with religious currency. Could it be argued that the irregular weather patterns that the villagers observe, were part of a God's play?

For Hindus, this might very well be the case, as a heated world, could be seen as the result of humans making the morally wrong choices. This would be to echo a narrative well known from the Hindu Vedas.

In the Vedas, at the end of the final era (eon) of the Kali Yuga, the god Shiva will dance his violent *Tāṇḍava* dance, and destroy the universe. The epic *Mahabharata* (c.500-200

B.C.E.) is known to many Hindus, and graphically depicts the events at the end of the fourth, last, and worst-aeon before Shiva takes action like this;

“At the end of the Eon the population increases...and odor becomes stench, and flavors putrid...When the close of the thousand Aeons has come and life has been spent, there befalls a draught of many years that drives most of the creatures, of dwindling reserves and starving to their death...The Fire of Annihilation then invades..[and] burns down all that is found on earth...(...) All countries will equally suffer from drought...[It] will not rain in season, and the crops will not grow, when the end of the Eon is at hand”

(From Lariviere 1989:48, in Narayanan 2001:180).

We also see in Narayanan (2001), that when *dharma* deteriorates in humans, humans destroy their surroundings, observations that the Rajputs of Rani Mājri also seemed to draw.

This connotation between Hindu cosmology and global warming, has been interpreted as rather fatalistic or deterministic, and seemingly as a removal of human responsibility. In the reader on Indian religion and its relationship to ecology, edited by Nelson (1998), several contributions draw the conclusion that Hinduism in fact could also be argued to provide a rather deterministic world-view that, drawn far enough, resolves people’s responsibility for the environmental degradation they observe around them; as if it was fated.

This argument has drawn support from the interpretation that Shiva's forceful dance represents the cosmic cycle of Hinduism; one of destruction, but also of creation and renewal. “In order to save the world, Shiva in his perverse power, dances the world out of existence (...) *so that the world may be renewed*” (Kramrisch, 1981:439 emphasis added). In effect: the world does not end. It is rather created anew. One could, of course, ask; what is the point of being environmentally aware if the world is about to end? But that, I

believe, would be to both missing how fate, or *qismat* is seen as adjustable, but also perhaps be based in a misunderstanding of the cyclic temporality of Hinduism.

The contrasting of cyclic Hindu views of time with the linear Western time is an oriental cliché, Anthony Good (2000:281) argues, and a gross oversimplification of both the western and Hindu views of time. Good bases his argument on his analysis of periodic worship in Hindu temples in South India, and argues that cyclicality does not need to imply exact repetition (Good 2000:281).

“Because of *karma*, each soul is reborn at a level determined by its previous action, so each new birth cycle is different. This impinges on the whole cosmos, because *karma* persists from one *kalpa* [the longest time cycle] to the next; “indeed, that is why another *kalpa* is necessary. Moreover, if each karmic cycle was identical, salvation would be impossible (Balslev 1983:145-7). In short, Indian philosophy fully incorporates linear (A-series) time into the dominant cyclic (B-series) ideology”

(Good 2000:281).

According to Good, time in Hindu cosmology “should be visualized not as a spinning disk, but a wheel, rolling forwards” (Good 2000:281). In my view, this removes the deterministic notion from Hindu cosmology and its relation to the idea of a fated, as in fatalistic, or fixed process of global warming. Seen together with my reading of *qismat*, it means that global warming is neither unavoidable nor fatalistic, but rather a matter of adjusting one-self to obstacles and challenges in the ‘right’ or ‘wrong’ manner.

A relation persists, however, between the pollution of the environment and *karma*. In the next section, I will look more closely at how it expressed itself in the village, and how one might proceed with such a relation.

## The ‘Wrong’ Progress

In chapter 4, I outlined my position on the relation between ritual pollution and *pradūṣaṇ* as two different things completely. I used Haberman (2006) to argue that it is not the

same thing, as for example, living in material and environmental waste is not indicative of 'body essence' per se. Living in or with waste, filth and environmental pollution, however, is a sign that someone is not being considerate towards their own self, nor towards others; their actions, desires and thoughts are of peevish character.

This is how, I suggest, the two concepts of pollution are related. The understanding of *karma*, *qismat* and *dharma* above indicates that people who do not act according to the moral codes for their community, do not act in accordance with their *dharma*. Negative substances will arise in the person, and he or she will act in a manner of self-interest, regardless of ones' surroundings.

If the world's *dharma* is becoming less, it is because people do not act in the right manner towards each other, the deities nor the environment. *Pradūṣaṇ* and environmental degradation, if I am right, will then be the consequence of a society moving in the 'wrong' direction, as byproducts of conspicuous consumption, egocentrism, and carelessness. This relationship becomes clearer, I believe, if one considers how and what the people of Rani Mājri appreciated with, or worried about, in their surrounding *vātāvaraṇ*. I left chapter 6 with an indication that the villagers valued certain aspects of village life, and that these were often expressed as having to do with the environment, *and* with social relations. I will here expand on these notions, starting with what was considered to make Rani Mājri a good place to live.

## The 'Good' Village

The village, most would agree, was a good (*acchā*) place to live. Very few villagers I met ever expressed the wish to live in a city. The people of the city were perhaps more 'progressed', their status and influence in politics and policy higher, their material riches greater, but there were, despite obvious lacks and challenges to rural prosperity, something about village life that made it 'better' than life on the plains.

Agreed, most would like to see some of the urban facilities become more accessible, such as a walking distance to a medical dispensary for medicines, a bus-stop serving a reliable

bus route, a market to buy clothes or utensils, etc. But preferably without moving to the plains.

There were many aspects of life, I found, that were seen as better in the village.

The women, for example, were often quick to point their Pahāri identity with pride. The Pahāri were - unlike how they perceived the stereotype city-dweller - a hardworking (*mēḥnatī*) people, with strong women, able and tough. The young men would also pity their peers in the city, for not being able to sit in the evening with their friends, chatting about this and that, keeping together as friends and allies until their old age. Both men and women, young and old, expressed in various ways the value of the ability and time village life granted them to take care of their relationships with family, friends and deities. They also noted, interestingly, that the cities of the plains had an undesirable environment.

Looking at how the villagers described how a place was a good (*acchā*) place to live, they pointed at certain qualities, that included, but also transgressed the visionary 'beautiful' (*sundar*). As Anja Wagner (2013) notes from her fieldwork amongst the Gaddi of Uttarakhand, aesthetics is a sensory experience, and something that goes beyond mere vision (Wagner 2013:153,154).

In Rani Mājri, a place was seen as good, for example, through the absence of "noise". The notion of peacefulness (*śantī*) in a place was always good, something achieved if a place was at a reasonable distance from (large) roads, loud traffic, crowds, etc. The surroundings of the village were, they agreed, *śantī*.

Elevation also mattered. If a village was at a high elevation, it was almost exclusively regarded as positive. Somewhere cool, or *ṭhanḍā*, with cool air and cool water was almost always denoted as more beneficial, than somewhere warm, with warm water and warm air. The benevolent combination of peacefulness, elevation, wind and coolness was also used to describe Rani Mājri by the people who lived there, or to describe somewhere even better.



An uncle of one of the Scheduled Caste girls with whom I was acquainted, was visiting from a village higher up in the hills. He would readily describe his village as “even better, [my place] is more peaceful. We have almost no cars, and our water is always cold [compared to here]. In the winter, we don’t even need a fridge to keep our food fresh!”, he added. Many of my village friends also expressed a wish to travel higher up into the mountains to “see the view”, (or thought that I should go), or to experience the coolness of the water and air. The presence of air being clear (*havā sāf haim*), as in a clear sky, no fog, nor smoke (*dhuām*), was also always positive.

The plains, to the contrary, especially cities on the plains, had more of the qualities that made life bad, and less of those that made it good.

Unclear air was particularly tied to air pollution or fumes from exhaust, from factory pipes and automobiles (“*factory se dhuām, gārī se dhuām*”), expressed in lack of *havā*, denoting the words implication of movement, as in air moving as wind. As *dhuām* - also in the shape of mist or fog - could be blown away by wind, the city was seen as particularly lacking *havā*.

Qualities of heat, and the stillness of air and water, also tended to follow each other. In the summer season particularly, presence of *havā* was particularly associated with coolness, and the lack of wind with extreme heat. A Lohar farmer with whom I was acquainted, would for example ask me if I did not find Chandigarh to be too hot and uncomfortable in April? I would agree, and he would say; “The city has a lot of pollution (*bahut pradūṣaṇ hotā hai*). It is better here, here there is air/wind (*havā*), it is clean (*sāf*)”.

Thick, misty weather, was referred to as the weather being bad (*kharāb*). The presence of wind, however, would blow away mist or smog, making the sky clear (*sāf sūraj*). In addition to leaving the air murky, stillness of air was experienced as lacking the cooling quality of wind. Stillness of air and stillness of water was not beneficial, and was even thought to bring about disease. Summer in the cities of the plains were associated with flies, bad smells and the exposure to illness (*bīmārī*). Flies, and particularly mosquitoes,

were known to lay their eggs in shady and moist locations, typical for quiet ponds and backwaters, and for places kept unclean or untidy, which the city markets epitomized.

The villagers were well aware of this, and regarded the risk for becoming ill in the village as lower than in the cities. Scheduled Caste families of the village, for example, would take care of babies and small children of relatives in the cities so that they could escape the torment of the heat. The insects of the cities were also known to carry malaria and dengue, which the village mosquitoes did not, I was assured. Nirmala would for example say that the malaria mosquitoes were only in the city “because it is so dirty (*ganda*) there. Dengue is also there, but not here”, she said. “Only the itchy ones are here”.

Irrespective of disease as a byproduct of litter and waste, nobody particularly enjoyed the presence of litter (*kūrā-karkaṭ*, or *kūrā* for short) for aesthetic reasons either. *Kūrā* was seen to be refuse, or waste, from household and farming activities; such as plastic, paper, cardboard, cloth, ceramics etc. If I remarked on litter gathering in hill sides, people did agree that it was indeed *ganda*, filthy.

Surroundings being ‘clean’ (*sāf*), were on the other hand highly valued. Clean, or clear surroundings were not overgrown or untended, and they were not littered with *kūrā*. The shrubs and undergrowth of the forest, or a neglected field, or a market-place for example, were not *sāf* surroundings.

Altitude would therefore help in removing waste and sweepings that gathered in the village during the dry season, helping the surroundings into a clean/clear state. With the lack of waste disposal systems, the rains that irrigated their fields, refilled their water sources etc., would also physically clean the landscape of Rani Mājri of litter. As such, Rani Mājri was thus only *temporarily* polluted by litter, it was not a state of lasting/permanent condition, as was the case with the cities and the markets of the plains. This can be seen as again, a matter of practicality, not a symbolic display of a conflation of ritual and environmental pollution. Harmful substances, both those which visibly

gathered, and those that seeped into the soil, the food and the drinking-water however, should be removed. If they “stuck”, they would pose a danger to the wellbeing of the people who lived with it.

This became especially clear when talking about food. The Pahari potatoes, for example, were preferred over the plains-potatoes, which were regarded as too sweet. This was ‘a matter of fact’ that I also encountered in urban farmers markets where middle-class city people or their servants shopped for hill-farmer ‘fruits and veg’. These were also preferred, because the food of the rural, highland kitchen garden was of better quality than the food produced on the mega-farms of the plains, and thought better for your health. The IISWC researchers, for example, would readily buy hill farm produce off the counter for private consumption; so did some of the middle school teachers, the principal would for example regularly buy fresh buffalo milk from Prakash.

That the hill food was regarded healthier, could very well have to do with an awareness of the quality of the soil and the water with which it was produced.

I was told by several farmers of the village that people were less ill ‘before’. The concerns of increase in illness were noted just as frequently by men and adult women as they were by younger people, and they would often point to increased incidents of diseases (*bimārī*), such as cancer and diabetes in connotation with food production, and especially in connection with the use of chemical fertilizers and pesticides.

To illustrate the severity of the situation, the village shopkeeper told me that someone recently had gotten ill from drinking tea. This was, he claimed, because of the sugar in it, which had come from a plot in the village they knew had received far too much fertilizer. In the past, farmers would tell me, they used to fertilize with cattle dung. However, the yield was scarce (*kamī*). During the 1980s, however, fertilizers and pesticides (Litt; *khetī kī davāī*: field-treatment) were introduced by ‘the government people’ (*sarkāri log*). They also told me, that in the beginning, they would use only a little; a tad here and a tad

there, and the results were impressive, the yield in bounty. But after the years passed, however, development halted, and the solution opted for, was to increase the *davāī*. The last 15 years then, was also was when they began to use “very much *davāī*”. Although a few of the people I spoke to, like Prakash and his brothers, would shrug at the rumors of people becoming ill from the chemicals calling it nonsense (*bakwās*), many others perceived the difficult situation to have become more acute with the last fifteen years (since 1998), and were genuinely worried.

There is a ready availability of medical studies pointing out the effects of pesticides and fertilizers in farming in India, studies which have contributed to this fear. Bhanti and Taneja's (2007) study confirms the relatively large presence of pesticides in vegetables, Sanghi et al. (2003) results show residue of pesticides in women's breast milk in Bihar, and a study by Chakraborty et al. (2009) show the damaging effects on respiratory functions as a result of the exposure to pesticides and fertilizers through farming practice involving spraying (with bad or no protection gear). Saldana et al. (2007) tie the use of pesticides to the increase of lifestyle diseases like diabetes and Thakur et al. (2008) to cancer. Also, the editors of the 2005 Haryana State Gazetteer also noted the concern, although its consequences were tied to a decrease of other mammals than humans;

“To control the insect pests on these hybrid varieties, increasing amount of pesticides are used by farmers. The increased utilization of pesticides also kills large number of insects which is consumed by animals and birds. The bio accumulation of these pesticides and the related toxic effects have resulted into the decreased population of small animals and birds.”

(Kumar and Dahiya 2005:315)

The villagers of Rani Mājri had not read these publications, but they had heard about, and read, the large news-stories, like the one in 2013 about the 22 schoolchildren in Bihar that died after their midday school meal had been poisoned by a pesticide, either done by accident or, as rumor would have it, intentionally (CNN 2013).

These stories confirmed the widespread notion that the food is no longer as safe to consume as it was thought to be, but even if their concerns were real-felt, they appeared to be ‘between a rock and a hard place’.

A Rajput father and his teenage son in discussing the matter of chemical fertilizers with me, described in half jokingly, half seriously, that just like the father – who was smoking - the earth had gotten a “bad habit” with the chemicals, they were pleasing, but in the long run, they were but poisonous too. The Rajput farmer said: “In the maize, in the wheat, in the ginger; there is this poison - even in the milk that you give your son to drink - the animals (*paśu*) eat the grass fodder from the fields, so the poison ends up in our milk, too”. But as with any addiction, to stop using chemicals would be a difficult choice to make. “We cannot stop. For years, the soil will not produce enough, and we will have no food to eat”.

Talking about farming prospects and the possibility for keeping a good life in the village, many would also mention the threat of expanding industrialization in the area, indicating a worry of future industry expansion into the hills, despite of the regulations of the “Eco-Sensitive-Zone” in which they were located. One of the adult Lohar farmers I acquainted would explicitly worry about the factories encroaching towards village land. “Everything will be dirty (*ganda*), and all the smog (*dhuwān*) that will come with it...” he said, shaking his head worryingly.

These worries were connected to demands made by the Haryana Chamber for Industry and Commerce, for ‘free industrial zones’ to boost industrialization and growth (Sharma, for the Chandigarh Tribune, 2015). In such zones, industries could be allowed to buy land directly from the farmer.

What does these concerns and appreciations mean for understanding environmental pollution in Rani Mājri? First of all, that their environmental concerns are real-felt. Even

if the villagers at first sight did not appear ‘environmentally aware’, they were, in fact, quite aware. But why did they throw litter in their surroundings?

As noted, the riverine language of the Vedas does indicate that inferior substances tend to flow down-stream. Nail clippings and hair, for example, are also always disposed of in the *kuhl*, as these are especially loaded with personal substance that might be used for ‘bad magic’. It is also true, I think, that people threw litter in the *kuhl*, the fields and towards the river bed, because the monsoon would carry it away. I have however suggested, that to argue that both versions of pollutants, sin and garbage, are cognitively the same thing, would be an idealization and an abstraction. If they did not materialize their ecological concerns into practice, as when waste is thrown outside to later be removed, this was, I believe, because out of sight is out of mind. This practice is not unlike my own self-illusory practice of throwing my sons’ diapers in the Chandigarh renovation system, even though I was aware how faulty it was, and that my sons’ diapers would still pollute the environment. All waste ends up somewhere.

It seems more potent to look at what actions and relations made a place good. A good place is a *sāf* place. It is orderly, and it appears orderly, because it has been tended to with appropriate time and attention. A meticulously weeded field, a tidy house, or a neat hand embroidery, are *sāf* because someone has taken the time to care. It is the lack of proper care, however, that makes things bad. Moral degeneration and environmental disturbance belongs together, because the morally degenerate, make the ‘wrong’ choices for the future.

## Environmental Retribution

Regarding whether there had been changes to the rain (in amount and pattern), I was often told that the rain-pattern had changed over the years. Asking why, elder people would readily give me the answer that the reason was that “there is little/less dharma” (“*dharm kam hotā hai*”). At first, this appeared to me as an oddity, but I was to discover

other ethnographies pointing to the same connotation between moral degeneration and environmental deterioration or other disasters.

Wadley and Derr (1990) have noted the same juxtaposition in the case of the village fire of Karimpur. Not an environmental disaster per se, the incident illustrates how disasters thought beyond human control can be attributed to human sin. Wadley and Derr recorded several responses about the causes for the tragedy, which they admitted were multivocal, but still revolving around misdeeds, or sin. Some people blamed the fire on various actions that should have been taken, building a temple to the God Rama. Others said it was the Brahmins that had been corrupted and brought this upon the village by serving only themselves for years (Wadley and Derr 1990:146), or that those who died had offended the planetary God Sañicar. In all of the explanations, notions of sin, or adhering to dharma, was seen to cause the devastating results of the fire. “Sins, they say, are accumulated like water in a jar. When the jar becomes too full, it breaks: some disaster occurs. Those who were unhurt by the fire had jars of sins that were not full, or had some merit which counteracted the sins (...)” (Wadley and Derr 1990:141-142).

Lifted to this more general level of society, it was Bhagvān (ibid:146) who interfered, with a disastrous retribution to the immorality of the village. The responses they recorded were not unlike the ones I recorded after the Uttarakhand flood, where the flood initially was attributed to a single act (moving the Goddess temple), and later on was seen as a comment on society’s ‘sins’.

In Ishwaran’s (1968:180, in Sharma 1974:79) study from Shivapur, too, there is a note of what might be seen as environmental retribution for sins. In his study, an untouchable would never enter a guardian deity’s temple because he ‘knew’ that it will result in “drought or some other catastrophe”. In North India at last, there seems to be a close-knit relationship between environmental and moral deterioration

In the village of Ghatiyali in Gold’s (1998) study, too, there are perceived environmental retributions for the sins of mankind. In this region, one historical king had planted religiously valued trees of *nīm*, *pīpal* and *ber* along a road, trees that later were cut down

again by his successors. These successors to the throne who cut, and sold them, was talked about as doing sin (*pāp*), that Bhagvān later handed out punishment for (1998:172). The villagers of Ghatiyali were found to blame both government (mis)management and the community itself for the deforestation. She finds two pervasive explanations why the villagers thought there was less rain. One was posing a direct causal relationship between deforestation and drought.

“It asserts graphically that the trees now vanished from the hilltops had formerly “pulled” the rain clouds to the village. The other theory, less widely held (...) has to do with “the decay of social life, religion, and live among human beings – all of which are understood to displease God”

(Grodzins Gold 1998:174).

Grodzins Gold sums it up like this: “if selfishness cause drought, and that the environment participate in the fruits of human sin” (ibid: 188), then ecology is also moral, it is social.

This is the exact same interlinked chain of causality that I observed myself in Rani Mājri. Villagers saw water-related issues (draught, lacking reliability and stability of winter and summer monsoon-rainfall, flooding and erosion), as being connected to both reduced forest cover, *and* to moral decline.

In the village; most, if not all of those I interviewed on the issue, worried about the forest waning. The Scheduled Caste population blamed the Rajputs for depleting the forest – and indirectly the loss of water. One Scheduled Caste woman sighed when I asked her about the deforestation; “They have fields and land (*khet aur zamīn*), so why do they have to use the forest? If they stop using it, it will regrow!”. The Rajputs, would mainly blame the government. Still, the forest-guard and his job, were generally appreciated by all castes; they saw his job as important – the forest should be maintained.

This was not because the forest appeared sacred per se, however. There were no sacred trees in the village, either, except for a small *tulsī* tree (holy basil) kept in a pot in a household’s yard. The forest was not regarded as particularly nice to look at either, it was



rather a place of dangers one could not see, where deer and wild-boars kept during the day – to trod and eat in the fields during the night. It was valued more for what it did, than for what it was.

First and foremost, the forest was indispensable for its firewood during winter, fodder-supplement from lopping, and certain trees also for ritual purposes. I also found a very strong connection between forest and rain, which makes even more of a difference to life in the village. The connection appeared as one of ‘desiccation theory’<sup>76</sup>; that forests ‘draw’ or help produce, rain in clouds, and that deforestation thus causes ‘desiccation’, a thorough drying up. The temperature, they agreed, had also become higher as a result of the forest waning, a notion they shared with the local development officers, who made an explicit link to global warming in combination with foresting and population growth. “If there is more forest there will be more rain”, Mr. Sharma, the head of the department had explained to me during our interview session at the regional office.

The old Lambardar too, as I mentioned in chapter 3, spoke about days when there was more forest and more rain, spread more evenly across the seasons. In the same sentence, he also added;

“(…) then, the English government ended, and the time of the Raja was over. After that, things changed, and corruption came. Black money. And Bhagvān went far away”.

This, I argue, was not only an expression of lament for old days lost, but a way to comment upon social values in a changing society. When Bhagvān was seen as having gone far away, it could be understood as Bhagvān having withdrawn his protective gaze of the world; because of a larger, more complex ‘sin’; that of an uncaring society.

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<sup>76</sup> This is a matter which has been in dispute for many years and evidence for this theory is contradictory, but there are studies that point to its validity, as a study by D. Sheil at the Norwegian University of Life Sciences who finds forest cover to have a major role of affecting air-flow and cloud gathering – thus also precipitation (Makarieva et al. 2013).

# Morality, Climate and Modernity

Gold (1998) notes that there is also another juxtaposition in her material; not only between Hindu notions of *karma*, sin and ecology but between *karma*, sin, ecology and *modernity*. In looking at the same juxtapositions in Rani Mājri, the same relationship emerges. Grodzins Gold argues that God is seen as having turned away from people, “because people no longer worship as they once did” (Grodzins Gold 1998:178). I do not have any direct quotes of my own to indicate that the lack of worship directly led to God turning away, but what I did note, was a tendency to comment on the lack of care, in contemporary relationships.

Bhagwati, Prakash’s mother would recall few aspects of life in the 1950s with fondness, as the 50s and 60s were hard times, with less food, clothes and material goods. Some things *were* better though. In the 1950s, married women visited their parents more often. Back then, the natal village wasn’t so far away, she said – her own only walking distance from Rani Mājri. If her mother or father became ill, a baby was born, or any other occasion arose, she would be able to tend to them. Now distances to go home are longer, and it is harder to keep in touch with brothers, she said. Her observation is worth a note.

In chapter 5, I mentioned the important brother-sister relationship in the village. The brother is seen as someone who should look after his sister, protect her and assist her even after she marries. To maintain a good relationship with him, is very important. It should also be noted that Haryana sadly is making a name for itself as the Indian state of female foeticide par excellence, forcing families to travel far for eligible female marriage partners. These days, she said, there was no time to visit ones loved ones anymore. When I discussed the prospect of making a living in the village with a mixed group of men in their 30s and 40s (both Lohar and Rajput) gathering in front of the shop-keeper’s booth, they all agreed that faith in the Gods was definitely deteriorating, one added that “that

these days' people don't even keep faith in their own father”, which made the others nod in agreement.

I registered a profound sense of lack in ‘care’ towards others, that “*care nahīm hotā hai* (there is no care)”, as they would say in Rani Mājri, When I talked about why the men in the marketplaces payed less for their produce than they did before, women would comment; “*care nahīm hotā hai*”. If the doctor would only glance at the patient and prescribe pills without hearing what he or she had to tell him, “*care nahīm hotā hai*”. When the villagers talked about the news that a girl had been raped at the Chandigarh bus-stand, and the girls’ family had to pay for the expenses of hospital bills and investigation, it would upset them, and a girl exclaimed; “The police does not care; our government is so very bad!” (*Police care nahīm hotā hai, bahut kharāb hai hamārī sarkār*)! When a boy looked like he would miss the deadline for his college applications because his father had not bribed the right people the right amount of money, his jaws clenched, and he snarled; The government teachers, what do they do!? They come late, they drink chai, if the students fail or pass, *care nahīm hotā hai* - they still get their money”.

When the middle-aged “house-wife” of a Rajput family I spent time with talked about the deforestation of the area, she said; “When she came to the village, there was so much forest here, but the government people do not care, they only want the money”. City-people, she added; “*care nahīm hotā hai*”.

What the people of Rani Mājri saw as environmental retribution from ‘sin’, also looks like a want of ‘care’ in social relations in a ‘progressed’ society.

From Rudiak-Gould's (2012,2013) fieldwork in the Marshall Islands of the Pacific, we see that people drew the same peculiar connotations between climate change (which in the pacific islands is expressed very clearly in the rise of the oceans) and a sense of loss in the quality of relationships. Rudiak-Gould calls this a ‘narrative of decline’, that runs parallel to a narrative of prosperity. Marshall Islanders see themselves as violating their

own traditions (ibid 2013:27), and as doing so continuously because of their use and dependence on money. Living by money is seen to weaken the skills of younger generations, such as the ability to navigate the seas, or to forecast the weather. A sense of loss is also seen in relation to food: the quality of local food being replaced by quantities of imported food, as well as in the quality of social bonds, worries very similar to those I found in Rani Mājri. Rudiak-Gould sees this as part and parcel of a ‘janus-faced’ modernity, of a ‘progress’ has been both rewarding and punishing.

In the Marshall Islands, the seas are rising. The seasons are changing their expressions, the weather is less reliable. Rudiak-Gould registers that people draw on their Christian faith, *and* on the ‘scientific’ climate change idea, to explain why the climate is changing. In Rani Mājri, the land is sliding, the monsoon irregular, the seasons warming – and people draw on both the ‘scientific’ climate change idea *and* on their Hindu faith, because, I believe, the narratives are both include environmental retributions for one and the same thing: people making selfish choices, though often choices seen as beneficial in the short term.

The strange new idea, argues Rudiak-Gould, is not how people believe they affect the weather or their surroundings, “but the modernist notion of ‘blind, pitiless indifference’ (Dawkins, 1995:113), an unresponsive cosmos that cares nothing for the good or bad deeds of humanity” (Rudiak-Gould 2013:119). I find myself agreeing. There are still, however, much to be said about ‘adjustments’ to ‘modernity’.

## Adjustments to An Uncertain Future

For the people I interviewed on life in the village, prospects of the future (*anewale sālon̄ main̄*; litt: forthcoming years), held both promises and concerns.

The chemical fertilizers and pesticides had in 2013 ceased to be seen as only beneficial for farming, and had become a ‘necessary evil’. The market, on which all villagers to a degree depended, payed less for their produce than ‘before’, for reasons to do with taxes,

and capital led import and export regulations. For farmers, not only dependent on crops to eat, but also dependent on income from surplus sale, production has to be maintained and preferably intensified even more. Prime minister Narendra Modi has even gone as far as saying that he calls for a “new green revolution” in India to propel this rise in productivity (Deogharia, for Times of India (2015)).

These side-effects to ‘development’, to ‘progress’ had no quick-fix; there seemed to be only ‘adjustments’ left. Adjustments that involved adjusting one’s lives to what the future might hold, to the prospects of what one could allow oneself to dream.

Pointing out the lack of *care* in relationships and the presence of indifference, I believe, was not only to express nostalgia towards a past where women dressed properly, the Scheduled Castes kept in their place and behaved respectfully towards the higher castes, and when people listened to what the old men had to say.

For a young boy, the future was not necessarily to continue farming, and for young girl, not necessarily to become a ‘house-wife’. For the adults, it was not necessarily to continue the practice of joint family living, or to devote time to the deities and the elders, when other requirements had to be met generating an income.

These adjustments to a changing society added on to the concern about the relationships between children and their parents, who not only would seek to educate themselves to lives that made them dependent on traveling far away for work, or married in a village far away. The youngsters did not care much for attending to rituals and deities either, and many of them expressed embarrassment when I asked about the rituals they had performed; they had other means of creating prosperity for themselves, and they did not want to be associated with the ‘backwardness’ of the older generation.

To cite R. C. Gupta again, the hydrologist and environmental NGO-founder, there is one thing that the government seems to forget, but which he had realized: adjustments take time. After his years in service, he knew: social change takes time.

“And nobody has time to do that (...). [But] with a little new knowledge, you can adjust to the new form of economy (...). One does not have to keep them [villagers] away from progress, with the correct facilitation from the state and the civil society, they can be taught responsibility for their actions”.

Interview with R. C. Gupta 2012.

I agree with R.C. Gupta to an extent, in that villagers do not need to be kept away from progress, they need to partake in it, but on a leveled playing field. The ability to do adjustments on this playfield, however, is not evenly distributed.

### Preconditioned Adjustments: Issues of Power and Difference

During a discussion with a group of Rajput and Lohar men outside the shop-keepers’ booth, there were several suggestions to how life in the village could prosper in the future. Solving the issues they had with public transportation, or constructing a hospital or a dispensary nearby, was met with agreement from all of them. One, who had kept silent the whole time, addressed me in a silence that emerged from men thinking about what would make life better. He said;

“You see, your thinking is so different from ours. We do not think like you do. We think about ourselves, and our family. The others, they are of no matter to us. Your thinking is...big...but it is OK, it’s good” (*Thīk hai, acchā soctā hai*”).

Rajput male, 35

What was different, in his thinking and in mine? Was it really, that mine was more ‘techne’, scientific, and universal, and his was more ‘local’, contextual and based on perception and skill?

Through these chapters, climate change has appeared as an idea that is, at the time of writing, presenting itself to many rural Indians as knowledge about a process that is firmly anchored in expert science. It travels via a network imbued with pre-existing

discourses and power-relations, materializing in small hill villages in governmental and non-governmental projects that aim to better, improve and enhance the quality of life there.

In the campaign on raising rural awareness on environmental issues, the ‘universal dream’ has become intertwined with the “universal knowledge project”.

As outlined above, to Tsing (2005), the universal dream was what humans “cannot not want”, something humans “cannot turn down”, such as mitigating the effects of global warming for the cause of our common future on this planet. The basic ideas are universal, we cannot not want them, but the way they mobilize and touch people depends on context. Who is propagating these ideas? In what time, amongst what people, do they take root? Universalisms, says Tsing, mobilize people, but their basic tenets do not always travel smoothly, such is the case with human rights for example, or with gender equality. This also holds true for the climate change idea.

The climate change idea requires of people that they involve themselves with the ‘universal dream’. For the universal dream of a sustainable future to reach its fulfilment in North India, for example, people need to be made aware of the processes that obstruct this process in a particular manner. They have to be made aware that 1) global warming is taking place, that 2) its effects will harm our future lives on this planet, and that 3) the actions we choose today will reach into, and alter, these effects.

The realization of the ‘universal dream’ runs into quite a few obstacles, however.

One of them has to do with the difference in what kind of knowledge and expertise is valued as relevant contributions to the debate.

There was a tendency, as I have outlined in chapter 6, that the state operated with the idea that there are (at least) two incompatible kinds of knowledges about the world, and that one form of knowledge, that of ‘science’ is better disposed to meet and mitigate the climate change issues. When the people of the village could not wield such expertise,

they were looked upon as ‘backward’ and as not ‘progressed’ enough, justifying state intervention through projects and schemes.

This leads to other questions, such as; who profits on those very schemes and projects being about ‘climate change awareness’, and what do the villagers themselves profit from the same thing? I will begin by addressing the first, before moving on to the latter.

### *‘Unaware’, or ‘Different’?*

It should also be noted, that these policies never ‘fail’ to make changes. The results might not be what the policymakers always intend them to be, but there are results.

Hamilton in 1935 urged the colonial officers to make the landlords reclaim barren land (and protect it from pastoralism) and to “make them realize”, that cattle had to be stall fed, and that arable land had to be dedicated to cattle fodder, and to leave the intermittent tree “scattered over the fields” to protect the arable land from sun and wind – all being practiced in the village. Importantly, he also advised the reconstruction of the irrigation channels attached to the torrents (*choes*). If this was done, he argued;

“They [landholders] will be enriched, and both the Government and their neighbors in the plains will be benefited. This may sound too optimistic, but there are hopeful signs, and if continuous and sympathetic encouragement is given to the willing, and pressure applied to the unwilling, the task is not an impossible one. (...) This is the work of experts and cannot be done by the villagers themselves. It will take long, and continuity of action must be assured by the adoption of a well-conceived plan”.

(Hamilton 1935: page n/a).

In 2013, it was almost uncanny how the Rani Mājri’s landscape looked exactly like Hamilton advised the colonial government to work towards in 1935. It did take almost seventy years, but in 2013, a firm and steady *kuhl* directed floodwater away from the seasonal river and on to the fields. On its way, it ran past the intermittent tree kept here



and there to provide shade for both the crops and the workers amongst them. The *kuhl* neatly arranged to irrigate the landholder's fields, would produce crops for themselves and for the markets, and fodder for their cattle. The cattle, stall fed in the village, produced more milk, and more fertilizer, to blend with the chemical fertilizer to enhance production.

My ethnography, I argue, has shown that people *were* in fact environmentally aware. They were aware of a great many other things too, including market relations, politics, fashion, and many things in-between. Does the government act solely out of self-interest here? Is the government trying to bring those unruly peasants into a more governable state? The continuous representation of the Shivaliks as a “threatened and fragile” region (Yadav et al. 2008:1) does serve to justify such interventions, at least.

One does not have to look far for similar arguments, Dove (1992) for example, has ascribed the Indian governmental (mis)management of the environment on the state's history of “obfuscating and not recognizing” that very (mis)management for reasons of self-interest (Dove, 1992:231). Applying Agrawal's (2005) optic of ‘governmentality’, the Indian national economy does need a healthy and consuming subject to maintain infrastructure, welfare and political leverage – and on the other, the global society needs a steady, controlled development that does not impinge too much on common resources or contribute too much political unrest or environmental degradation through over-exploitation and intensifying rate of emissions.

If one looks at the statements made by the colonial government officers in 1935, we see that even though the flash floods of the hills have been known to occur in this region for a long time, their consequences have become more acute with human landscape interventions. As Hamilton (1935) describe the hills in the Himalayan Journal;

“The damage caused by the great floods which periodically sweep down the Punjab rivers from the high mountains attract large headlines in the newspapers;

and, though they may bring great havoc, they are, in the main, caused by unusual phenomena, such as the breaking down of glacier dams and cloudbursts, which are beyond the control of man. Yet nearer at hand, under the very eyes of the public, the Siwaliks and outer ranges of the Himalaya are being slowly converted into a source of destruction, the more dangerous owing to the insidious nature of its growth”.

(Hamilton 1935:page n/a).

If climate change is being established as the main culprit for the Uttarakhand disaster, it could be used to strengthen the need for ‘awareness’ on climate change and global warming.

This was also what was happening. Workshops on ‘awareness’ were, subsequent to the flood, created in all the twelve Indian mountain states - not only for the farmers themselves, but for the mediators that would engage with them. According to N. Bhaskar Rao, chairman of Centre for Media Studies, local media houses and other organizations that “play a key role in sensitizing people about climate change” needed these workshops because:

“[d]espite the fact that climate change has emerged as a huge issue world over, there is ambiguity about the issue among journalists and masses who need to understand it and espouse the cause with passion for better tomorrow”.

(Rao in Sharmal, for Times of India, 2016).

I would, however, be careful to suggest that the ‘state’ should be blamed as if it operated as a single, undifferentiated entity. If one - like Scott (1998), Agrawal (2005), and Li (2007) - sees the state not as a monolithic entity, but more as an assemblage of institutions and individuals, then being too critical on ‘its’ intentions would be too hasty in such a dissertation as my own. But to acknowledge the varying flows and ebbs of power within a government, is not to say that their policies have no effects, nor that they are univocally negative.

As was the case with Northern Indian villagers described in Gold (1998,1999) and Rudiak-Gould's (2012, 2013) Pacific islanders, for many people in Rani Mājri, life *was* a great deal better in 2013 than it used to be in the 'past', as I outlined in chapter 3. All government employees were not "all that bad" either – there were always exceptions from the rule. The villagers could tell me that some government teachers actually 'cared', and made an effort, for example in helping the boy understand the math before his exam, or in encouraging the girl to apply for college. One bus driver was also known to 'care', and drove the bus all the way to the final bus-stop of Bapūli (as it should, but seldom did) for the mother and child to have a shorter walk home.

Some government officers also 'cared'. For the adult women in the village of 2013, Dr. Arya was seen particularly 'different' for the social initiatives she had started in the village during the social mapping process. According to Dipika, my next-door neighbor and friend, Dr. Arya was especially remembered for speaking up against the men who drank too much alcohol, and for being the one who, in Dipika's words; "made the government do a lot of improvements in the village". As a symbol of these acts of 'caring', a memory of the sewing-lessons Dr. Arya gave; a self-made, stuffed teddy, wrapped in plastic to preserve its bright colors, was conspicuously placed in several Rajput and Lohar houses. To the landholders, the staff of IISWC saw the need of the village farmers and addressed them, they also 'cared'.

Climate change issues will continue to draw attention, and even 'care' to these hills, and to the people living here. That might be a good thing, for many of them. Some might do better in education, farming or in out-of-village employment, and earn more money, which can buy them the freedom of choice. When I look at the responses I got upon asking what people thought might happen to the village in the future (*ānewalla sāloṅ main*; litt: forthcoming years), people were found to worry, but many were also optimistic. The people of the village *wanted* the attention of the state government, because they wanted to take part in the 'progress', not as passive bystanders, but as active

participants. They had also experienced how much easier life can be, with certain technological inventions.

Many in Rani Mājri were quite good at adjusting themselves. When the crops failed, or the forest disappeared, they adjusted by approaching those who might help mitigate the consequences, be it the bank for a loan, the IISWC scientist or the priest for advice, or the deities for a more auspicious prospect. The landowners then, had resources to adjust, to a changing market, to a changing monsoon, to changes in gender-relations, making them eligible to partake in that deeply ambiguous process of ‘progress’. For others, however, adjustments might be more difficult.

In chapter 4, I addressed the issues with caste and rights, especially to water and irrigable land. Being left out of some projects and included in others, the Scheduled Castes could lose bonds of village unity, that despite its un-egalitarian design, still made them part of a village whole. As a village unit, the village itself wielded agency, because it had a few strong landholders who managed to pull strings both with the local development board, the scientists at IISWC and the *Sarpanch*, the panchayat leader. As we saw in chapters 4 and 5, ritual power, too, could to a certain extent, be seen as benefiting the village as a ‘whole’. Being left out, might just serve to strain those relations, without replacing them with anything better.

One might conclude, then, that the situation of the Shivaliks and the Himalayas in a changing climate, has made state intervention with local management of resources in these mountains easier to fund. One might also agree upon the fact that new knowledge and the increased attention has given largely positive consequences, for people, animals, and their environment. Discourse and policy also have, I argue, a power to change landscapes, and to change or reinforce social relations with it, for better or worse. Considering the pressing environmental situation that we might face with climate change, wielding that sort of altering power, carries quite a potential. However, this depends upon which angle one looks at it, and whether one is in agreement with the ‘universal dream’. Let us turn the optics, yet again.

## Potentialities

If the goal is to mend ‘disengagement’ to the climate change idea, then the notion that climate change is part of an *idea* that entwines morality to carbon footprints, the power wielded in this discourse could arguably be quite potent.

With Ingold (1995,2000,2010), Chakrabarty (2009a, 2009b) and Hulme (2009), disengagement from the climate change idea might be looked at as being a problem of humans being ‘removed’ from ‘the climate’. Either through our (largely western) industrial life worlds, where we have sheltered ourselves from heat and cold and wind and rain so that we no longer “feel” our environment, or through the scientific discourse itself, with its claim that true knowledge has to be derived from looking “at” the world (Ingold 1995:35). This distance, they all argue, alienates us from the world we actually live in, with and off. If the notion of a global environment is “far from marking humanity’s reintegration into the world” but rather “signals the culmination of a process of separation” (Ingold 1995:31), we might need these myths to *reintegrate ourselves* with the ongoing climate change processes, which is exactly what Hulme (in Malcome 2009) argues.

Looking at religious practice in the village, there are signs that seem to indicate such a potential. This is not at all an argument that religion itself makes people eco-sensitive, but rather an observation of the way religion tends to be as explicitly morally biased as the climate change *process* appears morally devoid. This apparent juxtaposition, or compartmentalizing, might carry much potential for the environmentalist.

This is also in the line of what Rudiak-Gould (2013) and Grodzins Gold (1998, 1999) have argued. Grodzins Gold, after considering the Ghatiyalians’ ideas about morality and environmental and societal change within a broader framework of Hindu cosmology,

found the villagers to be “ecologically sensitive”. Interestingly, she also argues that this is because of the convergence she considers there to be between the textual descriptions of Kali Yuga (the final age), ecological breakdown and concerns about the ‘modern’ moral laxness. Later, in a 2002 article on Indian environmentalism, she argued that the environmental deterioration of ritual sites has been a “wake-up call” that has led to committed activism, especially drawing followers from religious groups (Grodzins Gold 2002:14).

Similarly, Rudiak-Gould finds potentiality for engagement in the climate change idea in the “grumpy conservatism among the elderly or dispirited reflections on colonial disempowerment” of the Marshall Islanders. He finds that climate carries its own emotional weight in the Marshall Islands, because meteorological conditions are interpreted into moral terms, just like Huber and Pedersen (1997), Gold (1998), and Ingold and Kurttila (2000) amongst others have argued. ‘*Oktak in mejatoto*’, or changes in the environment, for the Marshall Islanders thus functions as umbrella term for perturbations, and as explanation for them. Climate change becomes reified and ‘deified’. The juxtaposition of the morally biased ways of ‘tradition’ lends the climate change *process* a “lively moral cosmologies that can inspire action” (Rudiak-Gould, 2013:11). With this, climate change communication might be easier than we fear. People will make it their own, and we should let them.

To conclude on this note, however, would be to accept that the end justifies the means, that environmental awareness *has* to be propagated, even if it has to be wrapped in religious ethics. Does it really?

In the re-interpretation of climate change in the Pacific, Rudiak-Gould (2013:112) argues that the climate change idea is enriched, but it is perceived as enriched because the Pacific islanders have a more ‘holistic’ ontology, encompassing nature and culture in one system, and marked off as very different from Rudiak-Gould’s own (western) ontology. Making this argument, he appears to fix, not only the ontology of the Marshall Islanders, but the western ontology too, into being two very different and set ontologies.

## Considerations

I have argued that the people of Rani Mājri dwell in an environment. This implies perceiving changes to it, and interpreting them as being the material consequences of choices they make, and choices made for them; including both those enforced by state officials, by their peers, and by the Gods and Goddesses with whom they dwell.

To ‘progress’ in the Indian society requires exactly the kind of compartmentalizing that Ramanujan (1989) referred to, when he marveled at the Indians and their tendency to encompass seemingly incoherent views of the world into one, coherent perception of the world. But to Ramanujan, the “compartmentalizing” of knowledge, addressed how a religious being-in-the world combined with a scientific being-in-the-world.

Following Ramanujan, the people of Rani Mājri and I are still ‘at twos’ with each other. But what happens if we look at knowledge, not as scientific and practical in-it-self, but as ‘modes’ of a cognitive process? Then the scientific knowledge about climate change appears merely as another abstract way of making sense of the large processes in life, operating at the same abstract scale as a Hindu cosmology, while drawing on other authoritative sources of information validating that knowledge about the world as being more or less ‘true’.

Looking at knowledge in such a manner allows us to be genuinely positive towards all new knowledge, without implying that other (or older) ways or ‘modes’ of thinking about the world are necessarily categorized as passé or sacred. In fact, we do not have to look at these various ‘modes’ as opposing each other at all, but as information that confirms or cast shadows of doubt over what one believed to be true.

If the people of Rani Mājri can explain the irregularity of the monsoon with it being both climate change and the anger of Shiva, then it is because both are environmental comments on what they believe to be true; that people are making wrong choices, and are working towards the wrong end, putting themselves above others.

Still, if something is believed to be true on the abstract level, or “in theory”, that does not necessarily change people’s practices. If it did, the world would certainly be a different place.

Many scientific explanations, or new methods in farming or in education, were accepted, not only because science per se, is valued higher than older, religious ways of making sense of the world and addressing what is wrong with it, but because most people are largely positive to new ways of solving issues that are quite precarious for their survival. Science and modernity does offer alternative ways of solving very real-felt issues, and in many ways, work more effectively than does prayer, ritual or sacrifice.

I believe this is also what Grodzins Gold (1998,1999) work indicates, when she wrote about farmers abandoning an agricultural ritual, held on the auspicious day of Ākhā Tīj in the Rajasthani village of Ghatiyali. Most villagers of Ghatiyali did not organize resistance to the developments within agro-technology, irrigation schemes and reforestation, but accepted the conveniences that outside agencies instituted and funded. She argued this was related to power and social upheaval, because with new technology, the farmers could act irrespectively of the Brahmin’s ritual calendar, embedding the abandonment of ritual “in a multiplicity of other kinds of change”, such as people wearing other kinds of clothes, eating different sorts of food, and the devaluation of Brahmanical knowledge (see Grodzins Gold 1999:263,270).

I read Grodzins Gold here as viewing the abandonment of the ritual as a diversion, or re-channeling of power, happening because with ‘modernity’, humans don’t depend so much on one, single source of power anymore. In fact, knowledge can be drawn from other places of authority, too, and this might be experienced as threatening to those who’s status depends on wielding the one mode of knowledge being devalued by so many. Also, the farmers of Rani Mājri would complement their practical skills with drawing from other sources of knowledge, both Brahmanical and technical, to prosper. In that, I do not find them so very different from others at all.



When I asked people if they would like to move to the city, or if they wished for a city-life for their children, I found but one who aspired for such a 'shift'. The first reason why the majority did not want to move, they said, was the presence, or clutter, of environmental pollution. Coupled with the heat and the stillness of air and water, it was seen to provoke disease and illness. The second reason was relational. When the village people characterized the city people, or 'the youth of today', they appeared in their full-blown stereotype, as no longer tending to their deities, nor to their family, in the way they used to. They did not take their time to, anymore, always hurrying, to achieve more, better, greater things, for themselves – not for others. This involved conspicuous consumption, the subsequent pollution and environmental deterioration; so that the globe warming and the climate changing, was perceived as an environmental retribution for the 'wrong' progress.

These concerns, however, were not approached by waving the banner of a political party, nor by joining any environmental organization. Rather, the issue was addressed through ritual and sacrifice, through tending to the relationships that they saw in danger of being disparaged, but also through using one's political or economic influence to ensure a good or better future. In this respect, I do not find them so very different from others at all. It is on this note of similarity over difference, that I would like to proceed to my final and concluding comments.

# A Resonance of Climate Change

## Conclusive Remarks

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This dissertation has been exploring the intimate relationship between humans, deities and the environment in which they dwell, and how it has affected how climate change is approached by people in Rani Mājri.

Water, has been central to this dissertation in many ways. In controlling the availability or flow of water, water was entwined with power. Water access also mattered for how people in the village could deal with the environmental and social changes that was seen to happen. This was particularly expressed in the ritual approaches to two monsoon-related incidents, a major flood, and a minor landslide.

Shaping social and ecological landscapes, water thus become entwined with notions of ‘awareness’ and ‘progress’. This became especially salient through the presence of the IISWC ‘watershed management project’, and its associated practices.

With that project, and many others, the hill village population became subjected to what I have called an ‘awareness campaign’, intended to help the villagers ‘progress’ and ‘conserve their environment’. The way it manifested in practice, however, was as a ‘discourse’ on climate change, one that failed to notice the ‘awareness’ that was already there. Below, I proceeded to discuss the consequences of this, and develop my argument; that the people of Rani Mājri were aware of climate change, and that they also attempted to mitigate its consequences. This conclusion, will address the implications of such an observation.

### Implications of Climate Change Resonance

Climate change is not just a fact about what happens when there is too much carbon dioxide in the atmosphere. It is an idea, present in meeting rooms, television programs,

political rhetoric, mass-market consumption; it carries with it an impossible juxtaposition of development and growth, preservation and equity.

For a sustainable future, ‘we’ (as in humanity in general) need people to act sustainably. Conspicuous consumption must decrease. To achieve this, we need people to buy fewer, more high-quality items that last longer, not many low-quality items that break and need to be constantly renewed. To do that, people have to be prosperous enough to buy quality items, so we need those who cannot do so, to be enabled to do so by a steady economy. They have to be able to choose, and to choose the ‘right’ thing in a long-term view, for a future we do not know. This future, if we look at the current state of global warming, hinges on humanity reducing the amount of stress on our environment, and the emissions that enhance and escalate climate change issues.

We, i.e. humans in general, also do not have the time, it seems, for the “rest of the world” (the people of the so called ‘developing’ nations and the currently industrialized countries) to spend as much time as the western, postindustrial countries have done to realize this issue. Hence, a need for propagating ‘environmental awareness’ arises. But to complicate the issue further, it seems like the ‘we’, of the industrialized ‘western world’ - who have already arrived at that point of ‘enlightenment’ to scientific facts, cannot seem to integrate the information on climate change into everyday life, so that it can materialize in social action (Norgaard 2011:11).

The Rajput farmer I quoted in chapter 7, saying that my thinking was so different than his own, was a comment on the ‘knowledge’, or chain of causality, I just displayed. What made my thinking so different from the man outside the shop-keepers booth, I think, is not that we could not ponder the same issues of universalisms or ideas of what could be “the greater good”, and to deduce causalities for them, however.

It was that I had time to draw on a background of years of studies, combined with the material comforts I needed to dedicate myself to what I thought the greater good could be. He was a marginal landholder with a small house, no parents, six children and “two”

wives (his older brother having died, leaving his wife and their three children for him to feed), as well as, to be honest, an issue with alcohol consumption.

Initially, it seemed like I had confirmed my own theory of a ‘gap’ in climate change and environmental knowledge diffusion. If the climate change idea is reflecting the scientific process of climate change, then it can be argued that the people of Rani Mājri were ‘unaware’ of climate change. This unawareness, I found, was also related to a certain characterization of a ‘backward’ rural population in the face of a ‘progressed’ urban population.

The issue was, to recite the IISWC scientists, the loss of translation from policy to practice; what was meant to address issues of ‘climate change awareness’ in the area of Rani Mājri, became instead a part of an ongoing campaign to raise the level of ‘general awareness’ by various techniques of governance in an ‘awareness campaign’.

But my own ethnography seemed to clutter my own argument.

I believe that although one particular idea of climate change and ‘environmental awareness’ was lacking, this did not necessarily indicate that there was a lack of environmental awareness per se.

I have based this argument on the following; most villagers, although they did not express a familiarity of climate change or global warming as concepts, did concern themselves with environmental issues.

I have argued this to be ‘bypassed’ because a) villagers did not alter their practices into recycling waste and litter, planting trees, driving less or using less chemical fertilizers and pesticides, and b) villagers voiced their concerns regarding environmental degradation as being an issue with *relationships*. Seen together, the villagers’ concerns on these issues was ‘bypassed’ because they were expressed in a manner that was not registered by the various government institutions.

To address the first assertion first: the villagers' 'awareness' of climate change was of a practical, and experience-near kind. It was to worry about toxins in the food, the air, the water. It was to worry about the forest being gone, leaving nothing to hold the soil in place, or to draw the rain closer. It was to worry about an encroaching industrial sector that polluted the air, the water, and the ground. Waste that was disposed of, that removed itself with the monsoon rain, was 'out of sight-out of mind'. In fact, paralleled with the quite sensitive relationship between the hill and plains-stereotypes and the awareness they obviously wielded on waste and pollution, one could almost blame them for knowing very well that their waste ended up in the plains below – and for thinking it good riddance.

To address my second assertion, I also argued, that my thesis was strengthened by the responses to the Uttarakhand flood, which was mostly interpreted as an environmental retribution from lord Shiva. I have argued that the idea of climate change, and of global warming, appears in the village as a form of environmental retribution for humanity doing the 'wrong' thing (conspicuously consuming to increase individual material wealth at the cost of kith and kin), even when aware of what they should be doing (refrain from conspicuous consumption and devote time to the relationships to the people – and/or the deities with whom we dwell).

I have used this observation to argue that our understanding of climate change depends on how we understand our surroundings, how it affects us dwelling in it, and how our dwelling affects it back. I have also argued, that even though the climate change *process* (of global warming) can be measured in models and charts, to understand the consequences of the process one has to confer the *idea* of climate change as well, an idea that I have argued in this dissertation is one about social relations.

I believe this is important to address.

First off all, because what appeared to be a ‘gap’, now appears rather a sort of conceptual ‘mismatch’ between a ‘devacentric’ world-view on one hand, and a ‘scientific’ or even ‘anthropocentric’ world-view on the other, but a mismatch that arguably is not so polarized as it appears at first sight. If how we make sense of climate change depends on where we are, and who we are, our cosmology, how we view the causality of the workings of the world, will matter as much for how the idea filters into daily practice in the United Kingdom and in Russia, as it does in Northern India or in the Marshall Islands. This will also lead to my conclusion being; that there is climate change awareness in Rani Mājri. However, I could not leave the matter there.

If the climate change idea is enmeshed, not only in cosmology, but in power and discourse, to such a degree that I have indicated here, then the idea of climate change and its relationship to power needs to be scrutinized. It needs scrutiny because if this environmental awareness was overlooked, it was overlooked because of a pre-conceived idea of contrast and difference, by those who transmit knowledge, and by those who wield it. Believing that global warming is proceeding at an alarming speed *and* that it is humanly induced, then this issue becomes salient.

As I have argued, this has to do with knowledge in two manners.

Firstly, because knowledge diffuses unequally, and knowledge is not always used to benefit those marginalized and oppressed. The people of Rani Mājri of 2013, for example, lived in an environment whose character changed quite rapidly. These changes were often beneficial to the personal economy of the larger landowners. To the landholders the taming and control of the water brought prosperity, both ritually and economically. In fact, many of the state interventions that could potentially harm the environment, such as the building of dams or watershed-management structures, benefited the farmers.

One could perhaps use this observation to argue, that what was good for the landholder, was good for the village, too; including the Scheduled Castes, who benefited both ritually and economically from the landholders providing sacrifice and a bountiful harvest.

However, the marginal landowners and the Scheduled Castes could also be seen to fall behind a ‘development’ or ‘progress’ that waited for no-one. We saw in the same chapter, that the village as a collective unit, seen from the ‘developers’ side, were perceived as quite different from the urban elite. One of the most important differences, it seemed, was the lack of the right kind of ‘awareness’ - an awareness that the landowners’ families had better prospects at attaining than the Scheduled Castes.

The landowners did not, it appeared, seem interested in assisting the Scheduled Castes in their struggle to “keep up”, and the Scheduled Castes were candidly left out of the watershed-management project, as their definition as landless entitled them no access to *kuhl* water. As such, the IISWC is an example of what Baker (2005) sees as the state continuing a long history of involvement in local *kuhl* management systems, locating power in the hands of landholders. This rendered the Scheduled Castes dependent both on the landowners and the government, and left them with a marginal say in local negotiations. If women in general were marginalized, then Scheduled Caste women were bearing the burden double.

This could also be argued to be a triple burden. As I outlined in chapter 6, being a rural hill villager, irrespectively of gender and caste, is to become subjected to the contemporary categorization of the rural hill peasant as ‘backward’ and ‘underdeveloped’. This is about knowledge secondly, then, because part of the discourse behind the policy that informed the government intervention in Rani Mājri, their sole reason for awareness raising, was tied to the lack of scientific, technical, and rational form of knowledge, or *techne* (Scott 1998:319). We then get a marginalization of a whole group of people, based on the unequal diffusion of scientific knowledge, and the value that has been ascribed to it. This, I argued in chapter 3, drew its strength on at least a

century of the government approaching the hill villagers as ‘backward’ - precisely because they are not modernized, developed and environmentally conscious citizens.

There is nothing wrong with new information that might enrich ones’ knowledge about the world or about certain farming practices per se. But to value one (the techno-scientific) higher than the other (the practical), and to deny their intimate relationship, might cause another loss. When the farmers of Rani Mājri acted on the monsoon before it arrived, they did so despite rumors that it would come later. They knew the meteorologists had predicted otherwise, I heard the principal from the middle school come by and updating them frequently on what the largest newspapers predicted from their models, but their hunch, their *mētis*, said something else. In the end, this was what the farmers acted upon. The practical skills that the farmers drew on to act upon their ‘hunch’, however, are skills that require time and experience to build up. Something which the lifestyles associated with ‘modernity’ and ‘progress’ allows no time for.

That the singular acts of ‘caring’ that I outlined above, were so much revered, did not amend that in general, relationships of ‘care’ were seen as lessening. As both my own, Rudiak-Gould and Gold’s acquaintances also note, at the same time as the *quantity* of material riches and possible options in life has increased, the quality of life seems to have decreased. In the words of Gold (1998:169) “indexed by factors such as community solidarity, joint family harmony, and the good taste of food”.

In the rush towards quantification, certain aspects of life are devalued. There is no way to validate rituals, or to technically reproduce *mētis*, and that disqualifies and devalues a way of ‘knowing’ the world.

This devaluation is something I think we should also be wary of.

As Norgaard’s Bygdaby-resident ‘Arne’ said, when explaining why people in Norway left their ‘old ways’ as they left traditional, simple wood cabins unused (but often well-tended) in the mountains, progress is elusively alluring. Arne explained how the



generation growing up after the World War II grew up in a poor country, where “they were focused on being modern. Old things reminded them of when they were poor and life was hard. They wanted to forget” (Norgaard 2011:130). By forgetting, I believe, we lose access to a mode of knowing the world that we cannot afford to.

To allow for the continuation of devaluating a certain kind of knowledge, based on an artificial division of what really is merely ‘modes’ of thinking of the same scale, is to allow for the production of artificial ‘otherness’, or ‘radical alterity’, that the anthropologist Henrietta Moore spoke against at her anniversary lecture at the Anthropological Institute in Oslo, Norway (2014)

In her lecture, Moore makes an argument against radical alterity, that which arise from accepting the presumption that we are different because we have such different ways of ‘seeing’ or ‘understanding’ the world that surrounds us.

Following Moore, ontologies - those theories that are held about the workings of the world - are processes that happen when we live in relationship with other persons, beings or things. Ontologies as concepts of *being*, cannot be passed on intact from one generation to another or from one individual to another, but is seen to change with time, and never in isolation – always in relation, to others.

If we see bodies as the products of our immediate surroundings, we are all unique, so are the positions from which we make our judgments. This ‘otherness’, however, does not render communication across whatever difference there may be, impossible. As our bodies share surroundings, and the processes of time, Moore argues, we will also in that sharing, find a way to communicate across the differences.

## Towards a Resonant Future?

Looking to Rani Mājri, I believe people perceived that the environment around them had changed because people, and peoples’ requirements, have changed. The modern world,

for all its ‘progress’, productivity and availability, seemed to entail a certain “being-in-the-world” that, for all its advances, had certain side-effects. And as we saw in the preceding chapters, the side-effects of ‘progress’ were both as material as they were social.

When I did my surveys, I would occasionally ask what could make village life better, and what people hoped for, in the future. Quite often, the answer provided would be something like this one, from Aparajita, a Rajput mother of my own age: "that there should be a good harvest, (that) in every season there should be rain(fall) at the (right) time, and ... a doctor’s office in the vicinity” (*“Ki acchī faṣal honā cāhiye - har mausam meṁ time meṁ bāriś honā cāhiye, aur...ḍākṭar kā office ās-pās meṁ hai”*).

A beneficial environment, a predictable climate, and availability of someone who could assist her in a time of need, that was good for her future self, and she knew that. Aparajita saw these processes as being linked, quite casually, because for a landholder, predictable weather, with appropriate rainfall, would enhance the productivity of the fields, and that would give her family more crops to eat and sell. With full stomachs and money in hand, one could adjust better, to both potential ills and benefits of the future. Deforestation and pollution and global warming wouldn’t be good for her future self, and she knew that too. In that, Aparajita and I were quite in agreement.

Moore suggests advocating against radical alterity. This is a salient suggestion at this point in time, when our differences threaten to weaken the prospects of solidarity and affinity. Climate change issues have pressed this point, by addressing how we in fact share the same world, in a way that might force an unprecedented strain on these very bonds of affinity. To keep them, we should take Moore’s advice and work towards being *in relation* with each other, and not cut down the spaces that we share (Moore 2014@58 min). Despite the versatility of our social lives around the world, our knowledge about the world as we know it is as practical and tangible as it is abstract and diffuse, as

enduring and sensible, as it is volatile and creative. If we depart from this, I believe we will find, not a rigid dichotomy between scientific thought and the ontologies of 'others', but a medley, a creative juxtaposition, that not only allows for an infinite ontology of the world to coexist, but one that we can talk about. In that, there is potential, and I hope that my ethnography can work towards that realization.

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